



# INDIANA ACADEMY OF SCIENCE NEWSLETTER

Number 153

May 2013

## Conner Prairie BioBlitz

June 8<sup>th</sup> & 9<sup>th</sup>

This year the Indiana Academy of Science through the Biodiversity and Natural Areas Committee is helping to sponsor a two day bioblitz [Saturday through Sunday, June 8<sup>th</sup> & 9<sup>th</sup>] at Conner Prairie, Fishers, IN [just north of Indy]. The bioblitz will be coupled with a festival, i.e., a series of interactive events between Conner Prairie staff and various partners throughout the state.

For this year's event, I am organizing the bioblitz participants. If you are interested, please send your information [i.e., **name, email address, and area of expertise**] to me. My contact information is below.

We need as many professional and volunteers as we can get. Please consider joining us at the bioblitz.

The event is less than one month away!

For more information on Conner Prairie see <http://www.connerprairie.org/>

Sincerely,  
**Donald G. Ruch**  
Ball State University  
765-285-8829 (phone)  
druch@bsu.edu



*Photos provided by Gail Brown, Program Developer, Conner Prairie.*

Plan now to attend and present a research paper or poster, hot topic, or workshop at the

***129<sup>th</sup> Annual Academy Meeting, March 15, 2014  
J. W. Marriott, downtown Indianapolis, Indiana***

The *Call for Papers* will be out following the summer months. Discount rates for early Meeting registrants will be posted at that time as well.

## Note from the President's Corner

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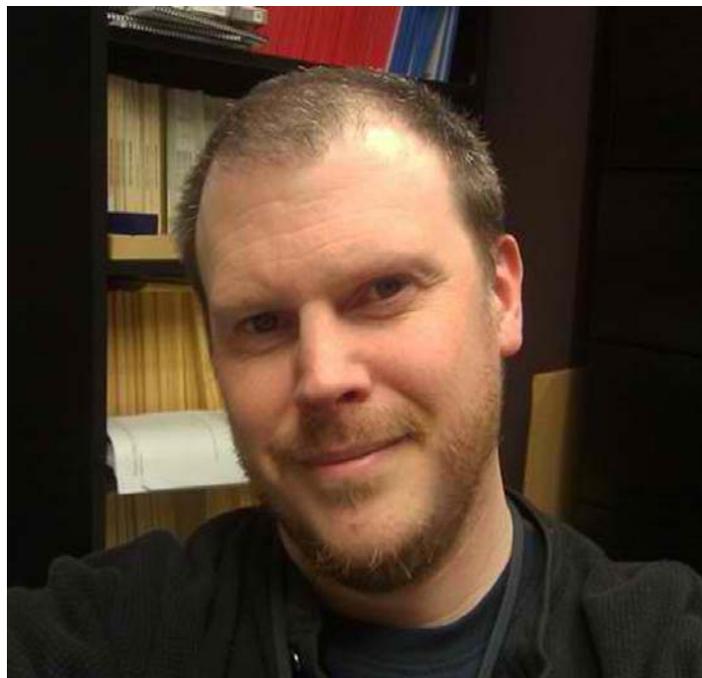
Hello Everyone,

The 128<sup>th</sup> Annual Meeting of the Academy was a great success. We had over 100 contributed talks and over 50 posters from our members, and some superb special presentations. I again want to thank our plenary speaker Dr. **Bilal Bomani**, our luncheon speaker Dr. **Michael Desmond**, our participants in the academic publishing panel Dr. **Uwe Hanson**, **Monica Bradford**, and **Fred Guterl**, and our “hot topic” presenters **Glenda Ritz**, **Rick Crosslin**, Dr. **Gene Kritsky**, Dr. **John Staver**, and Dr. **Don Takehara**. I also wish to express our deepest gratitude to our sponsors and partners in this meeting, which include **Subaru of America**, the **W.K. Kellogg Foundation**, the **Eli Lilly and Company Foundation**, **WFYI**, and **White River State Park**. The J.W. Marriott was a superb venue for our meeting, and I am pleased to announce that they will be hosting our 129<sup>th</sup> Annual Meeting, which will be held on Saturday, March 15<sup>th</sup>, 2014.

During the meeting I was pleased to honor, on behalf of the Academy, Dr. **Arden Bement** as our 2013 Distinguished Scholar Award Recipient and Dr. **Jim Curry** as our 2013 Distinguished Service Award Recipient. In addition, I was delighted to announce two new Academy Fellows, Dr. **Darrin Rubino** and Dr. **Marcia Moore**.

My term as Academy President comes to a close in less than two months. I believe we made great progress in the last year in terms of increasing the visibility of the Academy within the state. Largely through the efforts of our Executive Director, we have built wonderful partnerships with various groups throughout the state. We are revitalizing our educational efforts through our partnership with WFYI, and we are reaching out to more scientific constituencies throughout the state, including the private sector and the state government. I believe we are well on our way to becoming, once again, the key agent for the promotion of science literacy and scientific inquiry in the state. I am excited to see how incoming President **Dale Edwards** will build upon this in the next year.

Serving as Academy President this past year has been one of the most rewarding experiences of my life. I have had the chance to see firsthand how the Academy impacts and enriches science education and scientific literacy in the state, and more importantly I have seen the potential the Academy has for promoting the sciences in the state well



*Michael S. Finkler*  
*IAS President 2012-2013*

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beyond what we are doing now. It is my hope we will continue to grow in visibility in the media, reach out beyond our academic base to welcome professional scientists from all sectors in our state, and expand our activities towards the continued development of the sciences in Indiana. In order to do so, we must continue to evolve beyond an insular “science club” into a true, proactive institution. This requires active involvement from our membership. I ask the membership to serve as ambassadors for the Academy and its mission, and to become actively involved in our organization and the various events we sponsor. I especially encourage student members to take on leadership roles in our events, as this will open a whole new set of experiences beyond what can be offered in a department-sponsored club or on a single campus.

I am deeply indebted to the Academy Council (**Delores Brown**, **Stan Burden**, **Dale Edwards**, **Mike Foos**, **Ed Frazier**, **Marcia Gillette**, **Rich Kjonaas**, **Jarmilla Popocova**, and **Ron Richards**) for their efforts this past year. I am also grateful for the advice and wisdom provided by **Uwe Hansen**, **Bill McKnight**, and **Don Ruch**. I could not have asked for a better group of

*continued next page*

people to work with as Academy President. I am thankful to the section chairs and participants in our various committees, who in many ways are the vanguard fulfilling the Academy's mission. Finally, I thank you, the Academy membership, for making this one of the finest state science

academies in the nation.

With warmest regards,  
-- *Michael S. Finkler*  
IAS President 2012-2013

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## FROM THE DESK OF THE EXECUTIVE DIRECTOR...

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Thank you for joining us last month (March 9, 2013) at the *128<sup>th</sup> Annual Academy Meeting*. The attendance was a comfortable +350; with a great cross section of backgrounds and disciplines represented. The paper and poster presentations were indeed first class; the Indiana Academy of Science annual meetings are without a doubt a special forum at which to share your scholarly work and be brought up to date with the research that is taking place in the myriad of science disciplines.

I would like to again also thank our guest speakers, workshop facilitators, and hot topic presenters. Their participation in the *128<sup>th</sup> Annual Academy Meeting* offered new and thought-provoking perspectives that help us to understand why and how decisions and new developments are being made across the country.

I noticed that several meeting attendees commented in the survey that with so very many interesting research, hot topic, and workshop presentations offered, there was not enough time to experience everything. Thanks to all of you, we are able to bring our Academy members this wide array of stimulating intellectual opportunities, and present them with a truly professional science meeting where there is inspiration for all who attend whether they are senior scientists from industry or academia, science educators, graduate science students or undergraduate science students; and of course our high school science scholars and science enthusiasts.

The *128<sup>th</sup> Annual Academy Meeting* was generously supported by the Eli Lilly and Company Foundation, the W.K. Kellogg Foundation, White River State Park, and Subaru of America (Through the SUBARU LOVES SCIENCE Program, the Indiana Academy of Science will again be able to donate 200 science books to an Indiana public school. The book presentation will take place at the beginning of the new school year, 2013.)

Plan now to attend and present a research paper or poster, hot topic, or workshop at the *129<sup>th</sup> Annual Academy Meeting, March 15, 2014. J. W. Marriott,*



*Delores Brown, IAS Executive Director*

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**downtown Indianapolis, Indiana.** The *Call for Papers* will be out following the summer months. Discount rates for early Meeting registrants will be posted at that time as well.

-- *Delores Brown*  
Executive Director



# Results of the Indiana Academy of Science Elections, 2013

## President-Elect

**Arden Lee Bement, Jr.** is an American engineer and scientist. He is a former Director of the National Science Foundation (NSF), and had previously served as Director of the National Institute of Standards and Technology (NIST). Following the end of his six-year term at NSF, on June 1, 2010 he became the founding Director of the new Global Policy Research Institute at Purdue University (where he is currently serving).

Born in Pittsburgh, Pennsylvania, Bement started his career at Climax Molybdenum Mine after graduating from high school. His supervisor, Prentice Gain, was a graduate of Colorado School of Mines. He encouraged Arden to go to the Mines, in fact, he helped Arden fill out the admission form, and then made a life-changing covenant. He agreed to put up the first semester's tuition and if Arden made it beyond the first semester, he wouldn't owe him a dime. Unfortunately, Prentice Gain died before he could see Arden graduate but his unselfish contribution forever changed the career path and subsequent Science and Engineering contributions from Dr. Arden Bement.

Dr. Bement holds an engineer of metallurgy degree from the Colorado School of Mines, a master's degree in metallurgical engineering from the University of Idaho, a doctorate in metallurgical engineering from the University of Michigan, and honorary doctorates from Cleveland State University, Case Western Reserve University, and the Colorado School of Mines. He is a member of the National Academy of Engineering, a fellow of the American Academy of



Arts and Sciences and a fellow of the American Association for the Advancement of Science. Lt. Col. Bement is also a retired lieutenant colonel of the U.S. Army Corps of Engineers.

Dr. Bement served as a member of the U.S. National Commission for UNESCO and as the vice-chair of the Commission's Natural Sciences and Engineering Committee. He has served on and has chaired numerous NRC studies, most relevant to this study chairing the Committee on the Scientific and Technical Assessment of Stockpile Stewardship. He has served as the head of the NIST Visiting Committee on Advanced Technology, head of the advisory committee for NIST's Advanced Technology Program and as a member of the board of overseers for the Malcolm Baldrige National Quality Award. He chaired the Commission for Engineering and Technical Studies and the National Materials Advisory Board of the National Research Council, was a member of the Space Station Utilization Advisory Subcommittee and the Commercialization and Technology Advisory Committee for NASA and is an ex officio member of

the U.S. National Science Board, which guides NSF activities and serves as a policy advisory body to the President and Congress.

Dr. Bement has been a director of Keithley Instruments Inc., Lord Corporation, Midwest Superconductivity Consortium and the Consortium for the Intelligent Management of the Electrical Power and as a member of the Science and Technology Advisory Committee, Howmet Corporation, a division of Alcoa. He has consulted for the Department of Energy's Argonne National Laboratory, Electric Power Research Institute and the Idaho National Engineering and Environmental Laboratory and has recently been appointed to the Board of Trustees for Skolkovo Foundation's Scientific and Advisory Council and appointed to the Industrial Engineering faculty as a courtesy Professor.



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## Council Member-at-Large (2 years)

**Kay Yatskievych**'s is Botanist at the Missouri Botanical Garden in St. Louis Missouri. Kay's love of wildflowers began when she was growing up on a Johnson County, Indiana farm. Since 1990, she has been employed by the Missouri Botanical Garden as coeditor of a 9-volume series, the Flora of the Venezuelan Guayana, while continuing to do photography and research in her



spare time for Field Guide to Indiana Wildflowers. Kay is a founding

member of both the Indiana Native Plant and Wildflower Society and the Brown County Spring Wildflower Count. She has led dozens of wildflower walks, given numerous slide shows about plants, and has had many of her photographs published in books, magazines, posters, and newspapers. Kay is a member of the Academy Plant Systematics and Biodiversity Section.

## Research Grants Committee (3 years)

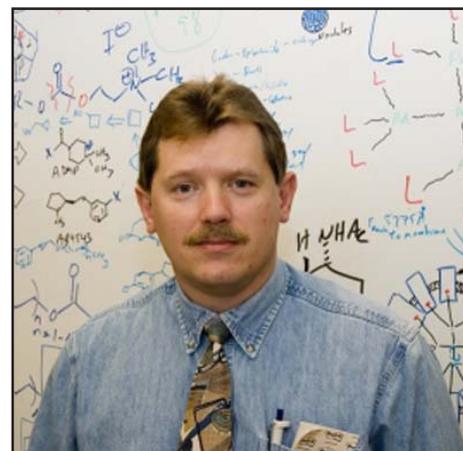
**Horia Petrache** is Assistant Professor in the Department of Physics at Indiana University Purdue University Indianapolis (IUPUI). He conducts research on biological membranes using x-ray scattering and NMR spectroscopy (Biomembrane Physics laboratory website: <http://www.iupui.edu/~lab59>). Dr. Petrache obtained a Diploma in Theoretical Physics from University of Bucharest, Romania, in 1992, held a research position for one year at the Ettore Majorana Center in Erice, Italy, and then earned his Ph.D. in Physics (1988) from Carnegie Mellon University in Pittsburgh.

Before joining IUPUI in 2006, Horia held research positions as a postdoctoral fellow in the Department of Physiology at The Johns Hopkins University (1998-2001) and in the Laboratory of Physical and Structural Biology at the National Institutes of Health (2001-2006). Horia has been a member of the Indiana Academy of Science since 2007 serving as Chair for the Physics and Astronomy Section between 2008 and 2011. He is currently a member of the Science and Society Committee and the Vice-chair for the Physics and Astronomy Section. Horia is also a member of



*Horia Petrache*

the American Association of Physics Teachers, American Chemical Society, American Physical Society, Biophysical Society, Hoosier Association of Science Teachers, and Mathematical Association of America. He is on the editorial board for the Journal of Membrane Biology and ISRN Biophysics and serves as reviewer for more than 10 research journals. At IUPUI, Dr. Petrache is a member of the Center for Membrane Biosciences and the Integrated Nanosystems Development Institute and he mentors students in a number of research programs for disadvantaged students.



*Richard Fitch*

**Richard Fitch** is a Bioorganic Chemist at Indiana State University. He was born in Louisville, Kentucky, received his BS in Chemistry from Western Kentucky in 1992 and his PhD in Organic Chemistry from the University of Louisville in 1998. He did postdoctoral work with John Daly at the National Institutes of Health until 2003, when he joined the Department of Chemistry at ISU. His research interests are in the chemistry, ecology and pharmacology of alkaloids, particularly from frogs, as well as pharmacology and structural biology of neurotransmitter receptors. He has been a member of the Academy since 2005, and was appointed and served as interim Research Grants Committee member in 2012.

## 2013 Indiana Academy of Science Fellows

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**Dr. Marcia Moore**

*Butler University, Friesner Herbarium*



**Dr. Darrin Rubino**

*Hanover College, Department of Biology*

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## 2013 – 2104 Section Leadership

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**Anthropology** (Susan Spencer): Next year's Chair - Charity Upson-Taboas, Next year's Vice Chair - Anna-Marie Casserly.

**Botany** (Darrin Rubino): Next year's Chair - Darrin Rubino, Next year's Vice Chair - Blake Junatolo.

**Cell Biology** (Sarah Mordan-McCombs): Next year's Chair - Sarah Mordan-McCombs, Next year's Vice Chair - Jennifer Kowalski.

**Chemistry** (Richard Fitch): Next year's Chair - Jessica Thomas, Next year's Vice Chair - Jeremy Johnson.

**Earth Science** (Nelson Shaffer): Next year's Chair - Darrell Schulze, Next year's Vice Chair - Gerry Guentie.

**Ecology** (Mark Jordan): Next year's Chair - Rod Chapman, Next year's Vice Chair - Sandy Davis.

**Engineering** (Nils Johansen): Next year's Chair - Terry West, Next year's Vice Chair - Nils Johansen.

**Environmental Quality** (Michael Guebert): New chair to be determined.

**Micro/Mol Biology** (Cindy Deloney-Marino): Next year's Chair - Elizabeth Rueschoff, Next year's Vice Chair - Landan Moore.

**Physics/Astronomy** (Horia Petrache): Next year's Chair - Horia Petrache, Next year's Vice Chair - Steve Presse.

**Plant Systematics & Biodiversity** (Nick Harby): Next year's Chair - Nick Harby, Next year's Vice Chair - Marcia Moore.

**Science Education** (Steve Kristoff): Next year's Chair - Steve Kristoff, Next year's Vice Chair - Scott Rahschulte.

**Zoology/Entomology** (Marianna Zamlauski-Tucker): Next year's Chair - Andy Ammons, Next year's Vice Chair - Brad Poteat.

## Bylaw Change

[Approved by Council - May 25, 2012 and Passed by the Academy Membership March 9, 2013]

Article VIII: Committees, § 2. Research Grants Committee. The Research Grants Committee shall consist of ~~five~~ six members, elected for ~~five year~~ three year rotating terms, and may stand for reelection. The Secretary shall serve as an *ex oûcio* member, but without vote. The committee shall receive senior research grant applications, determine grant recipients, and the amount of the individual grants from funds designated by The Academy for that purpose. The committee shall report regularly to the Council.

Vote: Pass - vote by consensus.

## Indiana Academy of Science Business Meeting Minutes March 9, 2013

Call to order: 4:16 PM

Presidents Remarks (**Mike Finkler**): Welcome, announced agenda for the meeting, thank JW Marriott, thank sponsors (\$40K for meeting), sign up for Science Expertise Database, become more active in the Academy.

Section Chair Reports:

Anthropology (**Susan Spencer**): Next year's Chair - Charity Upson-Taboas, Next year's Vice Chair - Anna-Marie Casserly. Good turnout, recommended students fee at half of member fee, recommend refund for meeting cancellation.

Botany (**Darrin Rubino**): Next year's Chair - Darrin Rubino, Next year's Vice Chair - Blake Junatolo. Suggest that Delores to go to large university to encourage participation, have Indiana speakers at the meeting, encouraged having annual meetings on college campuses, plan to sign up in Scientist.

Cell Biology (**Sarah Mordan-McCombs**): Next year's Chair - Sarah Mordan-McCombs, Next year's Vice Chair - Jennifer Kowalski. Spring break was an issue for meeting attendance, central location good.

Chemistry (**Richard Fitch**): Next year's Chair - Jessica Thomas, Next year's Vice Chair - Jeremy Johnson. Enthusiastic meeting, note there were spring break issues.

Earth Science (**Nelson Shaffer**): Next year's Chair - Darrell Schulze, Next year's Vice Chair - Gerry Guentie. 7 papers, invite professional geologists, schedule earth

science and engineering one after the other.

Ecology (**Mark Jordan**): Next year's Chair - Rod Chapman, Next year's Vice Chair - Sandy Davis. 20 presentations, 20 posters, pdf file of the program wanted early, wanted to know the times of presentations longer before meeting, recommend section chairs of ecology, zoo and botany coordinate times for presentations.

Engineering (**Nils Johansen**): Next year's Chair - Terry West, Next year's Vice Chair - Nils Johansen. Should coordinate with geology for scheduling presentations, suggest colleges give student memberships to deserving students.

Environmental Quality (**Michael Guebert**): No presentation.

Micro/Mol Biology (**Cindy Deloney-Marino**): Next year's Chair - Elizabeth Rueschoff, Next year's Vice Chair - Landan Moore. Combined with cell biology this year, may combine in the future.

Physics/Astronomy (**Horia Petrache**): Next year's Chair - Horia Petrache, Next year's Vice Chair - Steve Presse. 12 presentations, 15-20 people, no astronomy presentations, website needs improvement, password problem.

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Plant Systematics & Biodiversity (**Nick Harby**): Next year's Chair - Nick Harby, Next year's Vice Chair - Marcia Moore. 6 talks, science database sign up encouraged, discussed Bioblitz upcoming.

Science Education (**Steve Kristoff**): Next year's Chair - Steve Kristoff, Next year's Vice Chair - Scott Rahschulte. Section growing 6-8 people, more HS instructors, ask if IAS could issue certification for teachers, ask for IT presentations for classes.

Zoology/Entomology (**Marianna Zamlauski-Tucker**): Next year's Chair - Andy Ammons, Next year's Vice Chair - Brad Poteat. 12 presentations, pleased with venue, could we give awards for best presentations, need workshops.

Motion: Bylaw Change [Approved by Council - May 25, 2012 (900)] Article VIII: Committees, § 2. Research Grants Committee. The Research Grants Committee shall consist of five six members, elected for five year three year rotating terms, and may stand for reelection. The Secretary shall serve as an *ex oïcio* member, but without vote. The committee shall receive senior research grant applications, determine grant recipients, and the amount of the individual grants from funds

designated by The Academy for that purpose. The committee shall report regularly to the Council.

Vote: Pass - vote by consensus.

Fellows Elections:

**Darrin Rubino** and **Marcia Moore** were elected to Fellow – Pass - vote by consensus.

Results of election announced:

President elect – **Arden Bement Jr**; Council member at large – **Kay Yatskievych**; Research Grants Committee – **Horia Petrache** and **Richard Fitch**.

Announced: Next year's meeting at JW Marriott, date to be announced; hope to have the 2015 meeting also at the same location.

Passing of the Gavel:

**Mike Finkler** turned gavel over to **Dale Edwards** (assumes role of President June 1, 2013).

Remarks from new Academy Leadership (**Dale**

**Edwards**): honor to serve, acknowledge work of others, meeting permits interaction with colleagues for smaller colleges, permits students to work with scientists.

Adjournment,  
- **Mike Foos**,  
Secretary

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## Indiana Academy of Science Council Minutes March 8, 2013 Meeting

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Members Present: Ron Richards, Delores Brown, Jocelyn Lewis, Dale Edwards, Rich Kjonaas, Marcia Gillette, Mike Finkler, Ed Frazier, Mike Foos. Guests: Don Ruch., Bill McKnight, Jim Berry.

Called to order: 2:00 PM.

Reports:

President Report (**Mike Finkler**): Outlined the topics for the day, summarized his activities of the past several months, announced facebook being updated, Operating Policies updated, described TV interview. Reported that there is no mechanism for bonuses, perhaps bonus and assessment should be studied, announced new Academy store. Noted a need to consider costs at convention centers. Perhaps we should consider

providing funding for some essential members to attend Academy Meetings.

Treasurer Report (**Ed Frazier**): Taxes are on the calendar basis and the tax form 990 for 2012 has been filed with the IRS. The annual budget is adopted along with officers being elected for a June 1 to May 31 period.

Secretary Report (**Mike Foos**): Reported Operating Policy amendment of January 15, 2012, [i.e., "The Secretary shall email minutes requiring Council approval following Council meetings. The Council shall respond with any recommended changes to the minutes within 30 days of receipt. After 30 days, if there are no substantive changes, the minutes will be considered "approved" and published on the website. If substantive

changes are recommended, then edited minutes with the changes will be recirculated to the Council; if no further changes are recommended, then after 30 days the minutes will be considered approved.”] Suggested notifying the membership of time and place of Council meetings, and including the agenda. Reported that Research Grant bylaw is to be voted upon in Business meeting.

Executive Director Report (**Delores Brown**): Digitization of Proceedings is on time schedule. Kellogg grant redirected to help advertize youth programs. Museum has requested the possibility of mini grants to support school student transportation. Meeting report: outline of functions, Friday = Council, dinner, Biodiversity; Saturday = WFYI filming, registration, continental breakfast, posters displayed all day (presented 1:30-2:30), \$40K from sponsors, outlined topics for the day, announced 300 plus in attendance expected, discussed times available for workshops conflicting with poster presentations.

Foundation Report: [Report submitted by **Stan Burden**].

Research Grants Report: [Report submitted by **Jarka Popovicova**].

Nominations Report: President elect – **Arden Bement**; Council member at large – Kay Yatskievych, Research Grants – Horia Petrache and Richard Fitch.

Webmaster Report (**Mike Foes**): Report of activities. Motion: Restrict the most current 3 volumes of archived copies of the *Proceedings* on the website to current IAS members. Vote called. Motion passed.

Library Report (**Jocelyn Lewis**): Reported library activities and introduced herself.

Proceedings Report: [Report submitted by **Uwe Hansen**].

Youth Activities Report: [Report submitted by **Patty Zeck**].

Biodiversity Report (**Don Ruch**): Described the Scientist Experts website, announced a Bioblitz at Connersville this summer.

Publications Report (**Bill McKnight**): There are fall and spring rushes of deliveries.

New Business:

Venues for future meetings: There was a discussion of what kind of venue: convention center vs campus; location near central Indiana seems preferable; planning

ahead how many years, centrally located mid or large university campus might be important, possibility of alternating campus and conference center.

Motion: Create a 4 year rotation: 2014 – IU Bloomington, 2015 – Indianapolis conference center, 2016 – Purdue, 2017 – Indianapolis conference center, etc. Vote called. Motion failed.

Motion: Hold the IAS meeting at JW Marriott in Indianapolis in 2014 & 2015. Vote called. Motion passed.

Corporate and Institutional Memberships: There was a discussion of what representation comes with Corporate and Institutional Memberships. Delores will develop ideas about what to do for these categories for the Council to consider.

Council Member at Large: There was discussion about whether we should develop some written guidelines for this position.

Fellows: Being elected as a Fellow is an honor. Selection of Fellows should happen earlier. More specific guidelines should be created for the process and documentation.

Motion: Create an awards committee made up of 5 previous awardees from both physical and biological sciences who will serve for 3 years. Motion passed.

Election of Fellows: There was a lot of conversation about the form of recommendations for a number of fellow recommendations. As guidelines are developed these issues should be reduced.

Motion: Refer all nominees who have been recommended in a single cover letter be referred to the new Honors committee. Vote called. Motion passed.

Motion: Nominate candidates who received full letters of recommendation and CV. **Marcia Moore** and **Darrin Rubino** were recommended with full letters of recommendation and CV. Vote called. Pass. Both nominated.

Announce next Council meeting – November 9, 2013

Adjourn,  
-- **Mike Foes**  
Secretary





The Indiana State Museum will host *Star Wars®: Where Science Meets Imagination*, a national traveling exhibition, May 25 through Sept. 2, 2013. This will be the largest exhibition on view in Indiana State Museum history and will feature costumes and props from all six *Star Wars* films, but focus primarily on the real science behind the fantasy technologies depicted in the films.

As a backdrop to the exhibition, the museum will feature *Science Nights*, a three-part lecture series presented by Rose-Hulman Institute of Technology. The series includes:

*LASERS: What Are They? Past, Present & Future!*

Presented by Dr. Charles Joenathan, Rose-Hulman  
June 6, 2013; 7 – 8 p.m.

*Fact or Fiction: The Droids from Star Wars*

Presented by Dr. David Fisher, Rose-Hulman  
July 11, 2013; 7 – 8 p.m.

*Where is My Rocket Car?*

Presented by Dr. Zac Chambers, Rose-Hulman  
Aug. 29, 2013; 7 – 8 p.m.

The cost per lecture is \$10.00 for museum members and \$15.00 for non-members.  
For tickets, call the Indiana State Museum at 317.232.1637.

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## RESEARCH CONFERENCE HELD AT BUTLER

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The twenty-fifth anniversary meeting of the Butler University Undergraduate Research Conference was held on April 12 on the Butler University campus in Indianapolis. It was attended by about 800 people, with approximately 400 oral research presentations and 100 poster presentations. When the conference began in 1989 it involved only the sciences, but it quickly expanded to include 25 academic areas — in the social sciences, business, communication, liberal arts and the fine arts. The research topics ranged from A-to-Z. In Anthropology, Paige Spalding of Hanover College presented a paper on *Liminal Dreaming: Latino Immigrants in Madison, IN and the Barriers that Block Them From Citizenship*, and there was a Zoological paper by Justin Garlitz, Jonthan Glogower, Barbara Dale

and Adrienne Peters of Earlham College entitled *Ant Species Distribution Among and Within Acacia drepanolobium Populations of Varying Density and Habitat Type*.

Each of the students and advisers received a box lunch and a commemorative T-shirt with conference registration. Forty-eight colleges and universities from Indiana and the surrounding states were represented at the conference.

The conference next year will be on April 11, 2014. For more information, consult the website at [urc@butler.edu](mailto:urc@butler.edu).

-- Jim Berry

## THE VALUE OF ACADEMY MEMBERSHIP

We live in a busy world and it is only getting busier. Hectic work schedules, longer trips, more activities for both work and family, distractions from television, the Internet, social media and other opposing factors hinder individuals from joining organizations.

**Why be a member of the Indiana Academy of Science?**

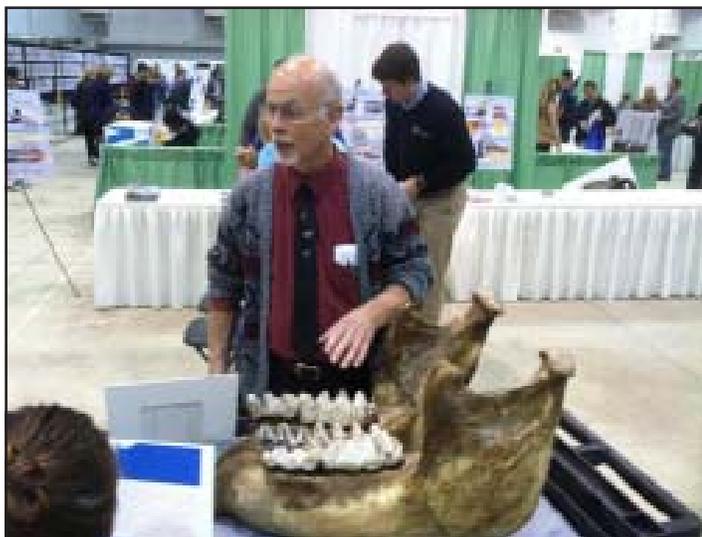
## INDIANA ACADEMY OF SCIENCE

When scientists and aspiring scientists intersect with other scientists and aspiring scientists, a synergy occurs like none other; they become increasingly connected. That is what membership in the Indiana Academy of Science makes possible.

Indiana scientists, science educators and young aspiring scientists join the Indiana Academy of Science because they want to make a difference: be it a change they want to affect in their own personal or professional lives as a scientist working in a laboratory, out in nature, at a corporate office, as a professor, as a writer, a teacher; a change they want to help cause in the wider world, or often best of all, a mix of both.

Academy members become a part of the Academy because they believe in it and they believe it can help make a difference.

<http://www.indianaacademyofscience.org...317.974.0827>



### Correction!

In the last issue of the newsletter we ran this photograph from the Fall Forum but forgot to mention the IAS member. We apologize. Here is the full credit.

**Ron Richard**, Academy Council Member and Chief Curator Science and Technology, Indiana State Museum, wowed CSI participants with both his talk to those in the auditorium area, as well as the hands-on experience he provided while walking up and down the aisles.

### **Our heartfelt sympathy...**

The Academy is deeply saddened to learn of the unexpected passing of the husband of Dr. Jarmilla Popovicova. Jarka has continued to serve the Academy as an elected member of the Research Grants Committee, and is the current Chair of that Committee. We remain grateful for Jarka's commitment to the Academy and holds Jarka and her family in our thoughts and prayers during this difficult time.

**The Indiana Academy of Science**

### **The Indiana Academy of Science's "Science Experts Database"**

If you have not already done so, please go to the the Indiana Academy of Science webpage and join the Science Experts Database.

The webpage is **[www.indianaacademyofscience.org](http://www.indianaacademyofscience.org)**

Once on the page, log in and click on **Scientists** on the right side of the bar at the top of the page and follow the instructions.

**Deadline for submission of copy for the September issue of the IAS Newsletter is  
September 6, 2013**

**Send copy to Donald G. Ruch at [druch@bsu.edu](mailto:druch@bsu.edu)**

**For IAS information, go to: [www.indianaacademyofscience.org](http://www.indianaacademyofscience.org)**