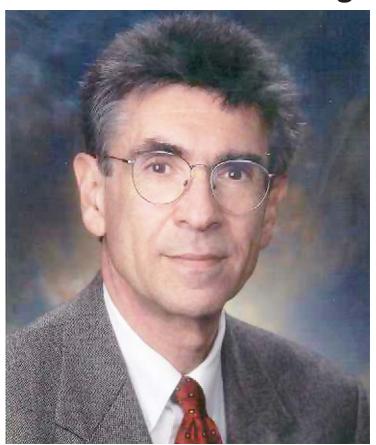
# **ASPET Congratulates Members Robert Lefkowitz and** Brian Kobilka on Winning the Nobel Prize in Chemistry





Robert Lefkowitz

**Brian Kobilka** 

#### Also in this issue:

2012 Year in Review

2012 Contributors

Council and Division Election Nominees

Program Grid for ASPET Annual Meeting at Experimental Biology 2013

myIDP: An Interactive Career Planning Tool for Scientists

Meet the 2013 ASPET Washington Fellows

Rita Allen Award Announcement

#### **Contents**

2012 Year in Review	204
2012 Contributions	205
2012 Corporate Contributors	205
2013 Election Nominees	207
ASPET Annual Meeting at EB 2013	
Program Grid	208
Important Dates	209
4th GPCR Colloquium and Reminders	210
Career News	212
Journals	214
Science Policy	216
News from FASEB	221
Social Media	222
Members in the News	225
Staff News	227
New ASPET Members	228
In Sympathy	231
Obituary: Sydney Spector	231
Division News and Election Nominees	233
Chapter News	
Great Lakes	240
Upstate New York	240
Membership Information	243
Membership Application	244

The Pharmacologist is published and distributed by the American Society for Pharmacology and Experimental Therapeutics.

#### **EDITOR**

Gary Axelrod

#### **EDITORIAL ADVISORY BOARD**

Stephen M. Lanier, PhD Charles P. France, PhD Kenneth E. Thummel, PhD

#### COUNCIL

President

John S. Lazo, PhD

President-Elect

Richard R. Neubig, MD, PhD

Past President

Lynn Wecker, PhD

Secretary/Treasurer

Edward T. Morgan, PhD

Secretary/Treasurer-Elect

Sandra P. Welch, PhD

Past Secretary/Treasurer

Mary E. Vore, PhD

Councilors

Charles P. France, PhD

Stephen M. Lanier, PhD

Kenneth E. Thummel, PhD

Chair, Board of Publications Trustees

James E. Barrett, PhD

Chair, Program Committee

Scott Waldman, MD, PhD

**FASEB Board Representative** 

Brian M. Cox, PhD

**Executive Officer** 

Christine K. Carrico, PhD

The Pharmacologist (ISSN 0031-7004) is published quarterly in March, June, September, and December by the American Society for Pharmacology and Experimental Therapeutics, 9650 Rockville Pike, Bethesda, MD 20814-3995. Annual subsciption rates: \$20.00 for ASPET members; \$45.00 for U.S. nonmembers and institutions; \$70.00 for nonmembers and institutions outside the U.S. Single copy: \$20.00. Copyright © 2012 by the American Society for Pharmacology and Experimental Therapeutics Inc. All rights reserved. Periodicals postage paid at Bethesda, MD. GST number for Canadian subscribers: BN:13489 2330 RT.

ASPET assumes no responsibility for the statements and opinions advanced by contributors to *The Pharmacologist*.

Deadlines for submission of material for publication: Issue 1, February 11; Issue 2, May 9; Issue 3, August 9; and Issue 4, November 11.

Postmaster: Send address changes to: The Pharmacologist, ASPET, 9650 Rockville Pike, Bethesda, MD 20814-3995.

#### 2013 Dues Notices

Please check your mailbox and your email inbox for your 2013 Dues notice.
You can mail your payment or renew online at
<a href="https://www.aspet.org/login.aspx">https://www.aspet.org/login.aspx</a>, no later than January 1, 2013.

# Participate in the ASPET Member-Get-A-Member Program

Get one
Regular, Post-doc,
or Affiliate (paying)
member) to join
ASPET and
get a FREE
ASPET T-shirt!

ASPET T-Shirt

**a**spet



Get
any member
(including Students)
to join ASPET and be
entered into a raffle to
win an Apple iPad or
Free Meeting
Registration!

The more
people you
recruit, the more
chances you have to
win a grand prize!
(Apple iPad or
Meeting
Registration)

#### **Get Started Today!**

- Tell a friend, colleague or student about the benefits of membership
- -Encourage them to fill out an application form online at: www.aspet.org
- -Tell them to enter Marketing Code: MGM and provide your name as their sponsor
- Once they are approved for new membership and their dues payment has been made, you will receive credit for your recruitment efforts
  - -If you have any questions about this program, please contact the membership department at membership@aspet.org or call (301) 634-7060

By helping us recruit new members, you will be contributing to the growth and sustainability of ASPET. A growing ASPET means great recognition for the field of pharmacology, more resources and support for our members, and a louder voice with policy makers.

For more program details, visit: http://www.aspet.org/membership/member-get-a-member/

#### 2012 Year in Review



As 2012 comes to a close, we would like to reflect on what a great year it has been for ASPET. In April, we held an exceptional Annual Meeting at Experimental Biology in San Diego. Member registration was at an all-time high, and members enjoyed a program packed full of cutting-edge science and exciting networking and social events. We awarded 59 Graduate Student Travel Awards, 22 Young Scientist Travel Awards, and five SURF Fellow Awards. If you haven't already done so, be sure to take a look at our program for 2013 (http://www.aspet.org/EB2013/program/), when we will be meeting in Boston along with the British Pharmacological Society.

The ASPET journals continue to be leaders in the field of pharmacology. This year, our publications made the transition to online-only very smoothly. Subscriptions and advertising remain steady despite this change, and one great benefit to our members included an end to color figure fees. To increase visibility of our journals, staff is working hard to create a social media presence for our journals. The editors are also working hard on bringing you the best journals for 2013.

Membership is also holding steady in an increasingly strained economy. Despite the fact that people are not as open to join more and more societies, ASPET continues to attract new members, which signifies the importance and respectability of our meetings, journals, public affairs efforts, and much more. We are always looking to strengthen our membership base, and we ask you to help spread the word about our great Society. Currently, ASPET is running a Member-Get-A-Member program in which we are rewarding members for their recruitment efforts. For more information about this program, visit <a href="http://www.aspet.org/member-spet-a-member/">http://www.aspet.org/member-spet-a-member/</a>.

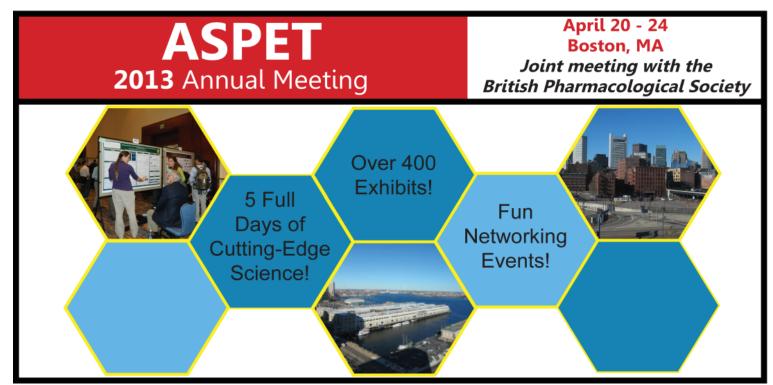
We are also very proud of two of our members who have won the Nobel Prize in Chemistry this year, Dr. Robert Lefkowitz and Dr. Brian Kobilka! Both members will be speaking at our Annual Meeting in 2013. This is a testament to the kind of work that our members are doing and the important impacts we are making in the world today.

In an effort to better understand our members' wants and needs as well as figure out a way to attract new members, ASPET started examining the Society's brand this year. With the help of *McKinley Advisors*, ASPET has been working hard to conduct interviews, focus groups, and surveys to examine where our Society should be headed and how we should position ourselves in the changing field of pharmacology. We are still in the middle of our research efforts. However, we hope to start implementing our findings next year.

It has been a fantastic year, and we thank you for being a part of our important Society. We are looking forward to many great changes and new projects in 2013, so be sure to stay involved and stay tuned for all the exciting things we have planned. As always, we would love to hear your feedback, so please be sure to tell us how we can help make your membership as beneficial as possible!

Wishing you a happy, healthy, and successful new year!

—The ASPET Staff



#### 2012 Contributions



#### ASPET gratefully acknowledges the following individuals who have made contributions over and above dues for 2012:

John J. Abel Award

Michael Ehlers **Edward Morgan** 

Karl H. Beyer, Jr. Student Travel Fund

Annette Bever-Mears J. Fred Pritchard

Jerry J. Buccafusco Student Travel Fund

Robert Caldwell

Joseph P. Buckley Student Travel Fund

**Balwant Dixit** 

Thomas F. Burks Student Travel Fund

James V. Bruckner Mark. A. Osinski James J. Galligan Mark M. Voigt

P. B. Dews Award

Nancy Ator

James W. McKearney Joseph M. Moerschbaecher

**Drug Metabolism Early Career Achievement** 

**Award** 

Richard T. Okita

**Robert F. Furchgott Student Travel Fund** 

Suzanne G. Laychock James Putney

**Members Fund for Graduate Student Travel** 

Louis A. Barker William Beck Abby C. Collier Thomas E. Donnelly Juan J. Lertora Kevin Lynch C.J. Malanga, III Robert Pechnick Monica Vaentovic Barbara L. Waszczak Stephanie Watts

Carol Wilmot Richard Ye

Jennifer Yeung

**IUPHAR Travel Fund** 

Richard Neubig

Keith F. & Eva K. Killam Student Travel Fund

John F. Bowyer Merle G. Paule

Benedict R. Lucchesi Lectureship in Cardiac

**Pharmacology** 

Christine K. Carrico

Benedict R. Lucchesi Nancy J. Rusch

Stephen E. Mayer Student Travel Fund

Elaine Sanders-Bush Palmer Taylor

John P. Perkins Student Travel Fund

Joseph R. Bertino Richard B. Clark Frank Dowd James Putney Rita Valentino

Robert R. Ruffolo Career Achievement Award

in Pharmacology Robert R. Ruffolo

Frank G. Standaert Student Travel Fund

Joseph M. Moerschbaecher Michiko Okamoto

**Sustaining Member Fund** 

Bradlev T. Andresen Roselyn Cerutis Brian M. Cox Jeffrey S. Fedan William W. Fleming Amadeu Gavalda Eugene Herman Tadashi Inagami Kenneth A. Jacobson Alan Langworthy

Daniel Levesque Craig Malbon Robert Pechnick Walter C. Prozialeck Gary Rankin

John R. Raymond, Sr. Margaret A. Reilly

Arleen Rifkin Marie Rock

Robert Roskoski, Jr. Elaine Sanders-Bush Bruno M. Sepodes Junko Sugatani

Palmer Taylor Lvnn Wecker

A. E. Takemori Student Travel Fund

Patricia A. Broderick Gary DeLander Earl W. Dunham John Callaghan

#### Thank you to our 2012 Corporate **Contributors**

Covance Central Lab Services, Inc. Ferring Pharmaceuticals, Inc. Lundbeck USA Med-Associates Reckitt-Benckiser

#### **ASPET Appreciates ALL Donations** from Members!

Your donations help with programming, awards, and other important society affairs. Making a donation is a great way to demonstrate your commitment to the future of ASPET, pharmacology, and your profession.

Make a donation at www.aspet.org. Be sure to log in as a member so that we can make sure to recognize your generous support.

All donations are tax deductible.

Paul M. Vanhoutte Lectureship in Vascular Pharmacology

William M. Armstead David B. Averill

Kathleen H. Berecek Rosemary D. Bevan

Henry E. Brezenoff Christine K. Carrico Richard A. Cohen Sue P. Duckles

Yuansheng Gao Maik Gollasch

Garrett J. Gross

David D. Gutterman

Morley D. Hollenberg

Steven P. Jones Biny K. Jospeh Zvonimir Katusic

Richard H. Kennedy

John C. Kermode

Fadi T. Khasawneh

Benedict R. Lucchesi

Thomas F. Luscher Philip R. Mayeux

Chao-Yu Miao Virginia M. Miller

Keith J. Morrison

Sheila Muldoon

Stephen T. O'Rourke

Thom Rooke

Nancy J. Rusch

Yi Shi

Hiroaki Shimokawa

Ravi Thadhani Valerie Thadhani

Yurij Vedernikov

Stephanie W. Watts

R. C. Webb Heike Wulff Dan Yang Norman Weiner Lectureship in

**Pharmacology** 

Joseph L. Borowitz Diana Weiner

**Young Scientist Travel Fund** 

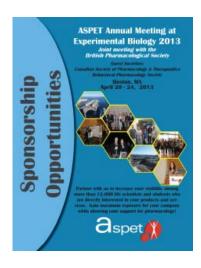
Robert Caldwell Joyce A. Goldstein Susan Gonsalves Ingeborg Hanbauer W. Keith Jones William R. Kem Kevin Lych

James E. Patrick Pushpa Thadani

Lynn Wecker Morris S. Zedeck

Note: This list reflects contributions received as of November 30, 2012.

# Sponsorship Opportunities for the ASPET Annual Meeting at EB 2013



Sponsorship opportunities are available for programs and events at the ASPET Annual Meeting at Experimental Biology 2013.

Download the brochure at <a href="http://www.aspet.org/EB2013">http://www.aspet.org/EB2013</a>.

Have questions? Email Suzie Thompson at sthompson@aspet.org.

#### **2013 Elections**



The ASPET election for President-Elect, Secretary/Treasurer-Elect, and Councilor will take place this month. All Regular, Post-doctoral, and Retired members are eligible to vote. In addition, the following Divisions are holding elections: Division for Behavioral Pharmacology, Division for Cardiovascular Pharmacology, Division for Drug Metabolism, Division for Molecular Pharmacology, and Division for Toxicology. Members will receive an email when the election opens, with instructions on how to vote.

As required by the by-laws, the election site on the Web will be open for a minimum of thirty (30) days from the day of notification.

#### **Nominees for President-Elect:**





Nancy J. Rusch

#### Nominees for Secretary/Treasurer-Elect:





Paul A. Insel

#### **Nominees for Councilor:**





**Debra Diz** 

John D. Schuetz

Division election nominees can be found in the Division News section on the following pages:

Division for Behavioral Pharmacology: See page 233. Division for Cardiovascular Pharmacology: See page 233. Division for Drug Metabolism: See page 234. Division for Molecular Pharmacology: See page 235. Division for Toxicology: See page 238.



# **Annual Meeting**

(All rooms listed are in the Boston Convention Center unless otherwise noted.)

PM   actures: 2:00 - 2:50	F. J. F. D.
.3.00 - 5.30.	7
PM Symnosia: 3:00 - 5:30:	
AM Lactures: 8:30 - 9:30	7.50
AM Symnosia: 9:30 - 12:00: AM Lartitras: 8:30 - 9:20:	The same of the sa

ASPET ANNUAL MEETING AT EXPERIMENTAL BIOLOGY 2013 – BOSTON, MA

AM Symposia: 5	:30 - 12:00; AM Lectures:	8:30 - 9:20; PM Symposi	AM Symposia: 9:30 – 12:00; AM Lectures: 8:30 – 9:20; PM Symposia: 3:00 – 5:30; PM Lectures: 2:00 – 2:50	s: 2:00 – 2:50		Lectures Divisi	Divisional Programming	Social Business
Saturday, 4/20	Sunday AM, 4/21	Sunday PM, 4/21	Monday AM, 4/22	Monday PM, 4/22	Tues AM, 4/23	Tues PM, 4/23	Wed AM, 4/24	Wed PM, 4/24
Behavioral	Diversity Mentoring	AXELROD LECTURE	ABEL LECTURE	DRUG METABOLISM EARLY	ISTCP, MP	BEHAVIORAL DIVISION	NORM WEINER	SIR JAMES BLACK
Pharmacology	Breakfast	No pain, big gain:	Arthur Christopoulos	CAREER ACHIEVEMENT	Purinergic transmission in	SYMPOSIUM: The opoid-	LECTURE	LECTURE
Meeting	7:30 AM - 9:00 AM	truncated mu opioid	8:30 - 9:20	AWARD LECTURE	visceral function &	cannabinoid connection: A	Novel ion channels and	Molecular mechanisms
8:00 AM - 6:00 PM	Westin Boston	receptor splice variants		TBN	sensation	translational, behavioral	their regulation	of biased agonism at 7
Separate pre-	Waterfront, Room TBD	as drug targets		2:00 PM- 2:50 PM	J. Galligan, H. Akbarali	perspective	David Clapham	transmembrane
registration		Gavril Pasternak		Room 108	Room 107C	M. Haney, Z. Cooper	8:30 -9:20	receptors
required		2:00 PM - 2:50 PM	NEU, DM, ISTCP, MP,	DRUG METABOLISM			Room 107B	Robert Lefkowitz
		Room 107AB	XOT	<b>DIVISION JAMES GILLETTE</b>		BEH BUSINESS MTG		2:00 - 2:50
			New kids on the block:	AWARD & PLATFORM				Room 107B
	DM, TOX	Axelrod Symposium:	Organic cation trans-	SESSION		Room 109A	MP, CVP, NEU	Colloquium Symposium:
	Correlating structure	Expanding the	porters & plasma				New roles for signaling	Bridging the efficacy
	and function of drug	repertoire of G-protein	membrane monoamine	DM BUSINESS MTG			by G protein beta/	divide: Novel molecular
	metabolizing enzymes	coupled opioid receptor	transporters in neuro-				gamma subunits	insights driving biased
	E. Scott, E. Johnson	targets	degenerative, psychiatric	Room 108			A. Smrcka	ligand drug discovery
	Room 107C	Room 107AB	& addictive disorders				Room 107B	A. Christopoulos, R.
			L. Daws					Lefkowitz
			Room 107C					Koom 107B
<b>Graduate Student</b>	MP, CVP, ISTCP, NEU	BPS. CVP, DDRA, ISTCP	BPS, MP	DDD DIVISION SYMPOSIUM	DDD. NEU	ISTCP DIVISION: HOT	BEH, ISTCP, NEU	ISTCP, BEH, CVP, NEU
Colloquium:	Novel functions for	Therapeutic approaches	Novel dynamics of cAMP:	Gliobiology: Emerging	Voltage-gated ion channel	TOPICS	Pharmacological	Sleep apnea: A sleeping
Introducing the	cyclic nucleotide	for erectile dysfunction	Towards new therapeutic	concepts in neural-glia	blockers as potential	G. Christ	enhancement of	giant in disease
Individual	phosphodiesterases &	& benign prostatic	interventions through	interactions in chronic	analgesic agents		wakefulness	pathologies
Development Plan:	their implications for	hyperplasia: Present &	compartmentalized	disease	M. Jarvis	ISTCP BUSINESS MTG	J. Witkin	I. Laher, N. Ayas
A Key to Success	pharmacological	future	signaling networks	M. Jarvis	Room 108		Room 107C	Room 107C
2:00 PM - 5:00 PM	intervention	S. Cellek	M. Schmidt	DDD BUSINESS MTG		Room 107C		
L. Wecker	M. Conti	Room 109A	Room 107AB					
Room 107C	Room 107AB			Room 107C				
2013 Teaching	BEH,ISTCP, NEU	CVP, ISTCP	TOX, ISTCP	NEUROPHARMACOLOGY	BPS	TOXICOLOGY DIVISION	NEU, CVP	NPS, TOX, ISTCP
Institute: Training	Cognitive enhancers for	Innate immunity &	Role of the coagulation	DIVISION POSTDOCTORAL	A "reductionist" approach	SYMPOSIUM: The	Apolipoprotein E: A	Systems biology
Models	the treatment of	cardiovascular disease:	cascade in tissue injury &	AWARD FINALISTS	to cardiovascular disease:	mitochondrion as a	protein at the	answering
J. Barnett, N.	neuropsychiatric	Unfolding the thera-	disease		Inorganic nitrate to nitrite	toxicological and	intersection of vascular	pharmacological
Goulding	disorders	peutic potential of toll-	J. Luyendyk	NEU BUSINESS MTG	to NO	pharmacological target	& neurodegenerative	questions
12:00 PM- 2:30	K. Kantak, R. Spealman	like receptors	Room 108		A. Ahluwalia, D. Lefer	R. Schnellman	disease biology	R. Neubig, J. Lazo
PM	Room 108	R.C. Webb,		Room 106	Room 107AB	TOX RUSINESS MTG	C. Wellington, M. Wood	Room 109A
Room 108		S.Goulopoulou Room 108				Room 108	Room 106	
ASPET Business	ISTCP, CVP, DDRA,NEU	DM, DDD, ISTCP, MP,	MP	MOLECULAR	MP,DDD, TOX	CARDIOVASCULAR	ISTCP, MP	BPS-YS, ISTCP
Meeting	Emerging technologies	XOT	Fatty acid activation of G	PHARMACOLOGY DIVISION	Transcription factors as	DIVISION TRAINEE	Signals activating	Stem cells:
6:00 PM - 7:30 PM	for delivering neuro-	Epigenetic control of	protein-coupled	POSTDOCTORAL SCIENTIST	therapeutic drug targets	SHOWCASE	pancreatic stem cells &	Pharmacology &
Room 107AB	therapeutics across the	drug metabolism &	receptors: Basic &	AWARD FINALISTS	T. Filtz, M. Leid	2:30 -4:30	beta cell regeneration	therapeutics
	blood-brain barrier	transport	clinical perspectives	Keynote Speaker:	Room 109A	Room 107AB	T. Wilkie	D. Reed, J. Mitchell
	N. Nanaware-Kharade,	A. Yu, Y. Osawa	G. Milligan, C. Briscoe	Brian Kobilka		LUCCHESI LECTURE	Room 108	Room 108
	E. Peterson	Room 107C	Room 109A	次を大学院の大学の大学院大学の		4:30 - 5:30		
	Room 109A			MP BUSINESS MTG		Room 107AB		
				Room 107AB		CVP BUSINESS MTG		
						KOOM 10/AB		

(All rooms listed are in the Boston Convention Center unless otherwise noted.)

# ASPET ANNUAL MEETING AT EXPERIMENTAL BIOLOGY 2013 – BOSTON, MA

Saturday, 4/20	Sunday AM, 4/21	Sunday PM, 4/21	Monday AM, 4/22	Monday PM, 4/22	Tues AM, 4/23	Tues PM, 4/23	Wed AM, 4/24	Wed PM, 4/24
	CVP, ISTCP Orthostatic intolerance: Insights into pharmacological, physiologic & gender issues J. Stewart, A. Arnold Room 106	EDU, DDD, ISTCP Translating pharmacology into career choices in the pharmaceutical & biotechnology industry J. Clark Room 106	Advancing discoveries from the academic laboratory to the market R. Leadley Room 106	CVP Local Ca <sup>2*</sup> signals in the endothelium: Key regulators of vascular function & dysfunction M. Nelson, R.Bryan Room 109A	TOX, DDD, DM, EDU Acetaminophen-induced hepatotoxicity: Lessons learned during the last four decades investigating mechanisms of toxicity J. Manautou, H. Joeschke Room 106	DDD, BEH, NEU Negative symptoms of schizophrenia: Neuronal circuit, translation and future directions R. Galici, L. Jacobsen Room 106	NPS, BEH, DDD, DM ISTCP, TOX The pharmacology of natural products D.C. Hopp, J. Williamson Room 109A	NEU, BEH, MP Peripheral mechanisms of opioid analgesia <i>K. Berg</i> Room 106
			Canadian Society of Pharmacology and Therapeutics (CSPT) Trainee Presentations	CSPT Award Lectures Room 109B CSPT Annual General Meeting 6:00 – 7:00 pm Room 109B	CSPT Clinical Correlates Session: Real-world clinical pharmacology: patient cases presenting in Canadian hospitals Room 109B	CSPT Clinical Correlates Session: Pharmacology in Pregnancy Room 109B	BPS, MP, NEU The 5-HT2C receptor: A new target for multiple therapeutics L. Heisler Room 109B	
	EDU Workshop: Art of item writing (NBME style) and basics of assessment S.K. Rojasekaran, A. Butler 9:00 AM – 12:30 PM Westin Boston Waterfront, Room TBD			DPE BUSINESS MTG 6:15 PM – 7:15 PM Westin Boston Waterfront, Room TBD	PHARMACOLOGY EDUCATION DIVISIONAL PROGRAMMING: The future of PhD education in biomedicine: US and European perspectives J. Mitchell Westin Boston Waterfront, Room TBD			4th GPCR Colloquium L. Bohn, R. Sunahara, G. Milligan S:30 PM – 8:30 PM Separate pre- registration required continues on Thursday Room 107B
Opening Reception 7:30 PM – 9:00 PM SW Lobby		Student/Postdoc Best Abstract Competition 6:30 PM – 8:30 PM Westin Boston Waterfront, Grand Ballroom AB		MP Bus. Mtg. & Mixer 7:00 PM – 9:00 PM Westin Boston Waterfront DDD/EDU/ISTCP MIXER 7:30 PM – 9:30 PM Westin Boston Waterfront BEH/NEU Mixer 6:00 PM – 8:00 PM Westin Boston Waterfront		CVP MIXER 6:00 PM – 8:00 PM Westin Boston Waterfront DM/TOX Mixer 7:00 PM – 9:00 PM Waterfront		Closing Reception 6:00 PM – 8:00 PM Westin Boston Waterfront, Room TBD
		Student/Postdoc/BPS- YS Mixer 9:00 PM – 11:30 PM Westin Boston Waterfront, Room TBD				Past Presidents' Dinner 6:00 PM – 9:00 PM Westin Boston Waterfront, Room TBD		
NPS= No primary sponsor	ary shonsor							

#### **Important Links for the ASPET Annual Meeting at EB 2013:**

Program Information: http://www.aspet.org/EB2013/program/

Registration: http://experimentalbiology.org/EB/pages/Registration.aspx

Late-Breaking Abstract Submisstion: http://submissions.miracd.com/eb2013/login.asp

Housing: http://registration3.experientevent.com/ShowEXB131/Default.aspx

Camp EB Childcare: http://www.accentregister.com/events/ch\_events.asp?eld=6364

# Important Things to Remember

#### **Important Dates:**

#### February 21, 2013:

-Late Breaking Abstract Submission Deadline

#### February 22, 2013:

-Early Registration Discount Deadline

#### March 22, 2013:

-Hotel Reservation Deadline

#### April 5, 2013:

-Child Care Registration Deadline

#### **Noteworthy at EB:**

**Child Care** - Camp EB will be available each day of the meeting, so you don't have to worry about leaving the kids at home.

Room Share Board - find someone with similar interests to share a room with for the meeting. Visit the EB website for details.

**WIP Into Shape -** Women in Pharmacology networking walk

Give a Day of Service to Boston - Friday, April 19 - 4<sup>th</sup> annual day of service by ASPET members

Wednesday Reception stay for the afternoon sessions on Wednesday, and enjoy one more night in Boston at a reception hosted by ASPET.

# 4th GPCR Colloquium



#### Wednesday, April 24 - Thursday, April 25

A satellite program to the joint ASPET/BPS Annual Meeting at EB 2013 Boston Convention and Exhibition Center, Room 107AB, Boston, MA

Organizers: Laura Bohn, Ph.D., The Scripps Research Institute, Scripps Florida

Roger Sunahara, Ph.D., University of Michigan Medical School

Graeme Milligan, Ph.D., University of Glasgow, College of Medical, Veterinary and Life Sciences

Sponsored by the ASPET Divisions for Neuropharmacology, Molecular Pharmacology, Drug Discovery and Development, & Toxicology, and the British Pharmacological Society

Please visit http://www.aspet.org/Meetings/GPCR2013/ to register for the meeting.

Attendees are invited to submit a poster for presentation on Wednesday evening and Thursday morning. Poster titles and abstracts must be emailed to Danielle Jordan at **djordan@aspet.org**, no later than February 25, 2013.

#### **Program**

#### Wednesday, April 24:

1:00 PM Registration open

2:00 PM – 2:05 PM Welcome and introduction to the 4th GPCR Colloquium and Sir James Black Honorary Lecture

2:05 PM – 2:55 PM Sir James Black Honorary Lecture

Molecular mechanisms of biased agonism at 7 transmembrane receptors

Robert J. Lefkowitz, Duke University

Bridging the efficacy divide: Novel molecular insights driving biased ligand drug discovery

Sponsored by the Divisions of Molecular Pharmacology and Neuropharmacology

Session Chairs: Arthur Christopoulus and Robert J. Lefkowitz

3:00 PM – 3:25 PM Ligand-biased signaling under the light of BRET

Michel Bouvier, Université de Montréal

3:25 PM – 3:40 PM COFFEE BREAK

3:40 PM – 4:05 PM Allosteric modulation of endogenous metabolites: Implications for on- and off-target drug action and bias

Patrick M. Sexton, Monash University

4:10 PM – 4:35 PM Moving from biased signaling to functional (physiological) bias

Andrew Tobin, University of Leicester

4:40 PM – 5:05 PM Biased allosteric modulators

Arthur Christopoulus, Monash University

5:10 PM – 5:30 PM Bringing receptor bias into clinical development for pain therapeutics

Jonathan Violin, Trevena, Inc.

#### Official end of ASPET's Annual Meeting at Experimental Biology 2013.

Attendance at the poster sessions, dinner and remainder of the Colloquium on Wednesday evening and Thursday requires separate registration.

5:30 PM – 8:30 PM Open Registration; POSTER PRESENTATIONS; DINNER (Buffet- 6:30 PM) for GPCR symposium (Poster awards if prizes can be

raised; Sponsorship needed, Please contact Christie Carrico or Laura Bohn).

Thursday, April 25:

8:00 AM – 8:30 AM Registration Open, Coffee

8:30 AM – 9:20 AM Allosteric modulators: Enhancing the selectivity and potency of current therapeutics

Allosteric modulators for improving CNS therapeutic targets

Jeff Conn, Vanderbilt University

#### Report from the MLPCN GPCR probe development

Session Chair: Laura Bohn

9:25 AM – 10:05 AM Introduction to the MLPCN and an update on Sphingosine1Phosphate receptor drug development

Hugh Rosen, The Scripps Research Institute

10:10 AM – 10:35 AM The chemistry behind CNS drug development

Jeff Aubé, University of Kansas

10:40 AM – 11:05 AM An industry perspective on GPCR drug discovery

Chris Felder, Eli Lilly and Company

11:05 AM - 11:20 AM COFFEE BREAK

Location, location, location: Diverse signaling as a function of context (within the cell)

11:20 AM – 11:55 AM Receptor Trafficking Determining Receptor Signaling

Mark von Zastrow, University of California, San Francisco

11:55 AM – 12:20 PM Nuclear membrane receptors signaling

Karen O'Malley, Washington University

12:20 PM – 1:30 PM LUNCH: Provided

Structure and function: Emphasis on context and drug design

Session Chair: Roger Sunahara

1:30 PM – 2:10 PM An update on GPCR structure and drug development

Brian Kobilka, Stanford University

2:15 PM – 2:40 PM X-ray Structures for the predictive generation of GPCR drugs

Fiona Marshall, Heptares Therapeutics

2:45 PM – 3:05 PM Cannabinoid ligands gaining entry

Patricia Reggio, University of North Carolina, Greensboro

Transient or transformative: Receptor oligomerization finds its way

3:10 PM – 3:40 PM Receptor oligomerization and ligand directed signaling

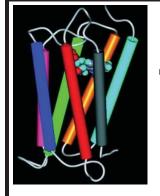
Graeme Milligan, University of Glasgow

3:45 PM – 4:10 PM 5HT2AR-mGluR interactions and implications in schizophrenia

Javier González-Maeso, Mount Sinai School of Medicine

4:15 PM - 4:40 PM TBD

4:40 PM Adjournment



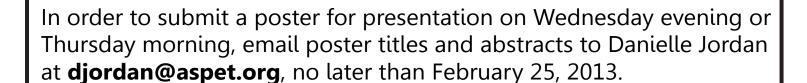
# 4th GPCR Colloquium

Wednesday, April 24 - Thursday, April 25



PHARMACOLOGICAL





For more information and to register for the 4th GPCR Colloquium, please visit: http://www.aspet.org/Meetings/GPCR2013/.

#### **Career News**



#### my/DP: An Interactive Career Planning Tool for Scientists

by Jennifer A. Hobin, Ph.D., Director of Science Policy, FASEB

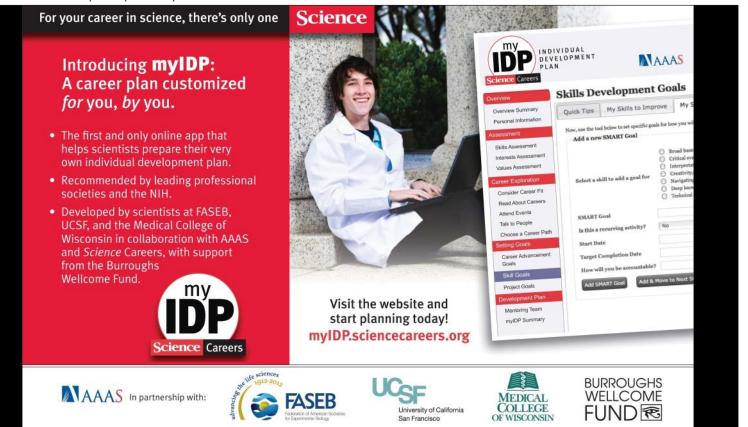
Are you nearing the end of graduate school or your postdoctoral appointment and starting to think about what's next in your career? Perhaps you're weighing the pros and cons of applying for a faculty position, joining a drug development start-up company, or pursuing the science journalism career you've always thought would be interesting. With little time outside of your research and teaching responsibilities, however, you may not have spent much time exploring careers and considering which ones would suit you best.

Now, *myIDP*, a new online career and professional development tool can help you identify and plan for the career option that is right for you. Designed for graduate students and postdocs in the sciences, *myIDP* walks users through the process of assessing their scientific skills and interests and their career-related values. After completing these self-assessment exercises, you will be provided with a list of 20 common scientific career options ordered from best fit to worst fit based on how well they match your skills and interests. Also included are resources that provide information about each of those paths and guidance on career exploration, including tips for networking and examples of questions you might want to ask during an informational interview.

After you've spent some time reading about job opportunities and talking with people in the fields that interest you most, you'll be guided through the process of setting long-term career goals and identifying the transition experiences you'll likely need to achieve those goals. For example, if you aspire to be the Vice President for Research and Development at a pharmaceutical company, you'll want to continue to build your scientific portfolio, and you might want to apply for staff scientist jobs in pharma.

With a clear career objective in mind, you're ready to start setting specific goals to help you prepare for that career. *myIDP* will help you establish goals aimed at developing the requisite skill set, staying on top of your laboratory projects, and advancing your career, such as by polishing your resume or brushing up on interviewing techniques. You can even choose to receive monthly reminder emails to make sure you stay on top of goal deadlines.

myIDP is not designed just for scientists who haven't decided on a career. Even if you know the direction you want to go, myIDP can help you prioritize and develop the skills you'll need to get there. Research shows that setting goals has a positive impact on career outcomes. People who develop and implement strategies to pursue career-specific goals achieve greater career success as measured by salary, promotions, and level of responsibility. They also report greater career satisfaction and consider themselves more successful than do their peers without career plans. A survey of postdocs conducted by Sigma Xi found that those who developed training plans with their advisors published more papers, reported greater satisfaction, gave their advisors higher ratings, and experienced fewer conflicts with their advisors compared to postdocs who had not developed plans. Moreover, a survey conducted by the Federation of American Societies for Experimental Biology found that postdocs who developed IDPs found that it helped them to assess their skills and abilities and identify the skills they would need to advance their careers. So, whether you're planning to become a university professor, join the editorial team at a pharmacology journal, or haven't even decided what your next step will be, consider logging onto http://myidp.sciencecareers.org and begin creating your individual development plan today.



# VISIT THE ASPET CAREER CENTER TODAY! HTTP://CAREERS.ASPET.ORG/



WHAT YOU NEED: ASPET'S CAREER CENTER HAS It.

#### ASPET is committed to your success:

It all starts with your Professional Profile.

Add It or Update It Today for...

FREE Career Tips
Resume Critiques
Resume Writing Services
Career Coaching
Online Profile Development
Career Advice Webinars

We are here to help you excel in your career and become an indispensable leader in the field.

We are here to show you how to navigate the job world by applying a revolutionary approach to determining your own direction.

We are here to showcase your It Factor.

#### Register Now for Exclusive Access

It is our job to nurture our members' professional needs, and the **ASPET career management solution** was developed to do just that. The solution is an online package where you can proactively manage all aspects of your career, and create a professional action plan tailored to your goals. Add or update your profile today and gain access to the career management tools.



9650 Rockville Pike, Bethesda, MD 20814-3995 Main Office: 301.634.7060 www.aspet.org

#### **Journals**



#### by Rich Dodenhoff

#### Figures Indexed by Google Images

The figures in freely accessible articles in ASPET's journals have been indexed by Google Images. Articles published since 1997 up to the most recent 12 months were recently "spidered" by Google for their images. Over 202,000 figures across the four journals are currently shown, including figures in supplemental materials. The number of indexed images will grow as new content is added to the journals.

To view figures by journal, go to http://images.google.com. Enter "site:dmd.aspetjournals.org," for example, to see the images indexed from *Drug Metabolism and Disposition*. Change the journal URL to see results for other ASPET titles.

Scrolling over a search result produces a slightly larger version of the figure, the image's size, the first several words of the figure's caption, and a link to the full-size image at the article. The full-size version provides the article title, the complete figure caption, and links to the full-text XML and PDF versions of the article.

Of course, Google Images enables searching by key words and phrases. Searches are done across all images indexed by Google. Adding a journal acronym seems to produce images primarily from that journal.

ASPET's hosting service, HighWire Press, worked with Google to facilitate image spidering and indexing.

#### **Change in Vendors**

Copyediting and composition for ASPET's journals is moving to a new vendor, Dartmouth Journal Services, effective with the January 2013 issues. This change started early this year when DJS won the bid for ASPET's work. Key people from DJS, including the company's president, Gary Kittredge, met with the ASPET Journals Department staff on March 6 for a transition plan meeting, and we have been working since then to make the change with no interruptions or delays in production.

Since that meeting, DJS developed a thorough style guide for their copyeditors, documented the type specifications for all types of articles and editorial matter published in the four journals, and made a number of design changes we requested to better meet our online-only publishing environment.

Bench>Press settings to deliver manuscripts to DJS were changed and tested, and manuscripts accepted for the January 2013 issues started flowing to DJS ahead of the scheduled start date for each issue. DJS has cut two weeks from the old production schedules.

New figure preparation specifications were adopted as part of the transition to address figure quality inconsistencies. ASPET staff members Jill Filler, Cassie Wood, and Mary Blackwood are helping authors adjust to the new requirements, which should assure that consistently high-quality images are published in all articles.

Final testing of XML files is under way between DJS and HighWire Press to ensure that all content is correctly formatted for online publication. The role of typesetters for research journals has expanded greatly with the need to properly tag and code all content for online delivery. In the case of biomedical journals such as ASPET's, this must be done in accordance with strict standards so the content can be used by PubMed, PubMed Central, and other indexing services. What is visible on screen is less than half of the data included in the files for online publication.

Lastly, DJS will send test files to PubMed Central to guarantee that that process works without a hitch. Articles that cite funding from the NIH, HHMI, the Wellcome Trust, or Research Councils UK are automatically deposited with PubMed Central. This process should happen at least a week faster under DJS.

The transition has progressed on schedule, and I expect the January issues to be published on time.

#### **Publication without the Wait**

*Pharmacological Reviews* is moving to continuous publication of its content. Articles will be published in their final form, including final page numbers, as soon as they are ready rather than being held for the release of a quarterly issue.

In an online publishing environment, continuous publication is a natural step forward, especially for titles with less frequent publication schedules such as quarterly journals. Removing the artificial restraints of issue-by-issue publishing gets content out faster and benefits readers and authors.

For *Pharmacological Reviews*, articles published during a calendar quarter will be designated as part of an issue, with the issue closing on the first business day of the next quarter. For example, issue 1 of 2013 will include the articles published up to January 2. Articles published after that and through March 31 will be part of issue 2, which will close on April 1.

Because the January 2013 issue of *PharmRev* is quite large, most of its articles will be published closer to the closing date than is expected for future issues.

All articles will be published with volume and issue numbers and page numbers to enable accurate citation. Readers can sign up at the *PharmRev* website, **http://pharmrev.aspetjournals.org/cgi/alerts**, for email alerts that will be sent as new articles go online. When the last article in each issue is published, a complete table of contents announcing the close of the issue will be sent.

Authors and readers will be better served as we take advantage of the versatility of online-only publishing.

#### **New Editorial Board Members**

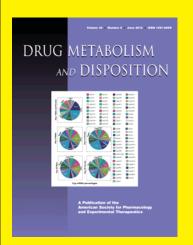
Dr. Andreas Papapetropoulos and Dr. Anton Y. Bespalov have joined the JPET Editorial Advisory Board.

Dr. Papapetopoulos is Professor of Pharmacology in the Department of Pharmacy, University of Patras, Greece, from which he received the B.Pharm. degree. He received the Ph.D. degree in pharmacology from the Medical College of Georgia and did postdoctoral studies there and at the Yale University School of Medicine's Boyer Center for Molecular Medicine.

Dr. Bespalov is Head of the Department of Pharmacology at Abbott GmbH & Co. KG in Ludwigshafen, Germany, and a Professor with the Department of Pharmacology at the Pavlov Medical University, St. Petersburg, Russia. He received the M.D. and Ph.D. degrees from Pavlov Medical University and the D.Med.Sci. degree from the Institute of Experimental Medicine.

We welcome Dr. Papapetopoulos and Dr. Bespalov to the JPET EAB and thank them for their willingness to serve the Journal and the Society.

# There's a new and easier way to access journal content for the following publications:









Use your member login at http://www.aspet.org/journalslogin. Members no longer need a separate username and password for full access to ASPET's journals.

# **Science Policy**



#### by Jim Bernstein

#### The Latest on Sequestration and What You Can Do to Help Combat Cuts to NIH

With the election now behind us, the President and a lame-duck Congress must now address the "fiscal cliff" – the outcome of which will impact future funding levels for NIH and other federal science agencies.

The lame-duck Congress returned November 13. The Lame Duck's efforts will hopefully avoid the nearly \$500 billion in automatic tax hikes and mandatory spending cuts through sequestration that will take effect January 2. What has happened to date at the time of this publication, and what will happen in the days ahead before the start the January deadline, is anyone's guess.

As the deadline looms closer, the likelihood of sequestration being enacted grows. Many members of the biomedical research community are assuming that Congress won't let it happen, that Congress will make a deal just before midnight of the last day as they often have in past budget deliberations. But it is important to remember that sequestration is law, and it would require legislation to change or repeal it. If sequestration is enacted, the NIH budget would be reduced by over \$2 billion and would result in NIH funding 2,300 fewer research grants. ASPET members can and should remain cautiously optimistic that some alternative, and more balanced, solution to deficit and debt reduction will be agreed upon. For that reason, it is critical that all ASPET members begin/continue to communicate to Members of Congress the devastating consequences to biomedical research should sequestration be enacted.

If a "grand bargain" is reached, some comments from Congressional leadership allow room for optimism that additional cuts to non-defense discretionary spending would be unfair. House Appropriations Chair Harold Rogers (R-KY) recently remarked that lawmakers have cut discretionary spending three years in a row, and "I think we have just about reached the bottom of the barrel on cutting domestic discretionary spending... because of entitlement spending, we will still be in the red, every year, so the problem is not in discretionary spending. We have done our job. The problem is the auto-spending of cruise control entitlements."

Amid all discussion of sequestration and to complicate the situation further, the NIH budget is essentially frozen for the first six months of FY'13 (Oct-March) at the FY'12 level. The funding level for the remainder of the fiscal year must be resolved. There is no guarantee that this final number will remain at the FY'12 level. While there could end up being a nominal increase, a possible outcome would be further reduction in the budget. Ideally, Congress could finalize spending in the Lame Duck. And to further muddy the waters, Congress must necessarily begin looking at FY'14 numbers soon.

There are direct actions that all ASPET members can undertake to help sustain NIH funding. Contact your Congressional Representatives today. Legislators need to hear from you that the investment in biomedical research should be a national priority. View the Advocacy Page on the ASPET website, <a href="http://www.aspet.org/advocacy/">http://www.aspet.org/advocacy/</a>, for more details on the impact of sequestration and for information on how to successfully contact and/or meet with your Congressional delegation.

The Ad Hoc Group for Medical Research, a coalition of over 300 organizations including ASPET, has compiled a resource page that includes reports, fact sheets, letters and more that provide more information on sequestration's impact on NIH. Visit <a href="https://www.aamc.org/research/adhocgp/seqstart.htm">https://www.aamc.org/research/adhocgp/seqstart.htm</a>.

The campaigns are now over. Real policy making must begin. Congress will, at some point, cobble together some plan that attempts to raise revenue, cut spending, and reform entitlement spending. There is no better time than today to make the case to Members of Congress about why a robust NIH funding is vital to our nation. For additional help on how to do this, contact Jim Bernstein, ASPET's Director of Government & Public Affairs at 301-634-7062 or jbernstein@aspet.org.

#### **Meet the 2013 ASPET Washington Fellows!**

#### Rosie G. Albarrán-Zeckler The Scripps Research Institute (FL)



Rosie was born and raised in Puerto Rico. After graduating from University of Puerto Rico in Río Piedras with a B.S. in biology, she pursued graduate studies at Baylor College of Medicine where she studied the regulation of dopamine receptor type-1 (D1R) signaling by the hormone ghrelin and its receptor (GHS-R1a). She recently defended her thesis project and earned a Ph.D. in molecular and cellular biology from BCM. She is now a postdoctoral fellow at The Scripps Research Institute in Florida. At Scripps, she has been investigating the modulation of D1R-regulated behaviors such as motivation, attention, and learning by the GHS-R1a in mice. Additionally, Rosie is actively involved in education outreach initiatives and the professional develop-

ment of fellow students and postdocs, and this led her to her become an Education Outreach Associate in the Department of Education Outreach at Scripps Florida. In this new position, her goal is to help middle and high school students, especially from underrepresented groups, get excited about science and math; she hopes that more students will excel at science and pursue scientific careers.

#### Molly K. Altman University of Georgia



Molly is currently a graduate student in pharmaceutical and biomedical sciences at the University of Georgia. Her dissertation research seeks to further understand and characterize specific proteins involved in the signaling mechanisms that lead to chemoresistance in ovarian cancer. She received her bachelor's degree in psychology with a focus in neuroscience from the University of Florida. Molly is a native of Jacksonville, Florida, where her family was stationed in the Navy. Molly is interested in how local communities of scientists can influence public policy in Washington, DC. She feels her role as an ASPET Washington Fellow helps to extend her commitment to the advancement of

biomedical research.

Catherine M. Davis
Johns Hopkins University School of Medicine



Catherine is a National Space Biomedical Research Fellow at Johns Hopkins University School of Medicine in Baltimore, MD. Her current research focuses on determining the behavioral, neurochemical, and physiological differences that impact an individual's sensitivity to cognitive neurobehavioral deficits following exposure to ionizing radiation or the administration of various drugs of abuse. She received her M.A. and Ph.D. from the Behavior, Cognition, and Neuroscience program at American University in Washington, DC. She is a 2004 graduate of Washington & Jefferson College, located in Washington, PA, where she majored in psychology, with a concentration in neuroscience. Cath-

erine was born and raised in Charleroi, PA and currently lives in Rockville, MD. She hopes the ASPET Washington Fellows program will enable her to successfully engage her colleagues in discussions of science policy issues and to help establish a larger network of scientists, researchers, and educators who are aware of the policy issues facing biomedical research and education.

#### Summer Leigh Dodson Oklahoma State University



A native of Tulsa, Summer attended the National Young Leaders Conference in Washington, DC in high school, where she received training in the political process and participated in mock political situations such as international hostage negotiations. At Tulsa University, her research interests in natural products was born where she successfully isolated and identified opioid active components of Monarda citreodora and verified their activity in tissue homogenates. After a seven year break from school while working as an Engineering Technician and then a Process Engineer in manufacturing, Summer entered Oklahoma State University – Center for Health Sciences, to pursue a dream of a

Ph.D. in biomedical sciences where she is continuing her opioid research focusing on the effects of methadone on neuroinflammatory signaling. Summer believes that in order to help bridge the gap of understanding between the necessary research tools and monies and the policies that govern science, it is imperative to have a great understanding of both.

#### Robert W. Gould Vanderbilt University Medical Center



Robert is a postdoctoral fellow at the Vanderbilt Center for Neuroscience Drug Discovery at the Vanderbilt University Medical Center. His research goals include developing drugs that improve the cognitive deficits associated with neuropsychiatric and degenerative disorders and improving the translatability of preclinical models to clinical settings. Robert received his Ph.D. in physiology and pharmacology at Wake Forest University of Health Sciences where his studies focused on characterizing the detrimental effects of cocaine on the brain and its effects on cognition, and attempting to improve cognitive function via novel drugs targeting the nicotinic acetylcholine receptor system as an

adjunct therapy for treating cocaine addiction. Robert's interest in advocating on behalf of scientific research at both the local community and national levels stems his belief that a strong dialogue between researchers, the public, and elected representatives is integral for improving quality of life. Robert is a past participant in ASPET's 2011 Capitol Hill Day during the ASPET Annual Meeting at Experimental Biology.

#### Kristoff T. Homan University of Michigan



Born in Crown Point, Indiana, Kristoff grew up in Indiana and Illinois and graduated from the University of Chicago Laboratory High School. He subsequently studied physics and mathematics at the University of Illinois as an undergraduate. Kristoff then attended Purdue University for graduate work in structural biology, where he focused on the identification of small molecule inhibitors for a low molecular weight protein tyrosine phosphatase in order to develop new treatments for metastatic transformation. After graduation 2010, his post-doctoral work at the University of Michigan involved G protein signaling networks, specifically the interactions between G protein-coupled receptors

and G protein-coupled receptor kinases (GRKs). He has been studying the structural basis of these interactions as well as translational research oriented at small molecule inhibitor discovery, characterization, and optimization for the GRKs.

#### Adam J. Kuszak

#### National Institute of Diabetes & Digestive and Kidney Diseases



Adam is an NIH Postdoctoral Fellow. His research interests focus on the structure and function of membrane proteins and his postdoctoral work investigates macromolecular complexes in bacteria and mitochondria that import proteins and insert them into the plasma membrane. Since 2010, he has become increasingly involved in science policy and advocacy, driven by a desire to educate the general public about the ever increasing scientific understanding of our world and to utilize that understanding to advance the health and prosperity of our society. He has worked extensively with the NIH Fellows Science Policy and Discussion Group and served as its co-chair. Adam was

born in Detroit and raised in the Chicago suburb of Oak Park, Illinois. He received his B.S. in pharmacology and toxicology from the University of Wisconsin-Madison, and earned his Ph.D. in pharmacology from the University of Michigan Medical School.

#### Gloria E. Malpass Wake Forest University Health Sciences



Gloria graduated from the University of North Carolina at Wilmington with a B.S. in mathematics. She has worked in the quality control division at GE Aircraft Engines in Wilmington, NC and Lynn, MA. An interest in pursuing a career in the pharmaceutical industry led her to the doctoral program in the Department of Pharmacology and Toxicology at the Brody School of Medicine at East Carolina University. Since receiving her Ph.D., she has been a postdoctoral research fellow in the Department of Physiology and Pharmacology at Wake Forest University Health Sciences. Her current research is focused on identifying biomarkers in human dermal fibroblasts that may be

impacted by tobacco products and is supported by a RJR-Leon Goldberg Fellowship. Gloria hopes to educate others on the importance of biomedical research, and to advocate for science policy based on sound scientific arguments.

#### Melissa Branham O'Connor Medical University of South Carolina



Although born in Jamestown, NY, Melissa's family moved all over the east coast before settling in Charleston, SC. She received a dual bachelor's degree in chemistry and biochemistry from the College of Charleston and a Ph.D. in microbiology and molecular medicine from Clemson University. Melissa pursued a postdoctoral career at the Medical University of South Carolina where she investigates modulators of G protein signaling in immune cells. She also serves as an adjunct instructor both at The College of Charleston and at The Citadel and is actively involved in the Lowcountry STEM initiative to improve the competitiveness of South Carolina education. Melissa is

eagerly anticipating working as an ASPET Washington Fellow in order to raise awareness for science policy and funding.

#### Alison Presley American University



Alison was born and raised in Albany, GA and attended the University of Georgia. As a psychology major, she was exposed to a variety of topics and didn't decide on drug abuse research until her senior year. After school, she took a year to work as a government affairs intern at a research related trade association. Following the internship, Alison was accepted into American University's Behavior, Cognition and Neuroscience program in Washington, DC. Her primary interests focus on the aversive effects of drugs of abuse and the mechanisms by which they act. She is currently a second year graduate student. Alison feels that the ASPET Washington Fellows Program will provide

a great opportunity to bridge the gap between the work of scientists and our lawmakers. As a young scientist, she hopes to bridge this gap and communicate with lawmakers on behalf of researchers.

#### Matthew Robson West Virginia University



A native of Waterloo, NY, Matthew completed his undergraduate coursework and received a B.S. in biochemistry from Canisius College. While at Canisius College, he conducted research in the neuropharmacology research division at the DENT neurologic institute. His primary research interest while there focused upon health outcomes in secondary stroke patients in regards to their responsiveness to antiplatelet medication regimens. Matthew became a graduate student at West Virginia University in 2008 and will be completing his Ph.D. in pharmaceutical and pharmacological sciences in the spring of 2013. While at West Virginia University, his primary research

focus has been the therapeutic potential of sigma receptor ligands for the treatment of neuropsychiatric conditions, specifically in the areas of depression and drug abuse. He has accepted a postdoctoral position at Vanderbilt University to examine the role of serotonin transporters and serotonin-related signaling in several neurologic disorders. Matthew believes science advocacy is an important skill needed by members of the scientific community and that scientists with a passion for both research and public policy are able to effectively portray the importance of federal funding for biomedical research and why it is a good investment for the American taxpayer.

#### Abigail G. Schindler University of Washington



Abigail is a senior fellow in the Department of Psychiatry and Behavioral Sciences at the University of Washington. She grew up in Santa Cruz, CA and attended the University of Texas at Austin where she received a full ride volleyball scholarship. After graduating with a B.S. in psychology and minor in biology she worked as a research technician with the Christopher and Dana Reeve Foundation at University of California Irvine. Abigail was awarded her Ph.D. from the Department of Pharmacology at the University of Washington in 2012. Her dissertation work focused on understanding the mechanisms underlying stress-induced increase in drug reward. Her current post-

doctoral research involves determining the behavioral and molecular mechanisms leading to increased risk taking behavior in adulthood following adolescent alcohol intake. She is the co-leader of Seattle's Forum on Science Ethics and Policy, helps organize the Science Policy Summit at University of Washington, and writes a science policy and research blog. Additionally, Abigail has previously traveled to Washington, DC to advocate for increased science funding and believes a strong federal research program is essential to economic prosperity and the future success of the country.

#### Tricia H. Smith Virginia Commonwealth University



Tricia was raised in Sarasota, FL and began her science career at the University of Florida, obtaining a bachelor of science in zoology. She received a masters in pharmacology from the Tulane University School of Medicine and in 2009 completed her Ph.D. in pharmacology at VCU. Her primary research interests include drugs of abuse; particularly cannabinoids and opioids, similar to marijuana and morphine, respectively. Her specialties include electrophysiology and g-protein coupled receptor (GPCR) function. Currently, Tricia studies the effects of morphine in the gastrointestinal system as a postdoctoral research fellow at VCU. Tricia believes that scientific involvement

in government is crucial to our national prosperity and that governmental policy should be shaped by sound scientific research.

Information and Application Guidelines for the 2014 ASPET Washington Fellows Program will be available in spring 2013. To view mission and guidelines for application in 2013 visit http://www.aspet.org/Page.aspx?id=3515.

#### PhRMA Foundation Announces New Grant Program in Translational Medicine and Therapeutics

**Washington, D.C. (November 20, 2012)** — The PhRMA Foundation has established a new program to support scientists in the field of Translational Medicine and Therapeutics (TMT). By distributing annual funds of up to \$350,000 through Research Starter Grants and Postdoctoral Fellowships, the program aims to build a cadre of highly trained and qualified TMT investigators.

TMT focuses on improving health care and medicine by bridging basic and clinical research. The science links clinical need to basic research and the resulting novel discoveries to therapeutic outcomes, addressing patients' needs in prevention, diagnosis, and treatment, and advancing development of medical therapies worldwide.

Working collaboratively to translate clinical need into research and research findings into treatments, scientists often gain deeper insight into the biological mechanisms they investigate. The TMT grant program supports training and career development for individuals engaged in such research. To this end, the PhRMA Foundation has identified program priorities for the short and long term: support individual grants for early-career academics, and invite potential partners and stakeholders to participate in additional funding for centers of excellence in TMT.

Postdoctoral awards will be offered for a period of two years, with the second year contingent on progress in the first-year activities. Research Starter Grants—which will provide \$100,000 for a one-year period—will support the work of academic scientists as they begin careers in TMT. Postdoctoral Fellowships—consisting of a \$60,000 annual stipend—will support graduates with doctoral degrees who seek to expand and refine their training in TMT.

Applications must be received by February 1, 2013, so funding can begin on July 1, 2013. Grant recipients will be notified in May. Contact Eileen Cannon at **ECannon@phrmafoundation.org** or visit **www.phrmafoundation.org** for more information.



April 20 - 24
Boston, MA
Joint Meeting with the
British Pharmacological
Society



For more information and to register, visit: www.aspet.org/EB2013

#### The Rita Allen Foundation and the American Pain Society Announce the 2013 Rita Allen Foundation Award in Pain

#### Applications open November 1, 2012 and close January 17, 2013

The Rita Allen Foundation (RAF) and American Pain Society (APS) announce the 2013 Award in Pain. The RAF and APS may award two grants in the amount of \$50,000 annually, for a period of up to three years to those research proposals demonstrating the greatest merit and potential for success.

Eligible candidates will have completed their training and provided persuasive evidence of distinguished achievement or extraordinary promise in basic science research in pain. Candidates should be in the early stages of their career with an appointment at faculty level. The entire award is to be allocated to projects specifically chosen by the recipient. Overhead is not supported.

#### **Research Topics**

Proposed research projects should be directed towards the molecular biology of pain and/or basic science topics related to the development of new analgesics for the management of pain due to terminal illness.

#### **Deadlines**

Applications may be submitted online and will be due by midnight Eastern Time on January 17, 2013. Grant awards will be announced in April of 2013 and funds will be awarded for the initial twelve month grant period upon satisfactory execution of the grant agreement between the RAF and the grant recipient's institution. For any questions regarding the application please see the detailed Program Guidelines at http://www.ampainsoc.org/downloads/RAF%20Applicant%20Guidelines%20for%20Download.pdf.

#### **General Information**

The application must include a written proposal in English of no more than six pages, including a page of no more than 20 references, and curriculum vitae. The candidate's application must include a letter of support from the Department Chair or Institute Head demonstrating strong support for the candidate's proposed research and career development. Two other required letters of support are from the candidate's Ph.D. advisor, and a mentor who has impacted the candidate's research. The candidate will provide the email contact information for the individuals requested to submit letters of support and each individual will be contacted by the online system requesting that their letters be uploaded directly into the candidate's application. The candidate should list current and pending research support from all sources.

#### Eligibility:

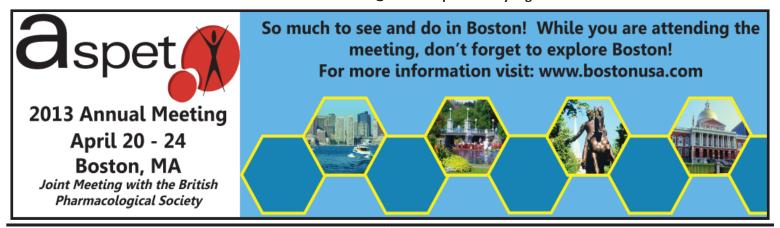
To be eligible for the Rita Allen Foundation Award in Pain the applicant:

- Must demonstrate the strong support of the appropriate administrators and Department Chair or Institute Head.
- Should have been on a tenure track for no more than three years and support will be reconsidered if a Rita Allen Foundation Scholar is awarded tenure.
- Must conduct the research and be appointed at an institution in the United States or Canada.

#### **Grant Budget and Grantee Obligations:**

- Eligible grant expenses may include Principal Investigator salary but not institutional overhead
- Recipients are required to submit a 500 word annual progress report and a financial report to the RAF in accordance with the terms of the grant agreement.
- Investigators are required to present an abstract presentation of the sponsored research at a future Annual Meeting of the APS.

For additional information contact APS at 847-375-4715 or info@americanpainsociety.org.

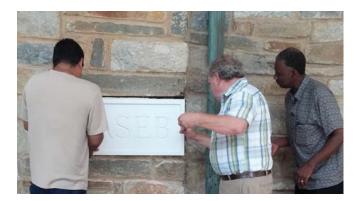


## **News from FASEB**



#### **FASEB Unearths Time Capsule from 1962**

On September 28, 1962, a time capsule was sealed into the cornerstone in the then newly built Lee Building in recognition of its completion and to mark FASEB's 50<sup>th</sup> anniversary. As part of FASEB's centennial celebration in 2012, FASEB unearthed the time capsule from its cornerstone on Friday, September 7. The 1962 time capsule contained letters from ASPET leaders, including Past President K.K. Chen. Below are pictures of some of the items placed in the time capsule from 1962. The time capsule will be installed in FASEB's East Wing lobby in early 2013 and will likely be reopened on occasion of FASEB's sesquicentennial in 2062. Among the items to be resealed in the time capsule, ASPET contributed a copy of its *Centennial Compendium*.











## **Social Media**



#### by Gary Axelrod

#### 'How To' Tips for LinkedIn: A Starter Guide to the Popular Online Professional Network

Do you want to find people with similar interests and ambitions from a professional standpoint? LinkedIn may be just the tool for you. LinkedIn, often thrown in the mix of social media outlets, prefers to tout itself as a multifaceted professional networking tool. LinkedIn allows you to connect with other like-minded individuals who study and work in pharmacology and other related scientific fields. Network with groups, find personal contacts, and explore the profiles of the people to whom your contacts' are connected. These days, you need more than just a resume in the job market, and LinkedIn adds tools to expand your professional presence and help you network.

#### The sign-up Linked in. screen on LinkedIn Be great at what you do. Get started - it's free. Fill out your demographics. let's start creating your professional profi \* I live in: United States 💡 A Linkedin profile helps you... Showcase your skills and experience → Be found for new opportunities I am currently: @ Employed @ Job Seeker @ Student Stay in touch with colleagues and friend Basic (Free What Do You Want to Do? What's this \* Company: Create a professional profile and build your network Join industry or alumni groups Search & apply for jobs See who's viewed your LinkedIn Profile View the professional profiles of over 175 million people Decide the type of account Send messages to people you aren't directly connected to for which you want to sign Premium search filters & automated search alerts Save profiles into folders up. Add notes & contact info to any profile Reach out to over 175 million users **Import** your email more value out of Linkedin by inviting your trusted friends and colleagues to connect contacts to find people See Who You Already Know on LinkedIn Enter Email Addresses Inter email addresses of per each address by a comma. you know. Profile Contacts Groups Jobs Inbox Companies Connections Imported Contacts Profile Organizer View lists Filter Connections Select: All, None and profiles of your first degree

The Basics of LinkedIn:

LinkedIn

connections.

All Connections (132)

Manage

▼ Tags

friends (23) colleagues (20)

#### **Explanations:**

Go to **www.linkedin.com** on the Web. Type in your name, email address and a password on the screen, then click "Join Now." LinkedIn will send you an email confirming your account. Once you have clicked on the link in the email, you will be presented with several screens asking you to complete various aspects of your profile.

Among the items LinkedIn asks you to fill out upon joining the network is basic professional demographic information, such as where you live, your current job title, and your current employer.

Another item you must decide on is whether to sign up for a basic (free) account or pay for a premium account. (See the chart at left to compare the features of these types of accounts.) A premium account gives you greater access to search features, and you are alotted a certain number of "InMails" per month, which should be used to contact and connect with people outside of your network. You will also receive priority customer service as a paying customer, if you ever have a question to ask LinkedIn customer support. Paying for LinkedIn also allows you to see all names of your "3rd degree" and Group connections, some of which would otherwise appear with a first name and first letter of their last name.

**LinkedIn contacts:** Your "1st degree" connections are those people to whom you are directly connected. Your "2nd degree" connections are contacts of your "1st degree" connections, etc.

LinkedIn will ask you to find connections by importing your email contacts. If you choose to do this, you will be asked for the password for your email account so that LinkedIn can search it for contacts who already have LinkedIn profiles. LinkedIn is not able to access the password to your email account, so this is a safe feature. Another way to access this feature would be to go to the "Contacts" menu at the top of the page and click on "Add Connections." When you reach out to people with whom you wish to connect, LinkedIn will sometimes ask you how you know that person (e.g., as a friend or a colleague) and allow you to type a short note to them in your request to connect with them. The person you contacted will then receive an email stating that you want to connect with them. If they decide to accept your request to connect, the two of you will then become "1st degree" contacts.

Now that you have added some connections, feel free to check out information about them. Under the "Contacts" menu, select the top option, "Connections." This pulls up indexes of your contacts, allows you to see their email address, and provides you with a link to send them a message through LinkedIn. Also, you may be able to look at their list of contacts. To do this, you first need to click on a contact's name from the "Connections" screen. This leads you to their profile page. Towards the top of your contact's profile page, you will see listed the number of LinkedIn connections accumulated by that person. Click on that number, and depending on how your contact has set his or her LinkedIn profile preferences, a full list of their contacts may appear on the screen. This is a great way to meet new professional contacts (2nd degree connections)through your list of LinkedIn contacts (1st degree connections).

upervising Attorney

LinkedIn Expert



Join groups related to your professional interests.

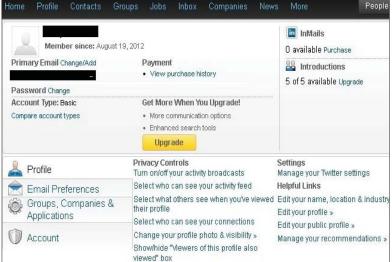
Groups Jobs Inbox Companies News More Below: The Groups page.



Start a discussion or reply to one on the discussion boards.



Toggle your privacy settings.



You can set your profile so that you can view others' profiles anonymously.



Now it's time to beef up your profile. The more information you have in your profile, the greater the chances are that others will look at it and want to connect with you. Go to the "Profile" menu atop the page and select "Edit Profile." You have several different sections to fill out:

Add a Photo: A professional photo gives people a good visual of who you are.

**Summary:** Write a short, catchy, summary of your core skills and/or the strengths that you can bring to a business or academic setting.

**Applications:** LinkedIn has about 15 applications that you can add to your profile. These applications allow you to share presentations (SlideShare Presentations), poll your network (Polls), share your blog (Blog Link or WordPress), find professional events (Events), and more. Click "+ Add an application," located at the top of the "Applications" section, if you wish to explore this feature.

**Experience:** Job summaries or resume bullet points from current and previous positions will appear in this section.

**Education:** Use this space to tout educational degrees or programs you have completed or are working towards completing.

**Recommendations:** You can ask current and former colleagues and supervisors to write recommendations for you. These recommendations will appear in your LinkedIn profile.

Having as much as possible of your profile information filled out improves the chances that other people will find you for professionally-related inquiries. This also helps LinkedIn group administrators decide whether or not to admit you to a group that you request to join.

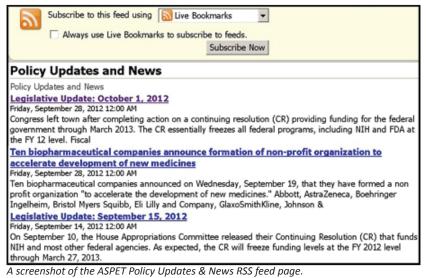
The Groups are where the discussions really begin. Joining a group allows you to contribute to that group's discussion board topics and send private messages to group members. LinkedIn allows you to join up to 50 groups. When, you join a group, you can set your preferences to have group updates emailed to you on a daily or weekly basis. (Go to Settings > Email Preferences > Set the frequency of group digest emails.) To start searching for groups, in the search box, type in the name of a group such as "ASPET," and hit the enter key. You will see a list of search results, of which the ASPET page will be at the top. Once you reach our group page, you can click on the "Join Group" button towards the top of the page. In some groups (including ours), a group manager will need to accept your request to join before you gain the privilege to post and comment on group discussions. If you don't know the name of a group you are trying to find but want to search by topic, go to the search box atop the right side of the page. Click on the word directly to the left of the search box, and toggle it to read "Group." Then search for a topic in the search box, and hit the enter key. After you have joined a group, you can quickly access that group's page from the "Groups" dropdown menu at the top of LinkedIn pages. If you want to start a discussion on a group's page, all you have to do is make sure that you are viewing the "Discussions" tab on the group page and start typing in the text boxes provided for you. To read a particular discussion, click on the first portion of it, which appears as a Web link written in large text, and the next page will detail that discussion's opening comment and any subsequent responses from group members. To add your input to a discussion, all you have to do is start typing in the text box that says "Add a comment..." on the page of the discussion on which you wish to write. The ASPET group is a perfect place to write about and respond to science policy-related posts, scientific questions, career advice, and more. You will also see job listings from the ASPET Career Center appear in the "Discussions" tab of our group page, countesy of our Twitter feed.

**Privacy:** So you want to search around on LinkedIn, but you don't want others to know you've viewed their profile? This is one of the most common issues addressed in LinkedIn's privacy settings. Click the arrow next to your name in the upper right-hand corner of the page, and go to "Settings." You will be prompted for your password. On the following screen, make sure you have selected the "Profile" tab and look under the "Privacy Controls" column. Click on "Select what others see when you've viewed their profile," and you can set your account to browse others' profiles anonymously. Other important settings include setting the frequency that you receive emails from your groups (Email Preferences tab), selecting the order in which your groups are displayed on your profile (Groups, Companies & Applications tab), and changing your profile photo and visibility (Account tab).

There are plenty of other features on LinkedIn. This guide is merely meant to brush the surface and help you get started on the site. Now that you're familiar with the basics of LinkedIn, head to the ASPET page at <a href="http://www.linkedin.com/groups/American-Society-Pharmacology-Experimental-Therapeutics-3320218">http://www.linkedin.com/groups/American-Society-Pharmacology-Experimental-Therapeutics-3320218</a>, join our group, and join the conversation.

#### **How to subscribe to ASPET's RSS feed**

RSS is a handy way to deliver real-time web content that constantly changes and updates. Similar to the idea of a stock ticker that scrolls across the bottom of your television screen, RSS (short for Rich Site Summary or Really Simple Syndication) provides easy access to real-time news updates. In other words, RSS feeds provide an easy way for you to get your news on-the-go. The news from an RSS feed is essentially "delivered" to you. You don't have to click through numerous pages of a website to find it. All you have to know is where to go to access the RSS feed(s) to which you have subscribed. One of the most popular ways to receive RSS feeds is through a folder in your email account. As an example of that, the process to set up an RSS feed in the Microsoft Outlook email viewer is described below.



Inbox (13) Subject Receiv Deleted Rems (96) ■ Date: Last Week Sent Items Dear Colleague' letter details impact of sequestration Wed 1 ASPET opposes policy provisions affecting NIH research Tue 10 Inbox (13) Date: Two Weeks Ago Drafts [2] president's S&T Council of Advisors report suggests doubling... Thu 10 3 Sent Items ASPET Washington Fellows Program Mon 1 Deleted Items (96) 'Dear Colleague' letter details impact of sequestration Junk E-Mail [2] - Outbox Posted On: Wed 10/31/2012 12:01 PM Policy Updates and News RSS Feeds Policy Updates and News Representative Norm Dicks (D MA), the ranking member of the House Appropriations Committee has circulated a "Dear

A screenshot of the ASPET RSS feed viewed in Microsoft Outlook.



A screenshot of the ASPET RSS feed viewed in the bookmarks of the Mozilla Firefox Web browser.



A screenshot of the ASPET RSS feed viewed in Google Reader.

Go to the ASPET Policy Updates & News RSS feed page: http://www.aspet.org/rss.aspx.

You can also get there by going to our main Advocacy page, http://www.aspet.org/advocacy/, and clicking on the RSS feed link towards the top of the page.

There are a number of ways to subscribe to the RSS feed and receive real-time updates from ASPET. The Mozilla Firefox Web browser was used in all of the below examples. Please note that while we use Mozilla Firefox in our examples, other browsers have different procedures for signing up for RSS feeds.

#### Via Microsoft Outlook:

<u>Note:</u> you must have Microsoft Outlook on your computer for this option to work.

Go to the yellow box at the top of the ASPET RSS feed page.

Select Microsoft Outlook from the drop-down menu, and click on "Subscribe Now."

Follow the prompts from Outlook, and you will receive messages from the ASPET Policy Updates & News RSS feed in the RSS feed folder of your Outlook email inbox.

#### Via Live Bookmarks:

Select "Live Bookmarks" option in the Subscribe menu, and click on "Subscribe Now."

A small bookmarks window will pop up. Click "Subscribe" on the window. Then all you have to do is access your bookmarks. Each of our posts to the RSS feed will be bookmarked for easy access.

#### You can also elect to access the RSS feed by signing in with a Yahoo! ID or logging onto Google with a Gmail account.

These options are available through the Mozilla Firefox Browser, and once you select one of them, Yahoo! or Google will guide you through the process. The following are instructions for signing up to receive the ASPET RSS feed by logging onto Google with a Gmail account:

- •In the Mozilla Firefox browser, at the top of the page, you will see a yellow box. Select "Google" from the drop-down menu and then click on the "Subscribe Now" button in order to subscribe to the ASPET RSS feed.
- •You are then asked if you want to add the RSS feed to your Google homepage or your Google reader. For this example, we've chosen the Google Reader option by clicking on the blue "Add to Google Reader" button.
- •Google then prompts you to sign in with your Gmail account login and password, and you are immediately directed to your Google Reader page in gmail.
- •To get to the Google reader on your own, you can either head to https://www.google.com/reader/. Another option to get there involves logging into Gmail. After you log in, click the word "More" in the black bar at the top of your screen, scroll down to "Reader," and click on that.
- •In Google Reader, look in the left-hand navigational menu, and you will see under "Subscriptions" a list of any RSS feeds you have subscribed to through the Google Reader service.
- •Click on "Policy Updates and News" underneath the "Subscriptions" heading in the left-hand navigational menu, and you can now look through posts on ASPET's Policy Updates and News RSS feed.

#### **Members in the News**



#### **Joe Harding**

ASPET member Joe Harding, Professor at the Washington State University College of Veterinary Medicine, was profiled along with colleague Jay Wright on www.LaboratoryEquipment.com, for developing a potential new drug for Alzheimer's that vastly improves the cognitive function of laboratory rats that had symptoms of Alzheimer's. In pill form, the molecular compound named Dihexa was found to be more effective than brain-derived neurotrophic factor (BDNF), which is currently seen as the most reliable compound that has been approved to treat Alzheimer's. Unlike other current drugs used to treat Alzheimer's, which merely slow the process, Dihexa actually restores lost function by rebuilding neural connections. The drug still requires extensive safety and efficacy testing to gain FDA approval. The article can be found at http://www.laboratoryequipment.com/news/2012/10/alzheimer%E2%80%99s-drug-builds-new-cell-connections.

#### **Brian Kobilka and Robert Lefkowitz**



Kobilka and Lefkowitz

ASPET members **Robert Lefkowitz** and **Brian Kobilka** have won the 2012 Nobel Prize in chemistry. The Royal Swedish Academy of Sciences awarded the two researchers for their groundbreaking discoveries on an important family of receptors known as G-protein-coupled receptors. Because so many medications act on these receptors, this research will help scientists to develop better drugs.

Dr. Kobilka, Professor of Medicine and Molecular and Cellular Physiology at Stanford University School of Medicine, was also recipient of the 2010 ASPET-Julius Axelrod Award in Pharmacology. The Axelrod Award is given to recognize outstanding scientific contributions in research and mentoring. Dr. Kobilka has been a member of ASPET since 2005.

Dr. Lefkowitz, a member of ASPET since 1977, is a Howard Hughes Medical Institute Investigator and James B. Duke Professor of Medicine and Biochemistry at the Duke University Medical Center. He was recipient of the ASPET 2012 Robert R. Ruffolo Career Achievement Award in Pharmacology honoring the scientific achievements of scientists who are at the height of their careers and who have made significant contributions to any area of pharmacology. Dr. Lefkowitz was also recipient of the ASPET 1986 Goodman & Gilman Award by GlaxoSmithKline to recognize and stimulate outstanding research in pharmacology of biological receptors.

As young investigators, both Drs. Lefkowitz and Kobilka were honored with the ASPET John Jacob Abel Award, in 1978 and 1994, respectively. The John Jacob Abel Award is given to a single young investigator for original, outstanding research contributions in the field of pharmacology.

Both Nobel Prize winners will be speaking at the 2013 ASPET Annual Meeting at Experimental Biology in Boston. Dr. Lefkowitz will receive the honor as speaker at the Sir James Black Lecture at the Boston Convention Center on Wednesday, April 24. This lecture and session, which Dr. Kobilka will also speak, are part of a colloquium on G-protein coupled receptors which continues Wednesday evening and Thursday.

The Nobel Prizes were established by the Swedish industrialist Alfred Nobel, the inventor of dynamite. Each award is worth 8 million kronor, or about \$1.2 million.

#### Stephen B. Liggett

The University of South Florida Morsani College of Medicine has announced that **Stephen B. Liggett, M.D.**, has been appointed Vice Dean for Research. Dr. Liggett is a Professor in the Department of Medicine, as well as the Department of Molecular Physiology and Pharmacology. He will retain his appointment as Vice Dean for Personalized Medicine and Genomics, and Associate Vice President for Personalized Medicine at USF Health.

#### John Parascandola

John Parascandola, Ph.D., a historical consultant who teaches courses in the history of modern biology and of poisons at the University of Maryland, authored *King of Poisons: A History of Arsenic*. The book was recently published by Potomac Books, Inc. From its linkage to criminal activity, to its former uses as an ingredient in compounds such as paint and cosmetics, to exploring neighborhoods contaminated by the poison, arsenic has been and continues to be prominent in society today. Further information on *King of Poisons: A History of Arsenic* can be found by visiting the following link: http://www.potomacbooksinc.com/Books/BookDetail.aspx?productID=272695.

#### **Marcus Reidenberg**



ASPET Member Marcus M. Reidenberg, M.D., F.A.C.P., Professor of Pharmacology, Medicine, and Public Health at Weill Cornell Medical College has long undertaken photography for a hobby. A recent photography project of his was published in *The New York Times* on Sunday, September 16, 2012. The project focuses on construction workers in their hard hats. They affix many stickers and slogans to their hats which serve as ways of sharing their artistic expressiveness, opinions, and endorsements with the world. A slideshow of 10 of Dr. Reidenberg's pictures is available online at: http://www.nytimes.com/slideshow/2012/09/16/nyregion/20120916HARDHATSS.html.

#### **Gregg Stanwood**

A team of researchers at Vanderbilt University, including ASPET member **Gregg Stanwood**, has found a repurposed role for the Type 2 diabetes drug, Extendin-4. Dr. Stanwood, an Assistant Professor of Pharmacology, is quoted on the Vanderbilt University Medical Center Reporter website, saying that his team of researchers has found that a "brain mechanism already known to be therapeutic for the treatment of diabetes also appears to be implicated in at least certain types of drug addiction." According to Stanwood, "The beauty of this is that it targets a completely new mechanism so we are cautiously hopeful that the field will be able to exploit this, to provide a pharmacological way to help patients combat [drug addiction]." http://news.vanderbilt.edu/2012/10/vanderbilt-researchers-find-that-diabetes-drug-could-be-effective-in-treating-addiction/

#### **Amy Wilson-Delfosse**



The Association of American Medical Colleges (AAMC) has awarded the 2012 Alpha Omega Alpha Robert J. Glaser Distinguished Teacher Award to ASPET member Amy L. Wilson-Delfosse, Ph.D. Dr. Wilson-Delfosse, Assistant Dean for Basic Science Education and Associate Professor in the Department of Pharmacology, was instrumental in redesigning the school's 2006 Western Reserve2 (WR2) curriculum which brought in an organ system-based approach to teaching basic science. The idea behind the WR2 curriculum was to foster an atmosphere of small, self-directed group learning. According to an article posted on the AAMC website, "Dr. Wilson-Delfosse has aided this transition by running workshops to help CWRU educators become better discussion facilitators and give meaningful feedback to students." And she works to keep the cycle of learning going by creating an atmosphere where students are trained to ask questions. Dr. Wilson-Delfosse currently serves as Director of the Case Inquiry Program, helping to advance the WR2 curriculum. She is also President of the International Association of Medical Science Educators. Her laboratory interests focus on cancer and Parkinson's Disease. http://www.aamc.org/initiatives/awards/307296/glaser-wilsondelfosse.html



Keep in Touch...



Have you moved?

Changed your email address?

Changed jobs?

Keep us informed of changes to your contact information so that you don't miss out on any important ASPET news!

Email us at info@aspet.org

#### **Staff News**

#### **ASPET Staff Halloween Celebration**

On Wednesday, October 31, some ASPET Staff members brought out their inner child and came to work in the Halloween spirit.



From left to right, ASPET Staff members Gary Axelrod, Suzie Thompson, Christine Carrico, Danielle Jordan, and our friend the ASPET Donkey had a little fun dressing up for Halloween.

# Does your Pharmacology Department at your school or organization have a job opening?



Register on ASPET's Career Center to post job opportunities and reach highly qualified candidates.



http://careers.aspet.org/

#### **New ASPET Members**

#### **Regular Members**

Mahfoudh A. Abdulghani, Management and Science University, Malaysia

Patti W. Adams, South University

Mohamed R. Ahmed, Vanderbilt University Medical Center

Michael J. Beckstead, University of Texas Health Science Center-San Antonio

Michael V. Bergamini, University of North Texas Health Science Center

Dan E. Berkowitz, Johns Hopkins University

Gary D. Bowers, GlaxoSmithKline

Michelle A. Clark, Nova Southeastern University

William A. Coetzee, New York University School of Medicine

Philip R. Cooper, Janssen R&D

Gokul M. Das, Roswell Park Cancer Institute

Roberto Di Maio, University of Pittsburgh

Leslie Dickmann, Amgen

**Aaron M. Domina,** Husson University School of Pharmacy

Richard W. Dudley III, University of Findlay

Ludmila Filaretova, Pavlov Institute of Physiology, Russia

David A. Hartman, Aptiv Solutions

Zoe A. Hughes, Pfizer Inc

Winston W. Kao, University of Cincinnati

Ted Weita Lai, China Medical University, Taiwan

Ralph H. Loring, Northeastern University

Robert R. Luedtke, University of North Texas Health Science Center

Hendrik Luesch, University of Florida

Chandrashekhar V. Magnnavar, Hanagal Shri Kumareshwar, India

Richard E. Mains, University of Connecticut Health Center

Douglas McHugh, Quinnipiac University

Catherine C. Moore, University of the Sciences in Philadelphia

Swati Nagar, Temple University School of Pharmacy

Surendra K. Nayak, SRI International

Mary Paine, University of North Carolina-Chapel Hill

Jinwoo Park, University at Buffalo

Josh T. Pearson, Amgen, Inc.

Svril Pettit. HESI

Irina A. Pikuleva, Case Western Reserve University

Victoria E. Richards, Quinnipiac University-Frank H. Netter School of Medicine

Ahmed S. Sahib, Alkindy College of Medicine/University of Baghdad

Jennifer M. Sasser, University of Mississippi Medical Center

Isobel A. Scarisbrick, Mayo Clinic

Daniel J. Selvage, University of New England

Yoshihisa Shitara, Meiji Seika Pharma Co., Ltd., Japan

Arun K. Shukla, Duke University

Guangji Wang, China Pharmaceutical University

**Baojian Wu,** Jinan University, China **Lei Xiao,** University of Illinois-Chicago

Daigen Xu, Rutgers University

Jin Xu, Memorial Sloan-Kettering Cancer Center

Mingyi Yao, Midwestern University College of Pharmacy

#### **Affiliate Members**

Krithika Lingappan, Baylor College of Medicine

Sachita Shrestha, National Medicine Laboratory

#### **Postdoctoral Members**

Mohammed A. Abdelsaid, Georgia Health Science University

Erin M. Allen, Case Western Reserve University

Susan A. Austin, Mayo Clinic

Megan L. Bertholomey, McLean Hospital/Harvard Medical School

Katherine S. Bourcy, University of Louisville

Chandeshwari Chilampalli, Insys Therapeutics

Kanika V. Choughule, Washington State University

Jonathan W. Dickerson, Vanderbilt University

Jamie R. Doyle, Tufts Medical Center

Timothy M. Doyle, Saint Louis University School of Medicine

Andrew C. Emery, National Institute of Mental Health, NIH

Yurong Fei, New York University College of Dentistry

Ayan Ghoshal, Vanderbilt University

Lenka Hruba, University of Texas Health Science Center

Brian D. Hudson, University of Glasgow

Modar Kassan, Tulane University

Kyungho Kim, University of Illinois-Chicago

Kwi Hye Koh, University of Illinois-Chicago

Prasad Krishnan, Penn State University

Jin Kyung Lee, University of Illinois-Chicago

LeeCole L. Legette, Oregon State University

Fei Li, National Cancer Institute/NIH

Wei Li, University of Illinois-Chicago

Jieru E. Lin, Thomas Jefferson University

**Zhigang Lu, Memorial Sloan Kettering Cancer Center** 

Zhiqiang Meng, Harvard Medical School-New England Primate Research Center

Jacob E. Montgomery, University of Minnesota

Amy E. Moritz, National Institute of Neurological Disorders and Stroke, NIH

Cara H. Nelson, University of Washington

Cesare Orlandi, The Scripps Research Institute

**Gonen Ozsarlak-Sozer,** Ege University Faculty of Pharmacy

Sven-Christian Pawelzik, University of Pennsylvania

Sarah C. Petersen, Washington University-St. Louis

Elisabeth Piccart, University of Texas HSC-San Antonio

Aaron M. Pitre, St. Jude Children's Research Hospital

Rani J. Qasem, University of Pennsylvania

Jesse Rodriguez, University of Texas Health Science Center at San Antonio

**Ibolya Rutkai,** Tulane University

Kaustuv Saha, University of Florida

Harriet Schellekens, University College Cork, Ireland

Abigail G. Schindler, University of Washington

Maria Alicia C. Sepulveda, Georgia Health Sciences University-Augusta

Edward I. Stahl, Scripps Florida

Devi Sukhtankar, University of Michigan

Katherine M. Sutherland, University of California-San Francisco

Kalidasan Thambiayya, University of Illinois-Chicago

Jennifer A. Thompson, Georgia Health Sciences University

Adam G. Walker, Vanderbilt University

Yuexiang Wang, Purdue University

Vanessa L. Wehbi, University of Pittsburgh School of Medicine

Hye Sook Yoon, Mayo Clinic

Claudio Zanettini, University of Texas Health Science Center

Yanyan Zhang, University of Illinois-Chicago

Wuqiang Zhu, Indiana University School of Medicine

#### **Graduate Student Members**

Al-Shaimaa F. Ahmed, Calgary University

Garrett R. Ainslie, University of North Carolina-Chapel Hill

Awatif Albaker, University of Ottawa

Khalid O. Alfarouk, H. Lee Moffitt Cancer Center Mahmoud Alghamri, Wright State University

Ramy M. Ammar, Sinai University Faculty of Pharmacy Shawn Anderson, Virginia Commonwealth University

Sameya Anjum, Jamia Hamdard, India

Damodaran Annamalai, Loyola University Medical Center Stritch School of Med.

John T. Barr, Washington State University Pankti R. Bhatt, Long Island University

Tasha N. Blatt, University of North Carolina-Chapel Hill

Christopher R. Bodle, University of Iowa

Julie S. Bonano, Virginia Commonwealth University

Zicole Brown, Philadelphia College of Osteopathic Medicine-Georgia Campus

Paulina Brzezinska, Queen's University

**Kathleen Buckley,** Georgia Health Sciences University **Erin S. Calipari,** Wake Forest University School of Medicine

Casey Y. Carmichael, Boston University

Chase M. Carver, Texas A&M Health Science Center

**Brittany A. Casino,** SUNY University-Buffalo **Ryan P. Ceddia,** Vanderbilt University **Allison E. Cherry,** University of Washington

Tanya Chotibut, LSU Health Sciences Center-Shreveport

John P. Connick, Louisiana State University Heath Sciences Center

Karissa E. Cottier, University of Toledo Joel J. Credle, Georgetown University

Ashok K. Datusalia, National Institute of Pharmaceutical Education and Research, India

Natalie A. Daurio, University of Pennsylvania Auditi Debroy, University of Illinois-Chicago Ghazaul Dezfuli, Georgetown University

Summer L. Dodson, Oklahoma State University-Ctr. for Health Science

Namita S. Dodwadkar, Northeastern University

Jennifer J. Donegan, University of Texas Health Science Center-San Antonio

Helen J. Dranse, Dalhousie University Yohan D'Souza, Queen's University Somhrita Dutta, Tulane University Aliza Ehrlich, Kyoto University

Shamia L. Faison, University of Maryland-Baltimore

Qiying Fan, University of Houston

**Christine A. Farthing,** Virginia Commonwealth University **Brian C. Ferslew,** University of North Carolina-Chapel Hill

Kyle L. Flannigan, McMaster University

Thomas A. Ford-Hutchinson, University of California, Irvine

Gloria S. Forkuo, University of Houston

Feana Francis Devaraj, University of Arkansas for Medical Sciences

Kelen C. Freitas, Virginia Commonwealth University

**Brenda M. Gannon,** University of Arkansas for Medical Sciences

Ryan T. Gardner, Oregon Health and Science University

Mohamed A. Ghonim, Louisiana State University, School of Medicine

Lisa R. Goldberg, Boston University

**Velmurugan Gopal Viswanathan,** Rosalind Franklin University **Maria A. Greenwood,** Virginia Commonwealth University **Steven G. Grinnell,** Memorial Sloan-Kettering Cancer Center

**Shilpi Gupta,** Long Island University

**Jennifer M. Haick,** Loyola University Medical Center **Laura E. Halpin,** University of Toledo College of Medicine

Jason Hall, Stony Brook University

**Trevor Hardigan,** Georgia Health Sciences University **Matthew A. Hartog,** State University of New York at Albany **Ali I. Hassan,** Louisiana State University, School of Medicine

Hannah Hathaway, Georgetown University

Tomohiro Hayaishi, Osaka University Graduate School of Pharmaceutical Sciences, Japan

Inas A. Helwa, Georgia Health Sciences University

Meghan Hibicke, Mercer University

Kristin C. Hicks, Loyola University-Chicago

**Todd M. Hillhouse,** Virginia Commonwealth University **Miyoun Hong,** New York University School of Medicine

Amanda M. Isom, University of Cincinnati Erin N. Jackson, University of Florida Amin Jahromi, University of Illinois

Sridhar Jaligama, University of Louisiana-Monroe

Monica Javidnia, Georgetown University Krista M. Johnson, University of Minnesota

Rachel N. Johnson, University of North Texas Health Science Center

Ailes Vessmande Ougan's University

Milosz Kaczmarek, Queen's University

Vijaykumar Kale, Penn State College of Medicine

Buki O. Kalejaiye, Howard University

**Sheri Dawn Kennedy,** University of Oklahoma Health Sciences Center

**Nayaab S. Khan,** University of Tennessee Health Science Center

Laura Kilpatrick, University of Nottingham, UK

Rebecca Klar, Vanderbilt University

Kokila Kota, University of Medicine and Dentistry of New Jersey

Shashank Kulkarni, Northeastern University Eva Yuhua Kuo, China Medical University, Taiwan Maggie M. Kuo, Johns Hopkins University Kateryna Kyrylkova, Oregon State University

Aaron M. Lambert, University of Minnesota-Twin Cities

Nora Lee, University of Washington Robert H. Lee, University of Toledo Sang-Min Lee, Pennsylvania State University

Joshua H. Leggette, Tougaloo College

Michael D. Leitl, Virginia Commonwealth University

**Haobo Li,** The University of Hong Kong **Xiaoxiao Li,** University of Texas-Southwestern **Kate Hsiurong Liao,** China Medical University, Taiwan

Ashley M. Liguori, University of Arizona

Hsiao-Yun Lin, National Chung Hsing University, Taiwan

Yunmeng Liu, New York Medical College

Amanda E. Mackenzie, University of Glasgow, Scotland

Tu H. Mai, Vanderbilt University
Nusrat Matin, Michigan State University
Amber A. McBride, University of New Mexico
Sarah R. Mikelman, University of Michigan

Nathan C. Mitchell, University of Texas Health Science Center-San Antonio

Kazuhisa Miyakawa, Michigan State University Mmalebuso L. Mokoena, Northwest University Mary Ellen E. Molloy, University of Illinois-Chicago

Christopher L. Moore, University of Arkansas for Medical Sciences

**Alex Morrison-Nozik,** SUNY-Buffalo **Ehab M. Moussa,** Purdue University **Sourashish Nag,** University of Houston

**Shotaro Nagase,** Osaka University Graduate School of Pharmaceutical

Sciences, Japan

Shraddha Nayak, Medical College of Wisconsin

Jacques D. Nguyen, University of North Texas Health Science Center

Joy K. Ngwainmbi, Virginia Commonwealth University

**G Yeon Oh,** Purdue University

**Sathish Padi,** North Dakota State University **Maria C. Palazzo,** Vanderbilt University

Rohun U. Palekar, Washington University-St. Louis

Xian Pan, University of Illinois at Chicago

Gabriel C. Park, Midwestern University Chicago College of Pharmacy

Angela M. Phillips, University of Florida Rebecca L. Pomfrey, American University Marina Popovska-Gorevski, University at Buffalo

Alison G. Presley, American University

Michael J. Pulkoski-Gross, Stony Brook University

Kun Qian, Northeastern University

Congzhen Qiao, University of Michigan

Shuiging Qiu, Georgia Health Sciences University

Maja Radulovic, Mayo Clinic Graduate School

Michael D. Raleigh, University of Minnesota Medical School

Frances Ramirez, University of Arizona College of Pharmacy

Sarah N. Rampersad, Queen's University

Rene Raphemot, Vanderbilt University Medical Center

Mohd Rashid, Jamia Hamdard, India

Emily E. Reichard, University of Arkansas for Medical Sciences

Jacqueline E. Reilly, University of Iowa

Erin L. Reinl, Washington University-St. Louis

William G. Robichaux, Medical University of South Carolina

Jillian L. Rourke, Dalhousie University Kyle S. Saitta, University of Connecticut

Ibrahim G. Saleh, University of Mississippi

Mukta S. Sane, North Dakota State University

Cara C. Schafer, University of Alabama at Birmingham

Chris L. Schaich, Wake Forest University

Louise E. See Hoe, Griffith University

Jessica L. Sessenwein, McMaster University

Tatyana Sevastyanova, University of Rochester

Deepika Sharma, Panjab University, India

Yoshimi Shimizu, Osaka University Graduate School of Pharmaceutical Sciences, Japan

Ninu Shrestha, Mahidol University, Thailand

Sonal R. Singh, University of Houston

Edward R. Siuda, Washington University in St. Louis

Tiffani N. Slaughter, University of Mississippi Medical Center

Lauren M. Slosky, University of Arizona

Sugin Lal Jabaris Sobhana George, Sri Ramachandra University, India

Shilpa Sonti, Northeastern University

Edwin J. Squirewell, University of Iowa

Jutamas Suwanpradid, Georgia Health Sciences University

**Arsalan Syed,** University of Vermont **Stephanie D. Syer,** McMaster University

Ehsan Tavassoli. University of Illinois-Chicago

Shraddha Thakkar, University of Arkansas for Medical Sciences

Brent A. Thornhill, Marshall University, Joan C. Edwards School of Medicine

Elaine E. To, Johns Hopkins University School of Medicine

Donteeno K. Todd, Tougaloo College

Jilliene Touchette, St. Louis University

Tammy K. Truong, Queen's University

Daniel J. Tyrrell, Wake Forest University

Jennifer L. VanAusdall, Johns Hopkins School of Medicine

Rita R. Verma, Loyola University-Chicago

Nisha Vijay, State University of New York at Buffalo

Jing Wang, State University of New York at Buffalo

Camille A. Webster, Florida A&M University

**Shannan T. White,** Howard University

Alonzo J. Whyte, Vanderbilt University

Li Xiangru, Osaka University Graduate School of Pharmaceutical Sciences, Japan

Mayo Yamashita, Osaka University

Xuan Yu, Texas A&M University

Eric J. Zaccone, West Virginia University/NIOSH

Le Zhan, Rutgers University Ernest Mario School of Pharmacy

Boyang Zhang, University of Ottawa

Changfeng Zhang, University of the Pacific

Wei Zhang, University of Kentucky

Zufei Zhang, University of Washington-Seattle

**Jie Zhou,** University of Minnesota **Zhu Zhou,** University of the Pacific

Shenghua Zhu, University of Manitoba

#### **Undergraduate Student Members**

Mariah Alejo, Dominican University of California

Chibuokem G. Amuneke-Nze, Ohio State University

Sonya Bhatia, Smith College

Kelly M. Biette, Seattle University

Fatimah Bori, North Carolina Central University

Maria A. Briscione, American University

Nehemiah Ceasar, Fort Valley State University

Gilbert Encarnacion Cortes, University of Puerto Rico-Fajardo

Hanna N. Dasenbrock, Northern Kentucky University

Paran Davari, University of Florida

Amberlene De La Rocha, Duke University

Jose Deniz, Stony Brook University

Jodi-Ann Foster, Lincoln University

Andrew Gabanic, University of Cincinnati

Cierra Gauvan, Chaminade University of Honolulu

Trent Gray, Temple University

Rekha K. Gupta, University of Kentucky

Sara Hamidi Azghadi, University of Florida

Clayton Hogan, Queensborough Community College

William J. Hurst, Washington College

**Manami Iida,** Osaka University Graduate School of Pharmaceutical Sciences, Japan

Anthony Juso. University of New Mexico

Denise Levy, University of Massachusetts-Boston

Kyle D. McIntosh, University of Toledo

Christopher A. McNees, Marshall University

Andrew P. Merluzzi, American University

Nathan A. Miller, Bowdoin College

Kyle Nakatsuka, Southern Methodist University

Matthew Nguyen, Virginia Tech

Vera Obinwanne, North Carolina Central University

Michael Okoronuo, Southern University of New Orleans

Anita C. Okpobiri, University of Texas-Austin

Rosalyn Reese, University of Missouri

Jenaye D. Robinson, Texas Southern University

Edward Rodruiguez, University of Texas-San Antonio

Shakara Scott, Brandeis University

Leah A. Smith, University of Cincinnati

Cody A. Stover, Marshall University

Ghislain Tchomdbe, Bowie State University

Karina Nieves Torres, University of Puerto Rico-Cayey

Mark A. Vanden Avond, University Wisconsin-Eau Claire

Laura P. Villarroel, University of Florida

Khaing Win, St. Joseph's College

Lola Yen, China Medical University, Taiwan



#### Order your copy of the 2012 Explore Pharmacology brochure

*Explore Pharmacology* is a great tool to get undergraduates and other students interested in pharmacology. If your academic institution has undergraduate science programs, *Explore Pharmacology* is a great resource to teach them about pharmacology and career opportunities within the field:

http://www.aspet.org/knowledge/pharmacology-resources/#Brochures.

To order multiple copies of Explore Pharmacology, please contact Pat Stoute (**pstoute@aspet.org**) or go to the ASPET Online Store, http://www.aspet.org/store.

# In Sympathy



#### **ASPET Notes with Sympathy the Passing of the Following Members:**

Joseph ArtusioDonald HunninghakeAlbert PicchioniJohn EcksteinDuncan HutcheonSydney SpectorJohn L. EmmersonLucien MorrisJohn M. Stewart

John Falk Stata Norton Howard Zauder

#### **Obituary**

#### Sydney Spector (1923-2012), Former ASPET President, Pharmacology Pioneer Passes Away at 88



Sydney Spector, age 88, passed away October 26, 2012. Syd was an excellent athlete and really loved sports where the best of the best are described as multi-tool players. Syd was a multi tool player as well — the best of the best as an innovative scientist, caring teacher/mentor, and beloved husband, father and grandfather.

Syd's entry into pharmacology was delayed by his service in World War II where at the age of 20 he fought in the Normandy Invasion, the Battle of the Bulge and other European campaigns. A pioneer and worldwide leader in pharmacology, Syd's early exposure to pharmacology occurred during a fellowship with Oliver Lowry, where he interacted with Bob Furchgott and others at Wash U in St Louis. From there with a growing family, he accepted a job in R and D in at Wyeth Pharmaceuticals. These opportunities led him to earn his Ph.D. in pharmacology from Jefferson Medical School in 1957. Syd participated in "the golden age of pharmacology" where he spent the early part of his career conducting research

at the Heart, Lung, Blood Institute at the National Institutes of Health. Syd's early collaborations with Bernard Brodie and colleagues were cornerstones to understanding the role and dynamics of the neurotransmitters, norepinephrine and serotonin in brain function, disease and drug action. He was among the first to study monamine oxidase inhibitors and provided key evidence for the general hypothesis that norepinephrine was usually stimulatory and serotonin inhibitory in the CNS. Syd's work was key to pharmacology in establishing biogenic amines as a scientific foundation of affective disorders and psychoactive drug therapeutics — all accomplished within four years after his Ph.D.; but he was just beginning.

In 1961, he began collaborating with Al Sjoerdsma and Sidney Udenfriend at the NIH and expanded his interests towards increasing biological and clinical relevance. He focused on the role of biogenic amine synthetic pathways and turnover showing that tyrosine hydroxylase was the rate limiting enzyme in catecholamine synthesis, and that alpha methyl tyrosine was a selective tyrosine hydroxylase inhibitor; and an enormously important tool to study catecholamine dynamics in disease and therapeutics. Together with his colleagues, Syd also showed that end product inhibition by catechols regulated tyrosine hydroxylase and as catechol levels increased, feedback inhibition of tyrosine hydroxylase occurred. These studies on catecholamine dynamics were among the most highly quoted and referenced scientific papers from 1965-1975.

Syd Spector was a great collaborator, and these synergistic studies with others established his leadership in the identification of important scientific questions but perhaps even more importantly, in the development and use of highly innovative methods necessary to answer those questions. Syd's attention turned to the role of catecholamines in hypertension where he was among the first to use genetic spontaneously hypertensive rats as a model system. He defined the role of alpha methyl dopa which ultimately became clinically useful, on catecholamine synthesis and the importance of norepinephrine turnover in hypertension and the cardiovascular system.

Syd joined the Roche Institute of Molecular Biology as a founding member and department head in 1968 and added the tools of immunology to his skill set via a sabbatical with Herman Eisen at Washington University. Once again, Syd became a pioneer, opening the new important field of immunopharmacology. He developed and used highly sensitive and specific antibodies to neurotransmitters and drugs as "receptor like fishing hooks" to track and search for important compounds in the body. He conducted pioneering experiments with these antibodies including establishing their important potential use as immunotherapy for modifying drugs of abuse. Antibodies created in Syd's lab were applied to the assay of many drugs and endogenous compounds such as barbiturates, reserpine, imipramines, morphine, naloxone, chlorpromazine, serotonin, acetylcholine, and curare — for basic research, clinical and forensic use. As diagnostic assays his methods achieved sensitivity and assay simplicity not previously possible or practical. Several of these ideas and tools were embraced by Hoffmann La Roche as products, which significantly accelerated Roche's diagnostic franchise. Using the morphine antibody as a tool, Syd also showed for the first time the presence and potential importance of endogenous morphine in the human body. He also significantly advanced our understanding of benzodiazepines and peripheral benzodiazepine receptors using a multiple technologies and pharmacologic studies.

Syd also excelled in his dedication to nurturing and developing scientific talent, launching the careers of a legion of scientists, a number of whom became drug discovery and research leaders in their own right. As excited as Syd was about the science and his innovative new discoveries and tools, the success of his colleagues and students was even more thrilling and sustaining to him. Syd said the following in an interview with Fridolin Sulser in 1998 for the ACNP. "I am reminded of a Chinese maxim that if you plan for a year you plant rice, if you plan for decade you plant trees and if you plan for a millennium you teach." Once Syd introduced a new approach to those in his lab, he freely shared his ideas and advice, reaping enormous satisfaction in the new discoveries and collaborations of the next generation of scientists that he trained. "I" was not a big word in Syd's vocabulary. He was humble to the very core. There is a Yiddish word for a kind and decent person that comes to mind that many of us would agree applies to Syd — he was a reference standard "mensch," a trait as admirable as his scientific brilliance.

Syd's sense of humor permeated his life and interactions with colleagues, his family and friends. "Humor is a rubber sword — it allows you to make a point without drawing blood (Mary Hirsch)." He was the master of the one liner, which seemed a talent that he fine-tuned with age. While Syd could be appropriately critical, this was always accomplished with a spirit of helpfulness and kindness.

Syd published more than 200 scientific papers and received multiple awards and honors (including the ASPET Award in Experimental Therapeutics, and the Julius Axelrod Award) and was elected President of ASPET in 1979. After retiring from the Roche Institute, Syd moved to Nashville, Tennessee in the early 1990's where he enjoyed an appointment in the Pharmacology Department at Vanderbilt University. Here, he continued to be actively engaged in scientific thought, nurturing students and reconnecting with his athletic and artistic interests via daily gym workouts and painting.

Anyone who worked with Syd was welcomed into the Spector family by Syd and Bettie. There, we could all see and feel their love and friend-ship — what a great team Syd and Bettie, his wife for 64 years, were. They were devoted to each other, and enjoyed travelling the world together usually related to some scientific undertaking or meeting; and they much enjoyed the interactions and friendship of their colleagues and their children.

Syd and Bettie were caring and supportive parents to Neil and Faye, both of whom became physicians. They in turn took great care of Syd and were so enormously proud of him. After relocating to Chapel Hill, North Carolina, Syd was energized in his later years through his ongoing scientific association with Neil. He continued to have innovative ideas and tested them. At age 76, Syd and Neil (an outstanding scientist and oncologist) published an excellent paper and obtained a patent on a new anticancer compound as a prototype for an entirely novel approach to cancer therapy and to aurora kinase regulation, based on Syd's ideas. As late as 2011, Syd continued to work in the lab with Neil, testing new hypotheses and maintaining a full and active life, priding himself on a rigorous daily exercise routine that was the envy of those half his age. Throughout his life, Syd's style, innovative actionable ideas and enthusiasm for science and drug discovery are qualities that defined him as a very special person, unique scientist, and leader.

Syd Spector was indeed a multi-tool person, excelling in matters of family, teaching and outstanding scientific accomplishment. Syd's loss as a scientist and friend is enormous, yet his legacy continues in his wonderful family and his enormous contributions to pharmacology. His colleagues and students will always be so very grateful and better that we knew and learned from Sydney Spector.

Barry A. Berkowitz, Ph.D (Bessor Pharma, LLC Framingham, MA, 01701)

Marlene L. Cohen, Ph.D (Distinguished Research Fellow (retired), Eli Lilly and Company; Creative Pharmacology Solutions LLC, Carmel, IN, 46032)

## Have you joined a Division?

Take full advantage of ASPET Membership by joining a Division!

- Participate in creating the scientific program for the annual meeting.
- Network with people in your field at mixers and divisional programming at the annual meeting.
- Participate in running the division and planning its activities.
- Receive special notices and newsletters about items and activities of interest in your field.

#### **Division News**

#### **Behavioral Pharmacology Division**

#### **Division Election Nominees**

**Nominee for Chair-Elect:** 



Jeffrey Witkin

#### **Nominees for Secretary/Treasurer-Elect:**



Matthew L. Banks



#### **Cardiovascular Pharmacology Division**

#### **Division Election Nominees**

Nominee for Chair-Elect:



David B. Averil

#### Nominee for Secretary/Treasurer-Elect:



Fadi T. Khasawneh

#### **News**

•The CV Division now has a Trainee page, front and center! Please go to: http://www.aspet.org/Cardiovascular\_Pharmacology/CVD-trainee-page/. A very special thanks to Fadi Khasawneh for working on this page and to ASPET for supporting it!

#### EB 2013

- •The CV Section will hold its annual Trainee Showcase at EB 2013 (Tuesday, April 23) followed immediately by the The Benedict Lucchesi Distinguished Lectureship in Cardiac Pharmacology. Both will be held in the Convention Center.
- •The CVP Mixer will be held from 7-9:00 p.m. in the Westin Boston Waterfront Hotel; stay tuned for room announcement.
- •We are proud to sponsor three symposia during EB 2013.
- 1) Symposium title: Orthostatic intolerance: Insights into pharmacologic, physiologic and gender issues

Submitted by: Julian Stewart, MD, PhD and Amy Arnold, PhD

Co-chairs: Julian Stewart, MD, PhD and Amy Arnold, PhD

Talk 1: Vasovaqal syncope: Putative triggers and pharmacological and physiological approaches to management Speaker 1: Roger Hainsworth, MB, PhD, DSc

Talk 2: Neural and non-neural control of orthostatic intolerance: Implications for sex differences Speaker 2: Qi Fu, MD, PhD

Talk 3: Identifying sympathetic nervous system abnormalities in orthostatic intolerance

Speaker 3: Elisabeth Lambert

Talk 4: Ehlers Danlos Syndrome, joint hypermobility and orthostatic intolerance

Speaker 4: Peter Rowe, MD

2) Symposium title: Innate immunity and cardiovascular disease: Unfolding the therapeutic potential of toll-like receptors

Submitted by: R. Clinton Webb and Styliani Goulopoulou Co-chairs: R. Clinton Webb and Styliani Goulopoulou

Talk 1: TLR signaling: Innate immune sensing and response

Speaker 1: Bruce Beutler, MD

Talk 2: "Shall I respond?": DANGERous questions and answers

Speaker 2: Polly Matzinger, PhD

Talk 3: Doubled-stranded RNA receptors in pregnancy-induced hypertension

Speaker 3: Brett Mitchell, PhD

Talk 4: TLRs: New therapeutic targets for treating atherosclerosis

Speaker 4: Claudia Monaco

3) Symposium title: Local Ca2+ signals in the endothelium: Key regulators of vascular function and dysfunction

Submitted by: Swapnil K. Sonkusare, PhD

Co-chairs: Mark T. Nelson and Robert M. Bryan, Jr.

Talk 1: Conducted vasodilation in resistance arteries: Ca2+ signaling between endothelial cells

Speaker 1: Steven S. Segal, PhD

Talk 2: Blood flow mediated dilation in small mesenteric arteries: Role of endothelial Ca2+ signaling

Speaker 2: David X. Zhang, PhD

Talk 3: Differential regulation of SK and IK channels during endothelium dependent hyperpolarization

Speaker 3: Kim A. Dora, PhD

Talk 4: Elementary TRPV4 Ca2+ signals regulate endothelium dependent vasodilation

Speaker 4: Swapnil K. Sonkusare, PhD

Talk 5: Endothelial Ca2+ wavelets and myoendothelial feedback

Speaker 5: Donald G. Welsh, PhD

•The CV division continues its support the Best Abstract Competition. Further information will be available on our website,

http://www.aspet.org/Cardiovascular\_Pharmacology/Home/.

#### Looking ahead and getting you involved!

•Submit your symposium for consideration for EB2014! This meeting will be held in San Diego. ASPET has posted online forms that can be used for symposium submission (http://www.aspet.org/division-info/symposium-sponsorship/guidelines/). We encourage you to contact our programming committee to discuss tips for a successful submission and consideration of your symposium.

•What would be helpful to you to see on the CV Division site? Please contact Stephanie Watts (wattss@msu.edu) with ideas and comments. We are always looking for ways to improve and serve you better.

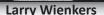
#### **Drug Metabolism Division**

#### **Division Election Nominees**

**Nominees for Chair-Elect:** 











**Mary Paine Jeffrey Staudinge** 

**Nominees for Secretary/Treasurer-Elect:** 

The Pharmacologist 234 Volume 54 Number 4, 2012

#### **Molecular Pharmacology Division**

#### **Division Election Nominees**

#### Nominees for Chair-Elect:





#### Nominees for Secretary/Treasurer-Elect:





Roger Sunahara Guangyu Wu Ya

#### News

The 13th Annual Joint meeting of the Great Lakes GPCR Retreat and the Club des Récepteurs à Sept Domaines Transmembranaires (commonly referred to as the GPCR Retreat) was held October 17 - 19, 2012. This meeting gathered together a core group of investigators from Michigan, Ontario and Québec, filled out by invitees and other participants from around North America and Europe. This year's gathering took on a celebratory air, taking place only a few days after the announcement of the Nobel Prize in Chemistry being awarded to colleagues Brian Kobilka and Bob Lefkowitz for their pioneering work on GPCR structure and function. The meeting featured several extremely interesting sessions on the physiological roles of GPCRs in the nervous system, circadian biology and cancer, as well as GPCR, G protein and effector structure, function, regulation and trafficking. A special issue of *Journal of Receptors and Signal Transduction* dedicated to the 2012 GPCR Retreat will be published in 2013.

#### 2012 Great Lakes GPCR Retreat Poster Award Winners

Below are the winners of the poster awards (\$200 each), sponsored by The Schulich School of Medicine & Dentistry along with Robarts Research Institute.

<u>Awardee</u>	<u>Supervisor</u>	Academic Affiliation
Martin Audet	Michel Bouvier	McGill University
Pui Yee Chan	Greg Tall	University of Rochester
Henry Dunn	Steve Ferguson	University of Western Ontario
Matthew Johnston	Mike Jackson/John MacDonald	University of Western Ontario
Tae Hun Kim	Scott Prosser	University of Toronto
Etienne Khoury	Stephane Laporte	McGill University
Rithwik Ramachandran	Morly Hollenberg	University of Calgary
Dar'ya Redka	Jim Wells	University of Toronto
Melanie Robitaille	Stephane Angers	University of Toronto
Stephanie Rosciglione	Christine Lavoie	Sherbrooke University



From left to right: Andrew Tobin, Karim Nagi (whose poster was selected for a short talk), Marc Caron, Ali Salahpour, and Stephane Laporte.



From left to right: Karim Nagi, Marc Caron, and Andrew Tobin.

#### **Neuropharmacology Division**

#### **News**

#### **Executive Committee**

The Neuropharmacology Division had a very lively meeting in San Diego in 2012. We welcomed our Chair-Elect, Dr. Laura Bohn, and Secretary/Treasurer-Elect Dr. Lakshmi Devi. The Executive Committee also nominated Drs. Charles Nichols, Dennis Paul, and Misty Smith as new members-at-large, effective June 2012. They join our current members-atlarge, Drs. Susan Ingram, Rita Valentino, and Michael Wood, our Past Chair, Dr. Margaret Gnegy; Past Secretary/Treasurer, Dr. Linda Dykstra; current Secretary/Treasurer, Dr. Eric Barker; postdoctoral representative, Dr. Spring Farrell; and graduate student representative, Jason Kehrl.



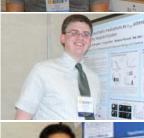
#### 2012 Awards

Judges had a very tough time selecting our 2012 winners from a group of outstanding students and postdoctoral fellows.

#### Winners of the Graduate Student Best Abstract Awards were:



1st place: Deana Apple, from the University of Texas Health Science Center at San Antonio, Department of Physiology of for her poster, Decynium-22 enhances SSRI-induced antidepressant effects in mice: Uncovering new targets to treat depression.



2<sup>nd</sup> place: Christopher Cottingham, from the University of Alabama at Birmingham, Department of Physiology and Biophysics, for his poster, Tricyclic psychiatric medications as alpha2A adrenergic receptor ligands modulating receptor function.



3rd place: Sairam Jabba, from Creighton University, Pharmacology, for his poster, Sodium channel activator-stimulated neuronal development involves BDNF-TrkB signaling.

#### Winners of the Postdoctoral Scientist Awards were:



1st place: Vikas Dukhande, Ph.D., from the University of Kentucky, Molecular and Cellular Biochemistry, for his talk, Regulation of glycogen phosphorylase by the malin-laforin complex.



2<sup>nd</sup> place: Emanuela Esposito, Ph.D., from the University of Messina, Clinical and Experimental Medicine and Pharmacology (Italy), for her talk, The NAMPT inhibitor FK866 reverts the damage in spinal cord injury.



3<sup>rd</sup> place: **Anthony Hutchinson, Ph.D.**, from the University at Buffalo SUNY, Department of Pharmacology and Toxicology, for his talk, Methamphetamine-induced locomotor sensitization in C57BL/6 mice requires the MT1 melatonin receptor.

All winners received a cash prize. First place winners for each category were also honored with membership to the Division's Executive Committee. We welcome our new student representative, **Deana Apple**, and our new postdoctoral representative, **Dr. Vikas Dukhande**, to the Executive Committee and look forward to their input at the 2013 meeting of the committee in Boston.

#### **News and Developments**

This year the Division again provided funds to support the operating costs of NC-IUPHAR, the receptor nomenclature committee established by IUPHAR over 25 years ago. The mission of NC-IUPHAR is to support biomedical research by providing to the international scientific community nomenclature guidelines on key receptor, ion channel, and drug binding sites. These guidelines, as well as basic pharmacological, biochemical, and genetic information on each receptor site, are published in primary journals, most often *Pharmacological Reviews*, and are made freely available through the NC-IUPHAR database <a href="http://www.iuphar-db.org">http://www.iuphar-db.org</a>.

The Division also is a sponsor of the 4th GPCR Colloquium that will follow the Experimental Biology meeting, April 24-25, Boston Convention Center.

Plans are in the works to introduce several new programs and events in 2013, including reviving a division sponsored mixer at the Society for Neuroscience meeting and creating a new travel award for junior trainees to attend neuropharmacology-related specialty meetings.

#### 2013 Annual Meeting Programming

The Neuropharmacology Division is the primary sponsor of four symposia at the 2012 ASPET meeting, and co-sponsor of nine others.

#### **Primary Symposia**

New kids on the block: Organic cation transporters and plasma membrane monoamine transporter in neurodegenerative, psychiatric and addictive disorders. Chair: Lynette Daws.

Co-sponsors: Drug Metabolism; Integrative Systems, Translational and Clinical Pharmacology; Molecular Pharmacology; and Toxicology

**Apolipoprotein E: A protein at the intersection of vascular and neurodegenerative disease biology.** Chairs: Cheryl Wellington and Michael Wood. Co-sponsor: Cardiovascular Pharmacology

Peripheral mechanisms of opioid analgesia. Chair: Kelly Berg.

Co-sponsors: Behavioral Pharmacology and Molecular Pharmacology

A "reductionist" approach to cardiovascular disease: Inorganic nitrate to nitrite to NO. Chairs: Amrita Ahluwalia and David Lefer.

Co-sponsor: the British Pharmacological Society

#### Co-sponsored symposia

Sleep apnea: A sleeping giant in disease pathologies. Chairs: Issy Laher and Najib Ayas.

Sponsored by the Divisions for Integrative Systems, Translational and Clinical Pharmacology; Behavioral Pharmacology; Cardiovascular Pharmacology; and Neuropharmacology

Pharmacological enhancement of wakefulness. Chair: Jeff Witkin.

Sponsored by the Divisions for Behavioral Pharmacology; Integrative Systems, Translational and Clinical Pharmacology; and Neuropharmacology

New roles for signaling by G protein beta/gamma subunits. Chair: Alan Smrcka.

Sponsored by the Divisions for Molecular Pharmacology; Cardiovascular Pharmacology; and Neuropharmacology

The 5-HT2C receptor: A new target for multiple therapeutics. Chair: Lora Heisler.

Sponsored by the British Pharmacological Society and the ASPET Divisions for Molecular Pharmacology & Neuropharmacology

Negative symptoms of schizophrenia: Neuronal circuit, translation and future directions. Chairs: Ruggero Galici and Leslie Jacobsen.

Sponsored by the Divisions for Drug Discovery and Development; Behavioral Pharmacology; and Neuropharmacology

Voltage-gated ion channel blockers as potential analgesic agents. Chair: Michael Jarvis.

Sponsored by the Divisions for Drug Discovery and Development & Neuropharmacology

Emerging technologies for delivering neurotherapeutics across the blood-brain barrier. Chairs: Nisha Nanaware-Kharade and Eric Peterson. Sponsored by the Divisions for Integrative Systems, Translational and Clinical Pharmacology; Cardiovascular Pharmacology; Drug Discovery and Development; and Neuropharmacology

Cognitive enhancers for the treatment of neuropsychiatric disorders. Chairs: Kathleen M. Kantak and Roger D. Spealman

Sponsored by the Divisions for Behavioral Pharmacology; Integrative Systems, Translational and Clinical Pharmacology; and Neuropharmacology

Novel functions for cyclic nucleotide phosphodiesterases and their implications for pharmacological intervention. Chair: Marco Conti Sponsored by the Divisions for Molecular Pharmacology; Cardiovascular Pharmacology; Integrative Systems, Translational and Clinical Pharmacology; and Neuropharmacology

We are looking forward to another exciting meeting! See you in Boston!

Lyn Daws, Ph.D.

Chair, Neuropharmacology Division

Professor

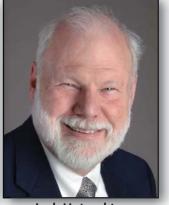
Departments of Physiology and Pharmacology, University of Texas Health Science Center at San Antonio

#### **Toxicology Division**

#### **Division Election Nominees**

**Nominees for Chair-Elect:** 







**Nominees for Secretary/Treasurer-Elect:** 



Photo Not **Available** 

Susan C. McKarns

The Pharmacologist

# Share your news...

Awards, Promotions, Achievements

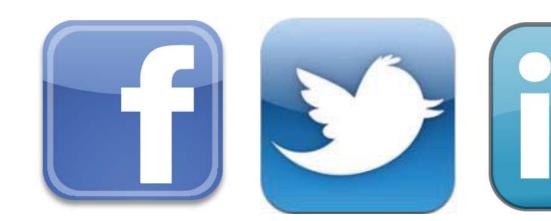
Share your accomplishments with *The* Pharmacologist and with the ASPET community.

> Send information and pictures to gaxelrod@aspet.org.



# On The Web

Join the conversation online!



ASPET is online! Join us on Facebook, Twitter or LinkedIn for the latest in news, discussions and events. Discuss hot topics with your peers, check out pictures from ASPET events and find resources to help in finding a job or a graduate program.

www.facebook.com/ASPETpage www.twitter.com/ASPET

www.linkedin.com/groups/American-Society-Pharmacology-Experimental-Therapeutics-3320218

## **Chapter News**

#### **Great Lakes Chapter of ASPET**

#### Save the Date!

26th Annual Scientific Meeting - Friday, June 14, 2013
The Searle Conference Center
Rush University Medical Center, Chicago, IL
1725 W. Harrison St.
Professional Building
Chicago, IL

#### **SCIENTIFIC SYMPOSIUM**

Functional microRNA in disease: Novel opportunities for pharmacology

#### **KEYNOTE ADDRESS**

Chunxiang (Kevin) Zhang (Rush University)

MicroRNAs in Cardiovascular disease: Current progress and challenges

#### SYMPOSIUM SPEAKERS

**Zain Paroo** (University of Illinois at Chicago) *Regulating the microRNA machinery* 

Gianpiero Di Leva (The Ohio State University)

microRNA roles in tumorigenesis and chemotherapy resistance

#### Jonathan Maher (Abbott Laboratories)

microRNAs as biomarkers of safety and efficacy in drug discovery and development

- Poster session (awards for best undergraduate, graduate, and postdoctoral fellow posters); ABSTRACT DEADLINE JUNE 1, 2013
- Mini-symposium featuring early-career scientists
- Lunch & Learn career session
- Vendor exhibits

For updates on the program, registration, and abstract submission, visit http://www.aspet.org/GLCMeeting/.

#### **Upstate New York Pharmacology Society**

#### Spring 2013 Meeting: Frontiers in Neuropharmacology

The **second annual meeting of the Upstate New York Pharmacology Society** will be held on Monday, May 13, 2013 at the Center for the Arts of the University at Buffalo. The keynote presentation by **Dr. David R. Sibley** will highlight the meeting theme of *Frontiers in Neuropharmacology*. Dr. Sibley, senior investigator of the Molecular Pharmacology Division of the National Institute of Neurological Disorders and Stroke, will present his latest research on novel screening approaches to identify dopamine receptor modulators. Other guest speakers include **Dr. Lynn Wecker** of the Department of Psychiatry and Behavioral Neurosciences of the University of South Florida and **Dr. Margaret Gnegy** of the Departments of Pharmacology and Neuroscience of the University of Michigan.

#### **2012 Election Results**

**Dr. Aiming Yu** of the University at Buffalo School of Pharmacy is now Chapter President, and the President-Elect is **Dr. Suzanne Laychock** of the University at Buffalo School of Medicine and Biomedical Sciences. **Dr. Peter** 

**Bradford** of the University at Buffalo continues as Secretary/Treasurer. Elected as new Councilors are **Drs. Paul Kammermeier** of the University of Rochester, **Kim Bernosky-Smith** of D'Youville College, and **Ji Li** of University at Buffalo. Continuing as councilors are **Drs. Jean Bidlack** of the University of Rochester, **Carlos Feleder** of the Albany College of Pharmacy and Health Sciences, and **Greg Tall** of the University of Rochester. **Dr. Margarita Dubocovich** of the University at Buffalo will now serve as Past President.



# **Early Career Pharmacologists**

Resources Available for Undergraduates, Graduate Students, and Postdoctoral Fellows

- \* Awards & Fellowships
- \* Information on Graduate Studies in Pharmacology
- \* Graduate Programs
- \* Career Resources
- \* Discussion Forums
- \* Social Networking Resources: 🚮 in 💟





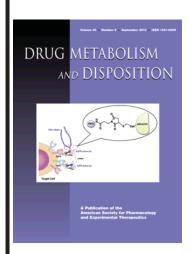


\* ASPET Membership Information

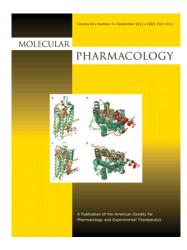
Find us at www.aspet.org/knowledge/early-career or at www.facebook.com/ASPETpage

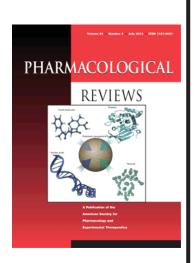
We welcome your feedback! Is there something you'd like to see on our Early Career Pharmacologist page? Let us know at info@aspet.org.

# ASPET Journals









# Why publish with ASPET?

- \* **Low page charges -** \$50/page for ASPET Members, \$90/page for nonmembers
- \* Online manuscript submission submit your manuscript 24/7, whenever suits your schedule; online peer review reduces review times; track the progress of your manuscript through the review process
- \* Wide dissemination accepted manuscripts are publicly accessible immediately; fully formatted articles are publicly accessible 12 months after publication; low-cost pay-per-view option for nonsubscribers; abstracts and tables of contents always publicly accessible.

Visit www.aspet.org/journalslogin to access each ASPET journal.

# **Membership Information**

#### **Definitions of Categories of ASPET Membership**

**Regular Members:** Any doctoral level investigator who has conducted and is the primary author on at least one publication of an original study in the area of pharmacology published in a peer-reviewed journal is eligible for membership in ASPET. Exceptions may be made for someone who does not meet the degree requirement but who has made major research contributions to pharmacology. Regular members must be nominated by one (1) Regular or Retired ASPET member.

**Affiliate Members:** An investigator who does not meet the requirements for Regular membership because of the lack of a degree or lack of publication is eligible to apply for Affiliate membership. Affiliate members receive all the same member benefits as Regular members except that they may not vote in ASPET elections. Affiliate members must be nominated by one (1) Regular or Retired ASPET member.

**Postdoctoral Members:** Any qualified person who has received their Ph.D. or equivalent degree in pharmacology or a related field within the past five years is eligible for Postdoctoral membership. Postdoctoral members will receive the same benefits as Regular members, including the right to vote in ASPET elections. Individuals may remain in the Postdoctoral membership category for a maximum of five (5) years from the date of receipt of their PhD (or equivalent) degree after which time they must upgrade to Regular Membership. Applicants for Postdoctoral membership must be sponsored by one (1) Regular or Retired ASPET member.

**Student Members:** Individuals who are enrolled in undergraduate, graduate, or professional degree programs are eligible for Student membership in ASPET. Student members receive all the same benefits as Regular members except that they may not vote in ASPET elections. Student members must be nominated by one (1) Regular or Affiliate ASPET member. Upon completion of their research doctoral degree, student members must upgrade to Postdoctoral Membership.

Sponsors should send an email or letter addressing the applicant's qualifications for ASPET membership directly to the ASPET office (membership@aspet.org).

#### Regular Member Benefits (Dues \$150):

- Reduced page charges for corresponding authors to publish in ASPET journals – pay \$50/page instead of \$90/ page and save enough with one four-page article to pay your annual ASPET dues!
- Free full-text access to all four online ASPET journals, including all back issues.
- Free subscription to *The Pharmacologist* (online).
- Reduced registration fees for ASPET meetings.
- Sponsorship of papers at the ASPET meeting.
- Best abstract awards for young scientists at the ASPET meeting.
- Free listing in the FASEB Directory.
- Membership in multiple ASPET Divisions for no additional dues.

**Affiliate Members (Dues \$150)** have all the benefits of Regular members except they may:

- Sponsor candidates for Student membership only.
- Not sponsor a paper for a non-member at a Society meeting.
- Not vote in Society elections.
- Not hold an elected office in the Society.

Postdoctoral Members (Dues \$75) have all the benefits of Regular members.

**Student Members (Dues \$30)** have all the benefits of Regular members except they:

- Pay no dues their first year.
- Pay only \$30 annual dues thereafter. Undergraduate Student members pay no dues and get their first graduate year free.
- Must have their papers at Society meetings sponsored by a member.
- May not vote in Society elections nor hold an elected office in the Society.

#### **Application Instructions**

Submit the completed Application for Membership form or use the online application form on the ASPET web site at **www.aspet.org/membership/apply**. Submit a current *curriculum vitae* including bibliography for Regular, Affiliate, Postdoc, and Graduate Student Membership.

Sponsor Statements: Submit a statement of qualifications of the applicant from one Regular/Retired/Postdoctoral Member of ASPET for Regular Membership, Affiliate Membership and Student Membership (Affiliate Members may also sponsor student applicants). In addition to the statement certifying that the applicant is qualified for ASPET membership, sponsors should provide their own current address, phone, fax, and email. It is the responsibility of the applicant to insure that these documents are submitted to the ASPET office.



#### American Society for Pharmacology and Experimental Therapeutics 9650 Rockville Pike, Bethesda, MD 20814-3995 USA

Phone: 301-634-7060 ♦ Fax: 301-634-7061 ♦ www.aspet.org

#### Membership Application

Please Complete All Sections:

Section 1: Application Details	Section 2: Source	
Application for:	How did you hear about ASPET:	
☐ Regular Membership	☐ Meeting	
☐ Affiliate Membership	☐ ASPET Journal	
☐ Graduate Student – Expected Date of Graduation:	Mentor	
□ Undergraduate Student - Year: □ Fr □Soph □Jr □Sr	□ Other	
Section 3: Personal Information	Section 4: Optional Demographics (Not Required)	
Name:	Date of Birth:	
Institution:	Sex: ☐ Female ☐ Male	
000 PROCESS (1990)	Ethnicity:   Asian	
Address:	☐ Black or African American	
	☐ American Indian or Alaskan Native	
- 100	☐ Hispanic or Latino	
Telephone:	☐ Native Hawaiian or Pacific Islander	
Fax:	☐ White	
Email:	☐ Other:	
	The information in this section will be used by ASPET to collate statistics and will be kept private. Completion of this section is voluntary.	
Section 5: Sponsor (Must be an ASPET Member)		
Name and email of your sponsor:		
Name and small of your opensor.		
	outlining your qualifications for Membership in ASPET to the nt at membership@aspet.org.	
Section 6: Division Selection		
Divisions: Division membership is a benefit of ASPET membership and there is no additional charge to belong to a division. It is highly recommended that you join a division so that you may take full advantage of Society participation. Joining a division allows you to participate in creating the scientific program for the annual meeting, network with people in your field at mixers and divisional programs, and receive special notices and newsletters about items and activities of interest in your field. Be sure to pick a division!  Indicate primary (1) and as many secondary (X) divisions to which you wish to belong:  Division for Behavioral Pharmacology  Division for Cardiovascular Pharmacology  Division for Neuropharmacology  Division for Drug Discovery & Development  Division for Drug Metabolism  Division for Integrative Systems, Translational & Clinical Pharmacology		
Continue 7: Commissions Vites		
Section 7: Curriculum Vitae		
	Please send your <i>Curriculum Vitae</i> (including bibliography) partment at membership@aspet.org.	
Undergraduate Student Applicants Only:		
Current Education :  Expected Degree & Date: School:	City/State/Country: Major Field:	

Applications are reviewed on a rolling basis. Please DO NOT submit payment with your application.
Upon membership approval, you will be sent a dues statement and welcome package.
Student Membership is FREE for the first year.

Call or e-mail the ASPET Membership Department for additional information: 301-634-7060 / membership@aspet.org.