From the Dean

Welcome to our first electronic version of the College of Science Newsletter. This newsletter is designed to keep our colleagues, supporters and friends informed about the latest happenings in the college. We hope you will enjoy these periodic updates on activities, achievements, and transitions in the College of Science.

Science Ambassadors

Since the UT Arlington Planetarium opened in March 2006, there has been a steady stream of yellow buses in front of the Chemistry and Physics Building. In fact, over 25,000 K-12 students have visited the Planetarium in its first year of operation. The Planetarium received a generous gift from ExxonMobil that will give these visiting students the opportunity to explore other areas of science and learn about science careers while on campus. Science Ambassadors, recruited from the most articulate and enthusiastic science majors, will perform demonstrations for the students and inform them about science career opportunities and the college application process. Beyond their presentations, ambassadors also will serve as role models for the visiting K-12 students. After the prepared presentation, the students will be able to explore classrooms, which will include relevant scientific displays, such as herpetological samples and moon rocks.

www.uta.edu/planetarium

Miller Brewing Company gives $20,000 for Chemistry Scholarship

An outstanding Chemistry student could receive the newly established full-tuition scholarship (including fees and books) provided through the generosity of the Miller Brewing Company. In October, corporate and local executives from Miller visited several campuses in the North Texas area to decide which university would receive the scholarship.

Physics Chair Jim Horwitz and Interim Chemistry Chair Ed Bellion personally escorted the representatives through the new Chemistry and Physics Building, and Planetarium Director Bob Bonadurer gave them a brief private screening in the state-of-the-art dome. Finally, word came from Miller headquarters in Milwaukee that the UT Arlington campus, with its diverse student population, renowned faculty, great curriculum and modern facilities, would be invited to write the scholarship proposal for the Miller partnership.

Chemists are a vital part of the development process when producing Miller products. With the scholarship comes the opportunity for an unpaid internship with valuable job-related experience and many opportunities for the scholarship recipient. Miller Brewing Company made the investment in this scholarship as part of REACH®, its platform for community partnership, which focuses on five primary causes: Responsibility, Employment, AIDS/HIV, Cultural Diversity and Heritage Initiatives.

To find out more about the Miller Brewing Company Scholarship, contact the Chemistry and Biochemistry Department Scholarship Committee.

College of Science Alumni Reception and Private Planetarium Screening

The Dean of the College of Science, Dr. Paul Paulus, hosted a gathering for Arlington area alumni on March 6th. They were invited to return to campus for a special College of Science reception and private showing in the new UT Arlington Planetarium, located in the recently opened Chemistry and Physics Building in the center of the campus. Hors d’oeuvres and a special “stellar presentation” were in store for those in attendance. It was great to have the “alums” on campus. Some had not been back in many years. Many alumni were surprised to see how much the campus had changed since they graduated and were especially impressed with the new learning facilities. There were many wonderful comments about the Chemistry & Physics Building, the Planetarium and the many other campus improvements. Look for news on future alumni gatherings in forthcoming newsletters.
Gifts of Endowment Leave a Lasting Legacy

At the University of Texas at Arlington, our capacity for success lies not only in our curriculum, our faculty and our mission, but in the belief placed in us by our donors. A donor who chooses to establish an endowment creates a legacy, an enduring foundation of stability and support for years to come.

The first step in establishing an endowment is to determine areas of interest and need, such as the provision of on-going financial aid for students, supplemental salary support for faculty, research, and program initiatives.

Endowment options include: Endowed Chairmanships awarded to deans, department chairs, and superior faculty to encourage and enhance leadership, scholarly efforts and research.

Options include:
- Distinguished University Chair $2,000,000 Minimum gift
- Distinguished Chair $1,000,000 Minimum gift
- Chair $500,000 Minimum gift

Endowed Professorships are awarded to outstanding faculty members to reward and enhance scholarly efforts, teaching and research:
- Distinguished Professorship $250,000 Minimum gift
- Professorship $100,000 Minimum gift

Endowed Scholarships and endowed Graduate Fellowships are awarded to deserving students based on university standards and criteria set forth by the donor and begin at a minimum of $10,000. Donors may take up to five years to fund an endowment. For more information regarding endowments and other gifts to the university, go to the UT Arlington website at www.uta.edu/giving or contact the College of Science at (817) 272-3491.

Research Day

The College of Science joined forces with the College of Engineering to host another successful Research Day on October 24th. This event promotes collaboration between the Colleges of Science and Engineering and allows students to learn what research labs and other students are exploring. It also fosters relationships based on mutual research interests and showcases research and development advancements in the two colleges to outside constituencies.

The day began with a keynote lecture from Dr. Larry Kazmerski, Director of the National Center for Photovoltaics. After Dr. Kazmerski spoke, faculty and students broke out into panel sessions to discuss research projects to explore collaborative ideas.

The most visible aspect of the day was the poster session, where posters covered every available space. Students enjoyed mingling with other students and learning about their research and their professors’ research.

To learn more about Research Day, visit www.uta.edu/researchday.

Nobel Laureate Presents Physics Talk

Dr. David Lee of Cornell University, who received the 1996 Nobel Prize in Physics, presented departmental and public talks on his research on superfluidity. His presentations were well attended and are part of an ongoing series of planned talks by high profile scientists to celebrate the new Chemistry and Physics Building. Departmental faculty and guests were able to meet with Dr. Lee and his wife at various social events and dinners. Dr. Lee was most impressed by the campus and the physics faculty.

Calendar of Events

- 4/18 - COS Academic Excellence Reception
- 5/14 - COS Spring Commencement
- 10/20 - Distinguished Alumni Gala

Student Success

~Oleg Lobanov, Psychology student, was accepted to the M.D./Ph.D. program at Wake Forest. He was one of two students accepted.

Faculty Focus

~Earth & Environmental Science Professor Christopher Scotese’s article on ‘Long-Term Global Forecast? Fewer Continents’ was published by the New York Times

Looking Back… 30 years ago!

~Professor Robert Neill, Department of Biology, received the College of Science Outstanding Science Teacher Award for 1970-77.
Advisory Council

The College of Science Advisory Council met on January 31, 2007. The council consists of alumni, community and corporate partners who help connect the college to key sources of community support. Gary Cole, Vice President for Development, presented the university’s plan for seeking increased support for endowed professorships. Named or endowed professorships play an important role at major universities in attracting and maintaining top professors with significant research programs. These endowments enable us to offer more competitive salaries and provide some research support. The college has made some key hires that were possible only because of the availability of endowed chairs. Continued growth in the status of the college and university will require a significant increase in the number of endowed positions. The college looks forward to working with the Advisory Council and the Office of Development in seeking alumni and community support for this important initiative.

Chemistry Leadership Transition

Dr. Sandy Dasgupta assumed leadership of the Chemistry and Biochemistry Department in January. He comes to UTA after a very productive career at Texas Tech. He brought with him a team of 12 post-docs, graduate students, and other colleagues. He will lead a top-notch department that has been made even stronger by the addition of some excellent scholars and Welch Professor Daniel Armstrong. Dr. Dasgupta is a world renown researcher in environmental and analytical chemistry. He replaces Dr. Edward Bellion, who served for three-and-a-half years as interim chair. During his term, Dr. Bellion played an important role in the transition of the department from Science Hall to the Chemistry and Physics Building. He made significant additions to the faculty and the support staff during his tenure. Prior to his term as interim chair, Dr. Bellion served for 6 years as Associate Dean of Science. Dr. Bellion now serves as associate chair of the Chemistry and Biochemistry Department. The College of Science is grateful to Dr. Bellion for his years of service.

New College of Science Staff

The College of Science has recently hired a number of new staff members. Dr. Greg Hale is Assistant Dean and Director of the Science Education and Career Center. Prior to his promotion, he was a full-time lecturer in Chemistry who was recognized for his teaching excellence. He played an important role in the administration of the Master of Arts in Science Education (MAIS) program in addition to teaching in this program. Dr. Hale has been joined by Dr. Carrie Baum, the Assistant Director of the Science Education and Career Center. She comes to us from the University of Pittsburgh where she taught in the School of Pharmacy. Dr. Baum also is involved in the MAIS program and will play a leadership role in science outreach efforts. Both Drs. Hale and Baum are active in seeking grant funding for a variety of science education initiatives. These two talented and dedicated people will be a tremendous asset to the College of Science.

Michael Seifi just joined us at the college as a web specialist. He brings with him a wealth of knowledge, not only is he extremely well-versed in computer languages and programs, but he also has diverse experience in business and education. He received his Master’s degree in Mathematics from Central Michigan University and is excited to joined us.

Dr. Peter Rosen

In Memoriam

Dr. Peter Rosen, who was Dean of Science from 1990 to 1996, passed away on October 13, 2006 after a three year battle with cancer. He was an internationally renown particle physicist who helped establish the high energy physics program at UT Arlington. He left in 1997 to become Associate Director of High Energy and Nuclear Physics (HENP) in the DOE Office of Science. We are very much indebted to him for his many contributions to the development of the College of Science. In 2000 he was awarded the status of Professor Emeritus in recognition of his distinguished career of teaching, research and service. For more information go to http://www.science.doe.gov/News_information/News_Room/2006/Rosen/InMemoriam.htm.
Two science faculty have received special Science and Technology Acquisition and Retention (STARS) funding from the UT System to upgrade their laboratories. Chemistry and Biochemistry Professor Dr. Krishnan Rajeshwar received $330,000 for equipment to enhance his research on renewable energy. Physics Professor Dr. Ping Liu received $500,000 for his research on nanostructured magnetic materials. The UT System has made STARS funding available for the recruitment and retention of top scholars in strategic research areas. Only applications deemed excellent by a review panel of members of the National Academies are funded. Congratulations to Dr. Rajeshwar and Dr. Liu for their accomplishments. Two years ago, Drs. Paul Chip-pin-pindle, Perry Fuchs, Karen Johannesson and Fred McDonnell received such STARS awards. These awards are a reflection of excellent faculty and greatly facilitate their ability to conduct cutting edge research.

The College of Science, in cooperation with the Office of the Provost, hosted two members of the NSF-sponsored POGIL (Process Oriented Guided Inquiry Learning) Project on February 1-3. They were brought to campus in order to allow UT Arlington faculty to become more familiar with some of the types of active learning techniques that are a part of the university’s Quality Enhancement Plan. To quote from their web site (http://www.pogil.org):

“POGIL is a classroom and laboratory technique that seeks to simultaneously teach content and key process skills such as the ability to think analytically and work effectively as part of a collaborative team? A POGIL classroom or lab consists of any number of students working in small groups on specially designed guided inquiry materials. These materials supply students with data or information followed by leading questions designed to guide them toward formulation of their own valid conclusions - essentially a recapitulation of the scientific method. The instructor serves as facilitator, observing and periodically addressing individual and classroom-wide needs.”

The POGIL Project was represented by Professor David Hanson of the State University of New York at Stony Brook and Professor Christina Mewhinney of Eastfield College. The two chemists spent three days at UT Arlington meeting with faculty and presenting workshops. On February 1st, Prof. Hanson presented “Active Learning in Large Classes ? The POGIL Approach” to a campus-wide audience. Slides from this workshop and a video of the proceedings are available at http://cos.uta.edu/secc/FTR/. On February 2nd, Prof. Hanson led a well-attended workshop for College of Science faculty entitled “Designing POGIL Activities and Facilitation Strategies”. Slides from this workshop are also available at the same web site. On their final day on campus, Ms. Mewhinney facilitated an all-day workshop attended by approximately 30 educators of all stripes from the region. Most participants were from the DFW Metroplex, but attendees came from as far away as San Antonio, Oklahoma and Arkansas.

Since August of 2006, the faculty members of the College of Science have received $5,087,732 in grant or contract funding. Especially gratifying is the continuing success of our faculty in gaining grants from the National Science Foundation and the National Institutes of Health. Among grants received in the last few months are one from NSF by Dr. John Holbrook (Earth and Environmental Science), and several by Dr. Cedric Feschotte (Biology) and one by Dr. Ellen Pritham (Biology) from NIH. College of Science faculty were successful in obtaining funding from the UT Arlington/UT Southwestern Collaborative Research Program. Drs. Yuan Bo Peng, Perry Fuchs and Angela Dougall (Psychology) and Pawel Michalak (Biology) received awards from a program that was designed to increase research collaboration between these two universities. This program provided seed funding for projects that involved scholars from both institutions that would have a significant scholarly impact and high potential for additional external funding.

Professor Tuncay Aktosun (Mathematics) received a GAANN (Graduate Assistant in Areas of National Needs) grant of $506,688 from the US Department of Education. It provides need based support to US citizens and permanent residents to pursue Ph.D. degrees in various areas of national needs. The Department of Mathematics is currently supporting 10 GAANN fellows using this grant. The grant provides stipends to GAANN fellows and covers their tuition and fees. It has helped the department attract strong US graduate students and significantly increased the number of supported graduate students.