

# Postdoc Research Day



**May 14, 2012**

**The University of Iowa  
Iowa City, Iowa**

# POSTDOC RESEARCH DAY

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May 14, 2012  
University of Iowa College of Public Health Building  
Iowa City, Iowa

**WELCOME** to the 2012 Postdoc Research Day hosted by the University of Iowa Postdoctoral Association (UIPDA), with support from the UI Office of Postdoctoral Scholars and the Graduate College.

We thank you for your participation and look forward to the many opportunities for intellectual exchange today and into the future.

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SCHEDULE OF EVENTS  
(Room assignments are tentative)

- 9:00-9:45 Registration and breakfast, CPHB Atrium and C217AB CPHB  
Poster set-up and presentation upload
- 9:45-10:00 Welcome and opening remarks, N120 CPHB (Ellig Classroom)  
*Maggie Chorazy, MPH, Ph.D.*  
*President of the UI Postdoctoral Association*
- Dean John C. Keller, Ph.D.*  
*Dean of the Graduate College*  
*Associate Provost for Graduate Education*
- 10:00-11:00 Oral presentations (4 talks – 10 min. talk + 5 min. for questions),  
N120 CPHB (Ellig Classroom)  
*Rebecca Fagan*  
*Mamta Gautam*  
*Tabitha A. Peterson*  
*Andrew J. Shepherd*
- 11:00-11:15 Break, C217AB CPHB
- 11:15-12:15 Oral presentation (4 talks), N120 CPHB (Ellig Classroom)  
*Ravi L. Hadimani*  
*Cajetan I. Nlebedim*  
*Raphael Lopes Quirino*  
*Jungding Zou*
- 12:15 Lunch, C217AB CPHB
- 12:45-1:45 Poster Session, CPHB Atrium
- 1:45-2:45 Oral presentations (4 talks), N120 CPHB (Ellig Classroom)  
*Matthew Cserhati*  
*Sean C. McConnell*  
*Kanchna Ramchandran*  
*Terrie Vasilopoulos*
- 2:45-3:00 Break, C217AB CPHB
- 3:00-4:00 Oral presentation (4 talks), N120 CPHB (Ellig Classroom)  
*Ryan Boudreau*  
*Israt Jahan*  
*Xianai Wu*  
*Margaret Chorazy*
- 4:00 Break and Judges Deliberation, C217AB CPHB
- 4:30 Awards and Conclusion, N120 CPHB (Ellig Classroom)

LIST OF PRESENTERS AND TITLES – ORAL PRESENTATIONS

*in alphabetical order by last name*

Ryan Boudreau

University of Iowa, Carver College of Medicine, Department of Internal Medicine

Title: siSPOTR: a tool for designing highly specific and potent siRNAs

Margaret Chorazy

University of Iowa, Carver College of Medicine, Department of Internal Medicine

Title: Acute Respiratory Infections among Third-Year Medical Students

Matthew Cserhati

University of Nebraska-Lincoln, College of Arts and Sciences, Department of Statistics

Title: Computational biology analysis of the carbon concentrating mechanism in *Chlamydomonas reinhardtii*

Rebecca Fagan

University of Iowa, Carver College of Medicine, Department of Biochemistry

Title: Intramolecular and small molecule inhibition of DNA methyltransferase 1

Mamta Gautam

University of Iowa, Carver College of Medicine, Department of Internal Medicine (Cardiology)

Title: Acid sensing ion channels (ASICs) in muscle skeletal afferents are heteromultimers with ASIC3 being a necessary component

Ravi L. Hadimani

Iowa State University, College of Engineering, Department of Electrical and Computer Engineering

Title: Therapeutic and diagnostic application of transcranial magnetic stimulation

Israt Jahan

University of Iowa, College of Liberal Arts and Sciences, Department of Biology

Title: Role of bHLH transcription factors in organ of Corti cell fate changes

Sean C. McConnell

University of Chicago, Division of Biological Sciences, Department of Pediatrics

Title: Characterization of class I major histocompatibility genes from divergent haplotypes in zebrafish

Cajetan I. Nlebedim

Iowa State University, Ames Laboratory

Title: Magnetostrictive cobalt ferrite for magnetoelectric applications

Tabitha A. Peterson

University of Iowa, Carver College of Medicine, Department of Molecular Physiology and Biophysics

Title: Analyzing the role of a Golgi transport-vesicle coat protein in PKC-epsilon-dependent signaling

LIST OF PRESENTERS AND TITLES – ORAL PRESENTATIONS  
*in alphabetical order by last name*

Rafael Lopes Quirino

Iowa State University, College of Engineering, Department of Materials Science and Engineering

Title: Dry methods for the oxidation of multiwalled carbon nanotubes

Kanchna Ramchandran

University of Iowa, Carver College of Medicine, Department of Psychiatry

Title: Neural efficiency in the brain-an fMR study

Andrew J. Shepherd

University of Iowa, Carver College of Medicine, Department of Pharmacology

Title: Regulation of neuronal survival-death dynamics via chemokine CXCL12-induced distinct modulations in Kv2.1 channel

Terrie Vasilopoulos

University of Chicago, Division of Biological Sciences, Department of Psychiatry and Behavioral Neuroscience

Title: Smoking moderates genetic and environmental influences underlying pulmonary function

Xianai Wu

University of Iowa, College of Public Health, Department of Occupational and Environmental Health

Title: 2,2',3,3',6,6'-hexachlorobiphenyl (PCB136) is enantioselectively oxidized by human liver microsomes

Jungding Zou

Iowa State University, Ames Laboratory

Title: Magnetocaloric effect in the vicinity of magnetic phase transition

LIST OF PRESENTERS AND TITLES – POSTER PRESENTATIONS

*in alphabetical order by last name*

Michael Carrie

University of Nebraska-Lincoln, College of Arts and Sciences, Department of Physics and Astronomy

Title: 1D1V Vlasov implicit solver

Matthew Cserhati

University of Nebraska-Lincoln, College of Arts and Sciences, Department of Statistics

Title: Computational biology analysis of the carbon concentrating mechanism in *Chlamydomonas reinhardtii*

Nancy R. Downing

University of Iowa, College of Medicine and College of Nursing

Title: Body mass index changes in prodromal Huntington Disease

Anne-Lise Ducluzeau

University of Nebraska-Lincoln, College of Arts and Sciences, Department of Biochemistry

Title: Evolution of the plastoquinone and ubiquinone biosynthetic pathways

Shannon Marie Harlan

University of Iowa, Carver College of Medicine, Department of Pharmacology

Title: The hypothalamic arcuate nucleus mediates leptin-induced sympathetic activation

Philip Jones

University of Iowa, Carver College of Medicine, Department of Microbiology

Title: Bone marrow stromal cell antigen 2 (BST-2) restricts virus replication *in vivo*

Katarina Kulhankova

University of Iowa, Carver College of Medicine, Department of Pathology

Title: *Streptococcus pyogenes* pneumonia in a model of chronic ethanol consumption

Piyali Mandal

University of Iowa, Carver College of Medicine, Department of Internal Medicine

Title: *Francisella tularensis* live vaccine strain disrupts phagosome maturation in human neutrophils and HL-60 cells

Tabitha A. Peterson

University of Iowa, Carver College of Medicine, Department of Molecular Physiology and Biophysics

Title: Analyzing the role of a Golgi transport-vesicle coat protein in PKC-epsilon-dependent signaling

Zhizeng Sun

University of Iowa, Carver College of Medicine, Department of Pharmacology

Title: The G $\beta$ 3 splice variant associated with the C825T gene polymorphism is an unstable and functionally inactive protein

LIST OF PRESENTERS AND TITLES – POSTER PRESENTATIONS  
*in alphabetical order by last name*

Hui Tang

University of Iowa, College of Liberal Arts and Sciences, Department of Chemistry

Title: Permutation test for groups of scanpaths using normalized levenshtein distances

Ulrich Taubenschuss

University of Iowa, College of Liberal Arts and Sciences, Department of Physics and Astronomy

Title: Source mechanism of Saturn drifting bursts