Tell us what you think: www.uh.edu/magazine  At The University of Houston Magazine, our goal is to create a publication you’ll be proud to receive, read and share with others. Your involvement as an engaged reader is critical to our success. As we strive to continue to improve the magazine, we want to hear from you. Please help us by going online at www.uh.edu/survey to take a brief survey about your thoughts on The UH Magazine. We want to know whether you prefer the print or the online edition, what sections you most enjoy, what sections you don’t prefer and suggested improvements for our online edition. We look forward to hearing your ideas.
on March 25, it was my honor to affix my signature to a beautifully illustrated scroll recognizing the University of Houston as the 48th member institution of the Texas Medical Center (TMC). Signing alongside me were Welcome W. Wilson Sr., chairman of the UH System Board of Regents, Dr. Richard E. Wainerdi, M.D., TMC president, and David M. Underwood, chairman of the TMC Board of Directors.

With its elegant hand-painted lettering and gold-leaf accents, the scroll has an old-world appearance, but it represents UH’s rightful place in the largest medical center of the modern world.

The University of Houston has had a presence in the TMC for years, most notably our College of Pharmacy, our affiliation with The Methodist Hospital Research Institute, dual-degree programs in law, business and social work, and scientific collaborations among UH faculty and researchers at TMC medical institutions.

Now, in the midst of our drive to attain Tier-One status, formal membership in the TMC allows us to bring to the table our broad array of scientific expertise, particularly in university-based sciences such as math, physics, engineering, supercomputing, pharmacy and optometry, as well as key health-policy and management areas such as health law and health care administration. Additionally, UH’s public radio and television stations are playing a key role in establishing the TMC as the global nexus for medical and health information. Membership in the TMC expands our health-related research — now representing 50 to 60 percent of our total research expenditures — in fields as varied as cell signaling, drug mechanisms, molecular design, bioimaging, toxicology, neuroscience, cancer biology, synthetic chemistry, stem cell research and genomics as well as health promotion and fitness.

And membership in the TMC underscores our commitment to lead in the development of the region’s health workforce. In fiscal year 2009, UH awarded about 1,200 bachelor’s degrees in health-related fields such as psychology, biology, biomedical engineering, and nutrition — amounting to 25 percent of the total number of bachelor’s degrees awarded. And more than one-third of UH’s Ph.D. degrees were awarded in health-related fields such as biology, chemistry, clinical psychology, kinesiology and physiological optics. These numbers will undoubtedly rise as we expand our health-related degree programs and add new health majors.

As we celebrate our official entry as the Texas Medical Center’s newest member institution, we do so in the belief that our UH Health initiative will grow and mature, further contributing to the region’s economy and the well-being of our citizens.

Renu Khator
UH System Chancellor and UH President
When I think back on the legacy of my grandfather, Hugh Roy Cullen, two things stand out — his lifelong support of the University of Houston and his enduring generosity to Houston’s medical community. He recognized that the well-being of a city is inextricably linked to the health and education of its residents. That’s why I know that he would be so proud, as I am, to see the confluence of his two great philanthropic passions in the Uh Health initiative.

In addition to being a major benefit to our city, this initiative, which focuses on the university’s tremendous strengths in health-related science and research, as well as our increasingly important role in training the region’s health care workforce, is an integral piece of the university’s Tier-one plan.

With renowned faculty such as hormones researcher Dr. Jan-Åke Gustafsson and cancer researcher Xiaoliu Shaun Zhang, the University of Houston has the capacity to produce the nationally competitive research required of a Tier-One institution. Development of new programs in emerging health fields such as biomedical engineering, and planned construction of the 167,000-square-foot Health and Biomedical Sciences Center, speak to the university’s commitment to attracting the high-quality faculty and students necessary to achieve Tier One. And with Uh researchers bringing in $61.1 million in grant funding for health-related research in 2009 alone, the health initiative is helping the university meet another key criterion for Tier-one status.

As a member of the Uh System Board of Regents, I am excited by the progress we have made so far in our Tier-One journey. I look forward to working with the university’s administration to see that UH Health remains a major factor in that effort.

But most importantly, I look forward to continuing our efforts to foster student success. As a prospective law student, I knew I didn’t have to look any further than Uh to find a leading law school where I could receive a stellar education. With the promise of Uh Health, we are on our way to becoming the premier destination for students seeking careers in the health care industry.

Carroll Robertson Ray (J.D. ’02)
UH System Board of Regents
A heart patient’s own skin cells soon could be used to repair damaged cardiac tissue thanks to the pioneering stem cell research of University of Houston biomedical scientist Robert Schwartz.

His new technique for reprogramming human skin cells could one day lead to treatments for Alzheimer’s, diabetes, muscular dystrophy and many other diseases.

Schwartz devised a method for turning ordinary human skin cells into heart cells. The cells developed are similar to embryonic stem cells and ultimately can be made into early-stage heart cells derived from a patient’s own skin. These then could be implanted and grown into fully developed beating heart cells, reversing the damage caused by previous heart attacks. These new cells would replace the damaged cardiac tissue that weakens the heart’s ability to pump, develops into scar tissue and causes arrhythmias. Early clinical trials could begin within one or two years.

“Professor Schwartz’s work will save lives, and his decision to pursue this pioneering research at UH is a big leap forward on our way to Tier-One status,” says John Bear, dean of the College of Natural Sciences and Mathematics. “Together with the many other outstanding scientists we’ve assembled here, Schwartz will help make this university a major player in medical research.”

Schwartz was attracted to the commitment of UH administrators and faculty to making the university a premier center for biomedical research. He brings his groundbreaking research to UH as the Hugh Roy and Lillie Cranz Cullen Distinguished Chair in Biology and head of UH’s new Center for Gene Regulation and Molecular Therapeutics. He also is affiliated with the Texas Heart Institute at St. Luke’s Episcopal Hospital in the Texas Medical Center, where he is director of stem cell engineering.

Before coming to UH, Schwartz was director of the Institute of Biosciences and Technology, a research component of the Texas A&M Health Science Center. He also was a longtime tenured professor at Baylor College of Medicine and co-directed the school’s Center for Cardiovascular Development.

Making An Impact

### Hot or Cold

Researchers Examine Extreme Temperatures and the Body’s Immunities.

by Marisa Ramirez (’00)

The Texas Department of State Health Services estimates that nearly 260 Texas residents succumbed to heat-related illnesses between 1999 and 2004. Researchers at the University of Houston’s Department of Health and Human Performance are using an environmental chamber to investigate ways to identify risk factors of those most susceptible to heat and cold illnesses.

“Houston has a climate that is very prone to extreme amounts of heat, especially in the spring and summer months,” Associate Professor Brian McFarlin says. “Exercising in that environment may have very pronounced effects on the body and not really positive effects.”

The environmental chamber at the department’s Laboratory of Integrated Physiology resembles a giant cooler. At 10-feet-by-10-feet, the wall-to-wall stainless steel room allows the temperature and humidity to be adjusted from 120 to minus 4 degrees Fahrenheit. Subjects’ blood and body temperature are monitored as they work out on stationary bikes. McFarlin says other institutions have environmental chambers, but not many are used to collect data on a problem that has touched the lives of the very elderly and the very young.

“We are interested in developing potential risk factors that can be measured in an individual so that medical personnel can be alerted to those with an increased risk to cold or heat illness,” McFarlin says. “Those are the people you are going to want to watch very closely, and possibly implement aggressive hydration strategies and more monitoring techniques.”

McFarlin says elite athletes who push their bodies for marathons and other competitions place a lot of stress on their bodies, stress that can impact their immune systems for up to 24 hours after their aerobic activity. He says individuals who are recreational athletes can suffer the same immunity suppression by exercising in, or being exposed to, extreme heat or cold.

“When you introduce an extremely hot or cold environment, that adds a whole other level of problem to the situation,” he says. “The most obvious is that your immune system is suppressed and you get a virus. You’ll get sick more easily.”

Researchers have used the environmental chamber for studies and in partnership with corporations, such as biotechnology company Biothera, to investigate how certain supplements can counteract the immune suppression that may follow exercise in extreme temperatures.

“We’re certainly interested in collecting data that we can publish, but we’re also interested in generating data that might be helpful to the larger population,” he says.

### Quick Takes

The College of Education has created an innovative online master’s degree program, dubbed SMART, funded by a $3 million grant from the Greater Texas Foundation. The Integrated Sciences, Math and Reflective Thinking Program (SMART) will help middle school science and math teachers improve science and math instruction as well as develop leadership skills.

The College of Technology has received $2.5 million from the Department of Energy to develop a smart grid workforce training program to prepare the next generation of workers in the electric power industry. The Smart Grid Energy Training Coalition includes UH, CenterPoint Energy, San Jacinto College, the Power Technology Institute, SkATMET and the Texas Business and Education Coalition.

National Center for Airborne Laser Mapping (NCALM) is UH’s first National Science Foundation-supported center. Ramesh Shrestha, Hugh Roy and Lillie Cranz Cullen University Professor of Civil and Environmental Engineering, brought NCALM and most of his research team to UH from the University of Florida. Future NCALM efforts include exploring the possibility of using Light Detection and Ranging to map everything from glacial movements to the migration of penguin colonies in Antarctica.

The Hobby Center for Public Policy began offering a new Certified Public Manager Program this spring, with the aim of strengthening the management skills and style of tomorrow’s leaders. The 14-month program offers seven courses (tracks), including personnel management, managing for quality, organizational communication, public finance, productivity and program evaluation, information systems for managers and applied project practicum. After completing the courses and a final project, graduates will receive a certificate and may use the official designation of Certified Public Manager. The new program is an affiliate of the CPM program offered through the William P. Hobby Center for Public Service at Texas State University and is accredited by the National Certified Public Manager Consortium.
**Making An Impact**

### Putting the Brakes on Tumors

Researchers Use Auto-Industry Tools for Tumor Therapy.

by Angela Hopp ('00)

An engineer at the University of Houston is using technologies with origins in the automobile industry to develop new tools that will help doctors and technicians better plan radiation therapy for patients with head and neck cancer.

Ali Kamrani, founding director of UH’s Design and Free Form Fabrication Laboratory, has teamed up with Lei Dong, associate professor and deputy research director of Radiation Physics at The University of Texas M.D. Anderson Cancer Center, to develop predictive models of tumors that may increase the accuracy of radiation therapy.

“A CT scan is used to collect information with respect to tumor size, location and volume, but the CT scan itself is a source of harmful radiation to body tissues and other organs,” says Kamrani, associate professor of industrial engineering.

“We aim to better understand tumor deformations using geometric and statistical models — rather than repetitive CT scans,” he says. “In this case, patients will undergo a minimum number of CT scans, and the radiation plans will be developed using the predictive models. Recently, we developed statistical models that allow us to predict the tumor’s geometrical information, both volume and surface, for the entire duration of radiation therapy for any new patient using our existing model.”

Kamrani hopes that, based upon initial CT scan readings, the team will be able to classify the tumors and predict through radiation models the various stages of their demise.

“You need that object — that 3-D representation — to make your plan,” Dong says. “This is a real human patient. It’s not just a theory. It’s both.”

Kamrani has a long history with visualization and rapid prototyping, a fabrication technique common in the auto and manufacturing industries. Back in Michigan, Kamrani prototyped valves and cylinders. Today, he’s prototyping bones and organs.

“The concept is the same,” he says. “When I came here, with the Texas Medical Center, it kind of came together. The industry is different here, so I started focusing on a particular problem: trying to create a three-dimensional geometry, going from valves to skulls and things like that.”

Kamrani’s idea of applying the auto prototyping tools to tumor modeling is “novel,” says Dong. “It can help us solve the problem,” he says. “We’re thinking there is a better, smarter way.”

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### An Engineered Solution

Researchers at the University of Houston and University of Texas Health Science Center at Houston (UThSC at Houston) are unraveling the process of diagnosing sleep apnea and related disorders. Ioannis Pavlidis, Eckhard-Pfeiffer professor in the UH department of computer science, and fellow investigator Jayasimha N. Murthy, M.D., assistant professor of medicine from the Division of Pulmonary Critical Care Sleep Medicine at UThSC at Houston, have made the significant first steps by using a thermal infrared imaging (TIRI) camera to diagnose sleep apnea, the first noncontact method of diagnosis. The method is capable of extracting breathing waveforms and monitoring airflow from about eight feet away from the patient with no physical probes attached on the nostrils.

“This opens the way for eliminating thermistor probes and freeing the lower part of the patient’s face in sleep studies — a major relief,” says Pavlidis.

Using the TIRI camera, researchers were able to track the patients’ movements of the face and nostrils, creating a virtual probe. The method proved to be as accurate as traditional methods without the contact. Murthy and Pavlidis believe, with more clinical trials, this scientific breakthrough could change the way sleep apnea is diagnosed in sleep labs.

“This is the first step in the development of this technology in airflow monitoring,” says Murthy. “I can foresee future applications for monitoring airflow in newborns and children, as well as situations such as respiratory isolation for contagious disease or traumatic injuries or the face where contact-free methods are the only option.”

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### A Good Night’s Sleep

Detecting Sleep Apnea Just Got a Little Easier.

by Shawn Lindsey

Patients may soon be able to lose a little less sleep about undergoing the test required to diagnose apnea. A polysomnography, or sleep study, traditionally takes at least 20 sensors attached to the head and body of the patient. These thermistors, especially those around the nose and mouth, can disturb sleep and contribute to a patient’s anxiety during the test.

Sleep apnea is a common disorder that causes a person’s breathing to pause during sleep, multiple times within an hour. It affects 9 percent of women and 24 percent of men. An immediate consequence is sleepiness, which is the leading cause of fatal car accidents. The long-term consequence of sleep apnea is sleepiness, which is the leading cause of fatal car accidents. The long-term consequences of sleep apnea include hypertension, heart disease, stroke and diabetes.

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Modernizing the U.S. Power Grid

Superconducting Wires Improve Efficiency and Reliability.

by Melissa Carroll

Although the U.S. power industry is one of the greatest engineering marvels, aging technology and an increase in demand are creating problems for the power grid — cables, transformers, motors, generators — that need to be fixed.

Venkat Selvamanickam (M.S. ’88, Ph.D. ’92), director of the Applied Research Hub and the M.D. Anderson Distinguished Professor in Mechanical Engineering, is developing a technology with high temperature superconducting wires that is revolutionizing the way power is generated, transported and used.

“Superconducting power cables can transmit up to 10 times more power than traditional copper cables without the significant losses of traditional cables and are considered environmentally friendly,” says Selvamanickam.

It is estimated that high temperature superconducting wires could eliminate 131 million tons of carbon dioxide released into the atmosphere and offset the emission of the equivalent of 40 conventional power-generating plants.

“The country’s electric transmission grid currently consists of about 160,000 miles of high-voltage transmission lines, with forecasts predicting an additional 12,900 miles needed over the next five years to meet increasing demand,” says Selvamanickam.

“High temperature superconductivity has the potential to revolutionize the way we use electricity. Our research pays immediate returns to the industry,” he adds.

Providing a Competitive Global Education

UH Signs Agreements with Several Institutions.

The University of Houston has established formal relationships to enhance research collaborations around the globe.

UH President Renu Khator and President Brian Norton of the Dublin Institute of Technology (DIT) signed a five-year, renewable Memorandum of Understanding (MOU) between the two institutions.

DIT, one of the highest-ranked academic institutions in Ireland, currently has approximately 20,000 undergraduate and graduate students and is a member of the European University Association.

UH also signed an MOU with the Institute of Technology, Banaras Hindu University (IT-BHU), Varanasi, India — allowing joint programs at the graduate level, the exchange of visiting scholars and faculty collaboration in research and technology.

IT-BHU is one of India’s oldest and highest-ranking engineering colleges.

Additionally, UH established an MOU with China University of Geosciences (CUG), Beijing — expanding its global reach with a joint Ph.D. program in geology and geophysics. CUG is one of China’s leading universities and plays a key role in China’s oil and mining industry.

Closer to home, UH and Texas Southern University have signed an MOU that will provide complementary research for students from both universities.

Play-by-Play

Rhoades Hires Proven Leaders to Head Men’s, Women’s Basketball Programs

by Richard Bonnin

Bill Bradley, National Basketball Association (NBA) Hall of Fame basketball player and former U.S. senator, once said, “Leadership is unlocking people’s potential to become better.”

Winning basketball programs, with first-class student-athletes on and off the court, have followed James throughout his career, and that is certainly no coincidence,” Rhoades says. “He is an exceptional leader and mentor of young men. We are excited to have James lead our basketball program.”

Rhoades also named Todd Buchanan as women’s basketball head coach. Buchanan completed a successful five-year run as the head coach at Houston Baptist, following a stint as the top assistant on the Cougar sideline.

“I became more and more impressed with Todd’s abilities as a coach and as a great mentor for student-athletes,” Rhoades says of the search to replace Joe Curi, who stepped down as head coach after leading the program to the postseason for the eighth time in school history. “Todd’s familiarity with the program and the respect he has earned from coaches around the city of Houston and in AAU circles are great advantages for our program.”

As the new basketball coaches prep for next year, Cougar fans are looking forward to the upcoming football season. Football is king in Texas, and UH did more than its share to add jewels to the crown. Head coach Kevin Sumlin lined up 26 commitments for 2010. The Cougars return three starting wide receivers, their starting running back and four of five offensive linemen. The 2010 season begins Sept. 4 at Robertson Stadium, as the Cougars host Texas State.

Quarterbacks Case Keenum, an unsung Heisman Trophy contender in 2009, had a spectacular season that resulted in an eighth-place finish in the race for college football’s most prestigious individual honor.

Keenum, a senior kinesiology major, had Cougar fans in suspense when he announced near the end of his junior year that he would explore entering the NFL draft. In mid-January, however, Keenum confirmed that he will return to the Cougars in 2010.

“This is a very special group of guys, and we have a lot of chemistry and history together,” he says. “When you have a team like this, it’s your family, and you want to stay together as long as you can.

“We have a chance to do something special this season. I want to win a conference championship, win another bowl game and take a shot at the BCS.”

In 2009, Keenum was a finalist for the Davey O’Brien National Quarterback Award, Manning Award and the Walter Camp Football Foundation Player of the Year.

Keenum won the Sammy Baugh Award as the nation’s top passing quarterback.

— Richard Bonnin
Margaret Cheung
Margaret Cheung first developed her interest in science looking at colorful photos in science magazines and visiting the Hong Kong Planetarium.

By 15, she knew she wanted to be a scientist. She began following a path that would eventually lead her to the University of Houston, where she is a professor and researcher in the physics department, and a mentor to young women.

"Once I came to Uh, I realized there is a need for role models in science, so I offered workshops for high school students and teachers, as well as reaching out to young girls in elementary and middle school, for them to share the excitement of research," she says.

In 2009 alone, Cheung’s outreach work has impacted more than 400 young people in the Houston area.

Carl Lewis
Long before he became the fastest man in the world, Carl Lewis was a self-described “small, skinny kid” looking for a place to nurture his growing talent.

“Houston was the only school that told me what they could do to advance me, which is what the college experience should be,” Lewis says. “Everyone else was saying, ‘Look at what you could do for our college.’”

Lewis found what he was looking for at the University of Houston. With help from Tom Tollez, the men’s track coach, Lewis trained to achieve remarkable feats — 10 Olympic medals and a world record for speed.

“I loved the experience. I loved being on campus,” Lewis says of living in the dorm. But, he also enjoyed his classes.

“What happened is that I realized that I couldn’t be what I wanted to be without being able to articulate my ideas, so I took speech classes here,” he says. “I said, ‘How can I become a better public speaker? How can I extend my vision?’ I learned that at the University of Houston.”

Danny Olivas
Growing up in El Paso, Danny Olivas (M.E. ’93) spent many nights on his roof, gazing at the stars and looking for craters on the moon. But it wasn’t until a trip to the Johnson Space Center in Houston that Olivas says he was truly “bitten by the space bug.”

Olivas, a NASA astronaut, has made two space flights — one in 2007 on Space Shuttle Atlantis and one in 2009 on Space Shuttle Discovery.

He says it was his passion for engineering — nurtured as a Uh graduate student — that made his career at NASA possible.

Olivas remembers being impressed by the caliber of graduate students on campus — many of whom, like himself, were pursuing graduate degrees while working full time.

One of the professors who went out of his way to help Olivas was Charles Dalton, professor of mechanical engineering. He recalls showing his thesis to Dalton.

“He took that document, and he just ripped it to shreds, and justifiably so,” Olivas says. “In doing so, he made me a better engineer.”

Odelia Bongmba
With a background in agricultural engineering and forestry management, Odelia Bongmba didn’t follow the typical route to Uh’s College of Pharmacy.

Nevertheless, Bongmba, a native of Cameroon, Africa, draws on her past experience as she pursues a degree in pharmacology — focusing her efforts on research to aid patients suffering from Alzheimer’s and Parkinson’s.

Her research could contribute to the search for and development of new forms of therapy that might improve the quality of life for people whose lives are affected by degenerative diseases.

Expecting to complete her degree program in 2011, Bongmba says she feels Uh is providing her everything she needs to succeed in her chosen career.

“I don’t think I could have a better environment,” she says.

"Houston is the city of energy and health. With all of these right ingredients combined, it makes Uh an excellent place for research. It is very exciting,” she says. www.uh.edu/pride-stories/margaret-cheung www.uh.edu/pride-stories/danny-olivas www.uh.edu/pride-stories/odelia-bongmba
Quick Takes

John W. Roberts has been named dean of the College of Liberal Arts and Social Sciences. Before joining UH, he was dean of arts and humanities and professor of English at Ohio State University. His research and teaching interests focus on African-American folklore. Roberts served two years as deputy chairman of the National Endowment for the Humanities. He has served on numerous departmental, college and university committees. And, he won a prestigious Guggenheim Fellowship (1994-95). At Ohio State, he established a faculty mentoring program for the retention of minority and women faculty in the arts and humanities.

Rajender Aparasu, professor and division head of pharmacy administration and public health, has been appointed associate editor of iMac Genetica and to the editorial board of Drug Healthcare and Patent Safety.

Carroll Parrett Blue, research professor for the Center for Public History and the Texas Learning and Computing Center, is one of 20 humanities scholars selected from a national applicant pool invited to attend the National Endowment for the Humanities Institute for Enduring Geospatial Scholarship at the University of Virginia Scholars’ Lab. Blue will train on Geographic Information Systems tools and examine a selection of well-regulated geospatial approaches to humanities scholarship.

Richard Bond (’83, Ph.D. ’88), professor of pharmacology, has received a two-year $682,000 grant from the National Institute of Allergy and Infectious Diseases for the next phase of his ongoing investigation into the use of beta2-adrenoreceptor inverse agonists as potential therapeutic agent for mild, chronic asthma.

Stanko Brankovic, assistant professor of electrical and computer engineering, and Zhu Han, assistant professor of electrical and computer engineering, each received a five-year grant from the National Science Foundation’s most prestigious and competitive faculty Early Career Development Program CAREER Award. Brankovic received $530,000 to research new products and technologies that could improve energy efficiency of everyday devices. Han received $400,000 for work that could allow wireless devices to more efficiently share radio waves.

Elizabeth Coyle, clinical associate professor of pharmacy, has been inducted as a fellow in the Society for Critical Care Medicine.

Vincent Donnelly, John and Rebecca Moores Professor of Chemical and Biomolecular Engineering, along with Demetrou Economou, John and Rebecca Moores Professor of Chemical Engineering, associate chairman of chemical and biomolecular engineering and Plasma Processing Laboratory director, have received $1 million as part of a five-year, $10 million Department of Energy grant to support the Center for Plasma Science, led by researchers at the University of Michigan-Ann Arbor. Economou and Donnelly will join $10 million Department of energy grant to support the Center for Plasma science, led by researchers at the University of Michigan-Ann Arbor. Economou and Donnelly will join

Ke-He Ruan, professor of medicinal chemistry and pharmacology and director of the Center for Experimental Therapeutics and Pharmacoinformatics, received a two-year, $450,000 award from the National Institutes of Health’s new Challenge Grants in Health and Science Research program for “Prostacyclin-secreting Cells as Therapy for Pulmonary Artery Hypertension.”

Jeff Sherer, clinical associate professor of pharmacy, has been appointed to the editorial board for the American College of Clinical Pharmacy’s “Pharmaceutical Therapy Self-Assessment Program, 7th ed.”

Barton Smith, professor of economics and director of the Institute for Regional Forecasting and senior economist for the Center for Public Policy, has received the Houston Business Journal’s Lifetime Achievement Award. The award recognizes Smith’s research in urban and Houston-region economics and real estate.

Vincent Tam, associate professor of pharmacology, has been re-appointed to a three-year term on the Antimicrobial Agents and Chemotherapy editorial board.

Jenny Yl, associate professor of education, has received a $272,753 grant from the Cancer Prevention and Research Institute of Texas for her study on cerebral career, which will develop, implement and assess the effectiveness of a culturally tailored cervical cancer educational program for Vietnamese American women with limited English proficiency.

Faculty Kudos

Tracy Hester has been named the director of the UH Law Center’s Center for Environment, Energy and Natural Resources Law. He previously headed the environmental law group of Brackenell & Gulak (Houston).

Thomas Holley, a senior staff geophysicist at Shell, has been appointed to lead the Cullen College of Engineering’s Petroleum Engineering Program.

Ali Kamrani, associate professor and director of industrial engineering, was appointed as Princess Fatimah Alnijriss Research Chair for Advanced Manufacturing Technology Visiting Professor for the industrial engineering department at King Saud University in Riyadh, Saudi Arabia. Kamrani is conducting research that could have applications in the medical field.

Stuart Long, assistant dean of undergraduate research at The Honors College and professor of electrical and computer engineering, named the 2010 Esther Farfel Award, the highest honor that can be accorded to a University of Houston faculty member. The award is a symbol of overall career excellence.

Bradley McConnell, assistant professor of pharmacology, has been appointed to the editorial board of Clinical and Experimental Hypertension.

Raul Ramos, associate professor of history, has received the inaugural 2010 NACCS-Tejas Book Award for “Beyond the Alamo: forging Mexican Ethnicity in San Antonio, 1821–1861.” He also was lauded as “a talented storyteller” who puts “Mexican Americans at the center of a key moment in Texas history.

Bookshelf

Bruno Breitmeyer, professor of psychology, has written “Blindspots: The Many Ways We Cannot See.”

Art Conklin, associate professor of information and logistics technology, has written “Principles of Computer Security: Security+ and Beyond.”

Charles Olson Cook (M.S. ’72, Ph.D. ’80), professor of history in The Honors College, is one of several collaborators of “African Americans and the Presidency: The Road to the White House.”

Chitra Dixaranji, professor of creative writing, has written “One Amazing Thing.”

Cynthia Freeland, professor and chair of philosophy and faculty fellow in The Honors College, has written “Portraits and Persons.”

Tony Hoagland, professor of Creative Writing, has written “Unincorporated Persons of the Late Honda Dynasty” and “Little Oceans.”

Michael Horvitz, emeritus professor of composition, and Robert B. Nelsen, professor of composition and music theory, have co-written "Music for Sight Singing, 5th ed."


Steve Werner, professor of management and doctoral coordinator, has co-written “Managing Human Resources, 10th ed.”

Robert Zaretsky, professor of history, has written “Albiet Camus: Elements of a Life.” Zaretsky: Sarah Fishman, associate dean and professor of history; and Alice Conklin co-wrote “France and Its Empire Since 1870.”
Q. How would you describe the UH Health initiative?
A. It is the intersection between where we want to go as an institution and what we think is good for Houston. The Texas Medical Center (TMC) makes this one of the most important health care sites in the world. UH is exploring the best way to capitalize on that. You play to your strengths — and we already have very strong faculty and a number of health-related programs. Basically, we are going to coordinate and expand our health-related research programs.

Q. So this isn’t a new enterprise so much as an enhancement of established programs?
A. It’s both. Right now, more than half of our externally funded research is health-related. With this initiative, we are bringing that together and strategizing our next steps.

Q. Where do we need to go next?
A. As a full-fledged TMC member, we now have many obligations but also immense opportunities. Our model is to complement our TMC partners. Beyond that, the sky’s the limit. The timing couldn’t be better for UH to expand its presence. It’s right in step with the national agenda of health care reform and an aging population. We’ll be very well positioned to make a major impact in research and education. We will do this gradually because of budget constraints, but there will be steady progress.

Q. Where is our health care research headed?
A. For one thing, what’s happening with the Genome Project and genetics is analogous to small particle physics research in the 1940s. And there is going to be an explosion of new research in biology and behavioral fields. But it’s not all white coats in labs. UH will play an increasingly important role in health care policy, which involves psychology, economics, philosophy and legal issues.

Q. Will there be a central health-oriented venue, comparable to the Energy Research Park?
A. Not now. But our new biomedical research building won’t be limited to optometry — everybody’s going to use those facilities. In a few years, we could launch a College of Health Professions.

Q. Five years from now, what will UH Health be like?
A. We should be doing more than $100 million just in health-related research, doubling our current level. We’ll have a world-class biomedical engineering program. We’ll be bigger and better, with a balance of basic research, applied research, educational programs, and community outreach.

Q. And 10 years?
A. Important partnerships in addition to our TMC affiliations. Much more engineering, management and computer sciences involved with health. I can see a Health Policy Institute.

Q. Can you see a UH medical school?
A. We already have three top medical schools here, so it’s a matter of funding and the state’s priorities. We’re focusing on making UH Health a success on its own terms. If the stars are aligned in the future, and the state decides we need another medical school, UH will certainly be ready.

Q. Our health-related research would seem to have considerable potential for commercialization of intellectual property. Is that the case?
A. Tremendous opportunities. But not many institutions do it well — USC, Stanford, MIT and a few others. That’s why we’re reorganizing the Division of Research. Moving forward, we need more than a great legal staff to write copyright contracts. We need people with their ear to the ground in various research areas to make sure our faculty are involved. We need IP managers who can provide entrepreneurial support.

Q. Our advantages seem clear. What are the challenges?
A. Supporting talented faculty. A successful researcher has to manage a lab, have capable postgraduate students and talented junior colleagues. That’s why we’re now set on the team-hire approach. We must provide the capacity to be productive. We’ll likely need at least two or three more major research buildings.

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It’s no secret that there is a buzz surrounding UH in its life-altering research at the University of Houston. Buried gems are beginning to emerge as the university launches to advance biomedical discoveries in Houston and across the globe.

“From Bench to Bedside: UH Health Opens Door to Hidden Treasures on Campus.”

By Lisa K. Marks (’92, M.A. ’97)

Now strategically hired additional renowned professionals to join UH Health team, leaders in a number of fields, has put UH Health on the forefront of the world’s biomedical research in Houston and beyond.

“UH Health will not just build bridges within UH, but across to other universities in our system, to the Texas Medical Center and beyond.”

— Kathryn Peek, Assistant Vice President, University Health Initiatives

FUTURE OF BIOMEDICAL ENGINEERING

“It requires a global vision to achieve our goals. We must co-invent, co-produce and co-mentor with leading health care institutions, providers and industry to generate leaders in the field of health care science, engineering and technology,” says Metin Akay, John S. Dunn Chair in Biomedical Imaging Sciences and founding chair of UH’s new department of biomedical engineering in the Cullen College of Engineering. “Tier One is a mindset, where every level — students, faculty, staff and administration — focus on excellence, quality and scholarship. We are fortunate to have the right leadership, with Dean Joseph Tedesco and Provost John Antel in place, with a visionary chancellor.”

Biomedical engineering is just one of the cornerstones of UH Health. An emerging field, it involves both engineering, as well as applied and physical science, to understand the mechanisms of biological systems and the causes of diseases. This return, helps researchers develop tools and therapies for treatment.

Akay lists three main thrust areas in biomedical engineering at UH: 1) Neural, cognitive and rehabilitation engineering includes such things as neural implants, neurosurgery, brain-computer interfaces, cognitive engineering and science, and neurorehabilitation with implications for treating epilepsy, Alzheimer’s, Parkinson’s and other neurological diseases. 2) Biomedical imaging focuses on molecular, cellular and clinical imaging toward therapies in cardiac and neurological imaging; genomics and proteomics involve gene regulatory networks; systems and synthetic biology and intelligent drug design and delivery, with the treatment of cancer as its main focus.

“Our department is going to be very health care oriented, and the focus will be to discover, develop, deliver. Every dissertation coming out of this department will have these themes,” Akay says. “The idea is to provide solutions to reduce health care costs, as well as focus on return on investment. That’s the difference between our department and the more than 90 others in the United States.”

Arriving at UH in January of this year, Akay is embracing the challenge of convincing the college’s longstanding biomedical program into a department. In addition to increasing the department’s visibility, he anticipates adding as many as 12 faculty in the next five years, creating a distinguished lecture series, offering a Ph.D. option on top of the existing bachelor’s and master’s degree tracks, and stimulating research collaborations with the Texas Medical Center (TMC).

AAAS FELLOWS AND TIER ONE FOCUS

Akay was selected and inducted this year into the prestigious American Association for the Advancement of Science (AAAS), as neither he shared with Stuart Dryer, John and Rebecca Moores Professor of Biology and Biochemistry and biology department chair. Each year, AAAS honors those who have made distinguished contributions to the advancement of science and is the world’s largest general scientific society, as well as publisher of the prominent journal Science.

Being named an AAAS fellow is one of the top honors a scientist can achieve and demonstrates the growing recognition within the scientific community that UH is a world-class center for research and education. “This recognition helps put the Tier One aspirations of UH into focus for the community,” he says.

Akay has his eye on bringing another institute. He plans to build the Institute of Global Health Care, which he says will partner with several international institutions, including the Chinese Academy of Science, several respected European research institutions and leading biomedical and science industry partners.

“Developments in science, engineering and technology have stimulated interdisciplinary research and collaboration among engineers, physicians, computer scientists and biologists,” he says. “We are in the midst of these scientific and technological advancements, and it is an exciting time to be in the biomedical field.”

Bridges are already actively being built between UH and the Texas Medical Center.

“Being named an AAAS Fellow is one of the top honors a scientist can achieve and demonstrates the growing recognition within the scientific community that UH is a world-class center for research and education. “This recognition helps put the Tier One
It is extremely good that UH is now formally part of the medical center, so it’s now easier for us to come in as insiders.

— Jan-Åke Gustafsson

### UH’s Interdisciplinary Collaborations

Working toward achieving these goals, both externally and internally, Gustafsson’s UH center offers weekly meetings (every Friday at 1 p.m.) where speakers are invited from within and outside the university — making sure to bring in UH researchers from other departments and disciplines across campus.

Gustafsson also operates under the philosophy that “everyone has a voice.” He says, “We really put this into action, building up the self-confidence of students, postdocs and faculty by listening. To make a good, publishable, competitive study, you must work with other disciplines, with other people, with other ideas. In a sense, the center is the ultimate consequence of this principle, and everything goes toward team science.”

Researchers in Gustafsson’s group can attest that he pays homage to these words. With five faculty already in place, performing active research, and more in various stages of the interviewing and hiring process, the center only has four slots left of their 12 openings in just over a year’s time, since his arrival at UH. His team is on the cutting edge of diagnoses and treatment of lung, brain, prostate and breast cancer and metabolic conditions like diabetes and obesity, as well as neurodegenerative diseases, such as Parkinson’s and Alzheimer’s.

Maria Blondesson, research assistant professor, and Wielia John Zhang, assistant professor, are two of the researchers working with Gustafsson. Blondesson, whose aim is to link pollutants to common diseases, says they have “already been given the opportunity to accomplish so much and can only imagine what [they] will be able to do once more of the team is in place.” John Zhang, whose work includes controlling cancer cells “appetites” to stop tumor metastasis, adds, “Each group is working very actively, from postdocs to faculty to researchers, and there are scientists working around the clock every weekend in the lab. The pulse in the lab never stops.”

Two other key scientists at the CNRCS are Cecilia Williams, assistant professor, and Xiaoliu Shuan Zhang, professor. Williams’ research involves analyzing stem cells, comparing cancer cells to healthy cells, to identify new treatment possibilities. As a virologist, Shuan Zhang develops novel cancer therapeutics to “turn killer to cure” by modifying a benign human virus to destroy tumor cells without harming normal ones.

### Building a Health and Biomedical Science Center

As if this weren’t groundbreaking enough, construction has been approved on a 167,000-square-foot, six-story Health and Biomedical Sciences Center (HBSC) on the other side of campus from the interdisciplinary Science and Engineering Research Complex where Gustafsson and Akyay do their work. In addition to expanding what the College of Optometry has to offer, coming together in this facility also will be two other of UH’s esteemed research units — the Texas Institute for Measurement Evaluation and Statistics (TIMES) and the Texas Learning and Computation Center (TLC2).

“The Health and Biomedical Sciences Center will be a truly integrated cross-disciplinary research facility that will incorporate researchers from the colleges of Optometry, Liberal Arts and Social Sciences, Engineering, Natural Sciences and Mathematics, and Pharmacy,” says David Francis (M.A. ’84, Ph.D. ‘86), Hugh Roy and Lillie Crenz Cullen Distinguished University Chair of Psychology and TIMES director. “The vision involves creating a space where researchers from psychology, neuroscience, statistics, computer science, engineering, health law and human health and performance, who have related interests in complex systems, will be able to collaborate more easily and readily on projects that are interdisciplinary. It goes beyond traditional colleges working together.”

Francis is spearheading the effort to bring together the people from these diverse groups. Disciplines set for relocation to this building upon its completion include faculty from computer science, neuroscience, biology and biochemistry, psychology, biomedical engineering, pharmacy, neuroscience and neuropsychology. By bringing together researchers across these various areas of expertise in the same physical location, Francis says they “can create something that’s more than just the sum of its parts, more of a synergy to create new things.”

He also stresses the importance of training students and future researchers both at the undergraduate and graduate level in these laboratories. The interactive facilities HBSC will offer are the kinds of work environments students will find themselves in when they graduate. By training students in such a manner, they will be better equipped to go into the workforce and be successful.

Francis’ group, TIMES, is essential to this group of complex systems professionals with its measurement, evaluation and statistical work. By moving to HBSC, they hope to offer more biostatistical support to their colleagues related to medicine, health and clinical intervention, including clinical trials. This, for instance, could assist computer scientists in their complex imaging studies in terms of processing data one way or another, with certain approaches leading to better results and less errors. Their processes in TIMES can help design treatments and test them for their effectiveness by examining large-scale databases and looking for information about connections between disease pathways and genes that might relate.

“Just imagine the possibilities when you can put together psychologists who study human behavior when it gets disordered, computational scientists and engineers who design image systems for looking inside the heart and neuroscientists who study how cells talk to each other in the brain,” Francis says. “These integrated collaborations ultimately will lead to more and better opportunities for center grants and program project grants coming out of UH.”

### Advances in Neuroscience

Another aspect of the HBSC is the expanded capabilities for the College of Optometry, which will include an ambulatory surgery center on the first floor. Its two components will include a place for outpatient ophthalmic procedures like cataract surgery and another for laser-refractive surgery, better known as LASIK. The second floor will be devoted to labs for patient-based research, classrooms, and faculty and graduate student offices.

“We see health and biomedical research as an area of tremendous opportunity, given both our own campus talent pools, as well as the resources from the Texas Medical Center,” says Earl Smith (’72, M.S./’75, Ph.D. ’88), College of Optometry dean and Greene-Petty Professor. “With the new facility, we will offer expanded services to our patients, create enhanced educational experiences for our students and establish important research collaborations with other scientists that will ultimately impact vision and its care for future generations. We expect groundbreaking in the fall of 2010, followed by about two years of construction.”
George Zouridakis and student assistant in his lab

Also included in HBSIC will be improved core facilities that are crucial to the neuroscience, 60 percent of which is vision related. According to Smith, most of what they do in optometry is neuroscience, an area which is actually “the heart and soul of campus collaborations” by his estimation. These new facilities also will put neuroscience labs, both in and out of optometry, closer to where they need to be. The desire to create these singular facilities, with common equipment that can be shared, will provide more cost-effective solutions and permanent, better design to accommodate research needs. Scientists will be closer to the resources they need rather than being spread out across campus in individual labs, sometimes duplicating efforts and equipment that would be better served by teamwork, collaboration and sharing. Smith says it will improve efficient use of space and resources.

One researcher who will benefit from these improved neuroscience facilities is George Zouridakis (M.S. ‘90, Ph.D. ‘94), Biomedical Imaging Lab director at TMC2 and professor of technology. Among other projects, Zouridakis and his colleagues are developing noninvasive brain-mapping technology that promises to deliver more comprehensive and accurate insights into the mind at a fraction of the cost of current technologies.

“The typical approach currently used for brain mapping is functional magnetic resonance imaging (or MRI), which is expensive, confined in one place and requires a shielded room due to strong magnetic fields, as well as requiring specialized personnel to maintain and operate,” Zouridakis says. “Our technology aims to eliminate such obstacles — allowing us to study both electrical and metabolic activities at the same time and improve patient benefits.”

He hopes that the combination of electroencephalography and near infrared spectroscopy in a very portable device one day will help more accurately diagnose brain damage in hospitals and on the battlefield, leading to rapid assessment of traumatic brain injury. The two tests he combines are usually done on patients separately, so using the technologies together requires special headgear to house the disparate sensors. This special device, however, will allow researchers to measure all aspects from the different tests in a simultaneous, complementary manner.

Before coming to UH, Zouridakis was a faculty member at the University of Texas Medical School and performed with neurophysiological procedures in operating rooms. He enjoys working in an interdisciplinary environment. With his translational research in computational biomedicine and biomedical imaging, his hope is to see the current invasive and expensive gold-standard procedures used in clinical neurophysiology for brain mapping replaced by completely noninvasive ones. This will improve the quality of life of patients and, at the same time, reduce the cost of health care delivery.

UH Health

“Tier One is a mindset, where every level—
students, faculty, staff, and administration—
focus on excellence, quality and scholarship.”

—Metin Akay
Chair, Department of Biomedical Engineering
Cullen College of Engineering

Two major milestones that are helping drive this grand UH Health initiative are UH’s induction into the Texas Medical Center as an official member institution and the appointment of Kathryn Peek (M.S. ’70) to spearhead the ambitious health strategies at UH. The decision resulting in UH’s inclusion into the medical center was a culmination of several years of discussion between the two organizations and is a critical step in developing strong educational and research collaborations to benefit the Houston community. With the College of Pharmacy having been a member for 30 years, the opportunity for UH in its entirety to be recognized in this manner has been a long time in coming. Not only will it formalize existing collaborations between TMC and UH, but it also will open the floodgates to new partnerships, resources and training that fall in line with UH’s growing interdisciplinary research efforts as it gains on Tier-One status.

Peek, a biomedical educator and administrator with 25 years of experience in the Texas Medical Center, serves as assistant vice president of University Health Initiatives. Charged with coordinating UH System health initiatives in the areas of research, as well as educational and clinical programs, she works with internal and external stakeholders. In this quest, she is identifying and creating new cross-disciplinary academic and health-related research opportunities for faculty and students.

“You can sense a buzz across the university about health-related programs and projects, and a number of people want to get involved. That translates directly into new health-related programs, new degrees that are under development and new opportunities across the entire university system,” Peek says.

“The next generation of health programs for UH will not be limited by boundaries of colleges and departments, but will be truly interdepartmental and interdisciplinary. UH Health will not just build bridges within UH, but across to other universities in our system, to the Texas Medical Center and beyond.”

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Taking Aim at Cancer

UH Researchers Explore Diagnosis at the Nano Level.

by Laura Tolley

In the ongoing fight against cancer, early detection has become a critical factor in successfully treating the disease. A team of University of Houston researchers is trying to take early detection to the next level by creating a technology that can identify cancer in even the smallest samples of body fluids.

Led by Dmitri Litvinov, UH professor of electrical and computer engineering, the research team has received some impressive help in this important endeavor—a $1 million grant from the National Institutes of Health.

The grant will be used to construct and also test the biosensor’s ability to spot cancer protein biomarkers for Chronic lymphocytic leukemia—a blood and bone marrow cancer. The device will use magnetic nanotechnology to locate these biomarkers, which are elevated in patients with the disease, on a single molecule level.

Litvinov’s co-investigators are Richard Willson, professor of chemical and biomolecular engineering; T. Randall Lee, Hugh Roy and Lillie Cranz Cullen Distinguished University Chair of Chemistry; and Chung-Che “Jeff” Chang, associate member of The Methodist hospital Research Institute.

“A technology that uses smaller samples that can be taken from patients less invasively and directly detects these miniscule biomarkers could cut back on the complicated steps doctors use now that often lead to errors and false positives,” says Litvinov. “This biosensor could do the same job faster, cheaper and with fewer problems.”

Their hope is to later expand the new technology’s capabilities and use it as an early detection tool for everything from HIV to Alzheimer’s.

While early detection is critical to successfully fighting cancer, another important element is discovering new treatments. Ming Hu, professor of pharmacy, is co-leading an international, multi-institutional project to investigate the chemopreventive potential of red ginseng extract for lung cancer.

With a subcontract award of nearly $1.1 million to UH, Hu is collaborating with Hong Kong Baptist University to procure and perform phytochemical studies on this herbal material.

By Laura Tolley

An antiparasitic agent is a drug for humans and/or animals that kills parasites and prevents and stops parasitic infections. Mebendazole was first introduced in the 1970s for the treatment of roundworm infection, but it also has proven effective in treating several types of parasitic infections.

Liang is an associate professor and chair of the Department of Pharmaceutical Sciences at Texas Southern University’s College of Pharmacy and Health Sciences.

In research conducted in the late 1990s and early 2000s, Chow’s colleagues at The University of Texas-M.D. Anderson Cancer Center discovered that the antiparasitic compound mebendazole possessed significant tumor-fighting properties and recruited her to develop novel formulations of the drug. UH later received exclusive rights to the formulations.
Training Future Health Care Workforce  
UH Prepares Students to Meet Real-World Needs.
by Michelle Klump

With the number of health care workers needed in the Gulf Coast Region projected to increase 44 percent by 2016, the University of Houston is looking at ways to increase its already sizeable impact on the workforce.

With 49 health-related programs and research areas, including biology, chemistry, social sciences, law, sociology, psychology, pharmacy, optometry and many others, the university is a major contributor. In 2009 alone, UH awarded 1,202 health-related baccalaureate degrees; 439 graduate degrees; and 210 special professional degrees in optometry and pharmacy. The university also is at the forefront of health-related research, which accounted for $61.1 million of its $110 million in research awards in 2009.

But to help meet the growing need for new workers, UH is positioning itself to become the leader in health care education, says Kathryn Peek (M.S. ’70), assistant vice president of University Health Initiatives.

Her goal: The University of Houston is the destination of choice for students in the 13-county Gulf Coast Region who are interested in a health career.

Peek and other UH administrators are taking a comprehensive look at current and future health care workforce needs in the region, along with the program offerings at UH System institutions, and are determining what new programs need to be added to help fill the gaps.

In addition to developing new programs, UH is working to strengthen ties with other members of the Texas Medical Center — a major incentive the university can offer students.

“We have very close ties to the Texas Medical Center,” Peek says. “We are developing pathways so that if a student enters UH as a freshman or transfer student, we can plug them into a pathway, and get them the type of career counseling they need so they know what their job opportunities are. We are very workforce oriented.”

Along with the traditional programs that lead to health careers, UH offers others, such as The Honors College’s Medicine & Society Program, that teach future health care workers important skills that will set them apart in the workforce.

“By encouraging students to explore modern medical practice through the perspectives provided by philosophy, history, religion, ethics and law, [the program aims] to foster a deeper level of analysis, reflection and broad-based understanding in our future medical practitioners,” says Helen Valler, assistant professor and program coordinator. “We are particularly concerned to see our future clinicians develop the skills of analysis, empathy and self-reflection through their coursework in the program.”

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A Mentor’s Influence
Alumnus Inspired by His UH Education Supports Chemistry Fellowship.

by Kelli Ferrell

For Dr. Herman Suit (B.A. ’48), a long and distinguished career in medicine began in a downtown Houston shoe store.

Knowing the importance of an education, and not wanting to burden his family with the cost of college, Suit earned the money for his University of Houston tuition by selling ladies shoes.

“The cost (at UH) was very low, and I made the money to pay for college,” Suit says.

Growing up, he knew he was interested in science and medicine, but it wasn’t until UH chemistry professor Eby Nell McElrath’s class that he became “enthused with chemistry.”

“I had to take chemistry to be a candidate for medical school, but I was not impressed until organic chemistry,” Suit says. “(McElrath’s class) was intellectually stimulating, exciting and provocative.”

After graduating from UH at 19, he entered Baylor Medical School where he received a master’s degree in biochemistry in addition to an M.D. During this time, Suit took a course on radiation biology at The University of Texas. Fascinated, he chose the field of radiation oncology, despite his professors’ belief that new drugs would eradicate cancer before he finished his residency.

wSuit didn’t let the discouragement get to him. He earned a Doctor of Philosophy from Oxford University in England in 1956, was accepted to the National Cancer Institute and, two years later, was hired by M.D. Anderson Cancer Center.

“I am proud to have been able to support a postdoctoral fellow, named for the best teacher in my entire career.”

In 1970, Suit was recruited by Massachusetts General Hospital and Harvard Medical School to develop the newly created department of Radiation Oncology. He has been there now 40 years. Though he stopped practicing medicine at age 78, he remains involved as the Andres Soriano Distinguished Professor of Radiation Oncology at Harvard Medical School.

When Suit and his wife, Joan, decided to fund a fellowship at the University of Houston, it was clear to Suit whom it should honor: his former professor.

In 2005, he and his wife, Micheline, started Advanced Pharma, Inc., which focuses on pharmaceutical compounding and outsourcing.

Abboud emphasizes that growth and success on the business front will translate into different aspects of life, including UH.

“The best way to reach his potential. Abbott channeled his inner “maverick” and decided working for himself was the best way to reach his potential. In 2005, he and his wife, Micheline, started Advanced Pharma, Inc., which focuses on pharmaceutical compounding and outsourcing.

Abboud emphasizes that growth and success on the business front will translate into different aspects of life, including UH.

“Intrinsic Satisfaction in Giving: A Passion for Pharmacy Leads Alumnus to Create Presidential Endowed Fellowships.

by Kelli Ferrell

Though he grew up in Lebanon, Bourjois Abboud (’96, M.B.A. ’02) knew he wanted to come to the United States to pursue a higher education. Following his sister’s footsteps and his passion for science, he enrolled in the University of Houston College of Pharmacy.

“Philanthropy comes from the heart!” says Abboud. “Being able to support my college and give back a portion of what I received gives me a great intrinsic satisfaction.”

When Suit and his wife, Joan, decided to fund a fellowship at the University of Houston, it was clear to Suit whom it should honor: his former professor.

As a former scholarship recipient at UH, it was natural for Abboud to want to “complete the cycle and give back to the university.”

The Abbouds created two Presidential Endowed Fellowships: one to support a student pursuing a Doctor of Pharmacy degree and the other for a graduate student in the college.

With all the success Abboud has seen and the generosity he shows, pharmacy students will certainly want to follow in his footsteps.
My Thank You
Alumnus Remembers UH in His Giving.
by Kelli Ferrell

It was the late 1950s. University of Houston Tau Kappa Epsilon (TKE) pledges were out to cause trouble and set their sights on Ronald C. Borschow (’58), the fraternity’s treasurer. They kidnapped him and threw him in the pond near the Sam Houston Monument at Hermann Park, fully clothed, ruining his expensive new shoes.

His best friend, who also was president of TKE, went back to the fraternity house and passed around a hat, collecting money to replace the shoes. “Things happen in a frat that don’t happen anywhere else,” he says. “I had a ball in those days.”

And Borschow will never forget the university that gave him those memories. “UH did right by me,” says Borschow, who received his B.B.A. from the C.T. Bauer College of Business and then worked for the city of Houston for 22 years as a statistician. “Giving back is my way of saying thank you.”

Borschow has established three endowments at UH as part of a planned gift, all in areas close to his heart. He first created two endowments in the C.T. Bauer College of Business to support student scholarships and visiting faculty.

It was his love of music that led him to establish a third endowment to support student and faculty travel in the Moores School of Music, allowing them to perform in competitions and performances.

“I want to give back what I was given,” he says. “I’ve been fortunate over the years thanks to the education I received from the University of Houston.”

Borschow is now a member of The 1927 Society, a recognition society that honors those who have included UH in their wills or other estate plans.

The 1927 Society

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- receive a fixed payment for life
- receive a charitable income tax deduction
- support the legacy of the University of Houston

Gift Annuity Rates*

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*Effective July 1, 2010. Rates subject to change. Dates above your life as a life annuitant when calculating a charitable gift annuity. The University of Houston is an Equal Opportunity/Affirmative Action Institution.

University of Houston System Operating Budget

University of Houston System Operating Budget

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Results: University of Houston System Operating Budget

If you would like to talk to someone about giving to UH, contact the Office of Planned Giving at 713-743-8680 or log on to www.uh.edu/plannedgiving.