

15th Annual Conference Program

Innovation at the NHP/Food Interface

May 14th – 17th, 2018 (Guelph, ON)

CONFERENCE AT A GLANCE

Monday May 14th, 2018

6:30 PM **Welcome Reception**
Delta Hotel Conference Foyer



Tuesday May 15th, 2018

7:30 AM **Breakfast**
One-to-One Partnering Sessions

8:30 AM **Welcome by NHPRS President**

8:45 AM **Opening Plenary Session (Tieraona Low Dog)**

9:30 AM **Coffee Break**

10:00 AM **Session 1**
Respectful Use of Traditional Knowledge



12:00 PM **Lunch**
One-to-One Partnering Sessions
Open Poster Session

1:30 PM **Session 2**
Cannabis



4:00 PM **Session 3**
Student Session: 3-Minute Thesis Competition
One-to-One Partnering Sessions



5:00 PM **Open Poster Session**
Wine and Cheese Reception



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May 14th – 17th, 2018 (Guelph, ON)

Wednesday May 16th, 2018

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|----------|---|
| 7:30 AM | Breakfast
One-to-One Partnering Sessions |
| 8:30 AM | Opening Plenary Session 1 (Stephen Daniels) |
| 9:15 AM | Opening Plenary Session 2 (Heather Boon) |
| 10:00 AM | Coffee Break |
| 10:15 AM | <p><u>Session 4 (Concurrent Sessions)</u></p> <p>4A: NHP Regulatory Affairs</p> <p>4B: DNA-based Approaches & Applications</p> |
| 12:15 PM | <p>Lunch</p> <p>Open Poster Session</p> <p>One-to-One Partnering Sessions</p> |
| 1:15 PM | NHPRS Annual General Meeting |
| 2:00 PM | <p><u>Session 5 (Concurrent Sessions)</u></p> <p>5A: Exploring the Pathway from Innovation to Commercialization in the NHP & Food Sectors</p> <p>5B: NHPs and Cancer</p> |
| 4:00 PM | <p><u>Open Poster Session</u></p> <p>One-to-One Partnering Sessions (4:00 – 5:00 pm)</p> |
| 6:30 PM | Gala Dinner and Awards Ceremony |



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May 14th – 17th, 2018 (Guelph, ON)

Thursday May 17th, 2018

7:30 AM **Breakfast**

One-to-One Partnering Sessions

8:30 AM **Opening Plenary Session (Marie-Claude Vohl)**

9:30 AM **Coffee Break**

10:00 AM **Session 6 (Concurrent Sessions)**

6A: Functional Foods

6B: Pharmacology & Pharmacognosy

12:00 PM **Lunch**

One-to-One Partnering Sessions

1:00 PM **Session 7 (Concurrent Sessions)**

7A: Product Quality

7B: NHPs in Disease Management



3:00 PM **Conference Closes**

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FULL CONFERENCE PROGRAM

Tuesday May 15th, 2018

- 7:30 AM **Breakfast**
One-to-One Partnering
- 8:30 AM **Welcome by NHPRS President (Paula Brown)**
- 8:45 AM **Opening Plenary Session (Tieraona Low Dog)**
A Clinician's Perspective on Nutritional Supplements
- 9:45 AM **Coffee Break**

- 10:00 AM **Session 1 (Plenary):**
Respectful Use of Traditional Knowledge



Session Chair: Cory Harris (University of Ottawa)

- 10:00 AM **Chair's Introduction**
- 10:15 AM **Kate Davis** (Botanic Gardens Conservation International)
Who Came Up with This Idea? The Global Framework to Recognize the Contributions and Rights of Traditional Knowledge-Holders
- 10:45 AM **Holly Johnson** (American Herbal Products Association)
Ethnobotany and Traditional Knowledge in the Modern World
- 11:15 AM **Marie Provost** (Clef des Champs)
A Vision for Respectful Use of Traditional Knowledge
- 11:45 AM **Panel Discussion** (Moderated by Dr. Pierre Haddad, Université de Montréal)
- 12:00 PM Lunch**
One-to-One Partnering Sessions
Open Poster Session

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1:30 PM

Session 2 (Plenary):

Cannabis



Session Chair: Lynda Balneaves (University of Manitoba)

1:30 PM

Chair's Introduction

1:40 PM

Mark Ware (McGill University)

Cannabis sativa: A Drug, a Natural Health Product, or Something Else?

2:10 PM

Ernie Small (Agriculture and Agri-Food Canada)

The Role of Agriculture in Supplying Nutritional, Medicinal, and Recreational Cannabis Products

2:40 PM

Jeremy Melanson (National Research Council of Canada)

Measurement Science for Enhanced Cannabis Testing

3:10 PM

Sharan Sidhu (Innovate Phytoceuticals)

Medical Cannabis: Regulatory Updates, Industry Perspective and Misconceptions.

3:25 PM

Brenna Boonstra (Cannabis Compliance/ NHP Consulting Inc.)

Forthcoming Regulatory Changes in the Cannabis/NHP Interface

3:40 PM

Panel Discussion (Moderated by Dr. Lynda Balneaves)

4:00 PM

Session 3:

Student Session: 3-Minute Thesis Competition



Session Chair: Bob Chapman (National Research Council of Canada)

5:00 PM

Open Poster Session

Wine and Cheese Reception



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Wednesday May 16th, 2018

- 7:30 AM **Breakfast**
One-to-One Partnering
- 8:30 AM **Opening Plenary Session 1 (Stephen Daniells)**
Global Trends at the NHP/Food Interface
- 9:15 AM **Opening Plenary Session 2 (Heather Boon)**
Natural Health Product Regulations: Past, Present and Future
- 10:00 AM **Coffee Break**

10:15 AM **Concurrent Session 4A**
NHP Regulatory Affairs



Session Chair: Krista Coventry (Canadian Association of Professionals in Regulatory Affairs)

- 10:15 AM **Lysanne Melanson (Health Canada, NNHPD)**
The Regulatory Framework for Natural Health Products in Canada
- 10:40 AM **Matthew Bown (Health Canada, NNHPD)**
Modernizing the Regulation of Self-Care Products in Canada
- 11:05 AM **Tania John (Renew Life Canada)**
Navigation of the Canadian Regulatory Framework for Products at the Food/NHP Interface
- 11:25 AM **Sharan Sidhu (Innovate Phytoceuticals)**
Case Study: Opportunities to Make Evidence-based Health Statements
- 11:45 AM **Thomas Brendler (Plantaphile)**
E.U. Regulations for Herbal Products: How Do Recent Changes Impact Access to the E.U. Market?

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10:15 AM ***Concurrent Session 4B***
DNA-based Approaches and Applications

Session Chair: Bob Hanner (University of Guelph)

- 10:15 AM **Steven Newmaster (True ID)**
Current Research Innovations as the NHP Research Alliance
- 10:35 AM **David Erickson (DNA4 Technologies LLC)**
Metagenomic Analysis of Dietary Supplement Authenticity and Complexity
- 10:55 AM **Darragh Clancy (NSF International)**
Next Generation Sequencing: A Fit-for-Purpose Tool in Managing Your Supply Chain
- 11:05 AM **Natalia Ivanova (Canadian Centre for DNA Barcoding)**
*Reference Library for Targeted SNP-based Identification of *Cibotium barometz* Using Next Generation Sequencing*
- 11:25 AM **Sidney Sudberg (Alkemist Labs)**
Equivalency of DNA Sequencing vs. HPTLC Chromatographic Analysis vs. Botanical Microscopy Methodologies for Botanical Identity: A Statistical Evaluation
- 11:45 AM **Caroline Puente-Lelievre (U.S. Food and Drug Administration)**
Using Chloroplast Genomes for the Development of DNA-based Methods for Allergenic Plants

12:15 PM **Lunch**
Open Poster Session
One-to-One Partnering Sessions

1:15 PM **NHPRS Annual General Meeting**

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2:00 PM

Concurrent Session 5A:

**Exploring the Pathway from Innovation to
Commercialization in the NHP & Food Sectors**



Session Chair: Shelley King (Natural Products Canada)

2:00 PM

Shelley King (Natural Products Canada)

Getting to Know Canada's Natural Product Commercialization Ecosystem

2:20 PM

Dana McCauley (University of Guelph)

How to Succeed as an Academic Entrepreneur

2:40 PM

Krista Coventry (Source Nutraceutical Inc.)

*Regulatory Considerations for NHP & Functional Food Commercialization in the
North American Health Products Marketplace*

3:00 PM

Susan Tandan (Gowlings LLC)

Intellectual Property Protection of NHP Innovations

3:20 PM

Paula Brown (BCIT)

Industry-Academic Partnerships: Opportunities for Innovation

3:35 PM

Kenna Whitnell (University of Guelph)

From Student Research to Commercialization: A Case Study

3:50 PM

Open Discussion

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2:00 PM

Concurrent Session 5B:
NHPs and Cancer



Session Chair: Jonathan Blay (University of Waterloo)

2:00 PM

Mary Hardy (George Washington University)

Maintaining Wellness Throughout the Cancer Journey

2:30 PM

Lynda Balneaves (University of Manitoba)

Moving Evidence to the Bedside: Natural Products in Cancer Care

3:00 PM

Jonathan Blay (University of Waterloo)

Actions of the Dietary Flavone Apigenin in the Context of Human Colorectal Cancer

3:20 PM

Siyaram Pandey (University of Windsor)

Targeting Mitochondrial and Oxidative Stress Vulnerability of Cancer Cells to Induce Apoptosis Using Natural Compounds and Extracts

3:40 PM

Paul Saunders (Canadian College of Naturopathic Medicine)

Cancer Treatment: Is There a Role for Homeopathy?

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4:00 PM

Open Poster Session

One-to-One Partnering Sessions (4:00–5:00)

6:30 PM

Gala Dinner and Awards Ceremony

Rickey Yada (University of British Columbia)

Adventures at the Food/NHP Interface

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Thursday May 17th, 2018

8:30 AM

Breakfast

One-to-One Partnering

9:00 AM

Opening Plenary Session (Marie-Claude Vohl)

Genetic Determinants of the Plasma Triglyceride Response to an n-3 Fatty Acid Supplementation in Overweight Adults.

9:45 AM

Coffee Break

10:00 AM

Concurrent Session 6A:

Functional Foods

Session Chair:

10:00 AM

Alison Duncan (University of Guelph)

Functional Foods and Human Health: Research Opportunities and Challenges

10:30 AM

Jennifer Barber (Health Canada Food Directorate)

Regulation of Supplemented Foods in Canada: Challenges and Evidence Gaps

11:00 AM

Fan Wang (University of Guelph)

Encapsulation of Phytosterols and Phytosterol Esters in Liposomes Made with Soy Phospholipids by High Pressure Homogenization

11:30 AM

Alexey Dudnik (Technical University of Denmark)

Bacterial Hosts for Production of Bioactive Phenolics from Berry Fruits (BachBerry)

12:00 PM

Lunch

One-to-One Partnering Sessions

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10:00 AM **Concurrent Session 6B:**
Pharmacology and Pharmacognosy

Session Chair: **Joseph Betz (U.S. National Institutes of Health, Office of Dietary Supplements)**

10:00 AM **Roy Golsteyn (University of Lethbridge)**
Prairie to Pharmacy Research Program: Investigation of Prairie Plants for Chemicals that Inhibit Vital Cellular Pathways

10:30 AM **Cory Harris (University of Ottawa)**
Yarrow by Parts: an Ethnobotanical, Pharmacological, and Metabolomics Analysis of One of North America's Most Important Medicinal Plants.

11:00 AM **Lee Ellis (National Research Council)**
Assessing the Efficacy of Zebrafish Seizure Models for Testing Cannabinoids.

11:30 AM **Lukman Sarker (Innovate Phytoceuticals)**
Transition of Traditional Lavender Essential Oils to the Modern Therapeutic Practices

12:00 PM **Lunch**
One-to-One Partnering Sessions

1:00 PM **Concurrent Session 7A:** 
Product Quality

Session Chair: **Paula Brown (BCIT)**

1:00 PM **Paul Shipley (BCIT)**
NMR-Based Metabolomic Analysis for the Discrimination of Highly Related Medicinal Plant Samples

1:30 PM **Stefan Gafner (American Botanical Council)**
Challenges in Determining Species Identity of Medicinal Plants: The Case of Euphrasia

2:00 PM **Joseph Betz (U.S. National Institutes of Health, Office of Dietary Supplements)**
*Dehydropyrrolizidine Alkaloids in Boneset (*Eupatorium perfoliatum* L.) and Three Related Species*

2:30 PM **Fabrice Berrué (National Research Council)**
Quality Assurance of Foods and Functional Ingredients Using Quantitative NMR Methods and Chemometrics.

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1:00 PM **Concurrent Session 7B:**
NHPs in Disease Management

Session Chair: **Roy Golsteyn (University of Lethbridge)**

1:00 PM **Kim Bretz (Fundamentals of Health)**
Clinical Use of NHPs: Challenges in Gut Health and the Microbiota

1:30 PM **Dong-Seon Kim (Korea Institute of Oriental Medicine)**
Herbal Complex DKB114 for Hyperuricemia and Gout

1:55 PM **Zack Cernvosky (University of Western Ontario)**
Translating Curry Extract to Novel Therapeutic Approach in Schizophrenia: The Emerging Role of Epigenetics Signaling

2:20 PM **Pierre Haddad (Université de Montréal)**
*Non-polar Solvent Fractions of *Oplopanax horridus* Stimulate Muscle Glucose Uptake and Inhibit Hepatocellular Glucose-6-phosphatase Enzyme Activity*

2:40 PM **Airudin Khan (University of Western Ontario)**
Sublimed Sulfur (Sulmedol) for the Activation of Endogenous Lactase and Restoration of Lactose Tolerance

3:00 PM **Conference Closes**