

The Pennsylvania Academy of Science



The Pennsylvania Academy of Science



President's Welcome – Edward Levri

Friends and Colleagues,

I am honored to begin my two-year term as the President of the Pennsylvania Academy of Science. I would like to thank outgoing President Joy Karnas for her exemplary leadership over the past two years. I hope that I can live up to her fine example. The Pennsylvania Academy of Science continues to promote scientific research and science education in the Commonwealth of Pennsylvania. The success of the organization can best be seen at our annual spring meeting where senior researchers and students present their work to the Academy. The presentations demonstrate the depth and breadth of knowledge and interests of the participants. The work of our members is truly impressive and the quality of the presentations at our meeting gets better every year.

The Academy is currently undergoing many exciting changes. Under Joy's leadership we have proposed substantial changes to the PAS Board of Directors, which will be voted upon at our upcoming spring meeting. We have substantially revised and updated our website and have increased funding for student research. We have also begun a relationship with Penn State University Press to publish our journal and, possibly, our book series. The relationship should lead to greater exposure of the fine work presented in our journal. We are placing a renewed emphasis on the physical sciences at our meetings to encourage more participation from those fields. We continue the Spychala Awards Competition to reward excellent student work at our annual meeting. We look forward to an exciting meeting at King's College in the spring, and I hope to see all of you there.



Ed Levri
President, Pennsylvania Academy of Sciences
Associate Professor of Biology and
Interim Head of the Division of Mathematics and Natural Sciences Penn State Altoona

The Pennsylvania Academy of Science

News from the PAS President - Edward Levri

A Partnership Between the Pennsylvania Academy of Science and Penn State University Press

Beginning in 2017, Penn State University Press will be publishing our journal. PSU Press brings a wealth of publishing experience that will result in a much greater audience for our journal. For the past several years, the Academy has been publishing its journal online, making it available on our website. While this model has been cost effective, it has severely limited the journal's exposure. PSU Press will promote our journal and make it available to scholars through online search engines. These efforts will increase the impact of articles published in the journal and the journal's prestige. We are very excited about the partnership. There will be some changes in the submission and review process such as a new online submission system. We are also exploring the possibility of utilizing PSU Press to publish our books. Details will be posted on our webpage soon.

A Call for New Officers

The success of PAS depends on the participation of its members. It is crucial that we continue to recruit new individuals onto the Board of Directors to inject new ideas and increase representation from as many institutions as possible. We currently have an open slot as a Director-at-Large. If you are interested in this position please let us know. If you would simply like to find out how the Academy works, please join us for our Business Meeting during lunch on Saturday of the Spring Meeting.

Stanley Tracton- PAS's First Emeritus Member

Stanley Tracton served as a member of both the PJAS and the PAS. He began his association with our organization in 1953 by mentoring junior high students and served into the 1990's. He organized the Philadelphia region for the PJAS for a long time. At the 2016 PAS Annual Meeting Stanley received Emeritus Member Status of the Pennsylvania Academy of Science for his mentorship and service.



Upcoming Meetings

The Spring 2017 Annual Meeting is scheduled for March 31 through April 2 at King's College in Wilkes-Barre, Pennsylvania. As in past meetings, we plan to have lively oral and poster sessions, a banquet with a plenary speaker, a competitive student competition. Details will be published on the Pennsylvania Academy of Sciences website (pennsci.org) soon.

The 2018 Annual Meeting will return to the western part of the state and will be held at Indiana University of Pennsylvania in Indiana, PA. More details will be published on the Pennsylvania Academy of Science's website (pennsci.org) soon.

In Memoriam



David Dunbar, Ph.D., a longstanding active member of the Pennsylvania Academy of Science, passed away suddenly on May 21, 2016. He was a professor of biology at Cabrini University for the last 15 years. David attended Lycoming College and Lehigh University, and completed his post-graduate work at Yale Medical School. David and his students published their work in the *Journal of the Pennsylvania Academy of Science*, presented at numerous PAS meetings, and received several PAS undergraduate research grants. The David Dunbar Fund for Undergraduate Science Research at Cabrini University memorializes his passion for training young scientists and honors his legacy.

The Pennsylvania Academy of Science

News from the PAS President - Edward Levri

PAS Research Grant Awardees for 2016

Beverly Andre, John Hranitz, and Cynthia Surmacz, *Bloomsburg University* “The Effects of Pesticides on Sub-lethal Stress in Honeybees”

Kristen Felt and Leocadia Paliulis, *Bucknell University* “X1X2Y sex trivalent location as a mechanism for understanding chromosome positioning in spermatocytes of the cellar spider *Pholcus phalangioides*”

Olivia Townsend, **Lauren Markowitz**, and Sheryl Fuller-Espie, *Cabrini University* “Earthworms as Sentinel Species for the Measurement of Macroautophagic Biomarkers in Response to Cadmium and Copper”

Sarah Grant and Sheryl Fuller-Espie, *Cabrini University* “Using Flow Cytometry for the Analysis of Macroautophagy in the Earthworm in Response to Polycyclic Aromatic Hydrocarbons”

Robert Schmidt and David Dunbar, *Cabrini University* “Identification of Gene Promoters in Mycobacteriophage Cabrinians and Catdawg Genomes”

Jasmine Smith and André Walther, *Cedar Crest College* “Replication Protein A and Phosphorylation Dependent Protein-Protein Interactions in *Saccharomyces cerevisiae*”

Katherine Pecko and André Walther, *Cedar Crest College* “Using qPCR to Quantify Homologous Recombination in *Saccharomyces cerevisiae*”

James Kelleher and Darl Swartz, *Delaware Valley University* “qPCR Assay Development for Sexing of Avian Species from Fecal Samples”

Kacie Chern and Jane Huffman, *East Stroudsburg University* “Comparison of Tissue Types and PCR Primers for Determining Prevalence of *Borrelia burgdorferi* in *Peromyscus leucopus* and *Ixodes scapularis*”

Morgan Chambers and Jodi Yorty, *Elizabethtown College* “Investigation of the Connection between Apoptosis and the Corticosterone-Induced Loss of Splenic Dendritic Cells in C57BL/6 Mice”

Gabrielle Acosta and Quyen Aoh, *Gannon University* “The role of Ent3 in Put4 trafficking from the trans-Golgi Network and Endosome to the Plasma Membrane”

Daniel Cooney and Quyen Aoh, *Gannon University* “The Role of SCAMP3 in Amyloid Precursor Protein (APP) Processing”

Kara McClain and Vida Irani, *Indiana University of Pennsylvania* “Spatial Variation in the Prevalence of Zoonotic Pathogens in Blacklegged Ticks from Northeastern and Midwestern United States”

Basma Adeeb and Cuong Diep, *Indiana University of Pennsylvania* “Genetic screen for peptides that interact with the *lhx1a* transcription factor”

Ethan Habbershon and Douglas Glazier, *Juniata College* “Testing the Temperature-Size Rule in Two Sexually Dimorphic Aquatic Crustaceans”

Tammy Weidman and Wendy Ryan, *Kutztown University* “Effect of Changing Salinity on Metabolism in Larval Forms of the Blue Crab (*Callinectes sapidus*)”

Catherine Kruszynski and Amy Danowitz, *Mercyhurst University* “Synthesis of a focused triazole library for the inhibition of bacterial quorum sensing”

Aimee Wilson and Meda Higa, *York College of Pennsylvania* “Infection Level Differences Between the Mutated and Wild-type Hantaan Virus on the Putative Glycosylation Site N235”

Megan Oberer and David Singleton, *York College of Pennsylvania* “A Comparative Toxicological and Carcinogenic Assay of E-vapor in Comparison to Traditional Cigarette Smoke”

Sophia Swartz and Darl Swartz “Molecular-Based Genotyping of *Lactuca sativa* for Accelerated Genotypic Selection”, Central Bucks South High School, Warrington, PA

Spychala Award Winners 2016

Every year the Pennsylvania Academy of Science recognizes the top oral and poster presentations at our annual meeting. The 2016 award winners are listed below. Congratulations to all winners and thanks to all our presenters.

Undergraduate Poster Competition

1st Place

Cody Thompson, York College of Pennsylvania

Title: Telomere length and telomerase expression prior to and following regeneration in *Lumbriculus variegatus*

2nd Place

Breanna Titchen, Gettysburg College

Title: Mutations in the nsr1/nucleolin RNA-binding protein suppress defects in the snxAHrb1 RNA-binding protein in *Aspergillus nidulans*.

3rd Place

Lyanna Kessler, Temple University

Title: Genomics of sexual isolation in *Drosophila melanogaster*

Undergraduate Oral Competition

1st Place

Andrew Nevin, Messiah College

Title: A study on the long-term performance of the Sawyer PointONETM filter in the developing world

2nd Place

Erica Ward, Harrisburg University of Science and Technology

Title: Method Effects on Antibacterial Properties of Essential Oils

3rd Place

Scott Godshall, Delaware Valley University

Title: Determining population densities of the Cerulean Warbler (*Setophaga cerulea*) in the Delaware Water Gap National Recreation Area

Graduate Competition

1st Place

Stefani Cannon, East Stroudsburg University

Title: Niche partitioning by shelter site selection in neotropical tree frogs of northeastern Costa Rica

Nominating Slate

The slate for our annual elections is given below and will also be discussed at the annual Business Meeting. After nominations are taken from the floor, there will be a vote of the membership to approve the slate of officers. Officers up for election are in bold and italicized. We are still accepting nominations for offices up for election especially one Director-at-large position, which currently has no nominees. Please let Ed Levri know if you are interested in running for any position (EPL1@psu.edu).

Nominated Slate for 2017 Election:

President-Elect: Amy Diegelman-Parente (2016-2018, President 2018-2020, Past-President 2020-2022)

President: Ed Levri (2016-2018, Past-President 2018-2020)

Past-President: K. Joy Karnas (2016-2018)

PJAS Director: Fay Nelson (elected by PJAS)

Treasurer: Matthew Wallace (2016-2018)

Treasurer-Elect: Chris Brey (2017-2018, Treasurer 2018-2020)

Committee Director: Greg Czarnecki (2017-2019)

Finance and Investments Chair: J. Michael Campbell (appointed)

Education Chair: David Singleton (appointed)

Annual Meeting Chair: Tammy Tintjer for Kings Meeting (appointed)

Program Chair: André Walther (appointed)

Affiliate Chair: Greg Czarnecki (appointed)

Spychala Awards Chair: Darl Swartz (appointed)

Corresponding Secretary: Sheryl Fuller-Espie (2017-2019)

Recording Secretary: Tammy Tintjer (2016-2018))

Editor in Chief: Carl Pratt (2017-2019)

Book Editor: Sandy Whidden (appointed)

Journal Editor: Carl Pratt (appointed)

Webmaster and Archivist: André Walther (2017-2019)

AAAS/NAAS Representative: K. Joy Karnas (2016-2018)

Director at Large: ***Greg George (2017-2019), open (2017-2018), Ryan Colyer (2017-2019), Robin Ertl (2016-2018)***

Changes to the Constitution of the Pennsylvania Academy of Science

There are a number of changes in the following pages proposed for our constitution that will need to be voted upon at our spring meeting. Most of these changes relate to issues that need to be addressed so that we can more effectively partner with Penn State University Press to publish our books and journal.

The Pennsylvania Academy of Science

Proposed Changes to the Constitution:

ARTICLE II OLD LANGUAGE (WITH TEXT NEEDED TO BE EDITED IN RED):

ARTICLE II - MEMBERSHIP

- SECTION 1** Membership to the Academy shall be made up of the following classes: a. active members; b. student members; c. life members d. honorary members; e. emeritus members; ~~f. sustaining members; and g. institutional members.~~
- SECTION 2** Any person engaged or interested in scientific work shall be eligible to active membership
- SECTION 3** Honorary members may be elected by the Board of Directors to this class of membership in the Academy on account of special prominence in science or other branches of learning. They shall be exempt from the payment of dues.
- SECTION 4** Active members who elect to pay an increased rate of annual dues shall be designated as sustaining members.
- SECTION 5** Members in current standing will be allowed to attend the annual meeting.
- ~~**SECTION 6** Any business or professional organization, or educational institution, that is interested in science may be elected to institutional membership.~~
- SECTION 7** Applications for membership will be accepted by the Chairperson of the Membership Committee. Upon receipt of the official notification of acceptance to membership, the new member will have all the rights and privileges of membership.
- SECTION 8** Election of honorary members shall be by a three-fourths vote of the active, life, ~~sustaining~~, honorary, and emeritus members, present at any meeting. No election is required to permit active members to advance to the ~~sustaining or~~ emeritus membership category.
- SECTION 9** To qualify for emeritus status, a member must have been in good standing for a minimum of ten years, active in the Academy as judged by the Board of Directors and no longer gainfully employed either because of disability or retirement.
- SECTION 10** Members of all categories shall pay at a rate set annually by the Board of Directors and subject to a three-fourths vote of the voting members present at the Annual Meeting. The rates set should reflect the programs and operating costs of the Academy as determined by the membership. Life membership is conferred upon active members upon payment of an amount equal to fifteen (15) times the regular annual membership dues rate. Honorary members shall be exempt from the payment of dues.
- SECTION 11** Scientific organizations within the Commonwealth, following application and approval by the Board of Directors and the General Membership, shall have the right to affiliate with the Pennsylvania Academy of Science.
- SECTION 12** The privilege of voting in the Academy shall be restricted to the classes of: active, life, ~~sustaining~~, student, emeritus and honorary membership who are in good standing prior to the Annual Meeting. The privilege of speaking from the floor at meetings of the Academy shall be available to all classes of membership.

PROPOSED NEW LANGUAGE FOR ARTICLE II:

ARTICLE II - MEMBERSHIP

- SECTION 1** Membership to the Academy shall be made up of the following classes: a. active members; b. student members; c. life members; d. honorary members; and e. emeritus members.
- SECTION 2** Any person engaged or interested in scientific work shall be eligible to active membership
- SECTION 3** Honorary members may be elected by the Board of Directors to this class of membership in the Academy on account of special prominence in science or other branches of learning. They shall be exempt from the payment of dues.
- SECTION 4** Active members who elect to pay an increased rate of annual dues shall be designated as sustaining members.
- SECTION 5** Members in current standing will be allowed to attend the annual meeting.
- SECTION 6** Applications for membership will be accepted by the Chairperson of the Membership Committee. Upon receipt of the official notification of acceptance to membership, the new member will have all the rights and privileges of membership.
- SECTION 7** Election of honorary members shall be by a three-fourths vote of the active, life, honorary, and emeritus members, present at any meeting. No election is required to permit active members to advance to the emeritus membership category.
- SECTION 8** To qualify for emeritus status, a member must have been in good standing for a minimum of ten years, active in the Academy as judged by the Board of Directors and no longer gainfully employed either because of disability or retirement.
- SECTION 9** Members of all categories shall pay at a rate set annually by the Board of Directors and subject to a three-fourths vote of the voting members present at the Annual Meeting. The rates set should reflect the programs and operating costs of the Academy as determined by the membership. Life membership is conferred upon active members upon payment of an amount equal to fifteen (15) times the regular annual membership dues rate. Honorary members shall be exempt from the payment of dues.
- SECTION 10** Scientific organizations within the Commonwealth, following application and approval by the Board of Directors and the General Membership, shall have the right to affiliate with the Pennsylvania Academy of Science.
- SECTION 11** The privilege of voting in the Academy shall be restricted to the classes of: active, life, student, emeritus and honorary membership who are in good standing prior to the Annual Meeting. The privilege of speaking from the floor at meetings of the Academy shall be available to all classes of membership.

ARTICLE III OLD LANGUAGE (WITH TEXT NEEDED TO BE EDITED IN RED):

ARTICLE III - DIRECTORS AND OFFICERS

- SECTION 1** The Board of Directors shall be composed of the persons holding office as provided in this article and four Academy Directors-at-Large elected to staggered two-year terms by the membership. ~~The at-large Directors will serve as chairs of Academy committees, defined in Article VI, Section 4 of this Constitution.~~
- SECTION 2** The officers of the Academy shall be and consist of the President, the President-Elect, the Immediate Past-President, the Recording Secretary/Archivist, the Corresponding Secretary, the Treasurer, the Treasurer-Elect, ~~the Book Treasurer~~, the Editor ~~of the Journal~~, ~~the Editor of the Newsletter~~ the Webmaster, and the State Director of the Junior Academy of Science
- SECTION 3** With the exception of the President-Elect, all nominees must have two years of prior membership and have attended one annual meeting to be considered for the above offices. Nominees for President-Elect must have satisfied the completion of one full-term as an officer in the Academy.
- SECTION 4** Officers elected hereafter shall hold office for terms in accord with the following schedule: President, President-Elect, Immediate Past-President, Recording Secretary/archivist, Corresponding Secretary, Treasurer, Treasurer-Elect, and ~~Book Treasurer~~ - Two Years; Editor ~~of the Journal~~, ~~Editor of the Newsletter~~, and Webmaster - Four Years; State Director of the Junior Academy - Three Years (limited to two successive terms).
- SECTION 5** The duties of the officers shall be those that usually pertain to the respective offices. The Recording Secretary/Archivist shall take minutes, and keep a record of all official business, shall collect and preserve all information of interest to the Academy and submit it to the Pennsylvania State Archives. The Corresponding Secretary is responsible for all Academy correspondence. The Treasurer shall accept, deposit, and disburse funds, maintain investments ~~and~~ records (including records of the Academy's membership) and ~~issue membership cards~~. The Treasurer-Elect shall assist the treasurer and become familiar with financial operations of the Academy. ~~The Book Treasurer is responsible for all financial matters relating to book publication including the book fund.~~ The Webmaster shall maintain the Academy website.
- SECTION 6** In case of the inability of the President to perform the functions of ~~his~~ office, the following succession shall assume responsibility of the Office of the President: President-Elect, Recording Secretary/Archivist, Corresponding Secretary, Treasurer, Treasurer-Elect and Book Treasurer. In the case of the inability of the Treasurer to perform the duties of the office, the following succession shall assume responsibility of the office of Treasurer: Treasurer-Elect, and ~~Book Treasurer~~.
- SECTION 7** Interim vacancies on the Board of Directors may be filled by appointment by the President with the approval by the majority of the Board of Directors. The office will be open for election at the next annual meeting. In the event that any officer, other than the President or Treasurer, is unable to complete the term of office by virtue of inability, resignation, disability, or death, the interim vacancy may be filled by the President with the approval by a majority of the Board of Directors. The Board position will be open for election at the next annual meeting.
- SECTION 8** Voting privileges at Board of Directors Meetings are restricted to the Board of Directors, as defined in Article III, Section 2 of this constitution.

PROPOSED NEW LANGUAGE FOR ARTICLE III:

ARTICLE III - DIRECTORS AND OFFICERS

- SECTION 1** The Board of Directors shall be composed of the persons holding office as provided in this article and four Academy Directors-at-Large elected to staggered two-year terms by the membership.
- SECTION 2** The officers of the Academy shall be and consist of the President, the President-Elect, the Immediate Past-President, the Recording Secretary/Archivist, the Corresponding Secretary, the Treasurer, the Treasurer-Elect, the Finance Chair, the Editor-in-Chief, the Webmaster, the AAAS/NAAS Representative, the Committee Director, and the State Director of the Junior Academy of Science
- SECTION 3** With the exception of the President-Elect, all nominees must have two years of prior membership and have attended one annual meeting to be considered for the above offices. Nominees for President-Elect must have satisfied the completion of one full-term as an officer in the Academy.
- SECTION 4** Officers elected hereafter shall hold office for terms in accord with the following schedule: President, President-Elect, Immediate Past-President, Recording Secretary/archivist, Corresponding Secretary, Treasurer, Treasurer-Elect, AAAS/NAAS Representative, Committee Director, and Finance Chair - Two Years; Editor-in-Chief, and Webmaster - Four Years; State Director of the Junior Academy - Three Years (limited to two successive terms).
- SECTION 5** The duties of the officers shall be those that usually pertain to the respective offices. The Recording Secretary/Archivist shall take minutes, and keep a record of all official business, shall collect and preserve all information of interest to the Academy and submit it to the Pennsylvania State Archives. The Corresponding Secretary is responsible for all Academy correspondence. The Treasurer shall accept, deposit, and disburse funds, and maintain investment records (including records of the Academy's membership). The Treasurer-Elect shall assist the treasurer and become familiar with financial operations of the Academy. The Webmaster shall maintain the Academy website. **The Finance Chair shall manage the investments of the society. The AAAS/NAAS Representative shall represent the society at the annual meeting of the National Association of Academies of Sciences. The State Director of the Junior Academy of Sciences shall manage the Junior Academy.**
- SECTION 6** In case of the inability of the President to perform the functions of the office, the following succession shall assume responsibility of the Office of the President: President-Elect, Recording Secretary/Archivist, Corresponding Secretary, Treasurer, Treasurer-Elect and Book Treasurer. In the case of the inability of the Treasurer to perform the duties of the office, the following succession shall assume responsibility of the office of Treasurer: Treasurer-Elect, and Finance Chair.
- SECTION 7** Interim vacancies on the Board of Directors may be filled by appointment by the President with the approval by the majority of the Board of Directors. The office will be open for election at the next annual meeting. In the event that any officer, other than the President or Treasurer, is unable to complete the term of office by virtue of inability, resignation, disability, or death, the interim vacancy may be filled by the President with the approval by a majority of the Board of Directors. The Board position will be open for election at the next annual meeting.
- SECTION 8** Voting privileges at Board of Directors Meetings are restricted to the Board of Directors, as defined in Article III, Section 2 of this constitution.

ARTICLE VI OLD LANGUAGE (WITH TEXT NEEDED TO BE EDITED IN RED):

ARTICLE VI - COUNCILS AND COMMITTEES

- SECTION 1** The membership may elect an Honorary Council to consist of the Governor of the Commonwealth and others as may be determined from year to year.
- SECTION 2** The President shall appoint an Advisory Council to be composed of twelve to fifteen members appointed for three-year terms with reappointment at the discretion of the President.
- SECTION 3** All Past-Presidents of the Academy, including those who held the office of president prior to the incorporation hereof, shall constitute a committee representing the membership delegates to any and all meetings of the Board of Directors.
- SECTION 4** The following standing committee chairpersons shall be appointed by the ~~President: a. Membership; b. Editorial; c. Time and Place of Meetings; d. Local Arrangements; e. Program; f. Auditing; g. Finance; and h. Investment.~~ Special committees may be appointed by the President.
- SECTION 5** The Nominating Committee shall consist of the immediate Past-President as chairperson, the other two members being the second Past President and a current long-standing member of the Academy to be appointed by the President.

PROPOSED NEW LANGUAGE FOR ARTICLE VI:

ARTICLE VI - COUNCILS AND COMMITTEES

- SECTION 1** The membership may elect an Honorary Council to consist of the Governor of the Commonwealth and others as may be determined from year to year.
- SECTION 2** The President shall appoint an Advisory Council to be composed of twelve to fifteen members appointed for three-year terms with reappointment at the discretion of the President.
- SECTION 3** All Past-Presidents of the Academy, including those who held the office of president prior to the incorporation hereof, shall constitute a committee representing the membership delegates to any and all meetings of the Board of Directors.
- SECTION 4** The following standing committee chairpersons shall be appointed by the Committee Director in consultation with the President: a. Time and Place of Meetings; b. Program; c. Finance Investment; d Education; and Pennsylvania Science and Talent Search. The Membership Committee chairperson shall be appointed by the Corresponding Secretary in consultation with the President. The Journal Editor and Book Editor chairpersons shall be appointed by the Editor in Chief in consultation with the President. Special committees may be appointed by the President.
- SECTION 5** The Nominating Committee shall consist of the immediate Past-President as chairperson, the other two members being the second Past President and a current long-standing member of the Academy to be appointed by the President.

ARTICLE IX OLD LANGUAGE (WITH TEXT NEEDED TO BE EDITED IN RED):

ARTICLE IX - PUBLICATIONS

- SECTION 1** The regular publication of the Academy shall be the *Journal of the Pennsylvania Academy of Science*, which shall include the transactions and all papers deemed acceptable by the Editor and his/her committee.
- SECTION 2** The Academy shall ~~sponsor~~ the Pennsylvania Academy of Science ~~Newsletter~~ which shall include notices pertinent to Academy business, and information about the activities of the Academy and its members.
- SECTION 3** The Academy shall sponsor PAS Books.
- SECTION 4** Current members will be able to publish in the open access *Journal of the Pennsylvania Academy of Science*, as a privilege of membership. Books and other publications shall be sold to members at a predetermined price.

PROPOSED NEW LANGUAGE FOR ARTICLE IX:

ARTICLE IX - PUBLICATIONS

- SECTION 1** The regular publication of the Academy shall be the *Journal of the Pennsylvania Academy of Science*, which shall include the transactions and all papers deemed acceptable by the Editor and his/her committee.
- SECTION 2** The Academy shall maintain the Pennsylvania Academy of Science *website* which shall include notices pertinent to Academy business and information about the activities of the Academy and its members.
- SECTION 3** The Academy shall sponsor PAS Books.
- SECTION 4** Current members will be able to publish in the open access *Journal of the Pennsylvania Academy of Science*, as a privilege of membership. Books and other publications shall be sold to members at a predetermined price.

ARTICLE XI OLD LANGUAGE (WITH TEXT NEEDED TO BE EDITED IN RED):

ARTICLE XI - AMENDMENTS

- SECTION 1** This Constitution may be amended at any Annual Meeting by a favorable vote of three-fourths of the members present and entitled to vote thereon, provided that a copy of the proposed amendment shall be ~~sent~~ to all members at least thirty (30) days prior to the annual meeting. For purposes of this section, publication of the proposed amendment ~~in the Newsletter~~ shall be sufficient notice, provided that ~~copies thereof are mailed~~ at least thirty (30) days prior to the annual meeting.

PROPOSED NEW LANGUAGE FOR ARTICLE XI:

ARTICLE XI - AMENDMENTS

- SECTION 1** This Constitution may be amended at any Annual Meeting by a favorable vote of three-fourths of the members present and entitled to vote thereon, provided that a copy of the proposed amendment shall be made available to all members at least thirty (30) days prior to the annual meeting. For purposes of this section, publication of the proposed amendment on the Pennsylvania Academy of Science website shall be sufficient notice, provided that members are notified via email of the proposed changes at least thirty (30) days prior to the annual meeting.

Journal of the Pennsylvania Academy of Science:

The most recent edition of the *Journal of the Pennsylvania Academy of Science* is now available through the PAS website at:

<https://pennsci.org> and https://pennsci.org/wp-content/uploads/2015/02/JPAS_V90_1.pdf

NEEDED: Volunteers to serve as reviewers for the Journal manuscripts:

Serving as a reviewer is an excellent way to provide service and support to the Journal and to the Academy. Although authors are asked to provide suggestions for reviewers, it is often necessary to supplement with additional input from others. With sufficient volunteers, the workload will be kept to a minimum. Please consider this as an opportunity to help the Academy and to promote the Journal. If interested please contact:



Carl R Pratt, Editor JPAS
cpratt@immaculata.edu

The Pennsylvania Academy of Science

An invitation to submit manuscripts to the *Journal of the Pennsylvania Academy of Science*

As of January 1, 2017 the Journal of the Pennsylvania Academy of Science will enter a new phase in its history. We will begin our partnership with the Pennsylvania State University Press as the Journal's publisher. As a result of this partnership, the JPAS will reach a larger audience, be available in both print and online formats, and become a "searchable" journal stored in JSTOR.

The character of the Journal will remain the same and the Academy retains editorial responsibility for content. 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 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 online submission and an editorial management system, professional review and editorial assistance, typesetting, proofreading, and publication both in print and online. PSU Press will market the Journal to libraries and other institutions to increase readership and impact.

The Journal will also have a new format and look (see illustration). The new compact format of 6"x 9" will be published as two issues per year. There is also a new cover and interior layout, all to make the Journal more appealing and reader friendly.

The transition will not be without its challenges. With publication dates of June and December, manuscripts must be submitted, reviewed, and revised three months prior. This means the deadline for

manuscripts to appear in the June issue is early March and to appear in the December issue manuscripts must be ready by early August. Only electronic submissions can be accepted and they must be submitted at the website listed below.

Finally, potential authors are encouraged to submit manuscripts (electronically) as soon as possible after January 1st to be in the inaugural issue. The website for submission of manuscripts is listed below. There will soon be a link to the online electronic submission site on the PAS website.

Addresses relating to publication in the *Journal*:

To submit a manuscript electronically:

www.editorialmanager.com/jpas

Questions to Editor:

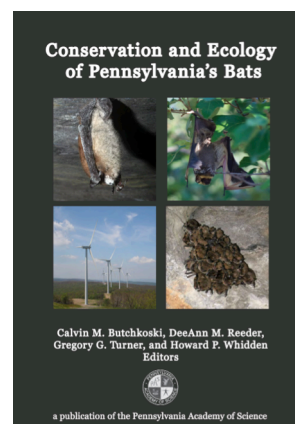
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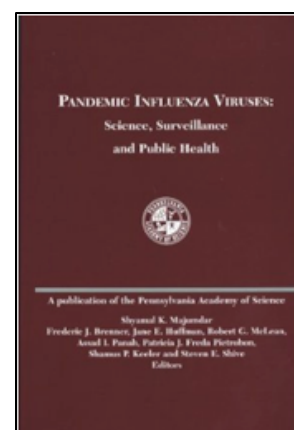
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PAS Books

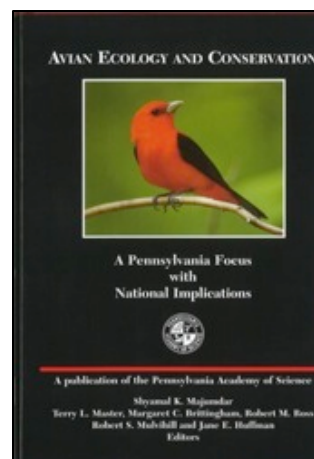
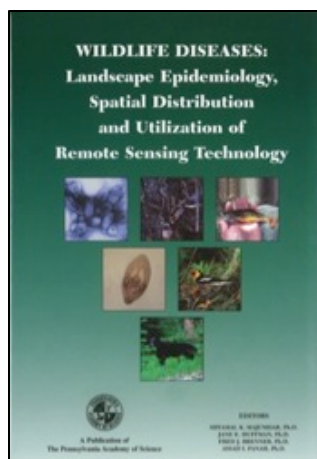
The most recent PAS book has just been published and will soon be available! *Conservation and Ecology of Pennsylvania's Bats*, edited by Howard P. Whidden (East Stroudsburg University), DeeAnn Reeder (Bucknell University), and Cal Butchkoski and Greg Turner (Pennsylvania Game Commission), takes stock of Pennsylvania's bats at a time of conservation crisis. Chapters in the book describe the natural history of Pennsylvania's bats and the history of bat research in the state, summarize long-term data on the state's bats, assess the recent impacts of wind turbines and White-nose Syndrome, and provide guidelines for future conservation efforts aimed at protecting and managing the state's bats. Purchasing information will be available on the PAS website once it is released.



Other recent PAS books are also available for sale through Amazon. *Pandemic Influenza Viruses: Science, Surveillance and Public Health*, edited by Shyamal Majumdar, Frederic Brenner, Jane Huffman, Robert G. McLean, Assad I. Panah, Patricia J. Pietrobon, Shamus P. Keeler, and Steve Shive, was published in 2011 and contains chapters on the biology, ecology, immunology, and genetics of influenza viruses. *Avian Ecology and Conservation: A Pennsylvania Focus with National Implications*, edited by Shyamal Majumdar, Terry Master, Margaret Brittingham, Robert Ross, Robert Mulvihill, and Jane Huffman, was published in 2010 and includes chapters 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. Finally, *Wildlife Diseases: Landscape Epidemiology, Spatial Distribution and Utilization of Remote Sensing Technology*, published in 2005, is still available but is now in limited supply.



The PAS book series is currently seeking proposals for the next PAS book. If you have a suggestion for a book for the series, please contact the PAS Book Editor, Howard Whidden, at hwhidden@esu.edu.



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.

PAS Research Grants

The Academy again has funds available to support undergraduate and graduate research in the natural, physical, and social sciences. Details about the formatting of proposals and budgets are given on the PAS website (<https://pennsci.org/grants/>). Proposals will be due **no later than February 15, 2017**, and must be submitted electronically via the submission form that will be open beginning January 1st on the PAS website. All proposals will be evaluated for feasibility, and successful funding will be announced at the 2017 Annual meeting of the Academy March 31 to April 2 at King's College. This change will allow those students who work on projects during the summer to actually have their funding in hand by the time they begin their work.

Also, because of this timing change, the PAS Grants Committee will have a big need for faculty evaluators to help make funding determinations on a tight turnaround schedule. If you anticipate having a brief block of time between February 15 and March 15 to read two or 3 proposals, please let me know (dsinglet@ycp.edu) of your willingness, and your general field of expertise. Evaluation will consist of reading the proposal for feasibility and benefit to the student, and using an online rubric/evaluation form.

One last item; the Academy also has funds available to support **high school student** research. If you are working with any high school students, or have colleagues who are, those proposals will be due **April 15, 2017**, with a funding decision to be made by June 1st. Proposals will also be electronically via the PAS website, however details of the format are currently in progress and should be in place by the end of January.

For further information about Grant and Prize Opportunities contact:
Contact David Singleton (York College) for details at dsinglet@ycp.edu

The Pennsylvania Academy of Science

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*



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