

The Pennsylvania Academy of Science



# The Pennsylvania Academy of Science



## News from the PAS President - Robert Coxe

### **2012 PAS Annual Meeting News**

The 2012 Annual Meeting of the Pennsylvania Academy of Science was the second meeting held on a campus (Cedar Crest College) since 1976 when the academy started having meetings at hotels and conference centers. We had approximately 360 registrants at the 2012 meeting representing an increase of 20% from 2011 (297 registrants) and 36% from 2010 (265 registrants), the last year of a hotel meeting. In fact the number for 2012 is close to the combined number of PAS and Wildlife Society, which equaled 397 registrants. Even more remarkable is that we had 187 abstracts presented, which is above the 183 abstracts given in the combined PAS-Wildlife Society meeting. It is hoped that these upward trends will continue in the future. The 2012 meeting at Cedar Crest College also marked the second year of the Teacher Science Education Workshop, which was held at the Da Vinci Science Center and had about dozen teachers attend. Many thanks goes to Joy Karnas, Andre Walther, Audrey Ettinger, and the ladies in pink of Cedar Crest College for planning the meeting. Many thanks also go to Vivian Coxe of PAS and David Smith of the Da Vinci Science Center for putting together the Teacher Science Education Workshop. Thanks also goes to others not mentioned for putting on an excellent and well planned meeting.

### **2013 PAS Annual Meeting in Bradford**

The 2013 meeting at the University of Pittsburgh-Bradford is the first to be held in this part of the state. Highlights of this meeting include a symposium on Marcellus and Utica Shale Natural Gas Reserves and a possible field trip to a drill site. The Teacher Science Education Symposium will feature an activity of sampling streams in the area for macro-invertebrates above and below a drilling site. It is also hoped that this meeting will be the first with its own website with easily accessible facts about the meeting, maps, and registration details. Be sure to check the PAS website ([www.Pennsci.org](http://www.Pennsci.org)) for further details such as lodging and registration.

### **Other happenings**

The first electronic edition of the journal should be coming out soon if it has not come by the time of the newsletter. As Mike Campbell stated earlier in the year, going to an electronic journal will save money for the academy and will allow for a wider distribution of the Journal. Work is in progress for the 2014 meeting. So far we have gotten quotes from the Ramada in State College, Radisson in Camp Hill, and have visited Susquehanna University. Of the three, it is my feeling that Susquehanna University offers the best opportunity for field trips, socials, and presentations. It is a beautiful campus and has large facility in both the science building and the student center, both of which are close to one another. Ample parking is also present. Susquehanna University was the last university that the Academy had a meeting before going to the hotel meetings. The 2014 meeting is our 90<sup>th</sup> meeting and I am hoping to invite all of the living past presidents and long-time board members to the meeting. More about the 2014 meeting can be found in the fall newsletter.

## The Pennsylvania Academy of Science

### An invitation to submit manuscripts to the open-access *Journal of the Pennsylvania Academy of Science*

Dear Colleagues,

I want to thank Dr. Shyamal Majumdar for his dedicated service as journal and book editor. His breadth and depth of knowledge about publishing scholarly works is truly astounding.

As the new editor for the journal I would like to extend an invitation to publish in the *Journal of the Pennsylvania Academy of Science*. Instructions for manuscript submission can be found on the academy's web site and on the following page.

In 2012 the journal has become open-access. It will continue to feature works of significance, originality, and relevance in all areas of biological science, chemistry, physics, geography, geology, curriculum and pedagogy. The journal will be published quarterly and will be found on the academy's web site. It will continue to disseminate significant research and original papers, research notes and case studies that can be of interest to a wide audience of scientists.

Scientists submitting manuscripts will benefit from:

- Open access to all published contents ensuring the widest possible, barrier-free distribution of works at no charge to any readers
- Online submission and editorial management system, professional review and editorial assistance, typesetting, proofreading and publication.

Address all inquiries relating to publication in the *Journal* to the Editor:

Jane E. Huffman  
Department of Biological Sciences  
Northeast Wildlife DNA Laboratory  
East Stroudsburg University  
East Stroudsburg, PA 18301  
Phone: 570-422-7892  
e-mail: [jhuffman@esu.edu](mailto:jhuffman@esu.edu)



## Call for Abstracts

**89<sup>th</sup> Annual Meeting of the Pennsylvania Academy of science**

**April 5-7, 2013**

**University of Pittsburgh at Bradford  
Bradford, Pennsylvania**

**Local Organizing Program Chairman: Assad Panah: [aap@pitt.edu](mailto:aap@pitt.edu)**



The 89<sup>th</sup> annual meeting of Pennsylvania Academy of Science [www.pennsci.org](http://www.pennsci.org) is scheduled for April 5-7, 2013 at the University of Pittsburgh at Bradford. Approximately 250-350 participants (mostly college students and faculty and local industry) are anticipated to attend.

We are planning to organize a symposium on Shale Gas Resources: on Marcellus and Utica Shale. Sixty-three percent of the total 750 trillion cubic feet of recoverable shale gas resources identified in the United States is located in the Northeast. Marcellus (412.5 trillion cubic feet, 55 percent of the total) is the largest shale gas play in the United States and the second largest gas reserve in the world.

You are invited to present a twenty minute talk (15 minutes presentation and 5 minute Questions and answers) on exploration and production of Marcellus/Utica Shale Gas Reserves during Saturday morning symposium on April 6, 2013.

**The Pennsylvania Academy of Science Annual Meeting: April 5-7, 2013  
University of Pittsburgh at Bradford, Bradford, PA**

**Marcellus and Utica Shale Natural Gas Reserves Symposium topics** - Contributions are invited, however not limited, to the following areas:

- The Geologic Setting of Marcellus/Utica Shale
- Economic Impact of Shale Gas Exploration
- Marcellus Shale Workforce Needs and Training
- Environmental Impact: Surface and Groundwater Protection
- Hydraulic Fracturing Technology and Fluids
- Shale Gas Lease Acquisition, Permitting and Drilling
- Frac Wastewater Recycle and Reuse
- Fracking Related Earthquake
- Depositional Setting of Marcellus/Utica Shale
- Drilling, completion and stimulation processes of Unconventional Shale Gas Resource
- Future Prospects of Unconventional Shale Gas Energy Resources
- Geochemistry of Shale Gas Reservoir Rocks and Fluids
- Natural Gas Gathering and Transportation (pipeline)

## **Preliminary Registration and Abstracts**

Prospective contributors are asked to indicate provisional title, topic area and three to six key words describing the content of their work. Registration and Abstract submission should be done exclusively on-line, at Academy Web site <http://www.pennsci.org>. Abstract deadline is tentatively set for February 10, 2013. Abstracts must be prepared in accordance with instructions that can be downloaded from the PAS Website. The abstracts of contributions accepted for inclusion in Conference Program will be published in Conference Abstracts to be handed-out to participants at the beginning of the Conference. Following PAS program chairs are available to answer your questions.

Alyssa Bumbaugh and/or Heather Sahli  
PAS Annual Meeting Program Chairs  
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Shippensburg University  
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Shippensburg, PA 17257-2299  
717-477-1593 (Alyssa), 717-477-1580 (Heather)  
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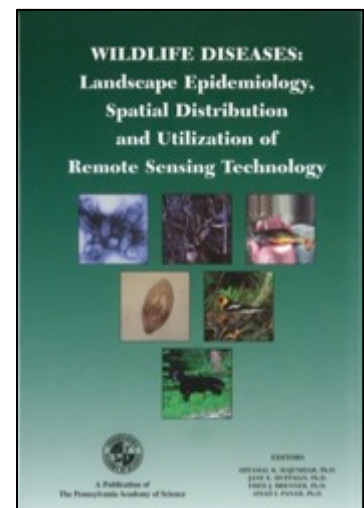
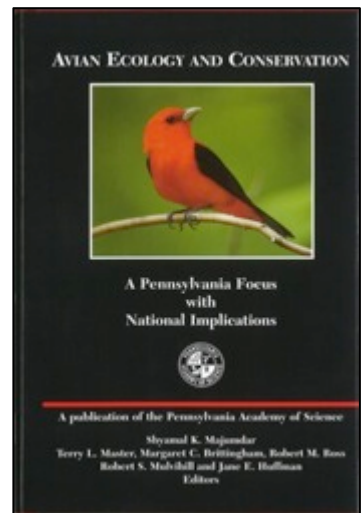
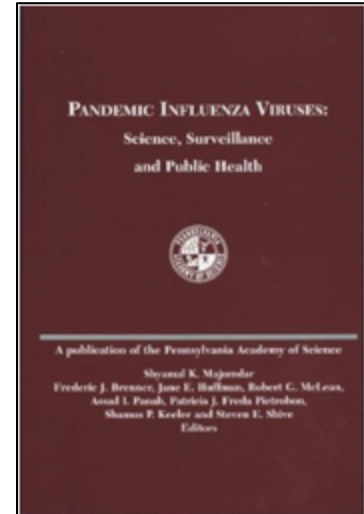
# The Pennsylvania Academy of Science

## PAS Books on the Move

The PAS recent book publication is now available for purchase through Amazon and the PAS web-site! *Pandemic Influenza Viruses: Science, Surveillance and Public Health*, edited by Shyamal Majumdar (Lafayette College), Frederic Brenner (Grove City College), Jane Huffman (East Stroudsburg University), Robert G. McLean (National Wildlife Research Center), Assad I. Panah (University of Pittsburgh), Patricia J. Pietrobon (Sanofi Pasteur), Shamus P. Keeler (University of Georgia), and Steve Shive (East Stroudsburg University) features introductory chapters on the history and science of influenza diseases, plus contributions on surveillance and tracking technology, public health strategies and planning, and vaccines. This book is a compilation of up-to-date scientific information of pandemic influenza with particular focus on the 2009 pandemic H1N1 virus and the 2005 highly pathogenic H5N1 virus, and contains chapters on the biology, ecology, immunology, and genetics of influenza viruses.

Check out the other recent PAS books on sale through Amazon. *Avian Ecology and Conservation: A Pennsylvania Focus with National Implications* (edited by Shyamal Majumdar, Terry Master, Maragaret Brittingham, Robert Ross, Robert Mulvehill, and Jane Huffman) published in 2010 offers 27 chapters by dozens of ornithological experts from Pennsylvania and other states, with cutting edge insights on habitats of PA breeding birds, migration and wintering ecology, conservation issues and challenges, and emerging issues such as climate change, wind power development, contaminants, and emerging diseases. The other recent book to buy is *Wildlife Diseases: Landscape Epidemiology, Spatial Distribution and Utilization of Remote Sensing Technology*, published in 2005. It has been a great seller, but a few copies are still available.

Finally, a unanimous vote by PAS Board members approved advancement of the next book project, tentatively entitled *Ecology and Conservation of Pennsylvania's Bats in a Time of Crisis*, with editors Howard P. Whidden (East Stroudsburg University), DeeAnn Reeder (Bucknell University), with Cal Butchkoski and Greg Turner (Pennsylvania Game Commission).



# The Pennsylvania Academy of Science

## **PAS Grant and Prize Opportunities**

### **Darbaker Prize - \$1000**

The Darbaker Prize is a Pennsylvania Academy of Science (PAS) award given for outstanding scholarly contributions, which use microscopic techniques and present microscopic illustrations in the reporting of biological research. The award is competitive amongst qualified papers submitted in association with the Academy's annual meeting.

The Pennsylvania Academy of Science established the Darbaker Prize in 1952. Funds for the award are made available through a bequest of the late L.K. Darbaker, 1939 PAS President. Referring to the award, Dr. Darbaker stated: "Any sum applicable to the Pennsylvania Academy of Science shall be for grant or grants in Microscopical Biology."

To qualify for the Darbaker Prize, a scientist or scientists must: (1) have used microscopy (light, SEM, TEM or other technologies) in the research they report, (2) submit in proper format a manuscript reporting the results of the completed study for consideration to be published in the *Journal*, (3) specifically state a request to the Editor of the *Journal* to have their manuscript considered for the Darbaker Prize for the current calendar year, and (4) be a member of the Pennsylvania Academy of Science. Darbaker Prize competition manuscripts are expected to be presented and submitted at the PAS annual meeting, but if not, manuscripts will be accepted for consideration within four weeks (28 calendar days) following the last day of the annual meeting. Only manuscripts that have successfully completed the review process and have been accepted for publication in the *Journal* will be eligible for the award.

For further information contact:  
Jane Huffman, PAS Past-President  
[jhuffman@po-box.esu.edu](mailto:jhuffman@po-box.esu.edu)

### **PAS Research Grants**

Make sure you check out the PAS web-site (under "funding opportunities") for announcements, instructions, and deadlines for our *college and high school student research grants*.

Contact Jane Cavender (Elizabethtown College) for details at [cavender@etown.edu](mailto:cavender@etown.edu)

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### **Reminder of PAS Mission**

The mission of PAS is to “encourage scientific research; to promote interest in the teaching of science; to stimulate exchange of ideas among those engaged in scientific work especially in Pennsylvania; to assist in the development and distribution of information about the material, educational, and other resource and riches of the Commonwealth; and to arrange and prepare for publication such reports as may further these objectives, all of which purposes do not contemplate pecuniary gain or profit, incidental or otherwise, to the members of the corporation.” *Excerpt from PAS Constitution*

### **Pennsylvania Academy of Science Annual Fund Campaign**

Fellow members of the Pennsylvania Academy of Science:

I would like to thank all of those who contributed to our Annual Fund Campaign and to ask for your continued support. In order to adequately fund our undergraduate research program, we need to increase our Undergraduate Research Endowment. Currently we are funding the Journal with the operating fund of the Academy, but we would like to be able to create a sufficient endowment so that the interest can be used to support our excellent peer reviewed journal. The executive board of the Academy established the annual fund drive to increase our endowment for undergraduate research and to endow the Journal of the Pennsylvania Academy of Science. It is our desire to have the journal be self-sufficient and to be supported entirely through interest from our recently established Journal of the Pennsylvania Academy Endowment.

If you would like to contribute to either of these endowment funds please print off and complete the form on the following page.

Thank You. Fred J. Brenner, Past PAS President

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**2012 Annual Dues Notice  
Pennsylvania Academy of Science**

- \_\_\_ Active Membership, active or associate \$35.00  
\_\_\_ Sustaining Membership \$40.00 or more  
\_\_\_ Student Membership \$17.50  
\_\_\_ Library or Institutional Membership \$45.00  
\_\_\_ Life Membership (installment plan available) \$525.00  
\_\_\_ Honorary member-Please return without remittance  
\_\_\_ Tax deductible donation to the (dollar amount in addition to dues)

**Student Research Fund** \_\_\_\_\_

**Journal Endowment Fund** \_\_\_\_\_

I am a member of \_\_\_ AAAS, \_\_\_ PSTA, \_\_\_ PASA, \_\_\_ Pa. Wildlife Society  
\_\_\_ SCST (Pa.), \_\_\_ Pa. Biol Survey, \_\_\_ PAEP  
(This information influences our grant support for research)

Name: \_\_\_\_\_ Institution: \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_

9 digit zip code: \_\_\_\_\_ Fax number: (\_\_\_\_) \_\_\_\_\_

Office telephone number: (\_\_\_\_) \_\_\_\_\_ Email: \_\_\_\_\_

My field of interest is \_\_\_\_\_

Please print this sheet and mail with check payable to **Pennsylvania Academy of Science** to:

Jennifer White, Treasurer  
East Stroudsburg University  
Department of Biological Sciences  
200 Prospect Street  
East Stroudsburg, PA 18301