

Baltimore **Fellows Symposium**

November 1, 2013



BRC Atrium • 9:00 a.m. to 5:00 p.m.



National Institute
on Drug Abuse



National Institute
on Aging



Schedule for the Day

- 9:00 a.m. **Coffee, tea, and light breakfast**
(Atrium)
- 9:30-9:55 **Skill Blitz:** Activities to Enhance Your CV &
Advertising Yourself on Your CV
(Room 3C211)
- 10:00-10:25 **Skill Blitz:** Interviewing
(Room 3C211)
- Skill Blitz:** Planning Your Job Hunt
(Room 3C227)
- 10:30-11:50 **Research Talks by NIH Fellows**
(Rooms 3C211, 3C219, 3C227)
- 11:00-1:00 **Exhibitors from NIH and local universities**
(Atrium)
- 12:15-1:00 **TED Talks by Francis Collins and Amy Cuddy**
(Atrium)
- 1:00-1:25 **Skill Blitz:** Cover Letters and Resumés
(Room 3C211)
- Skill Blitz:** Choosing Your Career Path
(Room 3C227)
- 1:30-1:55 **Skill Blitz:** Transferable Skills
(Room 3C211)
- Skill Blitz:** Networking and Social Media
(Room 3C227)
- 2:00-3:20 **Research Talks by NIH Fellows**
(Rooms 3C211, 3C219, 3C227)
- 3:30-5:00 **Poster Session**
(Atrium)
- 5:00 p.m. **Art of Science contest winner announced**
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Skill Blitz Sessions

These short sessions are designed to give you an overview of the skills required for a successful job search. Each session will be limited to 20 minutes to leave time for a few questions. Presenters will give you the highlights of the topics, with ideas on how to follow up with additional resources. Speakers will be NIH OITE staff.

Activities to Enhance Your CV & Advertising Yourself on Your CV

You have probably heard about the importance of acquiring leadership skills or other non-lab skills. Learn how to get these skills and how to advertise them on your CV.

Interviewing

Learn how to navigate the interview process: types of interviews, how to prepare, questions you might be asked, questions you should ask, the interviewer's perspective.

Planning Your Job Hunt

The job search has common threads. This session will cover how to structure your time and resources when job searching.

Cover Letters and Resumés

There are a few simple rules for a cover letter. Make this part of your job package shine. Learn the difference between a resumé and CV and the purpose of a resumé.

Choosing Your Career Path

Your dream job does exist. If you are still pondering what is next, come to this session to map out a plan to determine how your skills, interests and values can lead you to your perfect job.

Transferable Skills

How do you talk about the skills you already have or gain additional skills so employers see you as a competitive candidate?

Networking and Social Media

Find out who is in your network and how to expand and actively maintain your network. A lot of networking can be done via LinkedIn, Twitter, Facebook, and other social media outlets. How can these tools advance your job search?

Skill Blitz Presenters

Lori Conlan, Ph.D.

Director, Office of Postdoctoral Services

NIH Office of Intramural Training & Education (OITE)

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conlanlo@mail.nih.gov

Dr. Conlan is trained as a biochemist, receiving her B.S. in biochemistry from Michigan State University and her Ph.D. in biochemistry and biophysics from Texas A&M University. She worked for several years as a postdoc at the Wadsworth Center, NYS Department of Health, before transitioning from the lab to focus on career issues for the next generation of scientists. Lori started as the director of the Science Alliance, an international career development program for graduate students and postdocs sponsored by the New York Academy of Sciences. She now is at the NIH in the Office of Intramural Training & Education, assisting the 4000 NIH postdocs in their personal career choices. She speaks at universities and institutions around the nation on career development topics for young scientists. Additionally, she volunteers as a board member for the National Postdoctoral Association (NPA).

Shauna Clark, Ph.D.

Director, NIH Academy

NIH Office of Intramural Training and Education

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Dr. Clark earned her B.S. in biochemistry at Texas A&M University and her Ph.D. in Infectious Diseases and Microbiology from the Graduate School of Public Health at the University of Pittsburgh with an emphasis in HIV drug resistance. She went on to work as a postdoctoral fellow studying innate immunity and the role of epigenetics in hepatitis C infection in the Liver Diseases Branch in NIDDK. Shauna now assists NIH fellows in career development and exploration in the NIH Office of Intramural Training and Education. She is the Director of the NIH Academy, a health disparities program dedicated to training NIH postdocs to actively engage in promoting a society in which all people live healthy lives and have equal access to health care.

Exhibitors

NIH
Office of Technology Transfer

NIDA
Public Information
and Liaison Branch

NIDA
Office of Science Policy
and Communication

NIA
Office of Communications
and Public Liaison

Fellow Talks

Session 1 • Room 3C211

Moderator: Mimi Belcher, Ph.D. (NIDA)

- 10:30-10:50 Jennifer Illuzzi, Ph.D.*
NIA • Laboratory of Molecular Gerontology
Deciphering the role of APE1 protein variants in disease etiology
- 10:50-11:10 Mimi Belcher, Ph.D.*
NIDA • Neuroimaging Branch
Large scale brain networks in the awake, truly resting marmoset monkey
- 11:10-11:30 Rui Wang, Ph.D.*
NIA • Laboratory of Clinical Investigation
Learning and memory alterations in type 1 taste receptor 3 (T1R3) knockout mice
- 11:30-11:50 Yomi Okunola-Bakare, Ph.D.*
NIDA • Molecular Targets and Medications Discovery Branch
Structure activity relationship studies of novel modafinil analogs at the monoamine transporters: Elucidation of structural elements for selectivity at DAT versus SERT

Session 2 • Room 3C219

Moderator: Peter Sykora, Ph.D. (NIA)

- 10:30-10:50 Michael Rouse, Ph.D.*
NIA • Laboratory of Clinical Investigation
Resveratrol and curcumin enhance pancreatic beta-cell function by inhibiting phosphodiesterase activity
- 10:50-11:10 Anton Ilango Micheal, Ph.D.*
NIDA • Behavioral Neuroscience Branch
Affective role of ventral tegmental area and substantia nigra dopamine neurons: An optogenetic study
- 11:10-11:30 Alan Renton, Ph.D.*
NIA • Laboratory of Neurogenetics
Exome sequencing of young onset sporadic amyotrophic lateral sclerosis trios
- 11:30-11:50 Kohei Yamamizu, Ph.D.*
NIA • Laboratory of Genetics
Systematic discovery of transcription factors for lineage specific ES cell differentiation

*2014 FARE Winner

Fellow Talks

Session 3 • Room 3C227

Moderator: Thomas Keck, Ph.D. (NIDA)

- 10:30-10:50 David Root, Ph.D.*
NIDA • Integrative Neuroscience Branch
A novel neuronal subpopulation within the ventral tegmental area cotransmits glutamate and GABA to the lateral habenula
- 10:50-11:10 Jing Huang, Ph.D.*
NIA • Laboratory of Molecular Gerontology
Fanconi anemia protein FANCM promotes replication traverse of DNA interstrand crosslinks
- 11:10-11:30 Thomas Keck, Ph.D.*
NIDA • Molecular Targets and Medications Discovery Branch
Modular synthesis of novel dopamine D3 receptor antagonists: new tools for in vivo investigation in psychostimulant addiction
- 11:30-11:50 Auriel Willette, Ph.D.*
NIA • Laboratory of Neuroscience
Multimodal prognostic classification of MCI conversion: MRI independent component analysis and other biomarkers

Session 4 • Room 3C211

Moderator: Yomi Okunola-Bakare, Ph.D. (NIDA)

- 2:00-2:20 Vivek Kumar, Ph.D.*
NIDA • Molecular Targets and Medications Discovery Branch
Design and synthesis of high affinity and enantioselective D3 receptor antagonists
- 2:20-2:40 Wei-Na Cong, Ph.D.*
NIA • Laboratory of Clinical Investigation
Artificial sweetener Acesulfame Potassium alters energy metabolism and impairs cognitive function in C57BL/6J mice
- 2:40-3:00 Huikun Wang, Ph.D.
NIDA • Cellular Neurobiology Branch
Cocaine depresses GABAB transmission in dopamine neurons via endocannabinoid- and serotonin-dependent mechanisms
- 3:00-3:20 Huiming Lu, Ph.D.
NIA • Laboratory of Molecular Gerontology
RECQL4 mutations in RTS patients prevent cellular senescence

*2014 FARE Winner

Fellow Talks

Session 5 • Room 3C219

Moderator: Peter Sykora, Ph.D. (NIA)

- 2:00-2:20 Rachel Murphy, Ph.D.*
NIA • Laboratory of Epidemiology and Population Sciences
Adipose tissue density, a novel biomarker predicting mortality risk in older adults
- 2:20-2:40 Manikandan Paramasivam, Ph.D.*
NIA • Laboratory of Molecular Gerontology
Interplay between Fanconi anemia pathway and DNA damage response induced by DNA interstrand crosslinks
- 2:40-3:00 Maria Secci, Ph.D.
NIDA • Behavioral Neuroscience Branch
Modulation of the behavioral and neurochemical effects of cannabinoids by kynurenic acid (KYNA)
- 3:00-3:20 Chris Colleta, Ph.D.
NIA • Laboratory of Genetics
Using pattern recognition in biomedical imaging

Session 6 • Room 3C227

Moderator: Evandro Fang, Ph.D. (NIA)

- 2:00-2:20 Amaresh Panda, Ph.D.*
NIA • Laboratory of Genetics
AUF1 promotes myogenesis by enhancing Myf5 and Mef2c expression.
- 2:20-2:40 Ken Wakabayashi, Ph.D.*
NIDA • Behavioral Neuroscience Branch
Rapid, experience-dependent changes in nucleus accumbens glutamate release induced by repeated intravenous cocaine
- 2:40-3:00 Raghavendra Shamanna, Ph.D.*
NIA • Laboratory of Molecular Gerontology
RECQL4 modulates the non-homologous end joining pathway through its interaction with the Ku complex
- 3:00-3:20 Dong Wang, Ph.D.*
NIDA • Behavioral Neuroscience Branch
Neural activity of nucleus accumbens induced by rewarding optogenetic stimulation of VTA dopamine neurons

Poster Presentations

- 1 Aurelie Roux**
NIDA • Integrative Neuroscience Branch
Lipid profile changes in traumatic brain injury using MALDI imaging and electrospray ionization mass spectrometry
- 2 Amaresh Panda***
NIA • Laboratory of Genetics
AUF1 promotes myogenesis by enhancing Myf5 and Mef2c expression
- 3 Donna Calu**
NIDA • Behavioral Neuroscience Branch
Sign-tracking responses are insensitive to outcome devaluation
- 4 Francesca Anna Carrieri**
NIA • Laboratory of Genetics
Effects of Plac1 KO on early events in ES cells
- 5 Peter DeMatteo**
NIDA • Chemical Biology Branch
Design and synthesis of a highly potent and selective mu-opioid ligand
- 6 Laura D'Ignazio**
NIA • Laboratory of Genetics
Lhx8 ablation causes follicle autophagy by failure of ovarian vascularization
- 7 Yu-Wei Chen**
NIDA • Behavioral Neuroscience Branch
Yohimbine-induced reinstatement of food seeking is associated with neuronal activation in lateral hypothalamus, amygdala, ventral subiculum, and bed nucleus of stria terminalis
- 8 Rachel Murphy***
NIA • Laboratory of Epidemiology, Demography & Biometry
Adipose tissue density, a novel biomarker predicting mortality risk in older adults
- 9 Anna Li**
NIDA • Behavioral Neuroscience Branch
Role of epigenetic mechanisms in medial prefrontal cortex in incubation of methamphetamine craving

Poster Presentations

-
- 10** **Rui Wang***
NIA • Laboratory of Clinical Investigation
Learning and memory alterations in type 1 taste receptor 3 (T1R3) knockout mice
-
- 11** **Yuzheng Hu**
NIDA • Neuroimaging Branch
Altered interoception and resting-state functional connectivity in the insular system of cocaine dependents
-
- 12** **Alan Renton***
NIA • Laboratory of Neurogenetics
Exome sequencing of young onset sporadic amyotrophic lateral sclerosis trios
-
- 13** **Jia Qi**
NIDA • Integrative Neuroscience Branch
Optical activation of ventral tegmental area VGlut3 inputs from dorsal raphe drives reward
-
- 14** **Jie Ding**
NIA • Laboratory of Epidemiology, Demography & Biometry
Retinal Arteriolar Dilatation is associated with impaired memory in men: the Edinburgh Type 2 Diabetes Study
-
- 15** **Brandon Selfridge**
NIDA • Chemical Biology Branch
Scalable synthesis of enantiopure 10-norhydrocodone for opioid dependence investigations
-
- 16** **Dil Sultana**
NIA • Translational Gerontology Branch
The role of transcription factors TCF1 and β -Catenin in age-dependent thymic involution
-
- 17** **Nathan Marchant**
NIDA • Behavioral Neuroscience Branch
Nucleus accumbens shell projections to lateral hypothalamus are critical for context-induced relapse to alcohol seeking after punishment.

Poster Presentations

18 **Auriel Willette***

NIA • Laboratory of Neurosciences

Prognostic classification of Mild Cognitive Impairment and Alzheimer's disease: MRI independent component analysis

19 **Leslie Whitaker**

NIDA • Behavioral Neuroscience Branch

Silent synapses in selectively activated nucleus accumbens neurons following cocaine sensitization

20 **Guobing Chen**

NIA • Laboratory of Molecular Biology & Immunology

Comparative analysis of CD8 T cell response to cytomegalovirus (CMV) or influenza virus (Flu) antigen in healthy human adults

21 **Ken Wakabayashi***

NIDA • Behavioral Neuroscience Branch

Rapid, experience-dependent changes in nucleus accumbens glutamate release induced by repeated intravenous cocaine

22 **Jennifer Illuzzi***

NIA • Laboratory of Molecular Gerontology

Structural and functional evaluation of population and tumor-associated APE1 variants

23 **Alessia Auber**

NIDA • Behavioral Neuroscience Branch

The effect of post-retrieval extinction of nicotine Pavlovian memories in rats trained to self-administer nicotine

24 **Kohei Yamamizu***

NIA • Laboratory of Genetics

Systematic discovery of transcription factors for directed differentiation of ES cells

25 **Huikun Wang**

NIDA • Cellular Neurobiology Branch

Cocaine depresses GABA(B) receptor-mediated transmission in dopamine neurons via endocannabinoid- and serotonin-dependent mechanisms

Poster Presentations

- 26** **Yael Yaniv**
NIA • Laboratory of Cardiovascular Science
Age-associated changes of heart rate and heart-rate variability extend beyond age-dependent changes in autonomic nerve input to the sinoatrial node
-
- 27** **Mimi Belcher***
NIDA • Neuroimaging Branch
Large scale resting-state brain networks in the awake marmoset monkey
-
- 28** **Jimin Kim**
NIA • Laboratory of Cardiovascular Science
The N-glycoform of sRAGE is the key determinant for its therapeutic efficacy to attenuate injury-elicited arterial inflammation and neo-intimal growth.
-
- 29** **Comfort Boateng**
NIDA • Molecular Targets and Medications Discovery Branch
A synthon approach to development of highly selective and potent D3 receptor antagonists and partial agonists
-
- 30** **Michael Rouse***
NIA • Laboratory of Clinical Investigation
Resveratrol and curcumin enhance pancreatic beta-cell function by inhibiting phosphodiesterase activity
-
- 31** **Oluyomi Okunola-Bakare***
NIDA • Molecular Targets and Medications Discovery Branch
SARs of novel modafinil analogues at monoamine transporters: Elucidation of structural elements for selectivity at DAT vs. SERT
-
- 32** **Peter Sykora**
NIA • Laboratory of Molecular Gerontology
A reduction in DNA polymerase beta leads to neurodegeneration
-
- 33** **Vani Pariyadath**
NIDA • Neuroimaging Branch
Avoidance learning is dependent on baseline dopamine function
-
- 34** **Manikandan Paramasivam***
NIA • Laboratory of Molecular Gerontology
Participation of Fanconi proteins in the DDR induced by DNA inter-strand crosslinks

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Poster Presentations

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- 35** **Derek Wilkinson**
NIDA • Molecular Targets and Medications Discovery Branch
In vivo binding of N-substituted benztrapine analogs and antagonism of cocaine self-administration
-
- 36** **Yunqian Peng**
NIA • Laboratory of Cardiovascular Science
Dissecting RAGE signal pathways using triparties split GFP complementation screening
-
- 37** **Daniele Caprioli**
NIDA • Behavioral Neuroscience Branch
GABA-ergic and neuronal structural markers in the nucleus accumbens core underlie trait-like impulsive behavior
-
- 38** **Lisa Russell**
NIA • Laboratory of Molecular Biology & Immunology
The ABCs of aging: How they influence an immune response
-
- 39** **Fuying Li**
NIDA • Chemical Biology Branch
Probes for narcotic receptor mediated phenomena: Conceptualization, synthesis and pharmacological evaluation of ring-expanded phenylmorphans
-
- 40** **Kimberly Zanotti**
NIA • Laboratory of Molecular Biology & Immunology
Characterization of AID activity in the immunoglobulin variable gene during antibody diversification
-
- 41** **Leslie Whitaker**
NIDA • Behavioral Neuroscience Branch
Silent synapses in selectively activated nucleus accumbens neurons following cocaine sensitization
-
- 42** **Amalendu Ghosh**
NIA • Laboratory of Molecular Biology & Immunology
Generation and resolution of bivalent chromatin during hematopoiesis
-
- 43** **Brian Sadacca**
NIDA • Cellular Neurobiology Branch
VTA neurons show value prediction signals for cues possessing inferred value
-

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Poster Presentations

44 **Mary Kaila**

NIA • Laboratory of Molecular Biology & Immunology

Modulation of NFkappaB signaling by glucocorticoids in human B lymphocytes

45 **Joshua Antoline**

NIDA • Chemical Biology Branch

Scalable synthesis of C-9 functionalized phenylmorphans as probes for narcotic receptor-mediated phenomena

46 **Huiming Lu**

NIA • Laboratory of Molecular Gerontology

RECQL4, mutated in Rothmund-Thomson Syndrome, prevents cellular senescence

47 **David Root***

NIDA • Integrative Neuroscience Branch

A novel glutamate-GABA neuronal subpopulation within the ventral tegmental area projects to the lateral habenula

48 **Chinmoyee Maharana**

NIA • Laboratory of Neurosciences

Intermittent fasting alleviates behavioral impairments caused by a presenilin 1 mutation

49 **Oscar Torres**

NIDA • Molecular Neuropsychiatry Branch

HDAC2-induced regulation of gene expression in the mouse nucleus accumbens: Effects of methamphetamine

50 **Venkateswarlu Popuri**

NIA • Laboratory of Molecular Gerontology

A novel role for human RECQL1 in telomere maintenance

51 **Meredith McHugh**

NIDA • Neuroimaging Branch

Cortico-amygdala coupling as a marker of early relapse risk in cocaine-addicted individuals

52 **Jing Huang***

NIA • Laboratory of Molecular Gerontology

Single molecule analysis of the encounter of replication forks with DNA crosslinks

Poster Presentations

-
- 53** **Hideaki Yano**
NIDA • Molecular Targets and Medications Discovery Branch
Activation of the G(s) heterotrimer monitored in living cells with novel G(s) biosensors
-
- 54** **Anton Ilango Micheal***
NIDA • Behavioral Neuroscience Branch
Substantia nigra dopamine role in reward and aversion
-
- 55** **Peter DeMatteo**
NIDA • Chemical Biology Branch
Synthesis of a highly potent and selective mu-opioid ligand
-
- 56** **Thomas Keck***
NIDA • Molecular Targets and Medications Discovery Branch
Modular synthesis of novel dopamine D3 receptor antagonists: new tools for in vivo investigation in psychostimulant addiction
-
- 57** **Dong Wang***
NIDA • Behavioral Neuroscience Branch
Neural activity of nucleus accumbens induced by rewarding optogenetic stimulation of VTA dopamine neurons
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Baltimore Fellows Symposium Committee:

Peter Sykora, Ph.D. (NIA) Co-chair
Yomi Okunola-Bakare, Ph.D. (NIDA) Co-chair
Stephen Heishman, Ph.D. (NIDA)
Mary Pfeiffer, Ph.D. (NIDA)
Arlene Jackson (NIA)
Taya Dunn (NIA)
Rolanda Morris (NIDA)

**The Baltimore Fellows Symposium Committee
congratulates the 2014 FARE winners and
encourages all eligible Fellows to apply for the 2015
FARE competition next year.**

2015 Fellows Award for Research Excellence (FARE)

Abstracts accepted starting mid-February 2014. Watch for the FARE abstract workshop. Winners receive \$1000 towards conference travel starting October 1, 2014.

<https://www.training.nih.gov/felcom/fare>

