From the Dean

July 4th has been the traditional kickoff of summer—the day politicians hit the ground running to seek election, while children seek the cool refreshment of swimming pools and sprinklers. When I think about July, I remember backyard barbeques, laughing with friends, anxiously awaiting fireworks, and an overall relaxed pace we don’t seem to enjoy the rest of the year.

We tend to feel especially patriotic on July 4th and are not shy about displaying our red, white, and blue. However, most days we don’t think about the significance of July 4th. While we know that July 4th signifies all of the freedoms we enjoy because of our forefathers' sacrifice, many of us take for granted our right to pursue a quality education. Not all nations are so fortunate. When the College of Science began 100 years ago in 1907, not everyone in our country was free to pursue a college education. Those freedoms came much later for many individuals, most notably women and minorities.

Thankfully, many things have changed since 1907. Yet, in the next 100 years, our society will face new challenges. The late Nobel Laureate, Richard Smalley, spoke to an enthralled audience at Purdue three years ago. Smalley’s presentation was the result of a personal conviction that was spurred on by the 9/11 catastrophe. After dozens of speaking engagements to schools, universities, churches, business groups, and members of the science community, Smalley created a list of the top 10 challenges facing humanity 50 years from now, when the earth’s population will reach 10 billion. Smalley found that the concerns of each group were basically the same: shortages of energy, water, and food; pollution of the environment; poverty; terrorism and war; disease; education; democracy; and overpopulation. Smalley put energy at the top of the list.

In this issue:

Science People
- Purdue Provost Sally Mason Named University of Iowa's 20th President
- Department of Physics Welcomes Nick Giordano
- Zhou Wins Independent Scientist Award from NIH
- Conference to Honor John Deely
- Chaubey Earns New Holland Young Researcher Award
- Go With The Flow
- ChaCha Wins National Web Award
- First Science Bound head to Purdue in August
- John Fisher is the new Director of Special Events

Science News
- Alzheimer's drug begins clinical trials
- Purdue CS creates scientifically-based animation of 9/11 attack
- Reduced emissions required to avoid dangerous increases in heat stress
- Scientists close in on 'missing carbon sink'
the remaining problems will also be solvable.

Purdue and the College of Science are addressing several of Smalley’s challenges. We are leading efforts to develop clean alternative fuels, heighten awareness of environmental change, promote health, combat disease, and harness information, as well as perpetuate our advances by drawing young students to degrees and careers in science.

As we prepare to celebrate the College of Science’s 100th anniversary during the coming academic year, we will continue to address Smalley’s challenges. I'll talk next month about our efforts in the College to shape a new brand and a new way of looking at ourselves as we enter our next century. We're interviewing several faculty, alumni, and students in the process. These efforts are a precursor to a more comprehensive strategic planning effort that we will be starting in conjunction with the University.

I would like to invite all of you readers to submit suggestions for activities you’d like to see during our centennial celebration. It’s more fun when everyone is involved, so please send your ideas to John Fisher at jrfisher@purdue.edu, (765) 494-0586. History is an important part of who we are, and I invite you to email me a memory or favorite story related to the College of Science that we can share with one another in future issues of Insights. And finally, send me your own thoughts and outlook for the challenges you see in the next 100 years.

Happy 4th of July and have a safe and restful summer!

Jeff Vitter

**SCIENCE PEOPLE**

**Purdue Provost Sally Mason Named University Of Iowa's 20th President**

Congratulations to Purdue Provost Sally Mason, who was selected to serve as the University of Iowa's 20th president. On August 1, Mason will succeed David Skorton, who left the UI in June 2006 to become president of Cornell University in New York. Mason made a significant impact on Purdue University, including her efforts to increase diversity, recruit top faculty, double the research program, and advance engagement by improving the learning environment for our students. [Full story](#).

**Department of Physics Welcomes Nick Ciardone**

- Share the knowledge!
- A serendipitous number to end on

**Purdue News**

- Scientists hope baby dolphin picks up chat line
- Study helps preserve arctic whale, Eskimo subsistence hunt
- Gates Foundation funds Purdue effort to protect food, enhance African economy
- Purdue joins consortium's historic digitization agreement with Google
- Bacteria ferry nanoparticles into cells for early diagnosis, treatment
- Purdue surpasses goal, raises $1.7 billion in Campaign for Purdue
- Purdue announces new Indianapolis-based accelerator park

**Science Events and Calendar**

Science alumni: We want to hear from you! Share your professional news and your personal and family milestones by clicking here.

**Contact us**

**Past issues of Science @ Purdue**

*Insights*, the College of
Nick Giordano, Hubert James Distinguished Professor of Physics, has been named to the position of department head of the Department of Physics, succeeding Professor Andy Hirsch. Giordano is known for his research in the physics of nanostructures and mesoscopic systems, musical acoustics and the physics of the piano, computational neuroscience, and guitar acoustics. Giordano has earned many awards during his career, including the Purdue University Outstanding Undergraduate Teaching Award in memory of Charles B. Murphy 2003, the Computational Science Education Award 1997, the Herbert Newby McCoy Award, Purdue University 1992, and was named Alfred P. Sloan Foundation Research Fellow 1979-1983. Please also join me in welcoming Hisao Nakanishi and Marc Cafee, who both will be serving as associate heads for the department of physics.

The college thanks outgoing department head Andy Hirsch for his leadership, as well as his recruitment of many talented faculty members.

**Zhou Wins Independent Scientist Award from NIH**

Congratulations are in order for Daoguo Zhou, associate professor of biological sciences, who has earned The Independent Scientist Award from the National Institutes of Health (NIH). This prestigious award provides five years of salary support for newly independent scientists who can demonstrate the need for a period of intensive research focus as a means of enhancing their research careers. Read more about Zhou's research that helped him earn his award.

**Conference to Honor John Deely**

John Deely, 1965 Purdue Statistics PhD graduate, 1958 Purdue Mathematics MS graduate, and instructor for the largest Department of Statistics course, STAT 113 will be honored at a conference on July 5–6, 2007 at the University of Canturbury in Christchurch, New Zealand. The conference will be held in tandem to the New Zealand Statistical Association (NZSA) 2007 Conference held at the University of Canterbury. Deely is the former Chair of Statistics at the University of Canterbury.

**Chaubey Earns New Holland Young Researcher Award**
biological engineering and earth and atmospheric sciences, was presented with the New Holland Young Researcher Award at the Annual International Conference of the American Society of Agricultural and Biological Engineering. More.

**Go With The Flow**

One of the many science camps on the Purdue campus this summer is "Go With The Flow," a biology experience for fourth and fifth graders, run by Clark Gedney of the Department of Biological Sciences. Gedney was featured in the *Journal and Courier* for spending his time with fourth and fifth graders, who were getting a head start on the concepts of science, including solar power, entropy, and global warming. Gedney also runs and teaches the Howard Hughes Summer Biology Experience, in which high school students spend several weeks engaging in classroom and lab activities on the West Lafayette campus. Full story.

(Photo courtesy *Journal and Courier*)

**ChaCha Wins National Web Award**

ChaCha, the human search engine developed by Hoosier entrepreneur and Dean's Leadership Council member Scott Jones, was a finalist in the CNET Webware 100 Awards. ChaCha was one of 10 winners in the data category. Other winners included Google and Yahoo. ChaCha winners were determined, in part, by votes from the public. Click here for a full list of winners.

**First Science Bound students head to Purdue in August**

The first class of Science Bound students will begin their Purdue careers this August. Science Bound is a program developed by President Martin C. Jischke to encourage students to pursue careers in science, technology, engineering, and math (STEM). Students who complete the program's requirements are accepted to Purdue to earn four-year Purdue scholarships. Full story.

**John Fisher is the new Director of Special Events**

The College of Science proudly announces the appointment of its new Director of Special Events, John Fisher. John grew up near Buck Creek in...
of Liberal Arts. John most recently worked at Barnes & Noble Booksellers, as the community relations manager. Prior to that, he worked at Conference Coordinator in Stewart Center. John serves on the advisory board for the Lafayette Adult Resource Academy (LARA) and is conversational in sign language. In his spare time, John is an avid reader and horse enthusiast.

**SCIENCE NEWS**

**Alzheimer's drug based on Purdue-designed inhibitor begins clinical trials**

A drug to treat Alzheimer's disease based on the research of Arun Gosh, professor of organic chemistry and medicinal chemistry, will begin clinical trials this month. The drug represents a great hope for Alzheimer patients, says Gosh. [Full story.](http://c89.science.purdue.edu/sites/enewsletter/july2007/)

**Purdue CS team creates scientifically-based animation of 9/11 attack**

Purdue scientists and engineers are still seeking answers to questions surrounding the 9/11 catastrophe. Working together to save lives in the future, Christoph Hoffmann, a professor of computer science and director of Purdue's Rosen Center for Advanced Computing (a division of Information Technology at Purdue), and Voicu Popescu, an assistant professor of computer science, worked with Mete Sosen, the Kettelhut Distinguished Professor of Structural Engineering in Purdue's School of Civil Engineering, to develop a translator application that creates a link between computer simulations and computer visualization systems to automatically translate simulation data into a 3-D animation scene. Their work has gained national and international media coverage. [Full story.](http://c89.science.purdue.edu/sites/enewsletter/july2007/)

**Reduced emissions required to avoid dangerous increases in heat stress**

A study led by Noah Diffenbaugh, assistant professor of earth and atmospheric sciences, projects a 200 to 500 percent increase in the number of dangerously hot days in the Mediterranean by the end of the 21st century if the current rate of greenhouse gas emissions continues. The study found that France would be subjected to the largest projected increase of high-temperature extremes. [Full story.](http://c89.science.purdue.edu/sites/enewsletter/july2007/)

Related Searches:  [Mathematics Education Resources](http://c89.science.purdue.edu/sites/enewsletter/july2007/)
Scientists close in on 'missing carbon sink'

Forests in the United States and other northern mid- and upper-latitude regions are playing a smaller role in offsetting global warming than previously thought, according to a *Science* paper by an international team of scientists, including Kevin Gurney, assistant professor of earth and atmospheric sciences. By contrast, tropical forests are taking up more carbon than previously thought, the study says. [Full story](http://c89.science.purdue.edu/sites/enewsletter/july2007/).

Is the sky falling?

Orbital decay and 2,000 satellites dropping out of the sky; shorted-out power grids and multi-state blackouts; limited or no cell phone availability; grounded polar flights, all of which could cause potential economic devastation. While this frightening scenario may sound like an Orsen Wells hoax, unfortunately it's not. It actually represents the extremely destructive power of the sun for our technologically-dependent Earth, according to Matt Lister, assistant professor of physics. [Full story](http://c89.science.purdue.edu/sites/enewsletter/july2007/).

Share the knowledge!

What do you know that we don't? The College of Science will be celebrating its 100th anniversary in the fall, and we want to hear from you! What amazing things have come out of the College of Science at Purdue (other than you!)? What is your favorite memory of your time at Purdue? [E-mail us with your thoughts](mailto:).

A serendipitous number to end on

As we celebrate the successful completion of the Campaign for Purdue, the College of Science has its own bragging rights. CoS will top $100 million, the largest fundraising effort in the College's history. Call it coincidence or serendipity, but it's sure a nice way to prepare to celebrate our 100th birthday! Congratulations to Mary Jo Bartolacci, director of advancement, and to Lisa Robertson, director of corporate and strategic relations, for their tireless efforts.

*PURDUE NEWS*

Click on the title for a link to the full story.

**Scientists hope baby dolphin picks up 'chat line'**
Gates Foundation funds Purdue effort to protect food, enhance African economy

Purdue joins consortium's historic digitization agreement with Google

Bacteria ferry nanoparticles into cells for early diagnosis, treatment

Purdue surpasses goal, raises $1.7 billion in Campaign for Purdue

Purdue announces new Indianapolis-based accelerator park

SCIENCE EVENTS AND CALENDAR


July 14: Purdue Day in Chicago. The Brookfield Zoo, Chicago, Illinois. Click here for more information.

July 16–18: Diversity Forum. Camp Tecumseh Leadership Center. The forum is open to all colleges. Click here for more information.

July 29, 6:30 p.m.: Department of Statistics Purdue University Friends and Alumni Reception at the Joint Statistical Meetings. The Grand America Hotel, Grenoble Room, 555 South Main Street, Salt Lake City, Utah. Please RSVP to Mary Roe (765-494-5167) by July 16, 2007. Click here for more information.

Aug. 4, 9:30 a.m.: Summer Commencement. Elliott Hall of Music. Click here for more information.

Aug. 11, 12, 17, 18: Science Teambuilding and Leadership Institute (STALI) Dates scheduled are on the Sunday, preceding Boiler Gold Rush, as well as the Saturday and Sunday following BGR. Contact Drew Koch for more information, 496-3618.


Aug. 15: Purdue Day at the Indiana State Fair. Indiana State Fairgrounds, Indianapolis, Indiana. Click here for more information.

Related Searches: Mathematics Education Resources
Memorial Union, West Faculty Lounge.

**Aug. 20, 7:00 a.m.–noon: Donuts and Directions.** Information tables will be available under the Math Building and at satellite locations. Students are welcome to free donuts, water, fruit, and campus directions. Contact Kim Vestal for more information, 496-2025.

**Aug. 20: First Semester of Academic Year 2007–2008 begins.**

Are you interested in leaving a lasting legacy for future students or faculty at Purdue? If so, please visit our [Planned Giving home page.](http://c89.science.purdue.edu/sites/enewsletter/july2007/8)

Science Events

Science Seminars

Purdue Events