

**University of Bridgeport  
College of Naturopathic Medicine  
CNME 2017 Self Study**



**Submitted May 4, 2018**

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## **Introduction**

The University of Bridgeport (UB) is an independent, non-sectarian university established in 1927. The University consists of colleges, schools, and institutes offering a variety of undergraduate, graduate, and professional degree programs. Starting out as a junior college, it became the University of Bridgeport in 1947 when the state of Connecticut chartered it as a four-year university. The degrees granted in its early years included baccalaureates in business, arts and sciences, education and engineering. The Fones School of Dental Hygiene, the first academic program in this field in the world was founded in 1913 as an independent school and joined the University of Bridgeport in 1949, marking the university's entry into the health sciences. The enrollment in the university in 1950 was 3,500 students. In 1951, it awarded its first master's degree. In 1991, UB launched the doctoral program in chiropractic followed in 1996 by the doctoral program in naturopathic medicine.

The division of health sciences has grown significantly in the 21st century and now includes master's level degrees in acupuncture, physician assistant, nutrition, and dental hygiene, in addition to the new doctoral program in Traditional Chinese Medicine. In 2016, the doctorate of health sciences degree was launched providing an additional path to higher education for MS health sciences graduates. UB's new School of Nursing opened in fall 2015 offering a hybrid RN to Bachelor of Science in Nursing (BSN) completion program. The traditional bachelor of sciences in nursing program began in the 2017 Fall semester. The School of Arts and Sciences, which houses the School of Nursing, also offers bachelor's programs in health sciences with concentrations in exercise and fitness, nutrition, community health education, biology, and medical laboratory science. UB prides itself on housing the most robust and diverse collection of standard, integrative and complementary health sciences programs in the U.S.

The University is accredited by the Commission on Institutions of Higher Education of the New England Association of Schools and Colleges (NEASC), the relevant regional accrediting body recognized by the U.S. Department of Education. The University of Bridgeport underwent accreditation review and renewal in 2013.

The College of Naturopathic Medicine (UCNM) enrolled its first class in 1997, and has been in continuous operation since that time. The Connecticut Office of Higher Education (CTOHE) authorizes the UCNM graduate program to offer an ND degree. The College is accredited by the Council on Naturopathic Medical Education.

The 2017-2018 self-study process was initiated in January 2017 by the Dean, who initially met with the two UCNM Associate Deans to review the process. The Dean was in communication with the Vice President of Health Science throughout the self-study process.



who has training and experience in this process, to develop a new UBCNM Strategic Plan. The College then proceeded to review and revise the mission statement also as part of the self-study process.

The committee has engaged University staff as well as College faculty, staff and students in the process of gathering information, evaluating, identifying areas of weakness, and strategies for improvement. Some of this was completed directly because it was related to the standards for the self-study, and some through our ongoing process of UBCNM committee meetings. We are grateful for their support, analysis, and participation in the efforts to make improvements as the needs were identified.

The College has attempted to be thorough in its assessment, and honest and forthcoming in reporting our findings. We have contacted some faculty members and administrators in other ND programs as resources for comparative data in measuring ourselves, and for ideas on resolving some areas in need of improvement. With a College administration who are relatively new to their administrative roles, we took advantage of the knowledge and experience of others in their roles in naturopathic programs as resources. To them we are grateful.

Because of the interruption in the self-study process due to the absence of the Dean for three months, the process experienced some unanticipated delays. The evaluation and planning of remediation of some components were delayed from the original outline, but the process was completed, and the College and University are grateful to the CNME for the extension of time to finish the process and to submit the document.

## **STANDARD I**

### **Program Mission and Outcomes**

#### **University Of Bridgeport Mission Statement**

The University of Bridgeport offers career-oriented undergraduate, graduate and professional degrees and programs for people seeking personal and professional growth. The University promotes academic excellence, personal responsibility, and commitment to service. Distinctive curricula in an international, culturally diverse, supportive learning environment prepare graduates for life and leadership in an increasingly interconnected world. The University is independent and non-sectarian.

#### **College of Naturopathic Medicine Mission Statement**

Rooted in naturopathic philosophy, our goal is to train students to become physicians who are experts in individualized patient-centered care that focuses on disease prevention and optimization of health throughout the lifespan.

The mission statements of the University and the College are intimately tied together. The naturopathic medicine degree is one of the prime examples of the University's career-oriented professional degree programs. The requirements for admission to the program as well as the rigor of the program demonstrates the academic excellence demanded of students, as reflected in both the University and the program's mission statements. The personal responsibility expected of students, faculty, and staff is evident in the expectations outlined in the rigor across UB programs.

The University of Bridgeport College of Naturopathic Medicine (UBCNM) mission statement reflects the mission of the profession, from an educational standpoint. It is concise in its focus in preparing students to follow naturopathic principles in their work with patients. The details of how this mission is accomplished are found in the program objectives, outcomes, and competencies.

The University and College's mission statements are consistent in their goals and expectations, and is consistent with the operating authority of the program and the institution. The University mission statement guides the expectations for the program outcomes and the objectives for student achievement. The outcomes, combined with the competencies, identified in the AANMC Core Competencies of the Graduating Naturopathic Student, found in Appendix I-A, provide a more descriptive picture of the objectives of a UBCNM graduate. Together these documents reflect the application of naturopathic principles and philosophy in clinical theory and practice.

## **Development, Implementation and Review of Program Mission and Outcomes**

The mission statement that previously guided the program was reviewed and revised as a component of the strategic planning process which took place in the spring of 2017. Michael Ciolfi, DC, MBA, DBA, Dean of the UB College of Chiropractic, provided the leadership in the strategic planning process. His experience and expertise in this field provided the structure for the UBCNM administration and faculty to identify the components of our strategic plan, and then to step back and create a mission statement that reflected the focus of the program.

The mission and the strategic planning processes were developed as one process, with the assessment of the program needs driving the strategic planning process, and the goals identified in the strategic planning process contributed to the development of the mission statement.

The UBCNM Strategic Plan is found in Appendix I-B-1, and meeting minutes in the development of the plan and the mission are found in Appendix I-B-2. With the review and the revision of the program mission and the revised strategic plan, the current Program Outcomes and Objectives (Appendix I-C) will again be reviewed in the coming academic year. While the current Outcomes reflect the recently revised mission statement very well, a review will assure that the Outcomes are comprehensive and address the current needs of the program. Although the philosophy and principles of naturopathic medicine do not change, the practice of naturopathic medicine does evolve, and so must we evaluate the education of naturopathic physicians in training.

The Years 1 – 4 Student Framework was originally developed in the spring of 2014, following the 2013 programmatic accreditation process. It identifies student outcomes for each of the four years of the program, and serves as a guide for faculty as they develop expectations for courses and in advising students. The Years 1-4 Student Framework is found in Appendix I-D and will be part of the Outcomes and Objectives review processes.

The program's mission and objectives drive the decisions in didactic and clinical curriculum and assessment. Changes to the program offerings, individual courses, and clinical competencies and services are guided by these elements. The review, revision, and development of the mission statement included an examination of the overall assessment process as well as individual components, such as competency achievement, student feedback reflecting individual courses and the overall program through regular meetings with the Naturopathic Student Government Association (NSGA), Exit Interviews with upcoming graduates, NPLEX results, and graduate success as noted in alumni surveys.

The College administration and faculty formally serve on the committees that contribute to the development of the mission, objectives, and outcomes. Students are involved in many committees which feed into the process.

The revisions to the Program mission were developed and approved by the program's faculty and administration. The University does not request a formal approval by the institution's governing board.

The Program's mission will be published in the next edition of the UBCNM Student Handbook in 2018 – 2019, and the newly revised mission is posted in locations throughout the program's facilities.

The All-School Meetings take place on the first Wednesday of each term, and are used to communicate and discuss new information, and to gather information from students, faculty, and staff. The upcoming review of the Program Outcomes and Objectives will involve Program administration, faculty, and students. Revisions of the Outcomes and Objectives will be posted electronically and on paper, and meetings both directly and through student organizations such as NSGA, and will be published in the future editions of the UBNCM Student Handbook. The Student Framework was previously disseminated to faculty, and will be shared with the student body in the 2018-2019 academic year through similar processes.

The printed publications for prospective students of the College of Naturopathic Medicine do not contain the mission statement. As we develop new documents, the College mission statement will be added, and will include Student Outcomes. The program mission statement is found in the University catalog and the University website. Our end-of-program Exit Interviews provide student feedback to the administration on how well the program prepares students for their anticipated endeavors. These strategies, in addition to alumni surveys, help us identify learning outcomes that are not being fully addressed, and drive discussion with faculty members who play a role in developing curriculum, methods of delivery, and assessment strategies so that all components are appropriately addressed.

We believe the program has been consistent on delivery of its program outcomes. We will continue to expand use of new learning technologies to enhance student learning across all Outcomes. Going forward, revisions to these processes and products will continue to be regularly shared among faculty and students.

## **STANDARD II**

### **Organization, Governance and Administration**

The University of Bridgeport is an independent, non-sectarian university organized pursuant to a Charter of the Connecticut General Assembly dated May 5, 1927, as amended in 1947 (Appendix II-A). The University consists of colleges, schools, and institutes offering a variety of undergraduate, graduate, and professional degree programs. The University was designated as a 501(c) 3 not-for-profit corporation by the IRS in 1947. Organization and governance structures of the University and College provide for management and administration of day-to-day operations, medium- and long-term guidance, and direction for the University as a whole. The organizational structure is designed such that there is a multi-level approach to governance, with colleges and schools grouped by related areas of interest. A diagram of the overall structure of the governance and administration of the University can be found in Appendix II-B.

The University is accredited by the Commission on Institutions of Higher Education of the New England Association of Schools and Colleges (NEASC), the relevant regional accrediting body recognized by the U.S. Department of Education. The University of Bridgeport underwent accreditation review and renewal in 2013. See Appendix II-C for the NEASC authorization letter of June 24, 2015. The Connecticut Office of Higher Education (CTOHE) authorizes the UBCNM graduate program to offer an ND degree. See Appendix II-D for the CTOHE authorization letter for the ND program.

There are not any issues or problems with the current way in which the institution is organized and regulated that adversely affect the institution or the program.

#### **Board of Trustees**

The Board of Trustees (Appendices II-E and II-F) governs the University and is responsible for its fiscal and academic integrity. The Board may consist of no fewer than 11 and no more than 39 members. A trustee's term of office is four years. New trustees are elected by majority vote of the full board each May. The nomination process is set forth in the by-laws (Appendix II-G). Major areas of responsibility for the board include hiring the President, oversight of strategic planning, fiscal integrity and budget approval, determining tuition charges, approving the addition or discontinuance of programs of study, and approval of the mission of the University.

Trustees elect officers and draw candidates from a wide spectrum of academic and corporate backgrounds, including but not limited to law, insurance, banking, and public affairs, with broad expertise in business, health, social services, and other sectors. At least two-thirds (2/3) of the Board has no contractual, employment, or personal financial interest in the institution or its programs. The University's

conflict of interest policy (COI) and COI questionnaire are found in Appendices II-H-1 and H-2, respectively. The Conflict of Interest policy adequately protects the interests of the institution. The Institution maintains a file on the currently signed statements from each governing board member which indicates potential or actual conflicts of interest.

The University complies with state laws and regulations pertaining to non-profit governance. The Board of Trustees exercises ultimate authority over the institution. Per Connecticut Statute 33 C.G.S.1080: “Requirements for and duties of board of directors. (a) Each corporation shall have a board of directors. (b) All corporate powers shall be exercised by or under the authority of, and the activities, property and affairs of the corporation managed by or under the direction of, its board of directors, subject to any limitation set forth in the certificate of incorporation.”

The Office of the General Counsel is the primary coordinator of the University’s efforts to comply with relevant legal requirements and safety guidelines. The General Counsel reports to the President and the Board of Trustees. Responsibilities include providing guidance to ensure that appropriate safety requirements are implemented, and advising the University Safety Committee. This position also advises the Office of Human Resources regarding compliance with legal requirements involving employees, including policies preventing and prohibiting discrimination and other unlawful harassment.

#### Executive Committee

The full Board meets no less than three times per year. Special meetings may be called by a Board co-chair, the President of the University, or by written request of any nine members of the Board. During periods between board meetings, the powers of the Board may be exercised by the Executive Committee, which consists of the co-chairs of the Board, the vice-chairs, the chairs of the standing committees, and four members of the Board at large appointed annually by the chair. Faculty and student representatives, usually the presidents of the Faculty Council and the Student Government Association, attend Board meetings and represent the interests of those constituencies.

#### Standing Committees

The standing committees conduct much of the business of the Board. After reviewing and evaluating reports and proposals from the administration, often with assistance of faculty or student liaisons, members of each committee give reports and make recommendations to the full Board for final action. The current committees are: the Executive Committee, Administration and Finance Committee, Academic Affairs Committee, Audit Committee, Enrollment Management and Student Affairs Committee, and the Development Committee.

Faculty representatives may participate as observers on the Academic Affairs Committee, the Enrollment Management and Student Affairs Committee, the Development Committee, and several ad hoc committees. The Academic Affairs Committee of the Board holds particular importance to university organization and governance. This committee reviews and recommends action on all matters of general policy relating to the educational programs, including general educational philosophy, institutional academic structure, administration-faculty relationship, and development or phasing out of educational programs.

#### Board Communications

Board members communicate between meetings via conventional mail, e-mail, and attendance at meetings of standing committees. Board communication with the University is primarily via the President who, as the chief executive officer, is the representative of the Board to the University community. Other members of the President's Cabinet may, at times, communicate directly with members of the Board between regular meetings, often through working with standing Board committees.

#### University Officers

The Board of Trustees is solely responsible for selecting the President of the University, who serves at the pleasure of the Board. The President is ex-officio a member of the board, but has no vote at Board meetings. The Board delegates responsibility and authority for the day-to-day operations of the University to the President. The President thus serves as representative of the Board in the management and administration of the University; is responsible for supervision, activities, and functions of the Vice-Presidents as well as other academic and administrative personnel; and represents the University in its relations with government agencies and other organizations. The President, pursuant to the advice and consent of the Board Co-Chairs, is authorized to appoint the Provost/Vice President for Academic Affairs and Vice President for Finance and Administration (VPFA), who is the Chief Financial Officer (CFO).

#### President's Cabinet

The President meets weekly with the senior staff (Cabinet), consisting of the Provost, the Vice-President for International Programs, the Vice President for Administration and Finance, the Associate Vice President for Admissions, the Special Assistant to the President and University Counsel, the Dean of Students, and others whom the President invites. The President meets monthly with the Advisory Council, which includes the senior administrative staff, Deans, President of the Faculty Council, and other University staff. The President also meets with the General Faculty twice a year and with the Faculty Employment Concerns Committee each semester to discuss issues of faculty concern.

## Faculty Participation

The faculty have a voice in University governance through the following activities:

- Advising the Provost in the recruitment and appointment of academic administrators and in recruitment, appointment, reappointment, promotion, and tenure recommendations of peers, as provided for in the Faculty Handbook;
- Possessing legislative authority through participation in Faculty Council and University Senate;
- Serving on a variety of university-wide committees such as the University Planning Review Board, University Budget Review Committee, and the IT Governance Committee, by invitation of the administration and/or committee chairs.

## Faculty Council

The legislative authorities and responsibilities of the faculty are held by the General Faculty, consisting of the President of the University and all those holding academic rank at the University. This group is convened at least twice a year by the President, but may be brought together by the Board of Trustees, the Faculty Council, or a petition signed by at least twenty faculty members. Each of the latter mechanisms is dependent on support from super-majorities, designated as two-thirds (2/3). The teaching faculty delegate authority to carry out their routine responsibilities to the Faculty Council. These members are chosen from the instructional staff of each college/school/institute and those holding academic or professional rank (e.g., librarians). Specifically excluded, however, are those who hold academic rank but whose positions are primarily administrative (e.g., President, Provost, Dean). The Faculty Council meets at least once a month and has as its “central and guiding purpose furthering the effectiveness of the University of Bridgeport as an institution dedicated to teaching and research.” The Council thus concerns itself with undergraduate academic requirements, standards, and policies; curriculum, admissions, graduation, and student ethics; and student life policies. The Faculty Council is the faculty voice in the Senate and by provision of the Constitution of the University, the Senate outnumbers members of the administration by two seats.

A subcommittee of the Faculty Council, the Faculty Employment Concerns Committee, meets with the President on a regular basis to address issues involving working conditions for the full time faculty, including compensation, raises, and their structure. The Faculty Council is working with the offices of the President and Provost to revise the Faculty Handbook.

## University Senate

The most important policy-making organization is the University Senate, which consists of representatives of the three major University constituencies (administrators, teaching faculty, and students). The administration is represented by the Provost, academic deans, and eight members of the administration designated by the President. The faculty body is represented by delegates from the Faculty Council and each college, school and institute. The student body is represented by the President of the Student Government Association, and student senators who represent each of the colleges and schools. The structure for student participation in governance at the University includes undergraduate students, graduate students, and professional students. In addition to functioning in their respective areas of competence, the Student Senate and Faculty Council may prepare legislative proposals or position statements for submission to the University Senate.

The University Senate's legislative process accommodates two principles:

- The Board of Trustees has academic and fiduciary responsibility to the State of Connecticut for the integrity of the institution, and
- The faculty is given primary responsibility for academic standards and regulations, as well as general education and graduation requirements.

The Faculty Council can call the General Faculty into session, a quorum of which may reconsider and overrule Senate actions by a two-thirds (2/3) vote. Ultimate authority rests with the Board of Trustees, however, and is reflected in the provision requiring President's approval of Senate actions. In the event of an impasse between the President and the Senate, the latter has the right to appoint a committee to bring the dispute to the Executive Committee of the Board of Trustees. In such cases, final decisions rest with the Board of Trustees. The President is currently working with the University Senate and Faculty Employment Concerns Committee to revise faculty governance procedures and the University Faculty Handbook.

College faculty have representation on the University Senate, Faculty Council, Faculty Employment Concerns Committee, and the Faculty Handbook Committee. The Associate Dean for Clinical Affairs represents the naturopathic clinic in monthly Clinic Directors meetings. The Dean represents the college on the President's Advisory Council, the Provost's Council, and the Health Sciences Deans and Directors' Council.

#### Senior Academic Administration

The senior academic administration consists of the President; the Provost/Vice President for Academic Affairs; the Vice President for Health Sciences; the deans and directors of the university's 12 schools,

colleges and institutes; and the University Librarian. The deans and directors report to the Provost, who in turn reports to the President.

#### President

Neil Salonen is a graduate of the University of the State of New York with a degree in Political Science. He did graduate work in international relations at the George Washington University in Washington, D.C. He is the past Chair of the Board of the Connecticut Conference of Independent Colleges and serves as a member of the Executive Committee of the Bridgeport Regional Business Council. He is a Board member of the Connecticut Campus Compact, promoting public and community service, and is the immediate past Chair of the Bridgeport Public Education Fund Board of Directors. His résumé is found in Appendix II-I. The newly appointed University President who will start in this summer is found in Appendix II-J.

#### Vice President for Health Sciences

The Division of Health Sciences includes the Colleges of Naturopathic Medicine and Chiropractic; the Institutes of Acupuncture, Nutrition, and Physician Assistant; School of Nursing, and the Fones School of Dental Hygiene. The Health Sciences Deans and Directors meet on a regular basis to discuss common interests and identify shared priorities. The Vice President for Health Sciences represents the Health Sciences Division's interests to the University administration in order to proactively address common concerns and advocate for divisional needs. This position also works to assist the University administration in the development of new health science programs both internally and externally, engages in development and improvement of academic and clinical facilities, and provides oversight for the UB Clinics, Department of Health Sciences postgraduate education, and the Director of Health Sciences planning and academic assessment.

#### Dean

The program dean/chief academic officer is well trained with 20 years of experience in education and educational administration prior to achieving her ND degree. Dr. Prenguber has a Bachelor's degree in education, a Master's degree in Special Education, and a Master's degree in Educational Administration. She taught here in the United States and in Japan, and later served as a Program Specialist, coaching and training teachers. She completed Tiers I and II in educational administration through California State College (Tier I) and Azusa Pacific College (Tier II) as a requirement for educational administrators in the state of California. She served as the Coordinator of Special Education, supervising the programs in a 2 city school district. She completed her naturopathic doctoral degree in 2000. She served as the Director of Integrative Care in a hospital setting, developed a naturopathic residency program, and supervised the

naturopathic residents in that program for 10 years. She served on the CNME for more than seven years, including four years as the President of the Council.

In addition to the responsibilities listed in Appendix II-K, the Dean is also responsible for external relations of the College, including government agencies and professional organizations including the AANP, AANMC, CCACO, and those involved in naturopathic licensing, accreditation, and advancement of the profession, as well as interactions with naturopathic colleges and other institutions of higher learning.

The responsibilities of the position allow the chief academic officer the autonomy to manage the academic and clinical aspects of the program, working with the administrative staff and faculty to assess the multiple aspects of the program and to implement programmatic changes as needed. These include requirements for leading discussions and decisions regarding admission to the program, program and graduation requirements. Changes that have the potential to impact other programs within the Health Sciences Division, such as course content, are discussed with the chief academic officers of the Health Sciences programs. The Dean communicates directly with the Vice President of the Health Sciences Division and with the Provost regarding program needs. Program needs are reviewed regularly throughout the year through the various committee meetings held regularly each semester.

The budgeting process begins in January of each year and is finalized in April. Development of the annual programmatic budgets originate with each dean, and are presented to the Chief Financial Officer. Program needs are discussed, and requests for financial support for special projects are supported with documentation. A recent example involves the request for additional funding to hire medical doctors for clinical shift supervision to support the proposed increased scope of practice for naturopathic physicians. The need was clear and the funding was approved. Another example that occurred in recent years involved the need for replacement of clinic computers for the EMR system. The request with documentation was presented and the funding was granted. Renovation of clinic facilities for the naturopathic program was completed in 2015, providing the program an up-to-date facility for examining and treating patients, and conference spaces for Case Preview and Review. The Health Sciences Collaborative Research Lab and supporting equipment were also funded by the University during the 2016-2017 academic year. The University administration has been supportive of these and other projects for the naturopathic program, including those needs that have arisen during the course of the academic year, long after the budget development process has been completed. The Board of Trustees has final approval authority for all budgets.

The chief academic officer leads program initiatives such as the strategic planning process, and chairs the Curriculum and Assessment and the Policies and Procedures Committees. In the recent strategic planning efforts, the Dean worked with the Dean of the Chiropractic College Michael Ciolfi, DBA, MBA, DC and, based on his extensive experience in this area, requested that he lead the process.

Working collaboratively with the program leadership team and the faculty, the Dean is responsible for the effective delivery of educational programs, ensuring that they are consistent with the mission of the University of Bridgeport and of the Division of Health Sciences. The Dean chairs the Dean's Faculty meetings and the Curriculum and Assessment Committee meetings, leading the review and revision processes of the curriculum and assessment components of the program. These committees meet two to three times each semester, and while they have multiple functions, the driving objectives are to evaluate the curriculum and assessment aspects of the program. Other strategies for reviewing and revising curriculum and assessment include various other committees, including Clinic Faculty, Clinic Education, Policies and Procedures, and Research. The review process of each level of clinic exam findings is followed by revisions as indicated, and review of course surveys serve as other strategies for reviewing and revising curriculum and the multiple aspects of the assessment plan. CV of the Dean / Chief Academic Officer is found in Appendix II-L.

The organizational chart is found in Appendix II-M.

Associate Dean of Academic Affairs and Associate Dean of Clinical Education

The Associate Dean of Academic Affairs (ADAA) and the Associate Dean of Clinical Education (ADCE) report directly to the Dean and work with the faculty members to ensure implementation of the educational and clinical programs, respectively. The ADAA joined the administrative team in the spring of 2015, and her background as a practicing naturopathic physician and faculty member at National University of Health Sciences has prepared her for her current role, working with faculty and students. The ADCE joined UBCNM as a faculty member in the summer of 2014, and took on the administrative role in November 2016. His background includes training as a medical doctor and naturopathic doctor, and his practice as a naturopathic physician and as a faculty member at Universidad Del Turabo and the University of Bridgeport has provided him with the experience to guide the faculty and students in clinical education. The teaching experiences of these associate deans directly influence curriculum development and effective course delivery. Their CVs are found in Appendices II-N & II-O.

## Academic Coordinator and Clinic Coordinator

The Academic Coordinator and the Clinic Coordinator directly support the administrative aspects of the program. The role of the Academic Coordinator is to support the Dean and Associate Deans, working with the Clinic Coordinator and faculty members, to coordinate delivery of both academic and clinical education. She schedules classes, clinic shifts, mid-term and final exams, manages student remediation activities, and coordinates with other departments in scheduling and optimizing use of shared resources. The CV of the Academic Coordinator is found in Appendix II-P.

The Clinic Coordinator supervises students on clinic shifts, trains, mentors, and coaches new faculty members, and has supervisory responsibility of students participating in outreach activities. The Clinic Coordinator implements chart audit protocol, supervises the chart audit team, and reviews reports for accuracy, consistency, and flagged issues. She provides support for and tracking of clinical faculty and students in clinic compliance training in, but not limited, to HIPAA, OSHA, and CPR requirements. The CV of the Clinic Coordinator is found in Appendix II-Q.

Administrators are appropriately qualified for their roles and continue to receive training, both through formal CE training as well as on-the-job training and experience. The team is relatively new, with the Dean and the Academic Coordinator starting during the spring term of 2014, the ADAA starting during the spring term of 2015, the Clinic Coordinator starting in January 2016, and the ADCE starting during the close of the fall term of 2016. However, the members work collaboratively and have developed into a team, working well together, relying on the strengths of each member to support the goals of the program. It is anticipated that the team members will continue to work cohesively and effectively as we move into the future.

## Additional staff who support the administration

The Dispensary Manager is a 10.5 month position that includes the following responsibilities related to the management of dispensary operations:

- Supervise Dispensary Coordinators and work study students
- Coordinate dispensary inventory for off-site clinics
- Mentor Student Vendor Representatives and oversee their college activities
- Develop and maintain vendor relations
- Coordinate and promote college clinic events (e.g., Student Rep Day, Vendor Fair)

The Dispensary Manager has held this position since 2014, and has enhanced the functions of the Dispensary since that time. She developed and leads a Dispensary sub-committee which meets two to three times each term to review the products and assess for duplications and needs, with the goal of

streamlining the inventory to best meet the needs of the clinic. She has also worked closely with nutraceutical vendors to develop student business skills as they serve as vendor representatives, and has expanded the annual Vendor Day to include the students and faculty of the Chiropractic College as well as the College of Naturopathic Medicine.

The Administrative Assistant reports to the Dean and performs a broad range of administrative support, including but not limited to:

- Planning, organizing, and coordinating the day to day operations of the Office
- Collecting, tracking, and maintaining files of faculty CVs
- Collecting, tracking, and maintaining clinic supervisors' current ND Connecticut license, malpractice insurance, current CPR documents
- Updating and maintaining administrative files and purchasing records
- Prepare all check requests and expense reports
- Assist in the preparation for Accreditation team visits

The Clinic Clerk reports to the Associate Dean of Clinical Education, and responsibilities for that role include:

- Scanning and entering into the EMR patients' medical reports from external sources
- Providing clinical faculty and administrative support
- Contacting clinical faculty and students regarding cancellations and other unforeseen changes in the clinic schedule
- Tracking student clinic attendance, patient contacts, preceptorship hours, Grand Rounds hours, Dispensary hours, Lab hours, and Clinic Service hours
- Meeting with students to review hours and contacts
- Maintaining student and faculty records for OSHA, HIPAA, BBP, Hepatitis Waivers
- Maintaining inventory of clinic handouts
- Ordering UB and Community Clinic supplies

In addition to the College of Naturopathic Medicine, the College of Chiropractic and the Acupuncture Institute offer doctoral programs within the Health Sciences Division. All three programs hold the same administrative status within the division and in the university, with no disparity among them. The College of Chiropractic administrative hierarchy includes a Dean, an Associate Dean of Clinical Education, and an Associate Dean of Academic Affairs. The College of Naturopathic Medicine mirrors these positions, and includes the position of Clinic Coordinator in addition. The Acupuncture program

offers a master's degree program as well as a doctoral program. The program currently has a significantly smaller administrative staff due to the smaller size.

Inquiry with several other naturopathic medical programs in the US and Canada revealed significant diversity in administrative staffing among these programs. Administrative staffing at the College of Naturopathic Medicine at the University of Bridgeport appears to fall well within the norm of naturopathic programs.

The institution's leadership provides financial support and other resources to meet the needs of the program. Examples include the institutional support of additional administrative staffing in 2013 to meet the evolving needs of the program, support for progressively improving adjunct faculty wages over the past 4 years, the build out of the UBCNM clinic, and other financial support such as the additional funds to hire MD faculty to support implementation of increased scope of practice. The Health Sciences Collaborative Research Lab that has recently been completed, funded by the University, was developed largely to the specifications of the UBCNM Dean and Research Director. Other resources provided by the institution include the recent collaboration of the Provost and the Vice President of Health Sciences with the Dean to develop additional strategies to increase the patient volume for students' clinical experiences.

The University maintains a recruitment and hiring procedures guide, which includes an affirmative action policy, principles of recruitment, interviewing guidelines, and a candidate evaluation form. These guidelines provide an equitable and effective process in hiring new personnel.

UB's Employee Policy Handbook was most recently updated and published on July 1, 2016 and again in July 2017 (available as an onsite exhibit). It is a comprehensive tool to provide employees with knowledge and guidance of University policies and procedures. Policies are in place to ensure non-discrimination in hiring and evaluation of personnel, and recruitment and admission of students. The University maintains a recruitment and hiring procedures guide, which includes an affirmative action policy, principles of recruitment, interviewing guidelines, and a candidate evaluation form. These guidelines provide an equitable and effective process in hiring new personnel.

The UB Office of Human Resources addresses employee grievances. As indicated in the Employee Policy Handbook, all UB employees are required to abide by a policy for management of personal conflicts of interest. This policy includes a "zero tolerance" provision for "retaliation against anyone who reports an incident or files a complaint." A University policy (dated Aug. 29, 2012) specifically affords protection from, and the handling of, complaints of harassment, discrimination, hate crimes, intimate

partner violence, or sexual harassment. Anyone who suspects a violation of integrity may file a claim with the Office of Human Resources, and has the option of filing it anonymously.

Employment contracts signed by University personnel require reporting of perceived violations of integrity or law. Grievances deemed to be restricted to academic matters (e.g., a dean and faculty member disputing a scheduling concern) are handled by academic leadership. The Provost may occasionally convene an *ad hoc* committee consisting of faculty members and administrators should a strictly academic grievance prove intractable.

The University is fortunate to have a highly qualified and professionally engaged faculty. Its fulltime and part-time members are broadly engaged in teaching, research, and scholarship. Faculty are evaluated by UBCNM administration annually, and new faculty are evaluated more frequently.

The UB Faculty Handbook (1996, with a revised employment section approved in 2002. See Appendix II-R) adequately and appropriately defines categories of faculty required to fulfill the University's mission. Reappointment criteria are clear. Some details in the Faculty Handbook need updating such as position titles, and schools and colleges have changed, but the main principles such as peer review, timelines, and published criteria are widely established in academia, generally, and continue to be effective.

Faculty members have contractual security and appointment and reappointment processes that are as transparent as law and privacy concerns allow. A faculty member also has a right of appeal against dismissal through the Faculty Appeals Committee (FAC). Appeals are also “understood to include reappointment, promotion and tenure decisions, as well as requests for sabbatical leaves and leaves of absence.” The FAC is called into session when a faculty member makes an appeal that cannot be resolved through meeting with the Vice President for Academic Affairs.

The University strives to provide fair and competitive total compensation to its employees. The Department of Human Resources assists the University's Schools and Colleges in benchmarking positions to both ensure internal equity as well as attract the best qualified talent. As is common in higher education in general, particularly with clinical roles that compete with salaries afforded in private practice, the College has been periodically constrained to meet applicant salary demands.

The UB Employee Benefits Handbook, available on-site, provides specific information to administrative employees and faculty regarding benefits afforded full and part-time employees. The University considers employee benefits to be a priority as they are considered to be both a recruitment and retention tool. Accordingly, employee benefits are periodically reviewed to maximize employee satisfaction.

Teaching loads are determined by university policy and federal employment law. Accordingly, adjunct faculty are limited to a maximum of 18 credits per academic year and ten in any one semester. This is in compliance with federal law with regard to part-time faculty hours. The full-time faculty credit load may vary, but it is at least 20 credits per academic year.

There are various mechanisms in place for students, faculty, and administrative staff to communicate their needs and provide input to the program's leadership team. Faculty members participate in a number of committees, including the Dean's Faculty meeting, the Curriculum and Assessment Committee, the Clinic Faculty Committee, the Admissions Advisory Committee, and the Policies and Procedures Committee, and share their ideas and opinions on the respective topics at these meetings. Faculty members participate in the development of policies and procedures in all of these committees, and they are formalized in the Policies & Procedure Committee. Each member of the administration has an open-door policy, and faculty often present themselves to the member of the administrative team they feel is most appropriate. Faculty members are involved in the interview process for faculty and administrative positions.

Administrative staff meet during the year, often without an agenda for open discussion.

Students most commonly utilize the structure of the Naturopathic Student Government Association (NSGA), communicating with their representatives, such as the NSGA President, class presidents, and committee chairs. The NSGA has a Faculty Advisor, and the student representatives meet with the Advisor and the Dean throughout the academic year. The meeting frequency varies from year to year, based on the NSGA President's preference. The UB chapter of the Naturopathic Medical Student Association (NMSA) also serves a leadership function within the school, and communicates directly with the Dean. There is some overlap of function and budget between these two groups, and in each of the last three years the lines have become better clarified. One area for improvement will be to promote the clarifying process between these organizations and better define who is responsible for what activities and functions, including budget management.

Class Presidents also have a direct line of communication with the Dean. Meetings with any of the administrative staff of either one or both of the Associates Deans and / or the Dean, are as frequent as each Class President requests. Students present alone or in small groups to an individual or multiple members of the administrative team to discuss ideas, concerns, and to develop plans to resolve their academic, clinical, and sometimes their personal concerns. Surveys, both anonymous and named, are used in the program to provide an additional mechanism for expression of ideas. Class cohorts conduct them, the NSGA uses them to gather data, and occasionally surveys are used by the Associate Deans to gather information.

## **Standard III**

### **Planning and Financial Resources**

The University strategic plan summary and articulated strategic plan were created through a series of meetings of deans, directors, academic administrators, faculty, the provost and president (Appendix I-B). The drafting process followed an extensive period of SWOT analysis, vision development, and alumni participation, as well as a review of the prior plans (2005-2010) and (2011-2015).

The attached plan was authorized by the Board of Trustees. The plan was envisioned as an overarching mechanism that would guide the development of school, college, and institutes. The Board of Trustees has extended this plan framework through 2018, as a new plan framework is being developed by the Provost in consultation with a range of principals at the University, including consulting with faculty, as well as discussion with the President. Since a new President has been appointed by the Board and is scheduled to begin in July 2018, the new plan (2018-2023) will be finalized once she assumes office.

The plan currently under development reflects an appraisal of the significance of the plan set forth in 2010. The plan reflects institutional priorities and also provides an initial mechanism for ongoing prioritization.

While we felt the 2010 effort was significant, we have assessed its impact and will develop a plan which is more strongly powered by data for the next plan. There will be an increasing emphasis upon business analytics and data mining. The new plan also will be characterized by an even sharper focus on prioritization and will use key strategic concepts to assess whether priorities are being realized.

The university has used a five-year planning cycle and has occasionally extended a plan framework for additional years. The five-year planning cycle is founded on a NACUBO-based portfolio approach. In this approach, higher level priorities are constant, but goals and objectives can be adjusted in light of circumstances and data as they might emerge in the course of the plan cycle.

The development of the budget is based in the core values of the strategic plan, however, a reference which specifies that significant investments are tied to each core value would enhance the budget process.

The University President holds President's Advisory Council meetings periodically throughout the year that the Deans and Directors attend, and the work that the University has initiated to develop a new Strategic Plan has been part of the discussion at the last several meetings. There have also been additional opportunities offered by the Deputy Provost to provide input into the development of the plan. Under the direction of the Provost, the Deputy Provost is facilitating the work on the development of the institution's strategic plan. Through these mechanisms, the Program's Dean has ample opportunity to

offer ideas and present needs that represent the Program in the development of the new strategic plan, ensuring that the Program's current and future needs are considered.

The University of Bridgeport's leadership team aggressively monitors the University financial position. Care is taken to balance current operating needs with long-range planning.

UB administers its financial resources with integrity by adhering to generally accepted accounting principles (GAAP), providing transparency of data, engaging in a collaborative budget process, and employing qualified financial staff overseen by the Vice President for Administration and Finance and the Finance Committee and Board of Trustees. The University's primary financial model relies on tuition and auxiliary revenues coupled with expense controls to achieve its educational mission.

The University has produced operating surpluses every year since 2005, and its financial position is increasingly strong. Since 2006, the University's change in net assets has been markedly positive. Investments have grown to \$38 million as of June 30, 2017. This growth provides a strong balance sheet, which in turn improves financial ratios and provides reserves.

The financial challenges that could adversely affect the ability to achieve mission and educational objectives are related to enrollment declines within the international student population, an issue facing all of higher education and particularly comprehensive universities like UB with programs popular with international students (e.g., Engineering and Business). The current political climate has contributed to a fear of immigration visas not being stable. Redoubled focus is being placed on recruiting international students to increase enrollment of these constituents.

The institutional financial audit is completed by an independent auditor. Appendix III-A includes the institutional financial audit, an opinion/management letter, for the most recent fiscal year, as well as comparative financial information on the preceding fiscal year. The annual audit is handled by the outside auditors Marcum LLP of Hartford, Connecticut. The financial numbers are prepared by the Controller and staff. Upon completion, the Vice President of Administration and Finance reviews the figures. Upon approval, our auditors complete their audit and provide their opinion.

Since fiscal year 2000, the University has received unqualified opinions on the annual audited statements.

The Program is provided with sufficient financial resources to achieved its mission, meet existing program commitments, and provide adequately for instruction, research and scholarship, administration, learning resources, student services and activities, maintenance, equipment, and supplies. The naturopathic medicine clinic, however, is ideally in need of a new EMR system, to meet the needs of student clinicians' efforts to more efficiently document patient visits accurately, completely, and in a

timely manner. The current system minimally allows for clinical research to be completed using the data recorded in patients' medical records. The EMR system will need to meet the needs of other clinical programs within the Division of Health Sciences and UB Clinics, including the acupuncture and chiropractic programs.

Funds for instructional tools and supplies are available, as are funds for clinical needs. As one example, remote viewing for counseling and homeopathy rotations was moved in the summer 2017 from elsewhere in the building to the naturopathic clinic floor, and all viewing and recording equipment was replaced.

The 3-year institutional budget is found in Appendix III-B. Projected revenues and expenditures are based on assumptions related to enrollment trends, program needs (including personnel), capital expenses, and daily operations. The Program budget is guided by institutional missions and programmatic strategic plans, and has been sufficient to meet these goals. The Program budget is found in Appendix III-C.

The budgeting process begins in January of each year and is finalized in April. Development of the annual programmatic budgets originates with each Dean or Director, who use the Program strategic plan for developing budget priorities and review requests from faculty regarding specific program and course needs. The drafted Program budget is presented by the Dean to the Chief Financial Officer, with Program needs discussed, and requests for financial support for special projects are supported with documentation. The institution's leadership is aware of the Program's current and future needs. A recent example involves the request for additional funding to hire medical doctors for clinical rotation supervision to support the proposed increased scope of practice for naturopathic physicians in the state of Connecticut. The need was clear and the funding was approved. Another example that occurred in recent years involved the need for replacement of clinic tablets for the EMR system. The request with documentation was presented and the funding was granted. The renovation of clinic facilities for the naturopathic program was completed in 2015, providing the Program with an up-to-date facility for examining and treating patients, and conference spaces for Case Preview and Review. The program was also in need of an updated research lab, and the HSC Collaborative Research Lab was planned and developed in the last 2 years. The University administration has been supportive of these and other projects for the Naturopathic Program, including those needs that have arisen during the course of the academic year, after the budget development process has been completed. The Board of Trustees has final approval for all budgets.

The budget process is iterative and collaborative amongst all constituencies of the University, including the Provost as well as the Deans and Directors of each academic area. The budget process includes information generated through Institutional Research, and through Admissions regarding

enrollment and retention, in order to arrive at enrollment projections and targets, benchmarks, and consideration to investments in specific programs.

The annual budgeting process begins by advising each department that the budget module is open for input of their budget requests on a line-by-line account basis. Once all budgets requests are entered, the Budget Director compiles all the requests together with the expected enrollments at the new tuition rates. All other income is taken into consideration in the budget preparations. In April, the Vice President for Administration and Finance (VPAF) meets with the President to review the compiled budget requests. The University is committed to operating within current revenues. Therefore, if total budget requests exceed total revenue, the VPAF, Budget Director, and each Dean or Director meet to review and make adjustments to their expenses. Current and projected enrollment is also reviewed and adjusted at this time, if necessary. The adjusted budget is reviewed at the Board of Trustees' Finance Committee's Spring meeting and presented for the full Board's preliminary approval. The budget is presented again at the next Fall's BOT/Finance Committee meeting for final approval after the Fall term enrollment is realized. The budgets and actual expenses are available electronically on the UB intranet which displays up-to-the-minute actual figures. Monthly reports are generated for the President and members of the Board of Trustees' Finance Committee. The reports are reviewed at each Board of Trustees' Finance Committee meeting.

The Finance Office reviews expenditures of departments and schools. Accounting of expenses for each budget unit (e.g., college, school, institute, and department) is tracked for expenditures and remaining amounts in budgeted line items, and can be viewed online by those authorized via access to the UB portal. A purchase order system coordinated by the Accounts Payable/Purchasing Department ensures that purchases adhere to budgets. All purchases made by schools or departments must be approved by the Dean or Director of that unit plus the appropriate University administrator (Provost/Senior VP, Vice President for Administration and Finance [VPAF], president). Approved purchase orders are then forwarded to the Director of Budgets and Receivables and Director of Accounts Payable/Purchasing for processing.

An area of weakness identified by the CFO is the challenge in extraction of the institutional data that informs our financial decision-making process. With the start of the new University President in the 2018 Fall term, it is anticipated that will be an area that will be addressed.

## **STANDARD IV**

### **Program Faculty**

#### **Faculty Qualifications**

University of Bridgeport College of Naturopathic Medicine (UBCNM) faculty are required to hold a terminal degree in their discipline. Clinical faculty have three (3) or more years of experience prior to hire. We strive to bring in faculty for classroom positions with that same level of experience. Prospective faculty with fewer than three years of experience may be hired for Adjunct Support (Teaching Assistant) positions before being considered to teach a full course. If licensure exists for their field, the faculty member must maintain a current license.

The core of our basic science faculty consists of three instructors holding PhDs: Dr. David Terfera holds a PhD in Cell and Developmental Biology; Dr. Anthony Ross holds a PhD in Anatomical Sciences; and Dr. Mark Mattie is a medical doctor with a PhD in Biochemistry.

Several of our clinical practice instructors hold specializations in the areas in which they teach, including Mitchell Hubsher, DC, ND who holds dual degrees in chiropractic and naturopathic medicine, and Dr. Eleonore Herschberger, ND, LAc who holds degrees in acupuncture, naturopathic medicine, and nursing. Patrick Fratellone, MD is a cardiologist.

Faculty members submit an updated CV and a current license to the UBCNM Administrative Assistant annually. Beginning in the 2018 Fall term, faculty members will also be asked to complete a form detailing any continuing education earned, conferences attended, or other relevant achievements.

#### **Faculty Evaluations and Training**

Every faculty member is observed at least annually. Those who are new to the program or teaching a new course are observed more than once. The Associate Dean of Academic Affairs (ADAA) provides direct support for new faculty members, connecting them with experienced faculty who teach in the same sequence or for purposes of mentoring. For instance, Dr. Amanda Placeres was hired to teach *Nutrition III* in Spring 2018. She met on campus with Associate Dean Draus and the other instructors in the nutrition sequence, Dr. Sanders and Dr. Chimileski, to review the outcomes and syllabi for each of their courses and to coordinate the curriculum.

As is common in specialized training programs, many of the UBCNM faculty members began teaching without formal training in instruction or assessment. Since the 2014 Fall semester, UBCNM has made a

concerted effort to provide more consistent and enhanced faculty development, including specific training in assessment and teaching strategies.

UB provides a day of faculty development training during each fall term. Full time faculty across the University are required to attend and adjuncts are invited and encouraged to attend. UBCNM faculty members Kimberly Sanders, ND, participated as a member of the Planning Committee for the 2017 Faculty Development Day, and Anthony Ross, PhD, presented.

UBCNM also offers in-house training prior to the start of the academic year to full time and adjunct, didactic and clinical faculty members. Training topics have included instruction in writing clear and effective test questions, guidelines for advising students, effective utilization of the Learning Management System (LMS), developing workable rubrics for professionalism in the classroom. Additional faculty development opportunities are offered through committee meetings throughout the year, in addition to opportunities to participate in on-line and in-person seminars and conferences. See Appendix IV-A for the agendas and sample materials from UBCNM Faculty Development Days.

In February 2018, UB sponsored a daylong Grant Writing Workshop to which Drs. Mattie, Furlong, and Herschberger attended. See Appendix IV-B for the Grant Writing Workshop Agenda.

UBCNM provides funding for individual faculty members to attend conferences and workshops for specific training in instruction and/or assessment. These include:

2014:

- Dr. Norton: Women's Health Symposium
- Dr. Mattie: Online CMEs through Yale

2015:

- Dr. Terfera: Teaching Professor Conference
- Drs. Proctor and LaRosa: ICD-10 Coding Seminar
- Dr. Proctor: Organizational Skills Seminar
- Dr. Proctor: Pharmacology Conference, Vermont Association of Naturopathic Physicians
- Drs. Draus, Herschberger, Proctor, Prenguber: Connecticut Naturopathic Physicians Association Conference
- Dr. Herschberger: New Hampshire Association of Naturopathic Doctors Conference (livestream)

2016:

- Dr. Ross: Teaching Professor Conference
- Dr. Draus: Narrative Medicine Workshop, Columbia University School of Medicine
- Dr. Sanders: CNME Evaluator Training
- Dr. Herschberger: TCM

2017:

- Dr. Herschberger: Harvard Conference in Medical Education
- Dr. Draus: Leadership in Medical Education workshop (online)

- Dr. Furlong: PIE Conference, Integrating Evidence for Complementary & Integrative Health Educators
- Dr. Sanders: AANP (as presenter)
- Dr. Furlong: Integrative Healthcare Symposium

Annual training:

- Dr. Prenguber: OncANP Conference and the AANP conference

Resident: During the year-long residency, UBCNM sponsors the resident to attend a minimum of one conference or training workshop.

### **Support and Training of Didactic Faculty**

The ADAA reviews syllabi for every didactic course each semester, and assists faculty members in writing clear objectives. Individual faculty members are encouraged to meet with Dr. Tina Freilicher, Director of Academic Assessment and Planning for the UB Division of Health Sciences, who provides guidance on the creation of effective questions and developing appropriate and varied assessment tools.

The ADAA works individually with instructors to increase their comfort and skill with classroom technology. Until the 2018 Spring semester, UB IT department works with faculty individually on the use of classroom technology. Instructors needing assistance with academic technology now submit a request to the helpdesk and the requests are forwarded to a tech service representative.

UBCNM instituted a requirement in the 2015 Fall semester for each instructor to hold at least one class a semester online. Tools that are commonly in use include Zoom for synchronous instruction and discussion; chat rooms and discussion boards; online quizzes and exams; and uploading of multimedia materials by both students and faculty. These tools have allowed courses to stay on schedule during campus closures brought about by inclement weather.

Methods used to assess effective delivery of material include administrative observation of faculty during classroom instruction, student individual feedback or via class presidents and NSGA during the term, and student course evaluations following course completion. Material covered in each course is evaluated through a comparison of each syllabus to the UBCNM program outcomes, the NPLEX blueprint, a comparison of course grades to NPLEX results, exit interviews, and alumni surveys.

The ADAA works one-on-one with faculty to encourage and assist with refining instructional techniques and in the development of new teaching methods. As is common in college classrooms, students have had varying reactions to new techniques. Some vehemently protest, preferring more familiar methods (lecture combined with instructor-created notes handed out or published online is the most commonly cited) over more active methods such as teach-backs, group work, and aspects of the flipped classroom.

Taking time to explain the reasons behind changes in classroom technique seems to be most effective in assisting students with adapting to changes.

### **Support and Training of Clinical Faculty**

The clinical faculty team is currently comprised of seven (7) full-time and fifteen (15) adjunct faculty members, all of whom are licensed providers in the State of Connecticut. Nine (9) of the ND clinical supervisors are graduates from Bastyr and National University of Natural Medicine (NUNM), and the remaining 12 are graduates of UBCNM. UBCNM requires clinical supervisors to have a minimum of three years (or two years with one of them being a high volume residency) of clinical experience. The majority (91%) of clinical faculty have five or more years of experience. The following list shows the percentage of supervising clinicians' experience:

- > 30 years of clinical experience: 10%
- > 20 years of clinical experience: 14%
- > 10 years of clinical experience: 38%
- 5 - 9 years of clinical experience: 29%
- 2 - 4 years of clinical experience: 9%

There are eight designated categories of clinical rotations and include General Medicine, Physical Medicine, Homeopathy, Mind-Body, Pediatrics, Integrative Oncology, Women's Health, and Generative Medicine. The Generative Medicine rotation provides an opportunity for students to learn cutting-edge approaches to naturopathic medicine, led by Dr. Peter D'Adamo. Pioneering work in the field of intestinal microbiome analysis and genomic (SNP) research, relating to disease and prevention, is an opportunity for students to learn a unique approach to naturopathic medicine, employing tools not commonly used in the field, such as data analysis using clinic informatics platforms, including OPUS-23 and UTOPIA, both cutting edge personalized medicine platforms developed out of UB by Dr. D'Adamo.

UBCNM hires one Resident annually, who is assigned to five clinical rotations each semester, with levels of independence increasing as he/she progresses in their training. In addition to the mentoring provided through the guidance of supervising physicians in the clinical setting, the Resident supports both didactic and clinical physicians including providing instruction in the Academic/Clinical Support courses to students in years 1 – 4, and in the Physical Exam Lab and Gynecology Lab courses. The Resident reports to the Dean, and to the Associate Deans for specific classroom and clinical responsibilities.

Clinical faculty are overseen by the Associate Dean of Clinical Education (ADCE), who also functions as the Chief Medical officer (CMO) for the UBCNM Clinic. The ADCE performs clinical faculty

observations, followed by post-observation meetings to provide feedback to the faculty member, to review required clinic documentation, e.g., syllabus development, student evaluations, data regarding patient medical records, and patient tracking data.

Patient visit time management on clinical shifts was found to be a common area in need of improvement. To address this concern and support attending physicians and student clinicians, a patient visit structure was developed with participation of representative faculty members. The information was reviewed with clinical faculty members and student clinicians in the January 2017 Student Clinic Orientation, and during Clinic Faculty Development in August 2017. The visit structure was reviewed individually with some members of the clinical faculty in the 2018 Spring term.

Another identified area of need has been the format and content of the Assessment section of the patient record. Supervising clinicians were found to have varying expectations regarding this section of the medical record. The format taught in *Clinic Practicum I* and *II* was reviewed, and was the basis to reinforce instruction in the clinical setting. This structured format was reviewed with student clinicians and clinical faculty members during the January 2017 Student Clinic Orientation, and again in the Clinical Faculty Orientation in August 2017. This focus requires an ongoing effort to resolve.

An area that continues to be noted is the delayed completion of editing and sign off of the medical documentation. This is a concern that is monitored by the ADCE and discussed throughout the term with each incoming cohort of Student Clinicians and the supervising faculty members.

### **Support and Training of Non-ND Faculty**

For the 2017-18 academic year, 78% of the UBCNM faculty are naturopathic physicians (31 of 40); 70% of the full time faculty (7 of 10) and 80% of the adjunct faculty (24 of 30).

Of the non-ND faculty, four have worked for UBCNM for 10 or more years, including all three of the non-ND full-time faculty (Mark Mattie, MD, PhD, since 1999; David Terfera, PhD, since 2002; Anthony Ross, PhD, since 1999). Of the five medical doctors at UBCNM, two are also naturopathic physicians (Dr. Mahfoud and Dr. Sokolova); one is an active member of the American Herbalists Guild (Dr. Fratellone); and one, a relatively new medical doctor, is learning about naturopathic medicine as he works with the UBCNM faculty and students at (Dr. Kohli).

Other non-ND adjunct faculty members include a PhD in psychology (Dr. Buller), a social worker (Ms. McDermitt, LCSW, MSW), and a chiropractic doctor (Dr. DeMarco).

As part of their orientation, non-ND faculty members meet with the ADAA and are also provided with a PowerPoint presentation that introduces them to the field of naturopathic medicine and addresses common questions that come up when teaching naturopathic students.

### **Faculty Sufficiency**

The program is comprised of 10 full-time faculty members and 28 part-time faculty members. One additional full time position remains open since it was vacated by Dr. Mahfoud when he assumed the position of Associate Dean of Clinical Education.

The number of faculty members meets the needs of this relatively small program. Both full-time and part-time faculty loads are limited by University regulations, and are exceeded only at the request of the faculty member and approved by Administration. See faculty loads in Appendix IV-C. The larger number of part-time faculty members allows the program to address areas of specialty in both the didactic and clinical settings that may likely be restricted by a fewer number, but larger percentage, of full-time faculty members.

Part-time clinical faculty members have busy medical practices outside of the university, providing them with ongoing clinical experiences to share with students in the clinic. Most full-time supervising physicians also have clinical practices outside of the university on their release days.

For the 2018-2019 academic year, UBCNM will seek additional MDs for clinical rotations to serve as models for the appropriate use of pharmaceuticals, and to provide students the opportunities to practice first-hand the balance of pharmaceuticals with nutraceuticals and botanicals medications. With the restrictions of the current scope of practice in the State of Connecticut, NDs are unable to provide this practical application, and must refer patients out to their respective MD primary care physicians.

Faculty openings are typically met with numerous interested applicants. Full-time positions are more challenging to fill than part-time positions, due to the wide range of skills we seek in candidates.

### **Faculty Committees**

UBCNM faculty members are involved in a variety of committees, both in the broader University setting as well as in the College. Full-time faculty members are required to participate on at least one university committee in addition to the program committee work. These University opportunities include but are not limited to: Health Sciences Personnel Committee, University Personnel Committee, Library Committee, Faculty Development Committee, Calendar Committee, and University Senate CNM representative.

Program committees on which UBCNM faculty members participate include the Dean's Faculty, Curriculum and Assessment, Policies and Procedures, Clinic Faculty, Clinic Education, Research, Dispensary, and Admissions Advisory. While all faculty are invited to participate, the committee members are typically full-time members. Involving adjunct faculty in planning has been challenging with the constraints of their private practice schedules. Even with these barriers, several adjunct faculty have been willing to attend curriculum review meetings and faculty training sessions that are directly related to their teaching duties.

UBCNM committees serve as the evaluation and planning source for program development, assessment, and revision. Examples include:

- The Dean's Faculty, on which all faculty members are encouraged to participate, drafted the Strategic Plan and the Mission Statement. Drafts and plans are disseminated to faculty unable to attend the committee meetings, and comments are requested.
- The Admissions Advisory Committee reviews requirements for pre-requisite courses, skills, and behaviors in student applicants, interview and selection committee membership, and any related policy suggestions.
- The Policies and Procedures Committee reviews recommendations from the Admissions Advisory Committee, as well as other committees such as the Curriculum and Assessment Committee. Recent topics include attendance requirements, advanced standing and transfer requirements, challenge exams, and Student Handbook updates.
- The Curriculum and Assessment Committee addresses a broad range of topics and is the vehicle for changes in this area. In the 2017-2018 academic year, the committee addressed curricular mapping, faculty coaching, medical reasoning, strategies to enhance the inclusion of pharmacology in the "-ologies" and "-atrics" courses as well as in the clinical setting, pass/fail grading system, addition of TCM III and TCM IV, and NPLEX results.

### **Faculty Involvement with Academic Counseling and Tutoring**

Referrals for academic counseling are generated by faculty members. Four sections of Academic Support courses are held, one for each cohort, and are taught by faculty members or the Resident. Other academic counseling and tutoring is provided by tutors contracted to the UB Teaching and Learning Center. See Standard V, Section E for more details on tutoring.

The current cohort of full-time and part-time faculty is sufficient to handle the responsibilities of the program effectively.

## **Membership in Professional Associations**

Many faculty members belong to organizations representing specialties or therapeutic niches (e.g., Institute of Naturopathic Generative Medicine, National Ayurvedic Medicine Association, and the American Herbalists Guild). Several faculty members write exam questions for NABNE, and one full-time faculty member sits on the Board of the NPLEX Biomedical Sciences exam.

While membership in national and state associations is somewhat limited, action on legislative issues affecting the naturopathic profession is significant. According to the 2017 Faculty Survey, greater than 90% of respondents had contacted their state legislators to discuss naturopathic licensure and regulation. Of those, 60% had made the contact in the last six months. See Appendix IV-D for the 2017 Faculty Survey and Appendix IV-E for the list of professional associations to which faculty belong.

## **Faculty Orientation and Performance Evaluation**

### **Support and Training of New Faculty**

Recognizing a need for better orientation of new faculty, the Dean and the ADAA developed two presentations in the summer of 2016. The first, to be shared with all new members of the faculty, covers general knowledge and procedures for both the program and the university. The second presentation, developed for use with non-ND faculty, and gives general information about naturopathic medicine, including a description of the scope of training, and some of the myths and problems faculty might encounter. These presentations are found in Appendices IV-F-1 and IV-F-2.

New faculty are also provided with syllabi from previous iterations of the course(s) they will be teaching or, in the case of newly developed courses, they are provided with course outlines created by the ADAA and Curriculum Committee or sub-committee. They are also given access to the LMS sites for previous iterations of the course(s) they will be teaching, to view organization and course materials previously used. These documents are provided to them as resources in their own development of the course.

### **Procedure for Faculty Evaluations**

All faculty members are evaluated by a member or members of UBCNM Administration at least once annually. The ADAA observes didactic instructors in the classroom, and the ADCE observes clinical supervisors during clinical shifts. The Dean also takes part in evaluating faculty, when a second opinion is needed or in cases where circumstances may prevent an Associate Dean from evaluating the faculty member fairly or objectively.

Faculty members who have been teaching at UBCNM for fewer than three years are commonly observed every semester. Faculty teaching new courses are observed. Observations may also be implemented based on student feedback. Faculty may also request additional observation for a particular course, rotation, or event. Each observation is followed up with a meeting of the faculty member and the administrator who observed them. See Appendix IV-G for the ADAA Observation Calendar, from Fall 2016, Spring 2017 and Fall 2017.

Students evaluate didactic courses and faculty using anonymous feedback forms, administered electronically at the end of each term. Students must complete the forms in order to view their final grades on the UB portal. However, response rates in some courses are surprisingly low (80% or less). See Appendix IV-H for the Course Evaluation Form.

There is no formal system of program-level peer evaluation at UBCNM. However, there is peer review by virtue of the Division Personnel & Retention Committee (HSPC) and the University Personnel & Retention Committee (UPC). In 2014, faculty were asked if they were interested in peer reviews, the full-time faculty indicated that they were interested in reviewing the adjunct faculty members, but were not interested in peer reviews of themselves by other faculty members. As a result, no peer review was instituted.

Evaluation of didactic faculty by the ADAA focuses on classroom techniques. The evaluation process includes review and critique of the course syllabus, a pre-observation meeting, which includes a review of the previous semester's course evaluations by students as well as any trends in the evaluations over time, observation of a full class, and a post-observation meeting to discuss the ADAA's observations. The Classroom Observation Template is found in Appendix IV-I.

The ADCE conducts clinical faculty observations, with a general overview of the aspects of the shift that will be observed discussed in a pre-observation meeting. Post-observation meetings review observations and provide feedback to the faculty members. See Appendix IV-J for the Clinical Faculty Observation Form. Students are encouraged but not required to complete clinic faculty evaluations and a very limited number were completed in the last year. As a result, beginning in the Spring 2018 semester, the evaluations will be completed on paper in clinic during the last week of the semester, collected and submitted in a manner that protects anonymity.

## **Procedure for Renewal and Reappointment**

The process for renewal, reappointment, or tenure for each full-time faculty member is on the schedule designated by the University, detailed in the UB Faculty Handbook, Sections 7.1, 7.2, and 7.3, which describes the evaluation process for adjunct faculty. *Section 7*, is found in Appendix IV-K.

Each non-tenured faculty member being evaluated for reappointment is requested by the Provost to submit a self-evaluation, copies of publications, correspondence, grant proposals, and any other appropriate documents to the faculty member's personnel file maintained through the Office of the Provost. Summaries of each course evaluation and classroom and clinic observation are also placed in the file. Following submission of these documents, the Health Sciences Personnel Committee (HSPC), comprised of faculty peers in the Division of Health Sciences, with at least two (2) tenured faculty members from the Division of Health Sciences, at least one (1) faculty member from the College, in addition to non-tenured faculty members from Health Sciences, meets to review the documents in the faculty member's file and make a recommendation to the Provost regarding reappointment.

The Dean is then called upon to review all documents, including the recommendation of the HSPC, to identify the faculty member's strengths and make suggestions in those areas in which improvement is needed, to provide the rationale for the recommendation regarding reappointment, and to make that recommendation to the Provost. Following that, the University Personnel Committee (UPC), comprised of at least one (1) tenured faculty member from the College and additional tenured faculty members from within the University, reviews all documents, including the recommendations of the HSPC and the Dean, and makes a recommendation to the Provost regarding reappointment. Each committee and the Dean may identify specific areas of knowledge, skills, and behaviors that the faculty member has exhibited or performed, including but not limited to volunteer work on legislative efforts, as a question writer or committee chair for NABNE, certification and credentials that the faculty member has achieved beyond the basic requirements for the position, and the committees on which the individual has participated. The areas included in each level of evaluation address the following criteria:

- Area 1: Students
- Area 2: Service to the Program
- Area 3: Service to the University
- Area 4: Service to the Profession / Discipline

Each letter to the Provost regarding reappointment is also provided to the faculty member. The Provost makes the final decision regarding reappointment and notifies the faculty member of the decision. Each faculty member has the opportunity to place a letter of response to the recommendation or to specific

matters in their file. Faculty members who are not satisfied with the results of their University review may formally appeal, using the process designated in the Faculty Handbook.

The schedule for reappointment procedures is:

- First-year faculty member: early spring semester of the first year of teaching
- Second-year faculty member: mid-semester of the fall term of the second year teaching
- Third- to sixth-year faculty member: early in the spring semester of the 3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup> and 6<sup>th</sup> year teaching
- The Provost notifies the faculty member on or before May 1.

Faculty members on renewable contracts are not seeking tenure. Their evaluation process is similar to that of the tenure track faculty.

Adjunct faculty are evaluated using the same process and procedures at the program level as described in the evaluation of full-time faculty. Classroom and/or clinic observations and course evaluations completed by students serve as the primary source of feedback provided to the faculty member, and contribute to the decision to appoint the instructor for another semester.

### **Faculty Views of Evaluation Process**

On the UBCNM Faculty Survey of 2017, out of 21 respondents, 16 expressed satisfaction with the faculty evaluation by administrators, while 10 expressed satisfaction with the student evaluations. Eighteen (18) agreed with the statement that, “feedback received from faculty evaluations [by administrators] is constructive and helpful.” In contrast, only 13 agreed with the statement that, “feedback received from [student] course evaluations is constructive and helpful.” See Appendix IV-D for additional details regarding these findings. In 2014, full-time faculty members were asked if they were interested in peer review, and they expressed interest in peer reviewing the adjunct faculty members but were opposed to being peer reviewed themselves.

### **Faculty Professional Development**

Faculty development within the University is created through the Faculty Development Committee, with the focus on the UB Annual Faculty Development Day. Members of the faculty from a variety of programs comprise this committee, and evaluate the needs and interests of faculty members of each of the programs. Kimberly Sanders, ND, was a member of the 2017 Faculty Development Day Committee, insuring that the interests of the college were met. Anthony Ross, PhD, UBCNM faculty member, presented to University faculty in 2017.

There are a variety of mechanisms in place that provide faculty development opportunities through the College. Funding is available for faculty development for full-time faculty members to attend conferences, participate in online opportunities such as webinars and seminars, as well as to present at conferences. Faculty members attending conferences are requested to develop a faculty development session on a topic that they found particularly interesting and useful. Dr. Ross' presentation on one aspect of the flipped classroom to both the UBCNM and the UB faculties is one such example of multiplying the benefit of faculty development.

Faculty development for generalized areas of need are addressed through presentations and workshops provided through the program. Development of the syllabus template and its role in both classroom and clinical instruction was found to be an area of need, and instruction was provided to all faculty. Evaluation from both a general overview of the program curriculum and a review of curricular details through the curriculum mapping process have been useful tools in assessing the need for faculty development, identifying areas of individual need as well as addressing the needs of the program faculty as a whole. The classroom and clinical observation process also provides information to faculty members and administration regarding needs for faculty development. One such example is identification of strategies to develop medical reasoning, both in the classroom and in the clinical setting. As well-seasoned instructors and clinicians, faculty are often eager to share their breadth and depth of knowledge when students ask questions. We found some faculty members all too willing to provide responses to students' questions, without stopping to guide the students in determining the answers themselves. Development of ways to respond that elicit critical thinking and medical reasoning was addressed in group settings and coaching of individual faculty members took place related to their classroom and/or clinical instruction.

The program administration also identifies areas of interest and need, and makes recommendations or supports the expression of interest from individual faculty members to attend or participate in identified conferences or seminars. Adjunct faculty members may also request funding for faculty development. On those occasions in which the conference or seminar takes place during the faculty member's class or clinic, the program provides the funding for substitute instructors. As an example, in the Spring 2018 semester, a faculty member requested funding support to assist her in meeting her goal of presenting to colleagues at a conference related to her specialty area of homeopathy. This request for funding was granted, in addition to guidance and support in the preparation of her presentation.

Annually the college provides faculty development for all full-time and adjunct faculty, didactic and clinical instructors, in the week prior to the start of the new academic year, as described in Section A2.

In the 2017 Fall term, UBCNM launched a focused training in assessment for faculty. The coaching, conducted by the ADAA and the Director of Assessment for Health Sciences, began with a review of the draft syllabus, course objectives and learning outcomes, and continued past the end of the term. Topics included choosing assessment formats, weighting of assessments to determine course grades, developing test blueprints, aligning test questions to test blueprints, writing and evaluating the quality of the test questions, evaluating effectiveness using item analysis and other tools, and feeding forward to the next iteration of the course.

The Director of Assessment conducted a psychometric review of some of the instructors' assessments. Up to six faculty members are chosen each semester to be coached in the development of effective assessments for their particular courses. There were five faculty members involved in the first semester of coaching, and four additional faculty members are involved in coaching in the 2018 Spring semester. See Appendix IV-L Assessment Training Plan.

### **Faculty Continuing Education Requirements**

ND clinical faculty members are required by the Connecticut State Department of Health to obtain a minimum of 15 Continuing Education (CE) Units annually for their license renewal. The CE activity must be directly related to the practice of naturopathic medicine and be useful for serving the patient population.

### **Support and Training for Faculty Use of Technology**

Internal support is available for faculty members as they use technology in the classroom. Faculty can also access individualized assistance as needed from Information Services.

An anonymous survey of the UBCNM faculty conducted in May 2017 revealed a high level of comfort with UB's LMS, Canvas®. Almost all respondents (20/21) considered themselves to be proficient in the use of the LMS. Sixty-six percent (14/21) stated that they had been able to access Canvas® help when they needed it, and 85% (17/20) agreed that the LMS was user-friendly. Fifteen out of 21 found that Canvas® is effective in helping them teach efficiently. When asked more broadly about access to help for problems with Information Technology, about 60% found that IT services were easily accessible and that IT help was easy to access. In addition to the basic functions of Canvas®, other applications and programs in use included GoogleDocs, Zoom, YouTube, and UB's online library.

### **Faculty Participation in Program Development and Academic Administration**

Faculty members in all colleges, schools, and institutes in the University are provided opportunities to participate in organizations and committees that play a role in University policy development. The

Faculty Senate, with representation from all constituents in the University, is the predominant format for reviewing and revising University policies. The Senate meets two to three times each semester.

The UBCNM Policy and Procedures Committee also meets two to three times during the Fall and Spring semesters. Committee members review existing policies and develop and approve new policies as the need arises. Administration most often identify the need for a new policy or the review and revision of an existing policy. Recommendations from faculty members and other committees are also a source of policy revision or creation. One example is the revision of pre-requisites for application to the program, as requested by the Admissions Advisory Committee. This process involves the Office of Admissions, the Admissions Advisory Committee, and the Policies and Procedures Committee. Another example is the attendance policy, which involves the University attorney, the Dean's Faculty Committee, the Curriculum and Assessment Committee, and the Policies and Procedures Committee. There is also student representation on the Curriculum and Assessment, and Policies and Procedures Committees.

Each new policy goes through a process of creation by a sub-committee, presentation of the first draft to the committee; requests for edits and suggestions; presentation of final draft; and approval by the committee. See Appendix IV-M for the Policy and Procedures Committee minutes.

### **Faculty Involvement in University Governance**

UB faculty members participate in Faculty Council and University Senate. The Faculty Council and the Faculty Senate provide avenues for faculty to participate in University governance.

#### **Faculty Council**

The Faculty Council is concerned with furthering the effectiveness of the University as a teaching institution and supporting it by providing a platform for the faculty to voice their opinions and express their interests. The Faculty Council represents the University faculty and speaks for them with other University organizations, departments, and the Administration.

The Faculty Council is composed of at least one full-time faculty member from each school, college, and library. This includes the main Bridgeport Campus and local satellite campuses in Waterbury and Stamford, Connecticut. Individuals who perform primarily administrative roles such as the President, Vice-President, Provost, Deans, Associate Deans, etc., are not eligible to participate on the Faculty Council. Faculty representatives hold a two-year term, and may be re-elected for a second term. Each individual school must ensure its active representation in the Faculty Council.

Seats on the Faculty Council are allotted based on the number of faculty in each college or institution. The percentage of seats held is based on the ratio of the total number of faculty in the school or college to the total number of faculty in the University.

The Faculty Council has two standing committees: a) the Academic Concerns Committee, which focuses on issues related to academic standards, requirements, policies, curriculum and graduation, strategic planning, and admissions; and b) the Welfare Committee, which focuses on matters related to full-time faculty compensation and benefits and other conditions of employment.

### **University Senate**

The University Senate is comprised of faculty members who serve as administrative staff, 22 elected faculty members who also participate in the Faculty Council, members of each school, and members of the student body, including a representative of the SGA and representatives of each school. The Administration is represented by the Provost, Dean/Director from each school, and eight administrative staff members who are appointed by the President on a yearly basis. Appointees occupy positions in the University Counsel, VP of Facilities, VP of University Relations, Dean of Admissions, Dean of Students, Director of Publications, etc. Members of Special Services (non-teaching personnel) such as Director of Administrative Operations, Clinical Director, Librarian, and Provost may also form part of this organization. The ratio of these constituents match the ratio to the total number of members of the University faculty, providing an appropriate size that is a representative sample. Elected members of the Senate total more than twice the number of permanent members.

The primary functions of the University Senate are to address the rules and regulations pertaining to the University's schools and colleges, the policies pertaining to the institution's program of education, and the physical and intellectual well-being of the University community. The university Senate meets most every month during the Spring and Fall semesters. The Faculty Senate has multiple committees, including the Executive Committee, which functions to prepare the agenda for Senate meetings, receive and disseminate proposals from other committees, and create standing committees as indicated by the Senate. The Senate may also create *ad-hoc* committees to address specific issues not assigned to an existing committee, appointing members as needed. See Appendices IV-N & IV-O for Faculty Council and Faculty Senate Constitutions.

## **Faculty Involvement in Curriculum Development**

The UBCNM Curriculum and Assessment Committee meets two to three times each semester. Faculty members have the opportunity to recommend agenda items, although most suggestions for discussion regarding changes to curriculum and assessment originate with the Administration.

Faculty members are involved in discussions of course content, instructional delivery, and assessment methods through their participation in committees such as Dean's Faculty, Curriculum and Assessment, Clinic Faculty, and Clinic Education. In both of these committee settings and in individual meetings such as evaluation and observation meetings, UBCNM administrators discuss teaching methods with faculty members and gather information on useful techniques, which strategies have not produced the effective results hoped for, and how to create a successful clinical shift for the student and the patient. For example, a discussion began in a Dean's Faculty meeting regarding the challenges faculty members were experiencing in developing students' medical reasoning skills. This discussion expanded to the Curriculum and Assessment, Clinic Faculty, and Clinic Education committee meetings, resulting in faculty members creating strategies for both the classroom and clinical environments.

## **Faculty Involvement in Budget Development**

Faculty members are asked at least annually for the need for, and recommendations, for the purchase of equipment. Most all equipment purchases originate with faculty requests. Examples include models for physical exams, IV equipment, physical medicine equipment, and laptops for EMR use in the clinic. See Appendix IV-P for Curriculum and Assessment Committee minutes.

## **Conditions of Faculty Employment**

The UB [Employee Policy Handbook](#) was most recently updated and published on July 1, 2016. Policies are in place to ensure non-discrimination in hiring and evaluation of personnel, and recruitment and admission of students. The University maintains a recruitment and hiring procedures guide, which includes an affirmative action policy, principles of recruitment, interviewing guidelines, and a candidate evaluation form. These guidelines provide for an equitable and effective process in hiring new personnel. See Appendix IV-Q for the [UB Employee Policy Handbook](#).

The UB Office of Human Resources addresses employee grievances. As indicated in the [Employee Policy Handbook](#), all UB employees are required to abide by a policy for management of personal conflicts of interest. This policy includes a "zero tolerance" provision for "retaliation against anyone who reports an incident or files a complaint." A University policy specifically affords protection from, and the handling of, complaints of harassment, discrimination, hate crimes, intimate partner violence, or sexual

harassment. Anyone who suspects a violation of integrity may file a claim with the Office of Human Resources, and has the option of filing it anonymously.

Employment contracts signed by university personnel require reporting of perceived violations of integrity or law. Grievances deemed to be restricted to academic matters are addressed by Academic Leadership. The Provost may occasionally convene an *ad hoc* committee consisting of faculty members and administrators should a strictly academic grievance prove intractable.

The UB Faculty Handbook (1996, with a revised employment section approved in 2002) adequately and appropriately defines categories of faculty required to fulfill the University's mission. Reappointment criteria are clear, and the faculty have a central role in evaluating their peers. Some details in the Faculty Handbook need updating as position titles, schools and colleges have changed, but the main principles such as peer review, timelines, and published criteria are widely established and continue to be effective. See Appendix II-P for the UB Faculty Handbook.

Faculty members have contractual security and appointment and reappointment processes that are as transparent as law and privacy concerns allow. A faculty member also has a right of appeal against dismissal through the Faculty Appeals Committee (FAC). Appeals are also “understood to include reappointment, promotion and tenure decisions, as well as requests for sabbatical leaves and leaves of absence.” The FAC is called into session when a faculty member makes an appeal that cannot be resolved through meeting with the Vice President for Academic Affairs. See the Revised Section 7 of the Faculty Handbook for further details on the processes for faculty reappointment, promotion, tenure and renewal.

UBCNM revises the Clinic Faculty Handbook for clinic supervisors periodically. The content of this handbook will be reviewed in the summer of 2018 with some areas having been identified as in need of improvement over the past year. Among the planned revisions is the inclusion of the newly developed visit structure for patient encounters, which will replace the earlier section named “General Patient Flow.” New formats were outlined for both first office visits and return office visits, each one with different durations and areas of focus. This new information was presented to full-time and adjunct faculty in the clinical faculty orientation session held on January 9, 2017. For those not present, the information was recorded and made accessible to them. In addition, the information on the visit structure was emailed to faculty members.

The University strives to provide fair and competitive total compensation to its employees. The Department of Human Resources assists the University's Schools and Colleges in benchmarking positions to both ensure internal equity as well as attract the best qualified talent. As is common in higher

education in general, particularly with clinical roles that compete with salaries afforded in private practice, the College has been periodically constrained to meet applicant salary demands.

The University maintains a recruitment and hiring procedures guide, which includes an affirmative action policy, principles of recruitment, interviewing guidelines, and a candidate evaluation form. These guidelines provide for an equitable and effective process in hiring new personnel. The UB Employee Policy Handbook was updated and published in July 2016, more recently updated with Title IX revisions in July 2017. It is a comprehensive tool to provide employees with knowledge and guidance of the University's policies and procedures. Policies are in place to ensure non-discrimination in hiring and evaluation of personnel, and recruitment and admission of students.

The University's Employee Benefits Handbook (Appendix IV-R) provides specific information to administrative employees and faculty regarding benefits afforded full and part-time employees. The University considers employee benefits to be a priority as they are considered to be both a recruitment and retention tool and thus employee benefits are periodically reviewed to maximize employee satisfaction.

### **Teaching Loads**

Teaching loads are determined by university policy and federal employment law. Accordingly, adjunct faculty are limited to a maximum of 18 credits per academic year and ten in any one individual semester. This is in compliance with federal law with regard to part-time faculty hours. The full-time faculty credit load may vary, but it is at least 20 credits per academic year.

## **STANDARD V**

### **Student Services**

#### **General Provisions**

Student services at the University of Bridgeport include:

- UB Admissions Counseling
- UB Teaching and Learning Center (TLC) and Writing Resource Center
- UB Counseling Services
- UB Student Financial Services
- UB Career Development
- UBCNM Academic Support
- UBCNM Advising

The first experience for most students applying to UBCNM is through the Admissions Office. The Admissions Counselor works with all applicants, informing them of the naturopathic program, the prerequisites, the processes, and the timelines involved in the application process, as well as answering questions, and setting up interviews for those students who qualify. The Admissions Counselor is in communication with applicants throughout the application process. She interacts with prospective students regarding Student for a Day, Health Sciences Information Days and Open House days. Admissions hosts an Accepted Students Night each summer at which the incoming graduate students from several colleges mingle with future classmates, faculty, alumni, and administrative staff. The Admissions Counselor is the prospective students' primary contact with UBCNM from their first inquiry through the first day of school.

Once the student has either completed or has evidence of near completion of the pre-requisites, the application process includes a morning of interviews with each of the members of the naturopathic program admissions team that includes a faculty member, an Associate Dean, and the Dean.

New Student Orientation is held the week before fall classes begin. Students are introduced to the policies and culture of UBCNM, as well as the wide variety of services offered by the College and University. Orientation typically includes a tour of downtown Bridgeport, an introduction to the University library, introductions to tutoring, counseling, and career services, and talks from alumni and current faculty. This past year, the second year students joined the orientation to welcome the students and establish a buddy system.

New students are provided a more in-depth tour of the campus with the various university amenities pointed out. See Appendices V-A-1 and V-A-2 for the Agendas for 2016 and 2017 Orientation.

Financial aid, tuition bills, and other fees are handled by Student Financial Services (the Bursar's Office). Students are encouraged to seek guidance from that office whenever questions of finances arise, and especially when they are making temporary or permanent changes to their program of study which will affect tuition; for instance, a student who requests a leave of absence from UB is required to meet with Student Financial Services. A student changing to a part-time schedule will also be referred to the SFS Office for guidance. In a student focus group convened in June 2017, students reported that the Bursar's Office was "fairly easy to deal with."

In recent years it became apparent, through informal conversations, that many students do not focus or plan on the impact of their loans will have in their future, and in the New Student Orientation program of the 2017 incoming class, UBCNM began to address the financial concerns for new graduates. Students were provided a more in-depth presentation of what their loans will mean when it is time to repay them, as well as repayment options, through a discussion with an advisor from the Bursar's office and an ND faculty member. We are now planning more extensive exit counseling opportunities as well.

Each student is assigned an Academic Advisor when they begin the program. Full time faculty members serve as Advisors, with each faculty member advising 8 to 10 students. During the first two years of the program, the student works with an Advisor from the biomedical sciences faculty. Upon progressing to the clinical years, the student is assigned to a new Advisor from the clinical faculty. Students who are "off-track" (including transfer students, advanced degree students, and those on academic probation) are sometimes advised by the Associate Dean of Academic Affairs (ADAA). Students are required to meet with their advisors at least once in the first six weeks of each semester. Graduating students are required to have two advising meetings in their final semester. In an attempt to make advising more meaningful and to increase the support system for students, we provided some development for full time faculty regarding advising in 2015, and in 2016 redesigned the advising forms to include a wellbeing check as well as a check-in for academic and clinical progress. See Appendix V-B for the Advisor Meeting Record Form.

Academic counseling and tutoring, career counseling, and personal counseling are described in Standard V, Section E2.

The University of Bridgeport publishes the [Key to UB](#), which is available online through the UB website. This handbook details the various university services, standards and guidelines, campus activities, athletics, information about residential life, student conduct, and policies and disciplinary actions. The handbook informs students of the procedures for appeals and grievances. Some policies in the [Key to UB](#) that affect the UBCNM community include Title IX policies, a Weapon-Free Campus Policy, sexual

harassment, accessibility, FERPA, tobacco use, copyright, and leave of absence. For UBCNM and other graduate programs, academic policies are described and communicated by the individual programs in school-specific student handbooks. See Appendices V-C and V-D for the 2017-18 edition of the Key to UB and the most recent UBCNM Student Handbook.

Processes and procedures that may adversely affect the academic, clinical, or enrollment status of a student are detailed in the UBCNM Student Handbook. The University legal counsel, in conjunction with the individual deans, has recently been reviewing and revising the student handbooks of each of the Health Sciences programs, to better clarify and formalize some of these processes. While the current UBCNM Student Handbook provides fair, clearly-defined, and documented processes, which include required documentation and timelines regarding impending actions, response, and appeals processes, there has been room for improvement regarding clarity. The handbook is currently under revision and will be available for the 2018-2019 academic year and for the CNME site team visit.

The UBCNM Student Handbook has typically been revised to a limited extent each year by the UBCNM administrative team with input from students, faculty, and staff. Students receive a copy of the UBCNM Student Handbook at New Student Orientation, and again in following years if any significant changes have been made. Starting with the 2018-2019 academic year, only an electronic version of the UBCNM Student Handbook will be made available, with updates announced as they occur. The current editions of the Key to UB and the UBCNM Student Handbook are posted to the UBCNM “Bulletin Board” site on the LMS, where students, faculty, and staff can access them at will.

There are four primary mechanisms that the program uses to collect views and input from students:

- The Naturopathic Student Government Association (NSGA) and the Naturopathic Medical Student Association (NMSA) are the principal and most consistent mechanisms by which the program obtains student views and input. Representatives of these two organizations meet regularly with the Dean and occasionally with a faculty Advisor. Although the organizations represent different goals, the students represented are one and the same.
- Class Presidents meet with the Dean, representing their classes and bringing input and concerns expressed by their classmates.
- Small groups or individuals meet with the Dean, the Associate Deans, or faculty members, with ideas or concerns. The administrative team has an open door policy, and students are aware that they may stop by any of the administrative offices, any time.
- Surveys, which are often triggered by a specific concern or event, such as students’ perception that clinic requirements have changed, are typically generated by students and results are shared with the administration.

Most program committees have a student representative who participates in the meetings, bringing students' ideas and questions to the meeting, and reporting back to the student body.

The Dean had also made a point of visiting each cohort in the classroom and/or clinic. However, based on feedback she received from a previous NSGA President, she discontinued these visits in the 2016-17 academic year. This change removed one way that students, could speak directly with her about their concerns. The following year the NSGA requested that the Dean reinstate the visits, and she has begun that practice once again.

The Dean has also provided other opportunities for students to facilitate communication. One recent example was an opportunity to complete the signature lines for the hydrotherapy sections and Philosophy and Vendor Day sections of the Competency books for those students who did not yet have their competency books at the time of those events. Pizza was provided for students to stay and visit during the "book signing."

Grievance procedures are published in the UBCNM Student Handbook and in the Key to UB. These procedures serve as a guide for both students and administration in the process and procedures for formal complaints and grievances. Records of grievances and appeals are maintained in Student Files, in both the electronic file and the paper file. Copies of grievances and appeals dating back to 2013 will be available in the workroom for onsite review. The Office of the Provost will develop a process for the Health Sciences Division to maintain a consistent strategy for maintaining these records.

The University of Bridgeport publishes annual reports and issues alerts in compliance with the Clery Act. The most recent University of Bridgeport Clery Act report is available to the public at <http://www.bridgeport.edu/Media/Website%20Resources/documents/life/CampusSecurityReport.pdf> See Appendix V-E for Clery Reports 2016-17.

Campus safety is well-managed and compliant with regulations. The University makes a substantial investment in the safety, well-being, and security of students, faculty, and staff. A Safety Committee is charged with monitoring campus safety issues and ensuring that any problems are resolved. Security services are outsourced to Securitas, whose director is a UB employee and is supervised by the Vice President for Facilities. Each student, faculty, and staff member is provided with a Personal Alarm Locator (PAL). Activation of the device in a health or safety emergency within the campus perimeter summons immediate assistance from Securitas personnel. In addition, escorts for getting from one place to another on campus are provided on request 24 hours a day, 7 days a week. A regularly-scheduled shuttle service provides free transportation to shopping centers and to the train, ferry, and bus stations. The University also contracts with the Greater Bridgeport Transportation Authority to provide unlimited

bus transportation at no charge to students, with two bus lines serving the campus. UB operates a broadcast notification system that may be activated to contact the entire campus community in the event of a campus-wide emergency.

The University has worked independently and with its community partners to improve the campus environment and the surrounding neighborhood. In 2011, the University received an award from Hartford Insurance Company for controlling and reducing its workers' compensation claims, in part through the work of the University's Safety Committee established a few years earlier. At present, the Bridgeport Police Department maintains a substation in the Campus Security office. To enhance campus safety, cameras were added in residence hall corridors and at their entrances, on athletic fields, and in parking lots.

The University campus encompasses 53 acres. Overseeing this real estate requires multiple levels of expertise. Facilities management functions are delivered through a contractual agreement with a consultant, Cushman & Wakefield, who serve as the building and grounds department responsible for building, grounds, and maintenance repairs. Their expertise and depth of knowledge ensures compliance with all applicable federal, state and local fire, safety, health, and accessibility laws and regulations.

In a small focus group of UBCNM students convened in June 2017, students reported feeling very safe on campus due to the strong campus security presence. They described security as friendly and helpful. There were some concerns about the lighting on some of the streets between the Health Sciences Center and Seaside Park. Students reported that they did not like to park in that area because "cars have been broken into" in the past. The streets within and around the university campus are city streets, maintained and operated by the City of Bridgeport.

A few students reported some confusion about fire evacuation procedures. The proper procedure for clearing each building is communicated once annually through an email, but this limited communication has resulted in some student frustration. See Appendix V-F for a summary of the Focus Group Meeting, June 29, 2017. In the future, the information will be reviewed at the All School Meeting that occurs each semester.

## **Admissions**

To be eligible for the ND program, applicants must meet the posted requirements, published on the UB website for admissions to UBCNM. Prior to matriculation into the ND program, the applicant is required to provide evidence of successful completion of a Bachelor's degree, and transcripts for each program and courses taken in a higher education program. The Admissions Counselor calculates the GPA in each of

the following categories of prerequisites: science, cumulative science and non-science, and cumulative GPA of all institutions attended. Applicants are required to have earned a GPA of 3.0 or greater in each category for admission. Science prerequisites must have been taken within the past seven years, and may be taken in-person or online through an accredited institution, with lab hours taken in a physical lab setting.

Recruiting students with the academic excellence reflects the Program's mission and objectives. The admission requirements include prerequisites selected to optimize success by preparing students for the academic rigor of the Program. During the admissions process, the student is interviewed by UBCNM faculty member and a UBCNM administrator, to evaluate personal characteristics and assess if the candidate is a good fit for the program. Prerequisites for admission to the Program are found in Appendix V-G.

Background checks are required at the time of admission, and again prior to clinical rotations. This schedule is currently under evaluation.

While the admissions team for the naturopathic medical program has emphasized applicants' GPA scores, and the average GPA score of applicants has been rising over the past several years, the GPA has not proven to be a consistent primary predictor of success in the program. The College of Naturopathic Medicine admissions team continues to search for other indicators of program success through the application process.

The Admissions Counselor for UBCNM has regular contact with each of the applicants, responding to their questions and advising them as they gather their transcripts and referral documents in the early steps of the process. Once the required documents have been received, the Admissions Counselor reviews the application with the College administrative team. For those applicants who meet the prerequisite criteria, an interview is scheduled for them to meet with each of the members of the College admissions team. The team includes the Dean, one of the Associate Deans, and a full-time faculty member. The interviews are coordinated with the assistance of the Admissions Counselor, who also meets with the applicant on the day of the interview. Candidates also meet with a current UBCNM student, which provides the admissions team with a student's perspective on the candidate, particularly regarding the applicants' potential fit with the UBCNM program. Following completion of the interviews, the college admissions team members share their experiences of the interviews, evaluate the applicant based on criteria such as degree of professionalism, goals, plans, maturity, and other factors such as culture fit. The decision to admit a candidate is made by the UBCNM admissions team of a faculty representative and administrators.

It is the policy of the University of Bridgeport to prohibit discrimination in admissions, educational programs and employment, and in the provision of services on the basis of legally protected class characteristics (unless there is a bona fide occupational qualification related to employment), or any other unlawful factor. Protected class characteristics include race, color, ethnicity, religion, age, creed, ancestry, workplace hazards to reproductive systems, sex (gender identity, gender expression, and sexual harassment), marital status, civil union status, sexual orientation, genetic information, pregnancy, national origin, physical/mental/learning disability, veteran status and any other group protected by civil rights laws. The following is a link to the UB web page that describes this policy:

<http://www.bridgeport.edu/about/general-information/policies/nondiscrimination-policy/>

Through the Admissions Advisory Committee UBCNM faculty members are involved in the review and revisions of admissions criteria and the student selection process for the Program. Any suggestions for changes to the admissions criteria are discussed in depth by the committee, and significant changes are brought to the faculty and to the UBCNM Policies and Procedures Committee for further discussion and approval.

Policies regarding transfer credit and advanced standing were revised in the Spring of 2017. Re-admission, including readmission following withdrawal, leave of absence, and dismissal into the program, follows procedures outlined in the UBCNM Student Handbook. Policies regarding enrollment, cancellation, refund, and non-discrimination all comply with applicable federal and state/provincial laws and regulations, and are communicated through University publications. As described in the Key to UB, refund policies are found online, at <http://www.bridgeport.edu/finaid/tuitionand-fees/refunds/> and Chapter Four’s “Residence Hall Refund Policy.” As of the Spring 2018 semester, the tuition refund policy for 18-week courses was as follows:

<b>Week</b>	<b>Percentage Due</b>
Week 1	\$200 Processing Fee
Week 2	All Fees
Week 3	10%
Week 4	17%
Week 5	24%
Week 6	31%
Week 7	38%
Week 8	45%
Week 9	52%
Week 10	60%
Week 11	100%

Non-discrimination policies are outlined in the Key to UB, including the Policy on Sexual and Gender-Based Interpersonal Violence and Harassment, page 89, Equal Opportunity and Non-Discrimination, page 90, Disability Non-Discrimination Policy, page 103, and FERPA, page 106.

Enrollment and cancellation policies: As published in the UB Catalog for any student who drops their classes prior to the start of the term, all charges are dropped. They are not considered as an enrolled student until classes begin so do not incur any charges.

The program adheres to its published admissions policies. The college admissions team reviews each applicant's submitted information and discusses their interviews. There are occasions in which an applicant is admitted to the program who has a slightly lower GPA than the posted requirements in one of the three (3) areas. Because GPA is not the sole predictor of success in the naturopathic program, an applicant who has strong characteristics in other areas identified as desirable in a candidate, but with a GPA that is minimally less than the required 3.0 in an area, may be admitted. The decision is made by the program admissions team. Admissions files for 2014-2017 are complete.

The Office of Admissions represents all University programs, undergraduate and graduate alike. The Vice President of Enrollment ensures that recruitment and admissions activities are legal and all representation of information is communicated honestly and with integrity. The members of the UBCNM Admissions Advisory Committee review posted and published material for accuracy and clarity. Changes to admissions requirements, including prerequisites, are published by the Office of Admissions online and in printed materials. The online information is more up-to-date than printed materials, as online formats lend themselves to making changes more quickly.

All applications for transfer credit are evaluated by the Associate Dean of Academic Affairs (ADAA). An informal review of the request for transfer credits is initiated once transcripts are received, and the formal evaluation begins at the time of acceptance to UBCNM. For transfer courses to be considered, they must have been taken at an accredited institution. The ADAA reviews potential transfer courses for equivalence of content and contact hours, and then meets with the applicant to review the transfer credits and confirm registration.

Beginning in the Fall 2018 semester, Advanced Standing students will be asked to sit for challenge exams in any biomedical science courses for which they have requested transfer credit and which they took more than seven years prior to their application. The intent of the challenge exam is to evaluate the students' readiness for NPLEX Part I.

The College admissions policy states that no transfer credits will be considered after the student has matriculated. Exceptions to this policy have been made in cases in which the transferring course was taken or completed after the student had matriculated. For instance, a few students have been granted permission to take a course at another institution or UB program in order to remediate a failed course at UBCNM. Records of the review are kept in the student's file. See Appendices V-H, V-I, and V-J for Advanced Standing and Transfer Credit form, Transfer Credit Policies, Transfer Credit Worksheet for Advanced Standing Students.

International applications are reviewed by University admissions counselors who specialize in International Admissions. Counselors are assigned to specific regions of the world, and become familiar with different educational practices in those regions. The admissions counselors in International Admissions work with the UBCNM Admissions Counselor, to guide and assist the applicants through admissions requirements. Transcripts from foreign institutions are evaluated through World Education Services (WES), a nonprofit credential evaluation service. UB International Admissions can also conduct an additional transcript evaluation upon request by the College.

Admissions policies are assessed regularly for their success from two perspectives: effectiveness of the policies in identifying candidates who can succeed in the program, and assurance that the policies do not create barriers to prospective candidates who have a good chance of succeeding. Regular review and discussion of these policies is conducted in bi-weekly Admissions meetings with the Dean, Associate Deans, and Admissions Counselor, as well as in the Dean's Faculty meetings and Admissions Advisory Committee meetings. Changes in the last few years to Admissions policies include changes to science prerequisites; clarification regarding online courses; clarification regarding Transfer and Advanced Standing requirements; and the reinstatement of challenge exams for students with outdated prerequisites. See Appendix V-K for Admissions policies for 2018-2019.

### **Student Records**

The Office of the Registrar retains student transcripts permanently and can provide them to graduates/students when requested in writing. Students may request copies of their transcripts and financial records at any time during their training or after leaving the University.

UBCNM maintains two sets of individual student files: an electronic file, which is stored on the College's shared drive on the University system, with access limited to UBCNM administrators, and paper files, which are stored in locked fire-proof file cabinets in a locked archive room. For active students, records pertaining to their clinic participation are maintained electronically by the Clinic Clerk and paper copies

are maintained in locked file cabinets in the office of the ADCE. The Clinic Coordinator maintains an electronic record of students' Grand Rounds hours. Following graduation, the ADCE moves the paper clinic files of the graduating class to the central archived files. The full clinic file is maintained for one year after graduation, and then records of completion of practical exams and clinic competencies are maintained while the rest of the papers (e.g., details of hours earned on particular shifts, write-ups for minor infractions) are destroyed. Student records are retained in compliance with UB policy. See Appendix V-L for UB Document Retention Policy. The current record retention policy satisfies the needs of the students and the Program. There have been no issues reported regarding access to records.

As an institution receiving Title IV funding, UB complies with all federal and state laws regarding privacy. Policies, approved by the Board of Trustees and compliant with requirements of the federal Family Educational Rights and Privacy Act (FERPA), govern the retention, safety, and security of student permanent records. Students are made aware of these policies through formal statements in the Key to UB and through processes of various administrative offices in the maintenance of these records.

International Student Services keeps each international student's record up to five years post-graduation or post optional practical training, whichever comes later. All students who began studies from the Spring 2016 semester onward have an electronic record, and students who came before Spring 2016 have a paper file. Authorizations/correspondences are printed and stored in each student's record.

Documentation of the details of each authorization or correspondence with students is maintained in the University's Enterprise Resource Planning (ERP) system, Colleague. Paper files are kept in a locked file room and electronic files can only be accessed by personnel working at this office with login ID and password authority. After five years, paper files are securely destroyed and electronic files are purged through the IT department.

Federal immigration regulations requires the retention of records containing certain specific information and documents relating to each international student while the student is attending the University and for at least three years after the student is no longer pursuing a full course of study. UB's five-year record keeping policy exceeds the time requirements set by U.S. Immigration. Our policies and procedures regarding record retention, access to records, and release of information comply with all relevant state and federal law.

In accordance with the FERPA, UB students have the right to inspect and review their educational records. To obtain access, students must submit a written request to the University Registrar that identifies the record(s) they wish to inspect. The Registrar will make arrangements for access within 45 days and notify the student of the time and place where records may be inspected. If the Registrar does

not maintain the records requested, the Registrar will advise the student of the correct official to whom the request should be addressed.

#### UB Disciplinary File Record-Keeping

The Office of Housing, Residential Life and Community Standards maintains disciplinary files on all cases. Disciplinary files are kept (hardcopy) within the office of the executive director, which is a locked room (when not occupied) within the locked main office (when not occupied), thereby creating a second level of security. Since the 2015 Fall semester, the Office of Housing, Residential Life and Community Standards has utilized the secure, online conduct software system called *Maxient*. Records since that point in time are fully electronic and require students to authenticate their identity, with their log in credentials, to obtain communication from the office. Students have the ability to request, in writing, a copy of their disciplinary file through the Office of Housing, Residential Life and Community Standards. Once received, the request is reviewed and a copy of the file (redacted to remove personally identifiable information regarding other students) is provided to the student either (a) electronically or (b) in hard copy, based on the student need.

The program maintains data through various databases. UB registration records and transcripts are accessible through Colleague, the university's ERP system. The Academic Coordinator, Associate Deans, and the Dean are registered to use this system and can access information from their desktop computers. UBCNM electronic files are maintained in a shared drive and can be accessed only by the Dean, Associate Deans, Academic Coordinator, Dean's Assistant, and the Director of Assessment for the Division of Health Sciences. The Clinic Clerk maintains an electronic file of student clinic records that can be accessed by the Dean, Associate Deans, and Academic Coordinator. Student paper files are maintained in locked, fireproof cabinets inside a locked file room, which also houses the fax machine and some office supplies. The ADAA, Academic Coordinator, and Dean's Assistant have keys to the file cabinets. Full-time faculty and staff have keys to the file room but not the file cabinets. The staff of the UB Acupuncture Institute, with offices on the same floor as UBCNM, also have keys to this room. These file cabinets are convenient to the UBCNM administrative offices, but the limited access preserves the security of the files.

The University Office of Institutional Research tracks the number of students enrolled, graduated and readmitted each year; the number of applications received and accepted each year, and the ages, gender, and educational backgrounds of the student body. The graduation rate and the acceptance rate are also tracked by the University Office of Institutional Research. See Appendices V-M and V-N for the 2016 and 2017 Annual Reports that contain these data.

Student loan default rates are reported by UB as an aggregate, and it is not possible to separate UBCNM default rates from that number.

Pass rates on NPLEX Part I and II are reported by NABNE to UBCNM and the data are maintained by the Dean.

### **Tuition and Financial Aid**

Students are afforded various options for financing their education at UBCNM. Unsubsidized federal loans are available to students without a credit check. Students can also take private loans and Federal Graduate Plus Loans, which require a credit check and verification of enrollment. Student Financial Services follows Federal regulations for administering Financial Aid. All of UB's financial aid records are kept in accordance with Title IV regulations and the financial aid office is audited on an annual basis to ensure compliance. For these annual audits, the University hires its own auditors and the results of the audit are furnished to the Federal government.

Members of the Student Financial Services office attend webinars, national and state conferences, and in-house training every academic year and as needed when new or revised policies are effected. All new counselors attend novice training, administered by the New York State Financial Aid Administrators Association (NYSFAA). There are no government-mandated training programs in which financial aid personnel participate.

The Student Financial Services (SFS) counselors encourage UBCNM students to apply for outside scholarships through websites such as [www.fastweb.com](http://www.fastweb.com) and [www.finaid.org](http://www.finaid.org), and students are also given information on scholarships available to UB health sciences students, including several named scholarships reserved for UBCNM. During information sessions with prospective students, they learn how to check their past financial aid history ([www.NSLDS.ed.gov](http://www.NSLDS.ed.gov)) to ensure they are in good standing with any federal grants or loans. SFS counselors also discuss how to avoid any illegitimate scholarships or scams.

The SFS office informs students of the requirement to participate in online entry and exit counseling. Students read material at [www.studentloans.gov](http://www.studentloans.gov), electronically indicate that they have read it, and take online quizzes to confirm their understanding of the material. All students who take Federal Direct Unsubsidized loans must complete an entrance interview and sign a master promissory note through the [www.studentloans.gov](http://www.studentloans.gov) website.

The counselors in SFS are available to students for face-to-face counseling and to answer questions on a walk-in and/or appointment basis. Upon graduation from the program, students consult with SFS

counselors to discuss loan repayment, the different types of repayment plans, how to contact loan servicers, the importance of not falling into default, and other topics to assist the students in being responsible borrowers.

There are opportunities for improvements to the administration of Financial Aid as students enter and exit the program. Loans cannot be disbursed until students complete entrance counseling, and currently that counseling is completed online. Starting in the 2017 Fall semester, an SFS counselor and an ND faculty member reviewed loan information in person with newly enrolled students.

Students also complete exit counseling online. A hold is placed on release of transcripts to encourage students to complete the on-line exit interview. This typically occurs when students are ready to graduate, or when they are enrolled in fewer than six credits. The Program is exploring a more extensive in-person exit interview to be held with each student regarding their financial burden. This will provide a personal way of interacting with students at this critical juncture, and provide one more “touch point” with students before they graduate to reiterate the importance of repaying loans on time and provide information on repayment options.

University of Bridgeport’s Master’s/Doctor’s degree cohort default rate for fiscal years 2014, 2013, and 2012 were 8.9%, 9.2%, and 8.8%, respectively.



School Default Rates  
FY 2014, 2013, and 2012

[RETURN TO RESULTS](#)

Record 1 of 1

OPE ID	School	Type	Control	PRGMS	FY2014	FY2013	FY2012	
001416	UNIVERSITY OF BRIDGEPORT 126 PARK AVENUE BRIDGEPORT CT 06601-5650	Master's Degree or Doctor's Degree	Private	Both (FFEL/FDL)	<b>Default Rate</b>	8.9	9.2	8.8
					<b>No. in Default</b>	110	109	100
					<b>No. in Repay</b>	1,232	1,176	1,124
					<b>Enrollment figures</b>	5,828	5,816	6,201
					<b>Percentage Calculation</b>	21.1	20.2	18.1

**ENROLLMENT:** To provide context for the Cohort Default Rate (CDR) data we include enrollment data (students enrolled at any time during the year) and a corresponding percentage (borrowers entering repayment divided by that enrollment figure). While there is no direct relationship between the timing of when a borrower entered repayment (October 1 through September 30) and any particular enrollment year, for the purpose of these data, we have chosen to use the academic year ending on the June 30 prior to the beginning of the cohort year (e.g., FY 2014 CDR Year will use 2012-2013 enrollment).

Current Date : 03/19/2018

If a student drops classes prior to the start of the term, all charges are dropped. Once the semester has begun, UB follows the refund schedule shown in the table in section B5.

The University is in compliance with the Title IV refund policy and follows the federal refund calculations for financial aid. This is noted in the [UB Catalog](#) and included in the financial aid literature that is supplied to students. A Guidebook, found in Appendix V-O, provides the Title IV refund policy as mandated by the government.

The University also complies with the federal regulations regarding refunding Title IV aid overages to student, and Student Financial Services ensure that students receive their refunds within 14 calendar days of disbursement.

### **Academic Counseling**

The grading policies and grading scale are found in the UBCNM Student Handbook Appendix V-D.

Academic Counseling at UBCNM is provided through tutoring in *Academic Support* courses, one at each academic level. The course for the third and fourth year students includes both academic and clinical support. The support was officially created as a course starting in the 2014 Fall semester. Prior to 2016 Fall semester, there were two ways students could enter this program: students were assigned and registered to the course after failing a major exam; or students could elect to attend the weekly class as they felt they needed. Beginning in 2016 Fall semester, participation in these courses was limited to those students who were referred and required to attend, a change made by instructor request. Students who had been self-selecting for this support were instead referred to the faculty member teaching the course for support during office hours, or referred to the university tutoring center.

The University offers tutoring and writing coaching to students at no additional cost through the Teaching and Learning Center (TLC) and Writing Resource Center. Services for graduate students were offered beginning in the 2014 Spring semester, with a Health Sciences tutor added in the 2014 Fall semester. Beginning with the 2017-2018 academic year, New Student Orientation includes a visits to the TLC.

UBCNM students can be referred to the TLC by an instructor or by the ADAA, or they can seek tutoring through this service on their own. TLC hires specialist tutors to work with each program. The tutors for UBCNM are current students and alumni. Training includes instruction on working with a diverse student body and handling communication problems, as well as teaching styles.

Tutoring can take place face-to-face on campus, or online.

The following is a list of the numbers of UBCNM students using TLC from Fall 2014 though Fall 2016:

- Fall 2014      2 students
- Spring 2015   2 students
- Fall 2015      2 students
- Spring 2016   9 students
- Fall 2016      2 students

Usage of the TLC by UBCNM students has been limited by logistics and timing. The TLC is located in the Wahlstrom Library, a short walk across campus from the Health Sciences Center. For UBCNM students with crowded schedules, finding time for a tutoring appointment can be difficult. Email and

online tutoring has worked well for some students, allowing tutoring to take place at convenient times for the student.

In the 2017 Spring semester, UB launched a new eTutoring integration in its LMS, Canvas, developed through UB's partnership with the Connecticut Distance Learning Consortium. The eTutoring is available directly through the Canvas site for certain courses, including basic science courses. Students can choose to augment their onsite tutoring with CDLC eTutoring at any time. Since the offerings are geared towards undergraduates, these courses are most useful for first year students.

### **Career Counseling**

The University's Center for Career Development embraces the philosophy that career development is about acquiring the professional skills necessary to manage one's career at any point along the continuum, and that career development is an integral educational component of students' academic programs. The services are geared toward preparing students to assess their strengths, research career options, acquire relevant work skills, and use effective tools as they transition from academic endeavors to productive and satisfying employment. Through career experiential opportunities, students are challenged to expand their knowledge of themselves and the world of work in a dynamic and global community. The Center for Career Development provides services for the lifelong and multi-dimensional processes that are filled with choices and adjustments.

#### **Presentations / Workshops**

The Center for Career Development has offered approximately one targeted Naturopathic Workshop per semester since the 2014 Fall semester. Topics include Résumé Building, Career Guidance, and Mock Interviewing. ND students also have access to the general programs offered by Career Development, as many as one to two workshops per week each semester.

The Director of the UB Center for Career Development is a member of the Career Services Committee of the Association of Accredited Naturopathic Medical Colleges (AANMC). Committee members collaborate on creating consistent resources available to ND students and alumni in the US and Canada. The group has worked to identify the strengths and weakness of each institution to ensure that each school is providing the resources to ensure that students are successful, and providing the tools to be prepared within the ND profession. The Committee has identified sites to include on the AANMC Career webpage, as well as developed an online job posting portal, for specific use by ND students and alumni. The group decided to use "Symplicity," with strong support from the UB Director of Career

Development for this program, related to his prior experience using this program. See Appendix V-P for the AANMC Career Group Minutes. Brochures from Career Center are found in the On-site Workroom.

### **Personal Counseling**

UB operates a Counseling Services center on campus. Students can and are encouraged to schedule individual counseling sessions as needed. Faculty and administrators are encouraged to contact Counseling Services with concerns about the needs of an individual student. The university also provides a web “Student of Concern” form that students, faculty, staff, or parents can use to request help or express concern about a student. This process is coordinated through the Office of the Dean of Students. The link for the Student of Concern form:

[https://cm.maxient.com/reportingform.php?UnivofBridgeport&layout\\_id=4](https://cm.maxient.com/reportingform.php?UnivofBridgeport&layout_id=4) ). See the Site Team Workroom for brochures from UB Counseling Services.

The Director of the Counseling Services program reported that a graduate student using Counseling Services will typically use about 12 sessions annually. Most graduate students, including those from UBCNM, are seeking care for long-term issues, rather than crisis situations. The most common reasons for seeking services are anxiety, depression, and relationship issues. Many students who seek services are experiencing two or more of these issues simultaneously. Approximately 50% of students seeking services at the University have histories of trauma. Most students are self-referrals, although there are a few referrals from faculty each year.

The following are data on the number of graduate students seen in the past 3 academic years:

- 2014/2015: 28 graduate students seen, 26 from Division of Health Science, 4 from UBCNM
- 2015/2016: 49 graduate students seen, 29 from Division of Health Sciences, 22 from UBCNM
- 2016/2017: 62 graduate students seen, 26 from Division of Health Sciences, 12 from UBCNM

UBCNM has made an effort to increase students’ recognition of available counseling services over the past few years. Representatives from the Counseling Services program have spoken at New Student Orientations and in the first year course *Physician Self-Care* (formerly *Physician Heal Thyself*). Faculty Development has included training in recognizing students in need, and advisors are encouraged to contact Counseling Services with questions and to refer students to the counselors as needed. As a result, awareness and utilization of the services is high.

When a UBCNM student fails a major exam, the instructor meets with the student and completes an Academic Support Referral Form. The Associate Dean of Academic Affairs registers the student for the appropriate *Academic Support* section, notifies the student of the registration and the date at which they

are expected to report to the class. The ADAA also notifies the *Academic Support* instructor, the referring instructor, and the student's advisor of the registration. The student is generally required to attend the course for the remainder of the semester. After midterms, the ADAA asks Advisors of students registered in *Academic Support* to meet with the students to check on their progress. See Appendix V-Q for the Academic Support Referral Form.

The needs of students registered for *Academic Support* can vary greatly from semester to semester. Instructors communicate with students often, to tailor each class meeting to the current needs of those students. Teaching methods used include one-on-one tutoring, lectures, group work, and focused study sessions. The instructors can also refer students to the TLC for additional tutoring.

*Academic Support* is a pass-fail course worth one semester credit. Enrolled students must fulfill two requirements in order to pass: they must attend at least 70% of the course meetings from the time of enrollment (the UBCNM baseline attendance requirement for all academic courses) and they must contact the instructor each week with a question or a description of the material they would like to work on.

A UBCNM student who fails a required course, or whose GPA drops below 2.5, is placed on Academic Probation. The student must repeat the course successfully, and raise the GPA to at least 2.5, in order to be returned to Good Academic Standing. Information regarding Academic Probation is found in the UBCNM Student Handbook.

Grounds for Academic Dismissal include the following: a second instance of Academic Probation; more than one course failed in a single semester; or failure to raise the GPA in two semesters. The UBCNM Administration currently has discretion to impose academic dismissal in each qualifying case, as indicated in the UBCNM Student Handbook.

Most students placed on academic probation remediate the course and return to good standing without incident. Some students at risk for academic dismissal—those who are at risk of failing a second course—withdraw from the program.

Students have the right to appeal an Academic Dismissal to the Dean. The process for appeal is outlined in the UBCNM Student Handbook. Grounds for Non-Academic Dismissal include repeated instances of unprofessional behavior resulting in sanctions. Faculty members can cite students for unprofessional behavior; this is more likely to occur in the clinic, where the guidelines for professional behavior are more detailed and specific. There have been no instances of non-academic dismissal in the years 2013-17. However, in Spring 2014, one student was suspended by the University for violations of the code of conduct. That student subsequently withdrew from the University.

Since the 2014 Fall semester, a total of 14 students have withdrawn from UBCNM. Students withdraw for a variety of reasons, and they are not required to formally state their reason for withdrawal, so it is difficult to verify the ultimate reason for leaving the institution. Academic struggles may contribute to the decision to withdraw for some students, but personal circumstances are often the cause (e.g., a family member in need of round-the-clock care, financial changes, or a spouse being relocated).

See Appendix V-R for the [UB Catalog](#) regarding data on withdrawals and dismissals.

### **Use of Information and Communication Technology**

Upon enrollment, each student is provided a unique login for accessing all University electronic systems. Students have autonomy to change their password as desired. The [University of Bridgeport Computer Networks Acceptable Use Guidelines](#) outlines each student's responsibility to protect their account information. Additional technology is available for faculty to use to improve security for online testing, using the platform Respondus, which includes a Lockdown Browser (a custom browser that electronically secures the testing environment within Canvas<sup>®</sup>, so that students are unable to print, copy, go to another URL, or access other applications) and Monitor (which requires students to use a webcam to record themselves during an exam, and which flags inappropriate behavior).

Respondus also provides an alternative for students to take scheduled didactic assessments remotely, in the event of an illness or any other challenge that may prevent their being present on campus. This has been used successfully by some of our faculty. Respondus has the same security features (lockdown browser and camera) when used both on campus and from a remote location.

Plagiarism detection software (Turnitin) is also available for written assignments, to discourage and identify plagiarism. Canvas<sup>®</sup> allows faculty to create assignments for online submission through the Turnitin application, which offers the option of allowing students to see the Originality Report immediately or at a specific date, after comparing the content of the assignment against other student papers, Internet databases, journals, and publications.

UB's LMS, Canvas<sup>®</sup>, is used by faculty members as a technology resource for students and to provide a centralized communication system with specific student cohorts. Canvas<sup>®</sup> maintains a repository of files (documents, slideshows, images, videos, audio, etc.) which are grouped into modules for the students' easy access. Faculty members assign permissions to each individual for modules, files, quizzes, and other materials, making them available at specific date ranges as desired. Canvas<sup>®</sup> offers the option of issuing prompt automatic email notifications to students once files have been uploaded/updated, and when an announcement is posted. Students can access the resources using a computer or mobile device.

*Fundamentals of Entrepreneurship*, taught by a member of the UB School of Business, is currently UBCNM's only hybrid class. The instructor uses Canvas® to administer 50% of the course online through various assignments and activities such as discussion forums. The other 50% of the course is offered in the classroom.

Canvas® also allows for synchronous online class sessions, useful during times of inclement weather. Until recently the system used was Bb collaborate, and this year UB started using Zoom, a similar platform with a more user-friendly interface. This new platform also allows for recording the session for later viewing. Students participate in synchronous online learning, in which they are able to see the camera feed from the instructor and any shared resources such as slides and videos.

Instructors are encouraged to use the online teaching tools at least once each term, to help didactic faculty and students become familiar with the system. We have had good success with these remote sessions, reducing class time lost due to inclement weather and any other challenge that can impede an in-classroom meeting for any given day.

### **Official Publications and Online Resources**

The University abides by all federal and state regulations regarding the protection, distribution and maintenance of the information regarding students' academic records and personal information, while simultaneously addressing students' needs. Students and faculty each have a UB-issued unique username and password. These confidential credentials are used to access the UB Portal (myUB Portal), UB email account, and Canvas®. Students also have access to WebAdvisor, where they can access information such as academic transcripts, financial aid and billing information, and personal contact information. The UBCNM Dean, Associate Deans, Academic Coordinator, and the Assistant to the Dean have access to students' academic transcripts and other confidential information by accessing Colleague. Colleague users log in with additional security by utilizing an authenticator which generates a single-use numerical password. This device is registered to the current user and is issued by the University.

The University provides information about FERPA, available online at <https://www.bridgeport.edu/docs/StudentLife/ResLife/FERPA.pdf>. This document, available to all students on the UB website, states clearly how the University maintains confidentiality of student information.

All confidential student information is maintained in strict accordance with Federal privacy laws (FERPA). The University strictly enforces the student confidentiality policy and does not release

information to third parties unless authorized by the student in writing, with the exception of government and financial aid institutions.

The program notifies students of fees and additional student charges during the admissions process. These fees and charges are also listed in the UBCNM Student Handbook, which is provided to students at the time of New Student Orientation. The Naturopathic Student Government Association (NSGA) student representative has provided input to this list.

The UBCNM mission is published in the UBCNM Student Handbook and the UB Catalog. While programmatic *Outcomes* are published in the UBCNM Student Handbook, the *Objectives* are not.

Admissions requirements and procedures are published in the UB Catalog and on the UB website. UBCNM view books, published by the University, and the UBCNM Student Handbook contain admissions requirements only. Criteria for accepting transfer credit are listed in the UB Catalog and the UBCNM Student Handbook. The UB website provides information related to tuition, fees, and refund policies. The UB Catalog publishes the refund policy and references the UB website for current academic year tuition, fees, and other expenses. The UBCNM Student Handbook lists associated fees for each academic year over the course of the program. The UB website also publishes information about filing the Free Application for Federal Student Aid (FAFSA), exit counseling, loan consolidation, and frequently asked questions about financial aid, such as requirements and qualifications for receiving aid. Requirements for the maintenance of satisfactory academic progress and good academic standing are provided in the UB Catalog and the UBCNM Student Handbook. The UBCNM Student Handbook contains policies and procedures related to satisfactory academic progress, rules for student conduct, student disciplinary procedures, and student grievance procedures. Grading and attendance policies are published in the UBCNM Student Handbook for didactic courses and the Student Clinic Handbook for clinical rotations. The UBCNM syllabus template also includes the grading and attendance policies.

The UBCNM Student Handbook and the UB Catalog also contain the program graduation requirements, the list of the members of the College administration, including their positions. The UB website also provides the list of College Administrators and faculty members, their professional education and the qualifications, as well as the University's governing board.

The Title IX Policy is published in hardcopy and online in several resources. It appears in the UBCNM Student Handbook, UB Catalog, Key to UB, and on the UB website. Additionally, the UB website publishes the academic calendar, and has several publicly-available pages that provide the UB community with information about the resources, education and support available to students who have been or may be impacted by any form of sexual misconduct.

The program sequence is available to students and the general public in the [UB Catalog](#) on the UB website. The [UB Catalog](#) contains a description of each academic program, including the curriculum and course descriptions for each course; information on the methods of instruction; and technology requirements, and abridged course descriptions are published in the [UBCNM Student Handbook](#).

The UB website has information on UB's on-campus library, Wahlstrom Library, including descriptions of rooms available by reservation (e.g., Group Study Rooms, Skype Rooms, Anatomical Models Room, and the Adaptive Technology Room for students with visual, learning, and physical accessibility challenges). The UB website also contains pages with information about UB Clinics in general, the Dispensary, and a page dedicated to the naturopathic clinic housed within UB Clinics.

The [UB Catalog](#) indicates that graduates of accredited naturopathic colleges must pass both parts of NPLEX to be eligible for licensure. For specific professional requirements for licensing, candidates are advised in the catalog to contact the appropriate licensing authority in the jurisdiction in which they wish to practice. The [UBCNM Student Handbook](#) refers candidates to the appropriate State Board of Naturopathic Examiners or the designated licensing agency for the jurisdiction in which they wish to practice. The [UBCNM Student Handbook](#) additionally indicates that matriculation and completion of the UBCNM degree program does not guarantee a graduate the ability to gain licensure in any U.S. state or Canadian province. It also informs students that graduates must pass Parts I and II of NPLEX to be eligible for licensure, and it directs students to the NPLEX and NABNE websites for further details.

For entry into the profession, the [UB Catalog](#) refers candidates to the American Association of Naturopathic Physicians (AANP) as the national professional association for naturopathic medicine in the United States, and the Canadian Association of Naturopathic Doctors (CAND) as the national professional association in Canada. The [UBCNM Student Handbook](#) lists the names and websites of naturopathic medicine professional associations.

Courses are offered in sequence, according to semester and year, as published in the [UB Catalog](#) and the UB website. As revisions and/or corrections occur, the catalog and website are updated. The relative speed of making updates on electronic media versus hardcopy media may result in the information on the UB website being more up to date than print media.

Faculty availability is not made public. Full-time faculty course assignments are generally stable while part-time faculty assignments can be subject to greater variability, although UBCNM is fortunate to have a well-established cadre of adjunct faculty. Faculty assignments are published internally to the student body when the academic schedule is distributed.

Some courses are offered for a limited time based on the instructor's availability. When this is the case, it is communicated to the student body at the time of the course offering. For example, the 2016-2017 Resident at UBCNM had expertise in Ayurvedic Medicine, and in Spring 2017, he taught an 18-week elective course on that field. Because his residency ended in mid-Fall 2017, UBCNM offered this course only once, in Spring 2017. Thus, the course was advertised to the student body as a one-time offering.

A page on the UB website is dedicated to the employment outlook for graduates of the Naturopathic Degree (ND) program and the various employment/career paths available to them. Some of the options provided are Residency at naturopathic and integrative healthcare facilities, general and specialty private and group naturopathic practice, and serving at non-profit healthcare organizations. ND career path options are also presented in the [Division of Health Sciences Graduate Degree Programs](#) view book.

The College participates in University and community health fairs, specialty clinics, and community clinics. Advertisements and communications about these activities provide accurate information regarding the naturopathic program. A UB Clinics brochure is available in the on-site workroom.

The College of Naturopathic Medicine publishes its accreditation status and relationship with the Council on the University of Bridgeport website in accordance with CNME Policy 5, Representation of a Program's Relationship with the Council. The statement on the website is as follows:

“The College of Naturopathic Medicine is accredited by the Council on Naturopathic Medical Education (CNME), the programmatic accrediting agency for naturopathic colleges and programs in the United States and Canada.”

“Students and graduates of naturopathic colleges and programs accredited by or programs with candidate status with the CNME are eligible to apply for the Naturopathic Physician Licensing Examinations as administered by the North American Board of Naturopathic Examiners. In accordance with CNME policy, this posting provides the Council's address and phone number.”

Council on Naturopathic Medical Education

P.O. Box 178

Great Barrington, MA 01230

Phone: (413) 528-8877

[www.cnme.org](http://www.cnme.org)

## STANDARD VI

### Program of Study

#### Program Development, Delivery and Integration

The UBCNM program combines didactic, experiential, and clinical training to develop the knowledge, skills, attitudes, and behaviors necessary for the effective practice of naturopathic medicine. Didactic coursework begins in the first semester and continues throughout the eight semesters of training. Clinical experiences begin in the second year, with hydrotherapy shifts, and make up the bulk of the training by the seventh and eighth semesters. In each semester of their training, students must demonstrate competencies, often through experiential work and simulated situations.

The first semester of training contains several competency-based courses. *Biomedical Integration Lab I* is team-taught by the Biochemistry, Physiology, and Anatomy professors, who present case-based problems to the students each week. In the *Intro to Clinic* course, students are introduced to the use of their medical equipment as they practice taking vital signs and charting their findings. In *Counseling Skills I*, students record themselves interviewing a friend or family member and submit the video using the Learning Management System (LMS) to demonstrate their use of active and passive listening skills. In *Botanical Pharmacy Lab*, assignments include processing plants into various delivery forms (e.g., poultices, tinctures, oils) and identifying plants in the field. In the second semester, students continue to discuss and present cases in *Biomedical Integration Lab II*, and demonstrate hands-on skills in *Palpation Lab* and *Hydrotherapy Lab*.

In the second year, students focus on pathology and diagnostic skills. They demonstrate competency in the practical exams of *Physical Exam Lab I* and *II*, *Orthopedic Assessment*, and *Physiotherapeutics*, and must safely perform venipuncture and other sample collection skills in *Lab Diagnosis Lab I* and *II*. Meanwhile, in *Clinic Practicum I* and *II*, students synthesize their knowledge and skills by performing history-taking, charting, and basic physical exam. Students enter the clinic as hydrotherapy technicians, performing prescribed procedures on patients referred to them. The second year culminates in the demonstration of the synthesis of skills, knowledge, and medical reasoning in the competency-based Clinic Entrance Exam.

In the third year of training, students enter clinic as Secondary Student Clinicians. In the classroom, the competency requirements become more challenging. In *Counseling Skills II*, students again use the video to record their use of motivational interviewing and other behavioral change skills with a volunteer. The lab component of *Naturopathic Manipulation I* and *II* requires students to perform techniques in practical exams. In *Gynecology Lab*, students demonstrate competency in examination, patient education, fitting

barrier contraception (e.g. diaphragms, cervical caps), and collecting lab samples. Students work on training mannequins in the weekly lab and attend an all-day training session with live patient models. In *Cardiology*, students place and interpret an EKG. *Clinic Forum II* requires students to synthesize skills and knowledge by solving diagnostic and assessment problems. Meanwhile, students must successfully perform the procedures and discussions detailed in the Handbook of Clinical Competencies (Appendix VI-A). The third year of training culminates with a demonstration of competencies in the Clinic Promotion Exam, a simulated patient experience.

In the final year of training, students are in the clinic as Primary Student Clinicians, and must complete all procedures listed in the Handbook of Clinical Competencies. Competency-based work in the classroom includes maintaining a clean field and performing appropriate sutures in *Minor Office Procedures*; presenting a patient education talk in *Practice Management I*; writing a business plan in *Practice Management II*; and completing the required thesis.

In addition to their work with patients, students must complete related clinical requirements, including Dispensary, Lab, and Clinic Services. These experiences provide students opportunities to work in these vital areas of the clinic, where tasks may include compounding herbal formulas, collecting lab samples, preparing lab requisitions, and developing promotional material and handouts for clinic.

### **Competencies, Outcomes and Objectives**

In the 2018 summer, UBCNM administration and faculty will begin the review process to update the program Outcomes and Objectives, based on information from documents such as the 2018 spring and summer review and revision of the AANMC competencies. The UBCNM Strategic Plan, revised in 2017, and the Curricular Mapping process, conducted in the 2017-2018 academic year, will also be instrumental to the process. The first edition of the AANMC competencies have been in use in the program since 2015. The current program Outcomes and Objectives are found in Appendix VI-B.

The syllabus template in use through the 2017 Spring semester listed four program-wide instructional objectives: Medical Knowledge, Professionalism, Patient Care, and Interpersonal and Communication Skills. In the 2017 Fall semester, a fifth objective, Medical Reasoning, was added to the list in response to an identified area of need, as noted through observation in the clinical setting and confirmed in the Clinic Exams. Instructors select the objectives that are appropriate for each course, and indicate the level at which the objective is taught (Novice, Intermediate, or Competent). See Appendices VI-C and VI-D for the syllabi templates for 2017 Spring and 2017 Fall semesters.

Prior to the 2017 Fall semester, students received the Handbook of Clinical Competencies in the summer following their second year, when they became eligible to begin rotations as Secondary Student

Clinicians. Beginning in 2017-2018 academic year, the updated Handbook of Clinical Competencies was distributed to students in their second year of study, to document the hydrotherapy competencies completed in their hydrotherapy shifts. The Handbook of Clinical Competencies has been reviewed and revised annually in the last three years, to reflect changes, e.g., required hydrotherapy shifts for second year students, and to enhance usability of the book.

### **Length of Academic Program**

The program is designed for a student to progress through the regular program of study and complete it in four years. The academic calendar for the University of Bridgeport, Division of Health Sciences consists of two 18-week semesters, Fall and Spring, separated by a 3-4 week holiday break, and followed by two 6-week Summer Sessions. Classes take place during the Fall and Spring semesters. Clinic rotations take place during the Fall and Spring semesters, and both Summer Sessions. During the winter holiday break, there is also a Holiday Clinic schedule for one or two weeks, depending on the length of the school break. This takes place in December and in early January prior to the start of the Spring semester. The naturopathic program is nearly entirely residential. The majority of courses are held on campus, with a handful of courses having an online component. There are no courses that take place 100% online. As of the Fall 2016 Matriculation, the full program consists of 4,620 required contact hours. UBCNM uses a variant of the Carnegie unit, with 1 lecture credit equal to 18 contact hours (1 hour per week for the full term), and 1 lab credit equal to 36 contact hours (2 hours per week for the full term). Clinic credits are assigned at the same rate as lab credits, in which one clinic rotation in the Fall or Spring term meets for 72 hours (4 hours weekly for 18 weeks) and is valued at 2 credits. Summer clinic shifts meet for 24 hours (4 hours weekly for 6 weeks) and are worth 0.67 credit each. See Appendix VI-E for the UBCNM Curriculum and Contact Hours.

### **Community of Learning**

Most classes are conducted entirely on campus. Small class size allows for frequent interaction between instructors and individual students. Lab classes allow for more extensive interaction, with some sections holding as few as eight students working with the instructor and a teaching assistant (TA). All TA roles at UBCNM are held by licensed physicians (ND or DC). Group exercises are commonly used in classes. For instance, students in *Counseling II* (3<sup>rd</sup> year) work in groups of three or four to discuss specific interactions with patients in the clinic. Students in *Biomedical Integration Lab II* (1<sup>st</sup> year) research and present topics with a small group of colleagues.

In the few courses which have an online component, instructors use discussion boards, chat, and other features built into the LMS, Canvas®, to foster communication with and among students in the class. Some of the face-to-face classes also use these tools, either to replace missed classroom time (e.g., in the

event of closure due to inclement weather) or to augment lecture or discussion in the face-to-face classroom.

### **Articulation Agreements**

The University has not entered into any articulation agreements with other institutions for the delivery of any portion of the program.

### **Program Advertising**

Brochures for UBCNM program are produced by the UB Office of Admissions. In addition to information about prerequisites and instructions for applying to the program, they provide an overview of the program, with a brief and accurate synopsis of the academic and clinical work required. Brochures can be found in the On-site Workroom.

The pages devoted to the UBCNM website have been updated over the last few years. The information on the UB website offers a detailed description of the program, including the mission and goals and learning outcomes, as well as information about the program's history and the clinic's specialty shifts and Dispensary.

The website upkeep is an ongoing process. The work to keep the website up to date is continuous, and has shared responsibility between the Program and the IT department. Presently, the entire university webpage and digital presence is in the midst of a major re-design and update.

### **Course Syllabi**

Instructors have provided syllabi for each course at UBCNM since the inception of the program. Following evaluation of the syllabi, it became apparent that some faculty members needed additional guidance and support to ensure inclusion of the necessary details in their syllabi, and that students would benefit from the use of a consistent format for all UBCNM syllabi.

For the 2016 Fall semester, a redesigned syllabus template was introduced to be used by instructors for all didactic courses. The template is divided into several sections which reflect the required categories:

- A. Purpose of the course
- B. Objectives of the course in specific terms, and the educational competencies to be attained
- C. Outline of the content of the course and laboratory instruction in enough detail to permit the student to see its full scope
- D. Method(s) of instruction and assessment
- E. Requirements of the course with important dates (e.g., papers, projects, examinations)
- F. Type of grading system used
- G. Required and recommended reading

Some sections are “boilerplate”; they are identical on every syllabus, and directly reflect College policies or procedures that all courses must follow. Other sections, such as competencies, course calendar, and course assessment, require instructors to fill in the unique details for their course. The latest version of the template for didactic courses is sent to faculty at least six weeks before the beginning of the new term. Faculty are asked to submit a draft of their syllabus to the ADAA at least one month before the beginning of the term. The ADAA then responds with comments and edits on the syllabus draft in time for the faculty member to post the final syllabus to the LMS by the beginning of the term.

The syllabi for each of the clinical rotations follow the revised format. Clinical supervisors update and submit their syllabus to the ADCE with information, requirements, objectives, and competencies specific to their rotation. The ADCE reviews each syllabus and provides feedback to the faculty, or suggests modifications on the documents. Clinical supervisors distribute copies of the syllabus to each student on their rotation at the beginning of the term. Each syllabus is maintained electronically. The ADCE is developing strategies to support the clinical faculty in their efforts to deliver their syllabi in a timely manner.

### **Teaching Methods and Instructional Technology**

Faculty members use a variety of methods, including but not limited to lecture (accompanied by PowerPoint slides, blackboard, or whiteboard); large group discussion; elements of the flipped classroom; experiential activities; small group work; student presentations; working with standardized patients; skills labs; online discussions; and games-based teaching modules.

Additional technology is available for faculty to use to improve security for online testing, using the platform Respondus, which includes a Lockdown Browser and Monitor. Respondus also provides an alternative for students to take scheduled didactic assessments remotely, in the event of an illness or any other challenge that may prevent them from being present on campus. This has been used successfully by some of the program faculty. Plagiarism detection software (Turnitin®) is also available for written assignments, to discourage and identify plagiarism.

Canvas® is used by all faculty to provide reference materials and resources to students, and to provide a centralized communication system with specific student cohorts. Faculty have the option to create online assessments and collaborative assignments using this platform. Canvas® allows students to track their own progress in the course.

Canvas® also enables live, remote, online class sessions, useful during times of inclement weather. Students are able to see the camera feed from the instructor, as well as any shared resource such as slides, videos, and applications.

Each term, instructors are encouraged to run a test of the online teaching sessions, to help both faculty and students familiarize themselves with the system. We have had good success with these remote sessions, sparing the need for class cancellations due to inclement weather and any other challenge that may impede an in-classroom meeting for any given day.

### **Faculty Training in Instructional Methods**

Faculty are encouraged to broaden their repertory of teaching techniques, and to choose techniques that fit the material and the cohort. UB and UBCNM have sponsored faculty training in various instructional methods, for example:

1. UBCNM Faculty Development August 2016: Stephanie Draus, ND, presented on active learning and creativity in the classroom. Following that training, Louise Napoli, ND, added a class on honing observation skills through the viewing of classic art to her *Clinic Practicum I* course, and Cindy Anderson, ND, has students set up skits on ethical dilemmas in her *Ethics* course
2. Dean's Faculty Committee Fall 2016: Anthony Ross, PhD, demonstrated a flipped classroom technique that he learned at the Teaching Professor Conference in June 2016 and began using in his physiology course.
3. “-Ologies and –atrics”: in late Fall 2017, UBCNM Dean Marcia Prenguber, ND, introduced a template for use by the treatment and management courses (NNP prefix in the UBCNM catalog). The template was developed in response to requests from a number of students for a more straightforward delivery of material, organizing the material in a structured manner, replacing the more varied approaches that instructors were using to teach the material. The template (Appendix VI-F) was introduced to instructors by the Dean and the ADAA in one-on-one meetings, and the instructors were asked to implement this template in Spring 2018 courses.

Increasing the range of teaching methods has been an ongoing project of the administration since the 2015-2016 academic year. There has been some success with individual courses; for instance, Dr. Ross has implemented a flipped classroom technique for *Physiology I* and *II* that has had good outcomes in terms of student comprehension and grades. Dr. Napoli has added experiential exercises to almost every class meeting of *Clinic Practicum I* and *II*, and students demonstrate an improved ability to apply their history-taking skills in simulated patient scenarios such as the Clinic Entrance Exam. However, no change comes without resistance. While many students have expressed enthusiasm with these changes, others

have expressed displeasure with being asked to read or prepare material before presenting to class. A common complaint is that students feel over-burdened and have difficulty completing homework after a full day of classes and clinic. Some faculty are reluctant to implement new ideas, either because of the additional time involved in learning and preparing new methods; because they are reluctant to incur the displeasure of change-averse students; or simply because they believe that their current methods are “tried-and-true” and see no reason to change a system that “works.”

One-on-one coaching has been most successful in helping faculty members develop new methods. The ADAA and the Director of Assessment for the Division of Health Sciences will work with instructors to discover methods which fit the objectives of the course and the strengths of the individual instructor. This method produces slow changes, but has helped faculty members to transition to new ideas.

### **Coordination of Academic and Clinical Education**

The academic and clinical education components are coordinated and integrated in several ways:

1. Several faculty teach in both areas, and are able to bring insights directly to and from the clinic and the classroom.
2. Regular discussion at Dean’s Faculty and Curriculum and Assessment Committee meetings about issues that arise in clinic and how best to address them. For instance, after reviewing student’s performance on the 2016 administration of the Clinic Exit Exams, the general consensus among faculty was that students may not be applying adequate medical reasoning because faculty supervisors were providing answers to student questions without asking students initiate a problem solving process. Faculty have used these sessions to compare teaching methods and to encourage each other to “coach” the students to solve clinical questions, rather than offering the answers. Another faculty discussion of note occurred when a professor with expertise in botanical medicine noted that students did not seem to be using their full knowledge acquired in didactic courses when they reached clinic.
3. The Associate Deans of Academic Affairs and Clinic Education coordinate on projects that integrate clinic and classroom, including developing remediation workshops for students who struggle with components of the practical exams; bringing the current clinic templates for charting and coding into the classroom as early as the first semester; and developing classroom objectives which directly relate to practice at the UBCNM Clinics (e.g., *Emergency Medicine I*, added in Fall 2016, introduces first year students to the evaluation of emergent care.) Among other tasks, students are required to know and use the current protocol for emergencies in use in the Clinics, and to complete a CPR training course.

4. Clinic Faculty meetings frequently include discussions on the integration of classroom and clinic. The AANMC-developed core competencies are used as measurements in the clinical exams, and clinical faculty were requested to use the document as a guide, as the didactic faculty are, for training and assessment. The Study Guides provided to students in preparation for the clinical exams, and emphasize areas of need, such as medical reasoning.
5. Medical documentation in the EMR has been noted as an area of weakness. The ADCE is exploring strategies to work with clinical faculty to improve the process of providing feedback to students. This includes students' demonstration of knowledge and skills in medical documentation (e.g., medical reasoning for each recommendation). The same will hold true in didactic courses such as *Clinic Practicum* that address these clinical issues.
6. Other avenues for integrating the information in didactic training courses into clinical experiences include:
  - a) Oral quizzing in Case Preview and Case Review, including Secondary and Primary Student Clinicians
  - b) Demonstration of resources used in the determination of botanical formulas
  - c) Demonstration of the use of references regarding interactions, depletions

Areas of weakness that require enhanced coordination and integration include medical reasoning, medical research and analysis, botanical formulation, and documentation. Faculty Development beginning in August 2018 will address these areas, with implementation in the clinic starting in 2018 Fall semester.

Following the 2016 administration of the Clinic Entrance, Promotion, and Exit Practical Exams, a deficit in medical reasoning was identified, and noted that this matched their observations of difficulties commonly observed during clinical rotations. Greater focus was and continues to be placed on developing these skills in the classroom as well as the clinic.

- Spring 2017: the members of the Dean's Faculty committee developed and shared methods for assessing and evaluating clinical reasoning in each of their courses.
- Fall 2017: "Medical Reasoning" is added to the syllabus template as a program-wide instructional objective. Academic faculty are also asked to identify at least one course outcome that centers on the use of medical reasoning.
- Summer 2017 - Spring 2018: Working with the ADCE, the Resident physicians develop a compendia of pharmaceutical information for each of the treatment and management courses instructors to include in their respective courses. Clinic supervisors will also begin to use these compendia starting in the summer sessions in 2018.

## Coordination of Academic and Clinical Components: Curricular Details

Students begin their first year with a diverse array of academic subjects. While the bulk of their time is spent in biomedical science courses (e.g., *Anatomy, Physiology, Biochemistry*), several other courses (e.g., *Emergency Medicine I, Counseling I, Medical Ethics*) introduce triage, doctor-patient communication, ethical decision-making, and other components of medical reasoning that they will build on over the next three years of study. The second year of study focuses on pathology and diagnosis, and students begin to learn the practice of patient care in courses such as *Physical Exam Lab* and *Clinic Practicum*. Students implement their newly acquired skills in performing and assessing patient vitals as well as newly learned hydrotherapy skills in their second year. In the third and fourth years of study, patient care responsibilities grow while class time is spent learning application of the modalities in specific systems (e.g., *Cardiology, Gastroenterology, OB/Gynecology, and Oncology*).

At each stage of their classroom training, students are asked to demonstrate the application of the knowledge and skills that they have gained to solve novel problems. For instance, most courses across the curriculum have at least one case-based problem-solving exercise; examples range from students taking the history of a mock patient and choosing and performing appropriate exams in *Physical Exam Lab*, to students presenting a summary of a patient case in *Clinic Forum II*. The Clinic Practical Exams provide a measure of their success, with progressively greater emphasis placed on medical reasoning and problem solving with each level of testing.

In their first year of clinical rotations, Secondary Student Clinicians are encouraged to register for at least one “Model” rotation. The Model rotation provides Secondary Student Clinicians the opportunity to learn from directly observing the clinical faculty member demonstrate the process of the patient visit, start to finish. The clinical supervisor models case-taking, physical examination skills, (students repeat physical exams), case analysis, assessment, the development of treatment plans, and professional behavior. Students document in the EMR, and participate in Case Preview and Case Review. The supervising physician asks progressively demanding questions related to medical reasoning. Over the course of the semester, students progressively take on the responsibilities of the patient appointment, presenting Case Preview, performing case taking interviews and physical exams, initiating assessment, developing treatment plans, and presenting Case Review.

In other rotations, Secondary Student Clinicians, observe both the Supervising Physician and the Primary Student Clinician in the patient interview, performance of physical exams, case assessment, and selection of therapeutic interventions. Secondary Student Clinicians assess patients’ vital signs, assist in ordering labs, repeat physical exams when prompted by the supervisor, and participate in the case discussions.

Primary Student Clinicians present patient cases in Case Preview in Case Review, providing rationale for their assessment and recommendations for treatment. Secondary and Primary Student Clinicians research patient cases and consult medical literature in preparation for Case Preview and Review.

### **Clinic Education: Visit Structure**

In the 2017 Spring semester, a new visit structure was introduced in place of the previous “General Patient Flow” noted in the 2016-2017 Faculty Clinic Handbook (Appendix VI-G). This visit structure was introduced to address: a) concerns identified by both administration and by students in time management of the patient visit; b) feedback received from students regarding redundancy in the patient interview; and c) the role of each person in the rotation. The new structure applies outlines the role of the Supervising Clinician, the Primary and the Secondary Student Clinicians at each step of the patient visit. In addition, this provides an opportunity to better assess the students’ case taking and case presentation skills. These changes were introduced to Supervisors electronically and reinforced with faculty development and student orientation sessions.

In clinical rotations with Primary Student Clinicians, the new visit structure requires the student to take the case and then briefly present it to the Supervisor in front of the patient in the exam room. This motivates students to improve their presentation skills, professionalism, efficiency and appropriate use of medical terminology.

### **Clinic Education: Student Evaluation Forms**

Supervising Physicians evaluate students’ performance using standardized rubrics on the Student Clinic Evaluation form (Appendix VII-D), assessing clinical skills, medical reasoning, and professional and ethical behaviors. The current evaluation form has evolved from a number of different formats in the past few years, and is new in the 2018 Spring semester.

The data from the evaluation forms are collated and provide information on students’ status and progress, as well as trends in rotations. These and other assessment tools, such as the Visit Tracking form, Case Preview and Review format, and Punctuality & Professionalism form, were developed and introduced in recent years to address concerns as they became evident. Clinical competencies will continue to be reviewed and revised as a component of the broader review of competencies to be addressed in the 2018-2019 academic year.

### **Clinical Competencies**

Clinical education is competency-based, with the demonstration and application of material learned in academic and clinical courses. The competencies increase in complexity as the student progresses

through the program. The Handbook of Clinical Competencies is the tracking tool for completion of all of the clinical competencies required for graduation and is reviewed annually by the administration.

### **Naturopathic Philosophy throughout the Curriculum**

Training in naturopathic philosophy begins in the first semester. While certain courses throughout the curriculum emphasize naturopathic philosophy, all instructors have received some introduction to the principles of naturopathic medicine. All non-ND faculty are introduced to the naturopathic principles and modalities at faculty orientation specifically for instructors without naturopathic training.

UBCNM holds an annual Philosophy Day, which all faculty are invited and encouraged to attend. Non-ND faculty members who attend have reported that they come away having learned more about the profession each year. Most diagnostic and systems courses are taught by naturopathic physicians, who use clinical examples of naturopathic philosophy and principles of care as a link of the subject matter to naturopathic clinical theory.

There is still room to improve this integration. For instance, it is still common to hear students describe a course as “not naturopathic enough” or to see a division between “evidence-based medicine” and “naturopathic philosophy.” The struggle to increase the scope of naturopathic practice in Connecticut has brought some of these divisions to the fore, as some faculty members convey a message to students that pharmaceuticals are inimical to naturopathic philosophy.

Resolutions to this issue continue to be developed. On a formative level, Dean’s Faculty Committee members have discussed how best to weave naturopathic philosophy into the content of all courses, including biomedical science courses. Faculty who teach the systems courses are expected to teach gold-standard pharmaceutical treatments as well as “natural therapies, e.g., diet, nutrition, botanical and homeopathic medicine, and physical medicine; but this adjustment to content does not yet address the issue of students who assume that to prescribe pharmaceuticals is to step outside the “proper” scope of naturopathic practice. In addition, some naturopathic physicians or faculty have not used pharmaceutical treatments regularly in their own practices, and so are hesitant to give instruction on a modality with which they feel unfamiliar. Additional support is provided to faculty members through the pharmacology compendia.

Students are introduced to the Principles of Naturopathic Medicine in their first semester. In addition to the two-course sequence in Naturopathic Philosophy, courses throughout the curriculum refer back to the naturopathic principles. For example, the *Medical Ethics* course relates ethical principles such as autonomy, beneficence, and justice to the principles of naturopathic medicine. The clinical preparation

courses *Clinic Practicum* and *Clinical Forum* use the principles as a framework for developing treatment plans.

The Naturopathic Principles provide a framework for students' care of patients in the UB and Community Clinics. Students are required to present in Case Review and to document the applicable principles in the assessment section of the patients' medical records. The EMR has been customized to include a field where students can select the specific naturopathic principles applied in each patient encounter. Medical record documents used at the community clinics prompt students to identify the philosophical tenet(s) used for that visit.

The UBCNM Clinic Handbook includes the information on how the principles are incorporated and how students are to document them in the medical record. See Appendix VI-H-1 for the Student Clinic Handbook and Appendix VI-H-2 for clinical questions regarding each principle.

The principle of *Vis Medicatrix Naturae* is embedded in the treatment approaches taught in the didactic courses as well as in the clinical aspect of the program. This is most evident in the selection of therapeutic interventions that provide patients what they need to regain and maintain proper function, with consideration of the pathophysiology of the patient's condition. Students learn to implement individualized dietary interventions as an application of this philosophical principle.

The principle of *Primum Non Nocere*, is demonstrated in the development of the diagnosis, work-up, and treatment recommendations. Also discussed in the clinical setting is the concept that harm may be a result of noncompliance with treatments or with patients who do not follow treatment recommendations accurately, and careful follow-up on these concerns is reflected in the medical documentation. It is not unusual to need to remind students that by selecting the most effective, appropriately indicated and least toxic therapies, we uphold this naturopathic principle – that less is often more. This is a common discussion in the clinic.

Through a strong focus on building diagnostic and clinical skills, students become aware of the importance of finding the root cause of their patients' complaints. For example, students are taught the diagnostic value of routine and specialty laboratory tests in guiding their therapeutic interventions. Students are required to complete a number of hours in the clinical laboratory under the supervision of the faculty, when they learn about the various diagnostic tests and methods, and are able to complete required competencies. The Naturopathic Principle of "*Identify and Treat the Cause*" is presented as an ongoing effort to pursue the reestablishment of health, with the notion that often the cause of disease would be impossible to find. Students are taught to include etiology, contributing factors, and obstacles to cure in

their assessment and diagnosis. Supervisors encourage students to share their thoughts on these contributing factors in each of their cases during Case Preview and/or Case Review.

When managing patient cases, students learn that patient education is the cornerstone of naturopathic practice. Treatments recommended in clinic are detailed in instruction forms given to patients at the end of each visit, and include lifestyle change recommendations focusing on prevention, in addition to prescribed nutraceuticals and herbs. Students learn to work in collaboration with patients and assist them in looking at all possible influencing factors.

The Naturopathic principles of “*Primum Non Nocere*” and “*Treat the Whole Person*” are viewed by some students as contrary to a disease-based approach and consideration of pharmacological approaches. This typically brings on significant discussion in clinic conference. In an effort to model and guide students’ diagnostic skills and recognition of the role that pharmaceuticals play in patient care, and in the appreciation of a broader understanding of these principles, we are in the process of increasing the rigor of our expectations of student treatment skills and knowledge of pharmacology, with a particular emphasis on “*Primum Non Nocere*”, through enhanced knowledge of pathophysiology, epidemiology, drug-drug and drug-herb interactions, and nutrient depletions due to pharmaceutical drugs. In the 2018 Spring semester, a more developed pharmacology compendia was introduced into each of the systems courses taught in the didactic portion of the program. Additionally, greater emphasis is being placed on pharmaceutical knowledge to be demonstrated in the review of patients’ signs and symptoms, and in students’ assessment and determination of etiology, diagnosis, and treatment in the clinical portion of their training.

### **Course Prerequisites**

Course prerequisites are published in the [UB Catalog](#), as well as in the syllabus for each individual course. The electronic registration system has prerequisites built in, such that students cannot register for a course if they do not have a passing grade for the prerequisite(s). The ADAA also reviews student records each semester to ensure that course sequences are completed in the appropriate order.

In cases of “off-track” students, the ADAA creates individualized programs of study that allow for the completion of courses in the appropriate order. The ADAA, with the approval of the Dean, will occasionally allow an Advanced Standing student to take a course out of order. The ADAA will review the student’s progress before registration in each subsequent term to ensure that all required courses are complete.

## **Procedures for Curriculum Review**

The Curriculum and Assessment Committee, generally meet monthly during the academic year to review and evaluate the curriculum, delivery, and assessment aspects of the program. The committee evaluates and determines if the curriculum and delivery strategies are achieving the program objectives and outcomes, and supports the students' ability to demonstrate the competencies. Several perspectives are used in the evaluation process, including the results of the UBCNM Clinic Practical Exams, NPLEX, and final course grades, as well as the impressions of faculty and students regarding individual courses and content sequences. See Appendix IV-P for the Curriculum and Assessment Committee Minutes.

The Dean and ADAA have also conducted Curriculum Review meetings in which all faculty members teaching a specific content sequence meet to align and coordinate their courses. Content sequences reviewed since 2014 include: Physical Medicine; Clinic Preparation; Counseling and Psychology; Diagnostic Block; and Nutrition.

The Curriculum Mapping project, launched in the 2017 Fall semester, the review and revision of the program Outcomes and Objectives, and the current review and revision of the Competencies developed by the AANMC, will be used in further review of the curriculum, providing a framework of agreed-upon goals for curriculum assessment and development.

The curriculum review process has included a review of assessment process used in the classroom in the last two years and in the clinic for the last 4 years. The review includes faculty discussions of advances in the medical sciences and in student education of these advances. The strength and experience has been stronger in the analysis of the curriculum content, as well as in assessment tools and process in clinical education. There has been analysis of assessment in the didactic realm in the current academic year, and is yet in the development stages. The ADAA has conducted assessment review and revision coaching with groups of faculty members (Appendix IV-L). This process will continue with small groups of faculty members, addressing the purpose of assessment, types of assessment, frequency, and question writing strategies.

## **Academic Component**

### **Program Competencies**

Prior to graduation, students are required to demonstrate competency development in naturopathic medicine. These program-wide competencies confirm that UBCNM graduates possess the knowledge, values, attitudes, technical and communication skills, and clinical reasoning needed to practice naturopathic medicine safely and effectively. We encourage students through modeling and discussion

that, as medical professionals, they will integrate reflection, research and professional development into their medical practices.

One of the ways that the program ensures that course content is competency-based, the syllabus template, which has been in use since Spring 2017, requires instructors to identify the program-wide competency domains that are aligned to the instructional objectives in their courses. At that time there were four program-wide competency domains: Medical Knowledge, Professionalism, Patient Care, and Interpersonal and Communication Skills. In Fall 2017, a fifth competency domain, Medical Reasoning, was added.

Each syllabus includes a list of actionable objectives for the course as related to the competency domains. In addition, the course calendar includes a set of outcomes for each course meeting or topic taught. Assessment materials are regularly reviewed to determine if assessments are measuring the stated outcomes.

### **Training in Diagnosis and Management**

In the second year of study, students take three co-requisite courses: *Clinical, Physical and Lab Diagnosis; Physical Exam Lab; and Laboratory Diagnosis Lab*. These courses are taught by practicing naturopathic physicians who incorporate naturopathic principles and theory into their teaching. Students learn common algorithms for diagnosis and widely-used reference ranges, and also learn how to use gold-standard diagnostics within the model of individualized care that anchors naturopathic clinical practice.

Many students find it difficult to synthesize material from different courses. The division of the curriculum into biomedical sciences vs. clinical sciences vs. the so-called “soft skills” of ethics, communication, and counseling, while useful in other ways, can make it difficult for students to wield these skills simultaneously in the classroom or the clinic.

One change the ADAA is proposing is to rework the beginning courses in each of the modality sequences, e.g., Nutrition, Botanical Medicine, and Physical Medicine. Most of these courses now begin with an introduction to the particular modality and its vocabulary, techniques, and theory, with application of the modalities to clinical cases in the latter courses. While students address increasingly complex cases in the more advanced courses, they are not always asked to incorporate each modality as part of a full naturopathic treatment plan, taking into account the patient as an individual and incorporates the context of the patient’s life. Using the Nutrition sequence as an example: Nutrition I has been a straightforward introduction to nutritional science, with students learning basic vocabulary and concepts (e.g., macronutrients, micronutrients, minimum daily values. Many students, however, enter the program already equipped with a working knowledge of nutritional basics and preconceptions about what

constitutes “good” or “healthy” nutrition. These preconceptions can interfere with the student’s ability to investigate, assess, and apply the broad variety of nutritional therapies that may be useful for the broad variety of patients and diagnoses they will be working with. A different approach to Nutrition I could set the stage for patient-centered, holistic clinical practice early on, helping the student transition from a lay person with strong ideas about nutrition to an expert who individualizes nutritional therapies to achieve the best outcomes for the patient. The course would make direct and deliberate reference to the students’ earlier studies in *Medical Ethics, Philosophy and History of Naturopathic Medicine, and Research*, as well as to *Biochemistry* and *Physiology*. The first portion of the course would present clinical nutrition through the lens of medical ethics, evidence-informed practice, and the history of nutritional therapy. This triad of ethics, research, and history would be interwoven with the principles of naturopathic medicine. From the very beginning of the course, students would be evaluating nutritional therapies with the measured approach of a patient-centered practitioner.

The cohorts who matriculated in 2016 and forward have been grounded in Research, Ethics, and History by the current curriculum. The Nutrition I course will be switching to a new instructor in Fall 2018, which provides an ideal opportunity to make this change.

The redesign of Nutrition I would be completed by the ADAA, with the input of each of the current instructors in the Nutrition sequence. The success of the redesigned Nutrition I would be evaluated at the end of the first iteration, and again following each successive semester in the sequence.

While the Fall 2018 prototype of Nutrition I is in progress, the UBCNM faculty will be asked to develop additional approaches to interweaving naturopathic philosophy and clinical reasoning throughout the curriculum. The faculty currently teaching each sequence, e.g., the Botanical Medicine instructors, the Physical Medicine instructors, and so forth, could work together to develop an approach to the problem for their sequence. While the redesign of Nutrition I could provide a model for the other modalities, it is also possible that each modality will benefit from a unique approach.

By the beginning of Spring 2019, we will have some feedback about the change to Nutrition I and at least one redesigned course mapped out for use in one of the other modalities.

### **Components of Patient Care**

The four components of patient care (prevention and wellness; diagnosis and prognosis; effective treatment; and evaluation and management) are covered throughout the program. *Physician Self-Care* introduces concepts of lifelong wellness and stress management in the second semester. The concepts of stress management and self-care, as used with patients, are utilized in case management courses throughout the third and fourth years, as students develop whole-person protocols for various conditions.

In their final semester, the *Mind-Body Medicine* course provides additional tools and practice with these techniques. As shown in the following list, second year courses focus on identification, etiology, and diagnosis of conditions. In the third and fourth years, students take systems courses which cover effective treatment and the evaluation and management of outcomes for specific conditions. The following list also includes courses that address these areas.

- 1) Prevention and wellness: *Physician Self-Care, Nutrition I-IV, Counseling I & II, Mind-Body Medicine, Philosophy of Naturopathic Medicine*
- 2) Effective treatment: all courses with the NNP prefix focus on treatment and management of specific conditions (e.g., *Dermatology, Rheumatology*)
- 3) Diagnosis and prognosis: *CPLD, Lab Diagnosis Lab, Pathology, Diagnostic Imaging*
- 4) Evaluate and manage outcomes: treatment and management courses (NNP prefix). See the [UB Catalog](#) in the Site Team Reference Room.

Through the application of the naturopathic principles, students learn that prevention is at the core of our clinical practice. They inquire about and analyze their patients' dietary and social habits and tailor treatment recommendations aimed at addressing risk factors, removing obstacles to cure, optimizing nutritional status, and other components of self-care. Students also learn to be active participants in the management of their own health and, as it is common among naturopathic students, their journey through ND school provides them with first-hand experience in making lifestyle changes. This allows students to counsel patients from a more confident standpoint. In the multiple systems courses of the didactic component of the program, students learn about the causes of disease and about modifiable factors that can be therapeutic targets. They also learn treatment approaches from the literature and the faculty members' experiences shared in class and clinic. They are encouraged to construct treatment strategies using case-based learning in class. Students learn that successful application of the naturopathic principles to patient care requires the use of medical reasoning, and an understanding of the relevant medical literature.

In their clinical rotations, students learn to put into practice the knowledge developed from their systems courses, using a similar approach and applying the same thought process as in class.

In their *Clinical, Physical and Laboratory Diagnosis (CPLD)* classes, standard medical texts (e.g., *Bates Guide to Physical Exam, Harrison's Principles of Internal Medicine, Current Medical Diagnosis and Treatment*) are the primary source of information. Students learn disease presentation, pathophysiology, laboratory testing, and epidemiology, all of which need to be considered when making a complete

assessment of the patient's condition, understanding the likely prognosis, and knowing what to expect from the therapeutic approaches.

Medical reasoning is an area that was identified as an area of weakness both in the clinical setting and in the Clinic Exam results. This competency has received additional focus, both in the classroom and in the clinical setting, including assessment through clinic entrance, promotion, and exit exams, clinical supervisors asking students to assess and analyze the challenges that they face when asking a question (determining causation and diagnoses, developing a treatment plan) rather than giving students that answer. Another strategy has been to assign more time in the laboratory setting with the lab manager, to support understanding of the uses and the distinctions among the various tests. In the classroom, instructors are being asked to implement the same strategy of responding with a question to many student questions that require assessment and analysis, rather than simply providing the answer.

During post-observation meetings in 2017 Fall semester, recommendations are provided to clinical supervisors to raise their expectations of students' knowledge and demonstration of medical reasoning. These include assigning topics for discussion and oral quizzing during shifts, and eliciting information from students rather than readily providing them the information.

### **Laboratory Instruction and Clinical Demonstrations**

Courses labeled as Labs at UBCNM, fall into the following areas:

- Students practice a physical or verbal skill (e.g., *Physical Exam Lab I and II, Lab Diagnosis Lab I and II, Counseling Skills I and II*)
- Students spend their time solving case-based problems (e.g., *Pathology lab hours, Biomedical Integration Lab, Clinic Forum II*)

Most of our course content is delivered through face-to-face instruction. However, instructors and students also use a variety of media for communication and instruction, including online discussion, chat rooms, and video (e.g. Panopto, Collaborate, Zoom, and other Canvas® apps).

As part of their clinical competencies, students are required to complete a number of hours in the clinic laboratory where they practice their lab skills and their knowledge and skills are assessed.

A weakness in this area of the program is that certain courses are classified as “lab” hours but contain minimal or no experiential learning for students. For instance, the *Emergency Medicine* course taught in the eighth semester is classified as a “lab” but has consisted almost entirely of lecture. The course was changed from a weekend seminar to a semester-long course in Spring 2017, and the instructor was asked to add active teaching elements to the course. In the latest iteration (Spring 2018), course time included four hours of hands-on CPR training leading to recertification for the students, and skills labs in suturing,

splinting, and applying casts. These topics were chosen because supplies were readily available, either due to students' purchase for earlier courses (suturing kits for the *Minor Office Procedures* course) or because the instructor was able to provide some materials himself (casting and splinting materials). The ADAA is working with the course instructor to assess the material needs and the budget needed for these materials.

In the 2018-2019 academic year, the UBCNM administration will work with faculty members to evaluate each course that is considered a lab and determine if that designation is appropriate. Where designated as a lab, the course will include lab-appropriate activities.

### **Training in Naturopathic History and Philosophy**

There are two courses specifically devoted to naturopathic philosophy: *Naturopathic History & Philosophy*, a first-semester course, and *Naturopathic Philosophy II*, taught in the sixth semester, to apply students' clinical experience. In *Clinic Forum I*, a fifth-semester course, students synthesize the diagnostic skills taught in the second year with naturopathic approaches and modalities to develop comprehensive treatment plans for a variety of cases. In *Clinical, Physical and Lab Diagnosis I and II*, and all courses in the treatment and management/organ systems group (e.g., *Gastroenterology*, *Dermatology*, *Urology*, etc.), students analyze cases and develop treatment plans using naturopathic principles and modalities.

Each year, UBCNM hosts Philosophy Day, a morning-long event that celebrates naturopathic philosophy through guest speakers, panel discussions, and breakout events. The event is organized by a committee of faculty and students who select the theme, invite the speakers, and handle the logistics for the day. The event routinely receives high praise from students, who see it as an example of UBCNM preserving the philosophy of the medicine.

### **Training in Counseling and Health Psychology**

The Counseling/Health Psychology sequence at UBCNM consists of *Counseling I* (Semester 1), *Physician Self-Care* (Semester 2), *Counseling II* (Semester 5), *Psychological Assessment* (Semester 6), and *Mind-Body Medicine* (Semester 8). *Public Health I and II* (Semesters 2 and 3) also cover health education and motivating patients to change behaviors. Students also develop these skills in the Ethics sequence (*Medical Ethics*, Semester 1, and *Applied Medical Ethics*, Semester 8).

Faculty in these courses focus on the demonstration of these skills in the day-to-day work of a naturopathic physician. However, some students still express a lack of understanding of the importance of these skills, and describe these courses as wasting time that would be better spent studying the "hard" sciences. At the same time, clinical supervisors note that some students do not perform well with "soft" skills such as rapport-building, and are not adept at identifying issues outside of the physical.

## **Development of Clinical Skills**

Students initially take a brief health history and document limited aspects of their findings in the first semester course *Introduction to Clinic*. The second year courses, which are largely diagnostic in nature (*Pathology; Clinical, Physical and Laboratory Diagnosis; Physical Exam Lab; Laboratory Diagnosis Lab; Diagnostic Imaging; and Clinic Practicum*), build skills in history taking, physical exam, and diagnosis.

In these early courses, students learn the components of a medical history and are provided with ample opportunities to exercise history-taking and documentation during class and through written assignments in the *Clinic Practicum* course. By doing this, they learn the normal findings in a physical exam, which prepares them for identifying abnormal findings come their time as student clinicians. During *Physical Exam Lab*, history taking and charting skill are reinforced and progressively fine-tuned.

In the fourth semester, students take the first of the clinic practical exams, the Clinic Entrance Exam, which assesses their skills in history taking, selecting and performing a physical exam, developing a diagnosis, and initiating a preliminary plan of treatment.

In the Clinic Entrance Exam, students are required to perform physical exams demonstrating their knowledge of diagnosis, with a goal of identifying the organ systems of interest in a particular case, and formulate working and differential diagnoses. Clinical cases and assignments, and opportunities to practice skills are critical training activities as they prepare for this assessment of their clinical skills.

Third year courses emphasize treatment and management of specific conditions. In *Clinic Forum I*, students concentrate on incorporating naturopathic philosophy and clinical theory into case management, and in *Clinic Forum II* they address various cases from history-taking to reassessment. In the sixth semester, students take the second clinic practical exam, the Clinic Promotion Exam, which assesses skills in history taking, selecting and performing a physical exam, developing a working diagnosis and a short list of differential diagnoses, requesting appropriate labs and imaging studies, initiating a treatment plan including reassessment and follow-up care, and clear description of medical reasoning.

In the final year of coursework, students continue to apply their knowledge to treatment and management. In the final semester of training, students take the final clinic practical exam, the Clinic Exit Exam, which assesses the skills tested in the earlier exams, with more complex cases and with increased weight given to medical reasoning and clinical decision-making.

For each set of clinical exams, rubrics are used to evaluate student competencies in several distinct components of the clinical case workup, such as history-taking skills, documentation, and medical reasoning.

Students are required to provide rationale for their treatment plans using the applicable naturopathic principles, both in clinical exams and in patient cases in clinic. Through consideration of naturopathic principles and philosophy, students are provided with a framework that aids in their tracking of patient outcomes during follow-up assessments.

### **Development of Reflective Skills**

Throughout their training, UBCNM students develop the reflective skills to evaluate their personal well-being, their professional strengths and limitations, and the place that their naturopathic practice will have in their community and in the larger sphere of healthcare.

Courses that emphasize reflection and analysis include:

- *Medical Ethics* (Semester 1), *Applied Medical Ethics* (Semester 8)
- *Physician Self-Care* (formerly *Physician Heal Thyself*) (Semester 2)
- *Counseling Skills I* (Semester 1), *Counseling Skills II* (Semester 5)
- *Mind-Body Medicine* (Semester 8)

Courses that emphasize naturopathic medicine as part of a larger sphere of healthcare:

- *Practice Management I* (Semester 5), *Practice Management II* (Semester 8)
- *Emergency Medicine I* (Semester 1), *Emergency Medicine II* (Semester 8)
- *TCM I* (Semester 3), *TCM II* (Semester 4)
- *Oncology, OB/Gynecology* and other treatment and management courses (NNP course codes), (Semesters 5-8)

It is difficult to determine if these required self-reflective assignments have had a beneficial effect on students' behavior and attitudes outside of the supervised situation.

An ethics competency has been added to the Clinic Competency requirements, in which students must submit reflective writing on specific ethical dilemmas they have faced in clinic.

One deficiency noted that we do not have a clear path by which to address a student who does not demonstrate competency in ethics. There are pathways to handle these types of infractions of behavior, but we have not developed strategies to date. In the 2018-2019 academic year we intend to create a plan to address these concerns, starting with the formation of a committee that includes faculty members, students, and administrators. Our hope is to identify students in need of remediation after less severe

ethical transgressions are noted (e.g., a student who asks the Front Desk staff member to change the procedure code so that a patient will be billed a lesser fee), to reduce the likelihood of recurrent behaviors.

### **Training in Evidence-Based Practice**

The Research/Evidence-Based Practice sequence at UBCNM consists of the following courses:

- *Research* (Semester 2)
- *Thesis I* (Semester 5)
- *Thesis II* (Semester 6)
- *Thesis III* (Semester 7)

Students learn the elements of research methodology in the *Research* course. During their third and fourth years, they develop and write a thesis which explores a research question. The thesis can describe bench research that the student has conducted or it can detail scholarship based on medical and scientific literature. Each student works with a Thesis Advisor throughout this process.

More active research assignments are currently under development for several courses, including *Public Health II* (Semester 3). Many courses require at least one literature search or short research-based paper. All faculty are expected to incorporate examples of relevant medical research into their courses, and this is a component of evaluation during classroom observation by administrators. Improving this aspect of the curriculum is an ongoing project. Some faculty do not provide supporting medical research for some of their assertions. Other faculty provide medical research that is somewhat outdated. The ADAA reviews faculty materials during classroom observations, and if a deficit or problem in this area is observed, works with the faculty member to improve the quality of citations. Most faculty members are amenable to the suggestions and willing to adjust their teaching materials.

Faculty members are encouraged to model the use of research by practicing clinicians, and students are asked to research clinical questions from their very first semester of study. For instance, in *Embryology* (Semester 1), students research and write a summary of a genetic syndrome or birth defect and provide proper citations. See Appendix VI-I for a review of courses regarding the application of research.

### **Training in Ethics**

Through the graduating class of 2019, students take one course in *Jurisprudence and Medical Ethics* in their final semester. For the 2016 matriculation, graduating in 2020, the ethics curriculum was expanded with the development of *Medical Ethics I*, taught in Semester 1, which is followed by *Applied Medical Ethics*, in Semester 8. *Jurisprudence* is taught as a distinct course. *Medical Ethics I* introduces first year students to the basic concepts of medical ethics and provides a structure for discussions about clinical decision-making and professional behavior that other courses and clinic shifts can draw upon. Separating

the fourth year *Medical Ethics* course from *Jurisprudence* allows the principles of ethics to stand alone as guiding tenets, while the laws which govern practice can be taught as outgrowths of ethical principles.

### **Training in Career Skills and Practice Management**

The practice management curriculum was expanded in the 2016 Fall semester with the addition of *Fundamentals of Entrepreneurship*. Review of the AANMC alumni survey responses and the UBNMC alumni survey responses showed a need for additional business creation and practice management training. Drawing upon the unique positioning of UBCNM within a larger university, a collaborative project was launched with the Trefz School of Business at UB. This hybrid course is taught by a faculty member from Business School whose area of specialty is entrepreneurship. The course is currently offered as an elective, open to all levels of students. It will be required for all cohorts beginning with Matriculation 2017. This course augments *Practice Management I* and *II*, which are currently taught in the Semesters 6 and 7. As *Fundamentals of Entrepreneurship* has entered the required curriculum, the components of the *Practice Management* sequence are under review, with a goal of developing a sequence that reflects students' current needs and skills.

### **Development of Writing and Presentation Skills**

Several courses have a writing component. Assignments in these courses include short case reviews; referral letters to allied practitioners; case summaries; explanatory articles for the general public; website copy for a practice website; research papers; collegial discussions in online forums; and presentations directed towards medical colleagues, the general public, and prospective patients. Courses with significant writing components include *Medical Ethics*, *Research*, *Counseling Skills I* and *II*, and the *Thesis* sequence. Students present their clinical cases through Case Preview and Case Review during shifts. See Appendix VI-J for a chart that includes all courses which required speeches or presentations in the 2017-2018. All students are required to complete two hours of public speaking at outreach events, and submit their presentations for review in the weeks prior to delivery. To the extent possible, students are observed giving the presentations and are provided feedback both verbally and with the use of a feedback form. See Appendices VI-K and VI-L for the Public Speaking Preparation form and Observation of Public Speaking form.

### **Use of Research in Clinical Practice**

The responsibility of the physician to keep up with new research and methods is addressed in several courses, including *Research* sequence, *Ethics* courses (in which continuous study and the requirement to increase one's knowledge is related to "First Do No Harm"), *Jurisprudence* (licensing requirements for

continuing education), and *Practice Management* sequence (continuing education as a responsibility and a business expense as well as in clinical rotations, as well as in clinical rotations).

While the subjects named above are covered in individual course sequences within the curriculum, more work is needed to encourage students to synthesize these skills and use them in active problem-solving, both in their clinic rotations and moving forward into their careers. There is an observed tendency of students to compartmentalize material. UBCNM has begun to develop methods to encourage more complex problem-solving skills, including a set of problem-based learning modules, developed by a faculty team in Fall 2016 and delivered through the Canvas® LMS to students in the second year of training. Development of such modules takes significant time on the part of faculty, as well as coordination by the ADAA, and this has been an obstacle to successful participation for some faculty.

### **Curriculum: Biomedical Sciences**

The biomedical sciences are covered in the first two years of study. Year one includes *Anatomy I and II*, *Anatomy Lab I and II*, *Physiology I and II*, *Biochemistry I and II*, *Neuroscience*, *Embryology*, and *Histology*. *Biomedical Integration Lab I and II*, team-taught by three full-time faculty members, use case-based learning and discussion to assist students in integrating these subjects in the context of patient care. Second year courses include two semesters of *Pathology* and *Orthopedic Assessment*.

*Public Health I* and *Microbiology I* are taught in Semester 2, and *Public Health II* and *Microbiology II* are taught in Semester 3. These courses have been reconfigured two to three times over the past several years, including a reduction in hours of microbiology in an attempt to reduce seat hours and maintain the necessary level of instruction. The combined *Public Health & Microbiology* courses were split in Spring 2016. The next iteration of *Microbiology I* (Fall 2017) has been increased in hours on the advice of faculty. These changes may have impacted the pass rates on NPLEX I for August 2016 and August 2017, and additional questions have been raised about the effectiveness of the Biomedical Sciences curriculum. For the 2017-18 academic year, the hours have been increased slightly, to 3 credit hours. We will evaluate the impact of these changes on future NPLEX scores. We will also continue to work with instructors to identify any areas of change, e.g., required textbooks, additional teaching methods to the course plan, and assessment tools.

Students are introduced early to pharmacognosy, with the first year course *Phytopharmacognosy*. *Pharmacology I and II* are taught in the Semesters 6 and 7. UBCNM recognizes that graduates will need greater familiarity with pharmaceutical therapies, both to manage patient prescriptions and to communicate with partner providers regarding patient directions. While the State of Connecticut currently defines naturopathic practitioners as “drugless,” Connecticut NDs are requesting that the

legislature consider the question of the addition of prescriptive authority to the naturopathic licensure. For all these reasons, UBCNM is making a concerted effort to integrate training in pharmacology throughout the classroom and clinic. We have added an MD to the clinical faculty to supervise naturopathic student clinicians in the application of pharmaceuticals, as is permitted by Connecticut law. In Summer 2017, the UBCNM Resident, under the supervision of the ADCE, created a compendia of pharmacological remedies to be used with the systems courses. These compendia were provided to instructors of those courses for the Fall 2017 semester. Since then, faculty members have requested that compendia be created for additional courses. Concern regarding students' demonstration of their pharmacology knowledge and skills was related to the supervising clinicians' limited request of students to demonstrate their knowledge in the clinical setting. Students are now expected to provide the information for appropriate medications, dosages, and mechanisms of action for each patient case in the clinical setting. The August 2017 NPLEX results demonstrated an 86% pass rate in the Pharmacology exam.

### **Curriculum: Diagnosis**

In the second year, students take a set of diagnostic courses which centers on the courses *Clinical, Physical, and Laboratory Diagnosis (CPLD) I and II*. The co-requisites of *CPLD* are *Physical Examination Lab I and II*, and *Laboratory Diagnosis Lab I and II*. Students also take *Introduction to Pathology, Introduction to Diagnostic Imaging* (co-requisites in Semester 3), and the combined course *Pathology and Diagnostic Imaging* (Semester 4). Beginning in 2017-2018, *Psychological Assessment* was moved from second year to third year to incorporate students' clinical experience.

### **Curriculum: Treatment Modalities**

Botanical medicine studies begin in the first year with *Phytopharmacognosy* (Semester 1) and *Botanical Pharmacy Lab* (Semester 2). Students proceed directly to *Botanical Medicine I, II, and III* (Semesters 3, 4, 5). Some revision of the *Botanical Medicine* sequence has taken place in 2016-2017 and 2017-2018 in response to the student observation that they needed more basic vocabulary and categorization in their early training, and more case studies and clinical pearls in the later courses. The required sequence of *Homeopathy I, II, and III* (Semesters 4, 5, and 6) is followed by *Homeopathy IV* (Semester 7), which was made an elective since Fall 2015, freeing up time in the training schedule for students with a limited interest in constitutional Homeopathy. *Nutrition I, II, III, and IV* are offered sequentially in Semesters 3, 4, 5, and 6. Physical medicine studies begin in the first year with *Palpation Lab* (Semester 2) and continue through *Orthopedic Assessment* (Semester 3), *Physiotherapeutics* (Semester 4), *Naturopathic Manipulation I and II* (Semesters 5 and 6), and *Therapeutic Exercise/Sports Medicine* (Semester 7). *Hydrotherapy* is now taught in Semester 2, so that students can begin hydrotherapy rotations as early as the summer before Semester 3. *Counseling Skills I and II* are taught in the Semesters 1 and 5,

respectively. *Minor Office Procedures* (formerly known as *Minor Surgery*) is taught in semester 7. The emergency medicine sequence has expanded, with students in the 2016 matriculation cohort taking *Emergency Medicine I* in their first semester and *Emergency Medicine II* in their final term. This allows an early introduction to the identification of patients requiring urgent interventions. Students are also trained in CPR, and learn the protocols for handling emergent situations in the UB Clinics, preparing them to enter clinic for hydrotherapy shifts in their second year. Earlier cohorts take only the Semester 8 course. Finally, the Traditional Chinese Medicine sequence is undergoing revision and expansion. *TCM I* and *II* are now offered in the second year, and *TCM III* and *IV* will be added in the third year beginning with the 2016 matriculation cohort. This expansion allows for greater instruction time in acupuncture, in recognition of an unmet need in that acupuncture is within the scope of practice for Connecticut naturopathic physicians, and two courses were inadequate to ensure safe practice.

### **Curriculum: Treatment and Management of Conditions and Populations**

Population and systems courses that address diagnosis, treatment and management are offered in the third and fourth years, and include *Cardiology*, *Dermatology*, *Endocrinology*, *EENT*, *Gastroenterology*, *Urology/Proctology*, *OB/Gynecology*, *Gynecology Lab*, *Neurology*, *Pediatrics*, *Geriatrics*, and *Rheumatology*. In addition, UBCNM offers a unique sequence in epigenetics and personalized treatment, which begins with *Introduction to Biochemical Individuality* (a required course) and proceeds to *Generative Medicine I* and *II* (electives).

UBCNM does not currently offer separate courses in Pulmonology, Nephrology, or Adolescent Medicine, but instead integrates the material and concepts into other courses. *Cardiology* addresses pulmonology, *Pediatrics* incorporates adolescent medicine, and nephrology is included in *Urology*. Each of these subjects is under discussion, and will be examined closely as we complete the analysis aspect of the Curricular Mapping process.

### **Curriculum: Issues and Solutions**

There is much discussion among UBCNM faculty and administration about the proficiency of UBCNM students in diagnosis and therapeutics. Attempts have been made to provide some standardization in the instruction of certain subjects, such as with the “-ologies and -atrics” restructuring, and the introduction of the pharmacy in systems and population courses, as well as the use of medical texts, e.g., Lange’s *Current Medical Diagnosis and Treatment*; Harrison’s *Internal Medicine*; and Bates’ *Physical Exam and History-Taking*. Interestingly, some students have been openly resistant to any kind of required reading, insisting that all necessary information should be provided within the context of the lecture and the faculty prepared notes. An ongoing area of focus is requiring student to use standard reference text and

online medical resources when researching information for cases, just as it will be an important aspect of their medical practice.

### **Clinical Education Component**

Clinical competencies are classified according to the student's level of training, and are outlined in the Handbook of Clinical Competencies. Students must demonstrate proficiency in performing the skill, technique, or understanding of the concepts, as described in the Handbook. Each competency found in the Handbook is initially taught in the didactic portion of the program and reinforced through their clinical training.

During clinical rotations, students are required to identify one or more naturopathic principles related to their selected therapeutic interventions. Although a common practice with some supervising clinicians, it is not consistent throughout the clinic faculty. This is an area of additional attention.

A review of sample medical records revealed that the structure and the content of the Assessment section of the medical record is an area in need of improvement. Student Clinic Orientation in August, 2017 included an instructional review regarding the content and format of the Assessment section. This area continues to be a challenge, in part related to the varying styles of faculty in their private practices, and will continue to be addressed in both the classroom and in the clinic.

The ADCE provides feedback to clinical faculty during post-observation meetings regarding these concerns, and offers suggestions for remediating these issues. Medical documentation is starting to be more closely audited, with feedback provided, to students and faculty.

The efforts for improving the clinical skills by addressing medical reasoning and documentation, visit structure, are part of an initiative to increase clinical thought processes among our student clinicians, and to help build a strong conceptual and philosophical foundations to support their formation as competent, efficient, and effective naturopathic physicians.

The competency-based clinical education is designed to progressively increase students' skills and responsibilities in case-management, under the supervision of Supervising Physicians. Supervising Physicians oversee each step of the patient visit and guide students' case-taking and case analysis skills, and revisions to the treatment plan. Secondary Student Clinicians have the opportunity observe a faculty clinician work with patients from intake to work-up, diagnosis, assessment, treatment and follow-up in Model shifts, and to provide a supportive role to the Primary Student Clinicians. In this capacity they assess vital signs and support in lab needs, but are often found to interact less during case discussion. Clinic Administration is exploring ways to engage Secondary Student Clinicians in more active ways. In

the 2018-2019 academic year we will explore having Secondary Student Clinicians document the patient visit, independent of the Primary Student Clinicians' documentation, to foster independent thinking and analysis, and provide the Secondary Student Clinicians practice in medical documentation.

### **Clinical Training: Patient Populations**

Students work with a wide range of patient populations in the various Community Clinics as well as in the UB Clinic. The Bridgeport area is a diverse community with a high percentage of African-Americans, Latinos and people of Middle Eastern descent.

### **Clinical Training: On-Campus Clinics**

The UB Clinics, located on campus, serves as our central clinic. The full variety of modalities, within the scope of naturopathic medicine in the state of Connecticut, are utilized at this site. Student clinicians learn to work and communicate effectively and efficiently with their peers and supervisors, and have the benefit of other Health Sciences clinics in the same building with whom they can collaborate and to which they can refer patients. The naturopathic clinic within the UB Clinics has a laboratory with blood draw stations, glucose testing, and kits for other forms of assessment, such as oral swabs, and hair and stool analysis. The Chiropractic Clinic maintains an imaging center that provides x-ray services available for referral from other health science programs.

UB Clinics offers an Integrative Shift, in which faculty and students from Acupuncture, Chiropractic, Dental Hygiene, and Naturopathic Medicine collaborate for the purpose of assessing patients from an integrative perspective. Discussion provides an opportunity for students to learn from one another and to collaborate on determining the best course of action for the patient to initiate further assessment and treatment.

### **Clinical Training: Community Clinics**

In many of our community clinics, students work with underserved populations in collaboration with various community organizations. Through exposure to a wide range of patient populations, students learn to implement different approaches and case-management strategies to address concerns unique to each population, providing personalized naturopathic assessment and care as appropriate.

Students are taught strategies to communicate with other healthcare professionals, and are required to create referral letters for patients as needed. Students use in-house and external referral forms as training guides.

See Appendix VI-M for the list and description of the 2017-2018 UBCNM Community Clinics.

### **Clinical Training: Levels of Responsibility**

The clinical competencies increase in complexity from one year to the next, requiring a progressively higher level of knowledge and skills of students. Responsibilities regarding patient care and case management also progressively increase. Secondary Student Clinicians observe both the Supervising Physician and the Primary Student Clinician in patient interviews, physical exams, analysis of the case, and the determination of therapeutic interventions. Secondary Student Clinicians repeat physical exams, particularly those with abnormal findings, and participate in case discussions. Primary Student Clinicians prepare for Case Preview and Review, present their cases for the shift in a succinct and objective manner, and provide the medical reasoning for their diagnosis, work-up, and treatment recommendations. They are initially observed by the Supervising Physician as they perform physical exams and as they demonstrate proficiency, they are given more responsibility in the case, such as more independence when performing physical exams, and when tailoring treatment plans and formulas. By the time they are ready to complete the program, students are able to manage cases independently, having demonstrated a level of competency that will allow them to gain experience while practicing medicine safely, rationally, and effectively.

### **Clinical Training: Student Evaluations**

Clinical faculty members have been requested to use the Student Clinician Evaluation form with two to three students each week, cyclically, on each rotation to assess students' performance and identify areas of strength and weakness.

Students are required to submit case reports for evaluation each semester. The Resident reviews the reports and recommends edits regarding accuracy and comprehensiveness, then returns them to the students. The finalized reports are resubmitted to the Resident, who records completion in the students' Handbook of Clinical Competencies.

Clinic Entrance, Promotion, and Exit Exams are conducted in the Spring semester each year, and each exam is evaluated independently by 2 clinical faculty members. The results are collated and analyzed by the Director of Academic Assessment and Planning, Dean, ADCE, and Clinic Coordinator. Data from this analysis will be available in the Site Team Work Room. The team identifies individual students' strengths and weaknesses, as well as global trends in performance and knowledge. Remediation modules are created and sessions are scheduled to provide additional instruction to those students in need of reassessment of knowledge, skills, and behaviors. The instructional modules are administered by clinical faculty members, and include appropriate assessments for the remediated area, e.g., Medical Reasoning, Physical Exam, and Charting Skills. The Health Sciences Director of Academic Assessment and

Planning provides exam and item analysis data, and reliability data regarding the rubrics. This information is used to improve subsequent exams.

Students found to have deficiencies through the Clinic Exam process may be referred to the *Academic/Clinic Support* course for instruction and assessment.

Chart reviews through a UBCNM auditing process (Appendix VI-N) provides Clinic Administration with information that is reviewed from a whole clinic perspective, by faculty member, and by student. The feedback has been limited in follow-through, and subsequently less effective in changing practices, and the concerns continue to repeat themselves. The ADCE plans to evaluate the information available and provide feedback to individual faculty members and students, to better target expectations and recommendations to each individual. This allows follow-up on progress in the designated areas, both with faculty members and with students.

### **Clinical Training: Integrating Naturopathic Philosophy with Evidence-Based Medicine**

Student assessment of a case includes consideration of naturopathic principles, demonstrated in case presentation and in medical documentation, treatment plans are formulated following the therapeutic order. This results in medical decisions based on conventional evidence, e.g., symptoms, labs, imaging, as well as consideration of concerns such as toxic exposure, obstacles to cure, and herb-nutrient-drug interactions.

### **Clinical Training: Critical Thinking**

Student work with the diverse populations in the UB Clinic and the community clinics, focusing on the details of the medical history, noting subtleties of the patients' recall and delivery of their own medical history and symptoms, offers opportunities for critical thinking that requires students to think outside the box. Analysis of information in medical records from other providers may require students to consider interpretation of patients of other cultures in a different light – they find that normal is not the same for everyone.

Clinical rotations provide Students varied opportunities which require different critical thinking skill sets, such as having to distinguish between which diagnostic tools to use when a broad variety are available, and how to assess the presenting health concerns when no tools or funding is available, as found in some community clinics. Students demonstrate critical thinking skills in assessing and addressing the socio-economic aspects of health care, particularly when it is personal – when it impacts their patient, no matter what the setting. They find that determining the diagnoses, both with and without appropriate work-up, is sometimes as problematic as recommending a treatment plan that is affordable.

Students progressively move from a limited level of attention to the treatments that patients have previously received, to learning to focus on the details of those treatments and the impact those treatments have, physically, emotionally, and financially. As students participate in mind-body and homeopathy rotations, they learn to evaluate patients' social and emotional status and assess the impact that has on the physical person, well before understanding how to treat the patient.

Students often struggle to balance a display of their medical knowledge with appropriate consideration of the patient's clinical status, current supplements, and prescription drugs, with the patients' social and emotional readiness to hear the recommendations. In these situations, faculty often explore these issues in case discussion, prompting students to demonstrate their critical reasoning skills.

### **Developing Cultural Competence, Tolerance, and Respect for Others**

Students are encouraged to participate in the various specialty rotations—which are categorized by either treatment modality or patient population, but participation on each type of rotation is not required. The rotation types are found in Appendix VI-O.

UBCNM provides healthcare to diverse groups of individuals of various cultures, ethnicities, religious faiths, gender identities, and sexual orientations. The topics of cross-cultural competence, human sexuality, and gender sensitivity are addressed in several academic and clinical courses, including *Introduction to Clinic*, both Ethics courses, *Gynecology* lecture and lab courses, *Physical Exam I and II*, some Grand Rounds presentations, *Clinic Practicum*, and *Clinic Forum*. While some Supervising Physicians address these sensitive topics directly in clinical opportunities, it has been observed that others do not. In this self-study process, the Administration determined that there is a need to have structured conversations in Case Preview and Review in the clinical setting, which will address this with faculty in the upcoming academic year.

The diverse population in Bridgeport provides opportunities for students to learn how to manage the provision of healthcare to patients who face financial, educational, and social challenges. Treatment approaches take into consideration patients' financial concerns as well as their cultural environment related to lifestyle. With financial and cultural considerations taken into account, students are encouraged to prioritize recommendations with patients, providing information regarding all recommendations and allowing patients to make decisions about what they can and cannot incorporate. One example includes the challenges for a patient who experiences environmental problems which include heavy metal toxicity and nutrient deficiencies, and the changes that may be required to address the cause and remove the barriers to healing. These are often sensitive issues and difficult to address, and students typically struggle with this and request support in how to address these issues in the clinical setting.

## **Training in Practice Development and Management**

As part of an integrated approach to provide opportunities in practice development and management, we require demonstration of the following:

- a) Prepare and deliver two hours of public speaking, provide practice in public speaking, to promote the profession, the clinic, and to recruit patients;
- b) Development of an “elevator speech” to market the profession and to recruit patients, in the Practice Management courses;
- c) Community Service requirements (20 hours) to market the profession, their clinical services, and to serve the local community.

## **Clinical Training: Issues and Solutions**

Patient retention has been identified as an area in need of improvement. However, the reasons for it are unclear, and the ADCE is exploring ways to identify the most likely specific reasons. The ADCE will begin to evaluate patient retention by clinical supervisor and by student. The ADCE plans to review students’ communication with patients, e.g., ensuring use of patients’ primary languages, checking assumptions of the level of patients’ knowledge, and the use of appropriate medical/health care terminology. Understanding the prognosis, and expectations of patient compliance with recommendations also impact retention and will be addressed. Medical documentation, an identified area of weakness, will be addressed with attention to the inclusion of establishing and documenting the follow-up visit date at the conclusion of the patient visit.

Another area of concern that was identified was the attempts by a limited number of Student Clinicians to lower the cost of the patient visit by selecting inappropriate CPT codes. To reduce the risk of this challenge, the Clinical Service Administrator developed a Fee Schedule Form which identifies the fees, and is completed by students and signed off by Supervising Physicians. The form is used by the Front Desk staff to confirm the CPT code against the documentation in the EMR. Verification by Supervising Physicians is still somewhat inconsistent and is regularly addressed by Clinic Administration.

## **Clinical Training: Case Discussion**

Courses such as *Clinic Forum I* and *II* offer opportunities for faculty and students to discuss clinical subjects and analyze cases, as shared by clinical faculty from their private practices and from cases in the school clinics. Students also present cases for discussion in this forum, in addition to the case analysis that occurs on every clinical shift. Many of the weekly Grand Rounds presentations include case analysis

in the presentations, although the format of the presentations generally does not allow for significant student interaction.

Every clinic shift includes Case Preview and Review, a time in which the presentation by the Primary Student Clinician includes questions by the Supervising Physician and the other students on the shift. This format provides the opportunity for all of the students to develop their critical thinking and medical reasoning skills, address cultural and gender concerns and biases, as well as biases regarding naturopathic principles and evidence-based health care.

UBCNM annually hosts Philosophy Day, an opportunity for students and faculty to gather, listen to presentations related to naturopathic philosophy, discuss in groups the application of naturopathic philosophy in our world today, and the practice of the medicine. The planning committee for Philosophy Day is a collaborative effort; a group of students and faculty members begin their work each year with enthusiasm. Minutes for these meetings are found in Appendices VI-P and VI-Q.

### **Clinical Training: Documentation**

Primary Student Clinicians document the patient visit in the EMR in the UB Clinic on campus, and in paper charts at each of the Community Clinic sites. Supervising Physicians are responsible for providing students with feedback regarding the accuracy and completeness of the medical document, and indicating revisions to be incorporated before the charts are signed. Supervising Physicians can find it difficult to effectively complete this task given students often have not completed their notes by the end of the shift, and stay on to work on their visit notes. For data security reasons, clinical faculty are unable to access the medical records outside of the clinic environment, and must wait until they return to clinic for their next shift to finish any incomplete notes. This limited accessibility makes providing adequate feedback to students particularly difficult for adjunct faculty, and especially for those who work only one day per week in the school clinic.

Coding proficiency has been an area of deficiency, and has been an area of focus in the 2017-2018 academic year. A CPT coding form was developed as a tool for Supervising Physicians to use in addressing the coding concerns previously identified. The form was presented at the January 2017 Clinic Faculty Development session. The CPT Coding forms and PowerPoint Presentation are found in Appendices VI-R-1 and VI-R-2. This is an area that has shown some improvement, and will continue to require further work.

The UB Clinics' EMR serves the UBCNM clinic and the chiropractic and acupuncture clinics. While the system serves as a record of patient visits and holds patients' medical records, it has not served the

program optimally. The application presents challenges in its functions and formatting of the documentation of the patient visit. The drop-down menus and check boxes are not user-friendly, related to formatting that makes text difficult to read once the document is finalized. Instead, students and faculty use the free-text boxes, but those allow wrap-around text only, without the option to effectively organize the information into sections and lists. Students use the encounter note format, which provides a word processor application that the students use to type the encounter information. Within this Classic Encounter application, there is the option of using default templates. These issues significantly limit the opportunity to use the information in the medical records for research purposes.

Programming faults in the system have caused innumerable challenges with printing, leading to printer selection errors rerouting documents to alternate printers not selected by the user. Time management challenges have resulted, with the need to search out the printer to which the patient instructions were sent. Clinical Services Administrator, the UB IT Department, and the EMR provider have been contacted, with limited progress. The UB IT department has provided the Clinic Administration with instructions for a “work-around” to ensure printing to the intended printer. Although this works much of the time, it is not consistent and there continue to be challenges with printing patient instructions.

The EMR does not support color photographs and documents, which presents a difficulty in maintaining optimal documentation of some specialty lab results, which are color-coded for clarity. The lack of color also restricts the preservation of medical images in patients’ medical records, limiting case documentation and quality of instruction.

The University is undertaking the evaluation of alternate EMR systems, led by the Vice President of Health Sciences, UB Clinical Services Administrator, and Information Technology staff. However, given the expense of such a change and the complexity of operations in an academic clinic comprised of multiple professions, it has proved to be a complicated issue.

## **Clinic Administration, Resources, and Facilities**

### **Chief Medical Officer**

The ADCE serves as the Chief Medical Officer (CMO), and is licensed in the state of Connecticut as an ND. He is a graduate of UB, and has more than seven years of experience in the field of Naturopathic Medicine. He has also received training in Acupuncture, and holds a degree in Medicine (MD), obtained in the Dominican Republic in 2003. He was a full-time faculty member at UBCNM starting in July 2014, and transitioned to the ADCE position in November 2016. The ADCE supervises one to two clinical rotations per semester. He is directly involved in the oversight of all clinical faculty, conducting

observations and meeting with each clinical faculty member to address strengths and areas of improvement. The ADCE participates in the revision of clinical competency requirements, oversees the clinical exam process, and chairs Clinic Faculty and Clinic Education Committee meetings.

### **Compliance with Standards and Requirements**

The UB Clinics facilities are appropriate for the number of student clinicians. The Community Clinic settings also provide the space needed, although resources do not match those of the UB Clinics. The UB Naturopathic Clinic and laboratory facilities comply with OSHA standards. All clinic faculty and student clinicians must complete the mandatory OSHA, HIPAA, and BBP/Hazardous Waste trainings, as well as maintain CPR certification. The Clinic Compliance Officer maintains documentation of the completion of these requirements. See Appendix VI-S for the compliance records regarding OSHA, HIPAA, and BBP/Hazardous Waste documents. Clinic faculty members are required to provide current professional licenses to be kept on file with the program's Administrative Assistant. The electronic resources, including the EMR, and HIPAA compliance are overseen by the Clinic Services Administrator/Compliance Officer. Medical records are transmitted only via postal mail and facsimile. Paper charts used in the community clinics are kept in a secure cabinet, with access limited to the faculty member who is assigned to supervise the rotation. The Dean and ADCE also have access to these files.

### **Clinical Training: Ethics and Guidelines**

Ethical issues are addressed in several didactic courses, including *Introduction to Clinic*, two *Ethics* courses, and *Jurisprudence*. The Faculty Clinic Handbook has been provided to clinical supervisors as a reference guide to student supervision and evaluation, and includes the Professional Code of Conduct and Dress Code. The Faculty Clinic Handbook outlines policies and procedures pertaining to clinical faculty. Policies and procedures guiding the clinical component are included in the Student Clinic Handbook 2017-2018, with guidelines for professional and ethical behavior, as well as consequences arising from infractions.

Chart audits are performed regularly to ensure documentation is adequate and complete. The ADCE, as part of the clinical faculty observation process, provides feedback to the supervisors relating to the adequacy, completeness, and timeliness of their signature on patient charts. To ensure appropriate CPT coding, students are required to complete a paper form and select the CPT code for each patient encounter; this form helps the Front Desk staff ensure that the correct codes are being used for proper billing.

There is currently no formal policy addressing potential conflicts of interest in the Dispensary. When new products are considered for placement in the dispensary, the Dispensary Committee reviews the benefits and drawbacks of adding the product(s). A Dispensary Sub-committee reviews available literature and determines the appropriateness of each supplement considered. The sub-committee will discuss the creation of a policy and standard forms for these purposes in 2018.

### **Clinic Facilities and Equipment**

The facilities are of adequate size for the student clinician teams. The equipment inventory is sufficient to provide ample and diverse experiences for diagnostic and therapeutic activities. The clinic has a total of 17 exam rooms plus a hydrotherapy suite; four rooms are equipped with gynecology tables, and three other rooms have adjusting tables. Patient rooms are generous in size, and three conference rooms provide a comfortable space for supervisors and student clinician teams. The adjunct faculty room, which serves as the ND resident's office, contains clinic laptops, used to document the patient encounters. Each conference room is equipped with three desktop computers and laser printers.

A large storage room houses various diagnostic and therapeutic equipment and supplies, such as the ECG, ultrasound, phototherapy, infrared, massage equipment, and supplies for IV therapy. The clinic library is located in the clinic conference room 800. The library has reference texts for students and faculty. There is an additional homeopathic library in conference room 836, which is also dedicated to homeopathy and mind/body rotations. The hydrotherapy suite has three tables for constitutional hydrotherapy treatments, two infrared sauna units, one Russian steam bath, and an immersion tub used for peat/ice baths.

### **Patient Volume**

Patient volume in the clinic has been minimally sufficient for meeting students' clinical requirements. In the 2017-2018 academic year there have been greater challenges in meeting the patient contacts required by UBCNM. We have been increasing efforts to enhance patient volume, adding an additional community clinic in collaboration with the local YMCA, single day Specialty Clinics to attract potential patients to the UB Clinics, and stepped up the outreach through public speaking. We have added a Saturday rotation and an evening rotation to attract the Monday – Friday 9:00 – 5:00 working public.

The University has also supported these efforts to recruit patients, through collaborative work on a marketing campaign with the UB School of Mass Communication and Graphic Design Program, to promote UB Clinics in the community using both physical and electronic media. The University has set up radio spots for the UBCNM administrators, and contacts agencies in the communities to promote our

services. Examples of these organizations include The Office of Veterans Affairs, Mercy Learning Center, Sterling House, and Read School.

### **Clinic Faculty Sufficiency**

There are 25 faculty members (full-time and adjunct) who supervise clinic rotations for UBCNM clinics. The number of supervisors is sufficient for our student cohorts, and maintains a ratio of 1:6. Clinical faculty members have the required experience for supervising students in a clinical setting, and they are strategically assigned to rotations focused on modalities and/or populations in which they excel. The clinical administrative team, comprised of the ADCE, the Clinic Coordinator, and the Clinic Clerk, is sufficient to meet the needs of the clinic. Equipment and space for physical medicine services meets the needs of the UBCNM Clinic.

### **Laboratory Facilities**

The laboratory facilities are of sufficient size and adequately stocked for providing ample educational experience to our students, serving as a phlebotomy location, with three drawing stations and centrifuges for sample processing. Microscopes and microscopy supplies are available for both diagnostic and educational purposes. The lab has a Quintron diagnostic device, used for performing hydrogen breath tests, helpful in the diagnosis of SIBO. The laboratory stocks standard laboratory supplies and many specialty tests kits sufficient for the patient volume and for the students' educational experience. The lab is staffed by an ND faculty member during every shift.

### **Clinic Dispensary**

The Dispensary carries professional quality products and is used by all UB Clinics. The Dispensary Committee and Subcommittee meet regularly to discuss various aspects of the dispensary and which products are carried. Patients are encouraged to make use of the Dispensary, but are provided information for the supplements recommended should they choose to purchase them elsewhere. The Dispensary is sufficiently stocked to meet our patients' needs and special orders can be placed and products mailed to the patients, in the event that the needed products are not currently in stock. We use Fullscript service for some products. See Appendix VI-T for Dispensary Committee minutes.

Students and faculty members can access the regularly updated electronic Dispensary inventory report from each clinic conference room.

### **Clinic Record-Keeping: Student Records**

The record-keeping process of clinical education requirements is effective. The Clinic Clerk maintains records of each student on their rotation. Each supervisor records student attendance and patient contacts for each student during each clinic shift and provides that information to the Clinic Clerk. The Clinic Clerk additionally tracks other clinical requirements, including Grand Rounds hours, Community Service hours, Preceptorship hours and patient contacts, Lab hours, and Dispensary hours. These records are maintained in a shared network folder, accessible only to selected administrative staff. Students meet with their Advisors and the Clinic Clerk to review their clinical requirements. Students are encouraged to track this information as well.

Each student is provided a Handbook of Clinic Competencies, which documents completion of individual competencies that are observed and signed by a clinical faculty member as they progress through the clinical portion of the program.

### **Clinic Record-Keeping: Medical Records**

Chart audits are performed by randomly selecting UNCNM patient encounters in the EMR and evaluating them using a standardized rubric. It was noted this year that the chart audits did not include the paper charts in the community clinics. This is being remedied going forward.

Medical records are stored in the EMR, which is HIPAA compliant and operates in a secure server.

The Clinic Services Administrator serves as the Compliance Officer, overseeing the confidentiality and appropriateness of the documentation. The record-keeping practices used in the campus clinic are congruent with standard practices, facilitating interdisciplinary communication when sharing medical records. Patient charts are completed by the student in charge of the case and then are sent to the supervisor's queue for review, editing, provision of feedback, and finally signing off as completed.

We are currently working with the clinical faculty and students to improve the chart editing and signing turnaround time. A major challenge is the lack of remote access to the EMR for the adjunct clinic faculty.

### **Affiliated Clinical Training Sites**

The program does not have any affiliated clinical training sites.

## STANDARD VII

### Assessment of Student Learning and Program Evaluation

#### Assessment of Student Learning

The *UBCNM Comprehensive Assessment Plan* (Appendix VII-A) is designed to focus on an evaluation of student learning outcomes and continuous program improvement based on outcomes data. The *UBCNM Comprehensive Assessment Plan* adheres to the *UB Health Sciences Division Systems Evaluation & Assessment Protocol* (Appendix VII-B) for the analysis of the educational goals and objectives of the program and evaluation of the assessments used in the program. The *UB Health Sciences Division's Systems Evaluation & Assessment Protocol* provides guidance on how to implement an assessment system that results in data-driven decision-making for program improvement and to ensure that educational goals and objectives are met. UBCNM developed the *UBCNM Comprehensive Assessment Plan* by using the framework of the *UB Health Sciences Division Systems Evaluation & Assessment Protocol* to tailor it to the college's assessment instruments and plan.

To understand how the assessment plan functions, one must first understand the structure of the UBCNM program competency framework. The program competency framework consists of five (5) major competency domains, with a total of 22 competencies that are distributed among the major competency domains. Each program competency includes the following supporting features:

1. Knowledge Base – the information the student is expected to learn.
2. Course/Clinic Objectives – the general description of knowledge and abilities that are to be acquired by the student as he/she progresses through the competency continuum.
3. Student Learning Outcomes – the measurable expectations of student learning that collectively represent evidence of the realization of the broader competency.
4. Achievement Levels – the expected level of naturopathic medicine mastery associated with the implementation of program curricula. CNM utilizes three (3) levels of achievement: basic, intermediate and competent to describe student knowledge, skill and ability.

- a. Basic – teaches fundamental information designed to establish foundational comprehension of naturopathic medicine.
  - b. Intermediate – teaches increasingly complex information, assumptions and practical experiences designed to deepen comprehension of naturopathic medicine and build upon prerequisite knowledge and skills.
  - c. Competent – teaches varied and complex practical experiences designed to generate the habitual, effective and efficient acts of knowledge retrieval, assumption and research awareness, diagnosing, and patient plan preparation and delivery in the context of presented symptoms and naturopathic medicine.
5. Assessment Tools – identifies the specific instruments used to determine if the student has achieved the specified learning outcomes and attained the related competency at the stated level.

The goal of UBCNM is students’ successful achievement of the learning outcomes. A variety of assessments are used to measure performance on the student-level competencies throughout the program. The *UB Health Sciences Division’s Systems Evaluation & Assessment Protocol* provides guidance on how to implement an assessment system that results in data-driven decision-making for program improvement and to ensure that educational goals and objectives are met. The implementation of the assessment plan also ensures that the College addresses program-level competencies and the AANMC Professional Competencies of the Graduating Naturopathic Physician. The implementation of the assessment plan is ongoing, cyclical, and dynamic. The utility of the plan itself is also evaluated on an ongoing basis, and when necessary, improvements are made to enhance its value.

UBCNM seeks to improve the quality of the program through systematic collection, examination, and interpretation of quantitative and qualitative data about student learning, and professional practice upon completion of the program, and uses that information for program improvement. The intent of the assessment plan is to assess student success and the overall success of the program in terms of meeting its educational goals and objectives. The assessment plan is designed to collect key data from a variety of sources, including student performance data and data from various stakeholder groups (e.g., exiting students, alumni, faculty, and staff). The data are evaluated and used by the program to improve curriculum, student learning, faculty

development, instruction resources, and admissions prerequisites. Curriculum development is based, in part, on the analysis of the various assessment data.

The assessment plan employs multiple measures of assessment to monitor students' performance at various stages in their progression in the naturopathic medicine program. It also includes the collection of data from various stakeholders. The assessment plan is designed to address seven stages in the program. The stages represent the progression of students based on key assessments associated with each stage. Key assessment data are collected at each stage and are reviewed in aggregated form. The following is a list of the stages. For additional information about the types of data that are collected at the majority of the stages, please refer to the *UBCNM Comprehensive Assessment Plan*.

Stage 1: Entry to the College (i.e., Admissions Data)

Stage 2: Classroom/Course Assessment (Appendix D of the *UBCNM Comprehensive Assessment Plan* for assessment data associated with this stage)

Stage 3: Clinic Entrance Exam Performance and NPLEX Basic Science Exam Performance

Stage 4: Clinic Promotion Exam Performance

Stage 5: Clinical Performance (e.g., Clinical Rotations, Lab Services, Dispensary Services, and Observational Preceptorships)

Stage 6: Clinic Exit Exam Performance

Stage 7: Post Graduate and Stakeholder Data (i.e., completion rates, NPLEX Part II, exiting students' interviews, alumni surveys)

The assessment plan includes methodology for evaluating each student's academic and clinical performance and achievement in relation to the program's educational requirements and outcomes, including student competencies/learning outcomes in individual courses. This is evidenced by the data that are collected, analyzed and evaluated in Stage 2 of the assessment plan (See *Appendix D* of the *UBCNM Comprehensive Assessment Plan* for details). Each course is aligned to the program competencies, and the developmental level of the competencies is identified (i.e., basic/novice, intermediate, or advanced). The assessments used in the courses are designed to evaluate the aligned competencies at the designated competency levels. Student success indicators include assessment grades, remediation activities, course grades, cumulative

GPA, integrity incidents, and attendance. These data, in aggregated form, contribute to program level assessment and evaluation.

The program utilizes both formative and summative processes to evaluate student learning, as students are assessed in every stage of the program through the use of written examinations, quizzes, papers, and/or practical/performance examinations. Individual courses include both formative and summative assessments. The three clinical performance examinations (Entry, Promotion, and Exit) are structured to be standardized so that validity evidence is established (i.e., the tests are testing what they purport to test) and that they are fair and reliable. The examiners who score the performance examinations receive training in advance of the administration of the examinations. They are given access to the case scenarios and scoring rubrics so that they can become familiar with the examination. They are trained on how to apply the scoring rubrics for the examination. To calibrate the examiners' scoring, the examiners view videotaped performance examinations and independently score the examinations, and then share their ratings with their fellow examiners. The standardized patients also receive training in advance on the test administration so that they understand their role and become familiar with their scripted responses.

In the didactic courses, students who fail a major exam or assessment are registered for *Academic Support*. They are notified of the failure as soon as possible after the exam is graded, and encouraged to meet with the instructor of the course to discuss the exam and their general performance in the course. Students are notified of referral to *Academic Support* by their instructors, and then receive official notification of registration from the Associate Dean of Academic Affairs (ADAA). The ADAA also notifies the advisor of each student, and they are asked to set up meetings later in the term to review the student's progress.

The ADAA reviews the syllabi for each course before the semester begins, and assists faculty in writing outcomes that reflect the goals of the course and the program and have measurable components. Assessments are evaluated and revised to reflect the stated outcomes of the course.

Assessments and outcomes for each course are under regular review by the instructors and the ADAA. In the 2017 Fall semester, an Assessment Strategies Coaching program was implemented. Each semester, four to six faculty members, including full-time and adjunct staff, are assigned to the coaching program. They work individually with the Director of Assessment

on the assessment strategy for one of their courses. Faculty meet with the Director before and after assessments, to review and revise questions before an exam and to evaluate the success of the assessments after the exam has been graded. In Fall 2017, five instructors completed the program: three full-time and two adjunct. The 2018 Spring semester cohort consists of four instructors: three full-time and one adjunct.

In the 2017 Fall term, a focused training in assessment was launched for faculty. Up to six faculty members will be chosen each semester to be coached in the development of effective assessments for their particular courses. The coaching, conducted by the ADAA and the Director of Assessment for Health Sciences, began with review of the draft syllabus, course objectives and learning outcomes, and continued past the end of the term. Topics included choosing assessment formats, weighting of assessments to determine course grades, developing test blueprints, aligning test questions to test blueprints, writing questions, evaluating effectiveness using item analysis and other tools, and feeding forward to the next iteration of the course. The Director of Assessment also conducted a psychometric review of some of the instructors' assessments. There were five faculty members involved in the first semester of coaching, and four additional faculty members are involved in coaching in the 2018 Spring semester.

Students who fail all or any portion of the Clinic Practical Exams are required to attend remediation and pass sessions. These are specialized workshops taught by UBCNM faculty that include instruction, case-based problem solving, and an assessment of the skills. The 2017 and 2018 Schedules of Remediation Workshops for Clinic Practical Exams are found in Appendices VII-C-1 and VII-C2.

### Clinic Practical Exams

UBCNM employs three clinical performance assessments that are used to evaluate students at three stages in the program: entrance to the clinic, promotion to Primary Student Clinician role, and Exiting from the Program. The Clinic Entrance Examination is designed to assess the performance of second year students who have been in the clinic as hydrotherapy technicians, but not as naturopathic medicine student clinicians. They have taken coursework in pathology, basic sciences, clinical/physical/laboratory diagnosis, and physical examination, and have been introduced to medical documentation. The Clinic Promotion Examination is designed to assess the performance of third year students who have been Secondary Student Clinicians for most of a

year. The Clinic Exit Examination is designed to assess the performance of fourth year students who are about to graduate and enter practice. The rubrics used for each exam follow a similar format among all three levels and are revised each year with input from the clinic faculty, UBCNM administration, and the Director of Academic Assessment for the Division of Health Sciences. Each clinic exam rubric covers six main areas of competency, with medical reasoning elements included in the appropriate areas. The rubric allows evaluators to assess each area separately. Remediation modules are scheduled for addressing student deficiencies in each area. These modules consist of instruction by clinical faculty, clinical exercises, and an assessment upon completion of the remediation module.

The clinical examinations are designed to evaluate students' performance on the following competencies: History Collection, Physical Examination, Charting Skills, Medical Reasoning, Personal Introduction/Sensitivity to the Patient, Professionalism/Interview Skills, and Case Presentation. A variety of cases are used among the three assessments. Clinical cases for the exams are developed annually by clinical full-time faculty following a standard format. The Associate Dean of Clinical Education (ADCE) and Clinic Coordinator edit the cases as needed, with oversight from the Dean.

Each clinic exam comprises three parts: patient intake with a standardized patient, charting, and case presentation. The patient intake and case presentation are filmed and uploaded to Panopto for ease of evaluating by the clinical faculty, and also for quality assurance. Evaluators are randomly assigned and are provided access to the cases, grading rubrics, student chart notes, and video recorded exams. Each student is evaluated by two faculty members who score the rubrics independently, and which are then averaged to obtain the student's clinic exam score. If significant discrepancies are found in the grading for a given student, a third evaluator (ADAA, ADCE, or Clinic Coordinator) grades the exam; the score given by the third evaluator is then calculated with the previous two scores to obtain an average, which becomes the student's final score. Students are able to review the recording of their exams upon request.

#### Routine Clinic Performance Evaluation

Late in 2017 Fall semester, a new clinical student evaluation tool which was developed from similar tools used over the past 12-18 months was implemented. Supervisors use the instrument with two or three students on each shift to provide students formative feedback. Comparison of

the data collected over time provides summative assessment data on student performance at the end of the term and the year. The instrument gives supervisors the opportunity to promptly address any deficiencies identified. See Appendix VII-D for the Student Clinician Evaluation form.

Clinical faculty participate in Clinic Faculty Development prior to the start of each academic year. See Appendix IV-A for the 2016 and 2017 presentations. Data on global clinic performance are presented, as well as any current or future steps to ensure continuous improvement. Topics covered typically include charting, coding, medical reasoning, guidelines for conducting shifts, and administrative affairs. Two to three times each semester Clinic Faculty meetings are held in which updated clinical performance data are presented, new information is shared, and a review of previous information is discussed. Clinic Faculty Meeting Minutes are found in Appendix VII-E.

At the end of each academic term, clinical supervisors are evaluated by students using anonymous, university-created standardized assessment instruments that are administered online. While not mandatory, students are strongly encouraged to submit these faculty evaluations each term. Unfortunately, the number of evaluations is quite limited, and the clinic administration will revert to using paper and pen anonymous evaluations.

The ADCE performs annual observations of each clinic faculty member during their clinical rotations, provides feedback, and suggestions for improving the clinical education component of the rotation. New clinical faculty members are typically observed more than once per year, using a standardized rubric. Following the observation, the faculty member meets with the ADCE. Typical topics for review include timeliness of chart signatures, student medical documentation, and time management. The faculty members receive a copy for their records, and the ADCE stores them electronically and in paper form. The electronic copies are available in the shared drive for UBCNM administration to review. These evaluations are used as part of the portfolio for faculty review and reappointment by the appropriate University committee. The scope of clinical faculty evaluations will be broadened, to include timely feedback to students on medical documentation, visit structure, patient retention, and coding accuracy. (Appendix VII-F Student Evaluation of Clinical Faculty Form; and Appendix VII-G Clinic Observation Form)

The assessment plan used by UBCNM is designed to assess student success within the various stages of the program. Direct and indirect measures of student success are used as part of the assessment plan. Direct measures consist of admission statistics, performance on key course assessments, course grades, grade point average, performance on the Entrance, Promotion, and Exit Clinical Performance Examinations, performance on NPLEX, and completion rates. Findings from previous self-study accreditation reports have been slated as another direct measure. Indirect measures consist of various stakeholder surveys, including interviews of exiting students, course evaluation surveys, alumni surveys, and faculty/staff surveys. The assessment plan identifies the individuals responsible for the collection and analysis of data for each of these measures. The data associated with the direct and indirect measures are reviewed by committees of administration, faculty, and staff according to the assessment plan schedule.

The three clinical performance examinations that are administered at designated stages of the program provide a systematic evaluation of student competence in physical and clinical diagnosis. The Entrance Examination is designed to assess the performance of second year students who have not yet been in the role of student clinicians, but have taken coursework in pathology, basic sciences, clinical/physical/laboratory diagnosis, physical examination, and have learned charting. The Promotion Examination is designed to assess the performance of third year students who have already been Secondary Student Clinicians for a year. The Exit Examination is designed to assess the performance of fourth year students who are about to graduate and enter practice. To reflect the expectations at different levels of training, the competencies are weighted differently for each level of examination. For example, medical reasoning holds a much greater weight on the Exit Exam than on the Entrance Exam.

These are standardized examinations, administered in a timed, controlled environment, using standardized patients who are trained in advance of the test administration. Each student's performance is evaluated independently by two examiners. The examiners receive training on how to apply the scoring rubrics for the examinations (i.e., cases) using videotaped examinations as part of the training. During the training, the examiners view a videotaped examination of the physical exam of the cases they are reviewing, and clarification on anticipated points of confusion in the scoring process.

The clinic exam rubrics include items that assess each student's learning in a comprehensive manner. During clinic exams, students are challenged by clinical cases produced by full-time faculty following a standard format. UBCNM hires professional standardized patients for the clinic exit exams, and for the Promotion and Entrance Exams, fourth year students serve as standardized patients. The cases provide relevant medical history, physical exam findings, laboratory and diagnostic imaging results, and include elements that allow the student to demonstrate their history-taking skills, medical knowledge and reasoning, therapeutic skills and personal interactions, and professionalism.

The professional standardized patients complete survey forms evaluating each of the students with whom they worked. These forms are maintained by clinic administration and may be used to provide feedback to students after their exams have been graded. (Appendix VII-H)

### **Program Level Assessment and Evaluation**

UBCNM maintains a program level assessment plan that provides for a periodic assessment and evaluation of overall program effectiveness in relation to the program mission and outcomes. As mentioned above, the intent of the assessment plan is to collect key data that are used for program evaluation and improvement. The College seeks to improve the quality of the program through systematic collection, examination, and interpretation of quantitative and qualitative data about student learning and professional practice upon completion of the program, and use that information for program improvement. The data are collected from a variety of sources, including student performance data and data from various stakeholder groups (e.g., exiting students, alumni, faculty, and clinical supervisors). The data are evaluated and used by the College to improve the curriculum, student learning, faculty development, instructional resources, and admissions prerequisites. The implementation of the assessment plan also ensures that the College addresses program-level competencies and the AANMC Professional Competencies of the Graduating Naturopathic Physician. The implementation of the assessment plan is ongoing, cyclical and dynamic, and the utility of the plan itself is also evaluated on an ongoing basis, and when necessary, improvements are made to enhance its utility.

Course and faculty evaluation of didactic courses are assessed and analyzed for areas of improvement. One example of this includes the student feedback provided regarding structure of

and completeness of material covered in the systems and population courses (“-ologies” and “-atics”). A structure was developed and reviewed with the faculty members who teach those courses to revise structure and ensure completeness of material (Appendix VI-F). Another example is the development of the assessment coaching program for faculty.

The information gathered from alumni surveys revealed less than optimal preparation for practice development and management. With this in mind, UBCNM invited the UB Business School to offer an entrepreneurship course to students, which has been an elective course until now, and will be a required course for classes matriculating in 2016 and beyond. The feedback from the limited number of students who completed it as an elective course was outstanding.

Evaluation of the hours and staff dedicated to each course in the program is completed annually, and changes are made in response to this analysis. One example is the finding that students have not been adequately trained to practice acupuncture, and the subsequent plan to add one or two courses in Traditional Chinese Medicine to better meet the scope of practice in the state of Connecticut, training students to be safe practitioners of acupuncture. This change will occur starting in the 2019-2020 academic year.

Another example is the distribution of hours in the *CPLD* course starting in the 2017 Fall semester, from two 3-hour segments to three 2-hour segments, to enhance student learning.

*Naturopathic Manipulation Lab* was noted to have less than optimal supervised time for students to practice adjustments, and a second TA was added to the class in the 2018 Spring term.

Clinical examples are the assessment of the data regarding the patient visit forms collected for each patient appointment. This has provided the ADCE information on individual faculty and individual student practice patterns, and allowed the ADCE to review those findings with these individuals as needed. One example is the time management aspect of a patient visit, and how each individual manages that time.

Clinic exam results are assessed, and areas that have recurring areas of concern are addressed in Dean’s Faculty, Curriculum and Assessment, and Clinic Faculty meetings. Strategies are developed by faculty and implemented in the respective aspects of the program.

The program assessment plan schedule indicates the types of data that are collected and analyzed during each stage of the program, the faculty/staff who are responsible for the data collection and/or analysis, when data are reviewed and evaluated, and the faculty/committees who are responsible for reviewing and evaluating the data. Given the volume of data that are collected in each stage, the analysis, review, and evaluation of data are staggered across the academic year.

The UBCNM Assessment Plan Schedule, found in Appendix VII-I, is used to implement the assessment plan.

The information gathered from these data points has been used to direct change in curriculum and assessment, as well as the delivery of instruction. One example is the analysis of identified series of courses, such as courses in physical medicine, homeopathy, and psychology-related topics. These series of courses have been or are currently being assessed and revised to enhance instruction, content, assessment, and flow within the series. Evaluation and restructuring is also based on formal and informal feedback from students, didactic and clinic faculty members, and physicians in the field, in addition to the more formal methods of assessment listed in the chart above. Assessment of courses and series of courses will continue in an ongoing manner, as well as assessment of the program based on the items listed above, with the support of the Health Sciences Director of Assessment and Planning.

**Graduation Data:** Data are collected regularly on graduates to document their success as practitioners (e.g., number of practitioners who have become licensed/entered practice, survey information on graduates' satisfaction with their ND training, etc.). See the 2017 Alumni Survey Report for the latest data. (Appendices VII-J and VII-K Alumni Survey Reports 2015 and 2017 respectively). The 6-month Certified Graduates Survey is a University-wide survey that is not program-specific.

**Clinic Exit Examination:** Since 2014, the Clinic Exams were developed and assessed by the Clinic Education Committee chaired by the ADCE and/or the Dean. The 2018 Clinic Exit Exam was developed by the Clinic Education Committee, under the guidance of the Associate Deans and the Health Sciences Director of Academic Planning and Assessment. The team worked over a period of six months on the development of the exam. They also reviewed the Objective Structured Clinical Examination (OSCE) that is offered by the College of Chiropractic at the University to help determine the format of the exam. The Director of Educational Planning and

Assessment trained the committee on rubric development as well as professional development, highlighting differences between learning objectives and outcomes. The team of UBCNM faculty members and administrators developed a faculty guide outlining the process of the exam and student assessment, a student guide for defining the competencies that would be assessed by the exam, rubrics for assessment of student performances, and clinical cases for the exam. (Appendices VII-L-1, VII-L-2, and VII-L-3 for Student Guides to Clinic Exams.)

The exam was initially implemented in the 2014 spring semester. At that time individual faculty clinicians directly observed students during the exam and graded students on their performance. Faculty supervisors met with each student to discuss the results of their exam. The faculty also defined specific remediation plans for those students who did not successfully complete the exam, tailoring each to the specific area(s) of the exam in which the student did not achieve competency.

Information from the implementation of the pilot exit exam was collected and reviewed, providing significant information on the areas of need in clinical training, as well as the program's capacity to accurately assess students' skills. The information gathered from each year of implementation has been used to make adjustments to the process, the exam, and approaches to remediation, and to enhance instruction for future cohorts.

The Exit Exams will continue to be applied as an assessment tool of student learning, as well as continue to be evaluated for reliability and as an indicator for curriculum change.

The individual student who took the Exit Exam in December 2015 also served as a pilot for the audio-video recording of the exam, *in lieu* of having an evaluator in the room. The student's competencies were then evaluated independently, based on the recording, by four naturopathic physicians. Since the 2016 Spring semester, all Clinic Exams have been recorded, and the recordings viewed independently by a team of physicians who have undergone evaluator training. Remediation of identified areas of need will continue to undergo assessment and revision, with feedback from each administration of the exam.

In the 2014 Spring term it was noted that students were not optimally integrating the information from various courses. The *Biomedical Integration Lab* sequence was developed to help students synthesize knowledge they gain in biomedical science courses and apply it to cases. The course

is team-taught by the three biomedical science instructors from *Biochemistry, Physiology, Histology, Anatomy, Embryology, and Neuroscience*. The case-based learning has provided an integration of the basic science information previously lacking.

The UBCNM Strategic Planning process initiated in May 2017 identified areas related to research skills and utilization, faculty development needs, integration of didactic and clinical training, student success on NPLEX, enhancing methods of instructional delivery, and of assessment tools. The Strategic Plan 2017-2022 is found in Appendix I-B.

Findings from the clinic exams have led to changes in both the didactic and the clinical aspects of the program. Additional focus has been placed on medical reasoning. Scoring on the physical exam aspect of the clinical exams revealed that evaluators scored students based on the way that the supervisor performs that exam, which in some cases is different than the way that students were instructed, although both are correct methods. Training videos were created and clinicians were provided those videos as a guide with which to score the exams. This process also led to adjustments to the scoring rubric formats in a number of areas on the clinic exams.

Evaluation of medical documentation of patient visits found that the Assessment portion of the record varied significantly among rotations. The ADCE developed strategies to create a more consistent and accurate Assessment component of the medical record, and provided clinical faculty training and a review to student clinicians, but more needs to be done on this topic.

A review of the curriculum and comparison with the Connecticut scope of practice for NDs revealed that the existing traditional Chinese medicine courses do not cover needling techniques and practice to prepare UBCNM graduates to practice acupuncture. The UBCNM administration developed additional courses to prepare students to practice acupuncture within the context of naturopathic practice. *TCM III* and *TCM IV* are under development, and will launch in Fall 2019.

NPLEX pass rate results provide limited information on the pass rates of specific curricular areas. Faculty are frustrated with the lack of information, given the same faculty teach the same material, yet with significantly different results in pass rates, in some cases from one year to the next. In the 2018-2019 academic year, we will look at examining other aspects of instruction, such as options for changing the delivery method.

The university maintains information on the program's admissions and enrollment data, and completion rates, which are located in Appendix VII-M-1 and VII-M-2.

The full-time program is designed to be completed in four years, but students have seven years to finish all components to graduate. Appendix VII-M-2 presents 7-year completion rate data for cohorts starting in years from 2005 to 2013. However, the completion rates within a seven-year period cannot be calculated yet for the cohorts starting the program in years 2011, 2012 and 2013, as those cohorts' 7-year periods conclude in 2018, 2019 and 2020, respectively. The 7-year completion rates for the cohorts that started the program in years 2006 through 2010, which is a five-year period, and partial completion data for starting years 2011 through 2013 is also found in the same table. Overall, from the starting years of 2006 through 2010, 70% of the students completed the program in 7 years or less. However, the completion rates varied from year to year, as 55% of the students who entered the program in 2008 completed the program in 7 years or less, whereas, in contrast, 85% of the students who entered the program in 2009 completed the program in 7 years or less.

Given that the completion rate has been lower than 75%, we are currently performing an analysis of the available information to assist the UBCNM administration in determining the reason for the lower completion rates. We are looking at factors including the pre-requisite requirements for each matriculation, how closely those requirements were held to in the acceptance of each student, variation among the roles of the decision makers determining acceptance during each year, any trends in withdrawals, dismissals, and other reasons for non-completion differences among types of students, i.e., transfer, advanced standing, and on-track students.

We do know that the pre-requisite requirements have been raised in recent years, and suspect that this will improve the completion rates over the next few years. As we complete the analysis and discover potential reasons that impact the completion rates, we will make appropriate adjustments to the program.

UBCNM maintains and monitors pass rate data of its students taking the NPLEX Part I (Biomedical Sciences) and NPLEX Part II (Clinical Sciences) examinations. As shown in Appendix VII-N, the majority of pass rates for NPLEX Part I from 2012 to 2017 for the February and August test administrations have exceeded 70%. The pass rates exceeding 70% ranged from a pass rate of 71% for the August 2016 test administration to pass rates of 100% for the February

test administrations held in 2013, 2014, and 2016. The two exceptions to pass rates exceeding 70% were the February 2012 (4 students took the exam) and August 2017 test administrations, as the pass rates were 25% and 58%, respectively.

For the NPLEX Part II (Clinical Science) Examination, as shown in Appendix VII-O, the pass rates have varied from 2012 to 2017 for the February and August test administrations. Of the 12 test administrations reported (i.e., from February 2012 through August 2017), 50% of the test administrations have pass rates exceeding 70%. The pass rates meeting or exceeding 70% ranged from a pass rate of 70% for the August 2014 test administration to a pass rate of 100% for the February test administrations held in 2017. The lowest pass rate from February 2012 through February 2017 was 33% for the February test administrations in 2012 and 2016.

In an effort to develop a plan to improve students' performance on the NPLEX exams, multiple sources of performance indicators, qualitative and quantitative, were collected and analyzed. One of the sources included a review of students' performance on the general exam areas (GEAs) of the NPLEX I examination. As shown in Appendix VII-P, a review of the NPLEX test results by GEAs from February 2012 through August 2017 indicated low performance in the biomedical sciences in both structure/function and disease/dysfunction in the February 2012 cohort, which consisted of four students. However, since August 2012, with the exception of the August 2017, the pass rates have improved and remained at or above 70%.

Appendix Q presents the pass rates of UBCNM first-time test takers taking the NPLEX Part II by GEA in the last six years. The data show that the majority of the pass rates for the GEAs exceed 70% and have improved over time, as the pass rates have increased. However, there are a few exceptions, as in February 2016, the pass rate for both Diagnosis and *Materia Medica* was 67%, and the pass rate for Other (Medical) Interventions was 33%. It should be noted, the pass rates for all GEAs have been at or above the 70% in the last three (3) test administrations.

Review of the results of NPLEX Part I, with failures noted in the areas of both structure/function, and disease/dysfunction, and discussions with stakeholders, including review of related curriculum content, suggested the need for increased rigor in the content and improved teaching and learning strategies. The program faculty and administration addressed these findings through a variety of strategies, predominantly in the areas of teaching techniques and through review and revision of curricula and the syllabi that reflected the curricular content, as well as

assessment methods. Professional development in these areas was included as a component of the revisions.

Over the past four years dialogue in committee meetings revealed that some faculty members felt that communication is poor regarding the alignment of didactic and clinical experiences and expected student performance throughout the program continuum. In particular, clinic faculty expressed that students are not ideally prepared for clinic experiences when they enter the program, regardless of clinic entry exam results. In addition to those improvements already made in this document, one example of the tools to improve communication between didactic and clinical groups of instructors was the development of yearly “profiles” - what students’ performance abilities should look like as they advance through the program. (Appendix I-D Year 1, 2, 3 & 4 profiles).

Following the self-study visit in 2012 and related to subsequent feedback, the Program conducted a comparison of its total curricula hours against other naturopathic programs. The disparity discovered between UBCNM’s cumulative program hours compared to those of competing programs was obvious. As a result, the program collected evidence of its full curricula, so that core curriculum offerings could be differentiated from complementary curriculum. The Comprehensive Assessment Plan, reflects the full curricula as of January 2014.

Program administrators and faculty developed a plan to reduce curricula hours and increase the focus on the development of practice-ready skills and NPLEX expectations. In the 2014 - 2015 academic year, the program began to reduce its total curricula hours for incoming students, and plans to ultimately reduce the credit hours by approximately 400 hours. This action is expected to support students’ abilities to focus more attention toward the core competencies that the NPLEX exam validates.

Faculty members have been engaged in discussion related to students’ preparedness upon entering the program. Entrance requirements in the form of prerequisite coursework were evaluated and revised. Applicants are currently strongly advised to take a biochemistry course and are informed by the Admissions Counselor that all science prerequisites should be at a pre-med level. The required GPA of 3.0 in three areas (overall, science, and prerequisites) has been held to more stringently for admission to the program.

Both didactic and clinic faculty members expressed concerns that students are not ideally prepared with the foundational science knowledge that is needed to facilitate the expected skills and knowledge progression as they advance through the program. Analysis of the sequence of courses and content of each of the courses in a sequence with appropriate revisions has been in process since the initial review.

In 2014 the College raised concerns about students' performance in the areas of Anatomy, Biochemistry, and Physiology to leadership in the Health Sciences Division. Similar feedback was expressed by other Health Sciences program administration. Since that time, tutorial support has been provided in these basic sciences, including anatomy, physiology, and biochemistry, in addition to writing skills, to students in the health sciences programs, through the UB Teaching and Learning Center (TLC).

The program also identified and implemented an additional strategy for supporting students with poor performance in academic and clinical settings. Students identified as poor performers are enrolled in *Academic Support* or *Academic/Clinical Support*, courses created to meet the needs of these students.

Students are required to meet with their academic or clinical advisors each semester. Advisors provide support in a variety of areas, including the typical academic and clinical guidance as well as referral information for medical and emotional support.

The lack of sufficient rigor in assessments identified in the assessment of poor NPLEX scores led to the program Associate Deans and the Director of Academic Planning & Assessment for the Health Sciences Division to meet regularly to review some biomedical sciences courses. Subsequent meetings have provided assistance with developing more rigorous assessments.

In 2014 UBCNM initiated a move towards comprehensive final exams in all courses. This change was first implemented with first year courses; each academic year, courses in the next level of training were brought under the requirement. As of Fall 2017, final assessments in all courses are required to be comprehensive. In addition to requiring a review of the content of each course, this comprehensive assessment strategy provides students a test format that better mimics the more comprehensive approach of the NPLEX exams.

Failure of a course no longer may be remedied by retake of a second comprehensive final exam. Failure of a course requires a retake of the course, with a passing grade that includes passing the final exam.

The Curriculum and Assessment Committee noted that the Clinic Entry Exam and Clinic Promotion Exams were not used as comprehensive assessments, but were limited to information on students' readiness for clinic. The Clinical Education Committee has developed a more comprehensive assessment, with case-based evaluations.

The Clinic Exit Exam was initially implemented in the spring of 2014, as a comprehensive assessment tool for evaluating clinical competency, and has been evaluated and revised each subsequent year.

Beginning with the 2014 summer review, NPLEX preparation was changed to include a blended learning opportunity, with a one-day, in-person workshop combined with unlimited access to webinar material for several months, with Paul Anderson, ND. In the same year, a second review form was added for takers of NPLEX II, with two-hour NPLEX exam review workshops offered to students on a weekly basis, taught by the program Resident. An additional summer 2014 review was provided in preparation of the NPLEX II exam by Chris Habib, ND.

Based on feedback from students and continued review of NPLEX results, in Summer 2016 the administration elected to replace the college sponsorship of reviews by Drs. Anderson and Habib with a full slate of face-to-face review courses taught by UBCNM faculty. With improved NPLEX scores, the College repeated and expanded the face-to-face review courses in Summer 2017. While NPLEX II pass rates continued to improve, NPLEX pass rates in 2017 did not improve. Upon exploration, it was found that few second year students took advantage of the review courses, despite registering for them. It was also discovered that several students who took the NPLEX I exam in 2017 did so without any additional summer preparation or review of material. (Appendices VII-R-1, VII-R-2, and VII-R-3 for NPLEX Review Schedules Summer 2015, 2016, and 2017).

## **STANDARD VIII**

### **Research and Scholarship**

UBCNM supports research directly, through a variety of mechanisms, including University research opportunities, the program's Research Committee, the program's thesis requirement and supporting courses, as well as in a wide variety of academic and clinical courses. The University's Institutional Review Board (IRB) follows the universal guidelines for a diverse membership, and includes a naturopathic physician from the College. The University IRB meets several times each semester to review faculty and student proposals for all research involving human subjects, in compliance with the U.S. Department of Health and Human Services' Code of Federal Regulations 45 CFR 46. All research proposals involving any human participants or subjects is submitted to the IRB for approval for the safety of subjects, researchers, and the University, as designated by the University's Human Subjects Protection Program Plan.

Members of the University of Bridgeport IRB include:

- Joanna Badara, PhD
- Allison Buller, PhD
- Ruba Deeb, PhD
- Janet Dombroski, PhD
- Matthew Funk, DC
- Wendy Garcia, EdD (Co-Chair)
- William Greenspan, JD (Community Representative)
- Stephen Jackowicz, PhD
- Michael Lohle, PhD
- Lorie Noto, PhD (Co-Chair)
- David Oberleitner, PhD
- Alicia Petryk, PhD
- Tom Price, PhD
- Sandra Stramoski, MSDH
- Eugene Zampieron, ND

The IRB co-chairs provide support and answer questions about the processes and the status of proposed research.

The University provides leadership in research through Ruba Deeb, PhD, the Director of Biomedical Research Development, a Research Associate Professor of Biomedical Engineering, Liaison for Dual Credit Programming for the School of Engineering, and the School of Arts and Sciences. Dr. Deeb supports the research efforts of College faculty and students through consultation and guidance on concept, IRB submissions, and implementation. She has also been instrumental in the formation of the Research in Progress (RIP) meetings, which research-interested UBCNM faculty members attend with

increasing frequency. This somewhat informal gathering of both researchers and faculty members interested in research, and provides an opportunity for faculty members to hear and to present research ideas, and to get feedback on research concepts and projects (Appendices VIII-A-1, VIII-A-2, and VIII-A-3).

The University has a committee on Intellectual Property (Appendix VIII-B). The Intellectual Property Board (IPB) supports the evaluation, disposition, and appeals process in determining the commercial potential of an invention or copyrightable work.

Criteria for ownership and commercial rights governing intellectual property are defined in the University of Bridgeport Intellectual Property Policy. This policy is intended to govern matters of *Covered Individuals* (all staff, faculty, students, teaching assistants, and adjunct professors in residence, visiting teachers, and any other individuals associated with the University).

Intellectual property subject to this policy may include inventions, copyrightable works, and tangible research materials that have been created making “significant use” of the University’s resources. These resources include University-administered funds or University-funded time, facilities, and/or equipment. However, there is a broad category of scholarly work that is exempted. Exemptions include works for which academic institutions have traditionally waived any ownership interest in favor of the author, including textbooks; class notes; research proposals; classroom presentations and instruction; research articles for publication; research monographs; student portfolios (including electronic); theses and dissertations; photographs; paintings; drawings; models; sculpture; musical compositions and performances; dramatic works and performances; poetry; and popular fiction and nonfiction.

The Vice President for Graduate Studies and Research (VPGSR) is charged with investigating any dispute in the evaluation of significant use of University of Bridgeport resources. If a covered individual disagrees with a decision of the VPGSR, such individual may ask for reconsideration by the Intellectual Property Board (IPB). The IPB reviews the matter and makes its recommendation to the VPGSR who reconsiders the matter. In addition, under certain circumstances, the University may relinquish its ownership rights for an invention or copyrightable work to the inventor or creator of the intellectual property at his or her request.

The VPGSR is responsible for commercial development and administration of all University-owned intellectual property. This commercial development will ordinarily occur through licensing of inventions, copyrightable works, or materials to an outside developer. The VPGSR will endeavor to reasonably consult with, seek the advice of, and inform the inventor or creator of the intellectual property throughout the commercialization process. The University will use diligent efforts to commercialize the intellectual

property. If the University is successful in its commercialization efforts, the inventor or creator will share in the economic rewards, as will the School and University community.

Royalty income and other non-equity revenue derived from the licensing of University-owned intellectual property will be distributed at the end of each accounting period as follows:

- The University will be reimbursed for any out-of-pocket expenses incurred in obtaining and maintaining patent or copyright protection for a specific item of intellectual property, and in evaluating and marketing of such intellectual property.

The remaining net income will be distributed as follows:

- Sixteen and 67/100 percent (16.67%) to the University to fund patents, VPGSR and IPB operations, and research and project grants intended to lead to the development of intellectual property, scholarships, and other appropriate University purposes;
- Fifty percent (50%) to the inventor or creator;
- Sixteen and 67/100 percent (16.67%) to the IPB to fund research, project grants and scholarship, including professional development activities; and
- Sixteen and 66/100 percent (16.66%) to the School(s) that provided the resources for development of the intellectual property, to fund research, project grants and scholarship, including professional development activities, and other appropriate School purposes.

These provisions for distribution may be modified by the University based on recommendations by the IPB or VPSGR. In the case of multiple inventors or creators of commercialized intellectual property, their shares will be distributed as they unanimously agree or, in the absence of agreement, in equal portions. If multiple departments or Schools are involved, their shares will be distributed in the same manner as the distributions to the inventors or creators within such departments or Schools.

The University may accept an equity interest in a commercial vehicle (called “Corporation” in this policy regardless of actual legal structure), provided that approval is granted from the Provost and the Vice President for Administration and Finance before the VPGSR agrees to accept equity. A covered individual must choose one of the following approaches when negotiations commence between the University and the Corporation, but the choice is final once selected:

- Covered individuals may elect to receive fifty percent (50%) of the equity that the University would otherwise receive in connection with the commercialization of intellectual property

- Covered individuals may elect to receive equity directly from the Corporation independent of the University, in which case the covered individual agrees not to receive any share of equity that the University may receive in that transaction

If a covered individual disagrees with the final University decision, the individual may exercise his or her individual legal rights to pursue the matter in a court of law located in the State of Connecticut.

The board membership is composed of the following members:

- William Greenspan, JD, LLM, Chair of the Intellectual Property Board
- Jennifer Brett, ND
- Stephen Healey, PhD
- Spiros Katsifis, PhD
- Richard Saporito, DC

The UBCNM Research Committee is comprised of PhD and ND faculty members, members of the college administration, and a student representative. Faculty members explore and develop potential research projects, each with a plan for student involvement. Faculty members who have expressed interest in research and support the research efforts within the program in other ways than direct involvement in a research project are also members of the committee. Mark Mattie, MD, PhD, is the UBCNM Research Director, chairs the Research Committee, and is tasked with assisting in the development of research projects that originate within the College. His CV is found in Appendix VIII-S. Research Committee meeting minutes are found in Appendices VIII-C, VIII-D, VIII-E and VIII-F.

Full-time faculty members are encouraged to participate in research activities and are provided a Release Day each week, which may be used for clinical and/or research endeavors.

Students are required to develop research projects and/or scholarly activities in varying degrees of depth for several courses, such as Introduction to Clinic, Biomedical Integration Lab, Embryology, Ethics, and Public Health. See Appendix VI-J for courses that include a research component.

Students begin the process of thesis development in their third year, and must complete their thesis in their fourth year. In addition to the initial research course, students are enrolled in three (3) sequential thesis courses in their third and fourth years, to guide the development of a research concept, perform the research, and oversee the writing and editing aspects of the creation of the thesis. The thesis project may consist of a review of the literature around a particular subject area, or may detail a bench research project that a student completed at UBCNM. The development of a thesis provides the opportunity for students to enhance their research, writing, and editing skills in ways that time-constrained classroom assignments

in research do not provide. In addition to the thesis instructor, each student self-selects a thesis advisor, usually a faculty member with expertise in the area of research.

Students are encouraged to work with faculty members on research projects that are submitted for entry as poster presentations in the annual university-wide Faculty Research Day, both a collaborative and competitive event. These submissions may represent a summary of a thesis project or be a stand-alone research project. Examples of UBCNM faculty publications and faculty-student posters in the last few years include:

- *First-in-human phase II trial of the botanical formulation PHY906 with capecitabine as second-line therapy in patients with advanced pancreatic cancer.* Saif MW, Li J, Lamb L, Kaley K, Elligers K, Jiang Z, Bussom S, Liu SH, Cheng YC. Cancer Chemother Pharmacol. 2014 Feb; 73(2):373-80.
- *Multiple Forearm Muscle Variants Including a Rare Hypothenar Variant.* Kelliher K, Terfera D, Pracella J, and Kelly E. International Journal of Anatomic Variations. 2013 Aug 6: 124-127.
- *L-glutamine use in the treatment and prevention of mucositis and cachexia: a naturopathic perspective.* Noé JE. Integr Cancer Ther. 2009 Dec 8 (4):409-15.
- *Bilateral pectoralis minor variant: a case study,* 2016. Elder A, Klecha J, and Terfera D.
- *Unilateral presentation of three muscle variants in the pectoral region.* Terfera D and Kelliher K. European Journal of Anatomy. 2016.
- *Wallerian Degeneration Surveyed in Poliomyelitis.* Kelliher K and Terfera D.
- *Physical Manifestations Associated with Neurofibromatosis (NF-1).* Kelliher K and Terfera D.

2018 Faculty Research Day posters from UBCNM:

- *Breakfast May Not Be the Most Important Meal of the Day: The Benefits of Intermittent Fasting on Health, Exercise, and Muscle Growth.* Hannibal M. Advisor: Mahfoud J.
- *Marinade Matter: Inhibiting the Formation of Carcinogenic Heterocyclic Aromatic Amines in Foods through Smarter Cooking Methods.* Olsen K. Advisor: Mahfoud J.
- *Demographic and Outcome Trends in a Naturopathic Teaching Clinic.* Sanders K, Bawa, G, Fraser M, Jean-Paul R, Messano T, Rugeles Sepulveda V, Szeinbaum E.
- *A Model for Optimal Prevention: Naturopathic Community Healthcare.* Hawkins L. Advisor: Draus S.

Every research project that originates with a UBCNM faculty member must include students in the planning, literature review, or active research phases, and most projects include students at all levels.

UBCNM provides financial support upon request to faculty who have been invited to present their research or scholarship at conferences and meetings. In August 2017, Kimberly Sanders, ND, presented on "Kids with Arthritis: An Under-Represented Population for Naturopathic Intervention" at the AANP Convention in Phoenix, Arizona, with the financial support of the University, and in April 2018, Florence McPherson, ND, presented on delivering homeopathic medicine to an underserved population at the Joint American Homeopathic Conference in Arizona.

The recently completed Health Sciences Collaborative Research Lab is located on the third floor of Dana Hall, across from the University of Bridgeport Collaborative Biomedical Research Center (UB-CBRC) Lab. This newly-constructed Health Sciences Lab is 825 square feet and was created in consultation with the UBCNM Dean and Research Director, and is designed for the use of faculty and students in the Division of Health Sciences (Appendix VIII-G). It is equipped with:

- Variable-Speed Centrifuge
- Desiccator Jar, 234mm OD, 198mm ID
- Heated Bath 5L capacity; 120V 50/60Hz, 2.5A; With acrylic cover
- Hotplate/Stirrers :Troemner\* Talboys\* Hotplate/Stirrer Troemner No.:953202
- Vortexer, Fisher Scientific\* miniRot
- Refrigerator/Freezer
- Laminar Flow Hood 103.5 x 76.4 x 128 cm (403/4 x 30 x 503/8") 171 kg (377 lbs.) 0.9 m (3') AVC-3D2
- CO2 Incubator Stand-Alone Single Incubator, Right-Hinged Door 115V, 60Hz, 1200W 150 L (5.3 cu. ft.) 7° above ambient to 50°C (122°F) 9040-0057
- Sub Zero Freezer Capacity: 13 cu. ft. (368.1L); Holds 240 boxes; 115V/60Hz; 16A
- Cylinder regulator for CO2, Fisherbrand\* Multistage Cylinder Regulators
- Autoclave
- Spectrophotometer
- Light Microscope
- Microbial incubator
- Fume Hood

Students are encouraged to submit ideas and are supported in their efforts in research and writing for publications such as NDNR. One example of a successful effort is the NDNR publication of third-year student Radley Ramdhan's article, "PTSD: Using a Naturopathic Approach to Understand & Treat the Disorder," in June 2016.

Some students enter the program with research and publication backgrounds, and in addition to their own interest and further development in research, they consciously serve to encourage classmates and model for them their skills and talents in research and scholarly activities.

Research activities conducted through UBCNM are in accordance with the University's policies, legal requirements, and accepted practices. A research study, led by CNM faculty member Kimberly Sanders, ND, is an example in which the program demonstrates compliance with University policies, external legal requirements, and accepted practices. This multi-center, multi-national clinical study has been spearheaded by UBCNM and provided the opportunity for other ND programs to participate. The concept for a multi-center project was initially promoted in the 2016-2017 academic year by Bastyr University's past President Charles "Mac" Powell, and UBCNM offered to help move a collaborative study forward. Dr. Sanders developed the IRB-approved protocol utilized for this study, and Boucher Institute of Naturopathic Medicine in Vancouver, Canada, used the UB IRB approval process, and is participating in the study with us, through that process. Bastyr University submitted a parallel protocol to their IRB with the plan to proceed with the study. We will compile the data for three (3) sites, with two (2) sites using the same protocol. We anticipate that by the end of the project late in the Spring 2018 term, UB will have 30-40 patients enrolled and the study will be completed. The protocol for this study is found in the Appendix VIII-H.

The research project employs a well-accepted survey to "evaluate a change in patient-reported outcome measures regarding health-related quality of life in patients after three months of individualized naturopathic care in the University of Bridgeport, College of Naturopathic Medicine (UBCNM) and Boucher Institute of Naturopathic Medicine (BINM) clinics. Research question: Is three months of naturopathic care associated with a significant change in health-related quality of life in patients visiting a naturopathic clinic?"

Funds for research derived from external grants, contracts, and other sources are monitored and expended. Funds received are segregated into restricted accounts, each with a unique department account name. Fund receipt and expenditure requests are monitored as required. These funds are self-audited annually, through contracted services. A separate audit, Federal Single Audit (previously known as A-133 Audit), is performed for federally-funded research programs.

The University's Office of Sponsored Research and Programs and the IRB serve as the resource for policies, external legal requirements, and adopted and sponsored research policies. The University's Division of Graduate Studies and Research does not have a Data and Safety Monitoring Board.

The UBCNM Research Committee, comprised of faculty members, program administrators, and a student representative, is led by the UBCNM Research Director. The committee meets approximately twice each semester, to discuss new project ideas, updates on current projects, and address inquiries regarding research proposals. Matters related to research initiatives such as Seed Money Grants and IRB

requirements are also topics of discussion in research meetings. Faculty are encouraged to seek funding for research from a variety of sources. The University provides training on grant writing and shares information on sources of funding (Appendices VIII-I and VIII-J).

Every research project is overseen by a designated faculty member. The Research Director is consulted on most projects, and provides support and serves as a resource for those projects that go through the IRB process.

The University has an IRB that is registered with the U.S. Department of Health and Human Services Office of Human Research Protections (OHRP), and UB has an active Federal Wide Assurance. The IRB ensures adequate protection of subjects and addresses the issues of medical ethics. The board consists of fifteen (15) members, including one (1) community member, and functions to review and approve all research using human subjects at the University of Bridgeport. Such research activities must be approved by the IRB prior to the collection of any data or conducting any experiments. Eugene Zampieron, ND, a full-time faculty member of the College of Naturopathic Medicine, has been a member of the University IRB since 2013.

The University has now registered the Institutional Biosafety Committee (IBC) with The National Institute of Health Office of Science Policy. UB is registered in ClinicalTrials.gov, and UB has a federally-negotiated indirect rate. Christine Hempowicz, EdD, the Director of the Office of Sponsored Research and Programs, is a Certified Research Administrator, a designation given by the Research Administrators Certification Council. Dr. Hempowicz provides support to University faculty members interested in and participating in sponsored research.

The University of Bridgeport subscribes to the *1940 Statement of Principles on Academic Freedom and Tenure* and *1970 Interpretive Comments* issued thereon, an excerpt of which follows:

1. Teachers are entitled to full freedom in research and in the publication of the results, subject to the adequate performance of their other academic duties; but research for pecuniary return should be based upon an understanding with the authorities of the institution.
2. Teachers are entitled to freedom in the classroom in discussing their subject, but they should be careful not to introduce into their teaching controversial matter which has no relation to their subject. Limitations of academic freedom because of religious or other aims of the institution should be clearly stated in writing at the time of the appointment.
3. College and university teachers are citizens, members of a learned profession, and officers of an educational institution. When they speak or write as citizens, they should be free from institutional censorship or discipline, but their special position in the community imposes special

obligations. As scholars and educational officers, they should remember that the public may judge their profession and their institution by their utterances. Hence they should at all times be accurate, should exercise appropriate restraint, should show respect for the opinions of others, and should make every effort to indicate that they are not speaking for the institution.

The full Academic Freedom policies for the University are found in the Faculty Handbook, which is in Appendix II-R.

In addition to policies surrounding academic freedom, university policies and procedures regarding research include:

- Responsible Conduct of Research
- Human Research Protection Program Plan
- UB Investigator Financial Interest Disclosure policy for PHS Applications for Research Funding
- Policy and Procedures for Responding to Allegations of Research Misconduct

These can be found in Appendices VIII-K, VIII-L, VIII-M, and VIII-N.

The Faculty Research Council (FRC) is comprised of faculty representatives from UB's colleges, schools, and institutes. The Council is responsible for awarding funds through the Seed Money Grant Program, establishing the University's Intellectual Property Policy, and overseeing the IRB. The FRC sponsors Faculty Research Day.

Faculty representatives on the FRC:

Arts & Sciences	Kathleen Engelmann, Ph.D. Co-Chair of the Faculty Research Council
Business	Congsheng Wu, PhD
Education	Joanna Badara, PhD
Engineering	Jeongkyu Lee, PhD
Health Sciences	Emmett Hughes, DC Barry Kendler, PhD Mark Mattie, PhD
College of Public and International Affairs	Robert Riggs, PhD Co-Chair of the Faculty Research Council
Members-at-large	Wendy Garcia, RDH, EdD Kevin Kelliher, PhD

The University supports a Seed Money Grant Program which has been established to provide funding for initial research, the results of which are to be used to develop a grant application to one or more federal, state, or private funders.

The University hosts a Faculty Research Day, a day-long, annual event which showcases the current research of UB faculty and students through poster presentations and breakout sessions. A keynote speaker highlights the luncheon. UB faculty, undergraduate, and graduate student posters compete for awards. See Appendix VIII-O for the poster presentations by students of the College of Naturopathic Medicine for the 2018 Faculty Research Day.

One example of the creative acquisition of resources is the donation to the University of a bus and resources to outfit the bus for STEM instruction in local high schools. The College is in the initial stages of exploring obtaining another bus to be used as a mobile clinic. Much like most schools and universities, UB research staff and faculty would like to have additional funds for faculty to publish, and to expand the research budget. As detailed earlier in this document, the Health Sciences Division has a new research facility, completed in the 2017 Fall semester, equipped with a host of new research tools.

The University engaged an outside consulting firm to assist in developing a blueprint for implementing a clinical research infrastructure at UB that complements existing and planned endeavors across preclinical, clinical case report, and clinical trial research domains. The blueprint has been developed, and the university continues its search for a director to lead the program. More information on the blueprint is found in the Site Team Workroom.

The University provides a weekly Release Day for full time faculty, intended to be used to enhance their expertise in their field through medical practice, research, and a wide variety of strategies for learning. Faculty are actively encouraged to pursue research activities, and are provided support as requested, to the extent possible. Funds are available for research projects, and in recent years, every request for equipment has been filled, with resources provided either directly through the UBCNM program or through the Division of Health Sciences. In the past year, the Dean of the School of Engineering and Senior Vice President of Graduate Studies and Research have led preliminary discussions regarding awarding credits attributed to teaching load, along with faculty responsibilities, for research. This has been presented as a proposal to explore, and will take much more planning and discussion, as well as dedication of significant financial resources, prior to implementation. The UBCNM Director of Research is provided credit hours dedicated to that position.

UBCNM program funds are available for faculty development, and may be used for development of research skills. The Division of Graduate Studies and Research provides leadership, guidance, and management for graduate programming and sponsored research at the University of Bridgeport. The Division serves as a liaison for graduate faculty, staff, and students with external agencies and organizations as well as UB departments. Support is provided to facilitate grant writing and management

of grant awards in order to advance research activities at the University. The Division provides faculty with seed money to encourage early-stage research coupled with efforts to secure federal, state and other grants. The Division is also responsible for the management of graduate student assistantships and scholarships.

Participation in research is demonstrated through a variety of activities in the classroom, through the research and thesis courses, participation in Faculty Research Day, Research in Progress (RIP) program, collaboration with other programs on the UB campus such as the collaboration of Dr. Sanders of UBCNM and Dr. Lyon of the UB College of Chiropractic, and promotion of the projects through the UBCNM Research Committee. The current research projects include Mucositis, Glyphosate, and Naturopathic Outcomes. Summaries of these projects are found in Appendix VIII-P, VIII-Q, and VIII-H.

The University of Bridgeport is a member of the Consortium of Evidence-Informed Practice Educators (CEIPE) which produces the faculty-focused *Savvy Practitioner* newsletter. Faculty are encouraged to join and use the CEIPE web site where they can share resources for teaching evidence-informed practice. Samples of these newsletters are found in Appendix VIII-R.

The Program continues to support efforts of the didactic faculty to incorporate research opportunities in the classroom, through community-based support and through faculty development opportunities.

## STANDARD IX

### Library and Learning Resources

With new databases added since 2013, the Wahlstrom Library now boasts over 300,000 digital books, more than 60,000 e-journals, and close to 100 electronic databases at a cost of approximately \$600,000 a year. New annual subscriptions, costing more than \$350 a year, are requested by faculty, approved by the appropriate Dean, then added to the library budget request for the upcoming budget year. Over the past four years, 90% of what department Deans requested was approved and funded. Since today's students expect the University library to subscribe to everything they may need, and waiting for a resource to come in via Interlibrary Loan seems excessive to them, the library also has deposit accounts with several vendors and publishers to purchase individual articles for seldom-needed publications. This is also seamless to the user because of the Digital Library software. Students don't even know they are ordering an article that the University pays for instead of accessing a journal subscription. (Appendix IX-A, Library Database Descriptions)

In addition to the resources available at the Wahlstrom Library, UBCNM maintains a small library of clinical texts on the 8<sup>th</sup> floor of the Health Sciences Center. The bulk of the collection is kept in open shelving in a clinic conference room. The books were cataloged and labeled in 2016, and staff and student workers organized them by category and labeled the shelves. These texts are available for any clinic student to use at any time the clinic floor is open.

A small collection of more expensive texts was being kept in a locked shelf in another clinic conference room. The initial plan was for students to access these texts by request, with the shift supervisor, clinic coordinator, or another UBCNM staff member holding the key and signing out the books. In practice, these books were rarely used, perhaps because they were housed in a solid front cabinet and thus were not easily visible to students, and as a result were moved to the clinic library for ease of use.

A third collection of homeopathy textbooks is housed in another clinic conference room (836) which is used for homeopathy rotations.

The texts housed in the UBCNM Clinic libraries were acquired through purchase and donations. The Dean and faculty review the collection at intervals to remove battered texts and assess needs for new texts.

There are no perceived weaknesses in library and learning resources, and in fact they are found to be a strength in the program.

Students rely heavily on electronic resources. As the Wahlstrom Library expands the e-resource collection, there are more opportunities to use databases and references that are free and simple to access

for students and faculty. As with any new technology, there is a learning curve involved, and UB Health Sciences librarian Rebecca Dowgiert is a regular instructor at new student orientation, faculty development, and research courses throughout the curriculum.

Several years ago, a librarian taught an entire one to two credit class in each of the health science schools on Evidence-Based Practice, but students were unhappy learning this subject from a librarian instead of a practicing physician. To remedy this, librarians began to team-teach the course for one semester with a faculty member, then left subsequent semesters up to that faculty member. Now, librarians are available for periodic updating, but department faculty are responsible for most of the instruction. In the most 2015 Student Library Survey, students were happier with the current Information Literacy practices. The survey is available on UB website:

[http://www.bridgeport.edu/docs/temp/library/html/about/survey\\_results.html](http://www.bridgeport.edu/docs/temp/library/html/about/survey_results.html).

Librarians are typically available in the library, online, or via the phone 103 hours a week during the academic year, with additional hours for midterms and finals. This means that if a student has a question at midnight or Sunday afternoon, a degreed librarian is on duty to assist. One of our 5.75 FTE degreed librarians also specializes in the health sciences. Rebecca Dowgiert has worked for the university library for nine years, but worked in medical labs for decades before changing professions. She works closely with each of the Health Science programs, keeps the Evidence-Based Instruction pages of the website up to date, and meets with each new student to introduce them to library resources as their first semester at UB begins. Rebecca also publishes an e-newsletter each semester, sharing information about new subscriptions or features with the Health Science community.

The librarians attend professional development on new teaching and instructional methods regularly. Last year, the American Library Association offered workshops on their new Information Literacy Framework, and Matthew Schirano, our Instruction and Information Literacy Librarian, attended these workshops. Matthew is also working towards an M.S. in Educational Technology, has attended workshops on the Flipped Classroom and Understanding by Design, attended the LoEX annual conference entitled “Brick & Click” in 2016, and will attend the 9<sup>th</sup> annual International Evidence Based Library & Information Practice Conference entitled, “Embedding and Embracing Evidence” June 18<sup>th</sup> through the 21<sup>st</sup> this year. The Library Director, Deb Dulepski, attends roughly 180 hours of training each year. The library also belongs to OCLC, DOCLINE, the Chiropractic Library Consortium, the Academic Collaborative for Integrative Health, WALDO, the Ex Libris Users Group, the Northeast Library Information Literacy Group, and the Connecticut Library Consortium. Individual librarians are members of the Association of College & Research Libraries, the American Library Association, and Library Orientation Exchange (LOEX).

From the 2015 Student Library Survey, 64% of those surveyed were satisfied with the library staff; 31% felt neutral; and only 7% were dissatisfied with the library staffing; 363 students answered that they visited the library at least once a week; and 223 students visit the library 1-2 times a day or more. Students listed their reasons for visiting the library as: to study, eat, use a computer, copy or print, meet with classmates, meet a friend, use a study room, get help with an assignment, look for articles or books online, use WiFi or charge a device, or see if the library has their textbook (in this order). Students were mostly satisfied with the amount of full-text available, and said that books, e-books and articles in full-text were the most important things to them. Students were not as satisfied with the copier/printers in the library, the computers, noise in the quiet study areas, and the number of study rooms available. The library has replaced our copier/printer vendor since the survey was completed and we have added an additional 26 computers. Whereas we offered 54 computers in 2013, we now offer 80 computers in the library for student use, many with Solid State Drives to increase speed and responsiveness. If all 80 computers are in use, the library also has 20 loaner laptops, and students can reserve the Discovery Pavilion, an interactive presentation space with projector, screen, computer, and DVD player.

By early 2013, the library had renovated the 1<sup>st</sup> floor information commons and half of the 2<sup>nd</sup> floor. (Appendix IX-B, Library Floor Plan). Later in 2013, four new study rooms were added to the 2<sup>nd</sup> floor. This brought the total number of study rooms available for student use to 14 plus the two Skype rooms. The Discovery Pavilion is a presentation room, as are rooms 1 & 6: complete with projectors, Smartboards, and a place to connect laptops. This year, the library also added new online reservation software for study rooms called “Dibs.”

Between 2013 and 2017, the library renovated the 4<sup>th</sup> floor and most of the 3<sup>rd</sup> floor. The 4<sup>th</sup> floor is now a Quiet floor as many students need this to study and learn. The Anatomical Models Room is also on this floor, as are the older print journals.

The 3<sup>rd</sup> floor holds all of the print book collection, an adaptive technology room for students with an auditory or visual disability, and a reflection area for anyone wanting to pray or reflect. Study carrels offer individual study, and keep noise to a minimum. Work on the 3<sup>rd</sup> floor is about 80 percent complete and additional work is expected this summer.

The 1<sup>st</sup> floor is the loudest of the floors with a lot of interactivity taking place throughout the day, especially in the café. The floors get quieter moving towards the 4<sup>th</sup> floor quiet space.

The staff side of the 2<sup>nd</sup> floor, which the library staff share with the IT department, is also scheduled for upcoming renovations, and the 1<sup>st</sup> floor of the library will soon become the new home of the onsite IT Help Desk.

Department goals of the Library, Schools and academic departments are coordinated within the Provost's office. The Library has an Advisory Committee with one member from each school or department that advises the Library on long-term and short-term needs, strategic planning, priorities, resources, and Information Literacy instruction. The Information Literacy Librarian is a member of the General Education Committee and advises on Information Literacy-related issues in course creation, syllabus creation, revision of courses, and the design of the Core Curriculum. A Library representative also regularly attends the Faculty Council and the University Senate, and the University Librarian serves on the Provost's Council.

One way that the library shares information with faculty and staff of the university is through use of the Information Literacy team site. This site lists usage statistics for the Digital Library and individual databases, new purchases, and a copy of the Library budget. For example, site visitors could learn that 176,488 searches were run from the Digital Library main search screen in 2016.

From this site, faculty can also learn more about the costs and utilization rates of resources, as well as access forms to order new resources, request a class, put an item on reserve or request an in-person consultation with a librarian. A login to this site, as well as a login to use the Digital Library, can be provided on request.

Deborah Dulepski is the University Librarian, Library Administration. Her résumé is found in Appendix IX.

## **Standard X**

### **Physical Resources**

#### Computer and Information Technology

The University runs an in-house Information Technology (IT) group to maintain and develop its IT infrastructure and provide technology services to students, staff, and faculty. After many years of using an outsourced IT shop, the University decided to bring IT in-house starting July 2013. This massive process included documentation build-out, planning an optimal Organizational Chart, hiring, training, and knowledge transfer.

To provide a timely response and create a global presence of availability, the University engaged with a tier-1 help-desk facility to be able to provide timely response to all University students, faculty, and staff 24 hours a day, 7 days a week, 365 days a year.

All University buildings are connected using a dual redundant single-mode fiber plant carrying 2 Gigabit Ethernet to the core network system. The University is hosting most of its services in a datacenter located on the main campus. The datacenter is running a redundant, dual core Cisco 6509-E switch cluster with redundant connectivity to every location on campus.

The University main Internet feed grew from a dual T1 feed (load balanced 3MBps) to a redundant, dual-homed 1300MBps MetroEther. Both connections are BGP redundant with an automatic fail-over. The University has its own routable network block and is advertising its own routes on the Internet. Direct Connection to the Connecticut Education Network provides access to the Internet2 network. The University Internet links are protected with a Palo-Alto redundant firewall cluster. The system rule-set is adjusted on regular basis to make sure academic priorities and legal compliance are being followed. The firewall is also implementing a DMZ where the University Portal and other public-facing web services are hosted.

The University Data Center is hosted on campus and carries the majority of services on rack-mounted servers. The Data Center contains about 10 standalone servers and two clustered, fully populated and redundant blade centers. The Data Center went through two generations of central storage. More than 90% of the services hosted in the Data Center are run in a VMWare virtual environment. More than 200 active virtual servers are running in the environment and utilize about 40% of the computer resources. The architecture allows for maintenance of the servers with minimal-to-no downtime. Critical services are fully redundant and allow zero-downtime maintenance.

The University web site is hosted off-site in a commercial data center. The site is run off two redundant, load-balanced, cache servers. Hosting the main web site off the main campus was done to provide an additional layer of resiliency for such a critical communication channel.

All network addressable devices (close to 500) residing on the enterprise network and most network-based services (about 700) are being continuously monitored. Any critical failure is immediately communicated electronically to the technical teams and to the help-desk service for 24x7x365 escalation and follow-up resolution. The data center power distribution system is utilizing a 40KVA APC UPS and a 40KVA natural gas generator, allowing it to continue to run during extended power outage periods. The data center environmental control system is comprised out of a 7.5T AC unit, supported by the generator and an additional 10T AC unit that maintains the datacenter temperature during non-emergency conditions.

A special attention was given in recent years to enhancing collaboration and work place efficiency. All University employees are assigned a net account that provides access to collaboration systems such as Windows shares, SharePoint Portal, Microsoft Exchange 2016, and Canvas® LMS. The collaboration effort was also expanded to students who are currently provided with a Google-based email and collaboration system with a 25GB storage and 5GB cloud drive capacity. Students can keep their Google account after graduation. The same account is used through SAML2 single-sign-on for accessing many services such as the SharePoint Portal, and the Canvas® LMS.

The University owns and operates more than 2,000 PCs across all campuses. Systems are deployed in faculty and staff offices, more than 40 labs, and social and learning spaces. All University equipment is part of an annual technology refresh plan. Active systems go through a FIFO lifecycle evaluation, optionally get updated, re-purposed, and then recycled after a 4-5-year mark.

UB utilizes Canvas®, a state-of-the-art Learning Management System. A Canvas® shell is provided each semester for every course at UB, both on-campus and online. Instructure hosts Canvas® as a subscription service on the state-of-the-technology cloud infrastructure of Amazon Web Services (AWS). Within Canvas®, faculty can easily upload course materials, create opportunities for student interaction, and perform a variety of assessments.

Training and support for Canvas® is provided by technology staff. Faculty can request individual training, or choose from a selection of online tutorials and documentation. A help desk is also available to provide technical assistance 24 hours a day, 7 days a week.

Instructure's comprehensive implementation and hosting services include full system monitoring, automated provisioning, and "hands-free" update/upgrade services. Within Canvas®, faculty can easily upload course materials, create opportunities for student interaction, and perform a variety of assessments. Canvas® shells revert to a read-only status upon conclusion of the semester, with records of student activity and coursework remaining intact. Courses can easily be reactivated upon request to allow for review of student records.

Additional teaching and learning technologies are also integrated into Canvas® and available in all courses, including Blackboard Collaborate™ (video conferencing), Panopto (video recording and editing), Respondus® Lockdown Browser and Monitor (a custom browser and webcam which secure the testing environment. Students are unable to copy, print, access other applications, or visit other websites during an online exam.), and Turnitin® (plagiarism prevention & detection).

UB has increased its technological capacity, creating a wired campus that serves the needs of all University constituencies. Campus data security is in the capable hands of the IT staff, and the core IT infrastructure is secure under watchful maintenance. Family Educational Rights and Privacy Act (FERPA) compliance and data integrity are managed and monitored through appropriate policies and control of access privileges. Files describing these protocols are available as onsite exhibits in the workroom.

During the 2017-2018 academic year, an Academic Technology department was developed to specifically address the needs of the classroom instructors as well as clinical needs. The leadership within this department was proactive in seeking solutions to ever evolving challenges in the classroom and clinic. Further details on information technology functionality may be found in Appendix X-A.

Each full-time faculty member has an office, equipped with computer technology, in which to research and prepare for their courses, evaluate student work, and meet with students as needed. Staff offices are located on the same floor of the Health Sciences Center, and are centrally located for ease of access to faculty and students. Adjunct faculty are provided an office space, shared with the Resident, on the 8<sup>th</sup> floor of the Health Sciences Center. There is a conference room on the 6<sup>th</sup> floor, used for committee meetings and other faculty and staff meetings. These facilities are sufficient for and meet the needs of the Program.

Also on the 6<sup>th</sup> floor of the Health Sciences Center, students are provided an intimate space for their internal mailboxes, with two computers, a refrigerator, microwave oven, and toaster ovens. For groups larger than three or four, there are numerous and varied spaces available in the University library.

Students have access to lounge facilities in the Cox Student Center, Eleanor Naylor Dana (END) Hall, and Wahlstrom Library building.

The facilities are of adequate size for the student clinician teams (Primary and Secondary Student Clinicians), and they allow for the clinical training to achieve the Program's mission and objectives. The equipment inventory is sufficient to provide ample, diverse, and effective experiences in terms of diagnostic and therapeutic activities. With a total of 17 exam rooms plus a hydrotherapy suite, four of these rooms are equipped with gynecology tables, and three have adjusting tables for the physical medicine rotations. Our three conference rooms provide a comfortable space for our supervisors and student clinician teams, allowing for three to four rotations to run simultaneously.

The adjunct faculty room, which serves as the current ND Resident's office, also holds 35 clinic laptops in locked cabinets. These laptops are used to chart patient medical records using the EMR system, and are able to print wirelessly to the clinic printers.

Each conference room is equipped with three desktop computers, which also run the EMR system. All conference rooms are equipped with laser printers, used to print patient instructions and other materials needed for the clinic shifts.

A large storage room houses various diagnostic and therapeutic equipment and supplies, such as the ECG, ultrasound, phototherapy, infrared, massage equipment, and supplies for IV therapy.

The clinic library is located in room 800 of the Health Sciences Center. The library holds hundreds of reference texts, classified by specialty. There is an additional homeopathy library in room 836, the conference room used for homeopathy and mind/body rotations. Room 832 is equipped with a new remote-viewing system for conducting patient interviews in homeopathy and mind/body rotations, giving students opportunity to participate in the case being addressed.

The spacious hydrotherapy suite has three tables for performing constitutional and hydrotherapy treatments, two infrared sauna units, one Russian steam bath, and an immersion tub used for peat/ice baths.

The Program's facilities are owned by the institution. The College of Naturopathic Medicine utilizes a number of the classroom buildings and other facilities, all owned and operated by the University. The Health Science Center houses the Naturopathic Clinic on the 8<sup>th</sup> floor, and faculty and staff offices, the student computer and mail room, a faculty copy and mail room, a conference room, a faculty and staff kitchen, and the Herbarium on the 6<sup>th</sup> floor, and the Dispensary on the 1<sup>st</sup> floor. END Hall, directly across the street from the Health Science Center, provides classrooms as well as training labs for the physical

exam and physical medicine courses. The College of Chiropractic building provides a large lecture hall and training labs for physical medicine utilized by the College of Naturopathic Medicine. Dana Hall houses the Dissection Lab, additional classrooms, a large lecture hall, and the new Health Sciences Research Lab, as well as the Collaborative Biomedical Research Center. Mandeville Hall also provides a number of classrooms to the program, in addition to a lecture hall commonly used for Grand Rounds, All School Meetings, and similar events by the program.

Classrooms are equipped with white boards and audio/visual connections for computerized presentations. Facilities are well equipped to support the delivery of curriculum. The most common concern expressed by students is the limited number of charging stations for their computers in some of the classrooms. Plans are underway throughout campus for replacement furniture with new tables that have built-in power outlets.

The physical resources for each building are managed and coordinated between the Facilities group and the Program coordinator. Needs related to reserving classroom space, building access, appropriate heating and cooling, and classroom technology are all planned and addressed in advance of each semester. Campus faculty are advised of the facilities assigned to them for their scheduled class dates.

The University campus encompasses 53 acres. Overseeing this real estate requires assistance from areas of multiple expertise. Facilities management functions are delivered through a contractual agreement with a consultant, Cushman & Wakefield, who serves as the Building and Grounds Department responsible for maintenance and repairs on campus. Their expertise and knowledge ensures compliance with all applicable federal, state, and local fire, safety, health, and accessibility laws and regulations.

Three times a year the Vice President for Facilities meets with the Facilities Planning Committee, comprised of the Provost; the Chief Financial Officer; the Chief Information Officer; the Vice President for Health Sciences; the Associate Vice President for Graduate Studies and Research; Computer Science and Engineering; the Executive Director of Planning and Operations; the Director of Facilities; Dean of Students; the Executive Director of Housing, Residential Life, and Community Standards; and the Registrar.

The committee addresses the needs brought to its attention by the Deans of the colleges, schools, and institutes as a precursor to strategic planning, including funding new construction and renovation through setting targets for the annual capital budget, loans, gifts, and grants. In November 2016, Robert Cottle joined the University as Vice President for University Relations. In his new position at UB, Mr. Cottle leads and oversees various development and fundraising campaigns at the University as it prepares to undertake the first phase of a newly announced campus master plan.

The University hired the Sasaki Associates planning firm to initiate a campus master plan in fall 2015. The Board of Trustees adopted the plan in the spring of 2017. The plan outlines the University's vision for short- and long-term projects. Because of their proprietary interactive engagement tools, Sasaki was ultimately selected from a field of three very experienced firms. They initiated extensive solicitation of the community through online surveys and presented several open forums to determine University and community priorities. Three themes emerged and were identified as short-term priorities. The first was the student desire to have additional options for recreation. The plan calls for an expansion of the fieldhouse facility to support a fitness center as well as other active recreation facilities. The second was a new building to support the growth in the engineering school, and the third was a new health sciences building to house the new school of nursing and support growth in our other health sciences programs.

Campus safety is well-managed and compliant with regulations. The University makes a substantial investment in the safety, well-being, and security of students, faculty, and staff. A safety committee is charged with monitoring campus safety issues and ensuring that any problems are resolved. Security services are outsourced to Securitas, whose director is a UB employee and is supervised by the Vice President for Facilities. Each student and each faculty and staff member is provided with a Personal Alarm Locator (PAL). Activation of the device in a health or safety emergency within the campus perimeter summons immediate assistance from Securitas personnel. In addition, escorts are provided on request 24 hours a day, 7 days a week. A regularly scheduled shuttle service provides access to shopping centers and to the train, ferry, and bus stations. The University also contracts with the Greater Bridgeport Transportation Authority to provide unlimited bus transportation at no charge to students, with two bus lines serving the campus. UB operates an emergency notification system that may be activated to contact the entire campus community in the event of an issue of grave import. As renovation occurs, building compliance with health and safety codes and regulations is ensured.

The University has worked independently and with its community partners to improve the campus environment and the surrounding neighborhood. In 2011, the University received an award from the Hartford Insurance Company for controlling and reducing its workers' compensation claims, in part through the work of the University's Safety Committee established a few years earlier. At present, the Bridgeport Police Department maintains a substation in the Security office. To enhance campus safety, video surveillance cameras were added in residence hall corridors and at their entrances, on athletic fields, and in parking lots.

The 2017 University of Bridgeport Emergency Response Plan is found in Appendix X-B. The Plan is an "All Hazards Approach" to emergencies, providing broad guidelines for managing emergencies with specific emergency management functions. The basic emergency procedures in the document are

designed to protect lives and safeguard property using campus and/or community resources. Emergency situations can and will arise without warning and the emergency response plan is designed to accommodate a variety of emergency situations while being flexible enough to manage various types and scales of incidents. This plan requires a thorough integration of emergency plans and an understanding that lower management level personnel are responsible to manage an incident and request additional resources as required through upper levels of management. This plan is submitted in accordance with Connecticut Public Act 13-3 Concerning Gun Violence Prevention and Children's Safety and 10a-55a Campus Crime and Security.

The 2017 Annual Security and Fire Report is found in Appendix X-C. The Report is a compilation of crime statistics and campus security policies which is provided to current students and employees as of October 1st of each year. All postsecondary institutions participating in Title IX student financial assistance programs are required to disclose campus crime statistics and security information.

Crimes reported include:

- Criminal Offenses including Criminal Homicide, which include a) Murder and Non-negligent Manslaughter, and b) Negligent Manslaughter; Sex Offenses including: a) Forcible, and b) Non-forcible; Robbery; Aggravated Assault; Burglary; Motor Vehicle Theft; and Arson.
- Hate Crimes include any of the above-mentioned offenses, and any incidents of Larceny-Theft, Simple Assault, Intimidation, or Destruction/Damage/Vandalism of Property that were motivated by bias.
- Arrests and Referrals for Disciplinary Action include Weapons (carrying, possessing, etc.), Drug Abuse Violations and Liquor Law Violations.
- VAWA-Domestic Violence, Dating Violence and Stalking.
- Fire Safety Report: related to a new law which requires any institution maintaining on-campus student housing to issue an annual fire safety report. The report includes statistics regarding the number and causes of fires, injuries, and deaths related to the fire, and value of property damage. The report also includes information related to fire safety systems, the number of regulatory mandatory fire drills, fire safety policies and education programs, and any plans for needed fire safety improvements.

The Annual Security and Fire Report is available for review in the following campus offices: Department of Campus Security, Office of Residential Life, Office of Admissions, and Department of Human Resources. The electronic address (URL) to obtain the Security and Fire Report through the University's website is: [http://www.bridgeport.edu/docs/Security/Annual\\_Security\\_Report.pdf](http://www.bridgeport.edu/docs/Security/Annual_Security_Report.pdf)

The 2017 Security Protocol Plan, found in Appendix X-D, is developed in accordance with the Connecticut General Statute § 10a-156a (formerly P.A. 13-3 Sec. 92) and Connecticut General Statute § 19a-55c, in which the University of Bridgeport must provide a Security Protocol Plan identifying current UB security policies and procedures, specifically those designed to heighten awareness (of all faculty and staff) regarding potentially at-risk students and other individuals on campus through effective educational strategies. The plan addresses the following topics:

- The identification of the administrative office responsible for security on campus
- A description of authority of security personnel, including their relationship with state and local police authorities
- Procedures for students, employees, and other persons to report crimes, emergencies, and incidents of sexual harassment occurring on campus
- Policies concerning the institution's response to such reports, including informing victims of the outcome and disciplinary proceedings
- Policy regarding sexual harassment
- Policy regarding possession, use, and sale of alcoholic beverages and controlled substances
- Policy regarding possession and use of weapons on campus
- Policy concerning identification and admission of visitors to residential housing
- Type and frequency of programs to inform residents of guest policies, particularly as to housing security and enforcement procedures.
- Procedure for notifying prospective students and new employees of availability of said document

The electronic address (URL) to obtain the report through the portal is: \_

[http://www.bridgeport.edu/docs/Security/Security\\_Protocol\\_Plan\\_2017.pdf](http://www.bridgeport.edu/docs/Security/Security_Protocol_Plan_2017.pdf)

The University stores its student and mission-critical data on an enterprise class storage system that is capable of block-level de-duplication and is connected to all the servers with redundant fiber-channel links. Two Data-Domain replication appliances and a Quantum tape library are providing advanced backup capabilities with both online and offline backup levels for all the data hosted on the data storage system. Backups are near online and are asynchronously pushed to an appliance in the Waterbury Campus to provide a remote Disaster-Recovery location for enterprise-critical data. Traffic to the application systems and to the replication backup systems is encrypted. Data at the replication backup systems in both the local and the remote site (Waterbury) is also encrypted at rest. The University utilizes Ellucian Colleague and related systems as the University Enterprise Resource Planning (ERP) system. Access to sensitive data and records in the ERP is governed by a two-factor authentication process using a hardware token and a password.

Canvas® shells revert to a read-only status upon conclusion of the semester, with records of student activity and coursework remaining intact. Courses can easily be re-activated upon request to allow for review of student records.

Instructure hosts Canvas® as a subscription service on the state-of-the-technology cloud infrastructure of Amazon Web Services (AWS). Instructure’s comprehensive implementation and hosting services include full system monitoring, automated provisioning, and “Hands-Free” update/upgrade services. Canvas® provides:

- Redundancy of computing resources with active monitoring for failure detection and automated fail-over
- Real-time performance tuning via automated provisioning of resources to respond to spikes and peak usage times to minimize performance degradation
- Data protection through data replication, backup/restore, and disaster recovery procedures
- Load balanced application servers and aggressive data caching for superior web performance
- Rolling release schedule of upgrades and updates, rarely incurring system downtime

## **Standard XI**

### **Continuing Medical Education**

The continuing education program for the University of Bridgeport, College of Naturopathic Medicine (UBCNM) offers a variety of Continuing Education (CE) accredited programs related to naturopathic medicine, which are reviewed by the Health Sciences Postgraduate Education Department and accredited by the University of Bridgeport. These include one-hour presentations that are part of UBCNM weekly Grand Rounds, and presentations at the UBCNM annual events of Philosophy Day and Vendor Day. Other continuing education courses and programs available to the naturopathic community are offered through the College of Chiropractic, School of Acupuncture, and Fones School of Dental Hygiene. The instructor of each course being considered for CE credit must complete a course syllabus which outlines the content of the course, as well as provide their Curriculum Vitae, professional license information, and complete a Financial Disclosure form (Appendix XI -A). The Health Sciences Postgraduate Education Department, under the direction of James Lehman, DC, reviews these documents before the University offers the course for CE credit.

If there is an affiliation between an instructor and a particular company or organization, the instructor must announce this at the beginning of their program.

For each program that is considered for CE credit, the committee responsible for selecting that program meets to review and determine the topics of relevance and interest to the naturopathic audience and identifies an appropriate speaker. Committees within the Naturopathic Program that meet to discuss topics and speakers include the Grand Rounds Committee, Vendor Day Committee, and Philosophy Day Committee. Each of these committees is chaired by faculty and comprised of faculty and students.

For programs that are one to two hours in length, attendees sign in at the beginning of the program. For programs that are longer than two hours, such as a program in which there is a lunch break, or a program that spans the course of a few days, an Electronic Attendance Data Scanner is used, requiring attendees to sign in daily, as well as when they return from any scheduled breaks in the program. Each attendee completes a Credit Voucher (Appendix XI-B) which they submit to the Health Sciences Postgraduate Education Department.

All who attend a CE-accredited presentation have the option to complete a Presentation Evaluation form (Appendix XI-C). This form provides the attendee with a rating scale with which to evaluate the material content, instructor, and logistics in relation to the program. These forms are kept on file at the Health Sciences Postgraduate Education Department.

Participants who attend CE presentations are mailed their CE certificates in the weeks following the presentation.

While UBCNM does permit and require students to attend Grand Rounds presentations that are offered as CE to professionals, these courses are considered to fulfill Grand Rounds requirements, and are not offered as a component of the core curriculum. Students are invited to attend other programs offered as CE to community professionals, but these programs are not part of the core curriculum or offered as elective credit. One example is the series of four classes in Advanced Topics in Homeopathy, offered to students for information and to community NDs for CE credit.

To address the needs of the naturopathic physician community, UBCNM provides CE-accredited programs for many of the weekly Grand Rounds, as well as through our annual Philosophy Day and Vendor Day. These programs are typically offered at a discounted rate for alumni of the University of Bridgeport. Moving forward, consideration will be given to offering programs for continuing education on the weekends and / or evenings. This type of scheduling will make it more convenient for naturopathic physicians who are in practice to attend CE programs offered through the University of Bridgeport.

Continuing Education offered in the last two years is found in Appendix XI-D-1. Continuing education offered in the 2018 Spring semester is found in Appendix XI-D-2.

## Policies 5 & 6

### **Representation of a Program's Relationship with the Council**

The College of Naturopathic Medicine addresses accreditation in the Student Handbook, the UB Catalog, on the UB website, and in College of Naturopathic Medicine viewbook use to market the program. The Website, the UB Catalog, and the Student Handbook provide contact information as follows:

#### UB Catalog:

The College of Naturopathic Medicine program is accredited by the Council on Naturopathic Medical Education (CNME). Their contact information is P.O. Box 178, Great Barrington, MA 01230, telephone: 413-528-8877, and email: [staff@cnme.org](mailto:staff@cnme.org).

#### Website:

The College of Naturopathic Medicine is accredited by the Council on Naturopathic Medical Education (CNME), the programmatic accrediting agency for naturopathic colleges and programs in the United States and Canada.

Council on Naturopathic Medical Education  
P.O. Box 178  
Great Barrington, MA 01230  
Phone: (413) 528-8877  
[www.cnme.org](http://www.cnme.org)

#### Student Handbook:

The College of Naturopathic Medicine is accredited by:

The Council on Naturopathic Medical Education  
PO Box 178  
244 Main Street  
Great Barrington, MA 01230  
Tel: 413.528.8877  
[www.cnme.org](http://www.cnme.org)

### **Maintaining a Record of Student Complaints**

Grievance procedures are published in the UBCNM Student Handbook and in the Key to UB.

These procedures serve as a guide for students, faculty, and administration in the process and procedures for formal complaints and grievances. Records of grievances and appeals are maintained in Student Files, in both the electronic file and the paper file. Copies of grievances as well as the actions that have been taken to resolve them are on file, dating back to 2013, will be available in the workroom for onsite review.

## **Summary**

Upon completion of the self-study, we identified our strengths and areas in need of improvement. Below are the standards that have been identified as having areas for improvement, a description of what needs to be addressed, and the schedule/timelines in which the UBCNM intends to initiate actions for improvement. The implementation of the plans to address areas in need of improvement take into account the current and anticipated financial and human resources available to the College. The schedule for implementing plans for improvement follows this summary.

### **Standard I: Program Mission and Outcomes**

The program's mission statement was revised in the 2017-2018 academic year and publication of that more recently developed mission statement will occur as we publish new documents, such as the Admissions' brochure and the Student Handbook.

The Program Outcomes and the Objectives will be reviewed and revised in the 2018-2019 academic year, alongside the Curricular Mapping analysis, and will incorporate administration, faculty, and students in the process. We believe the program has been consistent in delivery of its program Outcomes. However, we will continue to expand use of learning technologies to enhance student learning across all Outcomes.

### **Standard II: Organization, Governance and Administration**

The UBCNM student body has multiple mechanisms by which to communicate their needs to the program's administration, including an open door policy by administrators, through the class presidents, through the NSGA and NMSA, as well as representation on committees. The NSGA recently conducted a student survey, with respondents submitting anonymously, that included concerns about transparency of the administration. The NSGA President was unable to clarify what was meant by the concern, as no details were provided by the author. With this expressed concern in mind, we will continue to be present in the classroom and clinic, invite discussion and communicate news and any changes.

There are currently no other areas of concern found in this area. With a new President starting on July 1, 2018, there may be changes in some areas, and we will work with her at that time.

### **Standard III: Planning and Financial Resources**

UB will continue its work on developing an updated University Strategic Plan. The Program will continue to implement of the UBCNM Strategic Plan 2017-2022. The Health Sciences Division will continue the research options for the current EMR to be more functional, as well as search for an EMR.

#### **Standard IV: Program Faculty**

The Program administration will continue to coach faculty on enhancing their skills, both in the classroom and in the clinic. Areas of focus include:

- Alternatives to lecture format, including interactive forms of instruction
- Integration of information among classes and with clinical cases
- Use of textbooks and medical research
- Structured delivery to insure content is covered
- Effective and varied forms of assessment
- Complete and detailed medical documentation, in the classroom and in the clinic, with faculty providing detailed feedback to students in a timely manner

The Program will continue to search for one or more MD and DO providers to serve on the clinical rotations, for the purpose of providing opportunities to student to enhance their education in the use of pharmaceuticals while on a clinical rotation.

With respect to the student clinical evaluations, to improve the volume of the student feedback provided for clinical faculty, we will use paper forms of the evaluations, distributed and collected during clinic rotations. Concerns regarding time management in the clinic will be addressed with the faculty and students for whom it is a challenge. We will continue to monitor the use of the visit structure to support a timely and student-supportive approach. Concerns regarding competency in medical reasoning are being addressed in the classroom and in the clinic, and have demonstrated improvement in the 2018 clinic exams.

#### **Standard V: Student Services**

Program administrators and University Student Financial Services staff plan to work together again this year to present information to newly enrolled students on accepting student loans, and will explore additional opportunities to meet with students who are graduating to better address options in loan repayment.

The University legal counsel and Program administration are working collaboratively to address concerns related to clarity in the UBCNM Student Handbook, such as attendance and disciplinary procedures. This process will be completed before the 2018-2019 academic year begins.

The program will continue to seek ways to enhance communication with students.

#### **Standard VI: Program of Study**

The Associate Dean of Clinical Education will develop strategies to address clinical concerns regarding:

- Timely submissions of clinic syllabi

- Timely feedback to student clinicians regarding medical documentation
- Demonstration of medical reasoning
- Use of medical texts and on-line medical resources
- Clinical Faculty Development regarding documentation of the naturopathic principles in the EMR
- Visit structure and timing
- Enhanced discussion of integration of pharmaceuticals
- Patient retention
- Accurate coding
- Patient volume

The Associate Dean of Academic Affairs will work with a student group and the website manager to review and make recommendations to the Dean for enhancing the website and monitor it for updates.

The Associate Dean of Academic Affairs will continue to work with didactic faculty regarding diversity of teaching methods, as well as using the structured approach initially reviewed in the 2017-2018 academic year in the material and delivery of the systems and population courses. The ADAA will also continue to work with the Director of Planning and Assessment in addressing assessment strategies and tools with faculty members. The Dean and the ADAA, along with faculty members who teach labs, will meet and review each “lab” and determine if the label is appropriate and what changes need to be made if it is to be considered as a lab in the future.

The ADAA will lead an effort to create a plan to address ethical concerns, starting with the formation of a committee that includes faculty members, students, and administrators. The ADAA will work with faculty to create additional strategies to foster problem-solving skills, implemented in the didactic aspect of the program.

The Curricular Mapping survey information will be collated and analyzed in the 2018-2019 academic year. Based on the findings, appropriate adjustments will begin to be made in the program.

The VP of Health Sciences Division and the IT department will determine a strategy that safely allows adjunct faculty to remotely access the EMR. The VP of Health Science Division and the IT department will continue to explore and develop a plan for ways that make the current EMR more usable for its intended purposes, e.g., enhanced ability to document patients’ medical records and allow printing of the necessary components, and to allow it to be used more easily for research purposes. Alternately, a replacement system will be identified that is more user friendly, scans and preserves color documents, and allows printing to consistently be completed as requested.

**Standard VII: Assessment of Student Learning and Program Evaluation**

Clinic administration will replace electronic evaluations of clinical faculty with paper to increase the volume of responses starting 2018 Spring semester. The scope of the clinical faculty evaluations will be broadened, to include timely feedback to students on medical documentation, visit structure, patient retention, and coding accuracy. The ADCE is developing strategies to address enhancement of medical documentation in the EMR.

The program administration and faculty are reviewing the recent cohort low pass rate on NPLEX I, in conjunction to the curriculum and are in the process of identifying ways to address the low pass rate. As part of the curriculum mapping project, faculty aligned course objectives to components of the NPLEX content outlines. Once the curriculum mapping process is completed and the data are analyzed, the findings will be considered when reviewing the low pass rate on the NPLEX I examination. The Advisors are working with and coaching students to take the exam only when they have prepared for the exam, and not just to see what the exam is like.

**Standard VIII: Research and Scholarship:** The Program continues to support efforts of the didactic faculty to incorporate research opportunities in the classroom. The Vice President of Health Sciences Division has a hiring plan for a Director of Research for Health Sciences, as well as continued enhancement of laboratory facilities and equipment.

**Standard IX: Library and Learning Resources**

There are no perceived weaknesses in this area.

**Standard X: Physical Resources**

The University has plans for replacement classroom furniture with new tables with built-in power cords.

**Standard XI: Continuing Medical Education**

No concerns noted in this area.

**Synthesis and Prioritization of the Plan/Recommendations**

The Program has identified a number of areas for improvement, and has developed specific plans for some and a timeline for all, with a two-year schedule for implementing the plans as shown below table. The schedule indicates the semester and year in which particular plans will be implemented, an indication of each plan listed as “Activities,” and the responsible parties for the plans. In terms of prioritizing the plans to address areas in need of improvement, a review of the Program Outcomes and Objectives will lead the work, as they relate to the recently updated program mission, and their development will impact the work in addressing the findings in the remaining standards. This review will be initiated in Spring

2018 and will be finalized at the time that the curriculum mapping project is analyzed (i.e., Summer 2018).

The identified areas of need in student performance addressed below include both didactic and clinical education. Competencies demonstrated in research skills, exam performance, NPLEX pass rates, medical documentation, and time management reveal that the administration needs to continue to work closely with faculty members to develop enhanced instructional techniques and assessment tools in these areas. Other areas of need will be addressed individually.

### **Schedule 2018 – 2020**

<b>Semester &amp; Activities</b>	<b>Responsible Party</b>
<b>2018 Spring</b>	
• Support faculty completion of curricular map	Admin & Faculty
• Implement Revised Clinic Student Evaluation	Clinic Admin
• Implement	Academic Admin
○ Revised structure for -logies & -atrics courses	
○ Pharmacology compendia in same courses	
• Continue Assessment Coaching	ADAA & Dir. Plan & Assess
<b>2018 Summer</b>	
• Initial steps of analysis of Curricular Mapping	Administration
• Detail Strategic Plan estimated dates	Administration
• Chart Audit Review	Clinic Administration
• Research & Thesis review & revision	Admin & Thesis Faculty
• Revision of Student Handbook	Dean & Legal Counsel
• Training for HSC Disciplinary Committee	Legal Counsel
<b>2018 Fall</b>	
• Analysis of Curricular Mapping	Admin & Faculty
• Schedule class meetings	Dean
• Faculty Development to address:	Admin Team
○ Case based learning	
○ Research in the classroom	
○ Assessment tools & schedules	
○ Medical documentation	
○ Patient retention	
○ Timely submissions of clinic syllabi	

- Timely feedback to student clinicians regarding medical documentation
- Use of medical texts and on-line medical resources
- Consistency among supervising faculty members in requiring documentation of the naturopathic principles in the medical records
- Visit structure and timing
- Patient retention
- Accurate coding
- Initiate Website Student Group ADAA & Dean
- Convene Ethics Sub-Committee Dean
- Hire full time faculty member Dean
- Ongoing ADAA
  - Canvas training
  - Instructional methods
- Remote access to EMR for faculty Health Sciences VP & IT
- EMR revisions or replacement Health Sciences VP, IT, Clinic Services Admin, & UBCNM Admin

**2019 Spring**

- Ongoing: Admin Team
  - Research in the classroom
  - Assessment coaching
  - Medical documentation
- Implementing changes re curricular mapping Admin & Dir Plan & Assess
- Implement Recommendations of Website Student Group ADAA
- Create a plan to address ethical concerns ADAA

**2019 Fall**

- Faculty Development Admin & Dir Plan & Assess
  - Review and analyze NPLEX pass rates
  - Discuss hybrid learning
- Continue implementation of Curricular Mapping Admin & Dir Plan & Assess

**2020 Spring**

- Develop additional Continuing Education opportunities ADAA