



American Physiological Society Respiration Section Newsletter

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Gregory D. Funk, Ph.D., Secretary-Treasurer

Fall Edition

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Experimental Biology

Chicago, IL
Apr 22 - 26 2017

Deadlines:

Nov 17, '16 -Abstracts
Feb 23, '17-Early Registration
Mar 31, '17 -Hotel Reservations

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AWARDS

The Respiration Section offers a number of awards and want to highlight three of these. See page 3 for a listing of the highlighted awards and the application dates. Many awards are for early career members and students, and the deadline for most of these is soon. Details of these and other awards can be found at:

<http://www.the-aps.org/mm/awards/sections/Resp.aspx>

MESSAGE FROM THE CHAIR

Falling leaves and temperatures remind us that planning for EB 2017 is at hand!

The deadline for abstract submission is rapidly approaching. The Program Committee has been hard at work, and have put together a terrific set of sessions. There are several Featured Topic categories, which provide an excellence forum for abstract-based oral presentations, especially from trainees and early-stage scientists. A list of the sessions sponsored by our section is included in this newsletter. Please consider submitting your work to these sessions.

We have also included information on several award opportunities from the Section, APS and AJP-Lung. A few years ago, with the generous help from our corporate sponsors, the Section initiated a Poster Presentation Award program. All posters presented by trainees in one of the Respiration Section-sponsored poster sessions were eligible and were judged by section faculty volunteers. This year we had a number of terrific presentations, and a list of the EB 2016 winners appears on page 8. Heartiest congratulations to all!

The Section is also working to increase participation and visibility in APS by soliciting section members to be nominated to serve on APS committees. These Committees cover a wide range of topics, including Animal Care and Experimentation, Science Policy, Education, Women in Physiology and Membership, just to name a few. If you would like to get more involved with APS activities, I encourage you to take a look at the committees <http://www.the-aps.org/mm/hp/Audiences/APS-Committees/> and consider submitting a nomination (self-nomination or through our Nominating Committee). In addition, as always, we are on the look-out for enthusiastic section members interested in becoming more involved with section activities, so please do not hesitate to get in contact with one of us, via email or at the annual meeting and introduce yourself. We have lots of work to do, and would welcome hearing from you.

Finally, my term as Chair will be ending next Spring and later this fall, we will be holding an election to select the next Chair. Please be on the lookout for messages from the Nominating Committee soliciting nominations and for on-line voting.

I look forward to seeing you all in Chicago in the spring!



Interested in helping with Section Activities?

A number of committees could use your help. Please contact the Chair for details, Larissa Shimoda
lshimod1@jhmi.edu

Want to get involved at the Society level?

Nominations for APS Committees are submitted in late fall. Please contact our Nominating Committee Co-Chairs for more details.

Donna Cioffi
dlcioffi@southalabama.edu
Carlos Mantilla
mantilla.carlos@mayo.edu

Nomination forms at: <http://www.the-aps.org/mm/hp/Audiences/APS-Committees/nominations>

2017 POSTER COMPETITION

In 2017 we will once again have a Trainee Poster Award competition. Details will be sent out in the next newsletter.

CALL FOR ABSTRACTS

Once again, it is time to submit your abstracts for EB2017. The abstract submission deadline is **November 17th, 2016**, which is rapidly approaching. To facilitate the process of identifying Respiration Section related research for submission of your abstracts, the abstract topic categories are listed below. Note that Respiration Section categories are tagged with either *Control of breathing* or *Lung physiology*, except for those associated with the Featured Topics sessions, which are identified by the title of the Featured Topic. This year we will have a trainee poster award competition.

<http://submissions.mirasmart.com/EB2017/Splash.aspx>

FEATURED TOPICS

- 1370-APS Central Neuromodulation in the Control of Breathing (Garcia/Mitchell)
- 1371-APS Epigenetic Regulation of Lung Development, Injury, and Repair (Rogers/Tipple)
- 1372-APS Organelle Dysfunction in Pulmonary Vascular Disease: Mitochondria, Endoplasmic Reticulum, Lysosomes and Beyond (Shimoda/Ryan)
- 1373-APS Respiratory Control: Beyond the Diaphragm (Fuller/Turner)

ABSTRACT TOPIC CATEGORIES

- 1375-APS Control of breathing: connectivity, neuromodulation and neurotransmission
- 1376-APS Control of breathing: chemoreception
- 1377-APS Control of breathing: development
- 1378-APS Control of breathing: integrated responses
- 1379-APS Control of breathing: respiratory motoneurons and muscles
- 1380-APS Control of breathing: respiratory plasticity
- 1381-APS Control of breathing: rhythm generation
- 1382-APS Lung physiology: airway epithelial cell biology
- 1383-APS Lung physiology: airway responsiveness and smooth muscle cell biology
- 1384-APS Lung physiology: alveolar epithelial cell biology
- 1385-APS Lung physiology: biomechanics, surfactant and gas exchange
- 1386-APS Lung physiology: development and plasticity
- 1387-APS Lung physiology: endothelial cell biology
- 1388-APS Lung physiology: fluid balance
- 1389-APS Lung physiology: pulmonary hypertension
- 1390-APS Lung physiology: vascular smooth muscle cell biology, vascular regulation, and hypoxia

BEST RESEARCH PAPER PUBLISHED IN AJP-LUNG BY A JUNIOR INVESTIGATOR SPONSORED BY THE AMERICAN PHYSIOLOGICAL SOCIETY

The American Journal of Physiology-Lung Cellular and Molecular Physiology invites nominations for the “Best original research paper published in AJP-Lung between 2012-2014 by a junior author (Assistant Professor, Instructor, Post-doctoral fellow or graduate student.).

The nominee must submit a nomination stating the importance of this paper in the field as well as the contributions of the first author to Dr. Sadis Matalon, Editor AJP-Lung (sadis@uab.edu) with a copy to Ms. McEver (amcever@emory.edu) by **December 1, 2016**. All applications will be reviewed by the Editor and Associate Editors who will chose the winner by secret ballot. **The winner will receive \$500** and a certificate of appreciation at the EB 2017 meeting.

THE USHA AWARDS SPONSORED BY DR. YS PRAKASH

Usha means “dawn” in Sanskrit

Dr. YS Prakash, Deputy Editor of the American Journal of Physiology-Lung Cellular and Molecular Physiology, is soliciting nominations for the Usha awards. The nominee must be a promising trainee (undergraduate or graduate student, or a research fellow (<5 years since being granted the terminal degree (e.g. PhD, MD, DO, DVM), and should have contributed a 1st author abstract to the Respiration Section of the APS for presentation at the APS. Criteria for selection will include the level of excitement regarding the nominee’s future, contribution by the nominee to the work, and the importance of the work to the field. Nominees are to be selected by the Respiration Section of the APS. All applications must be submitted by **Nov 11, 2016**. The **TWO winners will receive \$500 each** and a certificate of appreciation at the EB 2017 meeting.

Apply here : <https://apps.the-aps.org/awardapps/login/index.cfmd>

INTERNATIONAL OPPORTUNITY PROGRAM (IOP) AWARD

Now Accepting Applications

Did you miss your chance to apply for the International Opportunity Program (IOP) Award in June? Well you’re in luck! The IOP Award has been opened for a second round and is now accepting applications. The award provides up to \$7,500 in funds to support educational, training, research or public outreach events outside of the USA. For award details and to apply, visit the APS Awards page.

Application deadline: October 31, 2016 (for 2017 support). <http://www.the-aps.org/mm/awards/Other-APS-Awards/Early-Career-Professional#IOP>

MEETINGS OF INTEREST

XXth Meeting of the International Society of Arterial Chemoreception (ISAC), July 23-27th 2017
John Hopkins University, Baltimore, MD. <https://carotidbody.org/>

NEW INVESTIGATOR AWARD

The Respiration Section New Investigator Award (\$1,000 plus reimbursement of the advance registration fee) recognizes an outstanding investigator in the early stages of his/her career. Candidates should be investigators who have made meritorious contributions to the area represented by the Respiration Section. They must not be above the rank of Assistant Professor or a comparable position in a research track at an academic institution or in industry (e.g. Scientist, Sr. Scientist, Research Investigator, etc.). Applicants must have been independent investigators for no more than 8 years at the time of submitting the application. They must receive nominations from at least two regular members of the APS. Candidates will be judged on their publications, how the publications relate to the Respiration Section, evidence for independence and promise (grant funding, peer review activities, etc.) and level of participation in Experimental Biology and APS-related activities.

Although this is not an abstract-based award, awardees are expected to attend the Experimental Biology meeting and make an oral or poster presentation. The candidate must be an APS member in good standing with a primary affiliation in the Respiration Section. Candidates must upload: curriculum vitae, 2 nomination letters from APS members, and 3 reprints. Awardees must attend the Experimental Biology meeting in order to collect the cash prize and are recognized at the Respiration Section Banquet. **All applications must be submitted by November 11, 2016.**

APS FELLOW PROGRAM

The APS has created a Fellow Program (FAPS) to recognize noteworthy scientific and professional accomplishments and outstanding leadership and service to the Society. Requirements for FAPS status include: Regular and/or Emeritus member status for at least fifteen (15) continuous years post-doctoral prior to year of nomination and two (2) written recommendations from current APS Regular or Emeritus members. Candidates must also meet four of the six prerequisites:



- **Demonstrated Society Service:** APS Council or APS Committee, Advisory Group, or other Panel or Editor-in-Chief, Deputy Editor or Associate Editor in any APS-affiliated publication
- **Independent Grant Support/Funding:** Serve as Principal Investigator of peer-reviewed extramural research support from a nationally-recognized agency (i.e.: NIH, NSF, etc.)
- **Publications:** Demonstration of consistent scholarly production in the form of journal articles and book chapters with at least three articles in APS publications
- **Administration:** Serve in a leadership position in academia/industry/government
- **Public Service:** Provide unpaid service in physiology and/or medicine to the community (e.g.: scientific study section; PhUn Week service, etc.)
- **Teaching:** Demonstration of leadership in local, state or national instruction in physiology or medicine

Candidates can be nominated by any active APS Regular or Emeritus Member who is well acquainted with the candidate's professional activities and volunteer involvement. Candidates may also self-nominate. **Application materials, due February 1 each year**, are reviewed by the APS Fellows and Membership Committee. Please see the APS website for more details <http://www.the-aps.org/mm/awards/APS-Fellows-Program>

Greetings Respiratory Section Trainees!

As we settle into the swing of the fall semester, the Respiratory Trainee Sub-committee and APS Trainee Advisory Committee (TAC) would like to highlight upcoming trainee opportunities. For those new to APS, the TAC is a committee dedicated to supporting the professional needs of trainees at all levels. This fall we are sponsoring several new fellowships, webinars, and events (listed below) to help boost communication among trainees and foster professional growth.

Graduate Student Ambassador Program: The TAC is launching a new Graduate Student Ambassador (GSA) Program, enabling graduate students to hone leadership and professional development skills as they serve as a liaison between the APS and local undergraduate students. This two-year fellowship is a perfect opportunity for passionate graduate students to develop strong communication skills, learn more about the APS, and inspire a new generation of biomedical researchers. Additionally, GSA fellows will be awarded travel support to Experimental Biology during



Liz Kiernan

their term. For more information, please check out the GSA webpage: <http://www.the-aps.org/gsa>.

Careers for Physiologists Webinar: To address the growing popularity of “non-traditional” science careers, the TAC has partnered with the Porter Physiology Development and Minority Affairs Committee, Communications Committee, and APS Educational Programming to design a new webinar series focusing on alternative career fields for APS trainees. These webinars will include 30 minutes of real-time interaction with professionals in unique career fields who have a background in physiology. Keep your eyes open for webinar announcements which will be sent via APS connect.

Respiratory Section Trainee Listserv: The Respiratory Trainee Sub-committee is developing a new Respiratory Section Trainee Community in APS Connect to support communication among trainees. Please stay tuned for more information and trainee related updates!



Kristi Streeter

Best Regards,

Kristi Streeter, PhD

Respiratory Section Trainee Representative and Trainee Advisory Committee

Liz Kiernan

Trainee Contributor to Respiratory Section Newsletter

ADVOCACY OPPORTUNITIES

While FASEB and the APS are excellent advocates for science, it is critical that our elected representatives hear the voices of voting constituents as well. Our representatives need to know how we are impacted by issues such as decreased funding for research and an increase in government imposed regulations. Fortunately, there are several relatively easy things we each can do to increase awareness of the impact of these and other issues on our research careers.

The APS and FASEB have excellent resources to help scientists make their case for support of scientific research. Please take a moment to visit these sites and learn about ways to contact your Members of Congress. With the upcoming midterm elections Members of Congress are campaigning in their home districts, so now is a particularly good time to look for local opportunities for advocacy.

APS: <http://www.the-aps.org/mm/SciencePolicy/Advocacy/Advocacy-Resources>

FASEB: <http://www.faseb.org/Policy-and-Government-Affairs/Become-an-Advocate.aspx>

To send an email message, click on “legislative action center” on the left and enter your zip code to get started. You can take advantage of their suggested messages, or craft your own.

Once you have made your case to your Members of Congress, help friends and family members appreciate how the research environment has been impacted by reduced research support. This can be accomplished by sharing your own experiences using specific examples that are relatable: Is there important research you want to do but can't? Have you had to cut back on highly-trained staff? Have other labs in your department closed because funding was not available? Or you can share the following links to a series of stories that aired on National Public Radio, and encourage them to contact their Members of Congress as well.

<http://www.npr.org/blogs/health/2014/09/09/345289127/when-scientists-give-up?&refresh=true>

<http://www.npr.org/blogs/health/2014/09/24/351142702/after-the-nih-funding-euphoria-comes-the-hangover>

EARLY CAREER ADVOCACY FELLOWSHIP

If you received your PhD in the last ten years and are interested in learning firsthand about how the APS advocates for scientists, then you should apply for a 2016-2017 Early Career Advocacy Fellowship.

More information, including the terms of award, eligibility criteria and how to apply, is available on the APS website:

<http://www.the-aps.org/mm/SciencePolicy/Advocacy/Advocacy-Fellowship>

It would be great to have additional representation from the Respiration Section on this committee. **Applications are due by November 14, 2016.**

THE CAREER OPPORTUNITIES IN PHYSIOLOGY COMMITTEE APS CAREER DEVELOPMENT PROGRAM OPPORTUNITIES

The Career Opportunities in Physiology Committee supports a number of APS programs to foster the career development of physiologists of all ages:

Excellence in Professional (MD/DO) Student Travel Awards for EB 2017

Did you host a great MD or DO student in your lab this summer? Are they submitting a first author abstract to Experimental Biology? If so, you'll want them to apply this award! It provides medical student (not MD/PhD) first-authors with up to \$1,800 in reimbursement for travel and advanced meeting registration for Experimental Biology. This award is designed to foster the student's interest in research by aiding in their participation in the Experimental Biology meeting, along with gaining valuable advice from MD/DO "meeting mentors". **Applications are due one week after the Experimental Biology abstract deadline in November.** See <http://www.the-aps.org/md-do> for more details.

APS Video Contest – Help Spread the Word!

APS Presents...Phantastic Physiology Voyage: "Function Follows Form" video contest to encourage undergraduate and graduate students to creatively connect with physiology and engage them with the broader public through a short video contest. Videos should creatively demonstrate and/or explore a specific physiological function in five minutes or less (including credits). The target audience is the general public. The video can be staged as a short play, commercial, news broadcast, talk show, music video, documentary etc. No professional assistance can be provided to produce the video in any manner. The first place prize is \$750 plus up to \$1000 in travel support to Experimental Biology to collect the award. There is also a \$250 viewer's-choice award. Follow the link for more information and to view previous winners: <http://www.the-aps.org/video>. **Entries are due December 15.**

Science Fair Prizes

Know of a science fair near you? The APS has FREE prizes to give away! Just fill out a simple online request form (<http://bit.ly/1Pxf5p>) and APS members can present one award per science fair. Student winners receive an APS t-shirt and a certificate for the best physiology project. The teachers of the winning students will receive an APS teaching resource packet. Follow this link for further details: <http://bit.ly/1NgXJe2>

Summer Undergraduate Research Fellowships

It's never too early to start thinking about next summer! Our committee sponsors awards to encourage undergraduate students to pursue a career in research, providing a \$4000 stipend and \$1300 in Experimental Biology travel support to the student, and a \$300 grant to the APS member's lab. Awards are available both for students with little or no prior research experience (Undergraduate Summer Research Fellowship or UGSRF – see <http://www.the-aps.org/ugsrf>) or significant exposure to research already (>9 months; Undergraduate Research Excellence Fellowships or UGREF – see <http://www.the-aps.org/ugref>). The APS sponsors 3 additional summer research programs targeting underrepresented undergraduate students. See <http://www.the-aps.org/summerresearch> for additional details and opportunities. **Applications are due February 1.**

Respiration Section Poster Awardees Experimental Biology 2016

High School

Geraldine Goyenaga, LB, S. Wilson

Undergraduate Students

Shreya Patel, COB, D. Fuller

Paxton Stein, COB, J. Pilarski

Benjamin Massat, COB, M. Hodges

Graduate Students

Pascal Yazbeck, LB, D. Mehta

Eboni Chambers, LB, R. Veldhuizen

Xin Yun, LB, L. Shimoda

Jayakrishnan Nair, COB, D. Fuller

Jiaju Wang, COB, D. Kim

David Litvin, COB, F. Jacono/T. Dick

Fu-Shan Kuo, COB, D. Mulkey

Post Doctoral Trainees

Christopher Francis, LB, T. Stevens

Brandy Wade, LB, R. Sutliff

Kirsten Verhein, LB, S. Kleeberger

Gaspard Montandon, COB, R. Horner

Erik Van Iterson, COB, T. Olson

LB - Lung Biology

COB - Control of Breathing

Faculty Sponsor is listed after awardee.

STEERING COMMITTEE

Position	Name	Email	Term Ends
Chair	Larissa A. Shimoda	lshimod1@jhmi.edu	5/1/2017
Secretary Treasurer	Gregory D. Funk	gf@alberta.ca	5/1/2017
Comm on Comm Rep	Christopher M. Waters	cwaters2@uthsc.edu	5/1/2015
Joint Program Comm Rep	Y.S. Prakash	prakash.ys@mayo.edu	12/31/2017
Joint Program Comm Rep	Matthew Hodges	mhodges@mcw.edu	12/31/2017
Nominating Comm Co-Chair	Carlos Mantilla	mantilla.carlos@mayo.edu	12/31/2017
Nominating Comm Co-Chair	Donna Cioffi	dicioffi@southalabama.edu	12/31/2017
Awards Chair	Frank Powell	fpowell@ucsd.edu	
Trainee Advisory Comm Rep	Kristi Streeter	kastrey@gmail.com	
Newsletter Editor	Sean M. Wilson	seanwilson@llu.edu	5/1/2017
Past Chair	Wolfgang M. Kuebler	kueblerw@smh.ca	5/1/2017
Chair, Sec Advis Comm	Wolfgang M. Kuebler	kueblerw@smh.ca	5/1/2017
AJP Lung, Editor	Sadis Matalon	sadis@uab.edu	5/1/2017
Physiologist in Industry	James C. Mannion	jimmannion@msn.com	5/1/2017
J Applied Physiology, Editor	Peter D. Wagner	pdwagner@ucsd.edu	5/1/2017
International Members Chair	Rory Morty	rory.morty@innere.med.uni-giessen.de	

THANK YOU TO OUR CORPORATE SPONSORS



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