

# UT DALLAS

M A G A Z I N E

## Reversing the Brain Drain

A TIER ONE REPORT





THEN

NOW

28

**UT DALLAS**  
MAGAZINE

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## FEATURES

### UTD WOMEN WIN FIRST ASC CROWN / FALL SPORTS RECAP

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It's an updated version of the Cinderella story: 14 young women (plus coaches and manager) get to go to the big dance, dressed in Comets jerseys and high-performance shoes. The UTD women's basketball team put a fairy-tale ending on its season by winning its first-ever conference title and advancing to the NCAA Division III tournament. Catch up on their magical season as well as the season successes of other Comets teams.

### REVERSING THE BRAIN DRAIN: A TIER ONE REPORT

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As eight public universities in Texas map their paths to "Tier One" status, the friendly competition has led to substantial public and private support for education and research. Nationally recognized academic research universities often reshape the local economic landscape. Is a Tier One research university near you?

### THEN & NOW: FIFTY YEARS OF SCIENCE AND MATHEMATICS

28

The '60s boom of the U.S. space program, the unraveling of the DNA molecule and the mysteries of the Earth's crust and core brought a community of scientific scholars to the Southwest Center for Advanced Studies, now UTD. Fifty years later, the intellectual climate is nurtured with the same rigor and passion and, in some cases, by some of the same scientists.

### DRAWN TO DAMASCUS ALUMNI PERSPECTIVE: DINA SHAHROKHI

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The decision made during her senior year—to forego graduate school for the experience of living and working in the Middle East—took Dina Shahrokhi BA'11 from Dallas to Syria. Her exploration of the country and its culture was disrupted by the conflict that engulfs Syria today. An eyewitness to upheavals in the ancient city, Dina remains committed to a career combining mediation and Middle East policy.



## LETTERS TO THE EDITORS

### Mail For The Fall Issue . . .

#### Substance and Style

Just want you to know how much I look forward to receiving and enjoy reading *UT Dallas Magazine*. The layout and articles are most interesting. What a class act.

**Joyce R. Johnson BGS'83**  
Dallas, Texas

I always enjoy your magazine—cover to cover. Congrats on your fine work!

**Dr. Mike W. Peng**  
Professor and Chair,  
Jindal School of Management  
The University of Texas at Dallas  
Richardson, Texas

*Editor's Note: Thank you for the praise. We're pleased to report that UT Dallas Magazine garnered several awards in March from the Council for the Advancement and Support of Education (CASE), District IV, including a bronze award for overall publication design.*

- "Art in the Digital Age" (Spring 2012) by Chaz Lilly BA'11—gold award, short feature.
- Spring 2012—gold award, cover design.
- Fall 2012—honorable mention, cover design.

Since the first issue of UT Dallas Magazine hit mailboxes in 2010, three of its covers, all designed by LeeDon Moore, UT Dallas creative director, have earned CASE awards. CASE is an international organization for professionals in alumni relations, marketing, communications and development from educational entities in 74 countries. District IV is made up of 261 member organizations from Arkansas, Louisiana, New Mexico, Oklahoma, Texas and the Republic of Mexico.

### Differing by Degrees

What a vicious attack Ms. Patterson leveled at Republicans! (Fall 2012, "Not Red or Blue, but Green and Orange!") Bless her heart. She only has a BA.

**Victoria Chase MS'92**  
McKinney, Texas

### How to Subscribe

In my work at the UT System, it would be helpful for me to receive your magazine. How might I subscribe for a physical copy? How might I subscribe for an online copy? I also have several colleagues interested in reading the online version of your magazine. Can we be added to the list of people who have the online version emailed to them?

**Kathy Checkley**  
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## ON THE COVER

The state of Texas is second only to New Jersey as an exporter of talented high school graduates to out-of-state colleges. Building more Tier One universities has the potential to stop the brain drain and reframe the vision of what higher education can do for the state.



**Join the conversation!** Send letters to the editor to [utdallasmagazine@utdallas.edu](mailto:utdallasmagazine@utdallas.edu) or UT Dallas Magazine, AD14, 800 West Campbell Road, Richardson, TX 75080-3021. All submissions may be edited for clarity or length. Please include contact information such as phone number, email address and/or mailing address.

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## CONTRIBUTORS

### Proud of Our Students

I was pleased to read Daniella Mestyaneck's article, "An Unconventional Life," in your last issue. She described, in part, the usefulness of her studies in humanities to her work as a soldier in Afghanistan. I was pleased, but not surprised. Daniella was a tremendously capable and inventive undergraduate who poured herself into the study of translation. Not many people, she told me, congratulated her when she enlisted. Yet now we see her working within the U.S. Army, in the midst of conflict, to create a bit more cross-cultural comprehension and safety. We should be proud of her association with our school.

**Dr. Sean Cotter**  
Associate Professor,  
Literature and Translation Studies  
School of Arts and Humanities  
The University of Texas at Dallas  
Richardson, Texas

### Future Comet?



My two-year-old nephew Adam is captivated by the image of a child looking out of the cover of the latest *UT Dallas Magazine*. His mom, ChiYang Smith, is finishing up her master's degree at the Jindal School of Management and his dad, Aaron Smith BS'03, is going for his second degree at UTD.

**Kim Smith BA'08**  
Addison, Texas



### Thomas Korosec

Thomas Korosec has collected more than two dozen journalism awards as a staff writer for the *Houston Chronicle*, the *Fort Worth Star-Telegram* and the *Dallas Observer*. Currently he covers Texas legal issues for *Bloomberg News* and is a regular contributor to *D Magazine*, *D CEO* and *The Dallas Morning News*.



### Dina Shahrokhi BA'11

Dina Shahrokhi spent almost a year working for the U.N. in Syria, after graduating with a BA in political science. As a McDermott Scholar and the recipient of a Critical Language Scholarship from the U.S. State Department, Dina's studies took her to several Middle Eastern countries, including Syria. She also spent a semester at the Middle East Institute in Washington, D.C., as a Bill Archer Fellow. Dina is currently a researcher for the Baker Institute at Rice University, and will begin graduate studies at Harvard's Kennedy School of Government in the fall. In May, she was awarded a Marcus L. Urann Fellowship for graduate study from the Honor Society of Phi Kappa Phi.



### Amanda Siegfried

Amanda Siegfried joined UTD in 2011, where she writes about and promotes the School of Natural Sciences and Mathematics, the Office of Research and the Office of Technology Commercialization. Siegfried, who holds a BS in physics, has written for more than 20 years about physical sciences, engineering, technology and biomedical research at such institutions as UT Southwestern Medical Center, the University of Houston and her alma mater, Purdue University.

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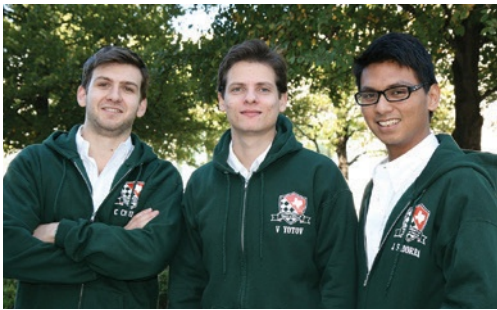


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For a full listing of the schools and programs that have social media sites, visit [utdallas.edu/social](http://utdallas.edu/social).



# ON CAMPUS



UTD Grandmasters Cristian Chirila, Valentin Yotov and Julio Sadorra took part in the Pan-American Intercollegiate Team Chess Championship in December at Princeton University.

## Chess Team Ties for First Place at 'World Series of Chess'

The University's chess team tied for first place at the Pan-American Intercollegiate Team Chess Championship, known as the "World Series of Chess."

The team faced one of the most competitive fields since the tournament's inception in 1946. Among the 44 teams at the tournament, UT Dallas faced such schools as Yale University, the University of Chicago, Texas Tech and the University of Maryland, Baltimore County.

UT Dallas played Webster University in the championship round, which ended in a 2-2 tie.

The first-place finish marks the 10th time since 2000 that UT Dallas has won or tied for first in the tournament. In the previous two years, the team won back-to-back victories and posted undefeated records.

The winning team included sophomore Valentin Yotov, junior Cristian Chirila, senior Julio Sadorra and sophomore Conrad Holt. All four UT Dallas students hold the highest chess ranking of Grandmaster. Two alternates also played on the team during the course of the tournament; International Masters Milos Pavlovic and Sal Bercys, the team captain, won their games. **-Chaz Lilly**

## Comets Volunteer, Tackle Community Projects

More than 400 students, faculty and staff gave up the chance to sleep in on a fall weekend morning so they could invest a few hours as volunteers with 32 nonprofit agencies.

Participants in Viva Volunteer, the largest single service day of the year at the University, fanned out across a 25-mile area to tackle community projects that ranged from cleanup work at a YMCA to walking dogs at area animal shelters to doing yard work for an elderly Richardson homeowner.

Organizers set the annual service day to coincide with the national Make a Difference Day. Since 2009, Viva Volunteer has tripled the number of projects students have taken on. UT Dallas students were expected to positively impact 1,000 people served by local agencies.

The event serves a dual purpose, said Monalisa Amidar, who heads the Office of Student Volunteerism. "It gives students an idea of what's out there among nonprofit agencies and also lets our neighbors get to know UT Dallas students," Amidar said.

Many of the students who participate go on to volunteer at a nonprofit agency for the rest of the year, she added.

"It's not us trying to inspire them to help. We're just giving them an outlet to serve," Amidar said. "We want to empower them to do this on their own." **-Robin Russell**



Student Amrutha Patil volunteered with Groundwork Dallas to preserve and enhance the natural resources of the Great Trinity Forest and the Trinity River.

## Dean Selected for School of Economic, Political and Policy Sciences



Dr. Denis Dean

Denis Dean, professor and head of the geography and geospatial information sciences programs, was recently named dean of the School of Economic, Political and Policy Sciences.

Dean is an expert in geospatial analysis, which can be applied to real-world applications including urban planning, population studies and computer mapping programs. He joined the UT Dallas faculty in 2008 and served as program head with responsibility for administering budgets, student retention and faculty teaching assignments.

"I'm excited about this opportunity, and I am looking forward to supporting each program within the school, and building up and expanding interdisciplinary endeavors among EPPS faculty," Dean said.

Prior to coming to UT Dallas, Dean taught at Colorado State University for 15 years, where he helped launch the Remote Sensing and Geospatial Information Systems Program. **-Katherine Morales**

## WHOOSH!

Dr. Sandra Bond Chapman, founder and chief director of UTD's **Center for BrainHealth**, published *Make Your Brain Smarter—Increase Your Brain's Creativity, Energy, and Focus*, a brain health fitness guide designed to maximize brain potential.

The *Journal of Criminal Justice Education* named **Dr. Nicole Leeper Piquero**, professor of criminology, one of the top-performing female academics in the field.

*Kiplinger's Personal Finance* magazine has again named UTD one of the nation's top 100 best values among public colleges, one of only three Texas schools to make the list.

The University's master plan for a mixed-use development near the proposed Dallas Area Rapid Transit station on the Cotton Belt Rail Line has earned a **Dream Study Award** from the **Greater Dallas Planning Council**.

## Interest in Campus Community Garden Grows



Senior Matthew Wyder and junior Haley Bilbray are student leaders with the Office of Student Volunteerism who enjoy working in UTD's Community Garden.

Lectures, research and studying in his room left sophomore Michael Bureson itching to reconnect with nature.

He wanted to get his hands dirty. Spend time outdoors. Watch things grow.

"I can't stand being inside all the time. I'd seen the Community Garden here for a year and finally had time for it," Bureson said on a recent work day, where he pushed a wheelbarrow full of fresh soil to replenish a common area.

He'd gardened a bit at his family home in Wylie, Texas, and was eager to grow things he knew how to cook with: tomatoes, basil, onions, rosemary and lots of garlic.

"My family's Italian. I can put that on everything I make," Bureson said.

The Community Garden gives students, faculty and staff the opportunity to grow their own fruits and vegetables and discover the benefits of natural gardening. New members like Bureson can learn from other students and even some master gardeners about what types of vegetables grow well in Texas, how deep to plant the seeds and how often to water.

Students organized the garden in 2006 with funding help from the UT Dallas Alumni Fund and Student Affairs. **-RR**

## Regents OK New Residence Hall and Jindal School Expansion

The UT System Board of Regents approved the design and funding of two major campus construction projects: a 108,000-square-foot addition to the Naveen Jindal School of Management (JSOM) and a 600-bed Student Housing Living Learning Center.

The new residential space will enable UT Dallas to continue to expand its undergraduate enrollment and to attract and educate highly qualified students. The residence hall will be the University's largest, and also its most complete in terms of dining facilities, learning space and opportunities for extracurricular activities.

The \$25 million addition to JSOM will include classrooms, seminar rooms, classroom laboratories, student support space and offices. The project will also provide space for a trading lab, economics lab, career center, media center, interview rooms and an expanded Executive Education center. A two-story common area fronting a new courtyard will provide space for individual and

group study, casual collaboration and café service.

Construction on both projects began in the spring and is expected to be completed by fall 2014. **-RR**



The new Student Housing Living Learning Center will provide living quarters for 600 students as well as recreational facilities and dining services in the same complex.

## Undergrads Design Sound for Perot Museum

A group of arts and technology undergraduates spent a year creating the soundscapes for the new Perot Museum of Nature and Science, giving the students hands-on experience in the field of sound design.

The students worked closely with Dr. Frank Dufour, a professor of sound design who led the digital music production course; Roxanne Minnish MFA'11, a UT Dallas sound design instructor, composer and project manager; and museum officials to refine their designs throughout the semester. Each design required specific sounds that would enhance the educational and artistic quality of the exhibit.

"This is a typical project that comes out of ATEC in that it connects art, science and technology in a creative dialogue and also contributes to positioning the University as a pertinent partner with major cultural institutions in the Metroplex," said Dufour. "Students were given a wonderful opportunity to express themselves in a professional environment in which their creativity was welcome."

The digital music production class worked on sound designs for the 11 exhibit halls, which include the T. Boone Pickens Life Then and Now Hall, Being Human Hall, Discovering Life Hall, Rose Hall of Birds, Sports Hall and the Texas Instruments Engineering and Innovation Hall, among others.

🔊 [UTDALLAS.EDU/NEWS/PEROT](http://UTDALLAS.EDU/NEWS/PEROT)

Go online to listen to some of the audio samples the students created:

T. Boone Pickens Life Then and Now Hall  
Lyda Hill Gems and Minerals Hall  
Being Human Hall  
Building as an Exhibit  
Rose Hall of Birds

Located north of downtown Dallas near Victory Park, the 180,000-square-foot museum features five floors of public space with 11 permanent exhibit halls, including a children's museum and a hall designed to host traveling exhibitions. The museum opened in December and has quickly become a popular attraction. **-CL**



Right: ATEC students Derrick Dugan (left) and Charles McCormick BA'12 in the digital music production course.

Top: The 180,000-square-foot Perot Museum of Nature and Science features five floors of public space with 11 permanent exhibit halls.



George Hall, a retired engineer, takes classes at UTD, including astronomy and geosciences.

## Student Captures Jupiter Fireball on Video

In late summer, student and amateur astronomer George Hall awoke at 5 a.m. to set up his telescope in his back yard. With clear skies and his telescope fitted with a video camera, he had hoped to spend the time before sunrise capturing a series of videos of the planet Jupiter, which was directly overhead.

By the end of the day, a snippet of his Jupiter video would be internationally famous.

Hall may have been the only person in the world to capture video of an apparent object hitting the planet Jupiter on Sept. 10. The impact created a bright fireball on the planet that lasted only a few seconds, but catching the event resulted in several hours of fame for the unassuming Hall.

"The last thing I expected was for a historical event to happen in my back yard," said Hall, a retired engineer and Dallas resident who takes occasional classes at UT Dallas, including astronomy and geosciences.

Hall posted a four-second video clip of the Jupiter impact to Flickr, and overnight, the site received more than one million visitors. His website had about 50,000 hits, he said.

Hall has had requests for his video from personnel at NASA, the Jet Propulsion Laboratory and the SETI Institute. Dozens of news agencies from around the globe have interviewed him or requested permission to post his video. **-Amanda Siegfried**



# FROM THE LAB



University computer scientists named a stealth technology software system *Frankenstein*, after author Mary Shelley's monster-creating scientist.

## 'Frankenstein' Programmers Build Cybersecurity Monster

To catch a thief, you have to think like one. University computer scientists are trying to stay one step ahead of cyberattackers by creating their own monster. Their monster can cloak itself as it steals and reconfigures information in a computer program.

In part because of the potentially destructive nature of their technology, creators have named this software system *Frankenstein*, after the monster-creating scientist in author Mary Shelley's novel *Frankenstein, or The Modern Prometheus*.

"Shelley's story is an example of a horror that can result from science, and similarly we intend our creation as a warning that we

need better detections for these types of intrusions," said Dr. Kevin Hamlen, associate professor of computer science, who created the software along with his doctoral student Vishwath Mohan. "Criminals may already know how to create this kind of software, so we examined the science behind the danger this represents in hopes of creating counter-measures."

*Frankenstein* is not a computer virus, which is a program that can multiply and take over other machines. But it could be used in cyberwarfare to provide cover for a virus or another type of malware, or malicious software.

In order to avoid antivirus software, malware typically mutates every time it copies itself onto another machine. Anti-virus software figures out the pattern of change and continues to scan for sequences of code that are known to be suspicious.

*Frankenstein* evades this scanning mechanism. It takes code from programs already on a computer and repurposes it, stringing it together to accomplish the malware's malicious task with new instructions. The program could be used to aid government counterterrorism efforts by providing cover for infiltration of terrorist computer networks. **-LaKisha Ladson**

# WHOOSH!

**Dr. Alain Bensoussan**, professor of risk and decision analysis and an Ashbel Smith Professor in the **Naveen Jindal School of Management**, was named a Fellow of the **American Mathematical Society**.

Former soccer players **Theresa Buckles Walters BA'07** and **Zac Lindley BS'08**, baseball standout **Trent Elizondo BA'07** and men's basketball star **Martin Salinas BS'07** were inducted into the **UT Dallas Athletic Hall of Honor**, along with **Doug Fejer**, a volunteer sports photographer.

The University's campus enhancement project was included in an online roundup of notable Texas architecture by **The Architizer** website, which praised UTD's mall and landscape design.

**Dr. Sheryl Skaggs**, associate professor in the **School of Economic, Political and Policy Sciences**, was recently appointed to lead the Department of Public Affairs and Sociology.

## Researchers Push the Boundaries of Virtual Reality

**R**esearchers are extending the borders of virtual reality, going beyond virtual spaces in which people can see and hear one another to an environment that adds the sense of touch.

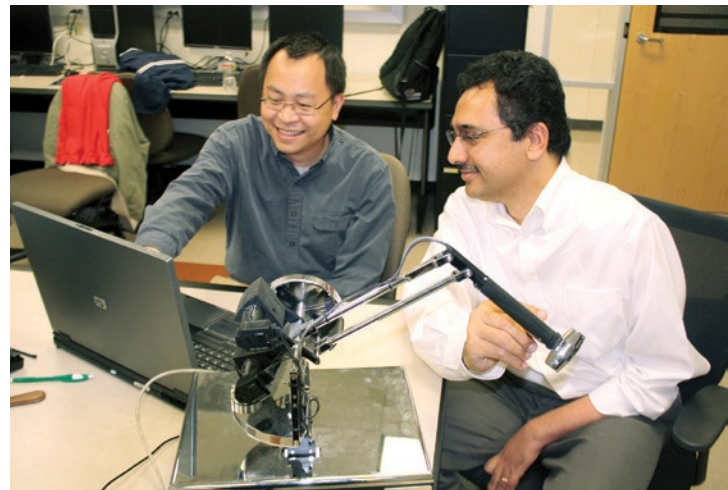
The technology would make it possible for physical therapists, for example, to work with patients in other locations. When a patient pushes down on a device, a device in the doctor's location would also move down with the same force, as if the patient were physically pressing the doctor's hand.

Professors in the Erik Jonsson School of Engineering and Computer Science are creating a multimedia system that uses multiple 3-D cameras to create avatars of humans in two different places, and then puts them in the same virtual space where they can interact.

In traditional telemedicine, a doctor and patient both appear on the same screen and are able to talk, but they are not in the same physical space.

"With in-home rehabilitation, doctors ask a patient if he or she has done their exercises, but the patient may not be doing them correctly," said Dr. Balakrishnan "Prabha" Prabhakaran, professor of computer science and a principal investigator of a \$2.4 million project funded by the National Science Foundation to create the system.

"It is one thing for a patient to say he or she did their exercises, but it is another to watch them in action, feel the force exerted, be able to correct them on the spot and get immediate response."



*Dr. Balakrishnan Prabhakaran (right) moves a haptic device while Dr. Xiaohu Guo tracks the corresponding movement on the computer screen.*

With large amounts of data, such as tracking images or movement, there could be significant lag time or delays in transmission. The grant funds creation of the algorithms and software needed to transmit the data through the Internet in real time. There are four major areas of this system under research by experts in the Jonsson School. **-LL**

## Findings Could be Used to One Day Engineer Organs



*Wrinkle formation that occurred on a four-day-old *subtilis* biofilm was preceded by cell death.*

**B**iologists have teamed up with mechanical engineers to conduct cell research that provides information that may one day be used to engineer organs.

The research sheds light on the mechanics of cell, tissue and organ formation and revealed basic mechanisms about how a group of bacterial cells can form large three-dimensional structures.

"If you want to create an organism, the geometry of how a group of cells self-organizes is crucial," said Dr. Hongbing Lu, professor of mechanical engineering and holder of the Louis Beecherl Jr. Chair.

"We found that cell death leads to wrinkles, and the stiffer the cell the fewer wrinkles."

Organ formation is the result of individual cells teaming with others. The aggregate of the cells and their environment form a thin layer of what is known as a biofilm. These biofilms form 3-D wrinkled patterns.

Senior author Dr. Gürol Süel, now at the University of California, San Diego, and his colleagues noticed dead cells under the wrinkle pattern. They teamed with Lu to discover what came first—the cells' death or the wrinkling.

They found that groups of cells dying together within the biofilm resulted in the formation of wrinkles. They also found that the stiffness of the biofilm affected the formation of wrinkles. This is significant because it lays the foundation for the first theory about building a structure in tissues and organs, taking both the biological and mechanical forces into consideration. **-LL**

**Dr. Christine Dollaghan**, a professor at the **Callier Center for Communication Disorders** and the **School of Behavioral and Brain Sciences**, received the American Speech-Language-Hearing Association's top award for her contributions to the field of communication sciences and disorders.

The **UTD Confucius Institute** has forged a new partnership with **Southeast University** in Nanjing, China, that will help redefine the institute as a home to creative connections, a place where arts, technology, culture and language meet.

The **Office of Technology Commercialization** achieved a record number of invention disclosures, patent applications and licensing agreements in fiscal 2012, including 66 invention disclosures; 60 patent applications; 10 patents issued; and 10 licenses and option agreements.

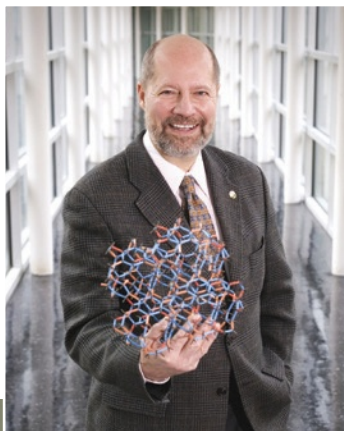
## Nanotech Yarn Behaves Like Super-Strong Muscle

University scientists working with an international research team have developed new artificial muscles made from nanotech yarns and infused with paraffin wax that can lift more than 100,000 times their own weight and generate 85 times more mechanical power than the same size natural muscle.

The artificial muscles are yarns constructed from carbon nanotubes, which are seamless, hollow cylinders made from the same type of graphite layers found in the core of ordinary pencils. Individual nanotubes can be 10,000 times smaller than the diameter of a human hair yet, pound for pound, can be 100 times stronger than steel.

"The artificial muscles that we've developed can provide large, ultrafast contractions to lift weights that are 200 times heavier than possible for a natural muscle of the same size," said Dr. Ray Baughman, team leader, Robert A. Welch Professor of Chemistry and director of the Alan G. MacDiarmid NanoTech Institute at UT Dallas. "While we are excited about near-term application possibilities, these artificial muscles are presently unsuitable for directly replacing muscles in the human body."

The new artificial muscles are made by infiltrating a volume-changing "guest," such as the paraffin wax used for candles, into twisted yarn made of carbon nanotubes. Heating the wax-filled yarn, either electrically or using a flash of light, causes the wax to expand, the yarn volume to increase and the yarn length to contract.



Top: Dr. Ray Baughman. Above: Artificial muscles made from carbon nanotube yarns are infiltrated with paraffin wax and twisted until coils form along their length. The diameter of this coiled yarn is about twice the width of a human hair.

The combination of yarn volume increase with yarn length decrease results from the helical structure produced by twisting the yarn. A child's finger cuff toy, which is designed to trap a person's fingers in both ends of a helically woven cylinder, has an analogous action. To escape, one must push the fingers together, which contracts the tube's length and expands its volume and diameter.

The yarn muscles could be used for such diverse applications as robots, catheters for minimally invasive surgery, micromotors, mixers for microfluidic circuits, tunable optical systems, microvalves, positioners and even toys. **-AS**



Dr. John Hart Jr., medical science director at the UT Dallas Center for BrainHealth, also directs the BrainHealth Institute for Athletes, which was created to address the long-term effects of sports-related traumatic brain injuries.

## Study Finds Cognitive Impairment in Some Retired NFL Players

A study led by the UT Dallas Center for BrainHealth examining the neuropsychological status of former National Football League players has found heightened incidence of cognitive deficits and depression among retired players.

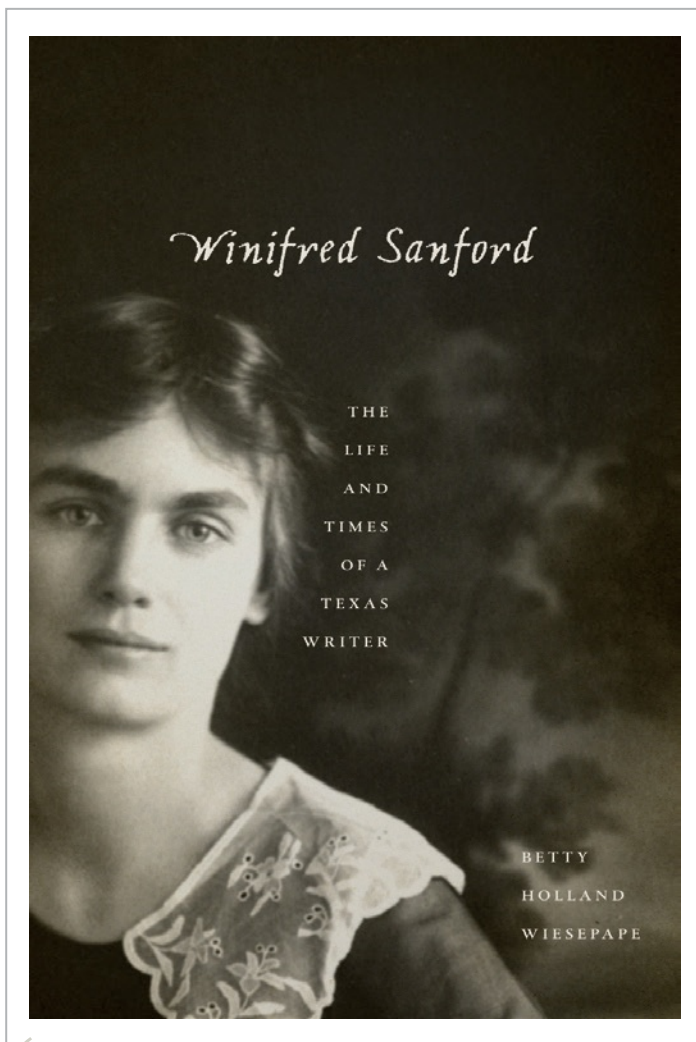
But University researchers from the center and from UT Southwestern Medical Center say their study also is significant for what it did not find: evidence of cognitive impairment in the majority of ex-players.

"Many former NFL players who took part in our study, even those with extensive concussion histories, are healthy and cognitively normal," said Dr. John Hart Jr., medical science director at the Center for BrainHealth and director of the BrainHealth Institute for Athletes, which was created to address the long-term effects of sports-related traumatic brain injuries. "In 60 percent of our participants—most of whom had sustained prior concussions—we found no cognitive problems, no mood problems and no structural brain abnormalities. Many former NFL players think that because they played football or had concussions, they are certain to face severe neurological consequences, but that is not always the case."

Hart, who also holds a joint appointment at UT Southwestern as a professor of neurology and psychiatry, said the investigation is the largest comprehensive study of former NFL players using neuropsychological testing, neurological assessments and neuroimaging. **-Shelly Kirkland**

# ARTS AND CULTURE

*With topics ranging from Texas literature to Chinese culture to Romanian poetry, faculty from the School of Arts and Humanities have produced a body of diverse scholarship and research this year.*



“Winifred Sanford’s daughters were surprised to learn that, in addition to short stories, their mother wrote two complete novels and produced 80,000 words of a third one. They thought she wrote only one novel, the one they watched her burn in the fireplace of the family’s home.”

Despite publishing only a handful of short stories before fading into obscurity, Winifred Sanford is considered an important early 20th-century Texas writer.

Dr. Betty Holland Wiesepape, who teaches creative writing and literature, sheds light on the mysterious writer in the biography *Winifred Sanford: The Life and Times of a Texas Writer*.

“I was just beginning to submit my own short fiction for publication, and I knew that if I ever experienced the level of success that Winifred Sanford had achieved almost instantaneously, I would not stop writing and go on to other things,” Wiesepape said. “Other scholars have puzzled over this sudden end and have lamented the fact that, although Winifred lived to be 93 years old, her last short story was published when she was only 41.”

Many of Sanford’s stories were set during the Texas oil boom of the 1920s and 1930s and offer a unique perspective on life in the boomtowns of that period. Four of her stories were listed in *The Best American Short Stories* anthology of 1926.

“Although Sanford did not have a prolific career, scholars pronounced her works, published in leading American magazines in the ’20s and ’30s, to be on par with the short stories of Pulitzer Prize-winning Texas author Katherine Anne Porter and superior to all other stories written in Texas during that time period,” Wiesepape said.

For her study, Wiesepape turned to the author’s previously unexamined private papers and emerged with a study that sheds light on both Sanford’s abbreviated career and the domestic lives of women at the time. Sanford’s fiction is examined through the sociohistorical contexts that shaped and inspired it.

“I reveal my findings and solve the mystery of her aborted career in the pages of this biography,” added Wiesepape.

The book also includes two previously unpublished stories and 18 unpublished letters between Sanford and her literary mentor H.L. Mencken.

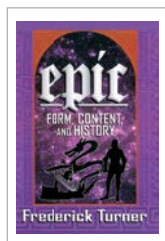
A native Texan, Wiesepape published her first book on Texas literary history, *Lone Star Chapters: The Story of Texas Literary Clubs*, in 2004 and contributed to *Let’s Hear It: Stories by Texas Women Writers*, an anthology of short fiction from 23 Texas women writers from 1890 to the present. **-CL**

# WHOOSH!

**Sandun Perera**, a PhD candidate and graduate teaching assistant in the **Naveen Jindal School of Management**, earned second place in a competition sponsored by the Financial Services Section of the Institute for Operations Research and the Management Sciences for his paper on a financial policy model that could potentially help countries fine-tune their foreign exchange rate policies.

**The Princeton Review** named **UT Dallas** one of the best values among the nation's public colleges for the first time in their book *The Best Value Colleges: 2013 Edition*.

**The Texas Higher Education Coordinating Board** has approved a doctoral degree program in mechanical engineering, offered in partnership with **The University of Texas at Arlington**.



**DR. FREDERICK TURNER**, professor of literature and creative writing, has written an epic study, literally. *Epic: Form, Content and History* argues that the literary genre of epic is the most fundamental and important of all literary forms, the frame within which

any literature is possible at all. The study defines the nature of the human storyteller, recalls the creation of the world and of the human race, describes the role of the hero, and outlines the complex quest underlying all human action.

"The mission of this book is to begin to repair the great gaps in the literary understanding that have been created in the absence of epic studies—and perhaps offer a permission to future epic writers and composers," Turner wrote in the introduction.

Turner authored *Genesis: An Epic Poem* in 1988, the first major work of fiction that addressed the idea of making Mars an inhabitable planet. *Genesis* was on the recommended reading list at NASA and has gone on to enjoy cult status.

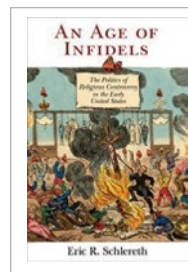
**DR. MING DONG GU**, director of the University's Confucius Institute, has published a study that explores the relationship between China and the West. *Sinologism: An Alternative to Orientalism and Postcolonialism* examines how Western societies have come to perceive China and the Chinese civilization and, in turn, provides a critique of the ways in which this

perception is formed. He argues that the misperceptions and misinterpretations surrounding China and its civilization do not simply come from misinformation, biases, prejudices or political interference, but follow certain principles that have evolved into a cultural unconscious.

"For over two decades I have been preoccupied with these questions: Why, for centuries, have the West and the world continuously produced knowledge about China that deviates from the realities of Chinese civilization? Why, since the mid-nineteenth century, have Chinese intellectuals oscillated between commendation and condemnation of their own culture, and between fetishization and demonization of all things Western?" Gu said.

Commenting on Gu's book as a major contribution to cross-cultural studies, J. Hillis Miller, former president of the Modern Language Association, wrote in the preface, "The book will be constructively useful as an alternative to Orientalism and postcolonialism."

**DR. ERIC R. SCHLERETH** finds religious conflict at the core of early American political culture in *An Age of Infidels: The Politics of Religious*



*Controversy in the Early United States*. Schlereth, an assistant professor who specializes in early American history, shows how believers and their critics struggled with questions about tolerance and the limits of religious freedom in early America

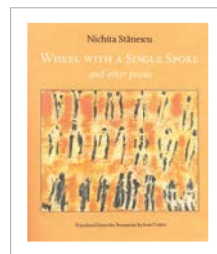
after independence. He examines how Americans resolved their diverse beliefs with political change at a seminal moment in the nation's history.

After the American Revolution, debates emerged when citizens argued how established beliefs, institutions and traditions could be accommodated within a new political system that encouraged suspicion of inherited traditions.

"Religious controversy allowed Americans to maintain the public authority of religious belief within early national civic life," Schlereth said.

Changes in the relationship between religion and the public sphere did not occur through legislation or the courts. Instead, changes happened in the less rarefied realm of popular politics and civil society.

"Although church and state were legally separated by 1840, religion and politics were recombined in powerful and lasting ways," he said.



**DR. SEAN COTTER**, associate professor of literature and translation studies, has crossed the language barriers of Eastern Europe with his work of translation *Wheel with a Single Spoke and Other Poems*. The book

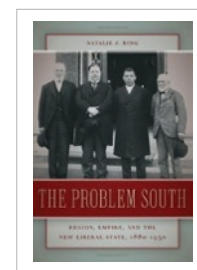
brings the works of one of Romania's most influential poets, Nichita Stănescu, into English for the first time.

Stănescu was the defining poet of Communist-era Romania. He was winner of the Herder Prize in 1975 and was also nominated for the Nobel Prize in Literature. Cotter calls Stănescu's work "innovative, conceptual and challenging poetry charged with energy."

"In an era of intense cultural politics, his aesthetics made him a leader of his generation, and his poetry was widely read," wrote Cotter.

Despite Stănescu's popularity in the post-WWII era, Cotter said the poet is still accessible and important today: "Decades after the cultural politics of his 1960s, Stănescu's distinctive poetry brings us to the edge of thought, a translucent lion on each hip, to peer through a pane of glass shattered by an invisible stone."

**DR. NATALIE RING** is taking a traditional field of study in new directions. Ring specializes in approaching southern studies and southern history with new perspectives. In *The Problem South: Region, Empire and the New Liberal State, 1880-1930*, she calls for a complete re-examination of the notion of reconciliation between the North and South after the Civil War. She argues that the



assimilation of the New South into the nation was as much rehabilitation and reform as a process of political and cultural reunion and must be situated in a global context.

Ring traces the evolution of the idea of the "southern problem" in the context of

U.S. colonialism and explains how national reform efforts to modernize the South contributed to the development of early 20th-century liberalism.

"The image of the South as the nation's problem served an ideological purpose; demarcating the region as a backward space reinforced the hegemony of the nation-state and created a sense of urgency surrounding sectional reunion," Ring wrote.

The book focuses mainly on the period when northern philanthropists, southern liberals and the federal government targeted the South for what they termed "readjustment" and "uplift." Reformers saw many similarities between the problems of the South and the problems of the overseas colonies. There is special attention to the ongoing conflict between the image of the "problem south" and the image of a national industrial democracy. **-CL**

# 2013 ASC CHAMPS

(Back row, left to right) Coach Polly Thomason, Kirstie McGillick, Ashley Shaw, Lauren "Alex" Wilson, Katie Koriath, Kimmie Grimes, Amber Brown, Morgan Kilgore, Emily Price, team manager Natalia Jones.

(Front row, left to right) Christina Brosnahan, Kellie Loukanis, Elisa McInnes, Kalyn Peters, JoAnna Davis, Sharmeke Shaw, assistant coach Mallory McAdams.

## A Cinderella Story—Comet Style

by Bruce Unrue

The fairy-tale ending to the UT Dallas women's basketball season would certainly have made Cinderella proud.

A program that once might have been looked on with "ugly stepsister" status in UTD's athletic history put a magical ending on a drama-filled 20-9 overall season—bringing home the team's first-ever American Southwest Conference (ASC) championship.

It was indeed a rags-to-riches story for the Comets, a team that went nine seasons without a winning record before head coach Polly Thomason started working her magic in 2005.

"I don't have any words to describe it," said Thomason, who saw her team rally from a 13-point second-half deficit to win the championship game. "To win it all after the kind of year we had, it's amazing what these girls were able to accomplish."

The Comets pulled off a 67-63 stunner in the ASC championship game against nationally ranked Louisiana College. It was UTD's second upset in the final two weeks of the season over the Lady Wildcats, a team that lost only four games all year.

The win earned UTD its first-ever ticket to the NCAA Division III National Tournament, where the Comets faced longtime national power Washington University-St. Louis in the opening round. UTD gave the 22nd-ranked Bears all they could handle before bowing out, 45-40.

The Comets' ascent toward reaching the big



dance began eight years ago when Thomason took over a program that had posted more than eight wins only once in its first seven seasons. After a 23-28 start in her first two seasons, the Comets have rewarded Thomason with six straight winning campaigns since, averaging more than 20 wins each of the last five years.

"But it's hard to win a conference tournament," Thomason said. "It may be the hardest thing to do in sports—to play your best basketball for three straight days. There have been years

where we had the best record of all the teams going into the tournament, but weren't playing our best basketball at the end of the season. That is frustrating—to know you have the ability but not be playing at your best. This year, though, the timing was just right."

Thomason said she had an idea early in the season that this year's team had a good shot at achieving its goals. But even she admits to losing some of that confidence during an ugly midseason six-game losing streak. The slump could not



have come at a worse time for the Comets, who were beginning division play against the teams they had to beat just to qualify for the postseason tournament.

Five of the six ASC East Division opponents sent the Comets home with losses during an extended January road trip. "I was getting nervous we might not even make the tournament," Thomason admitted. It was time for dramatic action.

After a 66-61 loss at East Texas Baptist in February, Thomason and assistant coach Mallory

McAdams buckled down. "We had to get them to refocus. We pointed out how poorly we had played defense and rebounded—two aspects of the game we've always been known for. We challenged them to play smarter," Thomason said. "There will be moments in every game when things aren't going your way, but it's how you respond that decides whether you win or lose."

Their confidence a little shaken, team members naturally questioned their abilities during the losing streak. But they never quit believing

and trusting they could start winning again.

"Some coaches don't like to say their teams learned things about themselves in losses, but I really feel like we did," Thomason said. "It was easy for us (the coaches) to point out to the players where things were going wrong. They made the adjustments, worked hard and never quit when it would've been easy to do that."

The adjustments included the hallmarks of UTD basketball—defense and rebounding. UTD held three of its final four regular-season oppo-

## A Cinderella Story *Continued*

nents to a remarkable 44 points or fewer per game, and limited the opposition to just 32.0 percent shooting (151 of 471) over the final eight games of the season. Meanwhile, the Comets pulled off a 74-72 overtime win over Louisiana College, then 22-1, that was a huge boost to their confidence.

"After that point, I think we realized we were talented enough to play with anybody," Thomason said.

That lesson carried over to the ASC Tournament two weeks later.

"The confidence just kept on building and building," Thomason said. "I just had this feeling deep inside that we were going to win it. We knew what we needed to do, and we had the confidence and focus to get it done."

After a convincing 71-55 quarterfinal win over Hardin-Simmons University, UTD faced ASC West Division champion Howard Payne University in the semifinals. The Lady Jackets, a former national champion, had already beaten UTD by 14 points (76-62) earlier in the season. Once again, defense prevailed late and UTD eliminated the tournament hosts with a 60-54 semifinal win.

In the championship game against Louisiana College, UTD played poorly in the first half and was down 38-28 at halftime. "We told the girls to calm down, to regroup and play our game," Thomason said. "And it worked."

UTD overcame a 13-point deficit to finally tie the game midway through the second period and get the game-winning basket from junior Morgan Kilgore in the final moments.

"The first half was shaky because we were playing into their game," said Kilgore, a computer science major. "Coach told us at halftime to start playing our game: to keep rebounding, boxing them out and making smart decisions."

Kilgore was named Tournament MVP after scoring a game-high 16 points. Kellie Loukanis added 14 points while Amber Brown scored 11 points to round out the Comets in double figures. Katie Koriath added seven points while pitching in nine rebounds and seven assists, both game highs. Loukanis and Koriath joined Kilgore on the All-Tournament team.

Now that Cinderella has been to the ball, she no doubt wants to go back. Thomason confirms that she has bigger goals in mind for her program next season.

"I'm hoping the girls see just how close we are to being competitive on the national level," she said. "It's very painful to play that close (in a national playoff game) and lose, but I think it's made them a lot hungrier." **UTD**



## Women's Soccer

After another winning season, the Comets qualified for the ASC Tournament for the 11th consecutive year. Finishing fourth in the ASC regular-season standings with a 7-3-2 league mark (11-5-2 overall), UTD advanced to the conference semifinals for the seventh time in 10 years. The Comets had six players recognized on the All-ASC teams, with Taylor Maeker earning first-team honors and third-team all-region recognition. Ten members of the squad were named ASC All-Academic.

(Above) Senior Taylor Maeker.  
(Left) The UTD women's team huddles before a game.

## Volleyball

The Comets claimed a seventh straight ASC East Division title and advanced to the conference title match for the fourth time in the past seven seasons. UTD set a school record for wins, posting a 27-7 overall record and a 14-2 mark in conference play. Seniors Dana Hilzendager and Halea Williams were named first-team All-ASC, leading six Comets on the all-conference teams. Hilzendager also was named second-team all-region and collected the ASC's Sportsmanship Award. Williams became the third Comet to ever claim National Player of the Week honors. Five Comets were named ASC All-Academic, and five players collected ASC Player of the Week recognition during the season.



Senior Dana Hilzendager (7) became UTD's all-time leader in kills.



Comet men compete in Wichita Falls.

## Cross Country

The UTD women's cross country team placed seventh at the ASC Championships while the Comet men were eighth. Sophomore Mel Cavage paced the UTD women, placing 32nd individually in the conference meet. Cavage, who was UTD's top performer in the season's final four events, became the first UTD women's runner to earn ASC Runner of the Week honors. For the men, junior Jordan Newcomer was consistently the Comets' top runner, leading UTD with a 21st-place finish at the ASC meet. Both squads were well-represented on the ASC All-Academic teams, with nine members of the women's team and six members of the men's squad honored.



## Men's Basketball

Head coach Terry Butterfield led his Comets to yet another 20-win season and a fifth straight ASC East Division title this winter. The Comets posted a 20-7 overall record and won the division with a 14-5 record, advancing to the ASC Tournament for the 10th consecutive season. The Comets posted a first-round tournament win for the fifth straight year before bowing out in the semifinals to eventual champion Concordia. Junior forward Kyle Schleigh was the driving force behind the UTD men's squad, averaging 21.4 points and 9.9 rebounds per game for the Comets. He was a seven-time ASC East Player of the Week and was named ASC East Player of the Year and Defensive Player of the Year at the conclusion of the season. Schleigh set several UTD single-season records over the year and climbed into third place on the Comets' career scoring list. He will easily become the program's all-time leading scorer during his senior season, needing just 185 points to pass former Comet great Chris Barnes (1,411 points, 2008-12). On Jan. 1, Butterfield collected his 200th career win at UTD and now boasts a 213-138 record after his 13th season with the program.



Senior guard Mike Timmins.

by David Wester

## Men's Soccer

With their 15th consecutive winning season, the Comets made their first trip to the ASC title game in five years. The Comets posted a 12-5-1 overall record (10-2 in league play) to finish second in the ASC regular-season standings, with a chance to advance to the NCAA Division III National Tournament for the first time since 2007. But in the conference championship bout against Mississippi College, UTD fell to the Choctaws in penalty kicks. The Comets placed seven players on the All-ASC teams, including four first-team selections. For the first time since 2002, UTD swept the ASC Player of the Year awards and nine team members were named ASC All-Academic. Junior Michael Darrow earned offensive honors, and senior Brian Bienhoff claimed defensive honors. Darrow, who set the school record with 19 goals, was named first-team all-region while Bienhoff was a second-team all-region pick. Joining the duo as first-team All-ASC picks were senior midfielder Eric Pekkala and junior goalkeeper Steven Nicknish. After posting a 193-77-23 record in his 15 years with the program, Coach Jack Peel announced his retirement at the end of the season. **UTD**



(Left) Teammates congratulate junior Michael Darrow (10) after scoring a goal.  
(Below) Head coach Jack Peel retired as men's soccer coach after 15 years.





# REVERSING



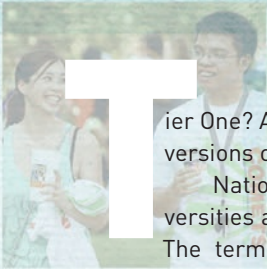
When President David E. Daniel set out to transform The University of Texas at Dallas into a national research university, he drafted a paper that could help get the state school there—and improve the standing of some equally ambitious competitors.



Concepts in Daniel’s white paper found their way into Texas law. The Tier One bill authored by State Rep. Dan Branch released hundreds of millions of dollars for education and brought new meaning (and prestige) to being among a small group of what the Texas Higher Education Coordinating Board has dryly described as “emerging research universities.”



The Tier One legislation drew a line that separated seven (now eight) state universities from the rest and set benchmarks for ranking the success of each institution in the race. It altered the vision of what higher education can do for Texas—reshape economic landscapes, create high-tech jobs and reverse the brain drain that puts the state second only to New Jersey as an exporter of talented high school graduates to out-of-state colleges.



Tier One? Are we there yet? Daniel is asked versions of these questions often.

Nationally competitive research universities are often referred to as Tier One. The term is inexact, but it typically describes schools that award large numbers of doctoral degrees, attract hundreds of millions of research dollars, hire nationally prominent faculty, admit high-quality students, and show well in *U.S. News & World Report’s* annual rankings.

Some believe UT Dallas already functions as a Tier One university, and by some measures—the *U.S. News & World Report’s* best colleges report—the University is ranked in the first tier nationally.

But Daniel takes pains to avoid some

of the overambitious language people in his position tend to use. In preparing an analysis of the University’s progress toward Tier One for a recent presentation at Texas Instruments, he put things in perspective.

Becoming “the best public research university in America” is an enormous task. It means displacing the University of California, Berkeley or the University of Virginia and, as he put it, “few universities truly would be in a position to do that.”

On the other hand, he said, joining the ranks of the truly exceptional is an attainable goal, and there are a number of distinguished universities he believes UT Dallas can use as benchmarks.

They include members of the Associa-

tion of American Universities (AAU) such as Iowa State University, the University of Kansas, the University of Oregon, Stony Brook in New York, Washington State University and several falling just short of that group.

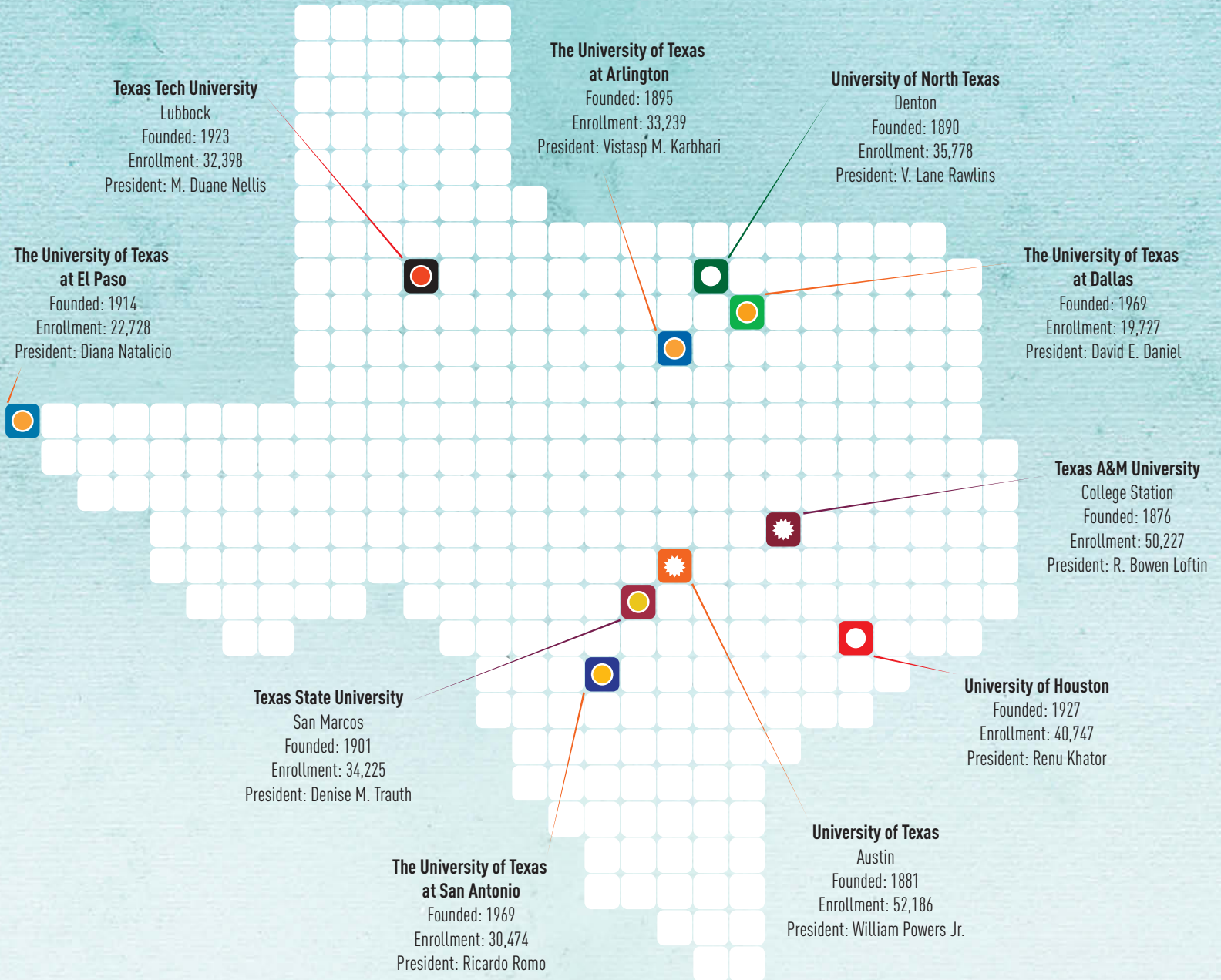
Becoming a member of the AAU—the nation’s most exclusive academic organization—reflects that a university is inarguably Tier One. Only 62 universities are members of the invitation-only association, which in recent years voted out one member (University of Nebraska at Lincoln), while another withdrew (Syracuse University).

UT Dallas compares well with Daniel’s benchmark group under the yardsticks typically used to rank universities. Its students, as measured by standardized tests

# THE BRAIN DRAIN

## A TIER ONE REPORT

by Thomas Korosec



Fall 2012 enrollment data as reported in the 2013 *Texas Public Higher Education Almanac*, Texas Higher Education Coordinating Board



Tier One is all about building up research, building up capability. We're sort of like the Marines compared to the Army. We're small but mighty, pound per pound.

**DR. DAVID E. DANIEL,  
UT DALLAS PRESIDENT**

or percentage graduating in the top 10 percent of their high school class, are top-tier.

It also has the resources to compete. To date, UT Dallas' \$310 million endowment is more than that of one of the AAU members on Daniel's list, and if its share of Texas' Permanent University Fund is added, the total is \$725 million, which is solidly top-tier.

On the other side of the equation, UT Dallas' \$36 million in federal research expenditures is only about half of the lowest expenditure total in the benchmark group and one-fourth the average. Total research of \$95 million is "less of a problem," Daniel said, although the University is barely in the game in the number of doctorates it grants. Similarly, while UT Dallas has a number of stars on its faculty, its numbers of National Academy of Sciences members and faculty awards are less than half those of the schools on the president's benchmark list.

But the University is gaining ground in these critical areas at an encouraging rate, Daniel noted. Federal research at UT Dallas has tripled in 10 years, which is a remarkable result given that it has come at a time when federal research and development has not grown.

"Imagine you were a company and you had tripled in profitability over a period of 10 years in a market when the market didn't grow," Daniel said. "We didn't go acquire another university. We didn't merge with another university. We did it organically. We brought people in who did it."

Tier One is all about building up research, building up capability. "We're sort of like the Marines compared to the Army," he said. "We're small but mighty, pound per pound."

So the University's goal is to keep scaling up, growing its student population by about 5 percent per year. UT Dallas has nearly 20,000 students, but some of the best research universities, even the small ones, can have up to 30,000.

Increased student population supports more faculty and gives academic departments wider reach. For example, Daniel pointed out, UT Dallas' chemistry department has about 19 tenured or tenure-track faculty members compared to 30 to 50 in departments at the top research schools. With that number of faculty, "you can more completely cover the field of chemistry,

from the biochemistry of cancer detection to the electrochemistry of what will be powerful enough batteries to drive our cars for 1,000 miles instead of 100 miles someday," he explained. "That's what being competitive is all about."

Bruce Gnade, UT Dallas' vice president for research, said the growth of the faculty from 300 in 2003 to 500 today is supporting a broader range of research and attracting more research money. "As long as we continue to grow, we'll continue on that trajectory," he said.

For instance, the Texas Analog Center of Excellence, founded just four years ago, has quickly become a vitally influential research hub on campus. Its mission is to find innovations in integrated circuits and systems that improve energy efficiency, healthcare, public safety and security. Similarly, the bioengineering department is just three years old but if it meets its strategic plan, will have 300 students by 2020. "Bioengineering faculty and some of our electrical engineering faculty are starting to work in the area of medical devices, with support from the National Institutes of Health (NIH). I think research support at UT Dallas from NIH will continue to grow as we add more faculty working in these areas. This is important for us because the NIH has a large portion of the federal research and development budget." Gnade explained.

Tier One universities have the ability to attract the best and brightest intellectual talent, on both sides of the classroom.

"In the end, training and educating students is the primary output of the University, and they are the motivation for doing great research and recruiting great faculty," Gnade said.

Daniel agrees. "As universities grow toward Tier One status, they attract more qualified students. Students see a greater offering of academic programs, resulting in the availability of a greater variety of classes," he said. "As the breadth and depth of academics and research at the University grows, the value of students' diplomas will grow, too."

### THE TIER ONE CHALLENGE

Currently only two Texas public universities are members of the AAU: The Univer-



In less than four years, the state's Tier One effort has meant an additional \$216 million in public and private support for university research, a wildly successful result.

**STATE REP. DAN BRANCH,  
CHAIRMAN OF THE HOUSE EDUCATION COMMITTEE**

sity of Texas at Austin, a member since 1929, and Texas A&M University, which was invited to join in 2001.

In 2009, the Texas Legislature passed House Bill 51, designed to create more Tier One contenders. The plan, envisioned in Daniel's white paper, provided several state funding pools to be used as incentives for schools aspiring to become major research institutions. Initially seven universities, including UT Dallas, met the state's criteria to compete for Tier One money under the new state program. Texas State University joined last year, expanding the list to eight.

"It just puts us on a higher plane," said Brian McCall, a UT Dallas alumnus who is now the chancellor of the Texas State University System, which includes Texas State and seven other institutions. McCall sees his university system's Tier One ambitions benefiting recruitment of faculty, students and dollars.

"I'm a big believer that the effort to create more Tier One schools is going to be very important in lifting Texas higher education's image in the rest of the United States," he said. "It already has. That's good for all the universities."

McCall, who previously served in the Texas House of Representatives, received a PhD from UT Dallas in 2006, and co-authored the bill that set up Texas' Tier One mechanism.

It becomes clear as McCall compares Texas State to other emerging research universities that among Texas' would-be Tier One institutions, friendly competition is a natural byproduct of the process. The eight—which besides UT Dallas and Texas State include Texas Tech, the University of Houston, the University of North Texas, UT Arlington, UT El Paso and UT San Antonio—span geographic rivalries that have been fueling competitiveness since Texas gained statehood, perhaps longer.

"All of them will tell you the spirit around

their communities has gotten a substantial boost because of competition and effort," said State Rep. Branch, chairman of the House Education Committee. In less than four years, the state's Tier One effort has meant an additional \$216 million in public and private support for university research, a "wildly successful" result.

"It's been good for all eight emerging research universities but out of that group, that cohort, three universities have particularly stood out and that would be UT Dallas, Texas Tech and the University of Houston," said Branch, whose district comprises the Park Cities and parts of Dallas. UT Dallas has "outpaced everyone and been extremely successful" in raising private donations geared toward research, Branch noted. Its focus on science, technology, engineering and mathematics helped the University draw \$27,472,954 in matching money from the Texas Research Incentive Program (TRIP) from years 2010 to 2013. The program offers a 100 percent match to private gifts of \$2 million or more and smaller percentages for gifts of at least \$100,000. UT Dallas' share of matching money surpassed that claimed by other institutions as of May 2013. (See chart on next page.)

At Texas State, the classification has boosted  
*continued on page 24, inside fold*

### FRESHMAN NATIONAL MERIT SCHOLARS

	2011	2012
UT AUSTIN	47	57
TEXAS A&M	159	136
UT DALLAS	53	63
TTU	8	3
UH	21	27
UTA	1	1
UTSA	--	--
UTEP	--	--
UNT	12	7
TSU	1	--

Data as reported by the National Merit Scholarship Corporation



In the end, training and educating students is the primary output of the University, and they are the motivation for doing great research and recruiting great faculty.

**DR. BRUCE GNAED, UT DALLAS  
VICE PRESIDENT FOR RESEARCH**

# PUBLIC TIER ONE UNIVERSITIES



AVERAGE FRESHMAN SAT SCORES<sup>2</sup>

1250



AAU-DESIGNATED UNIVERSITY

AVERAGE FRESHMAN SAT SCORES<sup>2</sup>

1207



AAU-DESIGNATED UNIVERSITY

EMERGING UNIVERSITIES

AVERAGE FRESHMAN SAT SCORES<sup>2</sup>

1248



TRIP MATCHING FUNDS (TOTAL)<sup>4</sup>  
\$27,472,954

51.5%  
ACCEPTANCE RATE<sup>1</sup>

52.5%  
4-YEAR GRADUATION RATE<sup>1</sup>

DOCTORATES<sup>5</sup>  
843

67.1%  
ACCEPTANCE RATE<sup>1</sup>

52.4%  
4-YEAR GRADUATION RATE<sup>1</sup>

DOCTORATES<sup>5</sup>  
678

NATIONAL ACADEMY  
MEMBERS AND  
NOBEL LAUREATES<sup>3</sup>

6

\$8,209M IN  
ENDOWMENTS<sup>1</sup>

\$6,989M IN  
ENDOWMENTS<sup>1</sup>

53.3%  
ACCEPTANCE RATE<sup>1</sup>

52.7%  
4-YEAR GRADUATION RATE<sup>1</sup>

DOCTORATES<sup>5</sup>  
168

TOTAL RESEARCH<sup>1</sup>  
\$580,267,408

52,186 STUDENTS ENROLLED<sup>1</sup>

TOTAL RESEARCH<sup>1</sup>  
\$633,181,397

50,227 STUDENTS ENROLLED<sup>1</sup>

TOTAL RESEARCH<sup>1</sup>  
\$90,700,157

19,727 STUDENTS ENROLLED<sup>1</sup>

\$274M IN  
ENDOWMENTS<sup>1</sup>

May 2008

UT Dallas President David E. Daniel drafts white paper, "Thoughts on Creating More Tier One Universities in Texas."

April 2008

### The Dallas Morning News

EDITORIALS

#### Wanted: Elite University

Tier One status needed for North Texas' vitality

The Dallas-Fort Worth area's economic vitality has been handicapped by the absence of a world-class research university. Following years of talk, the region's leadership must come together with this goal and concrete actions to get it done. The goal should be clear: a Tier One university, as defined by measures including admission to the exclusive 50 member Association of American Universities. All are characterized by intensive research, elite faculty, selective admissions and strong endowments.

Acadia has won Tier One (FT) College. The state has won (AMU). Houston has won (CIRTS). Dallas-Fort Worth has none. We would not disagree or disagree North Texas of many universities and the richness of their programs. But the facts: Tier One of a world-class elite is missing.

The advantages of elite research universities are unparalleled. It is an achievement that California's technology-rich Silicon Valley developed and the University of California Berkeley. A study on the economic impact of eight Boston-area research universities — Seven of them Tier One — found that about 50 percent of their total spending came from outside the area. Much of that infusion came in research dollars and the venture capital that followed.

The East and West coasts are committed to turning university-based intellectual resources into innovative businesses and desirable jobs. North Texas, meanwhile, is held back by an "undeveloped" reluctance to encourage business startups and an entrepreneurial culture in the universities," according to a study done for the Dallas Citizens Council.

**What's a Tier One university?**

- Membership in the Association of American Universities
- Research spending of at least \$100 million
- Strong faculty representation in the National Academies of Science, Engineering and Medicine
- National endowment
- Selective admissions

#### Tier One universities in largest metro areas

City	Association of American Universities	U.S. News & World Report Top 50 Universities
New York	2	2
Los Angeles	4	4
Chicago	2	2
San Francisco	0	0
Philadelphia	1	1
Boston	1	1
Houston	0	0

The Dallas Morning News calls for more research universities.

June 2007

Dallas FDIC President and CEO Richard Fisher supports increasing the number of top-ranked universities in the state. Fisher made the statement in a speech to the Rotary Club of Dallas on June 13.

### 2007 UT Dallas Snapshot

ENDOWMENT	\$263M
DOCTORAL GRADUATES	
PhD	131
AuD	8
FRESHMAN CLASS	
AVG SAT SCORE	1240
AVG ACT SCORE	26
TOP 10% HIGH SCHOOL CLASS	43%
TOP 25% HIGH SCHOOL CLASS	74%
NATIONAL MERIT SCHOLARS	30
FACULTY	
TENURE AND TENURE TRACK	396
RESEARCH EXPENDITURES	\$46,477,208

Nov. 2008

House Bill 51 (Tier One) is introduced in the 81st Texas State Legislature by State Rep. Dan Branch.

2009

March 2009

The presidents of seven emerging research universities testify before the legislature in favor of the proposal.

### EMERGING RESEARCH UNIVERSITIES



June 2009



House Bill 51 is signed into law by Governor Rick Perry in a ceremony hosted on the UT Dallas campus in NSERL. The bill offers funding via the Texas Research Incentive Program (TRIP) to reward research productivity and match private funding, and also establishes goals based on national standards for competitive research universities.

### TIER ONE LEGISLATIVE SUPPORTERS

Rep. Dan Branch	Rep. Jerry Madden	Sen. Florence Shapiro
Rep. Jim Pitts	Rep. Brian McCall	Sen. Judith Zaffirini
Rep. Angie Chen Button	Rep. Helen Giddings	Sen. Robert Duncan
		Sen. John Carona

Nov. 2009

Voters approve Proposition 4 (authorized through HB 51) to repurpose the Higher Education Fund as the National Research University Fund (NRUF), which will provide a pool of funds and benchmarks to incentivize emerging research.

2008

2007

AVERAGE FRESHMAN SAT SCORES<sup>2</sup>

1107



TRIP MATCHING FUNDS (TOTAL)<sup>4</sup>  
\$26,326,085

AVERAGE FRESHMAN SAT SCORES<sup>2</sup>

1117



TRIP MATCHING FUNDS (TOTAL)<sup>4</sup>  
\$15,084,016

AVERAGE FRESHMAN SAT SCORES<sup>2</sup>

1075



TRIP MATCHING FUNDS<sup>4</sup>  
\$837,500

NATIONAL ACADEMY MEMBERS  
AND NOBEL LAUREATES<sup>3</sup>

37.2%  
4-YEAR  
GRADUATION  
RATE<sup>1</sup>

70.7%  
ACCEPTANCE  
RATE<sup>1</sup>

DOCTORATES<sup>1</sup>  
253

32,398 STUDENTS ENROLLED<sup>1</sup>

TOTAL  
RESEARCH<sup>1</sup>  
\$132,542,194

\$490M IN  
ENDOWMENTS<sup>1</sup>

55.8%  
ACCEPTANCE  
RATE<sup>1</sup>

20.4%  
4-YEAR  
GRADUATION  
RATE<sup>1</sup>

NATIONAL ACADEMY  
MEMBERS AND  
NOBEL LAUREATES<sup>3</sup>

DOCTORATES<sup>1</sup>  
304

40,747 STUDENTS ENROLLED<sup>1</sup>

TOTAL  
RESEARCH<sup>1</sup>  
\$92,779,251

\$579M IN  
ENDOWMENTS<sup>1</sup>

62.3%  
ACCEPTANCE  
RATE<sup>1</sup>

20.9%  
4-YEAR  
GRADUATION  
RATE<sup>1</sup>

DOCTORATES<sup>1</sup>  
168

33,239 STUDENTS ENROLLED<sup>1</sup>

TOTAL  
RESEARCH<sup>1</sup>  
\$71,381,648

\$89M IN  
ENDOWMENTS<sup>1</sup>



2012

**Total Certified TRIP Match Funding**

UT Dallas	\$27,472,954
Texas Tech	\$26,326,085
U of Houston	\$15,084,016
UT of San Antonio	\$5,350,000
UT El Paso	\$5,324,636
U of North Texas	\$2,729,808
UT Arlington	\$837,500

As reported reported to the Texas Higher Education Coordinating Board

Sept. 2011

The **second round of TRIP matching funds** (\$22.5 million) is distributed.

Jan. 2011

The **University of Houston** is reclassified by the Carnegie Foundation for the Advancement of Teaching as a research university with "very high research activity." The University declares the Carnegie classification **elevates UH to Tier One status.**

TIER ONE



2011

Sept. 2010

The **first round of TRIP matching funds**, totaling \$25 million, is distributed to emerging universities.

TOP EARNERS



2010

Jan. 2012

**Texas State University** is designated as the eighth emerging research university by the Texas Higher Education Coordinating Board.

EMERGING RESEARCH UNIVERSITY



Feb. 2012

**Texas Tech** and the **University of Houston** meet requirements to access the National Research University Fund.

NRUF ELIGIBLE



Sept. 2012

The **third round of TRIP matching funds** (\$17.8 million) is distributed.

2012 UT Dallas Snapshot

ENDOWMENT	\$274M
<b>DOCTORAL GRADUATES</b>	
PhD	168
AuD	11
<b>FRESHMAN CLASS</b>	
AVG SAT SCORE	1270
AVG ACT SCORE	28
TOP 10% HIGH SCHOOL CLASS	42%
TOP 25% HIGH SCHOOL CLASS	73%
NATIONAL MERIT SCHOLARS	63
<b>FACULTY</b>	
TENURE AND TENURE TRACK	493
RESEARCH EXPENDITURES	\$90,700,157

continued from page 19

ed funding for research initiatives.

"We have been able to qualify for additional state funds through TRIP," said Texas State President Denise Trauth. "In a little more than a year's time, Texas State raised roughly \$5.2 million for research activities, making us eligible for a state match of more than \$3.1 million."

The designation also has helped in faculty recruitment.

"We have seen this impact in the latest hiring cycle, especially among faculty who are or have been at Tier One research universities or who, when applying for positions, considered Texas State along with Tier One research universities," Trauth said.

The other major source of state money opened by the Tier One legislation is the \$500 million National Research University Fund (NRUF) that Texas voters approved in November 2009. The University of Houston and Texas Tech started fairly close to the finish line under the eligibility criteria set and last year the Texas Higher Education Coordinating Board said both were eligible for awards. Each received \$7.9 million in 2012 and \$8.4 million this year.

Duane Nellis, who will take the helm as Texas Tech's 16th president in June, told *The Texas Tribune* that Tech's efforts to become a Tier One institution attracted him to the job in Lubbock.

"I think with my background and experiences, working with the team that's here, we can continue to elevate Tech to being Tier One, to being almost AAU-like," Nellis told the *Tribune*. "That includes making sure we have the most outstanding faculty, the most outstanding student success. It's about enhancing the overall profile of the institution, its impact on the state of Texas and nationally."

UT Dallas has met nearly all the criteria needed to join UH and Texas Tech in accessing the NRUF research funds, including having a high-quality faculty and a high-achieving freshman class. To fulfill the rest, it needs to increase the number of PhD degrees it awards

annually from 168 currently to 200 and complete a second year of achieving restricted research expenditures of at least \$45 million from sources other than the state.

Accessing NRUF money stands as the next goal in UT Dallas' journey. It's the next rung on what has been a steady climb toward, in Daniel's words, "true quality and excellence." But the fact is that the amount of money generated by the state program to each university, though much needed and very welcomed, isn't what's going to change a school's quality.

"What is going to change the quality of higher education in Texas is an ongoing dedication to being among the best, not only in the state but in the country, with aspirations to being of note worldwide," Daniel said.

Of the eight universities in the running, only one has declared itself as having reached Tier One status. In January 2011, the University of Houston cited its categorization as "very high research activity" by the Carnegie Foundation for the Advancement of Teaching as "[e]levating UH to Tier One status."

Does the Carnegie classification mean that UH has completed its task of becoming a Tier One university? The question is posed in a UH website page featuring frequently asked questions about Tier One. UH states: "The Carnegie recognition is very encouraging and validates the considerable efforts and commitment of UH and its supporters. Continuing hard work will be required to maintain that distinction. However, Tier One status is not an end in itself. UH is still committed to broadening our overall excellence and, in particular, strengthening our performance and reputation for student success. We are continuing our efforts along those lines and hope to enjoy results as admirable as the Carnegie distinction at some point."

Renu Khator, chancellor and president of UH, discussed the Carnegie classification in a *Texas Monthly* interview in December. She said that heightened recognition of the university

continued on page 26



We have seen [the Tier One] impact in the latest hiring cycle, especially among faculty who are or have been at Tier One research universities or who, when applying for positions, considered Texas State along with Tier One research universities.

**DR. DENISE TRAUTH,  
TEXAS STATE UNIVERSITY  
PRESIDENT**

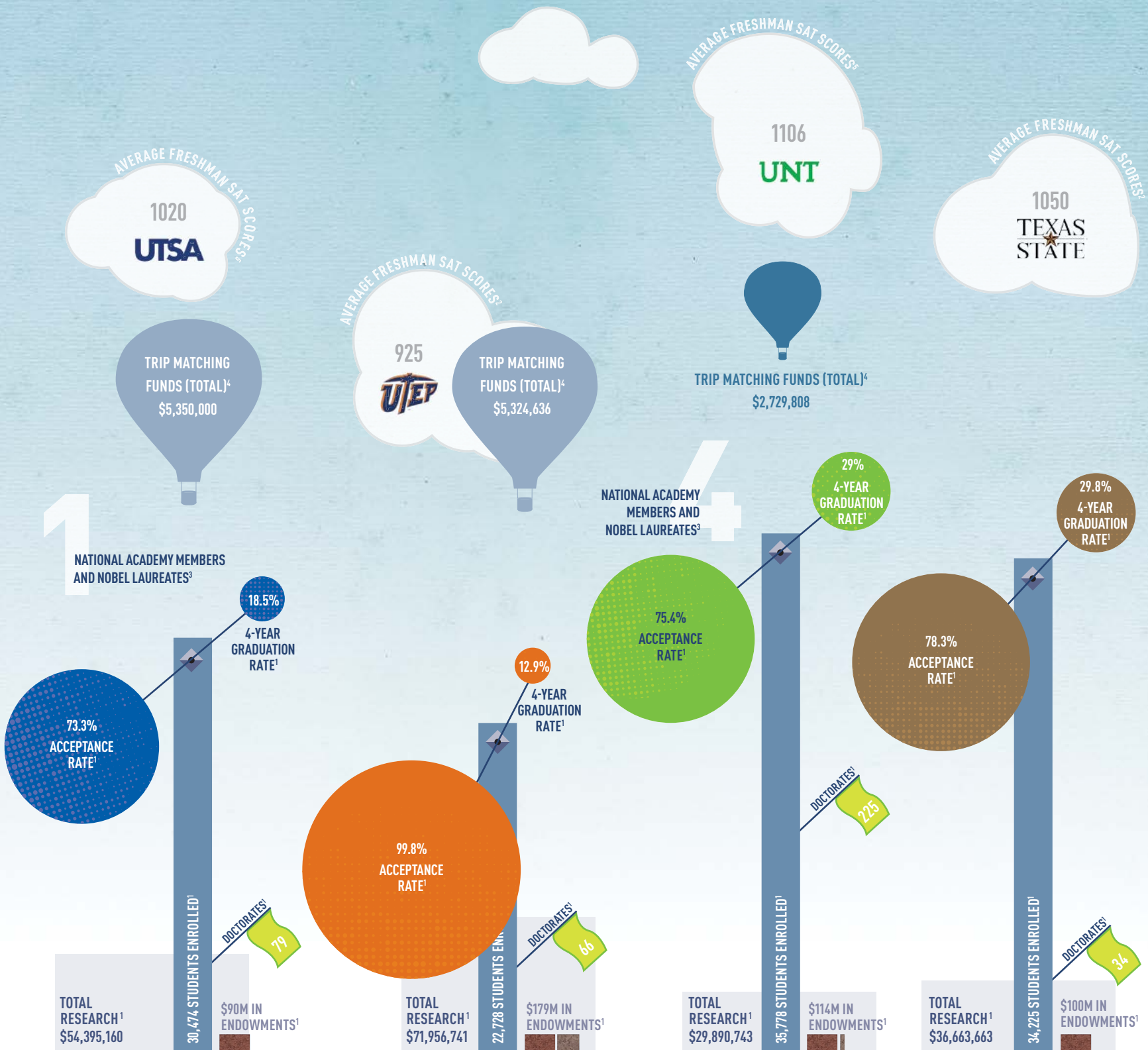
<sup>1</sup>2012 data as reported in the *2013 Texas Public Higher Education Almanac*, Texas Higher Education Coordinating Board

<sup>2</sup>2011 SAT average scores for math and reading, [www.petersons.com](http://www.petersons.com)

<sup>3</sup>Data as reported in the *National Research University Fund Eligibility Report (February 2012 and February 2013) to the Comptroller and the Texas Legislature*, Texas Higher Education Coordinating Board

<sup>4</sup>Matching funds for FY10, FY11, FY12 and FY13 as reported to the Texas Higher Education Coordinating Board

<sup>5</sup>Obtained from university websites ([www.utsa.edu](http://www.utsa.edu); [www.unt.edu](http://www.unt.edu))





UT Dallas is close to achieving that [Tier One] status. It's the best candidate we have to punch through and make that list.

**RICHARD FISHER,  
PRESIDENT AND CEO OF THE FEDERAL  
RESERVE BANK OF DALLAS**

*continued from page 24*

gives its faculty a better chance of competing and succeeding.

"We should have more institutions rise to the level of national excellence, because I don't think Texas wants to be second in anything," Khator told *Texas Monthly*.

### **MAGNETS FOR TALENT**

Education and business leaders agree that the contribution Tier One schools make to cities and states are so important that it's imperative that Texas host more. "It's patently obvious to everyone, whether they're supporters of higher education or not, that developed talent trumps everything," said Larry Faulkner, president emeritus of UT Austin. "These [Tier One] universities are magnets for talent."

In Texas that charge is reversed. More than 17,000 Texas high school graduates leave the state for college while about 6,000 arrive. This "brain drain" puts the state second only to New Jersey as a net exporter of college freshmen.

As it has grown, Texas has not kept up in creating high-achieving universities, Faulkner said. UT Austin's undergraduate enrollment has doubled since his college days, but the state's population has tripled and college attendance has increased.

It makes the most sense to put new top tier institutions in large cities such as Dallas-Fort Worth and Houston, he said. "You need the sophistication of a major city to be able to take advantage of all the connections and opportunities these institutions can bring."

One need look no farther than Austin to see how a major research university can re-

shape a local economic landscape. "The university's impact on Austin has been immeasurable," said UT Austin President Bill Powers, who was elected vice chair of the AAU in October. The biggest employer in Central Texas, UT Austin, generated about 11,000 jobs in the 2011–2012 fiscal year just from out-of-state research money, he said.

Perhaps the most pivotal moment in Austin's economic history came in the 1980s when it landed two high-tech consortia: SEMATECH, which was formed by a group of U.S.-based semiconductor manufacturers and the federal government, and MCC, which was formed as a response to a Japanese research project aimed at producing new computers.

Austin was chosen because of the commitment UT Austin made with upgrades to its engineering and science departments, Faulkner recalled. "The university was a huge factor, the most important element in the case for locating in Austin," he said.

Today, Austin is the only Texas city that ranks in the nation's top 10 in high-tech startups. According to the National Venture Capital Association, there were 487 new high-tech ventures started there in 2011, and \$646 million was invested in 70 companies.

The rest of the list is dominated by cities that host first-tier research institutions. In fact, the top five—San Francisco, Boston, New York, Los Angeles and Washington, D.C.—have two or more. California, home to nine Tier One universities, attracted \$14.5 billion in venture capital in 2011 compared to \$1.5 billion for Texas.

Even a relatively small city such as San

Diego, with a population less than half that of Dallas-Fort Worth, makes the list of high-tech hubs thanks in part to the presence of the University of California, San Diego. For all of its pride in being a place to do business, the Lone Star State underperforms the national average of venture dollars invested per capita. The U.S. average is \$80. Texas attracts \$60, chiefly because some of its largest cities—Dallas, Fort Worth, San Antonio and El Paso—host no Tier One universities and bring in much less than their share of research money.

When UT Dallas' progenitor was founded in 1961 as the Graduate Research Center of the Southwest, a newsletter at Texas Instruments heralded the event with a headline reading "Tiers Aid In Birth of 'MIT of the Southwest.'"

The Massachusetts Institute of Technology is an apt starting point for any discussion of the huge entrepreneurial impact a top-ranking university can bring. According to a 2009 study by the Kauffman Foundation, MIT alumni have founded 25,800 companies that employ 3.3 million people and generate worldwide revenues of about \$2 trillion a year. That sum outstrips the gross annual product of Texas by roughly \$700 billion.

Richard Fisher, president of the Federal Reserve Bank of Dallas, said people sometimes assert that Dallas-Fort Worth has thrived despite its lack of a major research university. "I've heard that argument many times and my answer is that, as successful as we've been, we'd be even more successful if we had a Tier One university. We live in a high-value-added society. What is driving our econ-

omy is high technology and business and financial services. In those spaces, in the nanoscience and science areas, you really need a Tier One university to compete.”

Beyond that, Fisher said, a major public university can serve as the intellectual hub for the community and attract people who care deeply about education at all levels. “They want their children to be at the best schools, so you have more involvement in middle schools and high schools,” he said.

Fisher sees Dallas-Fort Worth as having all the resources needed to support a Tier One public university, including a consensus among political leaders and significant private sector wealth and philanthropy. “UT Dallas is close to achieving that status,” Fisher said. “It’s the best candidate we have to punch through and make that list.”

UT Austin’s President Powers said, “The more, the merrier. The existence of more Tier Ones can only enrich Texas by expanding our knowledge-based economy and attracting even more clean industry and high-paying jobs.”

As much as a Tier One university can benefit its host, a region as dynamic as Dallas-Fort Worth can make it easier to build an exceptional university, Daniel said.

With companies such as Texas Instruments, Raytheon and General Dynamics, or a medical research hub such as UT Southwestern Medical Center, come myriad research opportunities. “They’ll want to work with us if we create a kind of revolving door for them, where they can walk in on any given day, talk to our faculty, talk to our students, rub elbows with the best and brightest people,” Daniel said.

These major electronics and telecommunications companies are unique local assets, so it’s natural that UT Dallas would gravitate to fields such as biomedical devices, he said. “There is a huge global opportunity to develop electronics, medical monitoring devices, medical measuring devices, chips that will analyze the chemistry of your breath and assess your health.”

State support for UT Dallas’ efforts has been strong, but in Daniel’s view, “there’s not enough money at the federal or state government level to sprinkle it down on us and get it done.”

Texas’ program of matching research grants as well as federal research money has experienced budget cuts in prior years. The most recent legislative session infused \$70 mil-

lion into the program, an amount that will erase the backlog of gifts waiting to be matched.

UT Dallas’ growing student population has necessitated a major campus expansion, and Daniel said the one thing that keeps him up at night is finding ways to keep the building boom going. Over the past seven years, UT Dallas has spent more than \$365 million transforming its old commuter-school facilities into a modern, fully formed university campus. Currently, there’s a new \$108 million bioengineering and science building being designed, along with recent projects such as the approval of a \$25 million addition to the Naveen Jindal School of Management, a \$25 million upgrade of the Founders Building, a \$75 million student living learning center, a \$15 million parking structure and the completion of a \$60 million facility set to open in November that will serve as the hub for the Arts and Technology program.

Texas’ Permanent University Fund, which dates back to 1876 and benefits the UT and A&M systems in part through the state’s oil riches, has helped Daniel get some sleep. It’s a source of building money without which UT Dallas’ Tier One growth plan might not be credible, he said. Still, at its current growth rate, the university needs to build about 100,000 square feet of academic space every year, the equivalent of adding a Natural Science and Engineering Research Laboratory building every two years.

“There are resources here,” Daniel said, in part because of private donor support. “I can find an endowed chair if somebody can go find a superstar faculty member interested in coming to the institution. I’ve got a chair in my hip pocket every day ... because our donors have been there, supporting us.”

A young school such as UT Dallas, whose alumni are building their careers rather than reaching the “give-back phase” of their lives, needs to draw support from its community, businesses, foundations and philanthropists, Daniel said.

“We have to build a value proposition with them that’s a winning one” he said. “That proposition is, ‘OK, together we’re going to take on big problems, big challenges. We’re going to, as a university, help you deal with those challenges and seize those opportunities. At the same time, because of the value we add for you, you’re going to want to support us and help us get even stronger.’” **UTD**



I’m a big believer that the effort to create more Tier One schools is going to be very important in lifting Texas higher education’s image in the rest of the United States.

**DR. BRIAN MCCALL, A UT DALLAS ALUMNUS WHO IS NOW THE CHANCELLOR OF THE TEXAS STATE UNIVERSITY SYSTEM**



SOUTHWEST CENTER FOR  
ADVANCED STUDIES

# THEN

*The School of Natural Sciences and Mathematics celebrates the dedicated individuals who laid its—and the University’s—foundation.*

**A) Then and Now:** Dr. Brian Tinsley arrived at SCAS in 1963. He studies upper atmosphere and space weather.

**B) Then and Now:** Dr. John Hoffman has been developing instruments for space missions since 1966.

**C) Then:** At SCAS, Dr. Wolfgang Rindler taught class via the TAGER television network. **Now:** Dr. Rindler is a UT Dallas professor of physics in the cosmology group.

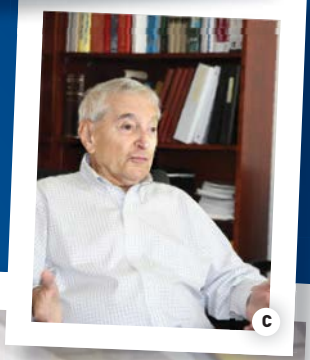
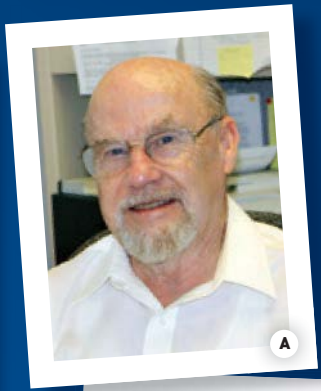
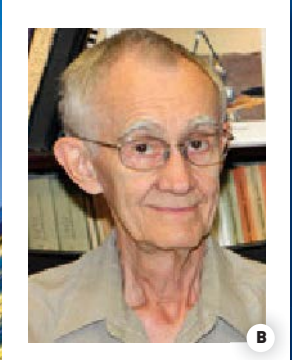
**D) Then:** Dr. Dimitrij Lang, biology division, explains the operation of an electron microscope to students. **Now:** Dr. Anvar Zakhidov, physics, discusses carbon nanofibers with graduate students.

**E) Then:** The SCAS campus consisted of just the Founders Building. **Now:** The \$85 million, 192,000-square-foot Natural Science and Engineering Research Laboratory (NSERL) facility.

**F) Then and Now:** SCAS and UT Dallas logos.

An ambitious experiment began in 1962 when Erik Jonsson, Cecil Green and Eugene McDermott—the founders of Texas Instruments—brought to North Dallas a group of distinguished scientists to build a “Community of Scholars” in the Southwest. Committed to fundamental research and graduate-level education in science and mathematics, these forward-thinking pioneers provided the intellectual capital for the newly formed Graduate Research Center of the Southwest (GRCSW), the pre-

cursor to The University of Texas at Dallas. The first divisions at the center’s research arm—the Southwest Center for Advanced Studies (SCAS)—were atmospheric and space sciences, geosciences, and mathematics and mathematical physics, followed soon by a division devoted to molecular science and genetics. Together these programs formed the core that would become the University’s School of Natural Sciences and Mathematics. Now, the school is celebrating its found-



# NOW

by Amanda Siegfried

ers' 50th anniversary in tribute to those dedicated individuals who laid its foundation.

"The early 1960s were an incredible time to be a scientist," said Dr. Bruce Novak, dean of the School of Natural Sciences and Mathematics. "The U.S. space program was booming, the structural intricacies of DNA had only recently been elucidated, and industry was eager for professionals with technological competence. The people who came here were dedicated to the pursuit of knowledge. Through both re-

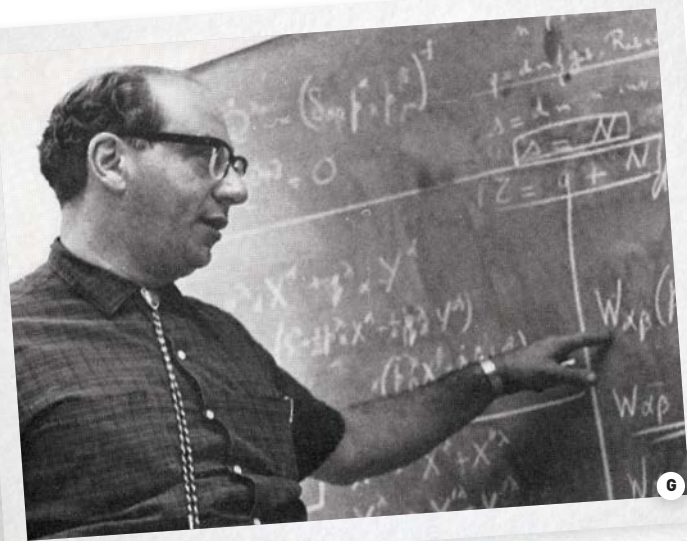
search and teaching, they created a hub of scientific leadership in the region and provided the catalyst for the tradition of learning that UT Dallas embodies today."

In 1967, the GRCSW took the name Southwest Center for Advanced Studies. The institution became UT Dallas in 1969.

"When I first came to Dallas, the future campus was farmland, with farms along Campbell Road," said Dr. Brian Tinsley, a professor of physics who arrived at SCAS in 1963 from Christchurch, New Zealand,

FOUNDERS' **50<sup>th</sup>**  
1962-2012

# THEN



## RELATIVISTIC ASTROPHYSICS

In 1963, Professor Ivor Robinson (shown above) was head of the Division of Mathematics and Mathematical Physics at the Southwest Center for Advanced Studies and an expert in relativity theory. Around his pool that summer, he and two colleagues from UT Austin decided to organize a scientific conference in Dallas. At the time, relativity was just beginning to enter into astrophysics, so the scientists created a new scientific discipline and called it relativistic astrophysics. At that first conference, in December 1963, more than 300 experts from around the world converged on Dallas to discuss, among other topics, the newly discovered and mysterious quasars, which are the most powerful sources of energy in the observable universe. The symposium was such a success that it has since been held every two years around the world, yet still retains the name Texas Symposium on Relativistic Astrophysics.

**G) Then:** Professor Ivor Robinson, the first head of SCAS's Division of Mathematics and Mathematical Physics and an expert on relativity theory. **Now:** Dr. Mustapha Ishak-Boushaki specializes in theoretical astrophysics.

**H) Then:** Biology postdoctoral researcher Dr. Beatriz Gomez hosted international visitors. **Now:** Dr. Kelli Palmer, assistant professor of molecular and cell biology, studies antibiotic resistance in bacteria.

**I) Then:** Dr. Frank Allum and Dr. Ricardo Palmeira display their cosmic ray experiment that flew on a spacecraft. **Now:** An Air Force satellite carries UT Dallas' CINDI experiment to study space weather.

**J) Then:** The Clark Foundation sponsored recent high school graduates, including Byron Cain, to conduct research at SCAS. **Now:** Biology student Kaleb Lambeth conducted heart research as a Green Fellow.

**K) Then:** Dr. Ian MacGregor and Dr. James Carter inspected Earth samples in preparation for analyzing lunar surface materials. **Now:** Now retired from the geosciences department, Carter developed simulated moon dirt used by NASA and scientists worldwide.

**L) Then and Now:** Two of UT Dallas' first graduates in 1973 helped kick off the public phase of the University's fundraising campaign in 2012. Susan Doe earned an MS in biology and Ron Hawkins earned an MS in physics.

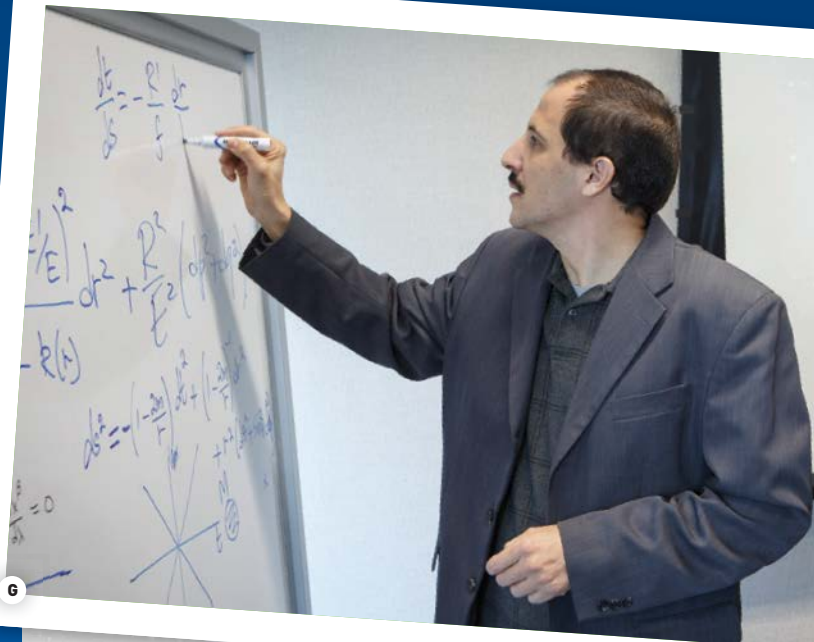
as a postdoctoral researcher studying the Earth's upper atmosphere.

"There have been tremendous changes in technology since I started research, but the intellectual climate at UT Dallas has not changed—it has always been stimulating," said Tinsley, who continues to investigate the relationship between solar activity and mechanisms of climate change at UT Dallas' William B. Hanson Center for Space Sciences.

Research related to space and atmospheric sciences comprised a large part of the center's work in the early days, work that continues today. For example, Dr. John Hoffman, professor of physics, has been building scientific instruments for satellites, planetary missions and other space probes since he joined SCAS in 1966. His instruments have accompanied three Apollo missions to the moon, the Pioneer mission to Venus and the landmark Phoe-



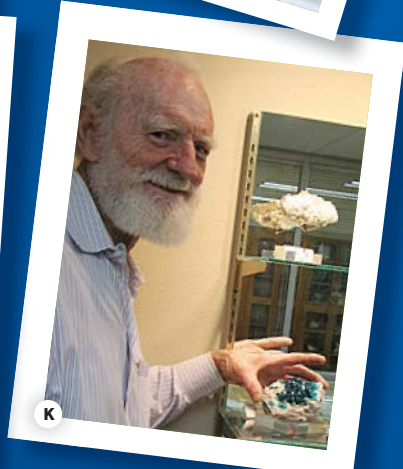
# NOW



## RELATIVISTIC ASTROPHYSICS

Fifty years after the first Texas Symposium, scientists from across the globe will converge once again on Dallas for the 27th Texas Symposium on Relativistic Astrophysics. Organized by UT Dallas' Department of Physics, with input from scientists worldwide, the jubilee event will be held in downtown Dallas Dec. 8-13, 2013. "We're very excited to welcome back to Dallas many international astrophysicists," said Dr. Wolfgang Rindler, professor of physics at UT Dallas and co-chair of the event with Dr. Mustapha Ishak-Boushaki (above), associate professor of physics. "We designed a scientific program that covers over 50 current topics in astrophysics, including recent breakthroughs and advances in the field," Ishak-Boushaki said. Rindler was a faculty member of SCAS in 1963 and took part in the first symposium. "We plan to both celebrate the past 50 years of the Texas Symposium and relativistic astrophysics, as well as kick off the next 50 years of remarkable discoveries," Rindler said.

Find out more at [nsm.utdallas.edu/texas2013](http://nsm.utdallas.edu/texas2013).




nix mission to Mars.

Although the center initially granted no degrees—UT Dallas would grant its first graduate degrees in 1973—education was an integral component of SCAS's mission. Faculty provided graduate and postdoctoral education, advanced training for industry professionals, and research opportunities for undergraduates and high school students from across the country.

Today, the School of Natural Sciences and Mathematics offers more than 40 undergradu-

ate and graduate programs in the departments of molecular and cell biology, chemistry, geosciences, mathematics, physics, and math and science education. Three Nobel laureates have been members of the faculty, and research areas are far-ranging, from cell biology and the geophysics of Earth's crust to deep-space mysteries and nanotechnology.

"True to our roots, we continue to grow as a community of scholars who are passionate about research, about pushing the envelope of

science and technology," said Novak, who holds the Distinguished Chair in Natural Sciences and Mathematics. "Our faculty has always been committed to teaching the next generation of scientists, doctors, entrepreneurs and teachers. As UT Dallas has grown to embrace engineering, arts and humanities, business, and a host of other educational opportunities, the campus has preserved that same commitment our founding core of scientists had to the pursuit of knowledge, service and education." 



# DRAWN *to* DAMASCUS

*During my senior year at UT Dallas, I grew a bit jealous of my friends as they worked on graduate school applications, studied for law and medical school entrance exams, and prepared for job interviews around the country. After four years of undergraduate study, I yearned for a continued sense of stability and security. Instead, I made the least stable and secure decision of my life: I chose to move to a Middle Eastern country in the midst of a revolution.*



The big decisions made during that final year at UTD came from the growing awareness that law school, grad school, or a career in the U.S. were not right for me—at least not yet. Before settling down, I wanted to live in the

Middle East for an extended amount of time and work for an agency dealing with political and social issues. I needed to live among and understand the people whose lives I wanted to make better.

I landed in Damascus in September 2011 as a worker for the United Nations Relief and Works Agency for Palestine Refugees (UNRWA). Instantly I remembered why I loved Syria's capital so much—the hospitable people, the beautiful mountains, the remnants

of old temples. Everything appeared to be exactly as it had been during my first visit. A few years earlier, as a student with a blossoming interest in Middle Eastern policy, I had lived in Syria and Morocco and traveled throughout the region, thanks to support provided through the UTD McDermott Scholars program and a summerlong grant from the U.S. State Department.

When I arrived in Damascus after graduation, things were fairly calm and normal. I attended big family feasts every Friday, went to cafés with my friends, strolled the streets of the markets, and even followed a Turkish drama dubbed in Arabic. For fun, I took salsa classes and went dancing on the weekends with my friends. In many ways, I had some of the best times of my life in Syria. It was exciting to live in a vibrant, walkable city that offers amazing hospitality. Damascus,

considered the oldest inhabited capital of the world, is filled with beautiful old mosques, houses and cafés. Music was everywhere. While living with a Syrian family, I had some of the best food I've ever eaten. (Syria is very vegetarian friendly.)

It didn't take long to realize, though, that drastic changes were happening with the advent of the Arab Spring and the ensuing conflict between loyalists and revolutionaries. Electricity had become systematically cut; communication to the outside world was either blocked or monitored; the sound of bullets had started to become the norm; and a city once nearly absent of petty crime was becoming rife with thefts, muggings, kidnappings and worse.

Then, in December, the first suicide bomb went off. My immediate reaction, besides deciding to never leave my residence, was to research topics ranging from the radius of a bomb blast to different kinds of IEDs (improvised explosive devices). I avoided densely populated areas, like movie theaters, and stopped taking the U.N. bus to work so as to avoid being a target.

The strength of the people of Damascus



by Dina Shahrokhi BA'11



*Dina's friendship with Lana Moamar BS'09 (right) provided relief from the deteriorating conditions they both experienced while in Syria.*



*Dina toured the U.S. following her 2012 return from Damascus. One of her stops included a visit with fellow Eugene McDermott Scholars Program alumni to the Museum of American History in Washington, D.C. From left: Mac Hird BS'11, Dina, Cristina Wolfe BS'11, Devarati Das BS'11 and Brady Spenwrath BS'11.*

encouraged me through those first scary months. They went to work every day, walked their kids to school, and even went out for dinner and hooka the day after a suicide bomb blast. As I witnessed their courage and defiance, and with the support of my family and friends back in the U.S., I knew I could push myself to stay.

The U.N. agency that sent me to Syria, UNRWA, provides assistance, protection and advocacy for registered Palestine refugees. I started as a volunteer in the communications office, where I learned how the organization provided education, health, relief and social services, and microfinance opportunities to some 5 million refugees. I interviewed refugees and wrote their stories, visited camps and helped with events organized by Palestinian youth. Later, I managed a project to bring 10 different U.N. agencies under one safe, united and green roof. In this role, I learned about other organizations like the World Health Organization, UNICEF and the U.N. Development Programme. I witnessed firsthand how these organizations directly helped people—something quite unlike the perception many have of a U.N. body that only makes resolutions. My colleagues came from all over, including countries that I had never heard of. Having coffee with them made me feel like I had traveled the world!

As the situation in Damascus grew worse and the international community became involved, the violence in the streets started to escalate. I started having panic attacks while on a busy street corner. I missed being able to speak openly to my friends in the States about all topics, including politics, rather than having to use code to circumvent government wiretapping. And while I think I could have stayed at least three more months to finish off the year, I had begun to realize that it wasn't right to put myself, my family and my friends through the stress of worrying about my safety. It was time to get out.

I returned home in June 2012 and took a tour across the U.S. to visit college friends. The love and support of so many of these friends made it possible for me to stay in the Middle East as long as I did. Most of all, I have to thank my best friend in Syria, Lana Moamar BS'09, and my best friend in the U.S., Mac Hird BS'11, for keeping me strong and sane.

My story could have been very similar to that of my friends who decided to pursue careers or graduate school immediately after graduation. Since the sixth grade, I had been absolutely certain that I was going to become a lawyer. Then, during my freshman year, I entered a mediation competition hosted by the John Marshall Pre-Law Society,

a student organization for UTD students considering a career in law. Four national tournaments later, I discovered that I loved the idea of resolving conflict outside of the courtroom and that I was much more comfortable with the idea of negotiating as a mediator than as a lawyer.

My enthusiasm for mediation developed alongside my passion for Middle East policy. In addition to my overseas travels as a student, I spent a semester as a Bill Archer Fellow with the Middle East Institute in Washington, D.C. All together, these experiences solidified my career dream to be a Middle East policy-maker and international mediator.

Now, with all of these amazing experiences behind me, I feel more passionate than ever about helping those in Syria and the Middle East enjoy a safe life with the freedoms they deserve. I currently work as a research associate for the Middle East at the Baker Institute at Rice University where I am drafting a report on how the U.S. should respond to the crisis in Syria.

When I begin my studies this fall at the Harvard Kennedy School of Government, I will do my best to draw from my time at UTD and my postgraduation experiences to make our world a better place. **UTD**



## Realize the Vision Gifts Change Lives

Donors have given more than \$160 million to advance research, bolster student support and increase the endowment during the past three years of the University's \$200 million fundraising campaign. With less than two years before the campaign ends on Dec. 31, 2014, the University has entered the most critical stage of this historic effort.

The number of donors since the campaign's start in 2009 has grown to unprecedented levels, with alumni giving more than doubling. Hundreds of graduates recently teamed up with President



President Emeritus Robert Rutford

Emeritus Robert Rutford to raise more than \$177,000 for scholarships, research and other areas of need. "After finishing my undergraduate degree 20 years ago and my master's 14 years ago, I see the changes in the University

and know that my contribution will help fund even more amazing changes," said Lisabeth Lassiter BA'93, MS'99.

"Alumni donors such as Lisabeth help in a way they may not realize," said Erin Dougherty BA'03,

MPA'07, senior director of alumni relations and annual giving. "Alumni giving is a factor in the methodology used by *U.S. News & World Report* and many other rankings. Every gift, no matter the size, is counted when measuring alumni participation in giving."

Alumni joined a strong group of community leaders, corporations, foundations and individuals whose campaign gifts fueled award-winning academic programs, scientific breakthroughs



Dr. Cindy Sherry BS'78 and her husband, Dr. Dean Sherry

cochlear implants for kids to geosciences projects to Alzheimer's disease research.

Dr. Cindy Sherry BS'78, chair and medical director of the department of radiology at Texas Health Presbyterian Hospital Dallas, and her husband, Dr. Dean Sherry,

"After finishing my undergraduate degree 20 years ago and my master's 14 years ago, I see the changes in the University and know that my contribution will help fund even more amazing changes."

**-Lisabeth Lassiter BA'93, MS'99**

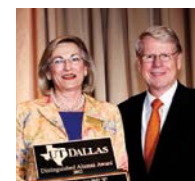
and student achievement. The gifts are advancing both the campaign and the University.

"Campaigns provide a platform for the institution to communicate its goals and aspirations and to engage donors in fulfilling them," said Rae Goldsmith, vice president of advancement resources for the Council for Advancement and Support of Education. "Effective campaigns attract those who have long supported the university as well as new donors who will almost certainly continue to give after the campaign has ended. And that means that campaigns help secure the university's immediate future and position it for the longer term as well."

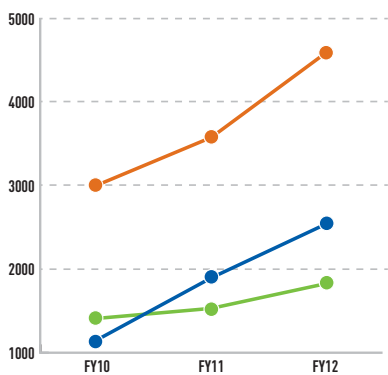
Donors looking to make a big impact created approximately 40 new Opportunity Funds. The endowed funds provide ongoing, unrestricted support for any unit and support everything from

celebrated his 40th year as a UT Dallas faculty member by establishing an Opportunity Fund to support the chemistry department. "We've witnessed firsthand the progress toward becoming a Tier One research institution and can see the impact it's beginning to have in this community," said Dean Sherry, who holds the Cecil H. and Ida Green Distinguished Chair in Systems Biology Science.

Supporters are ensuring the existence of need-based scholarships and funding for faculty through gift planning that includes bequests, wills and charitable gift annuities. For example, 2012 Distinguished Alumna Susan Fleming PhD'87 included the



Susan Fleming PhD'87 and President David E. Daniel



Total Donors Alumni Donors First-Time Donors



# COMETS COMING TOGETHER

During the past six months, more than 2,000 alumni networked and socialized in cities across the world and online. No matter where you and your classmates land after graduation, UT Dallas connections exist for your benefit.



Alumni at Ericsson do the Comet whoosh.

**AT WORK** // Connect with other grads through a corporate alumni gathering. Build your business network at industry-specific events. Mentor a student. Sharpen your skills with a course, new certificate or another degree. Share what you know with a class of bright freshmen visiting your company. Recruit interns or work-ready graduates.



Farah Ellenbogen BS'10, MS'11, Laura Shagman BS'11 and Georgina Solis BA'11 enjoyed a concert at the Dallas Arboretum, which the University sponsored last summer.

**ON CAMPUS** // Stop by the new Visitor Center and University Bookstore for a tour of campus, followed by shopping for UT Dallas gear. Once you've worked up an appetite, pop over to the dining hall for a bite to eat with current students. Later, catch a basketball game, art show or faculty lecture. The Comet Calendar is your resource for all these activities and more—[utdallas.edu/calendar](http://utdallas.edu/calendar).

**IN THE COMMUNITY** // Relax and visit with friends, family and alumni during a UT Dallas-sponsored summer concert at the Dallas Arboretum. Don your Comet pride apparel while cheering local sports teams. Learn more about what's new in science, technology, the arts and more at free UT Dallas events held throughout the Metroplex.



Barbara Hollis, director of development and alumni relations for the School of Natural Sciences and Mathematics, visits with Neil Gaynor PhD'91 (left) and Jose Fandino-Avila MBA'12 (right) during the Houston alumni reception at the Petroleum Club.

**IN YOUR HOMETOWN** // Visit with your regional representative. Don't have one? Contact us to become one. Meet with President David E. Daniel and network with alumni in your area when you attend a regional event. We've taken UT Dallas on the road to San Diego, Houston, Seattle, Albuquerque, Pittsburgh, Austin, the San Francisco Bay Area and even Taiwan. Don't miss out when we come to your area! Send your contact information to [alumni@utdallas.edu](mailto:alumni@utdallas.edu) to receive invitations to gatherings in your area.



Eric Tangumokem PhD'08 and his son, Afaamboma Tayem, attend the annual alumni homecoming breakfast with University leaders.

**ONLINE** // Stay in touch with fellow alumni through a free forwarding email like [GoComets@alummail.utdallas.edu](mailto:GoComets@alummail.utdallas.edu) or the online alumni directory at [utdallas.edu/alumni](http://utdallas.edu/alumni). Make connections through the alumni group on LinkedIn and the alumni page on Facebook. Find updates for classmates and friends with *The Link* newsletter and the *UT Dallas Magazine* app (see page 3).

**DON'T BE SHY!** // Show your Comet pride and reap the benefits. UT Dallas alumni are eligible for a variety of discounts on insurance and event tickets, as well as access to McDermott Library and the Career Center. Visit [alumni.utdallas.edu/benefits](http://alumni.utdallas.edu/benefits) for more information.



University in her estate plans so that future students will be able to focus on their studies, not the cost of college.

With Campus Enhancement Funds, donors are helping ensure that the beautification of UT Dallas will endure with the upkeep of trees, walkways and gathering areas. The second phase of enhancement is expected to begin later this year, thanks to an additional \$15 million in private support.

New resources from corporations and foundations are changing the future for students, faculty and research endeavors. The Miles Foundation contributed \$100,000 to UTeach Dallas, a program to increase the number of science, technology, engineering and mathematics (STEM) majors interested in becoming secondary science or mathematics teachers. Raytheon invested in student development by providing merit-based scholarships, supporting an undergraduate research competition and interacting with student organizations. "UT Dallas provides tremendous opportunities for Raytheon to encourage and support science, technology, engineering and math students who will further our nation's ongoing role as an economic leader of the global economy," said Lynn Mortensen, vice president of engineering for Raytheon Intelligence and Information Systems.

To contribute or learn more, contact the Office of Development and Alumni Relations at 972-883-6504 or visit [utdallas.edu/campaign](http://utdallas.edu/campaign).

—Sara Mancuso



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**VISION**  
The Campaign for Tier One & Beyond

# Istation

by Sara Mancuso



**Bill Fahle BS'88, MSCS'05, PhD'12** writes system code.

**Dustin Nulf BS'95** engineers audio for voiceovers and animations.

**Karin Khoo BS'09, MFA'12** works with artists to bring animations to life.

And **Jeremy Roden**, a UT Dallas PhD student, produces videos to promote products.



*Sandra Thomas, president and COO, and Jeremy Roden, director of media production and visual communications. Thomas also serves as chair of the UT Dallas Center for Vital Longevity's Advisory Council.*

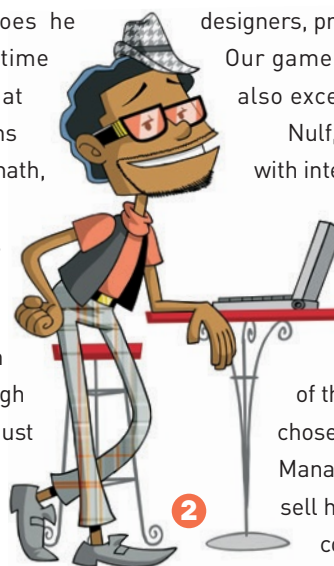
All four are spokes in the wheel of Istation, an educational technology company where more than 10 percent of the workforce is made up of University graduates or students. With degrees in arts and technology (ATEC), computer science, and business, this group of alumni is part of a 100-member team that creates interactive games and technology for K-12 students struggling with math and reading.

Located on two floors of the landmark gold-clad Campbell Centre office tower in Dallas, Istation headquarters were quiet on a recent afternoon as the president's white Maltese roamed the halls. In a glassed-in room aptly called the "fishbowl," 20 or so employees train their eyes on multiple screens, noodling over animations like Justin Time, an Indiana Jones-looking character who leads

students through reading lessons using science.

What does Justin do when a student pushes the button on his belt? How does he convincingly move through his time portal? These are questions that challenge Khoo, 26, as she programs Istation's game-like lessons in math, reading and Spanish.

With customers like the Texas Education Agency, which recently contracted with Istation to provide free access of its reading program to all Texas students in third through eighth grades, Khoo's solutions must be spot on. But the demands don't bother her: She cut her teeth at UT Dallas.



"The ATEC program is really broad," Khoo said. "When I was in it, we had different skill sets as designers, programmers, artists and animators. Our game development section was also excellent."

Nulf, 40, watches new grads like Khoo with interest. "It's pretty cool to see them

jump right into the production pipeline without worry." Though his background is programming, it's his management degree that the audio engineer relies on much

of the time. A video game designer, he chose the Naveen Jindal School of Management to learn how to market and sell his wares. He also learned the art of collaboration there, a skill he applies



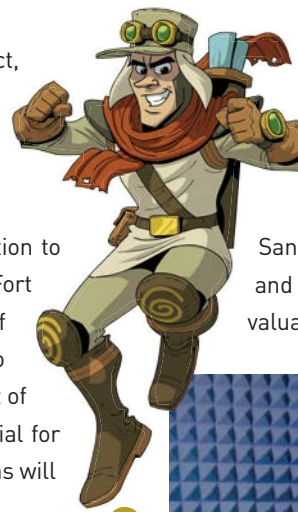
When Bill Fahle, senior vice president of development research, taught ATEC at UT Dallas, Karin Khoo, a multimedia programmer, was his student.

the Dallas Independent School District, he helped build the game design program at Richland Community College. Then he enrolled in ATEC and joined Istation.

“UT Dallas has been paying attention to the trends. They know what Dallas-Fort Worth needs,” Roden said. “A lot of people from California are coming to Dallas. Several studios have gone out of business so DFW has a lot of potential for businesses coming this way. UT Dallas will be a great resource for them.”

Among the newer Istation recruits, Fahle, 50, is a bit of a legend—not because he taught at UT Dallas, has three degrees from the University or is the father of a current senior. But because Fahle is one of the four engineers who developed the proprietary platform that launched Istation’s original software. His doctorate now also allows him to perform research and seek grants that may help the company fund its developments.

“I’ve been a student at UT Dallas off and on for 20 years,” Fahle said. “The school has grown from being a really good school to a top-notch school.”



3

And that’s why Istation continues to recruit alumni. “They come in with a high level of education and training and are excited to learn,” said Sandra Thomas, Istation’s president and COO. “They quickly become valuable assets to our workforce.” **UTD**

when working with actors on character voices and with writers on music to pair with their scripts. “Everything we do in the company is in a team. Everyone is connected to everyone.”

Where Nulf concentrates on audio, 37-year-old Roden’s focus is strictly visual. He and his creative team executed a marketing strategy for Istation’s messaging and branding last year. Roden’s creative juices began flowing years ago as a lighting technical director on the movie *Jimmy Neutron*. After teaching high school art and animation for



Audio engineer Dustin Nulf is at home in his sound booth.

## Nicole Tucker BA’04 has already made her estate plans. Have you?



It’s never too early to think about your legacy and what it can mean to others. That’s why Nicole named UT Dallas as a beneficiary in her will. Her generosity will establish a scholarship for future generations of students. Learn more about Nicole’s legacy and how to create your own at [utdallas.plannedgiving.org](http://utdallas.plannedgiving.org).

ANNA LEBLANC DIRECTOR OF GIFT PLANNING  
972.883.6023 | [anna.leblanc@utdallas.edu](mailto:anna.leblanc@utdallas.edu)





Think your gift doesn't matter?

Look closer.

Thanks to thousands of donors like you, The University of Texas at Dallas is challenging traditional research boundaries and forging visionary collaborations.

Your campaign support has helped double the number of endowed professorships from 15 to 32 and increased endowed chairs from 36 to 62. Every year, we continue to recruit more top scholars from some of the best universities and research institutes in the world.

With your investment, we can continue to change lives, make a difference, and realize our vision of the future.

*realize the*  
**VISION**  
The Campaign for Tier One & Beyond



# ALUMNI NOTES

## 1970s ▶

**Ronald Hawkins MS'73** sold his dental practice in Lubbock, Texas, to semiretire after 36 years. He moved to Joshua, Texas, and now works part time in the dental practice of his son, Dr. Chris Hawkins, in Burleson, Texas. His hobbies include classic cars, fishing, photography, remote-controlled airplanes and RV travel.

**H.B. Paksoy MA'76** was honored in May by the Turkish World Writers and Artists Association at the 17th Turkish World Service Awards for his studies on Turkish epics. He is one of 12 people, institutions and organizations from six countries being honored.



**Deborah Hankinson MS'77** has been selected for inclusion in the 2013 edition of *The Best Lawyers in America* for her work in appeals cases at the state and federal levels. Deborah is a former justice on the Supreme Court of Texas and the 5th Court of Appeals

in Dallas. She serves as an appellate attorney, oral advocate, strategist, mediator, arbitrator and problem-solver. She is board certified in civil appellate law by the Texas Board of Legal Specialization, a fellow of the American Academy of Appellate Lawyers and a member of the American Arbitration Association's National Roster of Neutrals.

**Kathleen Swafford BS'78, Teacher Certification'85** is the K-8 principal at Ann & Nate Levine Academy in Dallas.



**William "Bill" M. Vining Jr. MS'78** is a distinguished fellow of the American Industrial Hygiene Association. Bill and his family live in Fairview, Texas.

## 1980s ▶

**Brenda J. Lister BS'81** recently co-founded Atwater Martin LLC, a consulting practice with offices in Dallas and Philadelphia. Brenda also serves as practice leader, pay and rewards for the company.

**Richard McCullough BS'82** was appointed vice provost for research at Harvard University in

October 2012. His responsibilities include interdisciplinary research, research administration and policy, and research funding. He was previously vice president for research at Carnegie Mellon University in Pittsburgh. During his 22 years at Carnegie Mellon, he also served as dean of the Mellon College of Science and as head of the Department of Chemistry. He is the founder of two companies: Plextronics Inc. and Liquid X Printed Metals Inc.

**Christine Karol Roberts BGS'82** is an intellectual property lawyer and children's book author. After the recent shooting at Sandy Hook Elementary School in Newtown, Conn., she donated 100 percent of the proceeds of her book sales, through Feb. 14, 2013, to the Sandy Hook School Support Fund. Christine is the sole proprietor of an intellectual property law boutique, Law Offices of Christine Karol Roberts, in Orange County, Calif. *The Jewel Collar* is her debut children's novel. *Hannah the Hummingbird* has also been published. She is currently working on a legal thriller, *License to Die For*, and several children's picture books. She is a member of the Society of Children's Book Writers and Illustrators.

**Sharon Reamer BS'83, MS'86** had her first novel, *Primary Fault*, published in 2012.



**John Guthrie MS'84, PhD'89** is the pastor of Community Presbyterian Church in Cedar City, Utah.

**Teresa Preston BS'84** is completing her doctoral studies in marketing from Southern Illinois University Carbondale. She is also a visiting faculty member at the University of North Florida.



**Denise Ambrosi MS'85**, CCC-SLP, was promoted to the rank of clinical assistant professor by the MGH Institute of Health Professions, a graduate school founded by Massachusetts General Hospital. Denise joined the MGH Institute in 2000 and is a faculty member in the Department of Communication Sciences and Disorders. She is also director of speech-language pathology and program director of brain injury rehabilitation at Spaulding Rehabilitation Hospital, where she has worked for 26 years.

**Carol McClain Craver BA'85** recently published *Shadow of the Final Storm*, a novel that takes

readers back to the hurricane that hit Galveston, Texas, in 1900. She is the publications editor for National Write Your Congressman, a legislative research firm in Richardson, Texas.

**Mike Cline BA'89** became pastor of Tennison Memorial United Methodist Church in Mount Pleasant, Texas, in June 2012.

**Scott Fillebrown BS'89** is president/CEO and stockholder of Automated Circuit Design, based in Richardson, Texas.

**Yvonne Stroud MAT'89, Teacher Certification'93** was named principal of Fall Creek Elementary School in Humble, Texas, in August 2012.

## 1990s ▶

**John Bruce BA'91, MPA'94** recently assumed the role of chief of police of the Frisco Police Department in Frisco, Texas. He has been a police officer since 1986, joining the department in 1996. He was named assistant police chief in 2003 and was promoted to interim chief in 2012. Since 2008, John has served as an assessor with the Commission on Accreditation for Law Enforcement Agencies. He is an alumnus of both the FBI National Academy and the Leadership Command College.



**Cynthia Jenkins PhD'91** joined Marrs College Admission Advisors as a consultant. Cynthia, who is completing studies for an independent educational consultant certificate from

the University of California Irvine Extension, is the author of *The Naked Roommate's First Year Survival Workbook* and *Skills for Success: Developing Effective Study Strategies*.

**Anna Manning MS'92, MBA'92** published her first memoir, *The Leroy Tree*. Her other publications include *Dating: A Quick Reference Guide* and *Weight Loss: A Quick Reference Guide*. She is a life coach and weight coach.

**Anthony Reed MS'92** completed 15 marathons in 15 states in 2012. In the same year, he had more than 40 professional speaking engagements in the U.S. and Canada on topics related to technology, accounting, project management and endurance sports.

# ALUMNI NOTES

**Daniel Ehrenfeld BA'95, MAT'02** recently retired from teaching high school English at Anne Arundel County Public Schools and is now an adjunct professor of 20th century American literature at the University of Maryland University College.

**Ross Lyle MBA'95** recently was promoted to senior vice president, commercial real estate for ViewPoint Bank, N.A.

**Chris Olson MBA'95** is vice president of finance for First Watch Restaurants Inc., a breakfast, brunch and lunch restaurant chain based in Bradenton, Fla. He previously served as the vice president of finance, planning and analysis for Ruth's Hospitality Group Inc. and held executive-level finance positions with Silver Diner and Outback Steakhouse Inc., which is now Bloomin' Brands Inc.

**Michael Peticolas BA'95** and his wife, Melissa, recently opened Peticolas Brewing Company in Dallas. The brewery, which is open for tours on the first and third Saturdays of each month, supplies Peticolas beer on tap to more than 50 locations in the D/FW area.

**Michael Hasco MBA'98** was appointed chief growth officer of Seegrid, where he is responsible for U.S. and global business development. Before joining Seegrid, Michael designed and led a global accounts team in the U.S., Europe and Asia as the vice president of global account sales for H.J. Heinz Co.

**Laura O'Rourke BA'98** was elected in January as a partner in the Baker & McKenzie litigation practice, based in Dallas. Her practice focuses on securities litigation and enforcement. She represents public and private companies and their officers and directors in federal and state courts, and before federal and state securities agencies.



**Greg Pease MBA'99** was recently named a member of Sherrard & Roe PLC. Greg practices in the areas of general business and health care law. Prior to attending law school, Greg held management positions with Leggett & Platt Inc. He is a member of the Nashville, Tenn., and American bar associations and a member of the American Health Lawyers Association. Greg serves as chair of the board of directors of Bridges, formerly known as the League for the Deaf and Hard of Hearing/EAR Foundation.

## 2000S ▶

**Fran Piegari BS'00** is the owner of the Fran Piegari Allstate Agency in Dallas and a member of the Commercial Real Estate Women Network. She also serves as executive vice president of Altamar Fine Jewelry.

**Eric Van Horn BA'01** recently joined Wick Phillips Gould & Martin LLP, a full-service business law firm with offices in Dallas, Fort Worth and Austin, Texas. Eric, the newest member of the firm's bankruptcy litigation group, will focus on aspects of complex business bankruptcy, reorganization, liquidation and litigation matters in state and federal courts. Prior to joining Wick Phillips, Eric practiced for an international firm in Dallas as a business bankruptcy and litigation associate.



**Tawana Cummings MA'02** earned her doctorate in social work from the University of Houston in May 2012.

## Everything You Need to Know About Whooshing

It's somewhat silly, somewhat celestial, and all about spirit. The Whoosh is UT Dallas students' signature sign, an understood language between Comets.

Invented in the early 1990s, the Whoosh has become a way for UTD students to show campus unity. The University began teaching the Whoosh at new student orientation in 2005 and it is now embraced as the symbolic gesture for all students and alumni.

The salute is named the Whoosh because "it's the sound a comet would make if there was sound in space," said Daniel Long, assistant director for new student programs.



### How to Whoosh

1. Make a fist with your left hand and put it in front of your mouth.
2. Then extend your right arm out and slightly upward, with palm down and fingers extended. "It should look like the tail of a comet that slowly fades away," Long said.

3. Finally, give a quick lean to the left, and belt out a big "WHOOSH!" "Of course, the lean is important," Long said. "It's the apex of the Whoosh. It gives it motion."

Check out [utdallas.edu/whooshvideo](http://utdallas.edu/whooshvideo) for a video tutorial on how to Whoosh.

**Angela Cade BA'03** practices family medicine at Good Shepherd Family Health Center in Kilgore, Texas. She received her medical degree from The University of Texas Medical School at Houston and completed her residency program in family medicine at The University of Texas Health Science Center at Tyler, where she was chief resident.



**Sophia Dembling BA'04** is the author of a new book, *The Introvert's Way: Living a Quiet Life in a Noisy World*, that was published in December 2012. She writes "The Introvert's Corner" blog

for *Psychology Today*. She also is the author of *The Yankee Chick's Survival Guide to Texas* and co-author of *The Making of Dr. Phil: The Straight-Talking True Story of Everyone's Favorite Therapist* and *I Can Still Laugh: Stories of Inspiration and Hope from Individuals Living with Alzheimer's*. Her essays and articles have appeared in newspapers and magazines nationwide.

**Tim Houlne MBA'04 and Terri Maxwell MBA'04** co-authored *The New World of Work: From the Cube to the Cloud*. Tim and Terri met in the Executive MBA program at UT Dallas and became friends as well as business associates. Last year, they collaborated on a book about the virtual work movement. All proceeds from the first 2,000 copies of their new book—available at a discounted rate of \$12 at the UT Dallas Bookstore—will be donated to the University.

**Adeniyi "John" Olajide BSTE'04** teamed up with childhood friend Andrew Olowu in 2008 to create software for the home health care industry. The software, Axxess, launched in early 2011. Today, more than 20,000 professionals who work for hundreds of home health agencies nationwide use the Axxess platform to serve approximately 100,000 patients each year.

**Cathy A. Sonnier BS'04** was recently named controller at SkinzWraps. Cathy has more than 25 years of restaurant accounting operations experience. Her most recent position was vice president controller for El Fenix Corp.

**Shannon Chen MBA'05** received the Leaders of Excellence Award from the National Association of Asian American Professionals-DFW in December 2012. Shannon leads a community youth leadership camp for Chinese-American youth.



**Walter Voit BS'05 MSCS'06** and **Felicity Lenes-Voit BS'09** celebrated their marriage on Oct. 13, 2012. They were wed at Highland Park Presbyterian Church in Dallas, followed by a reception at Rush Creek Ranch, the country retreat of Mary McDermott Cook, daughter of Eugene McDermott, one of the University's co-founders. Alumni in the wedding party included Richard Voit BS'06, Sijy Mathew Voit BS'05, Benedict Voit BA'08, Jessica Harpham Voit BS'09, Michael Seeligson BS'06, Eric Kildebeck BS'05, Aidan Skoyles BSEE'05, MSEE'06, James McAndrew BS'04, MSCS'06, Christopher Wahlen BS'07, MSCS'10 and Juliann Peterson Horne BS'09. Flower girls were Serena Martin and Marissa Marek. Walter teaches at UT Dallas, where he is an assistant professor of materials science and engineering and mechanical engineering, as well as serving as chief technical officer of a startup technology company based on his graduate research in shape memory polymers, Syzygy Memory Plastics. Felicity completed medical school at the Yale School of Medicine and will begin her residency in otolaryngology at UT Southwestern Medical Center.

**Katherine Frei Lewis BA'05** began teaching English 10 and Pre-AP/English 11 at Rockbridge County High School in Lexington, Va., in August 2012.

**Scotti Smart George MS'06** was promoted to senior consultant at BKD National Health Care Group in 2012. She assists with projects such as Medicare and Medicaid reimbursement and cost report preparation services for community health centers.

**Matt Limpede BA'06** used the online funding platform Kickstarter to garner support for Pride Pants: Wear Your Pride, his project promoting gay, lesbian, bisexual and transgender pride through fashion. Pride Pants are jeans and pants from local thrift or resale shops painted the colors of the pride flag.

**J. Brian McCall PhD'06**, chancellor of The Texas State University System, received the Price Daniel Distinguished Public Service Award from the Baylor Alumni Association in January. Before his appointment as chancellor in 2010, McCall served in the Texas House of Representatives for two decades. He is a Distinguished Alumnus for 2012.

**Jocelyn Thomas Varghese BA'07** recently married. She also received her master's degree in secondary education from Texas A&M University-Commerce. Jocelyn teaches fifth-grade reading in Richardson, Texas.

**David Herman Jr. MA'08** is co-founder and creative director of Preservation LINK Inc., an education agency that works to educate youth through media arts and technology.

# ALUMNI NOTES



**Brad Perkinson BS'08, MS'09** launched FireWheel Brewing Co. in August 2012 with the support of his wife, **Jenny Lam Perkinson BS'08, MA'09**.

The brewery, located in Rowlett, Texas, is open for tours on Saturdays from 11 a.m. to 3 p.m. The beers can be found in bars and restaurants across Dallas and Fort Worth.

**Andrew Kintz BSEE'09** is now a third-year PhD student at The Ohio State University ElectroScience Laboratory. He also was awarded a NASA Space Technology Research Fellowship for his proposal, "Calibration of Satellite Antenna Arrays Using Signals of Opportunity."

**Monica Moffitt MBA'09** is founder and principal cultural consultant at Tianfen Consulting Inc. She is a columnist for AGBeat, an online publication for business owners and professionals.

**Jared M. Smith BS'09** owns Circuit Fitness gym in Porter, Texas. The gym, which has more than 150 members, opened in 2011. An insurance agent with Farmers Insurance Group, Jared co-owns the Smith Insurance Agency in Porter with his father.

## 2010s



**Corey Egan MBA'10 and Swapnil Bora MBA'11** started a new venture, iLumi Solutions Inc., after winning the UT Dallas Institute for Innovation and Entrepreneurship

Annual Business Idea Competition in 2010.

Following two years of research, design and development, they are bringing their intelligent LED light bulbs to the world and have kicked off the process with a crowdfunding campaign to pre-sell the intelligent bulbs.

**Dawn Rachelle Williams BA'10** is proud to announce the 2011 birth of her son, James Victor.

**Kristen Holland Shear MA'11** was promoted in 2011 to manager, web editorial and social media at The University of Texas Southwestern Medical Center.



**Joseph Warren BS'11** married **Krystle Gibbons BA'10** on June 30, 2012, in Carrollton, Texas. The couple met at UT Dallas in 2007.

**Sara Barnes AUD'12** is an audiologist with Atlantic Audiology Inc.'s Wilmington, Mass., office.

## Your gift makes a difference.

When you receive a call from a Comet this month or next, make a contribution that makes a difference.



For Comet Call, some of the University's friendliest students reach out to alumni each semester on behalf of UT Dallas. More than 12,000 alumni visited with Comet Callers last semester, updating their contact information and making gifts. This private support from alumni helps fuel outstanding academics, critical scholarships and innovative research.

## Get Your Alumni Gear



**The UT Dallas Ring:** Commemorate the experiences, knowledge and lasting memories you gained at the University with the official UT Dallas ring, which was established in 2001.



**Your Brick on Legacy Lane:** Make a lasting impression on campus with a personalized brick on Legacy Lane, a beautiful tree-lined pathway along the creek behind the Eugene McDermott Library.



**Spirit items in the University Bookstore:** Display your diploma in a custom frame. Cozy up with a mug of cocoa and a UT Dallas blanket. Catch a game in your favorite comfy alumni sweatshirt. The bookstore has all these items and more so that you can show off your Comet Pride.

For these and more great alumni items, visit [alumni.utdallas.edu/gear](http://alumni.utdallas.edu/gear).

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# IN MEMORIAM

## Remembrances of University Alumni

**John J. Barlettano MS'76**, Nov. 7, 2012, Colorado Springs, Colo. Barlettano retired from the U.S. Air Force with more than 23 years of service. He married his wife, Robbin, at Fort Gordon, Ga., in 1966. He traveled the world while in the military, and after retirement worked as an engineering and math college professor. He also worked as a part-time systems engineer for radio stations throughout Kansas. Barlettano's interment with full military honors was at Fort Logan National Cemetery, Denver.

**Marianne Megredy Beckham BA'77**, June 28, 2012, Carrollton, Texas. She worked for Southwest Airlines in Dallas for more than 30 years.

**JoAnn Humberson Schrodell MAT'78**, July 2, 2012, Frederick, Md. Schrodell and her husband, Charles S. "Jack" Schrodell, were married for 54 years. She taught in Pennsylvania and Texas schools for 25 years before retiring in 1996 from the Plano Independent School District.

**Clara Gail Wampler BA'88**, Oct. 1, 2012, Sherman, Texas. Wampler grew up in Sulphur, Okla., and graduated in 1963 from Sulphur High School. She married Elson Wayne Wampler on June 3, 1966, in Dallas. She enjoyed outdoor activities, including landscaping and tending to her flowers and shrubs. She also loved music, interior decorating, cooking, picture taking, photobooking, and reading books and poetry. Known for her witty sense of humor, Wampler loved being around family and friends and enjoyed helping people.

**Nancy Ferrell BA'90**, Nov. 10, 2012, Garland, Texas. Ferrell moved to Richardson, Texas, with her family in 1978 and graduated from Berkner High School. She cared for her ailing mother for 15 years, offering companionship during the difficult journey of her last years. In early 2012, Ferrell began to display the symptoms of amyotrophic lateral sclerosis (ALS), which quickly claimed her life.

**Timothy T. Ballard MBA'93**, Jan. 20, 2013, Indianapolis. Ballard grew up in El Dorado, Ark., and graduated in 1970 from El Dorado High School. He attended the University of Central Arkansas and graduated from the University of Arkansas for Medical Sciences. His career in health care information technology started at Children's Medical Center of Dallas, continued at Cerner Corp. in Kansas City, Mo., and concluded at Indiana University Health in Indianapolis.

**Robert J. Nelson BA'93, MS'97**, Jan. 19, 2013, Houston. He worked as an accountant and computer programmer. Nelson had traveled to nearly 20 countries in Europe and North Africa and pursued diverse interests, including history, literature, art, and music composition. He played chess, golf and the piano.

**Anselme Thierry Bony MS'99**, June 29, 2012. Bony served as the president of Ivorians in Texas Inc., from 2001 to 2004 and subsequently became a lifetime member of the board of directors.

**George Grimmer III BSEE'02, MSEE'07**, Oct. 11, 2012, McKinney, Texas. Grimmer died from head injuries suffered at his home. He had worked for five years for Raytheon in

McKinney. He had a job he loved, co-workers he respected, and many wonderful friends.

**Kelly Ann Drake BS'03, MS'04, PhD'08**, Oct. 1, 2012, Denver, Colo. While a student at UT Dallas, Drake was president of Women in Physics and the sponsor of a summer physics camp for middle school girls aimed at boosting their interest in science. A memorial fund in her honor has been established in the School of Natural Sciences and Mathematics.

**John Charles Brockman BS'06**, Jan. 16, 2013. Brockman was born in Plano, Texas, on Aug. 14, 1984, and graduated in 2002 from Plano East Senior High School. He enlisted in the U.S. Marine Corps upon graduation from college. He was on active duty, holding the rank of sergeant, at the time of his death.

**Kristin Gayle Jackson BS'06**, Dec. 11, 2012, Fayetteville, Ark. Jackson died in Hazen, Ark., from injuries sustained in an automobile accident. She was born in Dallas on Sept. 27, 1979, to John H. and Casey Hagemann Koons. Jackson graduated from Highland Park High School in 1998 where she was an outstanding basketball player and captain of the team. She married Justin Jackson in Garfield, Ark., on Aug. 23, 2003. An accomplished artist, she was the art director at Tyson Foods Inc. in Fayetteville, and prior to that she spent more than four years in a similar position at Walmart corporate headquarters in Bentonville, Ark.

**Michael Thomas Neubert BS'08**, Nov. 11, 2012, San Antonio, Texas.

# IN MEMORIAM

Remembrances of University Faculty, Staff and Friends



## Ken Rice 1925–2013

Ken Rice was an aviation expert and a longtime volunteer of the Eugene McDermott Library's History of Aviation Collection (HAC).

Researchers from all over the world sought out Rice for accurate information on the German air force during World War I. The Plano resident had been associated with the HAC since it started at UT Dallas in 1983.

Rice's research focus for many years was the A.E. Ferko collection, obtained from the Ferko estate in 1997. Ferko was known internationally as an authority on every phase of World War I combat aviation, especially the German aces and outstanding fliers.

Rice was also well-versed in World War II aviation but was most interested in the older aircraft.

Paul Oelkrug, coordinator of Special Collections, said Rice was one of the first people he met when he came to the HAC in 2002. "Ken was a great guy and easy to get to know. He made me feel at home with the HAC volunteers and staff. Ken had a great sense of humor and always had a big smile on his face. I as well as the rest of the Special Collections staff and volunteers will miss him."



## Vance C. Miller 1933–2013

Vance C. Miller, a local real estate mogul and civic leader, was a supporter of the University's Callier Center for Communication Disorders.

Miller and his wife, Geraldine "Tincy" Miller, who serves on the board for the Foundation for the

Callier Center, were supportive of the Callier Center's establishment of the biannual Callier Prize in Communication Disorders. In 2010, the couple hosted a reception for Callier Prize recipient Dr. J. Bruce Tomblin.

Vance Miller was chairman and chief executive officer of Henry S. Miller Co., a real estate business his grandfather launched in 1914. He and his father, Henry S. Miller, Jr. grew the business from a small family real estate company to one of the largest commercial and residential businesses in the country.



## Adolf J.H. Enthoven 1928–2013

Dr. Adolf J.H. Enthoven was the most senior accounting professor in the UT Dallas Naveen Jindal School of Management and director of its Center for International Accounting Development.

Dr. Enthoven, who joined the UT Dallas faculty in 1976, was an expert on international accounting and wrote or contributed to nearly 20 books on accounting education and the profession as practiced in Africa, Asia, China, Russia and many other countries around the globe.

His legacy includes hosting a wide array of foreign participants and guests who attended one of his

center's annual oil and gas financial management programs for developing countries. Held on the UT Dallas campus every summer since 1979, the three-week curriculum attracts mid- and upper-level personnel in oil-producing countries outside the U.S. The program, which has its own alumni association, now boasts almost 1,700 graduates from more than 80 countries.

"The school has lost a great accounting professor and a great man," said Dr. Hasan Pirkul, dean of the Jindal School and Caruth Chair of Management. "Dr. Enthoven was beloved by all who knew him—his friends, his colleagues and his many students, both here and spread throughout the world. He and his center made a huge impact in the oil and gas industry and the international accounting world."

Dr. Enthoven will live on, in part, through an endowed professorship that bears his name. The Adolf Enthoven Distinguished Professorship in Accounting and Information Management was established in 2010.

Memorial donations in support of the Adolf Enthoven Professorship can be made to UT Dallas online at [jindal.utdallas.edu/makeagift](http://jindal.utdallas.edu/makeagift) or by mail at the Naveen Jindal School of Management, The University of Texas at Dallas, SM42, 800 West Campbell Road, Richardson, Texas 75080-3021. Please designate Adolf Enthoven Professorship fund on the payment.

## Keep us informed

If you learn of the passing of a UTD alumnus, faculty, staff or friend, please send any information to [alumni@utdallas.edu](mailto:alumni@utdallas.edu) or to

**UT Dallas Magazine**  
**AD14, 800 West Campbell Road**  
**Richardson, TX 75080-3021**



In 1969, Texas Gov. Preston Smith (left) toured the molecular and cell biology facilities with program head Royston C. Clowes, who hired Elizabeth "Libby" Exley Hodge as part of the administrative staff.

## HINDSIGHT: Elizabeth "Libby" Exley Hodge

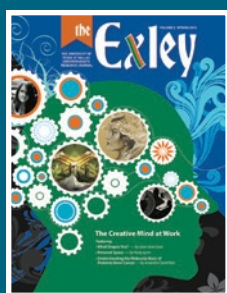
Today, thanks to a gift from Elizabeth "Libby" Exley Hodge, UT Dallas undergrads have a showcase for their research and creative work in *The Exley*. Hodge came to UT Dallas in 1967 when it was the Southwest Center for Advanced Studies. When the University came into being in 1969, she moved into the School of Natural Sciences and Mathematics' biology program, assisting in preparation of research grant applications in support of Royston C. Clowes, head of the biology program. She retired in 1986 from UTD's Office of Sponsored Projects.

*"I had never been in a scientific setting before or knew anything about science. I remember Dr. Clowes' dictation and those words. I had no idea for a while what he was talking about.*

*"We [the administrative staff] helped the faculty put grant applications together. It was fun when we worked on the submission of funds—not in a scientific way—but in the sense of striving to accomplish a larger goal. I can remember how, as we finished the paperwork for a National Institutes of Health grant submission, Dr. Clowes played the 'Hallelujah Chorus' because he was so glad to get it done.*

*"Later as a grants administrator for Natural Sciences and Mathematics, I realized the importance of education and research to the community, the state and to our country. This initiated my desire to help students and UTD attain their lofty goals.*

*"I am honored that The Exley was chosen as the name of the new undergraduate research journal."*



The Exley showcases undergraduate student research and innovative creative works. The journal is published annually by the Office of Undergraduate Studies.

## A Whoosh Heard 'round the World



(Left to right) Brendan and Camille Jenkins, former academic program leader Cynthia Jenkins PhD'91, and UTD students Alexander Lee, Rachel Beaulieu BS'10, Joscelyn Alvizo, Claire Barnes, Brittany Ellenberg, Jenna Pickett, Jesse Casselman and Danyal Mirza do the Comet whoosh atop stone walls on the outskirts of the historic Inca capital of Cuzco, Peru. Last year, the Office of International Education helped guide 431 students in educational experiences outside the U.S.—that's a 10-fold increase since 2005.