

Iowa Academy of Science

The New Bulletin

Volume 3 Number 3 Autumn 2007



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

Fall has arrived and so has your Iowa Academy of Science Bulletin. The weather is certainly changing and there are signs of autumn everywhere. Enjoy the pleasant days and cool nights while taking a few minutes to catch up on IAS happenings.

The Iowa Science Teachers Section is holding its annual Fall Conference at the Crowne Plaza and U.S. Cellular Center in Cedar Rapids on October 18th. This year's theme is "Opportunities for Learning." The keynote speaker is Andrew Chaiken, nationally known flight and space author and journalist. Check inside for more information.

Please mark your calendars for the 120th Annual Meeting of the Iowa Academy of Science to be held April 11th and 12th at Kirkwood Community College in Cedar Rapids. Kirkwood Community College will be sponsoring a lively and dramatic seminar for teachers and students. General Sessions will include presentations on nuclear energy, and an educational and entertaining chemistry extravaganza. The President's Banquet will be a gourmet delight presented by the Kirkwood Culinary Arts Program. Look for more information in the fall mailing.

We thank Academy members who are promoting IAS membership. Members, by far, are our most effective ambassadors. If you need brochures for prospective new members please contact the Academy office. The goal is to double Academy membership. Posters and brochures have been placed in many institutions but we need to add more. If you don't see a poster in your institution, department, or school, please call us. We want them in as many locations as possible for maximum impact.

The offer is still on the table to reduce your dues next year by \$10 (up to 6) for each new member you attract to the Academy. Thank you for your support of the Iowa Academy of Science. If you have questions or suggestions please feel free to contact the Academy office.

On behalf of the Board of Directors, Marcy, Toni, and our new student worker Emily, enjoy the fall season.

Craig Johnson, Executive Director

Iowa Science Teachers Section Fall Conference

The Iowa Science teachers section has put together a phenomenal program for this year's ISTS Fall Conference, including more than 50 concurrent sessions, an expanded exhibit hall, Interest Area breakfasts, and keynote speaker Andrew Chaikin. Back by popular demand, there are 5 pre-conference workshops available as well. For more information see pages 3 and 4.



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Myrle Burk

Myrle Burk Scholarship Winners

The Myrle Burk Scholarship program was created by Myrle Marie Juliana Burk. . Myrle, a long time member of the Iowa Academy of Science, left a generous contribution to the Academy to create a scholarship for undergraduate and graduate students pursuing the study of birds. This year's scholarship winners are:

- Joy K. Fisher, Coe College, 3rd year student, Major: Biology/Art, \$750
- Ross R. Conover, Iowa State University, Ph.D. student - 2nd year, Major: Animal Ecology, \$750
- David A. Miller, Iowa State University, Ph.D. candidate; Major: Ecology and Evolution Biology, \$750
- Paul Skrade, Iowa State University, Grad student - 2nd year, Major: Animal Ecology, \$750

For more information see the IAS Website: <http://www.iacad.org/research.html#mburk>. The deadline to apply for a Myrle Burk Scholarship for the 2007-2008 school year is March 28, 2008.



Now is the time to think about the Academy Awards

No, not the movie awards. Nominations for the Distinguished Science Awards are due on the first Friday in February and nominations for the Excellence in Science Education Awards are due January 31st, 2008.

The Distinguished Awards Program recognizes the best contributions of Iowans to science research, post-secondary science education, and service to science. An individual or organization which has contributed to science research and/or science education to the benefit of the entire state of Iowa may be nominated for the Distinguished Service Award. Only individuals may be awarded a Distinguished Iowa Scientist Award or Distinguished Iowa Science Teaching Award. The highest award given by the Academy is the Distinguished Fellow Award. This award is to recognize Iowans who's contribution to science and/or science education has reached beyond the state of Iowa to the national or international level. Distinguished Award nominations require 3 letters of recommendation and documentation of contributions, usually complete publication lists and vita.

The Excellence in Science Education Awards are open to K-12 Science teachers. Awards are given in the following 6 areas: Physical Science, Life Science, Elementary Science, Earth/Space Science/Environmental Science, General/Multiple Science, and Middle School/Junior High Science. Two letters of support are required and the person nominated for the award must complete an essay application.

Get an early start on your nominations for these awards by visiting the IAS Website and reviewing the section: **Recognizing Great Science.**



Project WET Update

The Academy's team of Project WET facilitators have provided professional development workshops for 272 preservice educators last spring and early this fall. The WET workshops are funded through a grant from the Iowa REAP-CEP Program. The Academy has funds to train an additional 128 preservice educators before the end of the year.

The Project WET preservice workshop provides Iowa's future teachers with much needed experience in environmental education. Workshop participants learn about the water cycle, watersheds, and resource management by experiencing several activities from the guide. In many cases, the Project WET workshop is the only environmental education experience a preservice teacher receives during an undergraduate program.

The Academy also offers custom project WET workshops for all grade levels and subjects to individual school districts and AEAs. For more information contact: Marcy at 319-273-7486 or seavey@uni.edu.



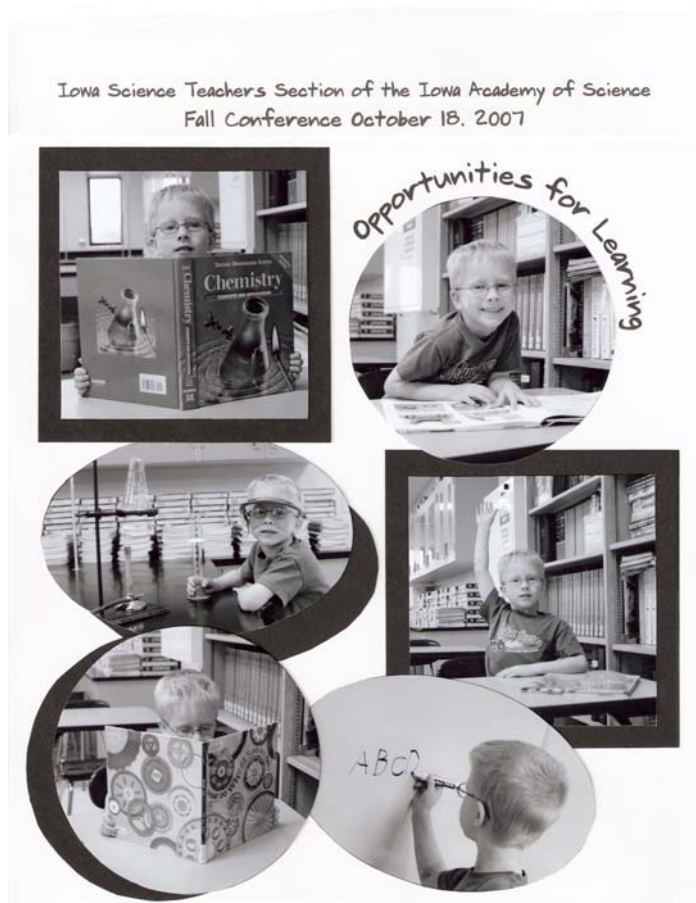
Resource Enhancement And Protection

Invest in Iowa

Our Outdoors
Our Heritage
Our People

Opportunities for Learning

Iowa Science Teachers' Section Fall Conference



October 17th and 18th, 2007
Five Seasons Crowne Plaza Hotel, Cedar Rapids

Luncheon Speaker: Andrew Chaikin
Author of A Man on the Moon: The Voyages of the Apollo Astronauts

Start the day right! Be sure to sign up for an Interest Area Breakfast!
Chemistry Interest Area Breakfast
Earth Science Interest Area Breakfast
Elementary Interest Area Breakfast
Biology Interest Area Breakfast

Program of events and registration materials available at:
<http://ists.pls.uni.edu/fall-conference/index.html>

ISTS Fall Conference—Wednesday Evening Workshops

6:00-9:00 pm, Wednesday, October 17th, 2007

Pre-registration Required: <http://ists.pls.uni.edu/fall-conference/index.html>

A. Connecting Students to Local Outdoor Classrooms

(K– 16) Ecology/Environment

Jan Aiels Indian Creek Nature Center, Naturalist
Fee: \$20 per person. Minimum of 10 participants.
Location: 6665 Otis Road SE, Cedar Rapids, Iowa

Indian Creek Nature Center will conduct a tour of our center including a walk in the prairie and oak savanna restorations. We will discuss how students and classes have been involved in restoration work at the Center and suggest possible projects that might be done in other communities. Learn about unique prairie plants and the history of prairie in Iowa.

B. Introduction to AeroLab

(6—12) Physical Science / Chemistry / Physics

Marcy Seavey, Iowa Academy of Science
Fee: \$20 per person.
Location: Crowne Plaza

In just five years, from 1899 to 1903, the Wright brothers were able to discover the secret of flight, overcoming obstacles that proved too difficult for other prominent inventors and scientists preceding them. Participants will investigate AeroLab, a multi-media curriculum package specifically designed to introduce upper elementary, middle and high school students to the invention/inquiry process. Teachers will engage in "hands-on" student investigations of weight and drag, through a lab activity which utilizes model balsa airplanes, stop watches, and pylons. Participants will learn how to choose the best flying site and flying conditions for student activities, as well as explore opportunities to build flying machines to illustrate the invention and engineering process of the Wrights. Participants will learn about on-line teacher training and the potential for support from local Academy of Model Aeronautics flying clubs.

C. Opportunities — the IMAX

(K-16) General

Cliff Ehlinger, Science Station
Fee: \$15 per person.
Location: 427 1st St. SE, Cedar Rapids, Iowa

Visit the Science Station for a tour and a film at the IMAX. A presentation and discussion will follow showing how the films give us another opportunity show science to students.

D. Science as Inquiry through Collaborative Geographic Information System Mapping

(7-12) Inquiry/Technology

Christopher Soldat Grant Wood AEA 10
Fee: \$15 per person. Maximum of 20 participants.
Location: GWAEA, computer labs
4401 6th ST SW, Cedar Rapids, Iowa

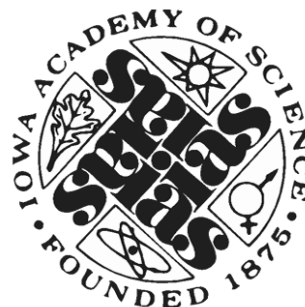
My World GIS™ is a Geographic Information System (GIS) designed specifically for use in educational settings. My World allows learners to explore and analyze geographic data about our world. These skills can be utilized for data analysis and visual representations that help students develop their abilities and understandings of Scientific Inquiry. Participants will also be introduced to Water Quality probe ware which can be used to gather their own data to incorporate into the larger data sets in the scientific community.

E. Devonian Quarry Tour

(7-12) Inquiry/Technology

John Tuthill and Marv Houg Four County Quarry
Fee: \$15 per person. Maximum of 25 participants
Location: Meet at the Crowne Plaza and we will carpool to the quarry.

Tour the Four County Quarry and hunt for Devonian fossils such as corals, brachiopods, and trilobites. Participants will receive materials to help understand the stratigraphy of the Devonian Gorge limestone exposed at the quarry. This is the same formation as found at the Coralville Spillway, so participating teachers will be able to collect fossils like those found at the Devonian Fossil Gorge. This activity is a good extension activity for those teachers who participated in the ILPA Geology of Iowa Workshops at UNI. Hard hats, rock hammers and safety goggles will be provided. Participants will be required to wear long pants and closed-toe shoes.



Increasing Academy Membership and Recognition Across the State

Academy members at 35 institutions across the state have posted copies of the Academy's new membership poster and brochures in their departments, offices, and schools. These members will monitor the posters and refill the membership brochures as necessary throughout the school year, creating a presence for the Academy at academic institutions across the state. The current list of institutions with posters is printed below. If you are a member of one of these institutions and know a colleague who should be an IAS member, visit the poster to obtain a membership brochure for them! If your institution is not on the list, contact Toni at iascience@uni.edu to volunteer to monitor a poster for your location.

Financial Statement

July 1, 2008 to September 27, 2008

Income (Expenses)

IAS Journal	285.94
Iowa Science Foundation	50,000.00
IAS	10,262.30
ISTS	6,825.58
Iowa Junior Academy of Science	4.87
Education Programs	16,038.84
Saylorville Visitor Center	2,509.00
TOTAL	85,926.53

Payroll	22,865.11
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IAS NET INCOME **63,061.42**

Funds Withdrawn - JA Parrish Fund	10,000.00
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Selected Assets

JA Parrish Fund (Merrill Lynch)	489,232.00
Frank Starr Investments	23,780.61
Benchmark Development	2,282.34
Education Programs	31,569.60
Myrle Burke Endowment	64,168.73
Science Endowment	13,806.38
ISTS CD	3,131.15

TOTAL LIABILITIES & EQUITY **\$728,734.37**

Membership: 751

Poster Caretaker List—Institutions

Ames High School
Basic Materials Corp.
Belle Plaine High School
Buena Vista University
Central College
Central Lee High School
Central Middle School
Coe College
Cornell College
Des Moines University
Graceland University
Grand View College
Grinnell College
Hempstead High School
Indian Hills Community College
Iowa City West High
Iowa State University
Iowa Wesleyan College
Kirkwood Comm. College
Marshalltown High School
Mount Mercy College
Muscatine Comm. College
Muscatine SWCD
Museum of Natural History
Nature Conservancy
North Iowa Area Community College
Oskaloosa High School
Parkview Middle School
Putnam Museum
Simpson College
University of Dubuque
University of Northern Iowa
Upper Iowa University
Waldorf College
Wartburg College



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175 Baker Hall – UNI
Cedar Falls, Iowa 50614-0508

Return Service Requested

The New Bulletin is a publication of the Iowa Academy of Science and is distributed to current IAS members 3-4 times per year.

Volume 3 Number 3 Autumn 2007
also available online at:
<http://www.iacad.org>

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Article Submission: The deadline for submission of articles for Vol. 3 #3 is December 1, 2007. Articles must be pre-approved. For more information contact Craig Johnson, IAS Executive Director, at craig.johnson@uni.edu

Advertising Rates: Full page, single issue \$160; Half page, single issue \$75, two consecutive issues \$100; Business Card (3.5"x 2.0"), single issue \$30, two consecutive issues \$40. For more information or to submit an advertisement, contact: iascience@uni.edu

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

Graceland University, Lamoni

Grinnell College, Grinnell

Iowa Conservation Education Coalition

Iowa State University, Ames

Iowa Wesleyan College, Mt Pleasant

Kirkwood Community College, Cedar Rapids

Krell Institute, Des Moines

Loras College, Dubuque

Luther, Decorah

Mount Mercy College, Cedar Rapids

Northwestern College, Orange City

Simpson College, Indianola

The Nature Conservancy, IA

The Putnam Museum, Davenport

University of Iowa, Iowa City

Wartburg College, Waverly