

Iowa Academy of Science

The New Bulletin

Volume 2 Number 2 Spring 2006



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

Our Annual Meeting at Buena Vista University is fast approaching and we hope you are making plans to attend. This year's general sessions and symposia will cover a variety of important and timely topics with an excellent line-up of speakers. We are wrapping up this year's meeting with three special events designed to highlight the technology, leisure activities, and landforms of northwest Iowa. More information is available in your Advance Program Guide or on our website at www.iacad.org.

Buena Vista University is generously offering 40 registration scholarships to the IAS Annual Meeting. Awardees must be K-12 Iowa educators who have never attended an IAS Annual Meeting. The scholarships will be awarded on a first come basis. Check the program guide, the website or call the IAS office at 319-273-2581 to take advantage of this offer.

Have you ever wondered about the technology and decision-making process necessary to issue tornado warnings? General Session I will take us behind the scenes with two National Weather Service meteorologists, Jeff Johnson and Karl Jungbluth. Friday evening General Session II features Dr. Patricia Quinlisk, Epidemiologist for Iowa, followed by a distinguished panel discussing pandemics and the possible impact on Iowa. Saturday morning Session III features Dr. Kathie Olsen, the Director of the National Science Foundation.

This year's symposia cover "Seed Genetics from Three Perspectives," "Stressing Iowa's Environment: An Argument, A Snapshot, An Overview," and "A Fifty Percent Chance of Partly Cloudy: An Introduction to Modern Weather Forecasting Workshop." The special events include a fly fishing workshop including a training session Friday morning followed by a Saturday afternoon field trip. The annual Geology Field Trip is on the agenda as is a 1 hour tour of the VeraSun Ethanol Plant near Fort Dodge.

The Iowa Academy of Science needs your help to support science in Iowa. There will be many opportunities if we all work together to grow this fine organization. Please attend the Annual Meeting to learn more and connect with other Academy members. This is the only organization of its kind in Iowa and it is uniquely positioned to advance science, science education, and the public understanding of science. Please attend this meeting and invite a friend or colleague.

-Craig Johnson, Executive Director



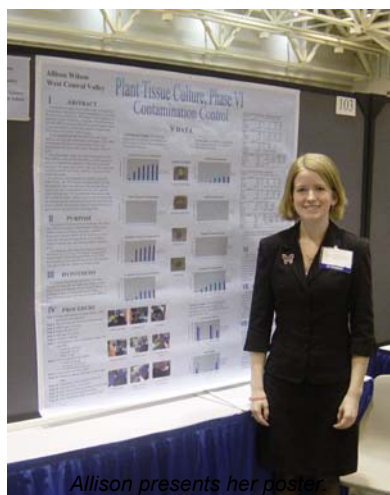
Iowa's 2006 AmJAS Delegation:
Cory, Ernest, Allison, Alicia
See Next Page for Story



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Iowa's Young Scientists Shine at American Junior Academy of Science Conference



Allison presents her poster
Photo by Alicia Schiller

Senior Allison Wilson of West Central Valley High School and Sophomore Cory Millmier of Central Lee High School represented the state of Iowa at the American Junior Academy of Science Conference in St. Louis this February. Allison and Cory competed in the IAS Annual Meeting Competition last year, where they were selected by the Academy for their exceptional research and presentation skills. Student Program Committee Chair Ernest Schiller, Teacher Alicia Schiller, and IAS Program Director Marcy Seavey accompanied the students on the trip.

Allison has been participating in science fairs since 6th grade. She presented her research entitled *Plant Tissue Culture, Phase VI: Contamination Control* at the AmJAS Conference. Allison plans to attend Iowa State University in the Fall and major in Engineering. Cory's research entitled, *Use of Probiotic Bateria to Inhibit the Growth of Pathogenic Bacteria*, drew the attention of science educator Bill Nye. Cory says "I felt honored to represent the state of Iowa at the American Academy of Science held in St. Louis, Missouri. I had the opportunity to hear presentations by scientists concerning their

research and meet students from across the country, which were involved in science. Our country's future depends on the young people of today. Science teachers should encourage their students to participate in science research that may open doors to their future. Besides the learning experience, students have the opportunity to share their research with others and meet people in the science field and science related industry."

Both Cory and Allison are currently competing in the 2006 state and regional Science Fairs with new research projects.



Cory and Bill Nye.
Photo by Alicia Schiller

Iowa Academy of Science – Election 2006 Candidates for President Elect and IAS Board of Directors

(For more about all of the candidates visit the IAS webpage: <http://www.iacad.org>)



Candidate for the IAS Board:

Mark L. Anderson
Office of the State Archaeologist - the University of Iowa

The Iowa Academy of Science is the premiere scientific body in the state. We collectively hold a responsibility and obligation to the citizens the state to provide quality leadership in all matters concerning science education, research, and application. If elected I will serve assiduously, with this in mind.



Candidate for the IAS Board:

Lyn Countryman
Malcolm Price Laboratory School

Research Interests: Middle school practice, constructivist teaching strategies (mainly in science), national standards, assessment, concept mapping, adolescent nutrition, national certification by the National Board of Professional Teaching Standards, gender equity in the science classroom.



**Candidate for
President Elect:
Erica Larson**

Grant Wood AEA
Science Curriculum
Consultant
IAS Member Since:
1988, Fellow in 2005

For the past five years I have served K-12 schools in the seven county GWAEA area as a science curriculum consultant. Prior to that I served for one year as a Secondary Science Methods Teaching Assistant in the University of Iowa Secondary Science Education program. And prior to that I served as a secondary science educator for 20 years: 13 in Tipton CSD, Tipton Iowa; 2 in Farmington, MN; 2 in Muncie, Indiana, and; 3 in Mitchell, South Dakota. I have been a member of the Q section of the Iowa Academy of Science since 1986. I have served as an IAS Board member, Iowa Science Teachers Section of the Iowa Academy of Science Fall Conference Chair, Past-President, President, President-Elect, Secretary (for two terms) and Regional Director (for 3 terms). Last year I was awarded the honor of Fellow to the Iowa Academy of Science.

IAS affords a unique opportunity for scientists and science educators to collaborate on a common mission to further scientific research, science education, public understanding of science and recognition of excellence in these endeavors. I pledge to donate my time, talents and service toward achieving that mission.



Candidate for the IAS Board: Richard B. (Rick) Hall
Wallace Professor of Forestry, Department of Natural
Resource Ecology and Management, Iowa State
University

Now, more than ever, the Iowa Academy of Science is needed to build bridges of understanding between our different branches of science and to the general public. Two priorities should be to encourage more graduate student papers at the Annual Meeting and to support public dialogs on science.

**Candidate for
President Elect:
John Pearson**

Botanist/Plant Ecologist,
Iowa Department of
Natural Resources
IAS Member Since: 1985



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.

Plant ecologist for The Nature Conservancy 1982-1985
for South Dakota Natural Heritage Program. Doctoral
degree in Botany from University of Wyoming (1982),
master's degree in Forestry from Southern Illinois
University (1978), bachelor's degree in Psychology from
Oakland University (1973).

I have served as chair of Botany and Conservation
sections and on the Conservation Committee.

A challenge for the Iowa Academy of Science will be to
continue to provide leadership for science and science
teaching issues while faced with a general trend toward
membership of scientists in national, specialized
professional societies and decreasing participation in
state organizations.



Candidate for the IAS Board: Darin Strike
Consultant, AEA 267 –Clear Lake Regional Office

Science education is moving to the forefront in the State
of Iowa and around the world. Current issues such as
NCLB science score reporting requirements and the
state science initiative (Every Learner Inquires-E.L.I.) will
be instrumental in making this shift. The collaboration
between science professionals, colleges and
universities, and science educators that takes place
through the Iowa Academy of Science will be a catalyst.
I support the growth and future endeavors of science in
Iowa.

Iowa Academy of Science – Election 2006 Ballot

Rules: Ballots must be postmarked by Friday, April 14th, 2006. One Ballot per member.
Return to: Toni Arends, IAS Office Manager, 175 Baker Hall, Cedar Falls, IA 50614-0508

IAS President-Elect (vote for one)

_____ Erica Larson

_____ John Pearson

IAS Board Director (vote for two)

_____ Mark Anderson

_____ Lyn Countryman

_____ Rick Hall

_____ Darin Strike

Saylorville Visitor Center



Dr. Gene Lucas

Saylorville Lake is nestled along the Des Moines River north of Des Moines and is home to a valuable cooperative venture between the Iowa Academy of Science and the U.S. Army Corps of Engineers. As part of the Academy's mission to advance the public understanding of science in Iowa, a relationship was established in 1993 between the Corps of Engineers and the Academy to provide interpretive and educational information for the public's benefit.

The Saylorville Visitor Center, located at the east end of the 105 foot dam, was established by the Army Corps of Engineers as an interpretive facility to inform the public about the safe use of Corps facilities and provide an educational experience about the archeological, natural, and cultural history of the area. The 1993 agreement allows the Academy in conjunction with the Corps to operate the gift shop within the Visitor Center and stock it with items and educational materials. Profits from the shop are split between the Corps and the Academy.

IAS Member Dr. Gene Lucas has been responsible for oversight of the gift shop. Gene has ordered products, maintained the inventory, and reported on the financial status of the shop to the Corps and the Academy. We want to thank Gene for his volunteer service to the Academy and for supporting the public understanding of science in Iowa. His is an example of how pitching in can make a difference. Gene joined the Academy in 1965, became a Fellow in 1975, and is now an Emeritus Fellow (retired from Drake University). His area of interest is Biology.

The agreement with the Army Corps of Engineers also allows the Academy to be actively involved in providing programs to the public at the Visitor's Center. This is an area that the Academy has not fully utilized and that members may not be fully aware. It is an opportunity for the Academy to engage the public by organizing programs of interest. If you have an idea for an outreach program that could utilize the Saylorville Visitor Center please contact the Academy office. This is another way the Academy can become more visible to the residents of Iowa.

What to do at the Saylorville Reservoir

- Take a walk or bike along the 24 miles of nature paths which connect the lake to the Visitor Center and the Des Moines Botanical Center
- Go fishing any time of the year.
- Hold a picnic for 1 to 250 of your friends at one of the area shelters.
- Go bird watching, common species include Great Egrets, Double-Crested Cormorants, Greater Scaups and more.
- Camp with the family in one of the four campgrounds.
- Volunteer to maintain a butterfly garden bed, bluebird box trail, nature trail or section of shoreline.

Thank You to IAS Donors!

Donations from IAS Members and Friends

\$1000 and Up

None

\$500-\$999

None

\$250-\$499

None

\$100-\$249

Edward Bauman

John Clem

A. W. Guzick

Edward Finnerty

Harry Horner

Charlie Martinson

Jean Sandrock

Frank Starr

Less than \$100

Paul Bartelt

George Burnet

Cliff Chancey

Cedar Valley Progressive Bankers

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Gary Donnermeyer

Mary Alice Ericson

Peter Hansen

Gilbert Hewett

Laurence Hutzell

Dennis Keeney

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Donald Koch

Sherman Lundy

Richard Markuszewski

Richard McGaughy

Brenda Molano

James Redmond

Donald Schmidt

Karl Seifert

Melissa Spencer

Clayton Swenson

Ruth Swenson

Other IAS Funding

The GLOBE ONE Project which began in February 2004 and will end this August has been funded for \$150K through a subcontract and in-kind services from The GLOBE Program.

The IAS GLOBE Partnership is also a partner with the University of Northern Iowa Center for Educational Technology and Storm Program on the IMPACT Project. This project is funded by a Title II Educational Grant. In 2005-2006, the IAS portion of this grant was \$15,953. This grant has been renewed for the next 3 years.

Nestle Waters and Project WET USA provided \$3,000 in funding for the 2005 Make a Splash with Project WET Children's Water Festival.

IAS is a partner with the University of Northern Iowa Science Education Department and Native Roadside Vegetation Center on a REAP-CEP grant to develop the 5-12 Curriculum Supplement for America's Lost Landscape: The Tallgrass Prairie. The IAS portion of this grant was \$5,486.

The Iowa Science Teachers Sections raised \$44,843 in donations, exhibit fees and registration fees to pay for the 2005 ISTS Fall Conference.

The Sailorville Gift Shop raised \$3,000 in profits for IAS general operating funds.

The Iowa Space Grant Consortium donated \$2,500 to the Iowa Junior Academy of Science to fund Iowa's delegates to the American Junior Academy of Science Conference in February of 2005.

Iowa Science Teachers Section Fall Conference Moves!

ISTS conference will be held at the Crowne Plaza Hotel in Cedar Rapids on Wednesday, October 18th. The new date and location are due to the NSTA regional meeting that will be held in Omaha on the following day. Presentation submissions are still being accepted. Visit the Iowa Science Teachers' Section website for more information (<http://ists.pls.uni.edu/>).

Donations for January 1st-December 31st, 2005.



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Return Service Requested

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Article Submission: The deadline for submission of articles for Vol. 2 #3 is June 1, 2005. Articles must be pre-approved. No. 3 will be available online only. For more information contact Editor Marcy Seavey, IAS Program Director, at iowawet@sunny.uni.edu

Advertising Rates: Full page, single issue \$160; Half page, single issue \$60, two consecutive issues \$100; Business Card (3.5"x 2.0"), single issue \$30, two consecutive issues \$50. For more information or to submit an advertisement, contact iascience@uni.edu

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Iowa State University, Ames
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