### FULL CONFERENCE PROGRAM

#### Tuesday May 15th, 2018

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>7:30 AM</td>
<td>Breakfast One-to-One Partnering</td>
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<tr>
<td>8:30 AM</td>
<td>Welcome by NHPRS President (Paula Brown)</td>
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</table>
| 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*  
(AHPA)  
(Clef des Champs) |

**Session Chair:** Cory Harris (University of Ottawa)

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<tr>
<td>10:00 AM</td>
<td>Chair’s Introduction</td>
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| 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 |
15th Annual Conference Program

Innovation at the NHP/Food Interface

May 14th – 17th, 2018 (Guelph, ON)

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
## 15th Annual Conference Program

**Innovation at the NHP/Food Interface**  
May 14th – 17th, 2018 (Guelph, ON)

### Wednesday May 16th, 2018

<table>
<thead>
<tr>
<th>Time</th>
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</thead>
</table>
| 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 | **Matthew Bown** (Health Canada, NNHPD)  
*Modernizing the Regulation of Self-Care Products in Canada*         |
| 10:40 AM | **Lysanne Melanson** (Health Canada, NNHPD)  
*The Regulatory Framework for Natural Health 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?* |
### 15th Annual Conference Program

**Innovation at the NHP/Food Interface**

May 14\(^{th}\) – 17\(^{th}\), 2018 (Guelph, ON)

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<tr>
<th>Time</th>
<th>Session</th>
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<tr>
<td>10:15 AM</td>
<td><strong>Concurrent Session 4B</strong></td>
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<td></td>
<td><em>DNA-based Approaches and Applications</em></td>
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<td><strong>Session Chair:</strong> Bob Hanner (University of Guelph)</td>
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<tr>
<td>10:15 AM</td>
<td><strong>Steven Newmaster</strong> (True ID)</td>
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<td><em>Current research innovations as the NHP Research Alliance</em></td>
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<tr>
<td>10:35 AM</td>
<td><strong>David Erickson</strong> (DNA4 Technologies LLC)</td>
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<td><em>Metagenomic analysis of dietary supplement authenticity and complexity</em></td>
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<td>10:55 AM</td>
<td><strong>Darragh Clancy</strong> (NSF International)</td>
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<td><em>Next Generation Sequencing: A Fit-for-Purpose Tool in Managing Your Supply Chain</em></td>
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<td>11:05 AM</td>
<td><strong>Natalia Ivanova</strong> (Canadian Centre for DNA Barcoding)</td>
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<td><em>Reference library for targeted SNP-based identification of Cibotium barometz using Next Generation Sequencing</em></td>
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<td>11:25 AM</td>
<td><strong>Sidney Sudberg</strong> (Alkemist Labs)</td>
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<td><em>Equivalency of DNA sequencing vs. HPTLC chromatographic analysis vs. Botanical Microscopy methodologies for Botanical Identity: A Statistical Evaluation</em></td>
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<td>11:45 AM</td>
<td><strong>Caroline Puente</strong> (U.S. Food and Drug Administration)</td>
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<td><em>Using Chloroplast Genomes for the Development of DNA-based Methods for Allergenic Plants</em></td>
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<tr>
<td>12:15 PM</td>
<td><strong>Lunch</strong></td>
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<td>Open Poster Session</td>
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<td></td>
<td>One-to-One Partnering Sessions</td>
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<tr>
<td>1:15 PM</td>
<td><strong>NHPRS Annual General Meeting</strong></td>
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## 15th Annual Conference Program

### Innovation at the NHP/Food Interface

May 14<sup>th</sup> – 17<sup>th</sup>, 2018 (Guelph, ON)

### Concurrent Session 5A:

Exploring the Pathway from Innovation to Commercialization at the NHP/Food Interface

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<thead>
<tr>
<th>Time</th>
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<th>Topic</th>
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<tbody>
<tr>
<td>2:00 PM</td>
<td><strong>Shelley King</strong> (Natural Products Canada)</td>
<td>Getting to Know Canada’s Natural Product Commercialization Ecosystem</td>
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<tr>
<td>2:20 PM</td>
<td><strong>Dana McCauley</strong> (University of Guelph)</td>
<td>How to Succeed as an Academic Entrepreneur</td>
</tr>
<tr>
<td>2:40 PM</td>
<td><strong>Krista Coventry</strong> (Source Nutraceutical Inc.)</td>
<td>Regulatory Considerations for NHP &amp; Functional Food Commercialization in the North American Health Products Marketplace</td>
</tr>
<tr>
<td>3:00 PM</td>
<td><strong>Susan Tandan</strong> (Gowlings LLC)</td>
<td>Intellectual Property Protection of NHP Innovations</td>
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<tr>
<td>3:20 PM</td>
<td><strong>Paula Brown</strong> (BCIT)</td>
<td>Industry-Academic Partnerships: Opportunities for Innovation</td>
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<tr>
<td>3:35 PM</td>
<td><strong>Kenna Whitnell</strong> (University of Guelph)</td>
<td>From Student Research to Commercialization: A Case Study</td>
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<tr>
<td>3:50 PM</td>
<td><strong>Open Discussion</strong></td>
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15th Annual Conference Program

Innovation at the NHP/Food Interface
May 14th – 17th, 2018 (Guelph, ON)

2:00 PM  
**Concurrent Session 5B:**
NHPs and Cancer

**Session Chair:**  Jonathan Blay (University of Waterloo)

2:00 PM  
Mary Hardy (George Washington University)

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*
Thursday May 17th, 2018

7:30 AM    Breakfast
            One-to-One Partnering

8:30 AM    Opening Plenary Session (Marie-Claude Vohl)
            Genetic determinants of the plasma triglyceride response to an n-3 fatty acid supplementation in overweight adults.

9:30 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
15th Annual Conference Program

Innovation at the NHP/Food Interface

May 14th – 17th, 2018 (Guelph, ON)

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

Session Chair: Joe 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 EOs 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  James Harnly (US Department of Agriculture)  
*Chemical and genetic characterization of Maca (Lepidium meyenii)*

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

1:55 PM  Joe Betz (U.S. National Institutes of Health, Office of Dietary Supplements)
Dehydropyrrrolizidine Alkaloids in boneset (Eupatorium perfoliatum L.) and Three Related Species

2:20 PM  Fabrice Berrué (National Research Council)
Quality Assurance of Foods and Functional Ingredients Using Quantitative NMR Methods and Chemometrics.

2:40 PM  Jin Changdong (University of Alberta)
Classification of Cannabis Cultivars Marketed in Canada for Medical Purposes and Growth Trends of the North American Medical Cannabis Industry

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

Session Chair:  Roy Golsteyn (University of Lethbridge)

1:00 PM  Dr. 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  Simon Chiu (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  Airduin Khan (University of Western Ontario)
Sublimed Sulfur (Sulmedol) for the Activation of Endogenous Lactase and Restoration of Lactose Tolerance

3:00 PM  Conference Closes