

**Conference Program**  
14<sup>th</sup> Annual NHPRS of Canada

**Beyond Tradition**

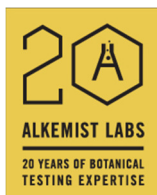
Vancouver, BC  
May 8<sup>th</sup> – 11<sup>th</sup>, 2017

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**Monday May 8<sup>th</sup>, 2017**

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- 12:00 PM     **Waters Workshop**  
*“Frontiers in Natural Products Research”*
- 3:00 PM     Exhibitor Set-up
- 4:00 PM     Registration Opens
- 6:00 PM     **Alkemist/Extrasynthese Opening Reception**



All conference participants are invited to attend the opening reception of NHPRS 2017.

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**Tuesday May 9<sup>th</sup>, 2017**

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- 8:15 AM     **Welcome by NHPRS President, Paul Shipley**  
**Opening Prayer**  
Aaron Nelson-Moody (Tawx'sin Yexwulla) of the Squamish Nation
- Plenary Session: Microbome & Health**     Chair: Paul Shipley, UBC
- 9:00 AM     **Jia Wei**, University of Hawai'i Cancer Centre  
*Gut Microbial-host Co-metabolism Links to Gastrointestinal Cancer*  
Dr. Roger's Prize in Complementary and Alternative Medicine Lecture
- Deanna Gibson**, University of British Columbia  
*Factors Which Influence Microbiota Establishment and the Effect on Health*

10:00 AM      Coffee and Networking Break

## **Concurrent Session 1A: Regulatory Affairs Part 1 – Updates**

Chair: Krista Coventry, Source Nutraceutical Inc.

- 10:30 AM      **Loren Israelson**, UNPA  
*New Dietary Ingredients Guidance – What You Need to Know*
- 11:00 AM      **Amanda Moir**, NNHPD, Health Canada  
*Proposed Regulatory Changes to Self-care Products*
- 11:30 AM      **William Yan**, Food Directorate, Health Canada  
*Health Canada's Update on Supplemented Foods, Regulatory Framework and the Healthy Eating Strategy*

## **Concurrent Session 1B: Industrial Innovations and Emerging Technologies**

Chair: Bob Chapman, NRC

- 10:30 AM      **Jimmy Yuk**, Waters Corporation  
*Unraveling the Complexity of Traditional Medicines Using LC/MS Coupled with a Novel Informatics Platform*
- Brian Killday**, Bruker Biospin  
*Cell Culture Media: NMR Approaches for Monitoring Composition, Stability, Nutrient Consumption, and Product Formation.*
- Ingrid Elisia**, BC Cancer Research Centre  
*The Use of a Whole Human Blood Assay to Screen for Potential Immunomodulators*
- Xiu-Min Chen**, University of British Columbia  
*How Does Tea Processing and Age of Leaf Affect Phenolic Content, Antioxidant and Anti-inflammatory Activities of Coffee Leaves?*
- Jinle Chen**, Zhongshan Zhongzhi Pharmaceuticals Co Ltd  
*How Does Tea Processing And Age Of Leaf Affect Phenolic Content, Antioxidant And Anti-Inflammatory Activities Of Coffee Leaves?*

**Ken Cawkell**, Pennington Biomedical Research Center  
*Clinical Study Results Of The Feasibility, Safety, And Tolerability Of  
Cerebella, Combination Of Highly Bioavailable Essential Fatty Acids, Panax  
Ginseng Extract, And Green Tea Catechins, On Cognitive Function And  
Functional MRI (fMRI) Activity In Middle Age And Older Healthy Adults*

12:00 PM

**Lunch**

**Student Poster Session** (Judging from 12:30-1:30)

1:30 PM

**Special Session: Neil Towers Award Lecture**

**Plenary Session: Personalized Nutrition**

Chair: David Kitts, UBC

2:00 PM

**Peter Jones**, Richardson Centre for Functional Foods & Nutraceuticals  
*Nutrigenetics: What does the future hold?*

2:30 PM

**Ahmed El Sohemy**, University of Toronto  
*Do our genes determine what we should eat?*

3:00 PM

Coffee and Networking Break

**Concurrent Session 2A: Regulatory Affairs Part 2 – Hot Topics**

Chair: Loren Israelson, UNPA

3:30 PM

**Krista Coventry**, Source Nutraceutical Inc.  
*Regulatory Opportunities for Caffeinated Products in the Canadian  
Health Product Sector*

3:50 PM

**Sharan Sidhu**, NHP Licensing Solutions  
*Natural Health Product Standards of Evidence and Health Claim  
Opportunities: A Case Study*

4:10 PM

**Chuck Chang**, ISURA  
*GMO Testing in NHP Finished Products and Raw Materials*

4:30 PM

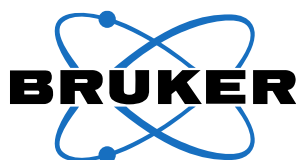
**Panel Discussion (Speakers from Regulatory Affairs Sessions 1 & 2)**

## Concurrent Session 2B: Student Talks

Chair: Paul Spagnuolo, University of Guelph

3:30 PM      **Student Talks**

5:00 PM      **Poster Session & Bruker Wine and Cheese Reception**



Poster Session and Reception open to all delegates.

6:30 PM      **Optional Social Event:** Brewery Tour, Canadian Craft Tours

Pre-registration required: sign up at [www.nhprs.ca](http://www.nhprs.ca)

## Wednesday May 10<sup>th</sup>, 2017

8:00 AM      **Bio-Partnering Session 1**

## Plenary Session: Protecting Plants: The Role of Researcher & Industry Responsibility

Chair: Susan Murch, UBC

9:00 AM      **Danna Leaman**, Canadian Museum of Nature  
*Sustainability in the botanicals market: [how do; how can] industry claims of sustainable sourcing address real conservation concerns?*

9:00 AM      **Connie Kehler**, Saskatchewan Herb, Spice & Specialty Agriculture Assoc.  
**Donna Fleury**, Alberta Agriculture  
*Ethical and Sustainable Sourcing of High Quality Safe Traceable Botanicals: Verified Tools and Practices*

10:00 AM      **Coffee and Networking Break**

## **Plenary Session: Botanical Authentication - Plants & DNA**

Chair: Paula Brown, BCIT

**10:30 AM**      **Wendy Applequist**, Missouri Botanical Garden  
*The Definition of Species, Botanical Identification, and Selection of Botanical Reference Materials*

**Shilin Chen**, Institute of Chinese Materia Medica  
*DNA Barcoding for Herbal Medicine Identification*

**Natalya Ivanova**, Canadian Centre for Barcoding  
*Embracing & Understanding Biocomplexity of Herbal Supplements*

**12:00 PM**      **Lunch**  
**NHPRS Annual General Meeting (12:00-12:30)**  
**Student Poster Session (Judging from 12:30-1:30)**

## **Concurrent Session 3A: Botanical Authentication - Reference Materials**

Chair: Steve Wise, ODS/NIH

**1:30 PM**      **Catherine Rimmer**, NIST  
*Reference Materials for Dietary Supplements*

**Ragu Subramnayam**, University of Guelph  
*Botanical References for DNA Testing*

**Rene de Vaumas**, Extrasynthese  
*Development of Standards for the Characterization of Dietary Supplements*

**Rob O'Brien**, ISURA  
*The Continued Development of User Authenticated Reference Materials (Uarm) For Development of Herbal Authentication Programs and Related Applications*

**Panel Discussion: Botanical Authentication Part 1 & 2**

## Concurrent Session 3B: Cancer

Chair: Siyaram Pandey (University of Windsor)

1:30 PM

**Paul Spagnuolo**, University of Guelph

*Natural health products in cancer cell metabolism*

Dr. Roger's Prize in Complementary and Alternative Medicine Lecture

**Ingrid Elisia**, BC Cancer Research Centre

*The Efficacy of Topical All Trans Retinoic Acid (Vitamin A) as a Treatment for Melanoma*

**Quan-xi Mei**, Guangzhou University of TCM

*Applications of Fresh Black Nightshade Fruit in Tumor Treatment*

**Zhipeng Qu**, Zhendong Pharmaceutical Research Institute

*Identification of Candidate Anti-cancer Molecular Mechanisms of Compound Kushen Injection Using Functional Genomics*

**Siyaram Pandey**, University of Windsor

*Targeting Metabolic and Oxidative Stress Vulnerability of Cancer Cell to Induce Apoptosis*

3:00 PM

**Coffee and Networking Break**

## Concurrent Session 4A: Botanical Authentication – Analytics

Chair: Steve Wise, ODS/NIH

3:30 PM

**Adam Kuszak**, NIH/ODS

*Critical Needs for Reference Materials & Methods: ODS Program Update*

**Holly Johnson**, Alkemist Labs

*Challenges in Testing Dietary Supplements-The Importance of Validation*

**Susan Murch**, University of British Columbia

*The Future of DNA Technology for Botanical Products*

**Jim Harnly**, USDA

*Chemometric Approaches for Characterizing & Authenticating Botanicals*

**Andrew Lewis**, Verity Analytics  
*Screening for Saw Palmetto Adulteration by NMR*

## **Concurrent Session 4B: Pharmacology & Traditional Medicine**

Chair: Cory Harris, University of Ottawa

3:30 PM      **Pierre Haddad**, University of Montreal  
*Renal Protective Potential, Mechanism of Action and Identification of Bioactives from Antidiabetic Medicinal Plants of the James Bay Cree Traditional Pharmacopeia*

**Yang Ling**, Shanghai University of Traditional Chinese Medicine  
*Discovery of Pentacyclic Triterpenoids as Potent and Selective Inhibitors Against Human Carboxylesterase 1*

**Selvarani Vimalanathan**, University of British Columbia  
*Echinacea purpurea Extract Can Reverse Respiratory Virus Induced Secondary Bacterial Infection*

**Hongxi Xu**, Shanghai University of Traditional Chinese Medicine  
*Pharmacological Studies on Bioactive Compounds from Garcinia Species*

**Roy Golsteyn**, University of Lethbridge  
*Sesquiterpene Lactones, Isolated from the Canadian Prairie Plant, Gaillardia aristata (Blanket Flower), Induce Cell Cycle Arrest and a Novel Anti-Mitotic Spindle Activity in Human Cells*

**Nebal Eltanbouly**, University of Cairo  
*Compositional, Rheological Analysis and Anticancer Activity of Mucilage Prepared From Colocasia esculenta Corms Cultivated in Egypt and Its Comparative Evaluation as a Sustained Release Polymer*

5:00 PM      **Conference Day 2 Ends**

6:00 PM      **Gala Dinner and Awards Ceremony**

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**Thursday May 11<sup>th</sup>, 2017**

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8:00 AM      **Bio-Partnering Session 2**

### **Plenary Session: Modernization of Pharmacopoeial Standards**

Chair: Dr. Yuan Chu Ma

8:30 AM      **Alex Leung**, HKCMMS

9:00 AM      **Zonghua Song**, Chinese Pharmacopoeia Commission

9:30 AM      **Gabriel Giancaspro**, USP  
*USP Update: Modernization from Chemometrics to Cannabis*

10:00 AM     **Coffee and Networking Break**

### **Medical Cannabis: Use, Regulation & Plant Science**

Chair: Dr. Paula Brown

10:30 PM     **Roy Upton**, American Herbal Pharmacopoeia  
*Historical use of Cannabis & Development of AHP Monograph*

11:00 PM     **Donald MacPherson**, (Canadian Drug Policy Coalition) *-invited*  
*Policy & Public Health - Implications for Cannabis Legalization*

11:30 PM     **Jon Page**, University of British Columbia  
*Unlocking the Genetics Secrets of Cannabis*

12:00 PM     **Lunch**

### **Medical Cannabis: Plant Science & Pharmacology**

Chair: Dr. Cory Harris

1:30 PM      **Melanie Kelly**, Dalhousie University  
*Lessons From Nature: Phytochemicals And Ligands Targeting G-Protein  
Coupled Cannabinoid Receptors As Potentials Leads For Drug Discovery.*

- 2:00 PM      **Bob Chapman, NRC**  
*Assessing the Uptake Kinetics, Activity and Potential Interaction of Cannabinoid Mixtures*
- 2:15 PM      **Rob O'Brien, Supra THC Services**  
*The Developing Role of Advanced Analytical Chemistry Techniques in Cannabis Clinical Trials*
- 2:30 PM      **Mahmoud Elsohly** University of Mississippi  
*Evaluation of Cannabis Extracts for Epilepsy in the US: Prospective from the University of Mississippi*
- 3:00 PM      **Coffee and Networking Break**
- Medical Cannabis: Clinical Research**
- 3:30 PM      **Zach Walsh, University of British Columbia**
- 4:00 PM      **M.J. Milloy, BC Centre for Excellence in HIV/AIDS**
- 4:30 pm      **Panel Discussion**
- 5:00 pm      **Conference Close**

*Thank you everyone for contributing to the success of this years' conference!*