

Friday March 3rd, 2006

8:30 Welcoming and opening remarks

9:00 Plenary Lecture: Dr. Boyd Eaton

“The Ancestral Human Diet and its Implications for Contemporary Nutrition”

10:00 Nutrition Break

10:30 Concurrent Sessions

A. Production and Processing

Session Chairs: Connie Kehler, NHP Saskatchewan Herb & Spice Coalition
Paul Kolodziejczyk, Lead Research Scientist, Olds College Centre for Innovation

10:30 Tatjana Stevanovic; Département des Science du Bois et de la Forêt, Université Laval
Forest Biomass as a Source of Bioactive Molecules

10:45 Stewart Cameron; Canadian Forest Service, Natural Resources Canada
Assessment of Perennial Woody Species to Ascertain Their Commercial Potential as Sources for Bioactive Compounds

11:00 Stewart Cameron; Canadian Forest Service, Natural Resources Canada
Biomass Quality and Economic Return as Supporting Arguments for Sustainable Woodland Harvesting of Wild Ground Hemlock (*Taxus canadensis*)

11:15 Trish Flaster; Ethnobotanist, Botanical Liaisons, LLC
Innovative Plant Identification: Virtual Herbarium for Economic Plants and their Relatives

11:30 Anna Bakowska-Barczak; Research Associate, Olds College Centre for Innovation
Selecting Black Currant and Saskatoon Berries Varieties Rich in Phenolic Compounds and Functional Properties

11:45 Danielle Julie Carrier; Associate Professor, University of Arkansas
Pros and Cons of Using Sub-critical Water for Extraction of Medicinal Plants

B. Metabolism and Diabetes

Session Chairs: Vladimir Vuksan; Dept. of Nutritional Sciences, University of Toronto

10:30 Pearl Breitman; Department of Nutritional Sciences, University of Toronto
Increasing Fiber Viscosity Lowers Postprandial Glycemia in Healthy Individuals

10:45 Livia Augustin; University of Toronto and St. Michael's Hospital, Toronto
Dietary Glycemic Index and Glycemic Load in Relation to Measures of Body Weight

11:00 Anamaria Dascalu; Department of Nutritional Sciences, University of Toronto
Deleterious Effects of American Ginseng Polysaccharides on Postprandial Glycemia in Healthy Individuals

11:15 Andrea Josse; Department of Nutritional Sciences, University of Toronto
The Effects of Almonds on Glycemia, Oxidative Stress and Risk Factors for Coronary Heart Disease

- 11:30 Adish Eztagha**; Department of Nutritional Sciences, University of Toronto
Dose Response Effect of β -Glucan Concentrates on Plasma Glucose and Insulin
Following an Oral Glucose Load is Correlated to Viscosity
- 11:45 Vladimir Vuksan**; Associate Professor, University of Toronto
Effect of a Novel Grain Rich in ω -3 Fatty Acids and Micronutrients on Risk Factors for
Heart Disease in Type 2 Diabetes

12:00 Lunch

1:00 Concurrent Sessions

A. NHP Quality

Session Chairs: Paula Brown, NHP Research Group, Technology Centre, BCIT
Joseph M. Betz; Office of Dietary Supplements, NIH

- 1:00 Jana Hildreth**; Dietary Supplement Subject Matter Expert, Lawnsdale Cal., USA
Common Problems & Issues with CAL Testing and CoA's
- 1:15 Phong Mai Le**; Institute for National Measurement Standards, NRC-Canada
Isolation and Structural Determination of Oleanane and Malonyl Ginsenosides: Ro,
mRb1, mRd, mRb2, From the Roots of American Ginseng Using HPLC/MS and NMR
- 1:30 Anthony J. Windust**; Institute for National Measurement Standards, NRC-Canada
Production of Universally ^{13}C Labelled Polyunsaturated Fatty Acids as Reference
Materials for Natural health product Research and Quality Control
- 1:45 Mark Roman**; Official Methods Committee for Dietary Supplements, AOAC
International
ELSD as a Detection Technique for the Analysis of Botanicals and Dietary Supplements
- 2:00 George E. Porter III**; HVL Incorporated
Benefits of ISO 17025:1999 Accreditation for NHP Quality Control
- 2:15 Paula Brown**; NHP Research Group, Technology Centre, BCIT
Optimization & Validation of an Analytical Method to Determine Key Constituents in
Hydrastis canadensis

B. Cardiovascular & Respiratory Health

Session Chair: David Jenkins, Department of Nutritional Science, University of Toronto

- 1:00 Caroline Pampolina**; Faculty of Pharmacy, University of Manitoba
CLA Stimulates PPAR γ to Modulate EGFR Signalling in Cardiomyocytes
- 1:15 Alex Rogovik**; St. Michael's Hospital
A Blend of Highly Viscous Polysaccharide Decreases Relative CVD Risk in Three
Population Groups
- 1:30 Vladimir Vuksan**; Department of Nutritional Sciences, University of Toronto
Viscosity of Dietary Fiber Determines Lipid Lowering Effects in Healthy Individuals.
- 1:45 Julia MV Wong**; Department of Nutritional Sciences, University of Toronto
Effect of a High Protein and Low Carbohydrate Soy Based Vegan Diet on Weight Loss
and Serum Lipids
- 2:00 Elena Jovanovski**; Department of Nutritional Sciences, University of Toronto
Root Fractions of Korean Red Ginseng (*Panax Ginseng*) Have Differential Effect on
Blood Pressure and Blood Glucose Control in Healthy Individuals.
- 2:15 David Jenkins**; Department of Nutritional Science University of Toronto
The Soy Debate

2:30 Health Break

3:00 Concurrent Sessions

A. Scientific & Regulatory Affairs

Session Chairs: Steven Dentali; Scientific and Technical Affairs, American Herbal Products Association

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TBA

3:15 Diadelis Ramirez; National Center for State Quality Control of Drugs
Updates in Pre-Clinical Regulatory Requirements for Phytomedicines in Latin America.

3:30 Helmi Hussien; Natural Health Products Directorate, Health Canada
Implementation of a Comprehensive Quality Management System in the Natural Health Product Industry from a Regulatory Perspective

3:45 David Crowley; Medical Director, KGK Synergize Inc.
Conducting Clinical Trials in the New Canadian Regulatory Environment

4:00 Heather Boon; Leslie Dan Faculty of Pharmacy, University of Toronto
Canadian Consumers' Perceptions of the Risks Associated with Using Natural Health Products (NHPs)

4:15 Gregor Reid; Canadian R&D Centre for Probiotics, Lawson Health Research Institute and University of Western Ontario.
Science Politics and Our Health: Why Does Canada Not Have a Strategy for Production and Legislation of Probiotic Foods and Medicines That Can Reduce Healthcare Expenditures?

B. Neurobiology and Mental Health

Session Chair: John Arnasson, Centre for Advanced Research in Environmental Genomics (CAREG), Dept. of Biology, University of Ottawa

3:00 William Jia; Div. of Neurosurgery, Dept. of Surgery, University of British Columbia
Neuroprotection by 20(S) Protopanaxadiol Focal Cerebral Ischemia Mouse Model

3:15 Rosalie Awad; CAREG, Dept. of Biology, University of Ottawa
Recombinant Human Glutamic Acid Decarboxylase 65 (rhGAD65) as a Pharmacological Tool to Test for Neurologically Active Botanical Compounds

3:30 Craig Hudson; Biosential Inc.
Protein Source Tryptophan versus Pharmaceutical Grade Tryptophan as an Efficacious Treatment for Chronic Insomnia

3:45 Cory Harris; Neural Regeneration Lab, University of Ottawa
Plant Phenolics as Novel Inhibitors of Platelet Activating Factor-Induced Neuronal Cell Death

4:00 Joel Gagnier; Faculty of Medicine, University of Toronto
Herbal Medicine for Low Back Pain: A Systematic Review

4:15 Priyantha Wijeeera; Natural Health Products Directorate, Health Canada
Gender Analysis of Natural Health Products Use in Canada: A Biological and Psychopharmacological Approach

4:30 POSTER SESSION

6:00 Networking Reception

Saturday March 4th, 2006

9:00 Plenary Lecture: Francis Brinker

“Food-Herb Drug Interactions: The Good, the Bad and the Ugly”

10:00 Nutrition Break

10:30 Concurrent Sessions

A. NHP-Drug Interactions

Session Chairs: Francis Brinker, Dept. of Medicine, College of Medicine, University of Arizona
Allison McCutcheon; NHP Research Society of Canada

11:15 Dugold M.R. Seely; Canadian College of Naturopathic Medicine and Faculty of Medicine, University of Toronto
Chemotherapeutic Drug Interactions in Clinical Cancer Care

10:30 Yang Zhao; The Prostate Centre at Vancouver General Hospital, UBC
Impact of Isolated Ginsenosides aPPD and aPPT on Cytochrome P450 1A1 Expression

10:45 Francesco Marotta; Hepato-Gastroenterology Dept. S. Giuseppe Hospital Milan, Italy
Oxidative-Inflammatory Damage in Cirrhosis. Effect of Vitamin E and A Fermented Papaya Preparation

11:00 Brian Foster; Faculty of Medicine, University of Ottawa and Therapeutics Products Directorate, Health Canada
In Vitro Inhibitory Effect of African Medicinal and Food Plants on Human Cytochrome P450 3A Subfamily

11:30 Jean-Jacques Dugoua; Truestar Health and Wellness Centre
Safety and Drug Interactions of NHPs During Pregnancy and Lactation: A Systematic Review

11:45 Open Discussion
Guidelines for Botanical Adverse Event and/or Interaction Reporting

B. Cancer

Session Chairs: Emma Guns, University of British Columbia
Neil Fleshner: Chief of Urology, Dept. of Surgery, University of Toronto

10:30 Neil Fleshner; Chief of Urology, Dept. of Surgery, University of Toronto
Overview of Natural Health Products (NHPs) and Cancer Research

10:45 Jianmin Chen; Department of Nutritional Sciences, University of Toronto
Dose Dependent Interaction of Lignan and n-3 Fatty Acid-Rich with Tamoxifen and Mechanism of Action in the Breast Cancer MCF-7 Xenografts in Nude Mice

11:00 Francesco Marotta; WHO-affiliated Centre for Traditional Medicine, State University Milano Italy
Phytotherapeutic Compound YHK Exerts an Inhibitory Effect on Early Stage of Experimentally-Induced Neoplastic Liver Lesions

11:15 Swati Saxena; Dept. of Biology, University of Waterloo
Therapeutic Potential of Novel St. John's Wort Extracts in Growth Inhibition of RT-29

11:30 Dugald M.R. Seely; Canadian College of Naturopathic Medicine and Faculty of Medicine, University of Toronto
In Vitro Analysis of the Herbal Compound Essiac®

12:00 NHPRS Annual General Meeting

1:00 Lunch

2:00 Concurrent Sessions

A. Pharmacognosy & Pharmacology

Session Chairs: Allison McCutcheon, NHP Research Society of Canada

2:00 Susanna Zick; University of Michigan, Dept. of Family Medicine, Comprehensive Cancer Center, Michigan Integrative Medicine

Challenges to Designing Pharmacokinetic Studies with Natural Health Products

2:15 Arsal Mansoor; Dept. of Biotechnology and Informatics, Balochistan University of Information and Technology and Management Sciences
Pharmacological and Biological Activities of Gentianine

2:30 Aziza Lizdaoui; Dept. of Wood and Forest Sciences, Laval University
Antioxidant Properties of Bark Extracts of Black Spruce and Trembling Aspen

2:45 Manuela Neuman; Dept. of Pharmacology, University of Toronto
Silymarin Changes Ethanol Immune-Signature in Viral Hepatitis

3:00 Danielle Julie Carrier; Biological & Agricultural Engineering, University of Arkansas
Milk Thistle Inhibits Chemically and Cell Mediated Oxidization of Low Density Lipoprotein

3:15 Jacqueline J. Shan; CV Technologies Inc.
Efficacy of COLD-fX in the Prevention of Recurrent Upper Respiratory Tract Infections in a Susceptible Population: A Randomized, Double-Blind, Placebo-Controlled Trial

B. Advances in Nutraceutical Research

Session Chair: Rickey Yada; AFMNet and University of Guelph
Yves Desjardins; Institute on Nutraceuticals and Functional Foods (INAF), Université Laval

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Integrated Research on Nutraceuticals, Functional Foods and Health: the INAF Model

2:15 Aleskandra Malgorzata Urbanska; Department of Biomedical Engineering and Artificial Cells and Organs Research Centre, Faculty of Medicine, McGill University
Microrcapsule *Lactobacillus acidophilus* Cells Yogurt Formulation and its Implications in Oral Therapeutic Probiotic Cell Delivery: Preparation and In-Vitro Analysis

2:30 Stephen Boyd; Mannatech Inc.
Dietary Carbohydrate Utilization and the Potential for Glyconutritional Supplements

2:45 Naderah Hannah Mirrashed; Biology Dept. Carleton University
Genomic Profiling of Yeast in Response to Berberine, a Plant-Derived Antifungal

3:00 Vinti Goel; CV Technologies
Efficacy of COLD-fX in the Prevention of Respiratory Symptoms in Community Dwelling Adults: A Randomized, Double-Blind, Placebo Controlled Trial

3:15 Mark J.S. Miller; Albany Medical College
The Role of Science and the Processes Involved in Translating Ethnomedicines into Western Therapeutics.

3:30 Nutrition Break

4:00 Concurrent Sessions

A. Alternative Medicines

Session Chair: Heather Boon; Leslie Dan Faculty of Pharmacy, University of Toronto

- 4:00 Heather Boon;** Leslie Dan Faculty of Pharmacy, University of Toronto
Homocysteine Impaired Contractile and Relaxation Response of Cultured Rat Aortic Tissues: Synergistic Effect of Macrophages and Protection by *Radix Salviae Miltiorrhizae (Danshen)*
- 4:15 Qian Yan;** Dept. of Physiology and Pharmacology, University of Western Ontario
Homocysteine Impaired Contractile and Relaxation Response of Cultured Rat Aortic Tissues: Synergistic Effect of Macrophages and Protection by *Radix Salviae Miltiorrhizae (Danshen)*
- 4:30 Rajesh Singh Pawar;** Div. Of Pharmacognosy and Phytochemistry, Dept. of Pharmaceutical Sciences, Dr. H.S. Gour University
Pharmacological Evaluation of *Asteracantha longifolia* on Cyclophosphamide Induced Bone Marrow Suppression
- 4:45 Alok Pal Jain;** Div. Of Pharmacognosy and Phytochemistry, Dept. of Pharmaceutical Sciences, Dr. H.S. Gour University
Anti-Inflammatory and Anti-Nociceptive Activity of *Adina cordifolia* Bark
- 5:00 Vasundara Venkateswaran;** Sunnybrook & Women's College Health Sciences Centre and Princess Margaret Hospital
Antioxidant and Prostate Cancer Prevention
- 5:15 Tina C. Belgaumkar;** Homeopath
Prostate Cancer: A Homeopahtic Approach

B. Panel Discussion

4:00 "The Challenges and Issues in Product Development and Commercialization: A Panel Discussion"

6:30 NHP Research Society Gala Dinner

Key Note Speaker: **Joe Schwarcz**

"Phytochemistry Magic"

Sunday March 5th, 2006

Special Sunday Symposium: Perceptions of Natural Health Products and Functional Foods Research

Sunday Plenary Session:

- 9:00** *Nutrigenomics – Significance to Foods and Natural Health Product Research*
Dr. Jim Kaput; Laboratory of High Speed Computing and Informatics, NCMHD Centre of Excellence in Nutritional Genomics, University of California Davis and NutraGenomics
- 9:40** *Opportunities & Challenges in NHP Research: The NCCAM Experience*
Dr. Marguerite Klein; Program Officer, Division of Extramural Research and Training, NCCAM/NIH
- 10:05** *Translating Clinical Research into Practical Health Benefits*
Dr. Bruce Holub; Professor Emeritus of Nutritional Sciences, Dept. of Human Health & Nutritional Sciences, University of Guelph
- 10:30** **Nutrition Break**

Scientific Evidence and Health Claims

- 11:00** *NHP and Food Health Claims: A Legal Perspective*
Ronald L. Doering; Gowling Lafleur Henderson, LLP, Barristers and Solicitors
- 11:30** *Food-NHP-Drug-Boundaries and Their Impact on Research*
Dr. Barbara Schneeman; Director, Office of Nutritional Products, Labelling, and Supplements, Center for Food Safety and Applied Nutrition, Food and Drug Administration
- 12:00** *The Co-Evolution of Research and Regulations*
Dr. Elizabeth A. Yetley; Senior Nutrition Research Scientist, Office of Dietary Supplements, National Institutes of Health
- 12:30** **Lunch**

Dissemination of Research: Scientists, Consumers, & the Media

- 1:30** *Between Protection and Freedom of Choice, Finding Balance*
Dr. Loren Israelson; Executive Directive, Utah Natural Products Alliance
- 2:00** **TBA**
Dr. Steve Dentali; Vice President, Scientific and Technical Affairs, American Herbal Products Association
- 2:30** *The Evolution of Natural Health Product Research*
Dr. John Cardellina; National Cancer Institute and National Institutes of Health

3:00 Nutrition Break

3:30 Closing Plenary Address

From Production to Clinical Trial: Building a Quality Foundation

Dr. Ezio Bombardelli;

4:30 Closing Remarks

