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Department of Nutritional Sciences and the
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**“Research Frontiers in
Nutritional Sciences Conference”**

October 8 - 9, 2009

The University of Arizona
Student Union Grand Ballroom

1303 E. University Boulevard
Tucson, Arizona 85721

***Program is approved for 10 CEU's by the
American Dietetic Association***

Conference Goals

Discuss novel research approaches to the treatment and prevention of obesity, cancer and diabetes.

Describe the influence of the bioactive food components of diet and nutrition on genomics, proteomics, and metabolomics in the setting of obesity, cancer and diabetes.

Develop and facilitate interdisciplinary interactions leading to collaborations among participating scientists and clinicians.

Foster growth of junior investigators and graduate students.

Register NOW!!

<http://nutrition.arizona.edu/nsconf/>

2009 Research Frontiers in Nutritional Sciences Conference Program

Registration *CEU approved (see front of brochure)*

Fee includes:

One Day Program - Continental Breakfast and Lunch
Before Sept. 14, 2009 \$135.00 Late registration \$170.00

Two Day Program - Continental Breakfast and Lunch
Before Sept. 14, 2009 \$190.00 Late registration \$225.00

Full Time Students \$ 75.00

There is no charge for those attending only the Memorial Tribute to Dr. Darrel Goll which begins at 1:00 PM October 8, 2009. However registration is required due to limited seating.

CONFERENCE KICK OFF

- 7:00 a.m. Registration and Continental Breakfast
- 8:00 a.m. Welcome
Joy Winzerling, PhD, RD, Head, Dept. of Nutritional Sciences, University of Arizona
Dean Eugene Sander, Executive Vice President, College of Agriculture & Life Sciences, University of Arizona
Fernando Martinez, MD, Interim Director, BIO5 Institute for Collaborative BioResearch, University of Arizona
- 8:30 a.m. Introduction
Conference Chair: Donato Romagnolo, PhD, College of Agriculture & Life Sciences, Dept. of Nutritional Sciences, University of Arizona
Keynote Speaker: Cindy Davis, PhD
National Cancer Institute, *Functional Foods*

Day 1 Thursday, October 8, 2009

Obesity

- 9:00 - 9:15 a.m. Introductions
Co-Chairs: Scott Going, PhD & Linda Houtkooper, PhD, RD, College of Agriculture & Life Sciences, Dept. of Nutritional Sciences, University of Arizona
- 9:15 - 9:45 a.m. Frank B. Hu, MD, PhD, Nutrition and Epidemiology, Harvard School of Public Health, *"Dietary Interventions for Weight Loss and Health Promotion: Low Fat Versus Low Carbohydrate Diets"*
- 9:45 - 10:15 a.m. David Cummings, MD, Division of Metabolism, Endocrinology, and Nutrition, University of Washington, *"Bariatric Surgery, Weight Loss and Prevention of Type 2 Diabetes"*
- 10:15 - 10:30 a.m. Break
- 10:30 - 11:00 a.m. Steven N. Blair, PhD, Arnold School of Public Health, University of South Carolina, *"Does Physical Activity Ameliorate Health Hazards of Poor Diet and Obesity?"*
- 11:00 - 11:30 a.m. Speaker Panel
- 11:30 - 1:30 p.m. Lunch - Poster Judging and Viewing

Concurrent Afternoon Sessions - Thursday Only

Session 1 (Requires Paid Registration)

Diabetes - Session 1

- 1:30 - 1:45 p.m. Introductions
Chair: Craig Stump, MD, Section of Endocrinology, Diabetes and Hypertension, College of Medicine, University of Arizona
- 1:45 - 2:15 p.m. Michael Quon, MD, PhD, Chief of the Diabetes Unit, National Institutes of Health, *"Beneficial Vascular and Metabolic Actions of the Green Tea Polyphenol EGCG"*
- 2:15 - 2:45 p.m. Gerald Hart, PhD, Director, Johns Hopkins University, Dept. of Biological Chemistry, *"Dynamic Crosstalk between GlcNAcylation and Phosphorylation: Roles in Signaling, Transcription and Mechanisms Underlying Insulin-Resistance and Glucose Toxicity"*
- 2:45 - 3:00 p.m. Break
- 3:00 - 3:30 p.m. Peter Reaven, MD, Director, Diabetes Program, Carl T. Hayden VAMC, Phoenix, *"Dietary Excess, the Innate Immune System and Inflammation: Potential Implications for Diabetes and Atherosclerosis"*
- 3:30 - 4:00 p.m. Speaker Panel
- 4:00 - 4:30 p.m. Breakout Session - Clinical
- 4:30 - 5:00 p.m. Conference Closing

A Tribute to Dr. Darrel Goll (Muscle Biology) - Session 2

- 1:00 - 1:10 p.m. Introductions
David Hartshorne, PhD, College of Agriculture & Life Sciences, Dept. of Nutritional Sciences, University of Arizona
- 1:10 - 2:00 p.m. Ron Mellgren, PhD, Director of Research Resources, The University of Toledo, *"A Darrel Goll Legacy: Calpains and Cytoskeletal Organization"*
- 2:00 - 2:40 p.m. Carol Gregorio, PhD, Dept. of Cell Biology & Anatomy, University of Arizona, *"Deciphering the Mechanisms of Thin Filament Length Regulation in Skeletal Muscle"*
- 2:40 - 3:20 p.m. Parker Antin, PhD, Dept. of Cell Biology & Anatomy, University of Arizona, *"Fgf Signaling During Muscle Development"*
- 3:20 - 3:30 p.m. Break
- 3:30 - 4:20 p.m. Peter Davies, PhD, Biochemistry & Biology, Queen's University, Ontario, *"Strategies for Controlling Calpain Activity in the Cell"*
- 4:20 - 5:00 p.m. Henk Granzier, PhD, Dept. of Molecular & Cellular Biology, University of Arizona, *"Role of Titin in Sarcomere Mechanics, Signaling and Protein Turnover"*
- Closing Remarks

Day 2 Friday, October 9, 2009

7:30 - 8:30 a.m. Continental Breakfast

Bioactive Food Components

- 8:30 - 8:45 a.m. Introductions
Co-Chairs: Randy Burd, PhD & Cynthia Thomson, PhD, RD, College of Agriculture & Life Sciences, Dept. of Nutritional Sciences, University of Arizona
- 8:45 - 9:15 a.m. Bette Caan, PhD, Senior Research Scientist, Kaiser Permanente, Division of Research, *"Bioactives and Breast Cancer Recurrence Risk"*
- 9:15 - 9:30 a.m. Break
- 9:30 - 10:00 a.m. Tim Bowden, PhD, Arizona Cancer Center, University of Arizona, *"Bioactives and Skin Cancer"*
- 10:00 - 10:30 a.m. James Johnston, PhD, Research Officer, National Research Council Canada, *"Nutriscience Research Initiatives at the NRC-INH"*
- 10:30 - 11:00 a.m. Speaker Panel
- 11:00 - 11:30 a.m. Poster Award Winners
- 11:30 - 1:30 p.m. Lunch and Learning

Cancer

- 1:30 - 1:45 p.m. Introductions
Co-Chairs: Kirsten Limesand, PhD & Cynthia Thomson, PhD, RD, College of Agriculture & Life Sciences, Dept. of Nutritional Sciences, University of Arizona
- 1:45 - 2:15 p.m. Eugene Gerner, PhD, Director, Gastrointestinal Cancer Program, University of Arizona, *"Colon Cancer Prevention"*
- 2:15 - 2:45 p.m. Eileen White, PhD, Molecular Biology & Biochemistry, Rutgers University, *"Autophagy and Cancer"*
- 2:45 - 3:00 p.m. Break
- 3:00 - 3:30 p.m. Stephen Hursting, PhD, Cellular & Molecular Sciences, University of Texas at Austin, *"Caloric Restriction, Physical Activity and Cancer Prevention"*
- 3:30 - 4:00 p.m. Speaker Panel
- 4:00 - 4:30 p.m. Nutraceuticals
- 4:30 - 5:00 p.m. Conference Closing