

# Penn State News

## U.S. Secretary of Energy Steven Chu Named Honorary Degree Recipient

HERSHEY, Pa.

-- U.S. Secretary of Energy, distinguished scientist and Nobel Laureate Steven Chu will receive an honorary doctor of science degree from Penn State. The University's Board of Trustees today (March 16) approved Chu as a recipient, who will receive the degree and deliver a keynote address during commencement ceremonies at University Park on May 5.

Chu, the former director of the Lawrence Berkeley National Laboratory and former professor of physics and molecular and cell biology at the University of California, was co-winner of the Nobel Prize for Physics in 1997. Before his time at the University of California, he held positions at Stanford University and AT&T Bell Laboratories. He has devoted his recent scientific career to the search for new solutions to energy challenges and stopping global climate change.

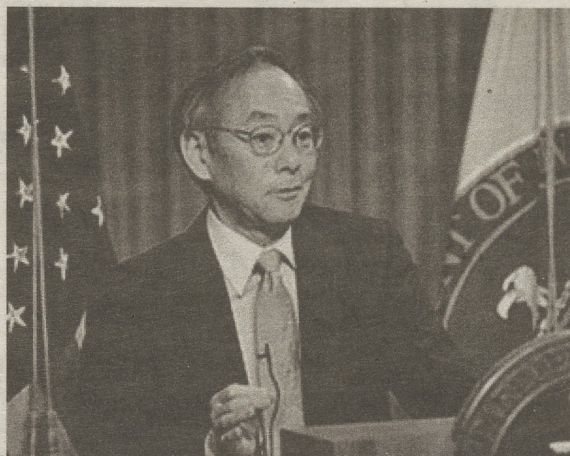
As U.S. Secretary of Energy, Chu is charged with helping to implement President Barack Obama's goals to invest in clean energy, reduce U.S. dependence on foreign oil, address global climate change, and create jobs in the energy sector. He was sworn in as the 12th secretary of energy on Jan. 21, 2009.

The holder of 10 patents, Chu has published nearly 250 scientific and technical papers. Chu's research in atomic physics, quantum electronics, and polymer and biophysics includes tests of fundamental theories in physics, the development of methods to laser-cool and trap atoms, and the manipulation and study of polymers and biological systems at the single-molecule level.

While at Stanford, he helped to start Bio-X, a multidisciplinary initiative that brings together the physical and biological sciences with engineering and medicine. About 30 alumni of his research group have gone on to become professors in their own right and have been recognized by dozens of prizes and awards. They include four Penn State professors: Nate Gemelke, assistant professor of physics; Kurt Gible, professor of physics; Tae-Hee Lee, assistant professor of chemistry; and David Weiss, professor of physics.

Chu is a member of the National Academy of Sciences, the American Philosophical Society, the Chinese Academy of Sciences, Academia Sinica, the Korean Academy of Sciences and Technology, and numerous other civic and professional organizations.

He received bachelors degrees in mathematics and physics from the University of Rochester and a doctorate in physics from the University of California. He is the holder of honorary degrees from 16 universities, including Penn State.



*U.S. Secretary of Energy  
Steven Chu*

## Nathan Gemelke Receives Alfred P. Sloan Research Fellow Award

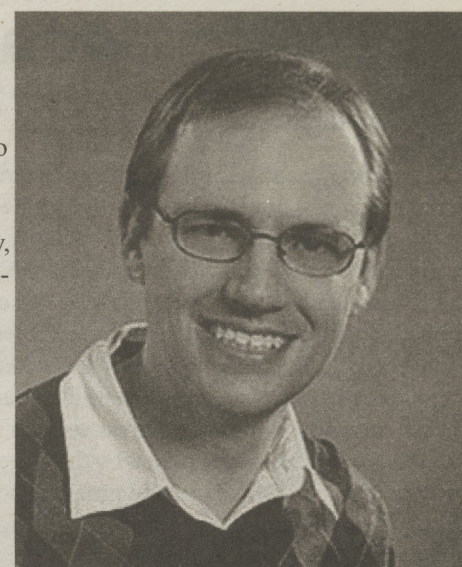
Nathan Gemelke, an assistant professor of physics at Penn State University, has been honored with an Alfred P. Sloan Research Fellow award in recognition of his research accomplishments. Sloan Research Fellowships are intended to enhance the careers of the very best young faculty members in seven fields of science: chemistry, computational and evolutionary molecular biology, computer science, economics, mathematics, neuroscience and physics.

Gemelke is a physicist whose research focuses on the behavior of atomic gases as they transition from one quantum phase to another at temperatures near absolute zero -- the point at which all random motion ceases. He and his collaborators recently created the first direct images showing the transition between two phases of such "ultracold" gases held in an egg-crate-like container formed by interfering laser beams. These high-resolution images reveal a peculiar self-organization of atoms resembling tiered cakes, which have been dubbed "wedding cake" structures. In other work, Gemelke and his collaborators demonstrated the peculiar effects of quantum mechanics in a rapidly rotating gas of atoms, where whirlpools known as "vortices" begin to overlap. Gemelke's research is an important step toward understanding the complicated and enigmatic quantum mechanics of large numbers of interacting particles at very low temperatures. His research also makes important advances in the categorization of unique forms of matter.

Before joining Penn State in 2011, Gemelke was a Grainger Postdoctoral Fellow at the University of Chicago. In 2007, he joined the James Franck Institute to participate in research on atomic gases. He also helped to develop Chicago's SMART (Science, Mathematics and Research Training) outreach program, which provides instruction in the physical sciences to minority and at-risk high-school students.

Gemelke has published numerous papers in journals such as Nature and Physical Review Letters. He has given talks at many conferences across the United States, and in 2007, he was invited to deliver the 66th Arthur H. Compton Lecture Series at the Enrico Fermi Institute at the University of Chicago.

In 2007, Gemelke earned his doctoral degree at Stanford University under the direction of Nobel Laureate Steven Chu. In 1999, he received his bachelor's degree from the University of Wisconsin, Madison.



*Nathan Gemelke, an assistant professor of physics at Penn State University*

## Penn State's Smeal College of Business Again No. 1 Among Recruiters

UNIVERSITY PARK, Pa. -- For the second year in a row, employers surveyed by Bloomberg Businessweek have ranked the Penn State Smeal College of Business as having the best undergraduate business program in the country.

To view the complete rankings, go to [goo.gl/1OYur](http://goo.gl/1OYur). To see Smeal's No. 1 ranking, click on the column titled "Recruiter Survey Rank" on this website.

The magazine surveyed 257 corporate recruiters as part of its 2012 ranking of the best undergraduate business programs. The recruiters were asked to identify which schools have the best graduates, most innovative curricula, and most effective career services. The recruiter ranking also takes into account surveys from 2011 and 2010.

In addition to the recruiter survey, Businessweek's overall ranking of undergraduate business schools also takes into account a survey of senior students at the schools and information provided by the schools themselves.

Smeal's overall ranking this year rose three spots to 22nd out of the 142 programs eligible for the ranking. Among publicly supported business schools, Smeal ranks seventh in the country.

## Faculty collaborate on a new book about musician Bruce Springsteen

A new book about Bruce Springsteen has been co-edited by Penn State Altoona's Kenneth Womack, associate dean for Academic Affairs, and Jerry Zolten, associate professor of communications arts and sciences, along with Mark Bernhard, associate provost for Outreach and Engagement at the University of Southern Indiana.

Through a collection of essays, "Bruce Springsteen, Cultural Studies, and the Runaway American Dream," focuses on the many ways in which Springsteen continues to impact listeners' lives by challenging their minds through his lyrics and music. One essay was written by Elizabeth Seymour, instructor in anthropology, communications and history; the cover photo was taken by Laura Palmer, associate professor of biology.

## Nurses can Prepare for Informatics Career with New Online Program

UNIVERSITY PARK, Pa. -- As hospitals and health organizations move from paper to electronic health records, a new profession is emerging. Nursing informatics combines nursing, computer and information sciences for managing and communicating information to benefit patients. Registered nurses (RNs) who want to prepare for this new health care role can earn a Nursing Informatics certificate online through Penn State's World Campus.

"Informatics is the direction of the future for health care," said Madeline Mattern, coordinator for Outreach Programs and instructor in Penn State's School of Nursing. "Nurses who have this added credential will be in high demand."

The Bureau of Labor Statistics projects job opportunities for RNs will grow 22 percent this decade. Some of these jobs will be in informatics, requiring nurse informaticists to use electronic health records, clinical decision support tools, database management and data mining, and patient safety technologies to improve patient care.

Penn State's School of Nursing offers the nine-credit undergraduate certificate program, which is delivered online through the World Campus. The courses provide an introduction to nursing informatics, an exploration of ethical challenges in health care informatics and an examination of clinical informatics tools. Six of the nine credits also can be applied toward electives in Penn State's online RN-to-bachelor of science in nursing degree.

Nurses who earn the certificate will be prepared for nursing informatics positions in hospitals, corporate offices of health care systems, consulting firms and health care vendors, home health agencies, managed care or insurance companies, and government agencies and facilities.

Applications are being accepted for summer and fall courses in the Nursing Informatics certificate program. Visit the website online or via smartphone for information.

Penn State World Campus specializes in adult online education, delivering more than 70 of Penn State's most highly regarded graduate, undergraduate and professional education programs through convenient online formats. Founded in 1998, Penn State World Campus is the University's 25th campus serving more than 10,300 students in all 50 states and around the world. World Campus is part of Penn State Outreach, the largest unified outreach organization in American higher education. Penn State Outreach serves more than 5 million people each year, delivering more than 2,000 programs to people in all 67 Pennsylvania counties, all 50 states and 115 countries worldwide.

**What do you think about this nurse's degree? Let us know on The Lion's Eye Facebook page!**

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