

GROWTH FACTOR

Past: 13 students in 1963

Present: 550 students in 2007

FUTURE:
700
STUDENTS
by 2020



THE UNIVERSITY of TEXAS
HEALTH SCIENCE CENTER AT HOUSTON

THE UNIVERSITY OF TEXAS
MD ANDERSON
CANCER CENTER
Making Cancer History®

table of contents

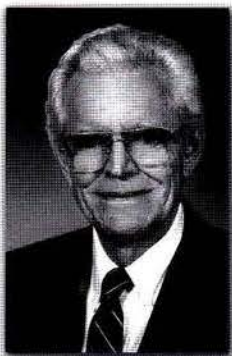
- 2 Benefactor News
- 3 Dean's Notes
George M. Stancel, Ph.D.
- 4 Graduating Class 2006-2007
Master of Science Degrees
Doctor of Philosophy Degrees
- 6 Commencement Address
Robert D. Wells, Ph.D.
Professor and Director
Center for Genome Research
Texas A&M University-Institute
of Biosciences & Technology
- 7 John P. McGovern Outstanding
Teaching Award for 2007
- 8 Commencement Photos
- 10 Message to Class of 2006-2007
Sharon Roth Dent, Ph.D.
GSBS Faculty President 2006-2007
- 11 Faculty Honors
- 12 Faculty Membership Report
- 16 Student Awards
- 20 Student News
- 21 Staff News
- 22 Distinguished Alumnus 2006-2007
John Kopchick, Ph.D.
- 24 Alumni Reunion
- 26 Alumni News
- 27 Special Thanks and Gratitude

Back Cover

Message to the Alumni:
Kendra Woods, Ph.D.
President 2006-2007
GSBS Alumni Association

The Original Benefactor

John P. McGovern, M.D. 1921 - 2007



When I became Dean of GSBS mid 1999, I did not know Dr. McGovern, but knew of his serious commitment to biomedical research and education long before then. He was a great supporter of education at the Graduate School, e.g., McGovern Teaching Awards and McGovern Poster Awards, and an equally strong supporter of research at many institutions in the Texas Medical Center. I knew of his clinical acumen since my wife was a patient at his allergy clinic and was a great admirer of his before we ever met.

Early in 2001 I received a phone call from Dr. McGovern's office asking if I would meet with him at his home. When I arrived he was cordial and we exchanged brief pleasantries - he then said very nonchalantly, "We can keep on throwing posies at each other, or you can tell me what your school needs." I responded that we had one overriding need - to recruit and support outstanding and capable students from a variety of backgrounds. He asked how he could help. He wanted to honor me with a professorship. Together we strategized how the first endowed professorship in the biomedical sciences would be held by me and each succeeding dean at GSBS with the income targeted to provide student recruitment funds and scholarships for what would best achieve that goal. He asked where to send the check, and I was immediately certain that he had done a great deal of homework about our School (and perhaps its new Dean!) long before I walked through his door that afternoon.

I made it a point to send him notes in subsequent years thanking him for his support, sometimes with pictures of the students who benefited from the endowment income, and every year he sent a gift to add to the endowment. Supporting students and their research training was a never-ending process for Dr. McGovern throughout his life and will remain as his legacy at GSBS.

George Stancel, Ph.D.

Dr. John P. McGovern was the first and continuously generous financial donor to the Graduate School of Biomedical Sciences. I had contact with him almost from the first day I walked in the door of the GSBS in 1966. He was also my allergist. He was the quintessential Southern Gentleman and was committed to personally preserving the "History of Medicine." The GSBS bestowed the title of Professor of the History of Medicine to him which he often listed among his credits. He was a major force in overseeing the preservation of appropriate books and documents detailing how medical training and practice evolved.

I had many and always positive contacts with him over the years. He always signed his formal letters to me (usually when he sent in his annual donation) "Jack."

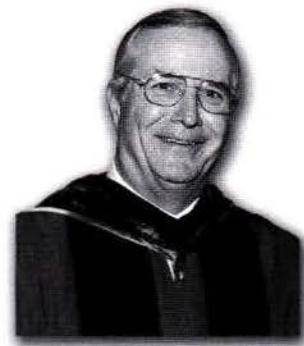
I always addressed him in correspondence and called him "Dr. McGovern." In the many articles written about him in the newspapers following his death, one said that he always insisted that his friends call him "Jack." That pleased me more than I can express in this tribute.

Melva Ramsay

Dean's Notes

Candidacy and Time to Degree ~

Is Less More?



On the way to achieving a Ph.D. in the biomedical sciences we train our students in critical thinking and sharpen their intellectual prowess as they study and develop research projects for the ultimate purpose of making new key discoveries. Most in my generation received our Ph.D.'s in 4-5 years, often closer to four. At GSBS that figure is now approximately 5 ½ years on average and even approaching 6 for certain programs. This is well below the national norm (7 years or more for biological sciences depending upon whose statistics you use and the specific discipline). Even so, it is in everyone's best interests to ask whether it can be decreased without sacrificing the quality of the students' education.

If we consider the two main phases of doctoral training, pre- and post-candidacy, there are things we might do in both. Better mentoring, increasing expectations of faculty (with commensurate recognition), and more clearly defined expectations for faculty and students would help in both phases, but the time spent in the post-candidacy phase is likely to remain the more variable and difficult to prescribe. On the other hand, are there other things we might do to decrease the time it takes students to progress to candidacy, i.e., to be ready to undertake independent dissertation research?

A place to start might be the primary purpose of the candidacy exam. If the goal is to assess whether a student is *capable* of undertaking independent research and *ready* to do so, is it necessary for the student to generate a large amount of data for their exam proposal? If we used options such as writing a proposal on a topic other than one's own research or reducing the amount of preliminary data (real or perceived) that students and mentors think they need, could we mandate a shorter, *invariant* amount of time such as two years to pass the candidacy exam. We should always allow exceptions for reasons such as entrance deficiencies, health problems, etc., but the real question is whether two years is sufficient for most students if we have proper admission's criteria? These is not a simple issue, but the point is to think about how we might shorten the time to candidacy so that qualified students could begin the dissertation project sooner and the few who were not, or became interested in other things, could consider realistic options rather than spending more unproductive time in a Ph.D. program. This would allow everyone more time after GSBS to make contributions to society which is the ultimate goal.

Another issue(s) is how effectively we prepare students to advance to candidacy in their first two years at GSBS. Could we do more

in the tutorials to identify the needs of individual students and help them learn the skills we wish to test in the candidacy exam? Should advisory committees meet more often in the second year to guide students more efficiently and effectively? Can we use advisory committee meetings to focus more explicitly on students' intellectual progress and critical thinking skills rather than emphasizing the preliminary results he/she has generated and suggesting new experiments? Should we encourage capable students with entrance deficiencies to begin their GSBS education in the summer rather than the fall term of their first year? Are there other creative things we can do?

This is a major academic issue, and whatever we do should be faculty driven and invite student comment. I would like all of us to take a fresh look at this issue and I encourage Programs and individual faculty to give it some serious thought; we would all benefit in the long run if we could reduce time to degree -- less might really be more at GSBS.

George

2006-2007 GRADUATES MASTER OF SCIENCE DEGREE

Atkins, Kristal (Nachum Dafny, Ph.D.)

Behavioral and neurophysiological mechanisms underlying psychostimulants

Curtis, Leigh (Roger Janz, Ph.D.)

The role of syntaxin 3B in retinal ribbon synapses

Defant, Jennifer (Alex Vidaeff, M.D.)

Preeclampsia and the trisomy 21 conceptus

Greenberg, Brandon (Guillermina Lozano, Ph.D.)

The role of mutant p53 in metastasis

Grove, Megan (Eric Boerwinkle, Ph.D.)

Gene environment interaction in the atherosclerosis risk and communities project (ARIC)

Huynh, Ly (Thomas Goka, Ph.D.)

Cysteine-switch control of the Ras/Raf/MEK/ERK pathway in COS-7 and breast cancer cells

Kline, Keith (David Eagleman, Ph.D.)

Why is the perceived direction of motion sometimes opposite the actual direction

Knisley, Alyssa (Jennifer Hoskovec, M.S.)

Maternal serum screening: does the frequency of abnormal results vary with ethnicity

Lin, Pei-Chun (Xin Lin, Ph.D.)

The molecular mechanism of G-protein-coupled-receptor-mediated NF-kappaB activation

Merritt, William (Menashe Bar-Eli, Ph.D.)

Effects of targeting IL-8 on ovarian cancer

Nica, Alina (Peter Ruvolo, Ph.D.)

Ceramide induces cell death in chronic myeloid leukemia-derived K562 cells by a caspase-8-dependent apoptotic mechanism

Patel, Purvi (Yong-Jian Geng, M.D./Ph.D.)

The role of gelsolin and signal transducers and activators of transcription 3 (STAT3) in vascular smooth muscle cell iNOS expression

Salo, Erin (Miguel Rodriguez-Bigas, M.D.)

Survey of the cancers and genotype-phenotype correlations in the HNPCC patient population at UT M. D. Anderson Cancer Center

Stanford, Amy (Sarah Noblin, M.S.)

Expanded newborn screening in Texas: a survey and educational module addressing the knowledge of pediatric residents

Stetson, Robert Chess (David Eagleman, Ph.D.)

Plasticity and neural correlates of time perception

Sullivan, Cathy (Terri King, Ph.D.)

The impact of genes in glucose metabolism on rostral lesion location in patients with spina bifida meningomyelocele

Tipps, Catherine (Jacqueline Hecht, Ph.D.)

Trisomy 21, 18, and 13 in Texas: prevalence and mortality study

Tseng, Jui-chuan (William Plunkett, Ph.D.)

Cellular and molecular pharmacology of the S-phase checkpoint pathway: a mechanism for cell survival

Uffort, Deon (Julie Ellerhorst, M.D./Ph.D.)

The regulation of the inducible nitric oxide synthase via the mitogen-activated protein kinase pathway through NF-kappaB activity

Zhao, Ruiying (Mong-Hong Lee, Ph.D.)

The COP9 signalosome subunit 6 (CSN6) is essential for early embryonic development in mice

GRADUATION CELEBRATION



Carter, Jennifer (Subrata Sen, Ph.D.)

High-resolution microarray analyses of chromosome 20q amplicon in human colon cancer metastasis model systems

Chang, Yao-Fu (Miles Wilkinson, Ph.D.)

T-cell receptor nonsense-associated altered splicing

Chen, Chih-Hsin (Richard Behringer, Ph.D.)

Comparative studies of Hox genes in mammalian limb and vertebral pattern formation

Childress, Jennifer (Georg Halder, Ph.D.)

Lethal giant discs, a novel C2 domain protein restricts notch activation during endocytosis

Chunn, Janci (Michael Blackburn, Ph.D.)

Adenosine induced pulmonary fibrosis and the contribution of the adenosine A2B receptor to the induction of osteopontin in a mouse model of pulmonary fibrosis

Dembinski, Jennifer (Michael Andreeff, M.D./Ph.D.)

Examination of the engraftment of exogenous mesenchymal stem cells in ovarian tumors and their potential use as delivery vehicles for therapeutic genes

Den Hollander, Petra (Rakesh Kumar, Ph.D.)

Nuclear functions of dynein light chain 1 in hormone action

Edwards, Sharon (Richard Sinden, Ph.D.)

Non B-DNA structures and genetic instability associated with myotonic dystrophy type 2 (CCTG).(CAGG) repeats

Fu, Xueyao (William Klein, Ph.D.)

Mouse retinal development: role of cell adhesion and mechanism of gene regulation

Hadjifrangiskou, Maria (Theresa Koehler, Ph.D.)

Cis-acting elements and developmental regulators govern toxin gene expression in Bacillus Anthracis

Hawthorne, Valerie (Dihua Yu, M.D./Ph.D.)

Transcriptional upregulation of the p21cip1 promoter by STAT3 and nuclear ERBB2

Imam, Jaafer (Miles Wilkinson, Ph.D.)

Regulation of RNA splicing by nonsense mutations

Johnson, Amber (Michelle Barton, Ph.D.)

Hypoxia-induced transcriptional regulation through chromatin modifications and NC2 function

Koch, Nicholas (Wayne Newhauser, Ph.D.)

Monte Carlo and analytical dose calculations for ocular proton therapy

Kry, Stephen (Mohammad Salehpour, Ph.D.)

The development and validation of a Monte Carlo model for calculating the out-of-field dose from radiotherapy treatments

Leduc, Magalie (James Hixson, Ph.D.)

Identification of genetic variation influencing apoE levels: follow-up of genome scans in GENOA

Lin, Wenchu (Sharon Dent, Ph.D.)

Requirement of GCN5 histone acetyltransferase in mouse neural tube closure and skeletal patterning

Lyons, Jon (Pierre McCrea, Ph.D.)

Analysis of WNT/beta-catenin signaling in kidney tubulogenesis

Mak, Solida (James Hixson, Ph.D.)

Expression study of atherosclerotic mouse aorta revealed significant disturbance of calcium signaling pathway

Marks, Hilary (Sara Peleg, Ph.D.)

New insights into the role of the duodenal vitamin D receptor in calcium homeostasis

Marsh, Rebecca (John Hazle, Ph.D.)

Measuring treatment response in irradiated murine tumors with diffusion-weighted magnetic resonance imaging

Mashruwala, Mary Anne (Chinnaswamy Jagannath, Ph.D.)

Regulation of T cell function by complement C5a in mice during mycobacterial infection

Meng, Qingchang (Rakesh Kumar, Ph.D.)

Regulation of Poly-C-RNA binding protein 1 functions by PAK1 signaling





COMMENCEMENT 2007 ADDRESS

Robert D. Wells, Ph.D.

Professor & Director

Center for Genome Research

Texas A&M University System Health Sciences Center

Institute of Biosciences and Technology

"The Scientist Citizen"

It's a wonderful day. Congratulations to all of you. I think it's fantastic. You've gotten your degree, and now you're off to other things. I'd like to say just a few words about what some of those other things might be.

Keep in mind that change will occur in your lives. Welcome change. Embrace it. You will have three or four or five different careers in your lives. Don't be intimidated by that. In fact, to the contrary, as I say, embrace it and move forward. I think it's wonderful.

What's going to happen in your lifetime, scientifically? Well, I don't know that, and I don't know that any of you know that; but I can tell you something about what's happened in my lifetime. I started graduate school in 1960, got my Ph.D. in '64 and as Dr. Stancel has said, I did a post-doc from '64 to '66.

But what's happened in my lifetime? Let me just run down a list of some developments I think all of you know about, but you take for granted today. First of all, amino acid analyses of proteins. That came into existence when I was a graduate student, the Moore and Stein analyzers.

Protein sequencing came into existence when I was a graduate student. The sequence of the first protein, insulin; the second, the coat protein of tobacco mosaic virus; the third, ribonuclease. We take protein sequences for granted today, but it was not always that way.

Peptide synthesis came into existence in those days, and today we can chemically synthesize almost any molecule. That's phenomenal. When I started graduate school, that was out of the question. There were lots and lots of molecules like Vitamin B-12, etc., which were beyond the capability of chemical synthesis.

Dr. Stancel mentioned the genetic code. That just fell out at our feet. It was the brilliance of Marshall Nirenberg and Gobind Khorana; because they developed the appropriate methodologies, the experimental results that solved this mystery, were obtained in about 18 months. And that code is the basis of virtually every grant proposal that goes through the National Institutes of Health today.

We know, I would estimate, 90%, to 95% of all of the molecules in a cell. When I started graduate school, when I was in your shoes, there was no way we had that kind of knowledge.

Cancer as a suitable topic for serious research endeavors has come into existence in my lifetime. The entire field of neurobiology has come from nothing. Restriction enzymology and gene cloning didn't come into existence until the mid to the late 1970s. Eucaryotic genetics and molecular biology came into their own. When I was in your shoes, we could only study procaryotes; there were really only very

sparse studies that were going on in eucaryotic systems.

The biotechnology industry flourished in the 1970s. When I was in your shoes, there were half a dozen or so companies that were selling what was basically reagents to the researcher. Today we have hundreds of biotech companies. That's also meant another change in the world, and that is that a number of scientists have become wealthy. This also has been a major change because when I started my own laboratory, a number of scientists I could see around me were very comfortable, but they certainly weren't wealthy. But that has now changed.

The use of diverse cells and organisms has certainly created a tremendous change in our science. The sequence of genomes, starting with the human genome but now scores of other genomes, is really very important and has given rise to the field of genomics.

I never dreamed, when I got my Ph.D. degree, that I would see another pandemic. I am old enough to remember polio and the polio issues when I was a teenager. But today we have AIDS, we have obesity, and we have diabetes. And so there are many challenges that are out there in front of you.

Xerox machines have altered science. It's true. When I was a graduate student, there was no such thing as a Xerox machine. And I invited - that's a nice word to use - I invited my wife, Dotty, to come to the library with me on several evenings and to copy down methodologies that I needed for the next day's experiments because there was no way to duplicate it. But in fact we take this for granted today. And of course the Internet searches for scientific papers have really made the search of the scientific literature much, much more easy.

So what's going to happen in your lifetime? Well, I don't have a crystal ball, and I can't tell you the specifics. But in general, it's going to be the investigation of the spatial and the temporal interrelationships between these molecules that we know exist in a cell. In other words, how do you put it all together, and what is the wiring diagram?

Let me tell you a small side story, and that is that I gave an endowed lecture at the M. D. Anderson Cancer Center in Smithville within the past year. A young faculty member had some background on me such as Dr. Stancel has just reviewed. He said, "Oh, Dr. Wells, you've done such great things in your life. Your generation has solved virtually all of the important problems in biology." I told him at that point that I didn't believe that for a second. In fact, quite to the contrary, I think it is your generation that has the opportunity to reach out and to make much more profound discoveries than, in fact, in the previous generation.

Why do people do science? Why are you sitting here? Why have you worked so hard to get your Ph.D. degree? I think there are fundamentally three reasons why people go into science, or some mixture of these reasons. Number one is altruistic, namely, to contribute knowledge, and that's very important. The second reason is money. You know that there is a chance that you will have a comfortable lifestyle. I think that's very important, and I think we ought to talk about that sort of thing. But the third reason is curiosity. There are some of you who could not do anything else. You were driven to learn a science. So I think there are basically those three reasons why people get into science.

Now let me say a few words more to add to Dr. Dent's remarks regarding responsibilities. As a scientist, you have a responsibility to be a good citizen. What does that mean? Well, you must define that, and it will change in your lifetime. But, number one, I would say, this means you must vote. Very simple. Vote. Stand up for the individuals that you think are going to do the right thing for society and also for medical research and for science.

Second, speak out on the issues. Do not keep quiet. Look at what's going on with evolution today in this country. Look at what's going on with a wide range of other issues. And legislators, members of Congress, do not know what's going on in science. They rely on you. You've got to tell them. So get involved with your congressmen, either in your home district or in Washington. Next, advise the general population. Get involved with civic groups. Get involved in church groups. Get involved in any sort of organization where you have the privilege of talking with people and expressing your views concerning the funding for medical research.

Yes, we were successful in getting the budget for the NIH doubled from 1999 to 2004, but due to a very hard landing, we find ourselves in a situation where it is much harder for scientists to get funded today. And so we've got to interact with and influence Congress to inform them of the needs of the medical research community. They don't know this *a priori*. In fact, only a few percent of everybody in the United States, less than ten percent of all people in the United States, know what federal agency funds medical research. Let me repeat that. It's less than ten percent of the general public who can tell you that it is NIH, National Institutes of Health, that funds medical research.

Alternatively, Research America, an organization in Washington, has taken another poll to ask the question, "How important do you think medical and health research is to the U.S. economy?" 94% said important, 4% not important, and 2% said they didn't know. Hence, the American public does support medical research, but they don't know very much about it; so you've got to get involved. In addition, join your scientific societies. If you're a microbiologist, that's ASM, American Society for Microbiology. If you're a biochemist, that's ASBMB, American Society for Biochemistry and Molecular Biology; cell biology is the American Society for Cell Biology. These are the organizations that work together as a group of scientists to, in fact, try to effect change in Washington. And so my message regarding science and your citizenship is, get involved.

Your road in the future may not always be easy. You know that. And you may need to persevere. Perseverance has certainly been a hallmark in my life. In my research programs, we have worked for 38 years to discover new types of non-B-DNA structures, such as cruciforms, slipped struc-

tures, bent DNA, etc.; however, it has taken all of this time to understand the biological functions of these structures. But it's only about two years ago that, in fact, we learned that these structures are at break points for gross deletions, rearrangements, etc., that cause some 70 human diseases. So, I have worked for roughly 38 years to lay the background but it has only been within the past couple years that we have really discovered the medical implications of these discoveries.

Therefore, you need to persevere in your activities. Thinking of perseverance always reminds me of a wonderful, humorous story about the penguin and the bar. The penguin went into a bar one day and asked the bartender, "Do you have any grapes?" The bartender says, "No." The penguin walks out. The second day, the penguin walks back into the bar and asks the question, "Got any grapes?" The bartender says, "No. And I hope you'll get out of here." The penguin walked out. The third day, the penguin walks back into the bar, asks the bartender, "Got any grapes?" The bartender says, "No, and get out of here because if you don't, if you come back again, I'm going to nail your webbed feet to the floor." Fourth day. What happens? The penguin walks back into the bar and says to the bartender, "You got any nails?" The bartender says, "No." The penguin says, "Got any grapes?"

So persevere in your endeavors. Have great fun. And congratulations.

John P. McGovern Outstanding Teaching Award



The annual John P. McGovern Outstanding Teacher award winners are nominated and elected by the student body based on a number of criteria which include: excellent and enthusiastic teaching, the ability to stimulate and encourage independent thinking, responsiveness to student questions, and finally, a commitment to, and

passion for, student academic and professional development. The winner of this year's award, Dr. Kevin Morano, demonstrates all of these qualities.

As a researcher, Dr. Morano is well known in his field of Microbiology and Molecular Genetics for his excellent work, and has won a number of research awards to commemorate this.

Dr. Morano is an excellent scientist, dedicated to adding quality work into the body of knowledge of his field and he sets an example that demonstrates how basic research can be useful for curing diseases and saving lives. He supports the student body in everything that he does - from mentoring students to teaching classes to actively participating in the GSBS. He is devoted to the students and works hard to help us develop as independent thinkers and as scientists. Dr. Morano motivates those around him to achieve excellence by his actions and his words - he embodies the concept of an outstanding teacher.

-Pat Gibney, Graduate Student Association president, 2006-2007



Commencement Ceremony 2006-2007



COMMENCEMENT GREETINGS

from the GSBS Faculty President

Sharon Roth Dent, Ph.D.
GSBS Faculty President, 2006-2007



I am so very happy and honored to welcome you all here today. I congratulate each of you, along with your families, loved ones, and mentors who have stood behind you on this quest, on the completion of your degree.

I have been a faculty member here since 1993, so I have heard many excellent and inspiring speeches from my esteemed colleagues on graduation day. I think one of my favorites was by Dr. Kripke, when she was President of the graduate faculty. She began by assuring everyone that she would not take too long, because she knew that most people are too excited on occasions like this to remember what the speakers say, but they almost always remember how long it took them to say it. I too will strive to be concise.

When I graduated with my Ph.D. back in mid 1980s, my degree was actually printed on a sheepskin, so it took awhile to prepare. As we walked across the graduation stage, we did not get a diploma. Instead we got a rolled up piece of paper, which likely told us when and where to go pick up our actual diplomas.

I, like you, was feeling very proud and I was so looking forward to moving on to the next stage of life. So I did not mind that I had to wait for the diploma to be ready. No more qualifying exams; no more meetings with my committee; I was done!! When I actually got my degree a few weeks later and read through it, I was pleased to see that they had spelled my name right and thrilled that it said I had a PhD. However, I was a little taken aback by the last line, which read "...all the rights, duties, and privileges appertaining to that degree." I was ready for new rights, and I was already expecting some new privileges. In fact, I had already begun a post doc and I was enjoying very much no longer having to struggle by on a student's salary. But what was this stuff about duties?? I guess that was the first time that I realized that a higher degree is not just a stepping stone; it is a lifelong title that reflects expectations that others now have of you.

So I ask you, are you ready for your duties as a scientist? What do you think these duties are? You are probably thinking, well that depends on what kind of job I get, on what my boss wants me to do, on what my spouse wants me to do. But I am talking about fundamental duties that come with higher learning. Although there are numerous such duties we could discuss today, I want to focus on just three.

The first and foremost duty, in my mind, of a scientist is to uphold the highest standards of excellence and integrity-- in your science, in your teaching, and in your life.

Aristotle said,

"Excellence is an art won by training and habituation. We do not act rightly because we have virtue or excellence, but we rather have those because we have acted rightly. We are what we repeatedly do. Excellence, then, is not an act but a habit."

It is our duty to make excellence our habit.

The second duty we have is to make a difference, to use our learning to push the envelop whenever possible. This duty will require some courage, a lot of dedication, and it may involve some risk. But to paraphrase David Lloyd George (a WW I era British statesman), "Don't be afraid to take a big leap; you can't cross a chasm in two small jumps." However, that is not to say that small steps are not important. Sometimes the biggest advances come from a series of painstaking studies. Just make sure that even your small steps are strong ones that will move you in a forward direction. Never stop learning and always strive for significance.

Our third duty, I think, is to 'pay it forward'. All of us got to this point in our lives and our careers with support and guidance from family, mentors, teachers, even committee members. You may not ever be able to pay everyone back for that support, but you can pass it on to future generations of young scientists, or to anyone who is eager to learn. I urge you to give freely of yourself. You'll be surprised how often such giving enriches your own life.

I'll end with a quote from Tom Brokaw, which must have been issued at a commencement exercise much like this one. He said,

"You are educated. Your certification is in your degree. You may think of it as the ticket to the good life. Let me ask you to think of an alternative. Think of it as your ticket to change the world."

On behalf of all the faculty: Congratulations, good luck, and stay in touch!

Faculty *honors*

Michelle Barton, Ph.D. noted that the Genes and Development program received a \$250,000 gift from the William Randolph Hearst Foundation through the efforts of UT M. D. Anderson development office and will provide for two graduate student stipends each year and two faculty "seed" grants for innovative research involving graduate student trainees.

Robert Chamberlain, Ph.D. was awarded the Margaret Hay Edwards Achievement medal presented by the American Association of Cancer Education.

Robin Fuchs-Young, Ph.D. has received a five-year \$750,000 grant from the Howard Hughes Medical Institute for a new education program to "open minds to health, science and careers."

Jacqueline Hecht, founding director of the GSBS Genetic Counseling program, received the 2007 Barbara Bowman Distinguished Texas Geneticist Award from the Texas Genetics Society.

Mien-Chie Hung, Ph.D., **Robert Chamberlain**, Ph.D., **Emil Freireich**, M.D., **Michael Ahearn**, Ph.D. and **Stephen Tomasovic**, Ph.D. were recommended for an award of The University of Texas System title of **Distinguished Teaching Professor**.

Edward Jackson, Ph.D. (1990/ Naryana) is PI for the first Medical Physics NIH T-32 Training grant totalling \$1.9 M over five years.

Eugenie Kleinerman, M.D. was honored with the 2006 Duke University Distinguished Medical Alumni Award.

Cheng Chi Lee, Ph.D. wins NIH Director's Pioneer Award, \$2.5M over five years to further his research.

Steven Norris, Ph.D. was a recipient of the inaugural UT Chancellor's Entrepreneurship and Innovation Award for his research in the development of a Lyme Disease test. Two graduate students involved in the research were Jing-Ren Zhang and Matthew Lawrenz. Jing is now an assistant professor at Albany Medical College, and Matt is a postdoctoral fellow at Washington University School of Medicine in St. Louis.

Hope Northrup, M.D. opens the region's first clinic at Memorial Hermann Hospital dedicated to the diagnosis and treatment of Tuberous Sclerosis Complex (TSC).

Stanley Schultz, M.D. received the Prince Mahidol Award for Medicine in Taiwan for his contributions to the rationale that led to the development of oral rehydration therapy.

John Spudich, Ph.D. was elected a Fellow of the American Academy of Arts and Sciences.

Heinrich Taegtmeier, M.D., D. of Ph. was elected president of the International Society for Heart and Vascular Metabolism.

Xinping Zhao, Ph.D. received the 24th Biennial Cornea Research Conference Committee Award.

UT M. D. Anderson Faculty Scholar Awards: Mark Bedford, Ph.D., Peng Huang, M.D., Ph.D., Anil Sood, M.D.; Faculty Achievement Awards: Cheryl Walker, Ph.D., John DiGiovanni, Ph.D., Pierre McCrea, Ph.D.

UT Health Science Center President's Scholar Award for Excellence in Research: Ponnada Narayana, Ph.D., Ferid Murad, M.D., Ph.D.; President's Scholar Award for Excellence in Teaching: Henry Strobel, Ph.D. Young Investigators noted: Kevin Morano, Ph.D., Ambro van Hoof, Ph.D., Blanca Restrepo, Ph.D., Peter Ruvolo.

Departing Faculty:

Bruce Kone, M.D., Ph.D. to become Dean of the University of Florida College of Medicine.

Kenneth Wu, M.D., Ph.D. to begin a new position as president and distinguished investigator of the National Health Research Institutes in Taiwan.

Stanley Reiser, Ph.D. an internationally known scholar and pioneer in ethics, and longtime (1983-2007) co-creator of the GSBS course *The Ethical Dimensions in the Biomedical Sciences* starts a new position at The George Washington University.

Faculty in the SPOTLIGHT



Thomas Matney, Ph.D., and wife Nancy

One of the earliest GSBS Associate Deans, serving under four presidents, Dr. Thomas Matney continues to translate his success into helping current professors train more and better students in several areas of research interest. A few years ago he funded the first endowed joint professorship that honors a faculty member in Environmental and Genetic Sciences for a GSBS faculty member who has a dual appointment at UT-School of Public Health. This honor is held by Dr. Stephen Daiger. Now, we are formally able to announce Dr. Matney's newest accomplishment, an endowed professorship in Cancer Genetics for a GSBS faculty member from UT-M. D. Anderson Can-

cer Center. Established by Dr. Matney last August, The Thomas Stull Matney, Ph.D., Endowed Professorship in Cancer Genetics is a first that joins the UT-Health Science Center at Houston and UT-M. D. Anderson Cancer Center collaboratively through an endowment. We are pleased to announce that the very first holder of this professorship is Dr. Randy J. Legerski, an exemplary scholar, research scientist in genetics, and professor. Every year Dr. Matney gets together over the holidays with his former students and early colleagues....to reminisce, share science, and catch up. Added to this will be a whole new contingent of professors whose efforts he has directly supported.

GSBS Faculty Membership Report

Members Reappointed with Highest Commendation

Sharon Dent
Ruth Heidelberger
Diane Hickson-Bick
Edward Jackson
Ralf Krahe
Richard Kulmacz
Guillermina Lozano
Pierre McCrea
Jagannadha Sastry
Heinrich Taegtmeier
Dihua Yu

Members Reappointed With Commendation

Phillip Carpenter
Stephen Daiger
Carmen Dessauer
David Followill
Jacqueline Hecht
Peng Huang
Yuan Ji
Jian Kuang
William Margolin
David McConkey

Emeritus Member Appointed

Harry Sperling

Retiring in August (except for special projects) faculty member, and long a valuable resource for education, Margaret Kripke, Ph.D., Executive Vice President and Chief Academic Officer at M. D. Anderson Cancer Center is presented with an aerial view of the Texas Medical Center and a silver bracelet inscribed with her years of service to GSBS:

1983-2007

NEW Regular Members

Christian R. Abee
Doctor, R. Lee Clark Professor and Chair Veterinary Sciences
M. D. Anderson Cancer Center
D.V.M., Texas A & M University, 1971
Research interests: nonhuman primate disease models; primate reproductive biology; assisted reproductive technologies

Jonas S. Almeida
Professor
Biostatistics and Applied Mathematics
M. D. Anderson Cancer Center
Ph.D., University of Lisbon, 1995
Research interests: systems biology; biomarker identification; drug/target discovery; statistical mechanics

Banu Arun
Associate Professor
Breast Medical Oncology/
Clinical Cancer Prevention
M. D. Anderson Cancer Center
M.D., University of Istanbul, 1990
Research interests: breast cancer risk assessment; identification of risk markers, surrogate biomarkers and novel preventive and treatment agents

E. Neely Atkinson
Professor
Biostatistics and Applied Mathematics
M. D. Anderson Cancer Center
Ph.D., Rice University, 1981

Research interests: optical methods for early detection of cancer; design and analysis of clinical trials; modeling of dose-response curves and surfaces

Gábor Balázs
Assistant Professor
Molecular Therapeutics
M. D. Anderson Cancer Center
Ph.D., University of Missouri - St. Louis and Rolla, 2001
Research interests: mathematical/computational modeling and experimental characterization of biomolecular interaction networks

Richard G. Brennan
Professor and Robert A. Welch Distinguished University Chair in Chemistry
Biochemistry and Molecular Biology
M. D. Anderson Cancer Center
Ph.D., University of Wisconsin - Madison, 1984

Research interests: multidrug resistance, protein-nucleic interaction, regulation of gene expression; oxidative stress responses; protein-ligand interaction, toxin-antitoxin structure and function; macromolecular crystallography

Claudio N. Cavasotto
Assistant Professor
UT-H School of Health Information Sciences
Ph.D., University of Buenos Aires, 1999
Research interests: computational chemis-



try; computational biology; ligand-based and structure-based drug discovery; protein-ligand and protein-protein interaction; force-field development; cheminformatics

Shine Chang

Associate Professor, Epidemiology
M. D. Anderson Cancer Center
Ph.D., University of North Carolina at Chapel Hill, 1995

Research interests: cancer prevention and control; biobehavioral determinants of obesity; epidemiology; health science research training and evaluation; career development programming and professional education

Laurence J. N. Cooper

Associate Professor, Pediatrics
M. D. Anderson Cancer Center
Ph.D., Case Western Reserve University, 1993
M.D., Case Western Reserve University, 1994

Research interests: immunotherapy; T-cell therapy; gene therapy; hematopoietic stem-cell transplantation; bone marrow transplantation; development of immunological approaches to treat pathogens and malignancies; pediatrics

Brian R. Davis

Associate Professor
Centre for Stem Cell Research
UT-H Institute of Molecular Medicine
Ph.D., California Institute of Technology, 1980

Research interests: gene editing of stem cells; stem cell biology; gene therapy; hematopoietic stem cells; somatic reversion; molecular genetics

John F. de Groot

Assistant Professor, Neuro-Oncology
M. D. Anderson Cancer Center
M.D., UT Medical Branch at Galveston, 1998

Research interests: role of glutamate transporters and receptors in the regulation of growth and progression of human glial neoplasms; regulatory loops in human gliomas and their effects on cellular proliferation and migration

Mauro Ferrari

Professor and Director, NanoMedicine
UT-H Institute of Molecular Medicine
Ph.D., University of California, Berkeley, 1989

Research interests: biomedical nanotechnology; translational science; medical therapeutics in drug delivery application in oncology, cardiovascular disease and diabetes; biosensors and bioseparation technology; multiscale discrete/continuum mechanics and

biomechanics

Michael T. Gillin

Professor/Deputy Chair and Chief
Radiation Physics/Clinical Services
M. D. Anderson Cancer Center
Ph.D., University of California at Davis, 1970

Research interests: clinical application of protons; clinical trials; information management; calibration of radiation beams

Vidya Gopalakrishnan

Assistant Professor, Pediatrics
M. D. Anderson Cancer Center
Ph.D., University of Pittsburgh School of Medicine, 1995

Research interests: pediatric brain tumors; identification of novel therapeutic targets; regulation of transcription factors in brain tumors and normal brain development

Barrett R. Harvey

Assistant Professor
UT-Houston
Institute of Molecular Medicine
Ph.D., University of Texas at Austin, 2003
Research interests: applied biologics; recombinant antibodies; directed evolution; high throughput selections

Hamed Jafar-Nejad

Assistant Professor
UT-H Institute of Molecular Medicine
M.D., Tehran University of Medical Sciences, 1994
Research interests: cell biological regulation of signaling pathways; neuronal precursor specification and differentiation; intracellular trafficking; asymmetric division; sugar modification of signaling proteins

Valen E. Johnson

Professor
Biostatistics and Applied Mathematics
M. D. Anderson Cancer Center
Ph.D., The University of Chicago, 1989
Research interests: Bayesian analysis with a focus on Bayesian model diagnostics and testing; ordinal and categorical analysis; model selection and Bayesian model averaging; statistical image analysis

Tetsu Kamitani

Associate Professor, Cardiology
M. D. Anderson Cancer Center
M.D., Toyama Medical and Pharmaceutical University, 1985
Ph.D., Toyama Medical and Pharmaceutical University, 1990

Research interests: post-translational modification; regulation by ubiquitination; conjugation with ubiquitin-like protein; SUMO; NEDD8; proteolysis by proteasome; function of NUB1; ubiquitination by Ro52; ubiquitination by TRIM5

Aarif Khakoo

Assistant Professor, Cardiology
M. D. Anderson Cancer Center
M.D., Columbia University, College of Physicians and Surgeons, 1999
Research interests: cardiomyopathy; chemotherapy; receptor tyrosine kinases; platelet derived growth factor; cell signaling; cardiac development; cardiac physiology

Jeri Kim

Associate Professor
Genitourinary Medical Oncology
M. D. Anderson Cancer Center
M.D., University of Southern California, School of Medicine, 1993
Research interests: prostate cancer prevention and treatment

Mikhail G. Kolonin

Assistant Professor
Centre for Stem Cell Research
UT-H Institute of Molecular Medicine
Ph.D., Wayne State University, 2000
Research interests: mesenchymal stem cells; mechanisms of adult stem cell mobilization/migration/engraftment; role of mesenchymal stem cells in cancer vasculogenesis; role of adipose tissue/adipose stem cells in cancer progression

Frederick F. Lang

Professor/Director
Neurosurgery/Clinical Research
M. D. Anderson Cancer Center
M.D., Yale University School of Medicine, 1988
Research interests: role of end terminal phosphorylation in p53-mediated apoptosis; human mesenchymal stem cells as delivery vehicles for gliomas; cancer stem cells in brain tumor formation; animal models of brain tumors

Dina Chelouche Lev

Assistant Professor
Cancer Biology
M. D. Anderson Cancer Center
M.D., Sackler School of Medicine, Tel Aviv University, 1993
Research interests: soft tissue sarcoma; chemoresistance; angiogenesis; lymphangiogenesis; metastasis; pre-clinical therapeutic models; tumor microenvironment; gene therapy; p53 tumor suppressor gene function; siRNA; signal transduction pathways; tissue microarrays; high throughput assays

Hui-Kuan Lin

Assistant Professor
Molecular and Cellular Oncology
M. D. Anderson Cancer Center
Ph.D., University of Rochester, 2002

Research interests: tumor suppressor gene/ oncogene in cancer development; protein phosphorylation

Nami McCarty

Assistant Professor
Centre for Stem Cell Research
UT-H Institute of Molecular Medicine
Ph.D., Purdue University, 2000
Research interests: human and mouse stem cell differentiation; gene regulation; RNAi; hematopoietic stem cell development; T/B cell development and differentiation; autoimmune diseases

Sattva S. Neelapu

Assistant Professor
Lymphoma and Myeloma
M. D. Anderson Cancer Center
M.D., Jawahar Institute of Post-Graduate Medical Education and Research, 1991
Research interests: tumor immunology; cancer vaccines; novel tumor antigen discovery; adoptive T-cell therapy; immunological monitoring; lymphoma

Andrew C. Papanicolaou

Professor and Director
Developmental Pediatrics/
Neurosurgery & Neurology
Center for Clinical Neurosciences,
Children's Learning Institute,
UT-H Medical School; Director
Ph.D., Southern Illinois University at Carbondale, 1977

Research interests: specification of brain mechanisms of linguistic affective and cognitive functions; brain activity signs of developmental disorders; localization of sources of epileptiform activity

Laszlo G. Radvanyi

Associate Professor
Melanoma Medical Oncology
M. D. Anderson Cancer Center
Ph.D., University of Toronto, 1996
Research interests: tumor immunology; melanoma; breast cancer; immunotherapy; adoptive T-cell therapy; tumor vaccines; antigen discovery

Xiujiang John Rong

Assistant Professor, Imaging Physics
M. D. Anderson Cancer Center
Ph.D., University of Missouri - Columbia, 1996

Research interests: radiation dosimetry; medical image quality evaluation and measurement; computed tomography; digital x-ray imaging

Dos D. Sarbassov

Assistant Professor
Molecular and Cellular Oncology
M. D. Anderson Cancer Center
Ph.D., University of Arkansas for Medical Sciences, 1997

Research interests: cell signaling; regulation of cell growth, proliferation, survival, and migration; rapamycin and the mTOR (mammalian Target Of Rapamycin) pathway; kinases and phosphatases; anti-cancer drug development

Robert J. Schwartz

Professor and Director
Texas A&M University Institute of Biosciences and Technology
Director, Center for Molecular Development and Disease
Ph.D., University of Pennsylvania, 1972
Research interests: gene regulation; mechanisms in transcription; embryonic development; formation of the cardiovascular system; myogenesis; gene networks

Padmanee Sharma

Assistant Professor
Genitourinary Medical Oncology/
Immunology
M. D. Anderson Cancer Center
M.D., Ph.D., Pennsylvania State University, College of Medicine, 1998
Research interests: immunological studies related to genitourinary malignancies; development of future immunotherapeutic strategies; role of effector and regulatory T-cells in anti-tumor immune responses; tumor antigen expression and immune responses against tumor antigens; cytokine profile in tumor microenvironment

Paul J. Simmons

Professor and Director
Centre for Stem Cell Research
UT-H Institute of Molecular Medicine
Ph.D., University of Manchester, 1985
Research interests: stem cell biology; mesenchymal stem cells; hematopoiesis; cell adhesion molecules; stem cell mobilization; skeletal biology; monoclonal antibodies

Robert Y. L. Tsai

Assistant Professor
Center for Cancer and Stem Cell Biology
Institute of Biosciences and Technology
Texas A&M Health Science Center
M.D., National Taiwan University, 1988
Ph.D., Johns Hopkins University, 1996
Research interests: stem cells; neural stem cells; neurodevelopment; neurectostemin; aging; cancer; regeneration

Yi Xu

Assistant Professor
Center for Extracellular Matrix Biology
Texas A&M University, Institute of Biosciences and Technology
Ph.D., UT-H GSBS, 1998
Research interests: bacteria and host interactions; bacterial pathogenesis; host cellular machinery; innate immune response; bacterial surface proteins

Qing Yi

Associate Professor
Lymphoma and Myeloma
M. D. Anderson Cancer Center
M.D., Jiangxi Medical College, 1983
Ph.D., Karolinska Institute, 1993
Research interests: tumor immunology; immunotherapy; dendritic cell vaccination; antibody therapy; myeloma mouse models; multiple myeloma

Dekai Zhang

Assistant Professor
Center for Extracellular Matrix Biology
Texas A&M University Institute of Biosciences and Technology
M.D., Harbin Medical College, 1993
Ph.D., University of Hong Kong, 1998
Research interests: innate immunity; pathogen-host interactions; inflammation and infectious diseases

Dapeng Zhou

Assistant Professor
Melanoma Medical Oncology/
Immunology
M. D. Anderson Cancer Center
M.D., Shanghai First Medical College, 1994
Ph.D., University of Zurich, 2000
Research interests: T cell biology; antigen presentation; immunotherapy; therapeutic vaccines

**NEW
Associate Members**

Ana M. Aparicio

Assistant Professor
Genitourinary Medical Oncology
M. D. Anderson Cancer Center
M.D., Universidad Autonoma de Madrid, 1995
Research interests: epigenetics; DNA methylation; DNA methylation inhibitors; histone deacetylase inhibitors; prostate cancer; genitourinary malignancies

Krishnakumar Balasubramanian

Assistant Professor, Cancer Biology
M. D. Anderson Cancer Center
Ph.D., Institute of Microbial Technology, 1997
Research interests: mechanisms in apoptosis and phagocytosis; resistance to drugs and death ligands; metastasis and acquisition of metastatic potential

Tina Marie Briere

Instructor, Radiation Physics
M. D. Anderson Cancer Center
Ph.D., State University of New York at Albany, 1995
Research interests: gastrointestinal tumor motion; in vivo patient dosimetry

Martin Bues

Instructor
Radiation Physics
M. D. Anderson Cancer Center
Ph.D., Harvard University, 1996
Research interests: proton therapy; intensity modulated radiation therapy; gated radiation therapy; prostate brachytherapy

Suhendan Ekmekcioglu

Assistant Professor
Experimental Therapeutics
M. D. Anderson Cancer Center
Ph.D., University of Istanbul, 1993
Research interests: signaling pathways in melanoma; regulation of survival factors in melanoma; molecular prognostic markers

Suzanne L. Craig

Associate Professor
Veterinary Medicine & Surgery
M. D. Anderson Cancer Center
D.V.M., Tuskegee University School of Veterinary Medicine, 1989
Research interests: animal models; experimental design; cancer biology; comparative medicine; animal imaging; immunology

William D. Erwin

Senior Medical Physicist, Imaging Physics
M. D. Anderson Cancer Center
M.S., DePaul University, 1991
Research interests: quantitative gamma camera imaging; septal penetration; scatter and attenuation correction; iterative SPECT reconstruction; hybrid SPECT/CT imaging; yttrium-90 bremsstrahlung imaging; internal radionuclide dosimetry; radionuclide therapy treatment planning

Carl S. Hacker

Associate Professor
Management, Policy and
Community Health
UT-H School of Public Health
Ph.D., Rice University, 1968
J.D., University of Houston Law Center, 1987
Research interests: urban ecology; vector biology; public health law and policy

Andrea E. Harbison

Clinical Instructor
Pediatrics
UT-H Medical School
M.S., University of Cincinnati, 2005
Research interests: genetic counseling; prenatal

Jennifer M. Hoskovec

Clinical Instructor
Obstetrics, Gynecology and
Reproductive Sciences
UT-H Medical School
M.S., UT-H GSBS, 2003
Research interests: genetic counseling; prenatal

Aaron K. Jones

Instructor, Imaging Physics
M. D. Anderson Cancer Center
Ph.D., University of Florida, 2006
Research interests: optimization of diagnostic imaging protocols (especially pediatrics) with regards to absorbed dose and image quality; phantom design and construction; radiation dosimeter design, construction and testing; image quality assessment; image processing; computed tomography, computed radiography, digital radiography

Malgorzata Kloc

Associate Professor
Molecular Genetics
M. D. Anderson Cancer Center
Ph.D., Warsaw University, 1978
Research interests: development; axial patterning; RNA localization

Anita Mahajan

Associate Professor
Radiation Oncology
M. D. Anderson Cancer Center
M.D., McGill University, 1992
Research interests: stereotactic radiosurgery; brain tumors; pediatric radiation oncology

Mark J. McArthur

Associate Professor
Veterinary Sciences
M. D. Anderson Cancer Center
D.V.M., Texas A & M University, 1979
Research interests: pathology of genetically engineered mice; p53; COX-2 in carcinogenesis; mouse models of pancreatic and urinary bladder cancer

Ramaswamy Sadagopan

Senior Medical Physicist
Radiation Physics
M. D. Anderson Cancer Center
M.S., UT-H GSBS, 1989
Research interests: medical physics

Miguel A. Rodriguez-Bigas

Professor
Surgical Oncology

M. D. Anderson Cancer Center
M.D., University of Puerto Rico,
School of Medicine
Research interests: surgical oncology; colorectal cancer

David L. Schwartz

Assistant Professor
Radiation Oncology
M. D. Anderson Cancer Center
M.D., University of California
Los Angeles School of Medicine
Research interests: multi-modality molecular genetic imaging of small animal preclinical models; head and neck; radiation oncology; medical imaging; radiobiology

Claire N. Singletary

Assistant Professor
Pediatrics
UT-Houston Medical School
Director, Genetic Counseling
S.M.S. Program
M.S., Northwestern University, 1998
Research interests: genetic counseling

Donna M. Stevens

Senior Medical Physicist
Imaging Physics
M. D. Anderson Cancer Center
M.S., University of Colorado Health
Sciences Center, 1993
Research interests: medical physics; diagnostic radiological physics

Sastry Vedam

Assistant Professor
Radiation Physics
M. D. Anderson Cancer Center
Ph.D., Virginia Commonwealth University, 2003
Research interests: respiratory motion management in radiotherapy; image guided radiotherapy; 4D CT; 4D cone beam CT; PET; 4D treatment planning and delivery

Alex C. Videa

Associate Professor
Obstetrics, Gynecology & Reproductive
Sciences
UT-H Medical School
M.D., University of Bucharest, 1977
Research interests: hormonal regulation of gene expression; genomic and non-genomic effects of corticosteroids; prematurity prevention

(Report includes June, August, October, December 2006 and February, April, June 2007 Membership Committee meetings)

student awards



Aaron Blanchard Research Award in Medical Physics

Named in memory of Aaron M. Blanchard, a GSBS student in the Medical Physics Program who succumbed to brain cancer in 1998, this \$300 cash award recognizes a Medical Physics graduate (M.D. or Ph.D.) for completion of an outstanding thesis or dissertation judged to make a significant contribution to cancer therapy or diagnosis. This will become a formal award endowment in 2007-2008. Award recipient for 2006-2007 is:

Student	Advisor
Jennifer O'Daniel	Dr. Lei Dong

knowledge

American Legion Auxiliary Scholarship Awards

Since 1971 the American Legion Auxiliary has provided scholarships for GSBS students involved in cancer research. The money for this funding is raised through a wide range of Auxiliary activities. To date the Auxiliary has raised over \$1,100,000 to present over 80 renewable scholarships of \$5,000 each. The 2006-2007 recipients are:



Student	Advisor
Kendra Carmon	Dr. David Loose
Jennifer Carter	Dr. Subrata Sen
Sarah Dunlap	Dr. Wei Zhang
Omar Duramad	Dr. F. Xiao-Feng Qin
Shannon Kidd	Dr. Paul Simmons

Student	Advisor
Sabine Lange	Dr. Karen Vasquez
John Latham	Dr. Sharon Dent
Athanasia Panopoulos	Dr. Stephanie Watowich
Nicole Pinaire	Dr. Timothy McDonnell
Joe Taube	Dr. Michelle Barton
Regina Weaks	Dr. David Johnson

accomp.



R. W. (Bill) Butcher Achievement Award

Established in 1977, the R. W. Bill Butcher Fund provides an annual award of \$2,000 for a student who demonstrates excellence in research, has a commitment to a career in biomedical research, and makes a professional contribution to the community or has faced a particular challenge. This year's recipient is:

Student	Advisor
Amber Johnson	Dr. Michelle Barton

Harry S. & Isabel C. Cameron Foundation Fellowship

The Cameron Foundation provides a fellowship to an exceptional GSBS student working in research fields related to Alzheimer's or cardiovascular diseases. The Foundation gift of \$10,000 is matched by the GSBS in 2006-2007 to provide a total of \$20,000 in stipend support to the student. The 2006-2007 recipient is Xi Mo, whose studies may lead to novel therapeutics to treat bleeding disorders as well as atherosclerosis and cardiovascular diseases.

Student	Advisor
Xi Mo	Dr. Renhao Li



Alfred G. Knudson Outstanding Dissertation

In 1997 an annual Alfred G. Knudson Outstanding Dissertation Award was established by M. D. Anderson Cancer Center to honor this distinguished individual and former GSBS dean. The \$1,000 award is given to a graduate of the GSBS whose dissertation is selected as the most outstanding in cancer research. This year's recipient is:

Student	Advisor
Ruoning Wang	Dr. Jian Kuang

tale.



William W. and Pearl Wallis Knox Foundation Scholar

Established in 2007, this is the first year to award a Scholarship from the Knox Foundation, whose interests are research in the areas of AIDS and other infectious diseases in humans. This \$2,500 award was presented to:

Student
Cana Ross

Advisor
Dr. Theresa Koehler

City Federation of Women's Clubs Scholar

Established in 2005, this \$2,000 Scholarship rewards an exceptional GSBS student who is working in an area vital to the biomedical sciences and of particular current significance in that year's national research for this scholarship. For 2006-2007 this scholarship recognizes research in the area of Stem Cells.

Student
Shannon Kidd

Advisor
Dr. Paul Simmons



T. C. Hsu Endowed Memorial Scholarship

To remember Dr. Hsu, and his remarkable research work, his daughter Margaret, M. D. Anderson Cancer Center Foundation, colleagues, faculty, friends and former students of Dr. Hsu established this memorial scholarship in 2003. The scholarship is a living testimony and serves to acknowledge the stellar research accomplishments of graduate students focusing on his areas of research, genetics and cell biology. The 2006-2007 recipient is Dung-Fang Lee, whose research studies will provide a more thorough understanding in inflammation-induced tumor development.

Student
Dung-Fang (Ben) Lee

Advisor
Dr. Mien-Chie Hung

Rosalie B. Hite Fellows

In 1946 Houston citizen Rosalie B. Hite left her entire estate to establish a fellowship program for cancer research. This award includes a stipend of \$25,000 per year, tuition and fees, and a single travel allowance up to \$850 for each student to present his or her research at a national meeting. The 2006-2007 recipients are: **Hannah Cheung** (Dr. Gil Cote, advisor), **Yumin Hu** (Dr. Peng Huang, advisor), **Shannon Kidd** (Dr. Paul Simmons, advisor), **Stephen Kry** (Dr. Mohammad Salehpour, advisor), **Taichun Qin** (Dr. Jean Pierre Issa, advisor).



Presidents' Scholars

Through funding from President James Willerson, UT Health Science Center at Houston, and President John Mendelsohn, UT M. D. Anderson Cancer Center, this \$5,000 award is given to four advanced GSBS students who have demonstrated excellence in research.

Student
Ruoning Wang
Athanasia Panopoulos
Melissa Adams
Stephen Kry

Advisors
Dr. Jian Kuang
Dr. Stephanie Watowich
Dr. Phillip Carpenter
Dr. Mohammad Salehpour

Michael Farley Moyers Heavy Particle Therapy Travel Endowed Award

In 2006 GSBS Alumnus Michael F. Moyers, Ph.D. (1991/Horton) created this award to provide travel support for an exceptional Medical Physics student who has had a paper accepted at the American Association of Physicists in Medicine (AAPM) to attend the annual meeting. Jonas Fontenot received the Cameron Young Investigator's Award from AAPM, and in turn is the first recipient of the Moyers Award of \$500.

Student
Jonas Fontenot

Advisor
Dr. Wayne Newhauser



John P. McGovern, M.D., Scientific Poster Competition

M.S. Category

Student	Advisor
1st: Bahareh Tavana	Dr. Zahid Siddik
2nd: Rosanna Isaguirre	Dr. Raymond Grill
3rd: Sara Spikes	Dr. Gregory May
4th: Violetta Chavez	Dr. Danielle Garsin

Ph.D. Pre-Candidacy Category

Student	Advisor
1st: Sharon Way	Dr. Michael Gambello
2nd: Eliseo Castillo	Dr. Kimberly Schluns
3rd: Wade Kothmann	Dr. John O'Brien
4th: Chris Singh	Dr. Chinnaswamy Jagannath

Ph.D. Post-Candidacy Category

Student	Advisor
1st: Yen-Michael Hsu	Dr. Xin Lin
2nd: Kimberly Mankiewicz	Dr. Vasanthi Jayaraman
3rd: Brett Chiquet	Dr. Jacqueline Hecht
4th: Charles Chung	Dr. James Hixson

Thank you to our judges:

Drs. Joseph Alcorn, Hesham Amin, Diane Bick, Phillip Carpenter, Irma Gigli, Vidya Gopalakrishnan, Michael Hallman, Constantin Ioannides, Theresa Koehler, Dina Lev, Shiaw-Yih Lin, Anita Mahajan, Hector Martinez-Valdez, Osama Mawlawi, Rajagopal Ramesh, Georgios Rassidakis, Subrata Sen, Ana Tari, Robert Wells, Yinhua Yu, and to Career Development presenter, Dr. Joya Chandra.



Dee S. & Patricia Osborne Endowed Scholarship in the Neurosciences

Established by the Linda and Ronny Finger Foundation in 2001-2002, this endowed scholarship honors former University of Texas Health Science Center at Houston Development Board president, Dee Osborne and his wife Patricia. Through the endowment an award of \$1,000 is provided to the winning presenter in the graduate student category at the Annual Neuroscience Scientific Poster Session, and an additional \$500 allotment is given for travel for presentation at a scientific meeting. This award is presented during Brain Awareness Week. This year's recipient was:

Student	Advisor
Feng Pan	Dr. Stephen Massey



Sam Taub & Beatrice Burton Scholarship in Vision Disease

In 2004 this \$2,000 award was established by Mary Wright and her sister, Joanna Ross, in honor of their grandfather and great aunt to support students with research in the area of sight-related vision problems, and the genetics and potential therapies behind these life-changing health concerns. The 2006-2007 recipient is:

Student	Advisor
Catherine Spellicy	Dr. Stephen Daiger



Roberta M. & Jean M. Worsham Endowed Scholarship in the Behavioral and Neurosciences

Formally presented during Brain Awareness Week this endowed scholarship of \$1,000 fosters exceptional students working in the fields of the behavioral or neurosciences with a focus on the areas of addiction or obsessive/compulsive behavior. The recipient for 2006-2007 is:

Student	Advisor
Aimee Lake	Dr. Mark Bedford

Graduate Student Education Committee at the Medical School Research Poster Competition:

1st place: \$400; 2nd place: \$300; 3rd place: \$200.

First Place, **Sharon Way** (Dr. Michael Gambello, advisor); Second Place ties: **Wade Kothmann** (Dr. John O'Brien, advisor) and **Feng Pan** (Dr. Stephen Massey, advisor); Third Place ties: **Chris Wilson** (Dr. Heinrich Taegtmeier, advisor), **Leslie Piggott**, (Dr. Carmen Dessauer, advisor), **Hanyin Cheng**, (Dr. Robert Kirken, advisor), **Kimberly Mankiewicz** (Dr. Vasanthi Jayaraman, advisor).

student awards



The Schissler Foundation Fellowships

This dynamic family foundation has been a major benefactor to the Graduate School of Biomedical Sciences for over ten years and has sincere commitment to the belief in graduate education. These fellowships foster collaboration with the emphasis on basic science projects with a high likelihood of translational application to human health, and the requirements that all students receive a broad exposure to the biomedical sciences and ethical concepts that underlie their research. This prestigious award, with the ever more directed focus on research studies will continue to make significant contributions to the therapies and cures of common human disease through genetics.

In 2006-2007 they have pledged three years of full stipend and tuition funding for 4 Schissler Foundation Fellowships with at least one expressly designated for a student working on cancer research with faculty at M. D. Anderson Cancer Center. The 2006-2007 recipients are:

Schissler Foundation Fellows in the Genetics of Common Human Diseases

Student	Advisor
Andrea Lafont	Dr. Dianna Milewicz
Yen-Michael Hsu	Dr. Xin Lin
Charles Chung	Dr. James Hixson

Schissler Foundation Fellow in Cancer Research at M. D. Anderson Cancer Center

Student	Advisor
Omar Duramad	Dr. F. Xiao-Feng Qin

Andrew Sowell-Wade Huggins Endowed Scholars, Professor and Fellow Cancer Answers/Sylvan Rodriguez Scholar

The Andrew Sowell-Wade Huggins Scholars, Professor and Fellow along with the Cancer Answers/Sylvan Rodriguez Scholar represent the culmination of sixteen years of determined support and growth of the Cancer Answers charitable organization through two founding mothers, Joann Sowell and Marcia Huggins Jahncke, their families, cancer survivors, and contributing foundations including the Vivian L. Smith Foundation, Sylvan Rodriguez Charities, Bridgway Capital Management, and especially Bobby Sue Smith Cohn and Bo and Amy Huggins. Originally started as the fund raising entity to support the Andrew Sowell-Wade Huggins Endowment which generates all of these awards to fund graduate education in cancer research, it has gained in size and prestige. Since 1991 a total of 48 scholars and 3 sets of professor/fellow teams (renewable up to three years) have been honored with awards ranging from \$2,500 up to \$20,000 in stipend support. The 2006-2007 recipients include:



Andrew Sowell-Wade Huggins Scholars

Student	Advisor
Lingchen Fu	Dr. Richard Ford
Yen Michael Hsu	Dr. Xin Lin
Dung-Fang (Ben) Lee	Dr. Mien-Chie Hung
Nicole Pinaire	Dr. Timothy McDonnell

Cancer Answers/Sylvan Rodriguez Scholar

Stephen Kry	Dr. Mohammad Salehpour
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Andrew Sowell-Wade Huggins
Professor and Graduate Fellow
Dr. Gary Gallick and Jing Zhang

Student NEWS



2007-08 GSA Officers

Yen-Michael Hsu, Vice President
MDACC, Molecular & Cellular Oncology
Melanie Dujka, President
MDACC, Immunology
Violetta Chavez, Secretary
UTHSC, Microbiology & Molecular Genetics

Farewell (many thanks)...

2006-2007 GSA Officers:

Pat Gibney, President, UTHSC
Microbiology & Molecular Genetics
Brett Chiquett, Vice President, UTHSC
Pediatrics
Nicole Pinaire, Secretary, MDACC
Molecular Pathology

2007 Career Day for Students sponsored by the GSBS Alumni Association



Career Development

by

**Jon R. Wiener, Ph.D., Assistant Dean
Academic Affairs**

Many students begin their education at graduate schools of biomedical sciences throughout the world without a clear plan for their careers. This is completely understandable and even expected. How can one prepare long-range career plans when they are just beginning to experience research in a graduate school setting?

Numerous surveys indicate that approximately 80% of students enter graduate biomedical science programs with the expectation that they will eventually be a faculty member at a university. However, the data indicates that approximately only 35% of students eventually do become tenured or tenure-track faculty members by 10 years post-graduation. There is therefore a considerable gap between early expectations and the real world.

The questions all graduate schools in biomedical sciences should thus be asking themselves are: How are we preparing our students for the real work-world? How do we help our students find the niche they are best suited for, and prepare them to obtain the positions they seek? And, how early in their training should students be receiving career development advice?

Students in the present era are fortunate to be able to pursue varied avenues of career options, all of which are viable for a career in the biomedical sciences. Not only may students pursue academic faculty positions as they have for generations, but as well, they may pursue positions in industrial research, patent law, scientific writing, technology transfer, public policy, consulting, and sales, to name a few, and with as much variety as maintaining a research career track with benchwork, or becoming a medical liaison, and never see the bench again. A generation ago, a choice of any option other than academia was considered 'selling out.' Now it is considered not only wise to consider non-academic options, but indeed narrow-minded to not

consider these possibilities, many of which have increased opportunities for scientific travel, renown, and financial remuneration.

Graduate schools must take on the responsibility to provide career development opportunities for their students. Schools which 'bury their heads in the sand' and elect to not provide educational opportunities in career development for their students are quite simply limiting the chances for their graduates to become valued members of the global biomedical community. Schools desire their graduates to succeed, not only to bring regard to the school as a distinguished graduates, but also to assist in the recruitment of the next generation of scientists, and to bring in development funds to assist the training of present and future students. In this golden age of biomedical science, all schools must assist their students in seeking, finding, and preparing for positions in all the varied career choices that are now available to them.

The GSBS, as a part of the UT Health Science Center at Houston, in partnership with the UT M.D. Anderson Cancer Center, endeavors to provide career development training for GSBS students. A combination of weekend workshops, career fairs, and a full seminar series has already been set up. In addition, the GSBS Alumni Association has developed an 'e-mentoring' program, an extremely valuable on-line resource that matches current students with alumni from the GSBS who work in various careers in the biomedical sciences, in an effort to provide students with real-life advice on the careers they are considering. Many of these alumni also speak at the Annual Career Fair. Check it out at:

http://gsbs.uth.tmc.edu/alumni/inreach_participants.html

Finally, we are always thinking of ways we can add more opportunities for the students to learn about their career options. Students should avail themselves of all of these resources, and begin doing so early in their training, to acquire the information they need to make wise career choices.

STAR TEAM



Our GSBS Staff was presented with The University of Texas Health Science Center at Houston Star Team Award and \$5,000 to benefit the Staff and School. "The Three Musketeers philosophy-all for one and one for all" and a willingness to go the extra distance for students, faculty and community made the difference. Here left to right: Gina Chappell, Brenda Gaughan, Lily D'Agostino, Jeannice Theriot, Carol Helton, Alice Hatcher, Linda Carter, Bunny Perez, Angela Doggett, Michael Valladolid, Tom Goka, Vicki Knutson, Heidi Porter, Liz Stamey, Ty Williams, Cheryl Spitzenberger, Mary Yehle, Karen Weinberg, Jon Wiener, Paul Darlington.

Distinguished Visitor



President James Willerson, Dean George Stancel, and Minister of Education and Training of Vietnam, Professor Nguyen Thien Nhan, is being presented here with a photo of the Houston Texas Medical Center.

LEADERSHIP AWARD



Paul Darlington, Ph.D., Associate Dean of the GSBS, received the 2007 Michael J. Jimenez Leadership in Action Award from UT-Health Science Center. This award was established in memory of the late Mike Jimenez, former vice president and chief human resources officer at the UT Health Science Center. It is given

for demonstrating a commitment to collaboration and productive relationships with faculty and staff at all levels of the organization; energy and enthusiasm for the work of the university; a consistently positive attitude; and a commitment to do the right thing.

Melva S. Ramsay AWARD



Carol Helton, Administrative Assistant for Finance and Personnel, is the 2007 recipient of the GSBS Melva S. Ramsay Award for outstanding service to faculty, students, and staff. The award of \$500 (and flowers) is presented by George Stancel, dean of the GSBS.

Hellooo...NEW GSBS STAFF



Joy Lademora has joined the team in the Academic Affairs Office and assists Deans Jon Wiener and Thomas Goka. Joy received her M.S. from the University of Manila and is newly married after moving here from the Philippines. Her favorite hobby is volleyball where she is a serious center spiker.

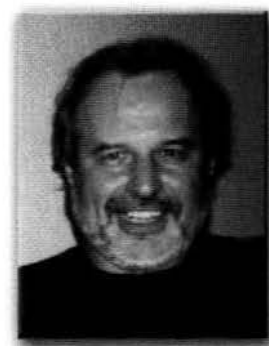


Michael Valladolid is our new IT Systems and Applications Specialist. Mike graduated from the University of Delaware, is married and keeps busy (when he's not at GSBS) with his wife, 18 month old son, and two dogs. For relaxation he takes long walks on the beach.

Distinguished Alumnus 2006-2007

John Kopchick, Ph.D.

Growth Hormone, Mice, Football, Dirty Shorts and a New Drug



I am still amazed that a molecule secreted by the pituitary gland, namely growth hormone (GH), directs both anabolic and catabolic processes. This is best seen when recombinant GH is administered to growing pigs wherein one observes a decrease in fat, and an increase in bone and muscle. What a wonderful molecule! These observations, made in the early 1980s, may have been somewhat ordinary to a physiologist, but were quite remarkable to a molecular biologist, in particular me! It started my scientific path of attempting to define the molecular mechanism(s) of GH action. We are still attempting to do this.

One simple-minded concept that could account for the multiple activities of GH was to hypothesize that the molecule had different "domains" and that these domains were responsible for the various activities of the hormone. This was our thought process in the mid 1980s. We set out to test this hypothesis by performing structure/functions studies. Basically, we changed GH's structure and determined the affect on function. These altered GH molecules were collectively termed GH analogs.

It was the widely held opinion among endocrinologists that if one were to change the structure of a peptide hormone, those changes should result in altered interactions or binding properties of the molecule to its cognate GH receptor. Although I believed this basic maxim and performed the classical *in vitro* receptor binding studies, I also thought that a cell based or *in vivo* reporter system ultimately would generate additional information concerning the molecule's activity. This is where transgenic mice come into play.

Mice that possess and express extra copies of GH genes (GH transgenic mice) are larger than their normal, non-transgenic siblings. We decided to study the activity of the GH analogs *in vitro* using classic receptor binding protocols and *in vivo* via growth enhancement of transgenic mice. Thus, we would change the GH molecule via amino acid substitutions or deletions, isolate the altered hormones, perform GHR binding studies, and generate transgenic mice that expressed the mutated DNA encoding the GH analogs. We expected that as the *in vitro* binding of the GH analogs to the GHR decreased, a corresponding loss of growth enhancement in the transgenic mice would occur.

This was indeed the case for many of the GH analogs. (By the way, GH possesses 191 amino acids and we have changed nearly all of them).

I now need to describe GH in terms of its topology. The crystal structure of the molecule has been solved and shows that it contains four α -helices. α -helix number 3 has amphipathic characteristics, that is, the charged or hydrophilic amino acids are separated from the non-polar or hydrophobic amino acids. However, there is one hydrophilic amino acid in the "sea" of hydrophobic residues, and one hydrophobic amino acid and a glycine residue in the hydrophilic area. One of our first alterations was to change these three amino acids in the third α -helix to make the molecule a "perfect" amphipathic α -helix that is, an α -helix with a complete hydrophobic domain juxtaposed to a full hydrophilic area. In doing this, we anticipated that we would increase the activity or potency of GH with high expectations of generating a molecule that would bind to the GHR with higher affinity than native GH and that would generate "really big mice."

If one expects a molecule to be more potent in its biological activities than the original molecule, the dogma of the pharmacology would predict that it should interact with its receptor "better." When we performed the experiments, we found that this "perfect" GH analog bound to GHR with the same characteristics as normal GH; it did not bind with higher affinity. We were terribly depressed with these results and were ready to "throw it out." Fortunately, we were so convinced that this perfect third α -helix should possess an altered activity that we generated the corresponding GH analog transgenic mice. To our surprise, instead of generating a giant mouse, we obtained a small mouse. In fact, it was approximately one-half the size of normal mice. We have affectionately named this mouse "Mini." (We aren't very original, are we?) We went on to show that this molecule was acting as a classic antagonist. This was the first description of a large protein antagonist and certainly the first GH antagonist.

We subsequently changed these three amino acids, one at a time, and found that it was not the three changes but only the glycine at position 120 in human GH that was important for the activity of the molecule. When this glycine, located near the middle of the third α -helix, was changed to any other amino acid other than alanine, a GH molecule that inhibited growth was generated. Thus, one amino acid change out of 191 converted GH from a growth promoter to a growth suppressor or a GH antagonist.

From my years in the pharmaceutical industry, it

was "drilled" into my subconscious that anything that inhibited a physiological process *in vivo* could be of potential value. For example, there are many instances of drugs that inhibit enzymatic activity or those that inhibit hormonal action. Since we discovered a GH antagonist, i.e. a molecule that inhibited GH action, I thought that it might have clinical value. After many hours in clinical libraries, I came up with three potential uses for a GH antagonist: for the treatment of acromegaly, diabetic end organ damage, and certain types of cancers. I quickly wrote a proposal in which I described the discovery and use of the GH antagonist. After submitting the proposal to just about all of the large pharmaceutical companies and giving numerous presentations on the discovery and potential uses of the GH antagonist, I was somewhat depressed (again!!) in that there were no "takers." Two large companies expressed some interest in the GH antagonist for the treatment of diabetic end organ damage, but none were interested in acromegaly, a condition caused by pituitary tumors that secrete GH.

I took out my frustrations concerning the lack of interest of the pharmaceutical industry for GH antagonists by performing physical exercise, especially with the Ohio University football coaches. They put me through some very agonizing drills. One of the coaches, the late Joe Dean, would routinely ask what I was doing in the laboratory. As we were straining on a weight lifting machine, I happened to tell him that we had discovered a potential drug but no one was interested. He relayed to me that one of his former students and football players, Richard Hawkins, knew "something about drugs." Rick was founder and CEO of a drug development company called Pharmaco, Inc. Joe scribbled Rick's phone number on a piece of scrap paper and said that I should give him a call. Frankly, I misplaced the number with my soiled workout clothes. Luckily, my wife found the wrinkled and "clean" piece of paper in the washing machine.

Several days later when in the process of writing an NIH proposal and day dreaming, I decided to call Rick. After an enjoyable conversation, he asked me to send him my proposal concerning the discovery and use of the GH antagonist. I sent it to him by overnight mail. About one week later, he called and asked why I did not send him the proposal. I said that I had. He subsequently found it on his desk in one of the many mountains of paperwork. That night, during a bout with insomnia, Rick read the proposal

and as he recounts, "could not sleep the remainder of the night." He was incredibly excited about the GH antagonist and potential uses, especially for acromegaly. Now, we had two individuals excited, Rick and me.

Rick, John Scarlett (a friend of Rick's) and I formed a company called Innovations in Drug Development whose name was subsequently changed to Sensus, a virtual company that out sourced all of its developmental resources. There was a small but extremely dedicated and competent group of individuals within Sensus who should be commended for the development of the GH antagonist along with the many clinicians who performed the clinical trials for acromegalic individuals. The data shows that the GH antagonist was efficacious in ~90% of these patients. The FDA is now reviewing the data. Pharmacia Corp. will market the drug, now called Somavert (pegvisomant for injection), if and when it is approved. Hopefully, it will also be tested for other indications including cancer and diabetic end organ damage.

Thus, a combination of unanticipated scientific results, coupled with several serendipitous social events ultimately resulted in a new drug that will benefit many individuals.

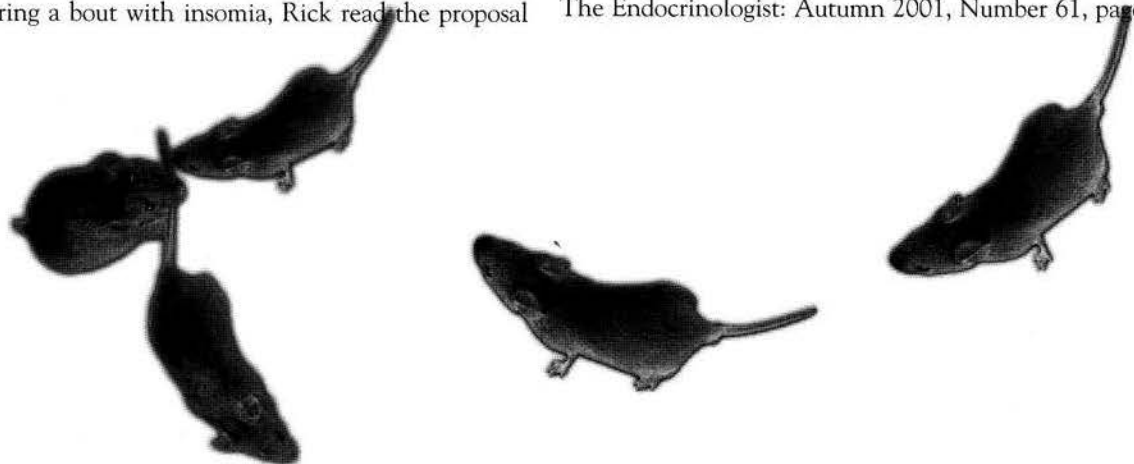
There could be many take home messages from this story but the two I like best are: "Be careful not to throw out the phone number with the wash" or "Football coaches can be smart!!!"

*I would like to acknowledge everyone who contributed to the discovery and development of GH antagonists. The list is formidable, however, I'd like to particularly acknowledge Wen Chen, Nick Okada, Tim Coleman, Joe Dean, Rick Hawkins, John Scarlett, Peter Trainer and all of the other clinicians who performed the clinical trials, Lawrence and Milton Goll, and Ohio University.

** This story is dedicated to the memory of Joe Dean.

John J. Kopchick, Ph.D. is the Goll-Ohio Professor of Molecular Biology at Ohio University. Also, he is head of the Growth, Obesity, and Diabetes group in the Edison Biotechnology Institute as well as Professor in the Biomedical Sciences Department in the College of Osteopathic Medicine at Ohio University.

"Mini Mice, Football, and Dirty Shorts" John J. Kopchick, *The Endocrinologist*: Autumn 2001, Number 61, page 13.

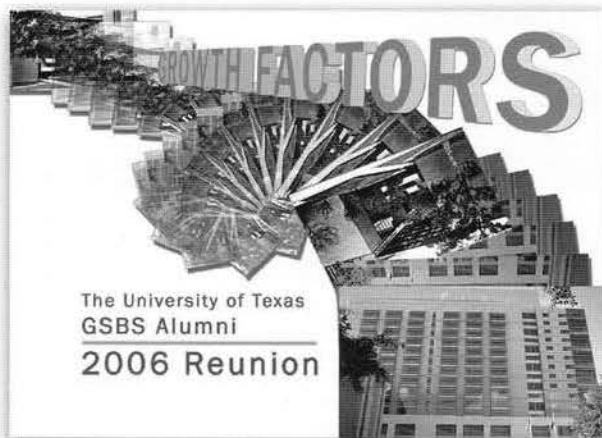


GSBS ALUMNI REUNION 2006-2007



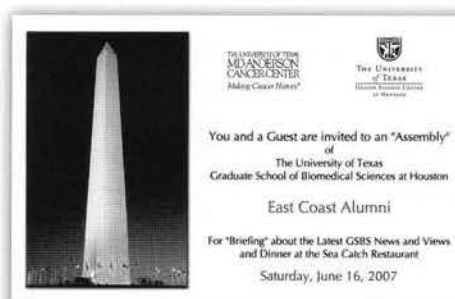
Alumni East Coast Reunion





Leposava Antonovic
Richard Bartlett
Yanis Bumber
Valentine Goodrich Boving
Joan Breuer McHam
Ivone Bruno
Joya Chandra
Vicky Estrera
Siqing Fu
Tom Goka
Maureen Goode
Richard Hajek
Julie Harless
Peng Huang
John Kopchick
Joshua Krumenacker
Xiaotao Li
Joy Marshall
Milton Marshall
Shirlette Milton

Catherine Moya
Jennifer Newcomb-Fernandez
Bay Van Nguyen
Karen Niederreither
Jiangong Niu
Mustafa Ozen
Jacqueline Peltier Horn
Mary Riser
Zheng (Jane) Shi
Cynthia Skinner-DeBord
Ben Thomas
Deidre Vedder
Brenda Whaley
David Wildrick
Thomas Wood
Kendra Woods
Wan-Song Wun
Jianhua Yang
Dihua Yu
Hong Zhang



Lida Anestidou
Elizabeth Bruckheimer
Cherie Butts
Tsong-Cheng Chang
Chi-Ping Day
Sandeep Dayal
Zuoming Deng
Stephen Hewitt
Howard Hubbell
Raegan Hunt
Lingxia Jiang
Jeffrey Kiefer
Gene Lang

Mercedes Meyer
Sana Pratt
Joye Purser
Ashutosh Rao
Ana Robles
Thomas Roesel
Travis Vaught
Simon Williams
Virginia Wray
Wayne Wray
Monica Zamisch
Jean Claude Zenklusen
Alan Zarrinnesan

Alumni news flash

Geetha Achanta, Ph.D. (2004) is a science communicator for the International Nutrition Company BV, a nutraceutical company in The Netherlands.

Gabriela Bowden, Ph.D. (1999) (Reuters) published in the journal *Science*, led a study of the toxic *Staphylococcus aureus* bacteria and noted that it can pass one another the gene for the toxin Pantone Valentine leukocidin (PVL) which itself causes pneumonia.

Understanding that could provide a way to develop new drugs or vaccines and shed light on how bacteria acquire new and dangerous qualities.

Dawn Chandler, Ph.D. (1998) is a new assistant professor in the department of pediatrics and the center for childhood cancer at Ohio State University, Columbus, OH.

Keith Chan, Ph.D. (2004) postdoctoral fellow at Stanford University was just awarded his first NCI K99 grant.

Antonio Chiocca, M.D., Ph.D. (1998) neurosurgeon at Ohio State University Medical Center for both research and clinical activities in both surgery and cancer care has been selected to receive the 2007 Grass Prize in Neurosurgery.

Vicky Estrera, Ph.D. (2001) is the PI for a new NIH MARC (Minority Access to Research Careers) grant of \$300,000 over five years at the University of Houston-Downtown. This grant will bring five or six students a year to GSBS for summer research with the potential of becoming GSBS students upon graduation. Fellow alumni and GSBS assistant dean for minority affairs, Thomas Goka, Ph.D. (1974) will work with Dr. Estrera to coordinate the summer program.

Valentine Goodrich-Boving, Ph.D. (1969) nominated in memory, T. C. Hsu, Ph.D., for a conference room at Sigma-Genosys, Woodlands, TX biotech firm. Dr. Boving is newly appointed as Sr. Improvement Advisor in Clinical Operations at UT-M. D. Anderson Cancer Center.

Ronald Harwerth, Ph.D. (1971) currently a University of Houston professor, received the American Academy of Optometry's Charles F. Prentice Medal Award.

Leslie Hodges-Gallagher, Ph.D. (2002) started a new position as Director of Molecular biology at Combithera, a new biotech company developing products that combine small molecule signaling inhibitors with endocrine therapies for hormone-related cancers.

Elizabeth Oldham Hileman, Ph.D. (2003) newly appointed to Project Director a UT-M. D. Anderson Cancer Center's External Collaborations office of Technology Discovery.

Dorrie Lamb, Ph.D. (1980) was recently appointed to the Lester and Sue Smith Chair in Urologic Research at Baylor College of Medicine (BCM). According to another GSBS alumni, Timothy Boone, M.D., Ph.D. (1985) and award-winning head of the urologic department at BCM, "Dorrie has built a world class laboratory and her mentorship to young investigators is a shining example to the entire college."

Hui-Wen Lo, Ph.D. (1994) is a new assistant professor in the division of experimental surgery at Duke University Medical Center, Durham, NC.

Pierrette Lo, M.S. (2002) joins Texas Heart Institute as a scientific writer.

Maribelis Ruiz, Ph.D. (2003) re-located as medical science liaison for Abbott Laboratories in San Juan, PR.

Shankar Sellappan, Ph.D. (2005) While at Frost & Sullivan has received a license (patent award) on his use of the LICOR Biosciences' Odyssey System, in large part as a result of his work as a GSBS student while in the lab of Dihua Yu, M.D., Ph.D. (1991) alumni and UT-M. D. Anderson faculty member. This mechanism opens up new avenues for protein expression research.

Aurora Seminara, Ph.D. (2005) is the new Scientific Director at ProHealth, a division of Draftfcb Healthcare in New York.

Zheng (Jane) Shi, Ph.D. (2001) is a patent agent and attending law school.

Debra Wallis, Ph.D. (1999) opened a coffee shop and catering business "Central Perks" in Marshall, TX.

Kendra Woods, Ph.D. (1995) during UT-M. D. Anderson's Cancer Center partnership launch met with their Royal Jordanian Highnesses Ghida and Dina in Amman, Jordan, and most recently President and Mrs. George Bush.

Wanting (Allison) Xu, Ph.D. (1999) is assistant professor, Diabetes Center and the Department of Anatomy, University of California, San Francisco.



Tom Piantanida, Ph.D. (1972)

"I've been involved in color vision genetics, and in fact shared the Newcomb-Cleveland Prize from AAAS for sequencing the genes that encode the human color-vision pigments. I had a nice career at SRI where the philosophy was that I could do anything I wanted to do, as long as I could find someone to pay for it. So, I worked in stabilized-image research, invented a non-invasive intracranial pressure monitor, a telemetry SIDS monitor, researched the "filling-in" mechanism, which keeps us from seeing our own blindspot-it does much more than that, and it is critical to stereoscopic vision-and I started a virtual reality lab to research the perceptual effects of VR technology.

When I started GSBS, one of my Professors - Bob Benolken, as I recall - told me that the purpose of the Core Program was to prepare any GSBS Graduate to hold up his end of a conversation at a cocktail party at Cambridge. That "generalist" attitude has provided me with more than a few research projects over the years. And, yes, it has enabled me to converse with a wide variety of scientists, sometimes drawing on tidbits gleaned from the Core Program."

SPECIAL thanks and gratitude

September 2006-July 2007

Leader Cullen Trust for Higher Education

Cullen Trust for Higher Education made this record Leadership gift of \$1,115,000 to the Graduate School for the purpose of underwriting its M.D./Ph.D. program. Organized through the GSBS, the gift provides dramatic growth opportunities for students in the program at UT-Houston Medical School, UT-M. D. Anderson Cancer Center, and the Baylor College of Medicine Graduate School of Biomedical Sciences.

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		Leonard Zwelling

Project GRAD

Project Grad founder Mr. James Ketelson and his wife Kathryn (not shown), along with representatives of The Favrot Fund, Mr. Lenoir Josey II, Lenoir Josey III, and Mr. James Calaway listen to a student journal reading about the morning's experiment of isolating DNA. For the past three years GSBS has been selected to provide a two-week hands-on biomedical sciences seminar for Project Grad participants. The Project Grad Seminars at the GSBS is directed by Dr. Tom Goka, Assistant Dean of Outreach and Minority Affairs.



Hello Everyone,

This is my favorite time of year, the end of the academic year and the most important event, **Commencement is now behind us!** After all of the effort, sacrifice, placing other aspects of life on hold to focus on research and writing, **let the celebrations begin!** Once friends and family saw our GSBS graduates cross that ever important stage to the joy and pride of their faculty mentors they somehow understand just how powerful the journey has been. I love the pageantry, the tradition and I stand ready to join the party. Over 50 students crossed the stage with 50+ more celebrating in spirit from their various new postdoctoral, pharmaceutical and NIH positions.

To celebrate both students and alumni the Steering Committee organized several activities. First, we welcomed the 2006-2007 graduates into the official ranks of the GSBS Alumni Association with a final Friday Afternoon Club (on Thursday, May 3). Later, in June, we continued the tradition set last year of a great West Coast Reunion by hosting the first ever East Coast Alumni Reunion on June 16 in Washington D. C. Thirty+ intrepid alums journeyed to Georgetown for a wonderful evening and GSBS update. Our annual alumni-sponsored Career Day for GSBS students took place later in June with 12 alumni speakers showcasing their professional expertise and stellar careers in areas which our students indicated the desire to learn more. Thank you especially to Alumni Stars Russell Broaddus, M.D., Ph.D. (1994); Randy Evans, Ph.D. (2002); Deanna Leonard, Ph.D. (2002); Janci Chunn Lingsay, Ph.D. (2006); Milton Marshall, Ph.D. (1975); Darren Woodside, Ph.D. (1998), David Wooten, Ph.D. (1998) and the Alumni Steering Committee.

I have had the privilege this year to have worked with a dedicated and innovative group of Alumni Steering Committee members: past presidents Joya Chandra, Ph.D. (1998) and Dorrie Lamb, Ph.D. (1980); vice president Ben Thomas, Ph.D. (1973); Vicky Estrera, Ph.D. (2001); Maureen Goode, Ph.D. (1985); Mustafa Ozen, Ph.D. (1999) and our newest member Joy Marshall, Ph.D. (2003). These GSBS alumni have enthusiastically devoted their time to make the 2006-2007 academic year extraordinary.

One final note and celebration to consider, our Distinguished GSBS Alumna for 2007-2008 is **Dr. Suzanne Fuqua** (1982/Naso) noted for her pioneering work on hormonal resistance in breast cancer. The **Alumni Reunion** in Houston is scheduled for the evening of Friday, **October 19** so plan now to celebrate with me.



Cheers,

Kendra W. Woods, Ph.D.

Kendra Woods, Ph.D. (1995)
GSBS Alumni Association President
2006-2007

Newsletter

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