Iowa Academy of Science The New Bulletin

Volume 3 Number 4 Winter 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

Dear IAS Members.

The winter season is upon us and many lowans have already had their fair share of snow and ice. The season does bring hazards but also a change of pace, a different beauty to the landscape and opportunities for get-togethers with family and friends. On behalf of the lowa Academy of Science I want to express the sincerest wish that your holiday is a joyous one. Please read through this winter issue of the IAS Bulletin for updates on what is happening with the Academy. The Bulletin is one of several ways the Academy communicates with you. We also use email, our website, the Academy Annual Meeting, and the ISTS Fall Conference. If you have not been receiving Academy email it is because we do not have a valid address for you or our emails are being blocked.

The next important date on the Academy calendar is the 120th Annual Meeting to be held at Kirkwood Community College, April 11-12, 2008. An IAS Annual Meeting has something for all of our members including three general sessions, three symposia, section meetings, science-related tours, the Iowa Junior Academy of Science, a teacher seminar, and numerous opportunities to interact with other science-minded Iowans. We are excited to announce that the 121st Annual Meeting will be held at Graceland University in Lamoni on April 17-18, 2009.

As one of approximately 800 members of the lowa Academy of Science you are a member of one of the largest state academies of science in the United States. Since 1875 the lowa Academy of Science has offered a unique opportunity for all sciences to work together as one voice. There simply isn't another organization like this in lowa and with a renewed emphasis on science, technology, engineering, and mathematics (STEM), now is the time for the Academy to flourish.

Thank you for supporting the Iowa Academy of Science. Please take time to invite your colleagues to join and support the Academy's mission of advancing science research, science education, the public understanding of science, and awarding those who show excellence in these endeavors.

—Craig Johnson, Executive Director



The Iowa Academy of Science welcomes our new institutional member Luther College. Executive Director, Craig Johnson presenting Luther College President, Richard L. Torgerson the College's Institutional Plague.



Table of Contents



Focus on an Institutional Member Kirkwood Community College

From the beginning, Kirkwood Community College's main goal has been to serve the community. This dedication to higher education serves in excess of 15,000 credit students in more than 100 career and college-transfer programs; as well as through 80,000+ continuing education registrations. Two campuses are embedded in the thriving Cedar Rapids / lowa City "Technology Corridor;" and another ten regional centers serve the learning needs of residents in seven counties.

Well-equipped facilities like the world-class lowa Equestrian Center, Ballantyne Auditorium and the Kirkwood Training and Outreach Center host classes and public events, enabling community members and students to stay involved in athletics and the arts. Our main campus features two art galleries, showcasing work by both student and professional artists; Ballantyne Auditorium, which houses vocal and instrumental concerts throughout the year in a variety of genres, including classical, jazz, big band and contemporary; and our theatre department presents three productions annually. Com-

munity members and students are encouraged to cheer on the Kirkwood Eagles in golf, basketball, volleyball, baseball and softball either at the Johnson Hall gymnasium or the baseball/softball complexes. And, don't pass up the opportunity to have lunch in The Class Act, a restaurant that features delicious meals prepared by Kirkwood Culinary Arts students.

A partner throughout the surrounding communities, Kirkwood has worked to build seamless connections from the innovative Career Edge Academies in area high schools, to fully articulated 2+2 programs with area colleges and universities. Additionally, Kirkwood is part of a nationwide network of training resources that serves more than 150 businesses and trains



more than 4,000 people annually. Kirkwood provides personal guidance and career information for adults facing career transitions, whether that be finding a new position or returning to school to pursue a new career pathway. Additionally, Kirkwood partners with many federal agencies such as the National Science Foundation, Environmental Protection Agency, Department of Homeland Security and others to manage a \$34 million dollar portfolio of grants and contracts.

The mathematics and science disciplines are well represented on the Kirkwood campus. Forty three full time and numerous part-time instructors teach over 29,000 credit hours of math and science to nearly nine thousand students each semester. Over 1700 of those students are science, technology, engineering, and mathematics (STEM) majors planning to complete a two year degree that leads directly to employment, or to transfer and complete a four-year degree. Students have access to



modern science labs and equipment that supports their learning. The Human Anatomy and Physiology Lab has become a popular site for over seven hundred high school students that tour the lab each year to see plastinated human organs, the human cadaver, and to "hook up" with a Biopack unit to measure human physiology performance.

At Kirkwood, we've built a reputation for quality education, small class sizes, convenience and affordability. Please join us for the 120th lowa Academy of Science Annual Meeting on the Kirkwood Community College Campus, April 11 and 12, 2008!

Call for Papers 120th Annual Meeting of the Iowa Academy of Science Kirkwood Community College April 11 & 12, 2008

The Annual Meeting is an opportunity for you and your colleagues within your institution/business to share your research and accomplishments with other scientists and engineers across the state. The Academy accepts poster and oral presentations from undergraduate, graduate, and working scientists. The abstracts of all accepted papers will be printed in the Program for the 120th Annual Meeting of the Iowa Academy of Science. Submit your presentation today!

IAS Members submit by:

- visiting http://www.iacad.org
- logging into the IAS Members' Website
- completing the 2008 Abstract Submission form

Non-members may submit by:

- visiting http://www.iacad.org
- logging into the Members' Website as a guest
- (username = guest, password = 123guest)
- completing the 2008 Abstract Submission form

Abstract Deadline: February 8, 2008
The website will stop accepting new abstracts at 5:00pm on February 8th.

GLOBE Activities for You and YOUR Students

GLOBE at Night

February 25-March 8, 2008, join thousands people all over the world the international star party by participating in GLOBE at Night. All ages can participate! Visit the GLOBE at Night website and learn how to identify the constellation Orion and use a star magnitude chart. Plan your own GLOBE at Night viewing party, or participate in your own back yard. Finally, share what you observed with others by returning to the GLOBE at Night website and reporting your data. See a map of YOUR observations combined with the data from other participants all around the world. Your participation assists scientists in better understanding light pollution and how to conserve energy. By reporting, you also help lowa become a shining star! GLOBE at Night makes a great class or family activity! Teacher and family instruction packets are available on the website.

Visit: http://www.globe.gov/globeatnight/ Get out and observe the night sky!

Sponsored by NASA, NSF, US Dept. of State, ESRI, Windows to the Universe, UCAR, NOAO, GLOBE, and the Iowa Academy of science. For assistance planning your event in Iowa, contact: Marcy Seavey, 319-273-7486 or Seavey@uni.edu

University Professors, Please Help in the Search for GLOBE Alumni

The GLOBE Alumni Organization is populated with students who have graduated from secondary school and have the desire and commitment to participate in the activities of the GLOBE Program on a new level. If you are an instructor of college age students who may have been involved in GLOBE in the past, please share this article with your students so that they may become aware of GLOBE Alumni and possibly join.

The GLOBE Alumni website is located within www.globe.gov and can be accessed here http://www.globe.gov/fsl/html/templ.cgi?alumni, or by navigating to the "Community and Event" section under the "Home" Tab of the main page. Or contact the North American GLOBE Alumni Representative, Matt Fenzel at na-alumni-regionalrep@globe.gov.

Committee on Committees and Elections Report to the Iowa Academy of Science Membership

As chair of the Committee on Committees and Elections, it was my privilege and duty according to the IAS Bylaws AR-TICLE V-COMMITTEES, Section 2 to coordinate the efforts of the 2007 Committee on Committee and Elections. The members who have worked diligently to complete their duties as assigned were: Cherin Lee (UNI), Carol Schutte (NIACC), Neil Bernstein (Mount Mercy), Keith Summerville (Drake), Rob Dunbar (BVU), and Larry Schwinger (West Central Valley High School).

On behalf of this committee I would like to introduce the 2007 Iowa Academy of Science committee members for the following committees in this Bulletin, reserving space to introduce the remaining committee members in the next edition. Each committee consists of six to eight members or Fellows each serving three year terms, two being appointed each year.

Committee on Committees and Elections-The President-elect shall chair this committee. This committee shall review the structure and function of all standing committees and recommend changes when the need arises. year the committee shall recommend the names of persons to fill expiring and vacant positions on all standing committees to the President-elect. Recommendations shall give consideration to 1) balanced representation, 2) the number of committees and duties, which a potential nominee is, serving, 3) the principle of rotation of committee assignments, and 4) the responses from the membership to a periodic survey of member interests in and qualifications for service on a committee. This committee shall nominate candidates for the offices of President-elect, and vacant directors' positions ensuring that there is more than one candidate for each position. The 2007 Committee on Committees and Elections members are: Brian Nelsen (NWAEA). Paul Mays (Muscatine CC). Neil Bernstein (Mt. Mercy), Keith Summerville (Drake), Rob Dunbar (BVU), Larry Schwinger (West Central Valley High School). The IAS liaison and chair of this committee is Cherin Lee (UNI, president-elect).

Conservation and Preserves Committee—Matters relating to conservation and preservation within lowa and involving the Academy shall be referred to this committee by the Board of Directors. The Committee shall inform Academy members in matters related to conservation and preservation and shall encourage their participation in related activities. The Committee shall make recommendations to the Board in matters relating to conservation and preservation. The committee shall make recommendations to the Governor for appointments to the State Preserves Advisory Board as indicated by the Code of Iowa. The current members of this committee include Gary Phillips (Iowa Lakes CC), Doug Robinson (Buena Vista University), Daryl Smith

(UNI), Dave McCullough (Wartburg), and Paul Weihe (Loras). The Board Liaison for this committee is Denny Schlict.

Societal Issues Committee—The duties of the Societal Issues Committee shall be to study issues, trends and pressures on science, science education and the public's perception of science in Iowa and the nation. The committee shall develop position papers on these issues for consideration by the Iowa Academy of Science Board of Directors and the Academy membership or in other ways communicate these concerns to the members and the public. The current members of this committee are: Brian Lenzmeier (BVU). Debra Stork (Univ. of Dubuque), Thomas Fenton (ISU), Harold Martin (Presbyterian Church USA), Patrick Galliart (NIACC), and Luke Mortensen (DMU). The Board Liaison is Pat Finnerty.

Iowa Science Foundation Committee—The lowa Science Foundation Committee shall manage the lowa Science Foundation on behalf of the Academy for the State of lowa. The committee shall solicit proposals, subject them to a review process, make awards, monitor grant projects, and provide a general oversight for the grants program. The committee shall prepare and update brochures and guidelines pertaining to the program, as appropriate, and shall assist the officers of the Academy, the Governor, and the legislature in the development of the program on an ongoing basis. The current members of this committee are Steve Dinsmore (ISU), Carol Schutte (NIACC), Diane Debinski (ISU), Andrew Brittingham (Des Moines University), Shishonee Hughes (Iowa City CSD), Jean Gerrath (UNI). The IAS Board liaison is Jim Pease.

Student Programs Committee-The Chair of this committee shall serve as the Director of the Iowa Junior Academy. The Science Education Consultant of the Iowa Department of Public Instruction shall be an ex-officio non-voting member. The Student Programs Committee shall promote and supervise the student activities of the Iowa Junior Academy of Science in the area of pre-college science. The Committee shall act in partnership with the Director of the Iowa Junior Academy of Science in preparing the IJAS program for the Annual Academy Meeting. Recognition and awards for secondary school students involved in student programs shall be included under the purview of this committee. The current members of this committee are Mark Anderson (OSA). Barb Jacobsen (Bettendorf High School), Kelen Panec (Waterloo West High School), and Carol Boyce (Waterloo Orange Elementary School). The IAS Board liaison to this committee is Rick Hall.

—Submitted by the 2007 Chair of the Committee, Erica D. Larson, Iowa Academy of Science President

Financial Statement

November 30, 2007

Selected Current Assets (Check	ing/Savings)		Other Assets	
IAS Checking Account	5,314.73		JA Parrish Fund (Merrill Lynch)	469,994.33
Funds held at UNI	14,523.22		Frank Starr Investments	24,199.45
Iowa Science Foundation	49,195.24		Benchmark Development	2,302.58
Saylorville Checking Account	4,408.99		Education Programs	31,953.97
IJAS Visiting Scientists	2,571.78		IJAS Endowment	6,140.51
Education Programs	11,581.76		Myrle Burk Endowment	62,037.91
Total (Checking/Savings)	\$87,595.72		Science Endowment	14,032.72
			ISTS Certificate of Deposit	3,131.15
			TOTAL IAS ASSETS	\$734,948.18
Other Current Assets				
Accounts Receivable	1,083.00		ISTS Income/Expenses	
ISTS Inventory	1,360.11		Income	41,879.68
Saylorville Inventory	7,334.53		Expenses	31,082.32
Total (Current Assets)	\$97,373.36		ISTS Income	\$10,797.36
PROFIT & LOSS			July through	November 2007
Total Income		\$101,502.14		
Payroll/FICA/Medicare		\$38,108.52		
NET Ordinary Income		\$63,393.62		
Funds Withdrawn from JA Parrish Fund		\$30,000.00	NOTE: JA Parrish Fund withdrawals appear as	income in Net Ordinary Income

As you can see, it takes a lot of wonderful and dedicated volunteers to accomplish the activities of the Academy. Two members leave each of these committees each year and two new members must be found to fill their posts. If you are interested in volunteering on any of these committees for 2008-2009, please contact Marcy at the IAS Office (Seavey@uni.edu or 319-273-7486) or contact the chair of the committee you wish to know more about/join.

New Member Referral Program Report

Forty-six new members joined the Academy in 2007 through the new member referral program. The current IAS members who recruited these individuals will

save a combined total of \$460.00 on their 2008 dues renewals. If you successfully recruited a new IAS professional member in 2007, you'll see a referral credit and a discount of \$10.00 (per referral) on your 2008 dues renewal form. The Academy member referral program began two years ago and will continue through 2008.





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Return Service Requested

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Article Submission: The deadline for submission of articles for Vol. 4 #1 is February 8, 2007. Articles must be preapproved. 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, Pella

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, Ames

Loras College, Dubuque

Luther College, 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

University of Dubuque, Dubuque

Wartburg College, Waverly