

Naturopathic Medical Education
The Healing Power of Being Informed
By P. Wolfe

As President of the Boucher Institute of Naturopathic Medicine (BINM), the only accredited school of naturopathic medicine in Western Canada, I am writing to offer some clarity to the tangle of misinformation recently presented in the media concerning the education of naturopathic physicians.

Pre-Requisites

All accredited naturopathic medical schools have equivalent pre-requisites for aspiring students, specifically:

- completion of at least 3 years of pre-medical studies at an accredited university, (BINM requires a bachelor's degree);
- completion of prerequisite courses in biology, chemistry, organic chemistry, biochemistry, psychology and the humanities;
- additional recommended courses include anatomy, physics, microbiology, human physiology, genetics, sociology, statistics, cell biology, physics;
- a competitive GPA, generally 3.0 on a 4.0 scale;
- demonstrated personal qualities necessary to become a competent, caring and ethical physician (see our website for more details, www.binm.org .)

Admissions

The admissions process at BINM is stringent and competitive receiving three applications for every available seat. Applicants must provide an application form, an autobiographical essay demonstrating their commitment to naturopathic medicine, three reference letters and transcripts from all previous academic activities. Applicants meeting all eligibility requirements are interviewed by two members of our Admissions Committee looking particularly for mature individuals who have made an informed commitment to life long service and learning in naturopathic medicine, are capable of successfully completing our rigorous four year program and are prepared to engage in the interpersonal and self-reflective personal growth we believe to be essential to becoming an effective and compassionate physician. The Admissions Committee then offers seats to the top 36 most qualified and well suited individuals for our program and profession. The result is a student body that is informed and passionate about naturopathic medicine, that is academically well prepared (the average GPA of our incoming students for the past two years has been 3.25 or higher,) that has leadership qualities, initiative, perseverance and an undying commitment to bring optimal health to patients and to work toward a sustainable, accessible healthcare system for all.

Academic Curriculum

Our students need all these qualities, skills and academic background in order to succeed in our rigorous program. Naturopathic education consists of four years, 5,000 hours of full-time study – 3,500 hours in the academic portion and 1,500 in clinical training. Similar to courses taken in conventional medical school, naturopathic students study basic biomedical and clinical subjects such as: biochemistry, physiology, pathology, anatomy, microbiology, pharmacology, psychology, orthopedics, gynecology, obstetrics, dermatology, genetics, oncology, pediatrics, geriatrics as well as differential diagnosis, public health, research methods, emergency medicine and diagnostic imaging. See the table below comparing the average number of hours of basic sciences studied

by naturopathic (ND), allopathic (conventional MD) and osteopathic (DO) medical students as published in the journal, *Alternative and Complementary Therapy*.

TABLE 2

Comparison of average number of hours of basic sciences

	NATUROPATHIC	ALLOPATHIC	OSTEOPATHIC
Anatomy (gross/dissection)	350	380	362
Physiology	250	125	126
Biochemistry	125	109	103
Pharmacology	100	114	108
Pathology	125	166	152
Microbiology/immunology	175	185	125
Total hours	1125	1079	976

Source: Jensen CB. Common paths in medical education: The training of allopaths, osteopaths and naturopaths. *Altern Complement Ther* 1997; 3:276-280

In addition, ND students have thorough training in the naturopathic modalities: nutrition, botanical medicine, traditional oriental medicine and acupuncture, homeopathy, physical medicine and counseling. In each of these courses, similar to conventional medical training, BINM uses case-based problem-solving to promote integration of all relevant topics including various treatment options and pharmacological considerations.

Clinical Training

In the 3rd and 4th years of study, ND students undertake the 1,500 hour practicum component of their training, seeing patients of all ages and with a full range of health conditions, all supervised by licensed naturopathic doctors in our on-site teaching clinic and in mandatory preceptorships. A number of pre-requisites are stipulated for students entering the clinical portion of their training. These include: Level C First Aid qualification, clear criminal records check, Hepatitis vaccination and a passing grade in the clinic entrance exam. BINM also hosts an external walk-in clinic at Friends for Life, a registered charity in downtown Vancouver. This clinic provides a much needed free service to people living with life threatening conditions like cancer and HIV/AIDS, and gives our student clinicians essential experience with this population. In addition, BINM hosts a student chapter of Naturopathic Doctors International (NDI), an international medical volunteer organization by and for naturopathic physicians based in Nicaragua. BINM students volunteer with NDI annually in various developing regions, offering their skills in natural medicine and demonstrating their commitment to service.

Residency Training

Accredited naturopathic residency programs are increasing in number each year. Although the Canadian public residency system does not yet include positions for NDs, there are many private clinics and numerous American hospitals that provide residency options for naturopathic students. All accredited colleges are eager to see the number

and options for naturopathic residencies increase. The Association of Accredited Naturopathic Medical Colleges (www.aanmc.org) is already preparing for the inevitability that naturopathic residencies will become an integral part of naturopathic medical education in the very near future. Residencies maximize proficiency amongst graduates, providing students with a wide range of opportunities to apply their knowledge and engage in important research.

Research

Research is a core component of all naturopathic medical education. ND students are trained in research literacy, which enables them to critically evaluate research articles, as well as capacity, which prepares them for designing and conducting credible research. Opportunities exist in all accredited schools for students to participate in conducting evidence-based research in naturopathic medicine and therapies. There is today a considerable and growing body of evidence-based research validating naturopathic methods in peer-reviewed scientific journals. I refer readers to a few sources including the *Allied and Complementary Medicine Database*, the *Journal of Naturopathic Medicine* and to an Association of American Naturopathic Physicians (www.naturopathic.org) publication, *Naturopathic Medicine: Primary Care for the 21st Century*, which contains an excellent compendium of research into naturopathic protocols.

At BINM, although our research department is young, we are pleased to have recently received a \$.25M grant to investigate naturopathic clinical outcomes with our sister school, Canadian College of Naturopathic Medicine, in Toronto. We look forward to publishing our results at the end of the study in 2011.

Accreditation of Naturopathic Medical Education

In order for graduates of naturopathic medical schools to be eligible to be licensed in those provinces and states that have laws governing naturopathic medicine, which has included B.C. since 1923, they must sit internationally standardized Naturopathic Physicians Licensing Examinations (NPLEX). The North American Board of Naturopathic Examiners (NABNE) administers NPLEX and only students or graduates from Council on Naturopathic Medical Education (CNME) accredited schools are eligible to sit these exams.

The CNME accredits naturopathic medical programs in the U.S. and Canada. It is vested with this authority and recognized by the U.S. Department of Education as the only official reviewer and accreditor of ND schools. Please see www.cnme.org for their stringent standards that our accredited schools must meet and maintain. The CNME is also a member of the Association of Accrediting Agencies of Canada (AAAC) whose mission is "...ensuring the achievement and maintenance of reasonable and appropriate standards of education for professionals..." Other reputable accrediting agencies that belong to the AAAC include the Canadian Association of Schools of Nursing, Canadian Council for Accreditation of Pharmacy Programs, Canadian Medical Association, Commission of Dental Accreditation of Canada and the Royal College of Physicians and Surgeons of Canada.

In addition to achieving accreditation with the CNME, each ND school must also achieve local institutional accreditation which reviews everything other than the curriculum. For example, the institutional review covers the adequacy of the physical facilities and teaching resources, faculty credentials, financial stability, management and accountability, safety plans, etc. In B.C., the Private Career Training Institutions Agency

(PCTIA) performs this function for the BINM as well as for all private post-secondary career schools. As per PCTIA's website, "One of the objects of the Private Career Training Institutions Agency (PCTIA) is to establish standards of quality that must be met by accredited institutions. The Ministry of Advanced Education requires private career institutions to seek PCTIA accreditation as a precondition for StudentAid BC (student loan) designation." Access to student loans is as critical to naturopathic students as to conventional medical students and therefore maintaining BINM's PCTIA accreditation is essential.

Closing Remarks on Collaboration

I remain encouraged, despite recent divisive and misinformed comments in the media, by the many individual MDs and conventional medical school students who have open minds and are beginning to work collaboratively with naturopathic physicians and ND students. At BINM we will continue to train our students in a multidisciplinary model for healthcare and to encourage them to pursue collaborative problem-solving in preparation for the inevitable day when all qualified healthcare professionals work together for the good of our patients and for the health of our society.

Sincerely,

Patricia Wolfe, ND
President and Executive Director
Boucher Institute of Naturopathic Medicine