

A New Era for the Public Understanding of Science

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Cover: This tile mosaic on a building front in Amsterdam depicts 17th-century dynamicist Christian Huygens. Also shown are the pendulums he studied so intensively and the pendulum clocks he invented, which indicate his key insights into the dynamics of coupled oscillators. Superimposed on the mosaic, and reminiscent of the synchrony Huygens observed in his coupled pendulum clocks, are theoretical chaotic oscillations in coupled biological populations, the subject of the article that begins on p. 967, by John Vandermeer. Photograph: John Vandermeer; John Megahan supplied the graphic, which David Bay superimposed on the photograph.

Coming next month

Foundations of a New Conservation Movement

Cannery Row Revisited

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Biological Mercury Hotspots in the Northeastern United States and Canada

Building Edens: The Rise of Environmentally Distributed Ecological Networks

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Constructing a Broader and More Inclusive Value System in Science

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BioScience

Organisms from Molecules to the Environment

American Institute of Biological Sciences

A New Era for the Public Understanding of Science

As the Civil War raged—just four months before the battle of Gettysburg—President Abraham Lincoln, recognizing the importance of science in public policy, founded the National Academy of Sciences (NAS). In the more than 140 years since its founding, the NAS has served to “investigate, examine, experiment, and report upon any subject of science or art” and has provided advice to policymakers on everything from pollinator decline to the benefits and risks of seafood, from watershed management to global climate change, and from the challenges associated with electronic voting to the effectiveness of corporate average fuel economy standards.

At a time when the challenges facing humanity are growing rapidly, and when meeting those challenges increasingly depends on scientific research, the need for public support and understanding of science has never been greater. Yet this is also a time when a US senator proclaims that “the greatest climate threat we face may be coming from alarmist computer models,” when a state superintendent of public instruction concludes that “there is no evidence yet to claim how the earth was created and no evidence to connect the family of apes with the family of man,” and when a congressman feels compelled to write to the head of a federal agency complaining that “good science cannot long persist in an atmosphere of intimidation.”

In 2009 we will celebrate the 200th anniversary of Lincoln's birth. We will also celebrate in that year the 200th anniversary of Darwin's birth and the 150th anniversary of the publication of *On the Origin of Species*. Lincoln and Darwin are linked not only by their birthday on 12 February 1809 but by their deeds. More than any other act in our nation's history, Lincoln's founding of the NAS brings to mind the vital role that science plays in public policy. And more than any other part of modern science, Darwin's insight into the nature of evolution reminds us of the challenge posed by those who would substitute nonscientific for scientific views.

To mark this exceptional double centennial—the births of the founder of the NAS and the founder of modern evolutionary theory—AIBS is working with the NAS, the American Association for the Advancement of Science, the Federation of American Societies of Experimental Biology, and other scientific organizations to make 2009 the “Year of Public Understanding of Science.” Through scientific meetings and public lectures, news articles and editorial briefings, classrooms and laboratories—not to mention Web sites, podcasts, and programs at museums and science centers—AIBS and its members and partners will demonstrate both that science plays a vital role in the future of humanity and that science inspires the best qualities of the human spirit.

There is much to do. I urge you to work with AIBS and the other professional societies to which you belong to make 2009 not just a *year* for the public understanding of science, but the herald of a new *era*—one marked by leaps forward in the public's understanding of science.

KENT E. HOLSINGER
President, AIBS

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