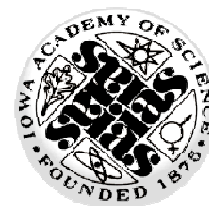


# Iowa Academy of Science

## The New Bulletin

Volume 6 Number 1 Spring 2010



*The Iowa Academy of Science is established to further scientific research and its dissemination, education in the sciences, public understanding of science, and recognition of excellence in these endeavors.*

### Message from the Executive Director

Hello from the Iowa Academy of Science.

This is your issue of the Spring IAS New Bulletin. Inside you will find the election ballot for IAS President-elect and the IAS Board of Directors. In addition, the ballot for members of the Iowa Science Teaching Section will include the candidate for Vice-chair of ISTS. These candidates have agreed to be considered for elected leadership positions in the Academy. Please read the candidate profiles before marking your ballot and returning it to the Iowa Academy of Science office. Ballots must be received or postmarked no later than March 29, 2010.

This year the Academy will hold its 122nd Annual Meeting at Graceland University in Lamoni. This is a one of a kind meeting for all science enthusiasts offering an opportunity to see and hear scientific presentations, meet with colleagues, learn about Iowa, national, and international research, and enjoy scenic southern Iowa with 3 educational field trips. You will also be able to meet some of Iowa's aspiring young scientists at Iowa Junior Academy of Science events and interact with other local high school students who will be attending the Friday session. Read more about Graceland University on page 5 of this issue. Download an Advanced Program and register online at <http://www.iacad.org>.

The IAS Saylorville Speaker Series co-sponsored by the Army Corps of Engineers at Saylorville is welcoming the following speakers for this year. They include Bill Desmarais, Aaron Haines, Laura Jackson, Christopher Jones, Steven Main, and Larry Stone. A complete schedule will be available on the IAS website soon.

Please read through this newsletter, cast your ballot, and register for the Annual Meeting in Lamoni!

Craig Johnson  
Executive Director

### Proposed Dues & Bylaws Changes

IAS Members attending the Annual Meeting in Lamoni will be asked to vote on the following proposals at the Business Meeting.

The Board of Directors is recommending a dues increase to take effect in 2011. The proposed increase will raise annual Professional Membership dues to \$70.00 from the current \$60.00. First year dues for new a member would increase from \$50.00 to \$60.00. Because student memberships are one-half the professional rate their dues would increase to \$35.00. A simple majority is required for approval.

*continued on page 6...*



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Reminder: Ballots are due March 29th, 2010!

## Candidates for President-Elect



### **Mark L. Anderson**

Project Archeologist, Office of the State Archeologist, University of Iowa

Member since 1991; served as Anthropology Section chair and vice-chair for multiple years; member of the Student Programs Committee (2008-2010); organized joint Anthropology/Science Teachers Section 2000 symposium on Teaching and Evolution.

*"The IAS is the quintessential science organization in the state, as well as being a stand out organization within the US. If elected, I will do my utmost to support the vision, mission and goals of the academy and to work for a greater public presence in all matters scientific that concern Iowans."*

### **Professional Experience**

### **Activities and Recognition**

- Project Archaeologist for the Highway Archaeology Program, 1989-present
- Survey Archaeologist for the General Contracts Program, 1987-1989
- National Pilot Study in Archaeological Bibliographic Database Creation, Iowa State Historical Society 1986
- Excavation and research experience in Oregon, South Dakota, Indiana, Ohio, Michigan, Minnesota, Wisconsin, and Ontario.



### **Thomas Rosburg**

Associate Professor and Chair of Biology, Director of Environmental Science and Policy, Director of Drake Biodiversity Center, Curator of Drake herbarium, Drake University

Member since 1989; Elected to Fellow Status in 2001; Board of Directors, 2002 to 2005; Associate Editor of Botany, *Journal of Iowa*

*Academy of Science*, 2004 to present

*"For over 125 years the Academy has been an important voice for science in Iowa. Iowa scientists from all disciplines benefit from a strong academy, which depends on the collective work and support of its members. The Academy has provided essential support to me several times over the last 20 years, so it's only right that I do my part to help continue its science tradition for those to come and offer to provide my service to the Academy."*

### **Professional Experience**

- 2009 to present, Chair of Biology, Drake University
- 2005 to present, Collaborating Faculty, Ecology, Evolution, and Organismal Biology, Iowa State University
- 2004 to present, Director of Environmental Science and Policy, Drake Univ.
- 1977, B.S. Fish and Wildlife Biology, Iowa State University

### **Activities and Recognition**

- Prairie Advocate Award, Iowa Prairie Network 2009
- Governor's Iowa Environmental Excellence Award, 2004
- Loess Hills Preservation Society Special Recognition Award, 2003
- Loess Hills Seminar Honoree Award, 2003

## Candidates for IAS Board of Directors



### **Melinda A. Coogan, Ph.D.**

Assist. Professor of Biology, Buena Vista University

IAS member since 2008; Student Research Presentations 2008 & 2009 IAS Annual Meetings; Project WET collaborations with BVU

*"The Iowa Academy of Science has established a tradition of promoting science research and science education on both local and state levels. Serving on the Board of Directors would provide me with the privilege of continuing this tradition and working toward finding creative solutions to the challenges of growth and state-wide support for educational programs that encourage student training and dissemination of scientific knowledge. Being able to serve IAS in this capacity would be a tremendous opportunity."*

### **Professional Experience**

Assist. Professor of Biology, Buena Vista University, 2007-present; Ph.D., University of North

Texas, 2007

### **Activities and Recognition**

2009 BVU Wythe Award Finalist for Teaching Excellence; 2009 Expert Reviewer for Ecological Screening Assessment Report of Triclosan for Environment Canada; 2009 Women of Excellence Nomination, United Way, Sioux City

## Candidates for IAS Board of Directors Continued...



**Mary P. Skopec**  
Senior Research Scientist  
Watershed Monitoring and Assessment Section  
Iowa Department of Natural Resources  
IAS Member since 2009.

*"Expanding scientific literacy and supporting new research efforts within Iowa are key issues for our state. IAS is uniquely positioned to bring Iowa's scientists together in a collaborative way - providing a forum for ideas to be exchanged within the scientific community. If elected, I would be honored to serve on the IAS Board and look forward to committing my time and energy to such a worthy organization."*

**Professional Experience**  
2008- present Senior Research Scientist, Water Monitoring & Assessment, IDNR  
2001 - 2008 Supervisor, Watershed Monitoring and Assessment, IDNR  
1999 Interdisciplinary Ph.D. (Geography), University of Iowa

**Activities and Recognition**  
National Water Quality Monitoring Council - Board Member 2006 - present.  
Governor's Golden Dome Award - Leader of the Year, 2005  
Governor's Golden Dome Award - Team of the Year 2007  
University of Iowa, Teaching and Research Fellowship 1987-1991.  
and Mathematics and Science Partnership Grant Program.



**John Pearson**  
Botanist/Plant Ecologist, Iowa Dept. of Natural Resources  
IAS member since 1985; served as chair of Botany and Conservation sections; served on Conservation Committee

*"Scientific research and science education are crucial elements for empowering citizens to choose wisely when faced with decisions about conservation of biodiversity. As a conservation agency ecologist, I would work to identify opportunities for the Academy to interact with researchers, teachers, and the public to promote sound conservation action."*

**Professional Experience**  
Botanist/Plant Ecologist for Iowa Department of Natural Resources since 1985, involved with natural areas inventory, threatened and endangered species, state preserves, and state parks. PhD Botany from University of Wyoming (1982), MS Forestry from Southern Illinois University (1978), BA Psychology from Oakland University (1973).

**Activities and Recognition**  
co-author of The Guide To Iowa's State Preserves book  
co-author of "Floristic composition and conservation status of fens in Iowa" (JIAS 99(2-3):41-52)  
author of essay for Deep Nature: Photographs from Iowa book



**Karen Couch Breitbach**  
Instructor of Teaching & Science Education, University of Northern Iowa  
Member since 1992; ISTS Regional Director for AEA 7; Recipient of the Excellence in Science Teaching Award—Physical Science, 1999

*"Throughout my teaching career I have been an active member of the Science Teaching Section of the Iowa Academy. Considering the challenges that we face in science education, as well as the environmental and political issues confronting the state, this is the perfect time to become more involved with the Academy. IAS is in a position to bring scientists and science educators, politicians, and members of our business community together to address issues that concern not only the state of Iowa, but our nation. Not only do I have a perspective on science and science education that I can bring to the board, but my participation on the board will help broaden my view of what we need to be doing in the classroom at both the middle school and high school levels, as well as in teacher preparation at the college level."*

**Professional Experience**  
1984 - present Instructor of Teaching and Science Education, University of Northern Iowa, Malcolm Price Laboratory School

Upward Bound Program (Math/Science Initiative), Curriculum Coordinator (1992 - 94) and Chemistry Instructor, University of Northern Iowa, (1992 - present).

1991-1995 Young Scholars Program (Early Alert Initiative), Assistant Director and Instructor, University of Northern Iowa

**Activities and Recognitions**  
Tandy Technology Scholars Outstanding Teacher (1995-1996)  
Designated as a model integrated classroom for the Dwight D. Eisenhower Mathematics & Science Education Grant, Modeling Integrated Mathematics and

# Iowa Academy of Science – Election 2010 Ballot

Rules: Ballots must arrive at the IAS Office by March 29<sup>th</sup>, 2010. One Ballot per member.  
Only original ballots will be accepted, no photocopies or faxes.  
Return to: Toni Arends, UNI—175 Baker Hall, 2607 Campus St., Cedar Falls, IA 50614-0508

## IAS President-Elect

(vote for one)

\_\_\_\_\_ Mark Anderson

\_\_\_\_\_ Tom Rosburg

\_\_\_\_\_ write in \_\_\_\_\_

## IAS Board Director

(vote for two)

\_\_\_\_\_ Melinda Coogan

\_\_\_\_\_ Karen Couch-Breitbach

\_\_\_\_\_ write in \_\_\_\_\_

\_\_\_\_\_ John Pearson

\_\_\_\_\_ Mary Skopec

**VOID - Only original ballots  
sent to individual members  
will be accepted.**

**ISTS Section Vice Chair** (*this portion of the ballot is only printed in issues of the bulletin mailed to members of the ISTS Section*)

\_\_\_\_\_ Adam Puderbaugh

\_\_\_\_\_ write in \_\_\_\_\_

## Candidate for ISTS Section Vice Chair



**Adam Puderbaugh**  
Science Teacher, Des  
Moines Public Schools

Member since 2010.

*"I believe ISTS provides excellent opportunities for science teachers to learn, grow, and exchange ideas professionally. I have left every conference feeling recharged with great ideas and new contacts. I am honored to be asked to help continue this great program and create new opportunities for teachers to further our great profession."*

### Professional Experience

2008 – Present: East High School Science Teacher (Earth Science, Biology, Environmental Science)

2005 -2008: Moulton Middle School Science Teacher (7th- 8th grade science)

### Activities and Recognition

Science Bound Leader  
CBIRC Researcher/Teacher  
Member of NSTA  
NSTA national conference presenter

**(note your ballot will only include an option to vote for ISTS Vice Chair if you are currently a member of the ISTS Section.)**

## Iowa Outdoor Youth Summit

***Look deep into nature, and then you  
will understand everything better.***  
~Albert Einstein

Saturday, April 10, 2010 from 9am – 5pm  
With optional recreational activities on Sunday,  
April 11\*, 2010 from 8 am – noon

Springbrook Conservation Education Center

Purpose: To bring together "teams" of youth and adult mentors from across the state to develop action plans for getting more kids outdoors in their local area develop a comprehensive action plan for getting kids outside strengthen relationships between environmental and youth development organizations initiate, energize and support collaborative work.

For More Information or Registration Forms:  
<http://www.iowadnr.gov/education/coalition.html>  
Email [AquaticEd\\_Info@dnr.iowa.gov](mailto:AquaticEd_Info@dnr.iowa.gov)  
Call 641-747-2200

## Graceland and Lamoni are Melting Pots of Tradition and Diversity in Southern Iowa

**Spotlight on  
Graceland University**  
Location of the 2010  
IAS Annual Meeting  
April 16 & 17  
Info: [www.iacad.org](http://www.iacad.org)

Located in the scenic rolling hills of southern Iowa, two unique communities have enjoyed a mutually rewarding friendship for more than a century. Graceland University was founded in 1895. It is a church-based, liberal arts university that prides itself on great academic programs and a "nurturing community" for its 1,000 students. Part of what makes Graceland special is that it sits up on "the Hill," as we say, overlooking the friendly small town of Lamoni.

Lamoni is a town with a feel of the past and yet it is immersed in all that a vibrant, cutting-edge university has to offer. The new, state-of-the-art Resch Science and Technology Hall just opened in the fall of 2009. It offers spacious classrooms and laboratories, industry-standard equipment and top faculty that are attracting science, math and technology students from around the world.

Students from 47 states and 41 countries are on campus this year – 17 percent are international students who add a diversity of culture and ideas to the region. GU offers more than 50 academic majors and programs and a 15:1 student/faculty ratio for a personalized education. Our national-champion Students in Free Enterprise (SIFE) team finished 2nd in the world not long ago, competing against 1,400 university teams. Graceland's sponsoring church is the Community of Christ, based in Independence, Missouri. Our nationally-respected School of Nursing, Seminary and extensive online bachelors and masters offerings in education and nursing are located at our 10-year-old campus in Independence.

Graceland is part of daily life for the 1,500 residents of Lamoni. They enjoy world-class performing arts events, visual arts exhibitions, great collegiate football games, academic lectures and symposiums, national-champion men's and women's soccer matches and the games of 16 other varsity teams that compete in the NAIA. We have a new, artificial-turf football field, great outdoor track facilities, an indoor track and pool, two art galleries, a 750-seat auditorium, wonderful theatre and music programs and an array of other academic and social activities. There is always something exciting to do on "the Hill."

Graceland owns/operates a restored, vintage movie theatre that is shared by the entire region. A beautiful, new Welcome Center on the edge of town (on Interstate 35) is also owned/operated by Graceland. An authentic Amish Country Store at the Welcome Center site opened in 2009, along with an iconic 1950s-style Maid-Rite restaurant. About 50 Amish families have settled around Lamoni in recent years and they have added an old-world charm, enhancing Graceland and Lamoni's uniqueness and friendly atmosphere. Their beautiful Amish quilts, furniture, baskets, baked goods and much more are sold at the Country Store.

Graceland was recently named a "Best in the Midwest" University by the Princeton Review. GU is one of only 158 institutions profiled in the "Best in the Midwest" feature of the 2010 Best Colleges: Region by Region. The 640 colleges across the country named "regional bests" represent only about 25% of the nation's 2,500 four-year colleges.

Perhaps no occasion demonstrates the uniqueness of Graceland and Lamoni more than our annual July 4th Celebration. You see students from Venezuela and Nepal eating corn on the cob alongside Amish farm families and Ph.D. professors in Religion and Chemistry. The fabric store owner and a café proprietor are pitching horseshoes with Theatre students from Kosovo and soccer players from Peru. The volunteer fire chief and the university's president are parked on a shaded bench, swapping stories with a man who farms nearby land his family has owned for 120 years. All is well for Graceland and Lamoni, where "town" and "gown" share Main Street with horse and buggy.



*For more information, contact:  
Randy Meline, Director of Media Relations, Graceland University  
641.784.5213—888.427.8985 (toll free)  
[meline@graceland.edu](mailto:meline@graceland.edu)*

## Proposed Dues & Bylaws Changes continued...

The Board of Directors is also recommending changing Article XI – Finance, section 3e of the Bylaws to read, “The membership year of the Academy shall coincide with the calendar year.” The word “calendar” replaces “fiscal” in the current Bylaws. Changes in the Bylaws require an affirmative vote of a majority of the voting members present at the Annual Business Meeting of the Academy.

Current IAS Bylaws are available on the IAS website at:  
[http://www.iacad.org/download/bylaws\\_2005.pdf](http://www.iacad.org/download/bylaws_2005.pdf)

Members with questions or concerns about Bylaws changes may contact Craig Johnson at [craig.johnson@uni.edu](mailto:craig.johnson@uni.edu) or 319-273-2581.

**Continuity gives us roots;  
change gives us branches, letting us stretch and  
grow and reach new heights. ~Pauline R. Kezer**

**Watch for Volume #116 of the Journal of the Iowa  
Academy of Science. Change is coming...**

## Announcements, Events & Deadlines

- **CVRMS Gem, Mineral & Fossil Show**  
March 20-21, 2010  
[www.cedarvalleyrockclub.org](http://www.cedarvalleyrockclub.org)
- **IAS and ISTS Ballots Due**  
March 29th, 2010
- **Advanced Registration Deadline**  
April 5th, 2010, last chance for \$10 registration discount and to order meal tickets.
- **IJAS Silent Auction Donations Due**  
April 5th, 2010
- **Iowa Wetlands Workshop** for 3rd-6th grade teachers, Orange Elementary, Waterloo  
more info: [seavey@uni.edu](mailto:seavey@uni.edu)  
April 10th, 2010, Register by April 1
- **122<sup>nd</sup> IAS Annual Meeting**  
April 16th-17th, 2010, Graceland University
- **Presentation Submissions**  
For the ISTS Fall Conference on or before June 4, 2010
- **ISTS Fall Conference**  
October 7th-9th, 2010
- **USA Science & Engineering Festival**  
October 10-24, 2010

Do you have know of an event that should be listed in here? Contact [iascience@uni.edu](mailto:iascience@uni.edu) and let us know!

## Call for Presentations Iowa Science Teaching Section Fall Conference

Changing  
Iowa Classrooms:  
One-Room  
Schools  
to  
One-World  
Education



**Thursday-Saturday,  
October 7th-9th, 2010  
Ames**

Content and pedagogy presentations welcome! Proposal deadline is June 4th, 2010!  
Details and Proposal Submission available at:  
**<http://ists.pls.uni.edu/>**

## Gifts made to the Iowa Academy of Science in 2009

### Under \$50

Paul Bartelt  
Don Blaker  
Daniel Deavers  
William Desmarais  
Jeffrey Elbert  
Donald Farrar  
Elwood Garlock  
Thomas Gibbons  
William Gilbert III  
David Hampton  
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Terry Meyer  
Brenda Molano  
Joyce Norton  
John Pesak  
Lee Potter  
Dennis Schlicht  
Marcy Seavey  
Richard Shibles  
Duane Priestersbach  
Diane Robertson  
Edna Wheelock



### \$50 plus

Neil Bernstein  
George Burnett  
Lee Burras  
John Clem  
Laverne Durkee  
Lenore Durkee  
Pat Finnerty  
Earl Hammond  
Tony Heiting  
Donald Langr  
Howard Lenhoff  
John Pesek  
Jean Sandrock  
Robert Summerfelt  
Clayton Swenson  
Ruth Swenson  
Paul Waite

### \$100 plus

E. Robert Baumann  
Gary Donnermeyer  
Thomas Fenton  
Donald A. Gurnett  
Craig Johnson  
Charlie Martinson  
Bion Peirson  
Karl Seifert  
Nick Stoyhoff  
Peter van der Linden  
John Patterson

### \$250 plus

none

### \$500 plus

Harry Horner  
Cherin Lee

**Thank you to all  
Academy members who  
made financial  
contributions to IAS  
between January 1 &  
December 31 2009.**

## Iowa Science Teachers *Journal*

### CALL FOR PAPERS

**The Academy encourages its members to contribute their classroom activities and ideas for improving science education to the Iowa Science Teachers Journal.**

**Submission guidelines are posted at  
[ists.pls.uni.edu/ists/submit/index.html](http://ists.pls.uni.edu/ists/submit/index.html)**

**Questions can be directed to the Managing Editor, Joe Taylor, at [joetay@iastate.edu](mailto:joetay@iastate.edu)**

# Iowa Academy of Science The New Bulletin

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Managing Editor: Craig Johnson  
Editor: Marcy M. Seavey

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**Article Submission:** The deadline for submission of articles for Vol. 6 #2 is June 1, 2010. Articles must be pre-approved. For more information contact Craig Johnson, IAS Executive Director, at [craig.johnson@uni.edu](mailto:craig.johnson@uni.edu)

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## **Iowa Academy of Science Institutional Members**

University of Northern Iowa, Cedar Falls  
Buena Vista University, Storm Lake  
Central College, Pella  
Coe College, Cedar Rapids  
Cornell College, Mt. Vernon  
Des Moines University, Osteopathic & Podiatric Medicine  
Drake University, Des Moines  
Earthpark, Pella  
Graceland University, Lamoni  
Grand View University, Des Moines  
Great Ape Trust of Iowa, Des Moines  
Grinnell College, Grinnell  
Iowa Central Community College  
Iowa Conservation Education Coalition  
Iowa State University, Ames  
Iowa Wesleyan College, Mt Pleasant  
Kirkwood Community College, Cedar Rapids  
Krell Institute, Ames  
Loras College, Dubuque  
Luther College, Decorah  
Mount Mercy College, Cedar Rapids  
North Iowa Area Community College, Mason City  
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Simpson College, Indianola  
The Nature Conservancy, IA  
The Putnam Museum, Davenport  
University of Dubuque, Dubuque  
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