Update yourself in state-of-the-art methods for botanicals research at the Purdue University workshop. You will be exposed to a spectrum of methodologies related to botanical sourcing, bioavailability and functional health relevance. The Botanical Center for Age Related Diseases has been developing and refining methodologies for botanicals research for over 10 years and has expertise in a broad range of technologies. Our experience in training in botanical research methods to students and senior researchers for over 10 years shows that a combination of lectures and laboratory experiences is the best learning environment.

Connie Weaver, Director of the Botanical Center at Purdue, will provide an overview of botanical research and the challenges which must be met to make the research relevant to human health. Jim Simon, Director of the New Use Agriculture and Natural Plant Products Program at Rutgers, will discuss the importance of archiving, characterizing and tracking of botanicals used in research projects. Successful translational botanical research requires moving from in vitro techniques to in vivo animal models and finally to human clinical studies. The in vitro to in vivo phases will be covered by Chris Rochet of the Purdue Medicinal Chemistry and Molecular Pharmacology department and Qing Jiang and Elsa Janle from the Nutrition Science department. Elsa Janle and Connie Weaver will discuss the transition from animal models to clinical research. One of the most important factors in determining if successful in vitro studies can be translated into successful in vivo and clinical studies is bioavailability of the botanical. This topic will be covered by Elsa Janle and Chris Rochet and David Colby from the Medicinal Chemistry and Molecular Pharmacology department. Analytical techniques for measurement of botanical components in food and biological samples will be covered by Mario Ferruzzi of the Food Science department.

November 2-3, 2011
Phillip E. Nelson Hall of Food Science
West Lafayette, Indiana
WORKSHOP SPEAKERS

Elsa Janle, PhD - a graduate of Purdue University in Physiology is an Associate Research Professor in the Department of Foods and Nutrition and a member of the Purdue-UAB Botanicals Research Center for Age Related diseases. Her research interests include the effects of polyphenols on glucose metabolism in diabetes and the brain bioavailability of grape polyphenols in models of neurodegenerative diseases.

Mario Ferruzzi, PhD - an Associate Professor in the Departments of Food Science and Nutrition Science and Leader of the Bioanalytical and Bioavailability Research Core of the Mount Sinai School of Medicine Center of Excellence for Complimentary and Alternative Medicine. His research interests include investigation of the impact of food formulation and processing on bioavailability, metabolism and tissue distribution of disease preventative pigments and flavonoids.

Chris Rochet, PhD - an Associate Professor in the Department of Medicinal Chemistry and Molecular Pharmacology. The overall goals of his research program are to understand how protein aggregation and mitochondrial dysfunction contribute to Parkinson’s disease (PD), and to use this information to develop new therapeutic strategies. Dr. Rochet’s group has addressed these problems by exploring the structural and functional properties of PD-related gene products (e.g. alpha-synuclein, DJ-1) and by characterizing the neuroprotective effects of botanical extracts enriched in polyphenolic compounds.

James Simon, PhD - a Professor in the Department Plant Biology and Plant Pathology Rutgers, The State University of New Jersey, and Director of the New Use Agriculture and Natural Plant Products Program. His research focuses on plant genetics, genetic diversity, plant breeding, natural products discovery and characterization, botanical authentication, standardization and quality control of botanicals and phytopharmaceuticals.

John R. Burgess, PhD - an Associate Professor in the Department of Nutrition Science. His research interests include examining the role of dietary and endogenous antioxidants in protecting against the development of diseases and disorders in which oxidative stress is implicated as a contributing factor.

David A. Colby, PharmD PhD - an Assistant Professor in the Department of Medicinal Chemistry and Molecular Pharmacology. His research interests are structure-activity investigations of bioactive natural products drug discovery and enhancing metabolic stability and bioavailability using fluorine chemistry.

Qing Jiang, PhD - an Associate Professor in the Department of Nutrition Science at Purdue University. Her research focuses on different forms of vitamin E and their metabolites with respect to their metabolism, new biological functions and roles in disease prevention and therapy including inflammatory diseases and cancer.

Connie Weaver, PhD - a Distinguished Professor and Head of the Department of Nutrition Science at Purdue University and a member of the Institute of Medicine. Her research interests focus on the use of isotopic tracers to study bioavailability of minerals and bioactive constituents and the effect of botanical and nutritional interventions on bone turnover. She is Deputy Director of the Indiana Clinical and Translational Science Institute and was Director of the Purdue-UAB Botanical Research Center for a decade.

WORKSHOP AGENDA

Wednesday, November 2

8:00 Registration and Continental Breakfast
8:30 Welcome, Connie Weaver
8:40 Archiving, characterizing and tracking botanicals – Jim Simon
10:00 Break
10:30 Moving from in vitro to in vivo – Chris Rochet, Qing Jiang, and Elsa Janle
Noon Lunch
1:30 Optimizing bioavailability and efficacy of botanicals through chemistry – Chris Rochet and David Colby
Metabolic pathways of botanicals – experimental
6:00 Dinner

Thursday, November 3

8:00 Breakfast
8:30 Overview of botanicals research: Making your study relevant – Connie Weaver
9:30 Moving to in vivo animal models to clinical – Elsa Janle and Connie Weaver
10:45 Bioassays for anti-inflammatory and oxidative stress – Qing Jiang and Jay Burgess
Noon Lunch
1:30 Tour in vivo sampling facility and lab exercise
Elsa Janle
Analysis of botanical components in food and biological samples
Mario Ferruzzi
3:30 Switch labs

GENERAL INFORMATION

Registration Information:
You may register online at: www.conf.purdue.edu/botanicals

Accommodations:
Purdue Union Club Hotel on the Purdue Campus. Phone: 800-320-6291 or 765-494-8913. To receive the conference discount please request the Botanicals Workshop room block.

Hilton Garden Inn Phone: 765-743-2100.

The hotel room is not included in the course fees and you will be responsible for making your own reservations.

For more information, contact: Geni Greiner, Conference Director at 765-494-7219 or e-mail: ghgreiner@purdue.edu

Purdue is committed to making its programs accessible to individuals with disabilities. If you require an accommodation or special assistance for this program due to a disability, please contact us at 765-494-7219. Purdue University is an equal access/equal opportunity university.

FEES

Purdue Trainees - $100
External Trainees - $200
External academic faculty and staff - $400 (other faculty and staff at universities)
Industry Participant - $500

Total Enclosed $ 

PAYMENT METHOD

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