

REPORT TO THE COMMUNITY 2019

ADVANCING HEALTH CARE THROUGH EVIDENCE



Updating Canada's Iconic Food Guide Using an Evidence- based Approach

HASAN HUTCHINSON, PhD, ND (CLASS OF 2000)
Former Director General of the Office of Nutrition
Policy and Promotion, Health Canada

CONTENTS

2 Message from the Chair

3 Message from the President

34 CCNM Supporters

36 OICC Foundation Supporters

37 Senior Leadership Team

37 Academic and Clinical Leadership

38 Board of Governors

40 Values, Vision, Mission, and Five Ends



UPDATING CANADA'S ICONIC FOOD GUIDE USING AN EVIDENCE-BASED APPROACH

Hasan Hutchinson, PhD, ND
(Class of 2000)



HOW A GROUP-BASED MODEL OF CARE GENERATED POSITIVE HEALTH OUTCOMES FOR PATIENTS

Dr. Zeynep Uraz, ND (Class of 2006),
and Dr. Alan Vu, ND (Class of 2006)



WINNER OF PRESTIGIOUS SCHOLARSHIP HAS A WORLD OF EXPERIENCE

Daniella Remy, second-year student



EMERGING RESEARCHERS

Dr. Athanasios (Thanasi) Psihogios, ND
(Class of 2019)



COMPETITION WINNERS STUDY TRENDS TO IMPROVE NATUROPATHIC CARE FOR FIBROMYALGIA

Bisleen Attli and Christilynn Guerin,
third-year students



RESEARCH HELPS GUIDE THE FUTURE OF NATUROPATHIC TREATMENT FOR MENTAL HEALTH

Dr. Monique Aucoin, ND
(Class of 2012)



THE POWER OF GENETIC TESTING

Dr. Penny Kendall-Reed, ND
(Class of 1997)



OTHER RESEARCH PROJECTS

- Body Composition Machine
 - Maternal Health and the Microbiome
 - Lab Testing Series
-

ADVANCING HEALTH CARE THROUGH EVIDENCE

Everything we study and observe strengthens the evidence base of naturopathic medicine.

Through research, we identify our common goals and areas of interest. We connect with one another, encourage collaboration, foster scholarship, and share what we learn. And by doing these things, we become even better naturopathic doctors and researchers.

In this year's Report to the Community, we explore how CCNM graduates, NDs, and students drive the profession forward by building the evidence.

Message from the Chair

Evidence is a driver of change, and the Canadian College of Naturopathic Medicine is proud of the role that it, and its graduates, are playing in building a strong evidence base to move the profession forward.

This Report to the Community is a celebration of that success. To put this in context, it is illustrative to examine this success in light of the Ends that the College is pursuing. The Board of Governors of the College has articulated five broad goals that it has directed the College to pursue. These goals are reviewed annually, and updated as appropriate. They are:

1. **Excellence in Education:** Educate NDs on the basis of clear and focused curriculum, delivered by the most competent faculty and graduate high quality NDs.
2. **High Quality Clinical Services:** Provide high quality naturopathic care in a clinical setting, resulting in positive educational experiences for students and positive outcomes for patients and clients.
3. **Excellence in Research:** Conduct and disseminate research relevant to naturopathic medicine and help develop skills among faculty, students, and graduates that foster research activity and a culture of evidence-informed clinical practice.
4. **Leading Voice:** Increase awareness and trust of CCNM as a leading voice for naturopathic medicine.
5. **Change Agent:** Be a leader and advocate of naturopathic medicine as positive change to our health, our environment and our health-care system.

To serve as a leading voice for naturopathic medicine, it is important that we are continually building the evidence base and making others aware of the evidence that exists.

CCNM is proud of the work that alumnus Hasan Hutchinson has performed in overseeing the development of Canada's new food guide. Graduate and researcher Dr. Monique Aucoin, ND, demonstrated her excellence through her winning of the Abram Hoffer Lecture Series award on the role of B vitamins in the treatment of certain mental illnesses. Recent graduate Dr. Thanasi Psihogios, ND, was the winner of the Student Innovation Fund in 2018, and has gone on to be the research resident at the Ottawa Integrative Cancer Centre.

Graduate Dr. Penny Kendall-Reed, ND, developed GeneRX, a tool that uses algorithms to analyze combinations of genes within an individual's gene profile to provide guidance for individualized treatment protocols. Graduates Dr. Zeynep Uraz, ND, and Dr. Alan Vu, ND, had their study of a group teaching model for individuals seeking fertility treatment accepted for presentation at the European Society of Human Production and Embryology as well as for the Canadian Fertility and Andrology Society's pre-conference nursing program. CCNM also recognizes the wisdom developed by individual practitioners, and it is working to increase the students' valuing of this traditional wisdom.

This year's Report to the Community highlights many of the achievements outlined above.

The evidence base is building every day, and the College and its graduates are performing an essential role in ensuring that it does.



Dr. Colleen McQuarrie, ND
Chair of the Board

“To serve as a leading voice for naturopathic medicine, it is important that we are continually building the evidence base and making others aware of the evidence that exists.”

DR. COLLEEN McQUARRIE, ND, CHAIR OF THE BOARD



Message from the President

The evidence of safety for naturopathic care has always been strong, the evidence of efficacy is becoming increasingly strong, and the evidence of significant financial benefit to the health-care system is becoming compelling. The Canadian College of Naturopathic Medicine and its graduates are playing an increasingly important role in advancing this knowledge base.

In this Report to the Community we profile a number of our students and graduates who are contributing to this building reservoir of research. Impressively, this represents only the tip of the iceberg. CCNM is working to build a strong culture of research within the College and the profession, and I am proud of the many ways that I see that being achieved.

CCNM students, faculty and alumni research and expertise were on full display at last year's American Association of Naturopathic Physicians (AANP) convention in Portland, Oregon. Not only were a number of the speakers at the conference from CCNM, 19 of the 21 research posters accepted for presentation were from CCNM, including all 16 student-faculty posters from CCNM's Research Day 2019, an event held to highlight student research within the College.

I was invited to participate in a meeting at the RAND Corporation convened to discuss the possibility of creating a research consortium to support stronger research in complementary and integrative medicine. RAND invited leaders from naturopathic and chiropractic educational institutions across North America; CCNM was one of only nine institutions participating. As we reviewed the research activity currently underway, I was proud to see that CCNM is clearly within the top five of such research institutions in North America.

Our research culture starts with our students. In addition to the aforementioned Research Day, we have a Research Club to expose students to the various approaches to research of which they should be aware. Many students have chosen CCNM due to the studies we are engaged in.

The range of research is significant. It varies from the various quasi-pragmatic randomized controlled trials we have conducted, including the cardiovascular study published in the Canadian Medical Association Journal and the current study on type 2 diabetes, to a broad range of studies focusing on adjunctive cancer care. Thanks to the support of Atrium Innovations Inc. we have a research fellow studying the role of the microbiome in maternal and newborn health. We have researchers focusing on diet and mental health, as well.

Yes, the College is very proud of the impact its research is having, but it is wanting and planning to do more. We will be seeking additional sources of support so that we can expand into fields such as health economics and pain management.

As outlined in the Chair's letter, CCNM aims to be a leader and advocate of naturopathic medicine as positive change to our health, our environment and our health-care system. Research will be the driver that will allow us to do so.



Bob Bernhardt, PhD
President & CEO

“CCNM aims to be a leader and advocate of naturopathic medicine as positive change to our health, our environment and our health-care system. Research will be the driver that will allow us to do so.”

BOB BERNHARDT, PhD, PRESIDENT & CEO





UPDATING CANADA'S ICONIC FOOD GUIDE USING AN EVIDENCE-BASED APPROACH

CCNM graduate Hasan Hutchinson, PhD, ND
(Class of 2000), on the importance of research
in developing healthy eating policies for Canadians

The latest iteration of Canada's food guide was released to the public in January 2019. There are some notable differences between this version and its predecessors; gone is the regimented, 'one size fits all' approach to healthy eating, replaced with an entire suite of tools and resources for consumers, health-care professionals, and policymakers.

Foundationally, the largest change has been the strict adherence to using evidence-based research. And for Class

of 2000 graduate Hasan Hutchinson, research is paramount.

In his previous role as director general of the Office of Nutrition Policy and Promotion, the department at Health Canada responsible for updating the food guide, he and his team felt a huge responsibility to communicate accurate information to all Canadians.

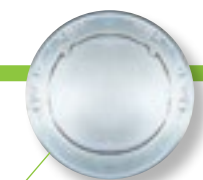
The food guide is more than a booklet – it acts as a policy piece, integrated by provincial and territorial governments

into their nutrition programs and regulations. As a result, it influences the types of foods that are served and sold in public institutions such as daycares, schools, and long-term care facilities.

"We must ensure that the health advice that we give is as up-to-date as possible and aligned with the most current evidence," Hasan explains. "Educators, dietitians, medical doctors, government officials – many of them follow the food guide's recommendations religiously."

Have plenty of
vegetables and fruits

Ensure you include
protein foods



Make water
your drink of choice

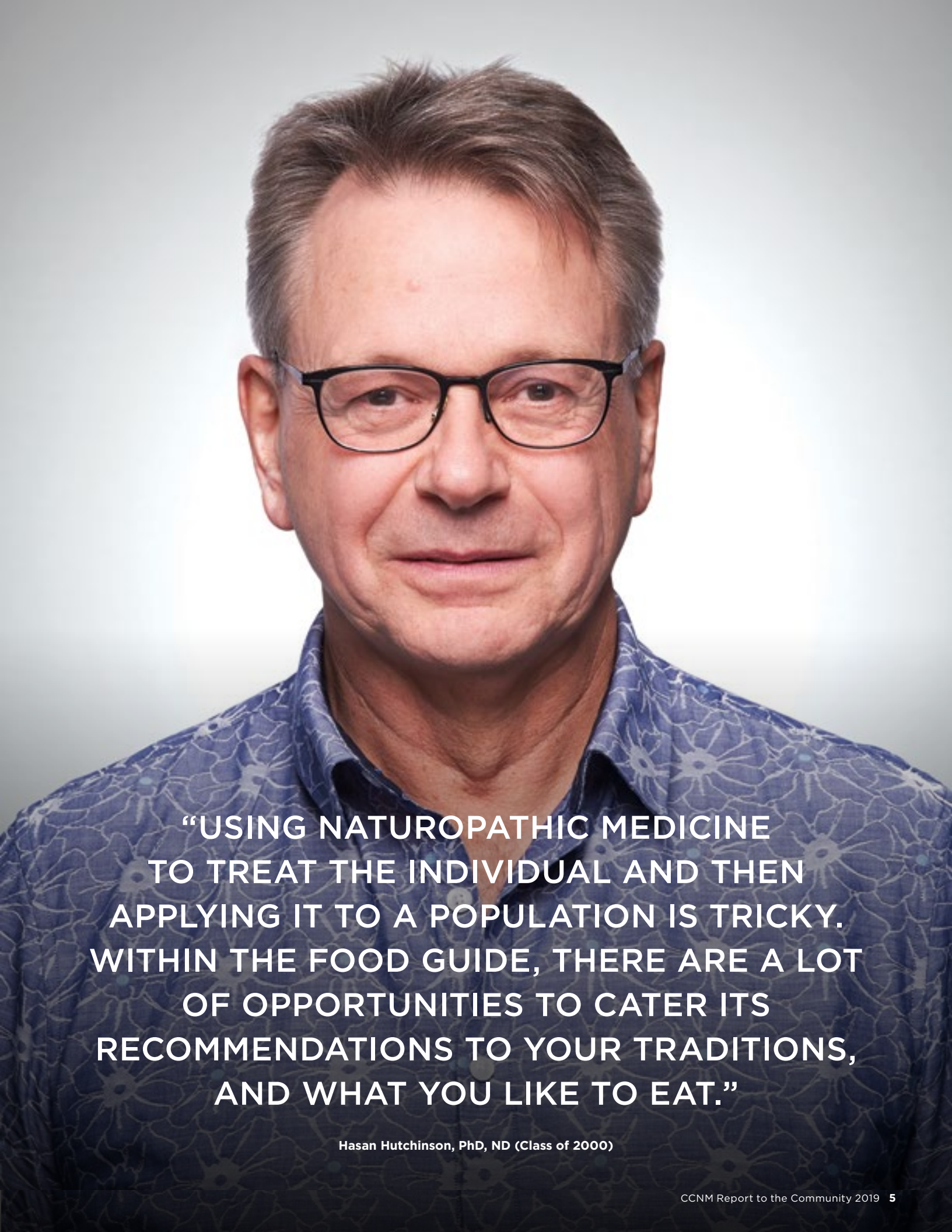
Choose
whole grains

Eat well. Live well.

Eat a variety of healthy foods each day.
Discover your food guide at:

Canada.ca/FoodGuide

Credit: Government of Canada



“USING NATUROPATHIC MEDICINE TO TREAT THE INDIVIDUAL AND THEN APPLYING IT TO A POPULATION IS TRICKY. WITHIN THE FOOD GUIDE, THERE ARE A LOT OF OPPORTUNITIES TO CATER ITS RECOMMENDATIONS TO YOUR TRADITIONS, AND WHAT YOU LIKE TO EAT.”

Hasan Hutchinson, PhD, ND (Class of 2000)

THE METHODOLOGY OF DEVELOPING CANADA'S HEALTHY EATING POLICY

Since 2007, when the last food guide was revised, new research on nutritional topics – saturated fats, sugars, sodium, and meat – has emerged. In preparation for a new food guide, the Office of Nutrition Policy and Promotion began developing its research methodology (published in 2015¹).

They gathered what they termed the 'best available evidence' from high-quality scientific reports originating from respected authorities, like the World Health Organization, the World Cancer Research Fund International, and many others.

These organizations conducted systematic reviews, measured the strength of food/health relationships, and assigned the following grades: strong, convincing evidence; probable evidence; possible evidence; or no evidence. For the first time, industry commissioned reports were excluded to remove any potential conflicts of interest.

"We set the evidence bar very high and only used strong, convincing evidence as

the groundwork for the food guide. We wanted to ensure Canadians understand that this is rooted in the strongest evidence that we have right now. Our approach ensured that any policies that we subsequently develop are informed by the best possible evidence," Hasan says.

The Office of Nutrition Policy and Promotion also consulted with various stakeholders on a quarterly basis during the development of the food guide – the provinces and territories, as well as national Indigenous organizations, professional regulatory bodies, the Canadian Cancer Society, Heart and Stroke Foundation, the Canadian Medical Association, Diabetes Canada, and several others.

During these consultations, it was quickly becoming apparent that they were creating a very different kind of food guide. "Early on, we were seeing what the problems were," Hasan says.

"We learned that health professionals need something more detailed and Canadians need something that is easier

to understand and most importantly, includes advice on how to incorporate it into their daily life."

Now, the food guide is full of healthy food recommendations and recipes, meal planning help, tips for eating at various life stages, advice for different cultural groups, dietary guidelines, and much more. Because the Office of Nutrition Policy and Promotion is continuously reviewing new research studies, the food guide is a 'living vehicle,' according to Hasan. And all of it founded on a very solid evidence base.

LIVING NATUROPATHIC MEDICINE

Hasan retired in the summer of 2019, following a four-decades long career in both academia and public policy. In addition to his ND diploma, he has a PhD in quantitative genetics and was a faculty member in the department of neurology and neurosurgery at McGill University. He then moved on to work at the Ottawa Regional Cancer Centre during the mid 1990s.

¹ www.canada.ca/en/health-canada/services/publications/food-nutrition/evidence-review-dietary-guidance-summary-results-implications-canada-food-guide.html

A TIMELINE OF CANADA'S FOOD GUIDES²

1942

The Official Food Rules, Canada's first food guide, is introduced to the public.

It recognizes the difficulty of healthy eating during wartime and recommends ways to maximize nutrition from food rations.

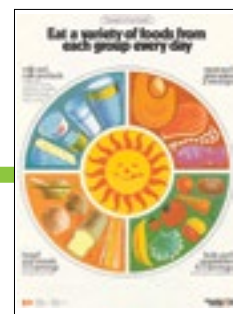


1949

Reflecting our expanding knowledge of nutrition, the food rules encourage consumption of a variety of food but still advocates for a reduction of overeating.

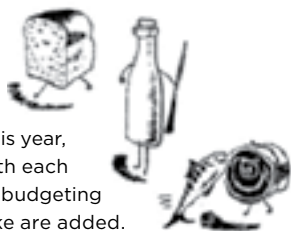
1977

The food guide is revamped based on the largest nutritional study of the country to date. The original five food groups are condensed into four: milk and milk products; meat and alternates; bread and cereals; and fruits and vegetables.



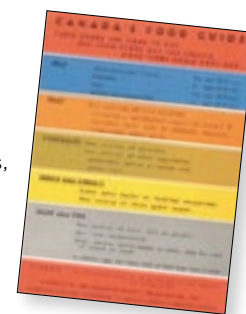
1944

The inclusion of graphics marks Canada's food rules this year, a trend that will continue with each version. Fact sheets on food budgeting and avoiding excessive intake are added.



1961

'Canada's food guide' becomes the official name. New additions include charts on food shopping, feeding infants, and meal planning, plus an emphasis on the nutrient profiles of each food group.



² www.canada.ca/en/health-canada/services/canada-food-guide/about/history-food-guide.html

Seeing the cancer patients affected him deeply, so much so that it transformed his life's direction.

“Patients were given surgery, chemotherapy or radiation – no lifestyle support, no dietary guidance, nothing holistic. It was those aspects of naturopathic medicine that were missing, and it got me thinking about changing what I was doing. Instead of continuing on as a PhD academic, I became interested in exploring naturopathic medicine,” Hasan recalls.

It was the first-year public health course at the College, taught by former CCNM professor David Berman, that triggered Hasan's interest in policy work. He still has the textbook from that class, about the determinants of health and why some people are healthy and others are not.

“I think most students, even in their first term at CCNM, wanted to start dealing with patients right away. But I was thinking, ‘This class is great. How do we change the systems so that people are healthy to start with?’ It was a huge turning point for me. Actually, my worldview really changed in that instant.”

In July 2000, two months after graduating from CCNM, he accepted a contract with Health Canada and stayed there until retirement (excluding a three-year assignment at the Canadian Institutes of Health Research from 2005–2008). In the early 2000s, there was a considerable amount of interest in complementary medicine with the establishment of the Natural Health Products Directorate (which was run at the time by Phil Waddington, Class of 1990). Hasan's diverse background – being a geneticist as well as a CCNM graduate – opened the door to policy work, but it was naturopathic medicine that knit it all together.

“I took a naturopathic approach to health wherever I worked. But using naturopathic medicine to treat the individual and then applying it to a population is tricky,” he states. “Within the food guide, there are a lot of opportunities to cater its recommendations to your background, your traditions, and what you like to eat. Basically, it's about the guidance you build into your life. People can have many different eating patterns and still be healthy. We did not want to have that type of specificity, and I think my time at CCNM influenced that.” *

In December 2019, Hasan accepted a three-year appointment at the Centre for Dialogue at Simon Fraser University.

Hasan will be involved in the creation of the food and health program at the centre to bring nutritional, environmental, and sustainability concepts together.



Hasan lives on Bowen Island, BC with his wife, Rabia Wilcox.

1982



As diet-related chronic diseases rise, the food guide shifts its goals somewhat. Nutrition is integrated with a message to moderate consumption of fat, sugar, salt, and alcohol.

1992



In this revision, the familiar rainbow graphic highlights the four food groups and emphasizes a 'total diet approach' to accommodate one's personal energy and nutrient requirements.



2019

A healthy eating lifestyle is stressed – among other things, reading food labels, eating mindfully, and cooking more often are recommended. The food guide is no longer static; new information is added regularly to help Canadians develop healthier food habits.

2007



Presented as a six-page brochure, the food guide continues its focus on food choices that reduce risks for chronic illness and obesity. Additions include spotlighting the vegetables and fruit food group, encouraging regular exercise, and a supplement for First Nations, Inuit and Métis people.



**“RESEARCH AND BUILDING
THE EVIDENCE BASE ISN’T ALWAYS
LOGISTICALLY EASY OR FEASIBLE TO DO,
BUT IT IS CLEARLY IMPORTANT. IT’S ALSO
A COMMON LANGUAGE THAT CLINICIANS USE
AND HELPS ESTABLISH PATIENT TRUST.”**

Dr. Alan Vu, ND (Class of 2006), and Dr. Zeynep Uraz, ND (Class of 2006)



HOW A GROUP-BASED MODEL OF CARE GENERATED POSITIVE HEALTH OUTCOMES FOR PATIENTS

Building the evidence base in the field of reproductive health

In the summer of 2018, Dr. Zeynep Uraz, ND, and Dr. Alan Vu, ND (both Class of 2006 graduates), embarked on a pilot study to assess the feasibility of a group teaching model on patients with infertility.

The study, conducted in partnership with Hannam Fertility Clinic in Toronto, hypothesized that evidence-based diet and lifestyle education, delivered in a group-based format, would improve the quality of life in patients undergoing fertility treatment. Their supposition proved correct; results illustrated the potential benefits of incorporating this type of learning model into a practice.

“The really cool thing about this model of care is that we know NDs are well-suited to provide this kind of service. We imagine other fertility clinics seeing the value of this model as well and choosing to have NDs run group-based diet and lifestyle programs like this, if they aren’t already,” says Alan.

IMPROVING QUALITY OF LIFE

Material was delivered to patients over six weekly sessions. Normally, infertility is thought of as an isolating experience but according to Zeynep, the group-based dynamic was valuable for the patients in the study. Overall, they enjoyed

the program material, the format, and the study results showed a quantitative (and statistically significant) decrease of their BMI and stress levels.

“This study provides a launching pad for this model of care in this population of patients who seek care at a fertility centre,” Zeynep offers. “We hope to conduct future research in this population with this care model, but so far we can say, based on qualitative feedback, that this care model was really well-received.”

Dr. Zeynep Uraz, ND, and Dr. Alan Vu, ND (both Class of 2006 graduates), embarked on a feasibility study to assess the efficacy of a group teaching model on patients with infertility.



“The really cool thing about this model of care is that we know NDs are well-suited to provide this kind of service. We imagine other fertility clinics seeing the value of this model as well and choosing to have NDs run group-based diet and lifestyle programs like this, if they aren’t already.”

DR. ALAN VU, ND (CLASS OF 2006)



PRESENTING THEIR FINDINGS

The study results were presented at the annual meeting of the European Society of Human Reproduction and Embryology, an organization that promotes study and research in reproductive health, in Vienna, Austria in June 2019.

The pair were also asked to present their findings at the Canadian Fertility & Andrology Society’s Pre-Conference Nursing Symposium in September 2019, and also had their research poster on

display. Thus far, their study has been greeted with positive interest by other health-care practitioners including medical doctors, psychologists, psychotherapists, and others.

“The more evidence we have to support our care and our profession, the more we will be respected inter-professionally. I hope to take what I have learned in my early experiences conducting research and work on future projects that will continue to build a body of evidence to help support the use of naturopathic medicine in an integrated setting,” Zeynep says.

Alan echoes Zeynep’s sentiments.

“Research and building the evidence base isn’t always logistically easy or feasible to do, but it is clearly important. It’s also a common language that clinicians use and helps establish patient trust. I was excited about being able to contribute!”

They are hoping to submit the results of their pilot study for publication shortly. *



JUNE 2019:

The study’s results were presented at the annual meeting of the European Society of Human Reproduction and Embryology (ESHRE) in

Vienna, Austria



Canadian Fertility & Andrology Society

SEPTEMBER 2019:

Dr. Vu, ND, and Dr. Uraz, ND, presented their findings at the Canadian Fertility & Andrology Society’s Pre-Conference Nursing Symposium in

Ottawa, Ontario



The evidence-based diet and lifestyle program material was delivered to patients at Hannam Fertility Clinic in a group setting during six weekly sessions.

EACH SESSION INCLUDED:

- 
 Check-in
- 
 Breathing exercise
- 
 Evidence-based educational content (diet and lifestyle related to fertility)
- 
 Moment of mindfulness
- 
 Commitment to change exercise
- 
 Supplementary materials for patients
- 
 Healthy snack options

THE RESULTS OF THE STUDY SHOWED:

Program material was rated as very useful (average = 4.67/5)

86.6%

enjoyed the group format, and all were exceptionally likely to recommend this program (median = 5, IQR = 5)

Average weight loss was

3.1 lbs

Statistically significant decreases in BMI and stress

When asked if they would recommend this program to others seeking fertility treatment the average response was

4.78 out of 5

The study was made possible through the generous donation of Nature's Way.





WINNER OF PRESTIGIOUS SCHOLARSHIP HAS A WORLD OF EXPERIENCE

For second-year student Daniella Remy, a career in naturopathic medicine was always in the cards

Few students come to CCNM with the breadth of life experience of Daniella Remy.

A citizen of the world, she is a polygot who has lived in several countries, aiming to give back and make an impact in the lives of the people around her.

In October 2019, Daniella was the first recipient of the Robert Schad Foundation Leadership Scholarship, awarded to one CCNM student in the second-year of the program. She was selected as someone who exemplifies leadership traits and is a change-maker in the community. For Daniella, leadership is a quality that comes naturally.

“Leadership, to me, means doing things wholeheartedly and encouraging others to do the same. Whether it’s being enthusiastic about the learning, taking a solution-focused approach to problems, or being proactive about making changes, I try to be engaged wherever I am and hope that my drive is contagious,” she says.

At CCNM, Daniella is the student governor, sitting on the Naturopathic Students’ Association’s executive council. In this role, she acts as the bridge between the student body and the College’s Board of Governors, striving to offer support and ensure that the student voice is heard.

“I ask myself, ‘How can I make this better?’ more often than you can imagine. The result is that I’m always aiming for positive

improvements, whether big or small, at every step of the way. CCNM is my team and I want everyone to cross the finish line.”


HOW AN INTEREST IN RESEARCH LED TO CCNM

Daniella completed her undergraduate degree in early childhood education at Ryerson University and followed that with a masters in family relations and human development at the University of Guelph. Although she had a lifelong interest in research, it was through her masters that it truly blossomed. Her interest in discovering what motivates people and how to foster supportive educational environments took her to Europe to try to uncover the ways in which populations learn in multicultural and multilingual societies.

In October 2019, Daniella was the first recipient of the Robert Schad Foundation Leadership Scholarship, awarded to one CCNM student in the second-year of the program.

Daniella was selected as someone who exemplifies leadership traits and is a change-maker in the community.



A portrait of Daniella Remy, a young woman with long, straight blonde hair, wearing a blue off-the-shoulder sweater and pearl earrings. She is smiling slightly and looking directly at the camera. The background is a plain, light-colored wall.

**“NATUROPATHIC MEDICINE
SHOULDN’T BE THE ALTERNATIVE, BUT
COMPLEMENTARY, IN PARTNERSHIP WITH
ALLOPATHIC MEDICINE. THE RAFT IS
OUR PHILOSOPHY, BUT OUR OARS MUST BE
THE EVIDENCE THAT DIRECTS US.”**

Daniella Remy, second-year student

“My experience during my decade abroad veered me into a completely different direction. Naturopathic medicine, it seems, was always in the cards for me, even if I didn’t consciously know it.”



DANIELLA REMY, SECOND-YEAR STUDENT

Originally intending to pursue a PhD to develop methods to improve the social and psychological outcomes for adolescent youth in ESL programs, Daniella instead found herself drawn to naturopathic medicine.

“My experience during my decade abroad veered me into a completely different direction. Naturopathic medicine, it seems, was always in the cards for me, even if I didn’t consciously know it,” she says.

“Between meeting key people who demonstrated its value and following my intrinsic curiosity on what drives self-improvement, it wasn’t difficult to pursue health and wellness as a passion.”

GLOBAL IMPACT

While living in France, Daniella taught ESL. In Austria, Daniella managed a holistic health clinic and learned how to train service dogs, including cancer

detection dogs. In Italy, she got involved with a research project on neurotypology, using EMOTIV headsets which map brainwaves and mental activity. But it was her involvement in the development of Australian-based health app ph360.me, serving as the VP Research, which would eventually steer her on the path to CCNM.

A CITIZEN OF THE WORLD

Daniella has lived in several countries, aiming to give back and make an impact in the lives of the people around her:

France

Taught ESL

Austria

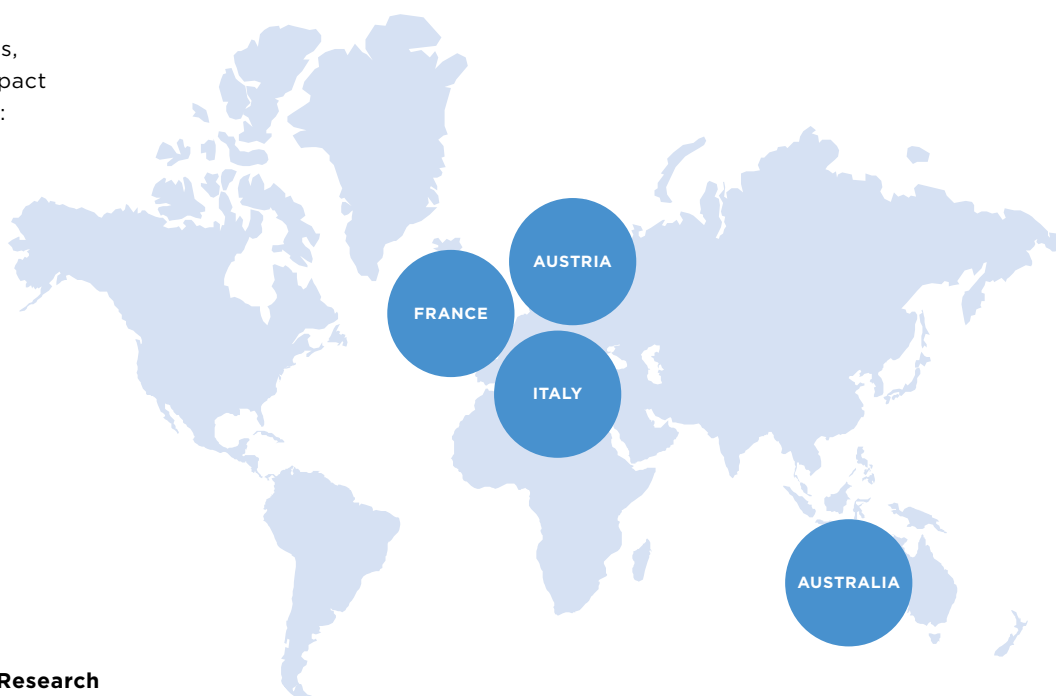
Managed a holistic health clinic and trained cancer detection dogs

Italy

Worked in a lab which led to a research project on neurotypology using EMOTIV headsets

Australia

Joined ph360.me in the role of VP Research

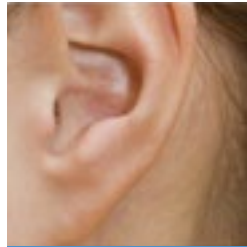




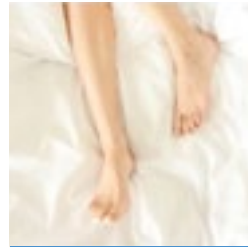
Weight & Mass



Finger Length



Ear Position



Foot Length



Waist Girth

Your body on the outside is a direct reflection of your health on the inside. From these simple physical assessments, the app ph360™ personalizes data specifically to your body and gives you practical health advice.

THE ph360™ APP

Users enter their measurements and complete a health assessment questionnaire in the app to reveal their unique health type, which Daniella describes as the body’s external representation of its internal condition.

“Your phenotype is your genetic makeup combined with your environment, which we’re using to assess what factors may influence your current state, allowing us to estimate your health and disease trends. The program then recommends specific lifestyle choices that are unique to you,

like what foods to eat and avoid for example, with no two profiles being identical.”

Daniella’s role is to compile health and wellness research from experts in various fields, including conventional medical providers and complementary health-care practitioners, and then communicate that with the app’s developers and programmers. But she grew increasingly frustrated with the gaps in her knowledge and decided to become an ND.

“I decided to just become a doctor myself and to eliminate these gaps of knowledge and tie the pieces together better.”

According to Daniella, research is an absolute necessity to push the profession forward.

“We need the evidence to build credibility and pave the way for the profession’s integration into the standard health-care system. Naturopathic medicine shouldn’t be the alternative, the outlier; it should be complementary, in partnership with allopathic medicine,” she explains. “The raft is our philosophy, but our oars must be the evidence that directs us.” *

Robert Schad Leadership Scholarship

The field of naturopathic medicine requires exceptional leaders who can drive a greater acceptance of naturopathic therapies and the integration of naturopathic medicine into Canada’s health-care environment. This leadership could be exhibited through political office, research, community service, professional associations, or within government, to provide a few examples.

The Robert Schad Leadership Scholarship has been created for outstanding students who require financial support to be able to devote their time to their studies and extramural contributions as would be expected of a budding, action-driven leader.

The inaugural scholarship was awarded to Daniella, who has demonstrated the potential to develop into a leader and change-maker within the naturopathic profession.

For more information, please contact Frances Makdessian, manager, advancement, at fmakdessian@ccnm.edu





“IF WE SET OUT TO CREATE MORE EDUCATION ABOUT RESEARCH INVOLVEMENT AND CONDUCT, WE MAY BE ABLE TO COLLABORATE MORE WITH OTHER RESEARCHERS AND LEAD THE STUDIES WHICH ULTIMATELY GUIDE OUR PRACTICE.”

Dr. Athanasios (Thanasi) Psihogios, ND (Class of 2019)



EMERGING RESEARCHERS

Dr. Athanasios (Thanasi) Psihogios, ND (Class of 2019), on being the first recipient of CCNM's Student Innovation Fund in 2018

A recent graduate of CCNM (Class of 2019) and a current research resident at an integrative cancer care centre in Ottawa, Dr. Thanasi Psihogios, ND, was also the first recipient of CCNM's Student Innovation Fund to support his research. Thanasi's perspective on research is guided by his experiences at CCNM and enhanced by the research projects and clinical practice he's engaged in. Here, Thanasi tells us about his interest in expanding evidence-based research and developing guidelines for the naturopathic medical profession.

My interest in integrative medicine research began during my undergrad studies but definitely flourished when I began studying at CCNM. I realized that there was a lot of potential for growth in the profession and that a rigorous research approach could help evolve naturopathic medicine. By working with professors, making posters, and involving myself in different projects, I was able to cultivate a passion for research at the College.

RESEARCH IN RESIDENCE

The research residency has already been an invaluable learning opportunity – I feel it has changed me as both a practitioner and researcher. I am primarily interested

in integrative oncology care, exploring the concept and feasibility of guidelines in our profession, and advancing the body of evidence that is accessed regularly by naturopathic doctors.

The majority of my time is spent working on research related projects and topics, such as monograph creation, observational study work, and patient care research.

I also see patients and this hands-on experience is definitely conducive to additional learning. The dual environment of research and clinic life allows me to see firsthand how one translates into the other and creates a good setting for both personal and professional growth.

Thanasi was the first recipient of CCNM's 2018 Student Innovation Fund

Thanasi and Dr. Dugald Seely, ND (pictured far left) used the prize to create a research review of prevalent naturopathic interventions used in integrative pediatric cancer care informed by their recent survey of naturopathic doctors.

Also pictured: Dr. Monique Aucoin, ND, and Dr. Kieran Cooley, ND



“The main takeaway from this experience is the realization that actually conducting research makes you appreciate the work that goes into all the studies we read, as well as a much better understanding of the strengths and weaknesses of various study designs and methodologies.”

DR. ATHANASIOS (THANASI) PSIHOGIOS, ND (CLASS OF 2019)



INTEGRATIVE PEDIATRIC ONCOLOGY PROGRAM

The Integrative Pediatric Oncology Program (IPOP) can be broken down into three main parts: part 1 involved a survey of NDs to see what they may recommend for children with cancer; part 2 is an ongoing scoping review, supported by the Student Innovation Fund, to identify the current state of evidence that exists for common naturopathic recommendations for children with cancer; and, part 3 has a future goal of developing a patient-accessible program.

Part 1 of IPOP was the first project I worked on in Ottawa while I was a student at CCNM. The now-published

survey collected information about recommendations for children with cancer from licensed naturopathic doctors (we surveyed ND members of the Oncology Association of Naturopathic Physicians)¹.

The Student Innovation Fund helped us move into part 2 of IPOP where we identified the primary natural health products recommended by naturopathic doctors and sought to investigate what evidence currently exists for each of these identified interventions. Known as a scoping review we are currently in the data abstraction phase, which entails sorting through thousands of abstracts to assess which studies are relevant to our project for further screening.

The Student Innovation Fund helped tremendously so far by allowing us to utilize services from a medical librarian to identify all of the relevant studies pertaining to our objective.

The main takeaway from this experience is the realization that actually conducting research makes you appreciate the work that goes into all the studies we read, as well as a much better understanding of the strengths and weaknesses of various study designs and methodologies.

¹ Psihogios, A., Ennis, J. K., & Seely, D. (2019). Naturopathic Oncology Care for Pediatric Cancers: A Practice Survey. *Integrative Cancer Therapies*, 18, 153473541987850. doi: 10.1177/1534735419878504



THE INTEGRATIVE PEDIATRIC ONCOLOGY PROGRAM (IPOP) CAN BE BROKEN DOWN INTO THREE MAIN PARTS:

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Part 3

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NDs AS RESEARCHERS

I think it is of the utmost importance to emphasize our professional efforts to create a strong evidence base for naturopathic medicine, with a focus on a few key aspects. Significantly more education around the critical appraisal of research is a necessity in order to create a truly evidence-based atmosphere at the College and in the profession. This would progress us from “using” research to using “sound” research.

Another key aspect to achieve this goal is the promotion and facilitation of NDs in the conduct of research in order to better guide methodology and endpoints which are pertinent and relevant to our practice. A large number of intervention studies that we access, which investigate naturopathic relevant interventions (such as natural health products), do not include NDs as authors/investigators. Yet these same studies make up the majority of our evidence-based practice. This often has brought forth issues from our professional body regarding concerns about dosing, sources, intervention choices, and applicability in our clinic setting.

If we set out to create more education about research involvement and conduct, we may be able to collaborate more with other researchers and lead the studies which ultimately guide our practice.

QUALITY RESEARCH PROVIDES EVIDENCE

I believe that, now more than ever before, there is enough available research (an amount not present during the inception of our profession’s materialization), to begin to form guidelines and standards based on consistent and high-quality data. This would help to evolve the profession to meet the professional efficacy and safety requirements that are expected by us from the public and allied health-care professionals.

A strong evidence base would allow for flexible consistency among practitioners, plausibly improving the quality of care we provide to patients, while fostering better inter-professional collaboration.

The naturopathic profession is well poised to make significant changes based on the amount of quality data that is now available to us. If we continue to strive

for better practice standards, with the adoption of evidence-informed practices (which favour quality of studies over the sole presence of them), we can provide better care to our communities.

Quality research can update our profession’s approach to health; and, essentially mold naturopathic medicine into a sustainable and valuable part of Canadian health care. *

In 2019 Thanasi participated in an interactive talk with The Naturopathic Medical Students Association (NMSA), where he discussed his experiences in conducting naturopathic research.



The Student Innovation Fund helped Thanasi and his research team tremendously so far by allowing them to utilize services from a medical librarian to identify all of the relevant studies pertaining to their objective.

WHAT IS THE STUDENT INNOVATION FUND?

The Student Innovation Fund, supported by Biotics Research Inc., is a grant competition that nurtures student-led research at CCNM. Winners of the fund hone their research and critical appraisal skills and receive opportunities to share their findings at conferences and through publication.



Utilizing “The Best of Science and Nature”
to Create Superior Nutritional Supplements



COMPETITION WINNERS STUDY TRENDS TO IMPROVE NATUROPATHIC CARE FOR FIBROMYALGIA

CCNM third-year students Bisleen Attli and Christilynn Guerin are excited about contributing to the profession's evidence base

Third-year students Bisleen Attli and Christilynn Guerin were the recipients of the Student Innovation Fund in 2019 for their joint research proposal on evaluating the use of naturopathic care provided to patients with fibromyalgia at the Robert Schad Naturopathic Clinic (RSNC), the teaching clinic of CCNM.

At the moment, the two are fully immersed in the study and balancing their course load at the same time. They sometimes find it difficult to do both, but Bisleen and Christilynn have taken on the extra

responsibility with enthusiasm and work together as a team to keep each other accountable.

“Once a week, we check-in with one another for about 10 minutes, just to see how the week is going, what to do in terms of next steps, and setting deadlines. This helps us to move forward and ensure we’re keeping up with the research,” says Bisleen.


Carving out time during the week to dedicate themselves to the study has

been key. To minimize any outside distractions, they reserve a set number of hours per week to focus solely on the research. Christilynn sets aside about half-a-day every Thursday while Bisleen schedules time during the weekend.

“It’s really about effective communication and making sure we’re on the same page because it’s not my research project, or Christilynn’s, it’s a whole team of us working together.”

Both Bisleen and Christilynn look to the value of building the evidence base to enhance integrative models of care. With fibromyalgia, for example, preliminary studies suggest that blending treatments may be able to help patients find some relief from chronic pain.





**“FIBROMYALGIA IS SUCH A
COMPLEX CONDITION THAT CONFUSES
A LOT OF PEOPLE, EVEN IN THE
CONVENTIONAL CARE SYSTEM.
OUR GOAL WITH THE STUDY IS TO EXPLORE
ALL OPTIONS WITH AN OPEN MIND AND
FIND REPEATING PATTERNS.”**

Bisleen Attli and Christilynn Guerin (third-year students)

THE GENESIS OF THE STUDY

As part of her undergrad degree at Brock University, Christilynn did an externship at Our Lady's Children's Hospital, Crumlin in Dublin, Ireland. There, she was introduced to a wide range of pediatric concerns and jumped right into clinical research. Her duties included helping with dry rounds, passing surgical tools, and handling patient audits for a large, multi-centred study that was published in the *Lancet*.¹

Bisleen had little experience in conducting research but wanted to get involved. So when the opportunity came up to take part in a study investigating fibromyalgia at the RSNC, Christilynn volunteered and immediately roped her in.

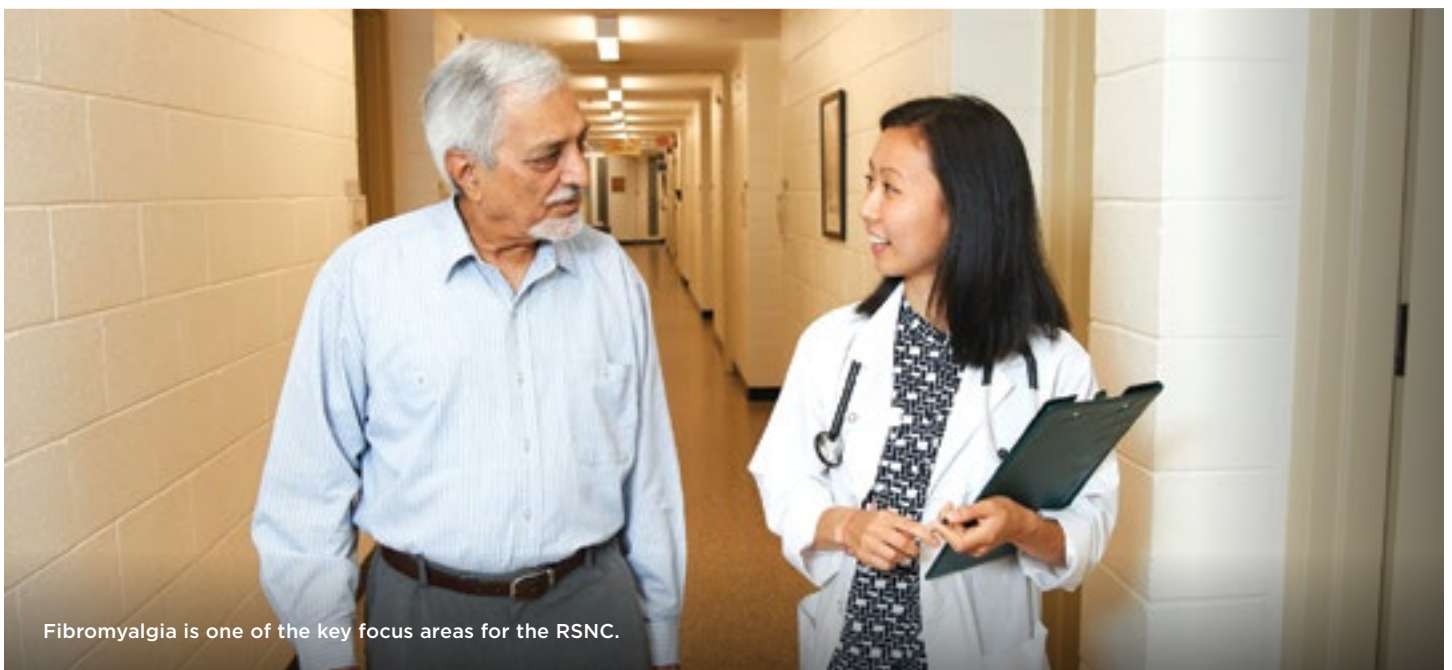
"I remember getting exposed to my first research project and I thought it would be so great for Bisleen's future if she's

involved in something like this," Christilynn says.

She estimates that it will take another year or so to complete the study as they comb through the patient files marked with the fibromyalgia code, compile the information, and analyze the results. They are mainly focused on finding trends related to symptoms, treatments, and outcomes.

¹Incidence of severe critical events in paediatric anaesthesia (APRICOT): a prospective multicentre observational study in 261 hospitals in Europe. *The Lancet Respiratory Medicine*. May 2017.

Third-year students Bisleen Attli and Christilynn Guerin were the recipients of the Student Innovation Fund in 2019 for their joint research proposal on evaluating the use of naturopathic care provided to patients with fibromyalgia at the Robert Schad Naturopathic Clinic (RSNC).



Fibromyalgia is one of the key focus areas for the RSNC.

“Fibromyalgia is such a complex condition that confuses a lot of people, even in the conventional care system. Our goal with the study is to explore all options with an open mind and find repeating patterns,” explains Bisleen.

“What should we be doing more of? What is more effective in terms of patient care? We’re interested in these kinds of

insights instead of looking for a specific supplement or treatment protocol.”

BUILDING THE EVIDENCE BASE

Both Bisleen and Christilynn look to the value of building the evidence base to enhance integrative models of care. With fibromyalgia, for example, preliminary studies suggest that blending treatments may be able to help patients find some relief from chronic pain.

“I wanted to practise naturopathic medicine and dive into the research at CCNM because I saw firsthand what pharmaceuticals do to not only kids, but adults as well. I decided from that point on, that any research I’m involved in is going to help people,” says Christilynn. *

Bisleen and Christilynn’s fibromyalgia project involves several faculty co-investigators:



**Dr. Louise McCrindle, ND
(Class of 2008)**

Lead supervisor of the fibromyalgia and chronic fatigue syndrome focus at the RSNC



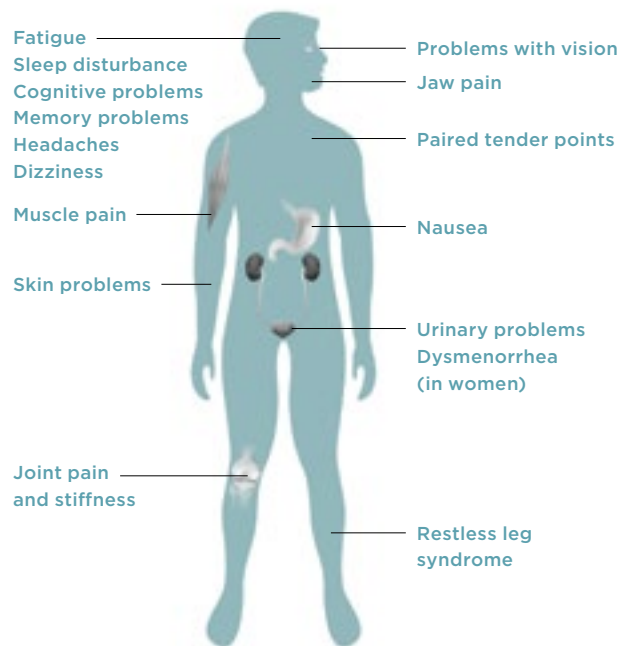
**Dr. Paymon Sadrolsadot, ND
(Class of 2017)**

Clinic supervisor




**Dr. Shadi Sarebanha, ND
(Class of 2018)**

Clinic resident



Bisleen and Christilynn are mainly focused on finding trends related to symptoms, treatments, and outcomes of fibromyalgia.

A portrait of Dr. Monique Aucoin, ND, a woman with long, dark, wavy hair, smiling warmly. She is wearing a black sleeveless top and a gold necklace with a small circular pendant. The background is a plain, light-colored wall.

**“MY PRIMARY INTEREST IN RESEARCH,
AS WELL AS IN CLINICAL PRACTICE,
IS THE ROLE OF NUTRITION IN
THE PREVENTION AND TREATMENT
OF MENTAL ILLNESS.”**

Dr. Monique Aucoin, ND (Class of 2012)



RESEARCH HELPS GUIDE THE FUTURE OF NATUROPATHIC TREATMENT FOR MENTAL HEALTH

CCNM research fellow Dr. Monique Aucoin, ND (Class of 2012), on fortifying the profession’s evidence base

For Dr. Monique Aucoin, ND, building the evidence base is a way to understand the various components of naturopathic medicine and how they work in clinical practice.

The Class of 2012 graduate has been involved in research since her undergraduate studies at Western, focusing on microbiology and immunology. Her interest continued into CCNM, where she volunteered at an integrative psychiatry clinic in Toronto, completing a literature review and drafting a manuscript to share the results of a clinical trial.

After graduating, an opportunity opened up for a clinical trial coordinator at CCNM, which she did for a few years before moving into her current role of research fellow.

NUTRITION AND MENTAL ILLNESS

“My primary interest in research, as well as in clinical practice, is the role of nutrition in the prevention and treatment of mental illness,” Monique says. “Standard treatment for mood and anxiety disorders often does not provide adequate relief for many individuals and there is a need for improved treatment options. If you had a heart attack and went to see a cardiologist, they would likely talk to you about your diet.

“But your entire body and its biochemistry are affected by the food you eat, your brain is no exception,” she continues.

“My research work is focused on increasing our understanding of how food impacts mental health as well as sharing this knowledge with clinicians and patients so that they can incorporate this information into clinical care.”

Monique’s research work is focused on increasing our understanding of how food impacts mental health as well as sharing this knowledge with clinicians and patients so that they can incorporate this information into clinical care.





**Who was
Dr. Abram Hoffer?**

Abram Hoffer, MD, PhD, (1917–2009), was an innovative, pioneering scientist and psychiatrist who developed the first evidence-based nutritional treatment to support recovery for patients with psychotic episodes and schizophrenia.

Dr. Monique Aucoin, ND, receiving the inaugural Dr. Abram Hoffer Lecture Series Award in November 2018, pictured with (from left) Dr. Sasha Tahiliani, ND, Dr. Jonathan Prousky, ND, Bob Bernhardt, PhD, and Steven Carter.

**THE 2018 ABRAM HOFFER
LECTURE SERIES PRIZE**

A research project she completed along with her colleague Dr. Laura LaChance (a psychiatrist who was with CAMH at the time) received the inaugural Abram Hoffer Lecture Series prize in November 2018. The winning paper outlined the role of certain B vitamins in the treatment of schizophrenia and related illnesses, which was a sub-analysis of a larger, more extensive scoping review related to a study

they had completed on diet and psychotic disorders.¹

Their findings showed an association between low levels of folic acid and vitamin B6 in individuals with schizophrenia spectrum disorders and possible therapeutic benefit with vitamin B12, B6, and folic acid supplementation. The paper calls for further study in this area and offers consideration into the use of these nutrients as adjunctive therapies.



¹ Aucoin M, LaChance L (2018) Vitamin B12, Vitamin B6, Folic Acid and Psychosis: A Review. *Journal of Orthomolecular Medicine* 33(5)

The winning paper showed an association between low levels of folic acid and vitamin B6 in individuals with schizophrenia spectrum disorders and possible therapeutic benefit with vitamin B12, B6, and folic acid supplementation.



STUDENT AND FACULTY RESEARCH SUPPORT

Monique is also interested in supporting the research efforts of students and faculty. For four years, she has taught an evidence and research course to first-year students in the IMG bridge delivery and the January cohort as well.

Her course is structured around grasping different types of research methodologies and practising critical analysis skills, which are especially important for reading and understanding scientific articles.

“When new research is presented to us – and this happens all the time, whether we are looking for it or listening to the news – we must be able to look at it and ask ourselves, ‘What kind of methodology was used and what were the results? What were the strengths and limitations of the approach they used?’ and draw our own conclusions on what can be taken away from this research and if this applies to a patient,” Monique says.

She feels strongly that more NDs should give serious thought to publishing case reports and offers assistance to any ND interested in developing their own research.

“There’s so much that NDs do that has significant benefit, but it’s not reflected in the scientific literature,” she says.

“If there’s nothing documented about a particular herb for some condition, it’s hard to justify doing a randomized clinical trial because those cost a lot of money and take a lot of effort and resources. As well, some approaches used in naturopathic medicine aren’t well suited for research in the form of a randomized control trial. Publishing case reports creates rationale or justification for further study; that’s a start towards building more evidence.” *

“When new research is presented to us – and this happens all the time, whether we are looking for it or listening to the news – we must be able to look at it and ask ourselves, ‘What kind of methodology was used and what were the results? What were the strengths and limitations of the approach they used?’”



DR. MONIQUE AUCOIN, ND (CLASS OF 2012)



THE POWER OF GENETIC TESTING

Dr. Penny Kendall-Reed, ND (Class of 1997), on the convergence of naturopathic and genomic medicine

Genomic medicine is an emerging field in health care that uses an individual's unique gene sequences to create a personalized treatment plan. By providing a comprehensive overview of a person's internal biology, genomic medicine can make accurate diagnoses of present and future illnesses and provide explanations as to why certain clinical diagnostics work for some patients and not for others.

Since graduating from CCONM in 1997, Dr. Penny Kendall-Reed, ND, has dedicated her practice to decoding her patients' health. She launched GeneRX.ca in 2019, an app that allows health-care practitioners to securely upload their patients' 23andMe raw data.

Almost instantly, based on a series of algorithms, a detailed report is produced outlining the interaction of genes, hormones, and neurotransmitters in the body and recommended treatment protocols.

GeneRX is a result of over 10 years of research. It's different than other apps of this nature because it considers the roles that all three types of genes – variant, normal, and heterozygote – play in the body. Using the example of carb consumption, Penny says that another program may recommend a ketogenic diet. But GeneRX provides a thorough breakdown of how a patient processes carbs, how their genetics are coded, and then provides an exact carb count per meal.

“I really think – especially when you're using GeneRX – that many NDs are afraid of delving into genetics because it seems so overwhelming,” Penny says. “But when you look at the report, you begin to understand the genes and how they operate, and it becomes less scary. So not only is GeneRX a great therapeutic tool for patients, but it's a great learning tool for NDs as well.”

And since NDs are trained to investigate the root cause of the symptom and consider the whole person, GeneRX fits amazingly well within the naturopathic scope of practice.


“I've been lecturing on this worldwide for about six years now and NDs are my favourite group to speak to. We just think about health care differently.”

In 2019 Dr. Kendall-Reed, ND, launched

GeneRX.ca

an app that allows health-care practitioners to securely upload their patients' 23andMe raw data



A portrait of Dr. Penny Kendall-Reed, ND, a woman with long, wavy, light brown hair, smiling warmly. She is wearing a bright red blazer over a black lace top and a silver necklace with a large, ornate pendant. The background is a plain, light gray.

**“MANY NDs ARE AFRAID OF
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IT SEEMS SO OVERWHELMING.
BUT WHEN YOU LOOK AT THE REPORT,
YOU BEGIN TO UNDERSTAND THE
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Dr. Penny Kendall-Reed, ND (Class of 1997)

AT THE FOREFRONT OF THE GENOMIC MEDICINE MOVEMENT

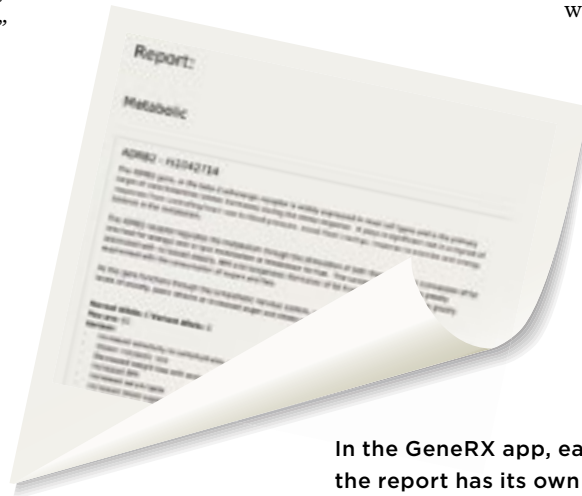
Penny sees NDs at the forefront of the genomic medicine movement. Naturopathic medicine provides the knowledge and foundation upon which patients can be treated – effectively and safely – with their genetic information.

“It’s the genes, yes. But it’s also the amino acids, the herbs, and the diet. Even down to a precise detail of how much saturated fat you need per day without triggering increased cholesterol or obesity, etc.,” says Penny.

“When a patient comes in and they are not responding well to a pharmacological intervention or chemotherapy, having their genetic information is valuable,” she adds. “Medical doctors have maybe five minutes with a patient. But I get as much time as I want to explain how their genes work.”

Her own interest in genomic medicine began when she read a research paper on single nucleotide polymorphisms, or gene variants, about 12 years ago. That turned out to be a lightbulb moment for Penny, who started to realize why her patients often presented with similar symptoms, health histories, and labs, but responded completely differently to the same treatment.

After that, Penny threw herself into the existing evidence base – first, reviewing each gene, and then its actionable qualities. In her app, each gene mentioned in the report has its own reference page, containing a description and citations to the research and clinical studies backing its validity.



In the GeneRX app, each gene mentioned in the report has its own reference page.

GENETIC TESTING AND GENOMIC MEDICINE ARE HERE TO STAY

Market research suggests that the industry for genetic testing is growing exponentially each year – it is estimated that the global market size will reach \$17 billion by 2025. Based on these trends, there’s no question that genomic medicine is here to stay and has a place in each ND’s toolkit.

“There’s so much power that the body has. The basis of naturopathic medicine is that the body has this innate healing ability,” Penny explains. “It comes from our genes and flipping them to their proper position. That’s all we’re doing – looking at how a patient codes for that gene and saying, ‘This is great, this is how we keep that pathway turned on. This is not so great, let’s turn this one off.’ And in doing that, we allow the body to heal itself.” *

GeneRX is a result of over

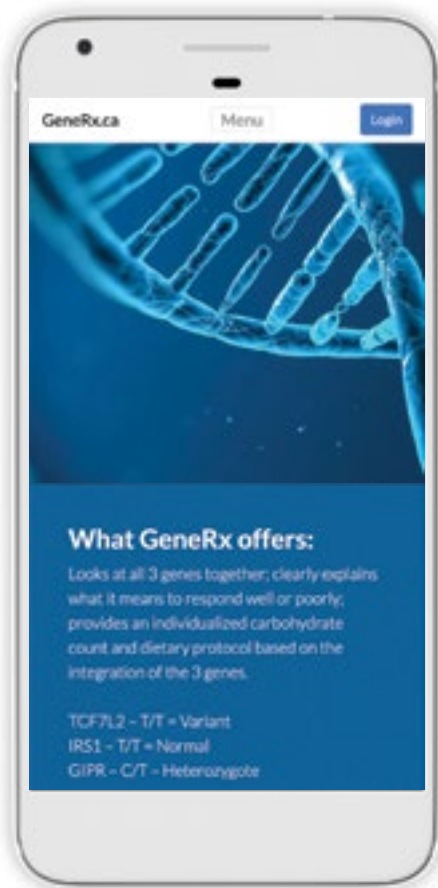
10 Years of Research

GeneRX is different than other apps of this nature because it considers the roles that all three types of genes play in the body:

1. Variant
2. Normal
3. Heterozygote



Although GeneRx is intended for any health-care practitioner to use, NDs are trained to investigate the root cause of the symptom and consider the whole person; thus, it works amazingly well within the naturopathic scope of practice.



WHAT'S IN THE GENERX.CA REPORT:

- Metabolic
- Carbohydrates
- Fats
- Protein
- Dairy-lactose
- Serotonin and dopamine
- Short term stress and long term stress
- Cardiovascular exercise
- Resistance training
- Injury susceptibility and prevention
- Immunity
- Inflammation
- Phase 1 and 2 detoxification
- Vitamins, minerals and methylation
- Reproductive hormones: estrogen
- Reproductive hormones: testosterone

“There’s so much power that the body has. The basis of naturopathic medicine is that the body has this innate healing ability. It comes from our genes and flipping them to their proper position.”

DR. PENNY KENDALL-REED, ND (CLASS OF 1997)



Other Research Projects



BODY COMPOSITION MACHINE

CCNM Integrative Cancer Centre uses an InBody 770 body composition analyzer during cancer treatment



To provide a more comprehensive summary of what happens to a patient's body composition during cancer treatment, the CCNM Integrative Cancer Centre (CCNM ICC) uses an InBody 770 body composition analyzer.

The machine goes beyond weight and body mass index (BMI) to measure the amount of water in the body. It tells NDs about the changes in their patients' body

composition that are connected to less favourable health outcomes – loss of muscle mass during treatments, lower phase angles (health of the cell membrane), and the breakdown of fluid in and out of the cells.

Through a simple, easy-to-read, one-page readout, patients can see the areas they need to improve and NDs can recommend specific treatment protocols to enhance prognosis.

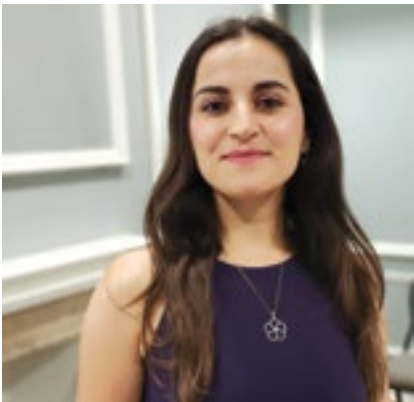
“The In Body 770 body composition analyzer allows us to provide data to patients so they can see the areas they need to improve and provide specific treatment protocols to enhance prognosis.”

DR. DAN LANDER, ND (CLASS OF 2006)





MATERNAL HEALTH AND THE MICROBIOME



Dr. Neda Ebrahimi, PhD, is exploring the interaction between our environment and the microbiome

The microbiome is the genetic material of all the microbes – bacteria, fungi, protozoa, and viruses – that live on and inside the human body. Genestra HMF Microbiome Researcher, Neda Ebrahimi, PhD, is embarking on a landmark study to explore the interaction between our environment and the microbiome as it pertains to maternal and infant health.

This work aims to provide a better understanding of how the creation, development, and maintenance of the microbiome can mitigate the impact of environmental toxins and pharmaceutical drugs during pregnancy and the postnatal period.



LAB TESTING SERIES

CCNM evidence-informed webinar series examines the value of laboratory testing in clinical practice



In September 2019, CCNM kicked off a high-quality, evidence-informed webinar series to examine the value of laboratory testing in clinical practice. The goal of the series is to provide NDs, health-care practitioners, and students with the tools and support to boost their diagnostic decision-making skills.

New modules are offered quarterly and cover different systems. The first webinar was an introduction to the lab testing series and the second was hematology; the third webinar covered kidney and electrolytes, and the fourth on lipids and cardiovascular health.

This series is supported by LifeLabs.

Thank You CCNM Supporters



The Canadian College of Naturopathic Medicine (CCNM) is fortunate to benefit from a long list of friends and supporters. The following individuals and organizations help CCNM achieve its mission to educate, develop and train naturopathic doctors through excellence in health education, clinical services and research that integrate mind, body and spirit.

By investing in research, scholarship, teaching clinics and other areas at the College, our supporters help CCNM lead the development of primary health care through education in naturopathic medicine and foster positive change in our health, our environment and our health-care system.

CCNM is a charitable education institution, and receives no direct financial support from federal or provincial governments. Our financial health depends on the generosity and commitment of our supporters, who believe in the work we do and support naturopathic education and research. On behalf of our students, alumni, faculty, staff and clinic patients, we thank you.

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Atrium Professional Brands	Health Products	Devices Inc. (ETD Inc.)	For Health Inc. (NFH)
Bioclinic Naturals	Costco	InteraXon	Thorne Research Inc.
Biotics Research Canada	Cyto-Matrix Inc.	Life Extension Publications Inc.	Webber Naturals
	Eastern Currents Distributing Ltd.		Pharmaceuticals Ltd.
			York Downs Pharmacy

TRIBUTE AND IN-MEMORIAM DONATIONS

We are grateful for the gifts made in memory or in honour of the following individuals:

Abbey Retreat Centre, retreat participants	Donna McCallum	Dr. Kenneth R. Dunk, ND	Dr. Richard D. McCrorie, ND
Bob Howie	Emery Kada	Luigi Frustaglio	Stephen Thomson
Chris and Joe Cullen	Gerald Farnsworth	Dr. Mubina Jiwa, ND	Women 22 nd Annual Retreat
David Pelton	Heinrich Gemballa	Norma Stannard	U. Trinity & Providence
	Kate Good	Rene Gottfried	United Church

LEGACY GIVING

We thank the following donors who have made gifts of a lifetime through bequests or life insurance:

Estate of Earl Farnsworth	Estate of Joyce	Estate of Marilyn A. Scheifele	Estate of William McQueen
Estate of Frances Eastman	Isabella Vanderburgh	Estate of Patricia Thorsley	Heinz Vollenweider
Estate of Gordon Wilinski	Estate of Linda Ganly	Estate of Roger and	
Estate of Ina Meares	Estate of Lucy Hopkins	Mary McCrorie	

STRONG HISTORICAL SUPPORT

We thank the following for their generous historical contributions to CCNM. Although they are not current donors, we appreciate their support over the years.

\$1 Million Plus

Husky Injection Molding
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RESEARCH PARTNERS AND SUPPORTERS

The following research partners and supporters have engaged in projects with the Canadian College of Naturopathic Medicine and the Ottawa Integrative Cancer Centre.

Abbey Retreat Centre	CHEO Foundation	Marsden Centre for Excellence in Integrative Medicine	The Lotte and John Hecht Memorial Foundation
Academic Collaborative for Integrative Health (ACIH)	Cyto-Matrix Inc.	National University of Natural Medicine (NUNM)	The Naturopathic Medical Students Association
Advanced Orthomolecular Research Inc. (AOR)	Endeavour College of Natural Medicine	Nutritional Fundamentals for Health (NFH)	The University of Toronto
Assured Natural Distribution Inc. (Bioclinic Naturals)	Gateway for Cancer Research	Oncology Association of Naturopathic Physicians (OncANP)	The World Naturopathic Federation (WNF)
Bastyr University	Health Source Integrative Medical Centre	Ottawa Hospital	William Osler Health System & Brampton Civic Hospital
Biotics Research Inc.	Integrated Health Clinic Cancer Care Centre	Research Institute	Wise Elephant Family Health Team
Canadian Association of Thoracic Surgeons	John and Thea Patterson and family	The Canadian CAM Research Fund	Women's Breast Health Centre, The Ottawa Hospital
Canadian Interdisciplinary Network for Complementary and Alternative Medical Research (INCAM)	KGK Science Inc.	The Canadian College of Osteopathy	York Downs Chemists
	Knowledge in Naturopathic Oncology Website (KNOW)		
	Leslie Dan School of Pharmacy, University of Toronto		

Thank You OICC Foundation Supporters



In December 2016, the Ottawa Integrative Cancer Centre Foundation received its status as a registered charity and became the fundraising arm for the Ottawa Integrative Cancer Centre (OICC). The OICC is fortunate to benefit from many friends and supporters. The following individuals and organizations helped the centre achieve its mission to provide evidence-informed integrative and preventative cancer care, research and education across the spectrum of prevention to survivorship. The OICC is a flagship model interdisciplinary centre that provides whole-person integrative care to people with cancer, cancer survivors and others seeking cancer prevention.

By investing in research, subsidized care and specialized patient programs, our supporters help people living with cancer cope better with their disease and find relief from the debilitating effects of chemotherapy, surgery and radiation.

The OICC receives no direct financial support from federal or provincial governments. Our financial health depends on the generosity and commitment of our supporters, who believe in the work we do. On behalf of our clinic patients, health-care providers and staff, we thank you.

The following list recognizes cumulative gifts from supporters who contributed \$50 or more between January 2019 and December 2019.

\$10,000 Plus

Dr. Dugald Seely, ND
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TRIBUTE AND IN-MEMORIAM DONATIONS

We are grateful for the gifts made in honour of and in memory of the following individuals:

In honour of:

Harlan Rain Karlsson
Jacob & Isaiah Fisher
Jillian O'Connor
Kim Krug
Raffi

In memory of:

Alex Neron
Anne Adams
Bryan Murray
Chris Linden
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Pierre Demers

STRONG HISTORICAL SUPPORT

We thank the following for their generous historical contributions. Although they are not current donors, we appreciate their support.

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Governance

BOARD OF GOVERNORS 2019*

The Institute of Naturopathic Education and Research (INER) operates CCNM and the Robert Schad Naturopathic Clinic (RSNC). INER is registered as a charitable organization and CCNM receives no direct government funding.

CCNM's Board of Governors consists of naturopathic doctors and laypersons from a variety of disciplines, elected by INER members. The Board's mandate is to govern the organization [the Corporation (INER) operating as the Canadian College of Naturopathic Medicine (CCNM)] through effective policy oversight and ensuring executive performance achieves the vision and goals of the organization.

*as at July 31, 2019

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Absent: Sameet Batavia, Dr. Rahima Hirji, ND, Ron Noble, Dr. Christine Davis, ND, Angela Hildyard, PhD, Sonia Drouin (Student Governor)

Values, Vision, Mission, and Five Ends

OUR VALUES

The Canadian College of Naturopathic Medicine is committed to reflect the following values in its deliberations and actions:

- **Integrity**
- **Collaboration**
- **Innovation and adaptability**
- **Respect for equity, diversity, inclusion**

OUR VISION

CCNM will make naturopathic medicine an integral part of health care through pre-eminent education, research and clinical services.

OUR MISSION

The Canadian College of Naturopathic Medicine will:

- Demonstrate excellence in education to our students, supporting them throughout their careers;
- Provide a working environment that allows our faculty and staff to excel;
- Expand our knowledge of naturopathic medicine through high quality research;
- Excel in delivering naturopathic medicine to our patients;
- Forge a strong relationship between allopathic and naturopathic medicine with a focus on affordable, accessible and effective health care;

... and so make the practice of naturopathic medicine widely acknowledged as key to maintaining patient health.

FIVE ENDS

To drive CCNM in its pursuit of excellence in naturopathic medicine, CCNM's Board of Governors has developed five "Ends" or goals:

Excellence in Education

Educate naturopathic doctors on the basis of clear and focused curriculum, delivered by the most competent faculty, and graduate high-quality naturopathic doctors.

High-Quality Clinical Services

Provide high-quality naturopathic care in a clinical setting, resulting in positive educational experiences for students and positive outcomes for patients and clients.

Excellence in Research

Conduct and disseminate research relevant to naturopathic medicine and help develop skills among faculty, students, and graduates that foster research activity and a culture of evidence-informed clinical practice.

Leading Voice

Increase the awareness and trust of CCNM as a leading voice for naturopathic medicine.

Change Agent

Be a leader and advocate of naturopathic medicine as positive change to our health, our environment and our health-care system.

By fostering a culture of research, CCNM investigates a range of topics, from addiction to nutrition, in order to explore the strengths of naturopathic medicine, test therapies, and influence policy.

CCNM's department of research is a leader in advancing our understanding of complementary and naturopathic medicine as a contributor to a sustainable health-care system.

CCNM has collaborated with many major medical research institutions, including McMaster University, The Hospital for Sick Children, University of Toronto, Ottawa Hospital Research Institute, University of British Columbia, Centre for Addiction and Mental Health, and Dalhousie University.

www.ccnm.edu/research



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Educating naturopathic doctors for over 40 years

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BISLEEN ATTLI AND CHRISTILYNN GUERIN

Third-year students and recipients of the 2019 Student Innovation Fund