



Summer 2009 Issue 1

# COLLEGE OF SCIENCE

# E-NEWSLETTER

## In this Issue:

- Dean's Welcome
- Commencement 2009
- College of Science Awards
- Alumni Highlights
- Faculty Highlights
- Student Highlights
- Faculty Retirement: John Fry
- Development Story
- New Grants
- ExxonMobil Science Ambassadors
- In Memoriam
- Science Events

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## Dean's Welcome

This has been another exciting semester for the College of Science. Our faculty members continue to gain recognition for their excellence in research and teaching and to be successful in gaining grant funding for the various research and educational programs. We also have a great group of science students who are excelling both in the classroom and the research laboratories.

We are also greatly enjoying interacting with our alumni and retired faculty members at various events. Several alumni have visited campus to meet with students and to give talks. It has been very inspiring for our students to interact with some of our successful alums. There has also been a lot of excitement about the Maverick Match program in which gifts of \$25,000 or more are matched dollar for dollar with gas royalty funds. We have already received some very significant gifts in response to this program. These donations are critical in helping us move our college and university to flagship status.

I am happy to announce that Dr. Pamela Jansma will take over as the new Dean of Science on August 15, 2009. She is a successful scholar and experienced administrator who is well suited to take the college to the next level. Please visit the following website for more information on Dr. Jansma

<http://www.uta.edu/ucomm/internalcommunications/mavwire/2009/jun12extra.php>.

I hope you will enjoy this brief snapshot of the happenings in the College and we look forward to seeing you back on campus for one of the many interesting events or at one of our alumni gatherings.

Paul Paulus



COLLEGE OF SCIENCE

# COMMENCEMENT 2009

## College of Science graduation featured two distinguished alums

Hundreds of parents, some who traveled from as far away as Australia, Japan and Lebanon, joined their students for the College of Science's May graduation. The capacity crowd heard addresses by two alumni: Dr. Donald Jernigan and Dr. Maxwell Scarlett.

In June 1967, Dr. Jernigan received the first-ever diploma awarded after the school's name changed from Arlington State College to The University of Texas at Arlington. Dr. Jernigan, President and Chief Executive Officer of Adventist Health System, the largest not-for-profit Protestant hospital system in the country, said his remarks would be brief, "because I am not the President of the United States and not one person came here today to hear what I had to say."

Here's what he said:

- As much as humanly possible, seek out a work environment where people share your values.
- Be a problem-solver. Good problem solvers will find that the world will beat their door down.
- Never quit growing: intellectually and emotionally.
- Be flexible. Life has a way of throwing unexpected curves.
- Recognize that this is the best possible time to pursue a career in disciplines like robotics, medicine, photonics or genetics.

"Once we get through the next year or so and the economy begins to turn around, we will be moving to the high-knowledge economy that we need to solve global problems," he said.

Dr. Scarlett, the first African-American graduate of this institution in 1966 (then named Arlington State College), spoke on the value of maintaining close ties to the University. He is President and Chief Executive officer of Lekar Emergency Medical Associates in Killeen. Dr. Scarlett and his wife, Vivian, recently established the Biology Department's first endowed professorship and the first such endowment established by an alumnus.

Dr. Scarlett, addressing the graduates as "Mighty Mavericks," said that graduation did not mean they were finished with UT Arlington.

"We share a common bond that makes us one," he said, encouraging the new graduates to come back to the campus, mentor and help provide internships for students, attend athletic and arts events, become active in the Alumni Association and to "never underestimate the collective effect of working together."



Dr. Jernigan, Dean Paulus and Dr. Scarlett

# COLLEGE OF SCIENCE AWARDS

College of Science faculty recognized for excellence in teaching and research.

## **A number of awards were presented at the spring meeting of the faculty and associates:**

Distinguished Record of Research, Andrew White, Physics  
Outstanding Research Achievement, Kaushik De, Physics  
Innovation in Teaching Award, James Epperson, Mathematics  
Election to the Academy of Distinguished Teachers, Lauri Jensen-Campbell, Psychology

## **Other awards received by our faculty:**

### *Research Enhancement Grants*

Woo-Suk Chang, Biology  
Frank W. Foss, Chemistry  
Dimitar Grantcharov, Mathematics  
Andrew Hunt, Earth and Environmental Sciences  
Stephen Pankavic, Mathematics  
Andre E. Pires da Silva, Biology

### *Innovative Teaching Grant*

Laura Mydlarz, Biology

### *Faculty Development Leaves*

Thomas Chrzanowski, Biology  
Zdzislaw Musielak, Physics  
Sophia Passy, Biology  
Jaehoon Yu, Physics

## **Awards presented at the spring College of Science Awards Ceremony:**

Outstanding Research Achievement, Cedric Feschotte, Biology  
Outstanding Teacher Award, John Holbrook, Earth and Environmental Sciences

[View full list of Awards from the College of Science Awards Ceremony](#)

# ALUMNI HIGHLIGHTS

## Alumnus establishes the Vivian M. and Maxwell C. Scarlett, M.D. Professorship in Biology



Dr. Maxwell Scarlett became our first African American alumnus when he graduated from the College of Science in 1966. With the **Vivian M. and Maxwell C. Scarlett, M.D. Professorship in Biology**, Dr. Scarlett and his wife, Vivian, have entered another realm of firsts: first alumni endowed professorship in the College of Science, first endowed professorship in the Department of Biology, and first professorship during the Maverick Match.

Read more at:

<http://www.uta.edu/ucomm/mediarelations/press/2009/04/Dr.-Scarlett-establishes-professorship.php>

## Alumnus Ivan Koon Challenges Students to Apply Themselves 100%



Ivan Koon (B.S., Mathematics, 1983) is the CEO of YouSendIt, a file sharing company based in San Jose, California. He generously came back to campus to address students in mathematics and computer science. “Very few people are lucky enough to find what they love early, but do not waste your life waiting for the perfect thing to come along. Apply yourself 100% to opportunities that come your way. When you do that, you will be recognized and given an opportunity for the next big project. When you apply yourself 100%, you will learn to love what you are doing, and you will give it 100%. That will make your success a never ending spiral,” Koon said. For more about Ivan and his company, visit <http://www.uta.edu/uta/gateway-features/index?id=ivan-koon>.

We are grateful to Mr. Koon for his time and for inspiring our students to really think about achievement, success, and happiness.

# FACULTY HIGHLIGHTS

Dr. Daniel Armstrong from Chemistry was mentioned in UT System article. Read more at <http://www.utsystem.edu/magazine/2009/STARS.htm>

Dr. Chaoqun Liu's research was "Today's Exclusive" story at the NSF Science 360 News Service website. Read more at <http://news.science360.gov/archives/20090424.aspx>

Dr. Subhrangsu Mandal recent manuscript in FEBS Journal 2009 is featured on the cover page. [View Cover](#)

Ms. Pat Ellington, Ms. Sonja Godeken, Dr. DMITAR Grantcharov, Ms. Shelley Hamilton, Dr. Hua Shan and Ms. Nancy Wolff were honored for their teaching excellence at a recent reception organized by the UT Arlington Freshmen Leaders on Campus (FLOC).

Dr. William Ickes just completed a book entitled *Strangers in a Strange Lab: How Personality Shapes Our Initial Encounters with Others*. The book will be published later this year by Oxford University Press.

Dr. Robert J. Gatchel was honored this year with the *HealthCare Hero Award* from Healthpoint Ltd. and Ft. Worth Business Press. His citation read: "His revolutionary research in pain management has helped improve the quality of life of men and women in the workplace and in the community."

*The First Annual Integrative Medicine Conference on Women's Health Issues: Breast Cancer* was hosted this year on April 22<sup>nd</sup> at the University of Texas at Arlington. Dr. Robert J. Gatchel was Conference Director, who used a donation received from Louise and Gigi Gartner to help sponsor the conference.

Chemistry Professor and Associate Dean Krishnan Rajeshwar has received the Electrochemical Society's Energy Technology Division Research Award. The honor goes to individuals in academia, national laboratories and industry who have made significant contributions to energy research and development. [Read More](#)

Dr. Cedric Feschotte was invited to present a talk about his research to about 600 UT System supporters at the Hidden Treasures event sponsored by the Chancellor. This event is designed to showcase the exciting research activities and other developments on the various UT campuses.

## Faculty Promotions

To Associate Professor: Esther Betran ( Biology), Cedric Feschotte( Biology), Michael Roner ( Biology), Hua Shuan (Mathematics)

To Professor: Ping Liu (Physics)

# STUDENT HIGHLIGHTS

**The UT Arlington McNair Scholars Program** is pleased to announce that Mathew Davis (Psychology), Steven Emenhiser (Geology), Andrew Palacios (Biology), Juandell Parker (INTS/Biology) and Crystal Red Eagle (Physics) have recently been admitted to the McNair Scholars Program. All plan to participate in the McNair Summer Research Internship this summer.

**Maria Oliveira** received the College of Science Dean's Excellence Scholarship. Her faculty advisor is Dr. Chaoqun Liu.

**Darius Bonds** (Biology, '09) has been awarded a fellowship at the University of North Texas Health Science Center to continue his research on the use of estrogen therapy in the treatment of Parkinson's disease. He won the President's Award at the 2009 ACES research competition for his work in this area and plans to continue it while pursuing a doctoral degree at UNTHSC.

**Samara Morris-Bobzean**, a senior Psychology student working with Dr. Linda Perrotti on identifying genetic predictors for cocaine abuse, has been awarded a paid summer fellowship from the National Institute of Drug Abuse in Bethesda, Maryland.

**Jordan Garrett**, a Geology senior, is one of 35 students nationwide selected for a U.S. Geological Survey internship. He will be working on hydrologic problems in Arkansas for the summer.

# FACULTY RETIREMENT



**John Fry**, Professor and former Chairman of Physics, retired in May, 2009 after 38 years of distinguished service to UT Arlington. In addition to his duties as Associate Professor (1971 – 1978) and Professor (1979 – 2009) Dr. Fry served as Physics Department Chairman from 1983 to 1987 and from 1998 to 2004.

Inspired to pursue a career in physics by a sighting of the Sputnik satellite from the rooftop of his boyhood home in Waco, Texas, his productive research career in theoretical condensed matter physics included such highlights as the opportunity to collaborate with Nobelist Peter Levy of NYU. He was a major force in the development of UT Arlington's Ph.D. program in Physics, and was the original advocate for a state-of-the-art digital planetarium which has been visited by almost 200,000 guests since it opened in March of 2006.

Reflecting on his lengthy career, Fry said "In retrospect I believe on that clear day on the roof of my parent's house I did not see an airplane, a flying saucer, a weather balloon or a shooting star in broad daylight. Even though I watched it for many days thereafter, I now conclude what I saw was not just Sputnik. What I saw was a bright silver chariot offering me and a host of aspiring young scientists and engineers a free ride on the most exciting and explosive period of growth and development in science and technology in the history of the world."

# DEVELOPMENT STORY

## Ed Morton Announces Planned Gift to UT



“I have very much enjoyed my long affiliation with the UT Arlington College of Science. The college faculty, students, and staff have essentially been my extended family and I have developed friendships that have endured over the years. Leaving a bequest in my estate for the creation of an endowed professorship is a way to give back to the college that has given so much to me,” said Ed Morton, Assistant Dean of Science for Student Affairs, a 28 year UT Arlington employee.

Anne and Ed Morton have worked with their attorney to include language in their wills to designate that a portion of their estate be used to fund a professorship in the Biology Department. If you would like to create a legacy and discuss the possibility of including the College of Science at UT Arlington in your estate plan, please contact Shelly Frank, Director of Development at 817.272.1497 or [shellyfrank@uta.edu](mailto:shellyfrank@uta.edu).

### Sample Bequest Language to Establish an Endowment

I give, devise and bequeath (*insert gift here—see \* below*) to the Board of Regents of The University of Texas System (“Board of Regents”) for the use and benefit of The University of Texas at Arlington (“UT Arlington”). Such bequest shall be used to create the (*name of endowment*) as a permanent endowment for the (*name of the department*) at UT Arlington. Funds distributed from the endowment shall be used (*describe use of gift*).

#### \* *Some items commonly addressed in this area are:*

1. *A fixed dollar amount or specific asset(s)*
2. *All the rest and residue or a percentage of an estate (i.e., 10%, 25%)*
3. *A percentage or parcel of land or real estate (Please give as specific a description of the property as possible.)*
4. *Other tangible asset (i.e., collection of art, private library, etc.)*

#### ***Endowments may be set up naming the donor or an honoree with or without the purpose included in the name:***

1. *Mr. and Mrs. John Doe Endowed Physics Scholarship  
Jane and John Doe Endowed Psychology Scholarship  
John Smith, M.D. Endowed Mathematics Scholarship*
2. *John and Jane Doe Endowed Professorship for Earth and Environmental Sciences  
Jane Doe Endowed Fellowship for Research in Chemistry*

*Endowments must meet minimum funding levels and are officially established upon approval of the Board of Regents. As with any decision involving your assets, we urge you to seek the advice of your professional counsel when considering a gift to UT Arlington.*

# NEW GRANTS

This past year collaborations between the College of Science and the College of Education have led to the awarding of more than \$1.4 million in grant funds to a team led by Dr. Ann Cavallo, Department of Curriculum and Instruction, and Dr. Greg Hale, Assistant Dean of Science. The two have been joined on some projects by Dr. Ramon Lopez, Department of Physics, and Dr. James Epperson, Department of Mathematics, both of whom have had very successful years obtaining funding in other collaborations as well. For details, please use the following link to read the *UT Arlington Magazine* story about the grants. <http://www.uta.edu/ucomm/utamagazine/2009/spring/Research.pdf>. In addition a \$80,000 grant was awarded for the ExxonMobil Bernard Harris Summer Science Camp, from Bernard Harris Foundation. The camp is a two-week residential experience for forty-eight 6th, 7th and 8th grade (2009-2010 school year) students from the Dallas-Fort Worth metroplex. For more details please visit <http://www.uta.edu/sciencecamp/>.

Drs. Minerva Cordero (PI), Tuncay Aktosun (co-PI), James Epperson (co-PI), Theresa Jorgensen (co-PI), and Jianping Zhu (co-PI) have received a five-year \$2,854,024 NSF grant for "GK-12: Mathematically Aligned Vertical Strands Connecting Mathematics Research, Pedagogy and Outreach for GK-12 Fellows and Teachers (MAVS Project)."

Drs. Theresa Jorgensen (PI) and Christopher Kribs Zaleta (co-PI) received a two-year \$220,000 Teacher Quality grant from the Texas Higher Education Coordinating Board (THECB).

Drs. Barbara Shipman (PI) and James Epperson (co-PI) have received a two-year \$150,000 NSF grant for their project on "Empowering Student Learning in Mathematical Analysis."

Dr. Timothy Odegard had his Veterans Administration research contract renewed, based on merit. The total budget is \$787,432 and the title is 'Auditory Visual Memory Conjunction Project of the Neuroimaging and Biomarker Studies' for the Gulf War Veterans' Illnesses IDIQ Contract.

Dr. Jeff Demuth of the Biology Department received a \$1,112,871 grant from NIH entitled: "Epistasis: it's role in complex traits, gene expression and speciation." The grant funds studies of the genetic architecture of complex traits using speciation in beetles as a model system. The prime recipient is Indiana University with UTA/Demuth being the sub-recipient.

Dr. Kevin Schug of the Chemistry Department received a CAREER award from NSF that pays \$550,000 over 5 years. This grant focuses on the development of new drug discovery methods using mass spectrometry. It also has a large educational component designated Diversity in Science in the US (DISCUS), which aims primarily to develop and disseminate teaching tools for students having limited English proficiency. The title is CAREER: Quantitative Characterization of Noncovalent Interactions by Mass Spectrometry - A Systematic Approach."

Dr. James Epperson (PI), Dr. Theresa Jorgensen (co-PI), and Dr. Christopher Kribs Zaleta have received a two-year \$700,000 grant on "UT Arlington Mathematics Teacher Preparation Academy" from the Texas Higher Education Coordinating Board.

# SCIENCE AMBASSADORS

## ExxonMobil Science Ambassadors



The UT Arlington College of Science has received a \$50,000 grant to continue the UT Arlington ExxonMobil Science Ambassador program. Since the program's inception in October 2007, the Science Ambassadors have performed over 200 science shows for about 16,000 students from elementary, middle, and high schools in the DFW area.

The Science Ambassadors are a group of undergraduate students who present free science shows to school groups visiting the UT Arlington campus. The typical show lasts around 45 minutes and has 10-12 science demonstrations. The Science Ambassadors have also taken the show to area schools' Science Nights and have served as science fair judges.

The science show was initially developed by Dr. Greg Hale, based on demonstrations that he and Dr. Fred MacDonnell have done for UT Arlington visitors and at area schools for many years. Over the past eighteen months, the Science Ambassadors have developed new demonstrations themselves, and they are continually revising old ones to make them more exciting.

For more information on the program, visit the Science Ambassador web site at [www.uta.edu/scienceambassadors](http://www.uta.edu/scienceambassadors).

The ExxonMobil Science Ambassadors were also on the Fox 4 Good Day Morning Show: Students Nada Hassan and Amanda Beckwith, Greg Hale. Read more at [http://www.myfoxdfw.com/dpp/good\\_day/Fiona\\_Flirts\\_with\\_Fire\\_Again](http://www.myfoxdfw.com/dpp/good_day/Fiona_Flirts_with_Fire_Again)

## IN MEMORIAM

### In Memory of Joe Kuban, Ph.D.

Joe Kuban (BS Biology '72, MS Biology '77) was both an alumnus and an adjunct faculty member in the College of Science, but his influence as an educator, scientist, singer/songwriter and environmental advocate extended far beyond the UT Arlington campus. As a faculty member at Nolan Catholic High School since 1973, Dr. Kuban pioneered an ecology studies program that allowed him to share his passion for nature and the environment with several generations of students. His field trips to exotic locales were legendary among Nolan and UT Arlington students, but his favorite destination was the Big Bend area, and its beauty was the subject of many of the songs he wrote and performed with his Lost Chizo Band. His passing on June 2, 2009 due to complications of Lou Gehrig's Disease is mourned by colleagues and students on both campuses, but his legacy of love for the environment will live on.

# SCIENCE EVENTS

## Science Talks



This past spring there were several compelling speakers on campus who highlighted the excitement of science. Dr. Diandra Leslie-Pelecky from UT Dallas presented her interesting research on the Physics of NASCAR on March 4.



Astrophysicist Neil Degraesse Tyson, Director of the Hayden Planetarium in New York, spoke to a sold-out crowd on February. 17 in Texas Hall on “The Cosmic Perspective: How the Astrophysicist views Life, the Universe and Everything.” His presentation was part of the Maverick Speakers Series and highlighted the fact that this is the International Year of Astronomy. View full story at <http://www.uta.edu/maverickspeakers/recap/neil-degrasse-tyson.php>

## UT Metroplex Day 2009

UT Metroplex Day was held on March 6<sup>th</sup> this year, marking its third straight year. Metroplex Day is a collaboration among The University of Texas at Arlington, The University of Texas at Dallas, and The University of Texas Southwestern Medical Center. The goal is to highlight the science being conducted at the UT Institutions and to promote greater collaborations. This year’s event was a great success, with 257 registrants and 120 poster presentations.