All the Science alumni I meet are alike—in one way, at least: They all talk with pride about their Purdue pedigree and the benefits they’ve received from their Science education.

Many of our alumni “give back” to their alma mater by committing their time and expertise as members of various College and Departmental advisory groups. For example, the Dean’s Leadership Council provides critical leadership and advice to help us reach the goals in our Strategic Plan. This past year, the Council has devoted its efforts to helping us work through the challenges of launching a world-class corporate partnership program.

Another important group is our Science Alumni Board, which helps us create opportunities for our many alumni to connect—or in some cases reconnect—with the College, the University, and one another. Many alumni also play key roles on Departmental advisory committees.

The contributions of these folks are invaluable to us, and we’re grateful for all they do for Science. But, alumni, whether or not you’re a member of groups like these, your connection with Purdue Science is important and there are many ways you can be involved. Here are a few suggestions:

- Visit our College of Science web site often and give us your input on what you see and what you’d like to see. We’re continually working to improve our site, so let us know what you think.
- Check out our Alumni and Friends portal (also reachable from the top of our main web page). Our Alumni Board will be helping us revamp the site to make it a comprehensive resource for alumni, and we welcome your thoughts on what information and links would be most useful. While you’re there, take a minute to update your information and share your professional or personal news with us. Read about your classmates and friends.
You can get in touch with our Alumni Board members and give them your thoughts on how they can best be your advocates. Kent Shadley, the board’s new president, is featured in this month’s Profile of Success.

Do you know others who might be interested in receiving Science@Purdue? Encourage them to subscribe by sending email to ScienceNews@purdue.edu. You can read both current and past issues of Science@Purdue on the Web on our Publications page.

Check out our new Science Kids Club for games, projects, and activities that bring science fun and learning to the special kids in your life.

You’ll soon receive the Fall issue of Insights in the mail. Read it, enjoy it, and pass it on so others can learn about the exciting things going on in Science! You can also read Insights on the Web in e-zine or PDF format.

The cover story of Insights highlights the stellar engagement activities of our K-12 Outreach team. We’re working with teachers and students around the state to promote excellence in learning, which is so critical for our society’s future vitality.

Our Science Diversity Office develops initiatives at all levels—from elementary school through faculty recruitment—to create a positive learning environment for everyone. You can learn more from our Diversity Office website and the next issue of Insights.

Take advantage of the many opportunities to interact with Science faculty, staff, and students at Purdue on the Road and other alumni events. Watch for them in your area, and go!

Come back to campus whenever you can. Football weekends are fun—even more fun if we have a winning team—but we’re happy to see you any time.

“Talk up” Purdue and Science with high school students. Tell them about the strong education they can get here. Would you like to represent Purdue at your local high school’s career fair? We can provide you with information and materials to give to students. Dana Neary, our Director of Alumni Relations, would be happy to work with you on these and other opportunities for local engagement.

Whether you graduated three or thirty years ago, your relationship with Purdue and the College of Science didn’t end when you walked across the stage of Elliott Hall to pick up your diploma. We hope you’ll take advantage of the many ways to...
suggestions, and ideas. Contact us at ScienceNews@purdue.edu.

Best regards,

Jeff Vitter

**SPOTLIGHT ON NEW FACULTY**

**Lucy Flesch,** Assistant Professor, Earth & Atmospheric Sciences. The face of our planet is in constant evolution as a result of geologic processes such as tectonic plate motions, earthquakes, surface erosion, or convection in the Earth’s mantle. Lucy, a member of the Geodynamics and Active Tectonics group in Earth & Atmospheric Sciences, studies the dynamics of continental plate margins to understand the driving forces involved in continental deformation. Lucy received her Ph.D from SUNY-Stony Brook and was a postdoctoral researcher at the Carnegie Institution of Washington.

**Arun Ghosh,** Professor, Chemistry. As an organic chemist, Arun explores the chemistry and biology of naturally-occurring organic molecules that have the potential to fight diseases. For example, he has developed a way to synthesize amphidinolides—a family of natural compounds that show promise as powerful antitumor agents—which would make abundant quantities available for cancer research. Arun received his bachelor’s degree with honors from Calcutta University; a master’s degree from the Indian Institute of Technology, and the PhD from the University of Pittsburgh.

**Kevin Gurney,** Assistant Professor, Earth & Atmospheric Sciences Kevin calls himself a mixture of atmospheric scientist and ecologist working in the broad arena of global change. In particular, he is interested in quantification and characterization of the global carbon cycle. In addition to his science research, he works in the area of climate change policy through research on those aspects of the Kyoto Protocol that relate to the carbon cycle. Kevin received his PhD from Colorado State University.

**Yukiko Mizukami,** Assistant Professor, Biological Sciences. Yukiko studies fundamental questions in developmental
linked to growth, differentiation (the process by which cells acquire a distinct function), and morphogenesis (the distribution of cells that happens during an organism’s development). Her goal is to identify the molecular links between the cell cycle machinery and the developmental cues that control the growth of cells and organisms, and to use that knowledge to understand how they determine the size, shape, and cell patterns of higher plants. Yukiko received her Ph.D from Sophia University in Tokyo.

**SCIENCE PEOPLE**

**National organization elects Joe Francisco**

Professor Joe Francisco of Chemistry and Earth & Atmospheric Sciences has been elected to a two-year term as president of the National Organization of Black Chemists and Chemical Engineers. NOBCChE has 4,000 members and promotes the professional development of underrepresented individuals in the fields of chemistry, chemical engineering and other related disciplines.

**Another UCAR award for Ernie Agee**

For the second straight year, Professor Ernie Agee of Earth & Atmospheric Science received the Science Advocacy Award from the University Corporation for Atmospheric Research (UCAR). Ernie was recognized for his exceptional effort in obtaining congressional support for scientific research. Ernie serves as Purdue’s Scientific Representative to UCAR.

**David Nolte delivers McCoy Distinguished Lecture**

Professor David Nolte of Physics delivered the 2005 McCoy Distinguished Lecture on the method he has pioneered to create analog CDs that can revolutionize medical testing. David won Purdue’s Herbert Newby McCoy Award for outstanding contributions to research for his bio-optical CD, which could provide hospitals with a fast, easy way to monitor patient health. Full story.
Fame

Dr. Rita Colwell, Biological Sciences alumna and member of the Science Dean’s Leadership Council, was one of ten outstanding women inducted into the National Women’s Hall of Fame this year. Dr. Colwell is pictured here with a delegation of Science women who traveled to the induction ceremony to honor her. (l-r: Jack Colwell; Martha Chiscon; Gabriela Weaver; Rita Colwell; Christine Hrycyna; Chris Sahley.) Full story.

Shau-Wai Lam drives away with business award

Shau-Wai Lam, president and CEO of the DCH Auto Group based in Amboy, NJ was named 2005 Dealer of the Year by Ward’s Dealer Business Magazine. The magazine cites Shau-Wai’s use of mission statements, principles and values to “mold a modest American subsidiary of a Hong Kong-based trading company into one of the top selling automotive dealer groups in the world.” Shau-Wai earned undergraduate and graduate degrees in mathematics from Purdue and was a 2004 Science Distinguished Alumnus.

Laura Biedermann, Physics grad student, wins national fellowship

Laura Biedermann, a doctoral student in Physics working with Prof. Ron Reifenberger, received a 2005 Purdue Excellence in Science and Engineering Fellowship from Sandia National Laboratories in New Mexico. The fellowships are awarded to top graduate students in science and engineering across the U.S. Full story.

Moira Gunn introduces grad student Bindu Varghese to BioTech Nation

Bindu Varghese, a graduate research assistant in Chemistry, talked with Moira Gunn on NPR’s BioTech Nation program about her research and new strategies for auto-immune diseases like rheumatoid arthritis and lupus. Bindu works under the direction of Phil Low, Ralph C. Corley Distinguished Professor of Chemistry and founder of Endocyte, Inc. Hear the interview.

James Price, Math grad student, earns place with best
James C. Price, graduate student in Mathematics, was inducted as an associate fellow to the Purdue Teaching Academy. The academy honors outstanding teachers among faculty and graduate teaching assistants and provides leadership for the improvement of undergraduate, graduate and outreach teaching. Full story.

**Biology senior Stephanie Tieken becomes Homecoming royalty**

Stephanie Tieken, a senior biological sciences major from Wadesville, Ind., was crowned Purdue’s Homecoming queen during halftime of the Purdue-Northwestern game. While she maintains a perfect grade point average, Stephanie is active in a number of University, College, and University activities and organizations, including Women in Science Programs. She is also a Science Scholar and was selected as an Outstanding Junior in Science last year. Full story.

**SCIENCE NEWS AND RESEARCH**

**Coming soon: The Wayne T. and Mary T. Hockmeyer Hall of Structural Biology**

A $5.3 million commitment from Purdue alumnus Wayne T. Hockmeyer and his wife, Mary is a major step toward a new building for our internationally renowned Structural Biology group. Dr. Hockmeyer is founder and chairman of the board of directors of Medimmune, Inc. Mary Hockmeyer earned her doctorate in human development at the University of Maryland. Full story.

**New technology may make us safer at the airport**

Luggage screening at our airports could become faster and more accurate, thanks to the work of a research team led by Graham Cooks, Henry Bohn Hass Distinguished Professor of Chemistry. The team has found a fast, highly reliable way to detect trace quantities of residues that could indicate the presence of explosives and other hazardous materials inside luggage. Full story.

**Climate model forecasts more to complain about in weather**

A climate model developed by Noah...
and Atmospheric Sciences gives the most detailed projection of climate change ever for the U.S. The model predicts more extreme temperatures across the country and more extreme precipitation along the Gulf Coast, in the Pacific Northwest, and east of the Mississippi. Noah says the changes the model predicts are large enough to substantially disrupt our economy and infrastructure. EAS Professor Jeff Trapp is also a member of the research team. Full story.

**Gold nanorods could brighten the future for medical imaging**

Chemistry Professors Alex Wei and Phil Low are part of a multidisciplinary research team that has taken a step toward developing a new type of ultra-sensitive medical imaging technique that works by injecting tiny gold nanorods into the bloodstream and shining a laser through the skin to detect them. The gold rods, which are roughly 200 times smaller than a red blood cell, might be used to develop an advanced medical imaging tool for the early detection of cancer. Full story.

**Two Discovery Park centers officially open for business**

The doors of the Bindley Bioscience Center and the Birck Nanotechnology Center in Purdue’s Discovery Park are now officially open. The $15 million Bindley Bioscience Center is a state-of-the-art, flexible research facility designed to encourage multidisciplinary research in the biosciences. Full story. The Birck Nanotechnology Center is considered the best university facility of its kind in the nation. The $58 million center involves about 260 faculty and staff members and graduate students from 25 schools and departments across the university. Full story.

**Missed class? Try a podcast**

Digital recordings of lectures allow students with MP3 players to catch lessons or just catch up wherever and whenever they want, and Purdue is a leader in making the technology available to students. Physics professor Erica Carlson, who is quoted in this Chicago Tribune article, says podcasting her lectures hasn’t changed her class, but has made it more accessible. Full story.

Related Searches: Mathematics Jobs | Degree In Math
Taking it to the classroom

College of Science K-12 Outreach is changing the shape of science education in Indiana schools. In Shelbyville, teachers become students again to learn a new approach to science teaching. Full story.

Purdue News

Study says Indiana is great place to work

Indiana has the seventh best working environment in the U.S., according to a study conducted by the University of Massachusetts-Amherst. The study looked at criteria such as job opportunities, job quality, and workplace fairness. Full story.

University says ABC News report on nuclear reactor was inaccurate and misleading

Purdue refuted claims made by ABC News concerning the safety of the nuclear reactor on its campus. Purdue spokesperson Jeanne Norberg says the report’s allegations are unfounded, misleading, and irresponsible, and they misrepresent the nature of reactors that are designed for teaching and research. Full story.

Science Events and Calendar

Science Kids Club blasts off!

A new online program of science fun for kids of all ages! On the Science Kids Club web site, kids can indulge their curiosity in do-it-yourself science activities and games and find homework help in features like “Ask a scientist.” Pages like “Super Science Fair” guide students in their search of exciting, grade-appropriate projects, and members-only sections include extra games and downloads. For information on how to enroll your favorite kids in the Science Kids Club, send email to ScienceKids@purdue.edu or phone 765-496-2025.

Department of Earth and Atmospheric Sciences birthday celebration and alumni gathering in honor of Professor Bill Hinze, November 4-5
EAS alumni reception at Society of Exploration Geophysics Meeting, Nov. 7

Intel Distinguished Lecture by Ralph Kling, Nov. 10

Science Women of Purdue meeting, November 11

Special public lecture on U.S.-Taiwan relations by Dr. Mark Chen, Minister of Foreign Affairs, Taiwan. Dr. Chen will speak on U.S.-Taiwan relations and on developing Taiwan-Indiana economic opportunities. Nov. 21, 7:00 p.m., Fowler Hall, Stewart Center.

Science Events

Science Seminars

Purdue Events

PROFILES OF SUCCESS

Each month we spotlight the personal accomplishments and career successes, whether mainstream or unique, of Science alumni. This month's spotlight is on Kent Shadley, who received his B.S. in Biology in 1983. Kent is president of the College of Science Alumni Board. Full story.

SCIENCE ALUMNI NEWS

Science alumni: We want to hear from you! Update your information and share your professional news as well as your personal and family milestones with your classmates and the Science community. Click here.

Click here for this month’s Alumni News.

Science alumni gather for Homecoming fun

The Homecoming football game left much to be desired, but the morning's activities gave Science alumni something to smile about. They visited with each other and stopped by to greet the winners of last month’s Favorite Science Professor voting. Six of the nine Favorite Science Profs are pictured here: Dennis Minchella and Al Chiscon (seated), Biological Sciences; Bob Zink, Mathematics; Derek Davenport, Chemistry; Phil Smith, Earth &
Science. Other Favorite Profs not present are Stephen Weingram, Mathematics; Don Schlueter, Physics; and David Moore, Statistics.

**New tax law encourages charitable giving in 2005**

At the end of September, President Bush signed into law a measure that allows donors to take up to 100 percent of their income for cash donations they make from August 28 through the end of the year. If you’re considering a gift to Purdue, it is important that you know how the new law favors charitable giving. [Full story.]

**Stay connected!**

Join the Purdue Web Community and stay connected to your alma mater. This interactive site will help you keep in touch with your Purdue family—your friends, faculty and staff, and fellow alumni. [Click here](#) to sign up and get started.

**RESEARCH FUNDING REPORT**

Science researchers received funding totaling more than $3.8 million in September 2005. [Complete list of funded proposals.](#)