

5th Annual FUTURE in Biomedicine Symposium

Friday, August 2, 2013

Beisner Auditorium, Bowen Science Building
Roy J. and Lucille A. Carver College of Medicine, University of Iowa

1:00 pm **Introductory Remarks** – Madeline A. Shea, Ph.D., Director

1:15 pm **Ryan Bezy, Ph.D.** **Mt. Mercy, Cedar Rapids**
Characterization of novel Escherichia coli cell division genes
UI Host: David Weiss, Microbiology

1:45 pm **Mary Shawgo, Ph.D.** **Graceland University, Lamoni, IA**
Genetic Regulation of Microbial Communities by a Biofilm Destroyer
UI Host: John Kirby, Microbiology

2:15 pm **Barbara Christie-Pope, Ph.D.** **Cornell College, Mt. Vernon, IA**
Investigating Gene/Environmental Interactions Underlying Parkinson's Disease: The Potential Role of Endogenous Neurotoxins
UI Host: Robert Cornell, Anatomy and Cell Biology

2:45 pm *Poster Presentations by Undergraduate Researchers, Alumni and Better Futures for Iowans grant recipients. Refreshments will be served.*

3:30 pm **Adina Kilpatrick, Ph.D.,** **Drake University, Des Moines, IA**
Ruth Ann Henriksen Fellow
Thermodynamic analysis of calmodulin recognition of the ion channel ryanodine receptor
UI Host: Madeline Shea, Biochemistry

4:00 pm **Nalin Goonesekere, Ph.D.** **University of Northern Iowa, Cedar Falls, IA**
Identifying genes associated with autophagy in prostate cancer
UI Host: Michael Henry, Molecular Physiology and Biophysics

4:30 pm **Rachel Robson, Ph.D.** **Morningside College, Sioux City, IA**
No Wrong Answers: How Undergraduate Questions Improved My Research
UI Host: Dan Diekema, Internal Medicine and Tara Smith, Public Health

5:00 pm **Closing Remarks** - Madeline A. Shea, Ph.D., Director

Poster Presentations by Undergraduate Researchers – Class of 2013

Cornell

Brianna Christensen, Barbara Christie-Pope, Ph.D. (2013 Senior Fellow) and Robert Cornell, Ph.D. (UI Anatomy and Cell Biology)
Inhibition of Aldehyde Dehydrogenase Affects Melanocytes and Dopamine Neurons

Drake

Amanda Marwitz, Adina Kilpatrick, Ph.D. (2013 Fellow) and Madeline Shea, Ph.D. (UI Biochemistry)
*Biophysical studies of calmodulin interaction with the ryanodine receptor in *Drosophila Melanogaster**

Graceland

Chris Chambers, Mary Shawgo, Ph.D. (2013 Fellow) and John Kirby, Ph.D. (UI Microbiology)
*Determining Genes Associated with *Myxococcus xanthus* Predation of Wild *Bacillus Subtilis**

Morningside

Quinton Behlers, Rachel Robson, Ph.D. (2013 Senior Fellow) and Tara C Smith, Ph.D. (UI Epidemiology) and Daniel Diekema, M.D. (UI Internal Medicine)
*Assessing the susceptibility of MRSA and MSSA isolates to two lytic phages of *S. aureus**

Mount Mercy

Jeremy Cline, Ryan Bezy, Ph.D. (2013 Fellow) and David Weiss, Ph.D. (UI Microbiology)
*Genetic Analysis of putative cell division genes in *E. Coli**

University of Northern Iowa

Logan Poole, Nalin Goonesekere, Ph.D. (2013 Fellow) and Michael Henry, Ph.D. (UI Molecular Physiology and Biophysics)
Identification of mTORC1 Independent Mechanisms of Autophagy in EMT

Poster Presentations by Better Futures for Iowans Investigators

Coe

Christian Lux, Haley Sandoe, Ryan Lechtenberg, Alicia Schiller and **Paul Storer, Ph.D.** (2013 BFFI Award Recipient)
Effects of estrogen on the expression of glutamate receptors using cultured astrocytes

Dordt

Brandon Wubben, Kim Buyert, Sam De Nooy, Nick Wilson, Tony Jelsma and **Robbin Eppinga, Ph.D.** (2013 BFFI Award Recipient)
Learning Upper Level Molecular Biology Using the Yeast Two-Hybrid (Y2H) System

Drake

Mallory Tough, Natalie Bensen and **Abebe Mengesha, Ph.D.** (2013 BFFI Award Recipient)
Thermosensitive monoglycerides blend for local delivery of chemotherapeutic agents

Simpson

Madelyne Besack ('14), John Greaves ('14) and **Jackie Brittingham, Ph.D.** (2013 BFFI Award Recipient)
*Characterization of Wnt Disruptors on *Nematostella vectensis* Development*



FUTURE in Biomedicine Program <http://www.medicine.uiowa.edu/FutureBiomedicine>
Contact Information: Madeline Shea, Ph.D. Professor of Biochemistry & Director (319-335-7885), and Ms. Sonya Housholder, Secretary, Office of the Dean, (319) 335-8587