Admissions Season
First Step Along the Way to Becoming a Biomedical Scientist...
From its earliest beginnings, the City Federation of Women’s Clubs have contributed their energy and resources to education while providing cultural enrichment for their families and themselves. Here’s a little history: The National Federation of Women’s Clubs was founded in 1900-1902, a time of few opportunities for women, either politically or socially. In 1914 the City Federation of Women’s Clubs was founded in Houston as an affiliate with a group of 29 local, women’s social groups. “The purpose of the organization was to unite women’s clubs for a consolidated effort to improve the nation and the world.” No small dream.

Its mission was to serve the Houston community as a benevolent, charitable, and educational association. This was achieved by furthering education—making it more available to more people through schools and school bond issues; by understanding social problems; and by acting as a volunteer organization which worked to build and strengthen things such as the public library system, free medical clinics, recreational parks, programs to attract business and industry to the communities that needed them, and to preserve natural resources. With the furtherance of these objectives, the City Federation of Women’s Clubs sought to build and strengthen the American home and aid realistic efforts to world peace.

As this early, larger collection of Houston groups comprising the Federation changed, it gradually became one, much smaller organization, and recently sold its building for $1.5M. With proceeds from the sale, The City Federation of Women’s Clubs gave financial support to over 25 worthwhile causes in Houston. The University of Texas Graduate School of Biomedical Sciences (GSBS) at Houston was selected to be a recipient. Student support seemed particularly well-suited to their original educational mission, and in 2004 The City Federation of Women’s Clubs Endowed Scholarship in the Biomedical Sciences was established for the purpose of supporting higher education in the biomedical sciences at the Graduate School.

Over 100 years later in December of 2005, the very first graduate student was named The City Federation of Women’s Clubs Endowed Scholar in the Biomedical Sciences. This inspired creation of Houston women Fadine Jackson Roquemore and Joyce Nagle (shown above left and right, with the scholar Andrea Lafont, center) along with others on the steering committee not shown, Gwen Seammen, Marguerite McFarland, and Gladys Stange, continues to benefit Houston, and is one of its last gifts to a beloved home town. It brings to fruition an endowment that provides for generations of scientists-in-training to come. The $2,000-$2,500 support generated through the endowment will recognize merit and may be used for such important necessities in a student’s life as a laptop computer, business attire for interviews and meetings, scientific software and books as well as other equipment. These things mean a great deal in the life of a graduate student. It appears that the Federation is still improving the nation and the world, one student at a time.
Higher education is going through a period of more rapid change than at any time I remember since I attended college in the 60's. Margaret Spellings, the U.S. Secretary of Education has appointed a Commission on the Future of Higher Education that is considering approaches for-profit institutions use. An executive vice-president of IBM states that American universities are not responsive to industry needs. Knowledgeable people point out that the U.S. is falling behind countries like India and China in its science and engineering graduates. We regularly hear that global collaborations and interdisciplinary projects are increasingly important to higher education’s success. Buzzwords and phrases like “innovation and the economy,” “innovative financing,” and “innovative delivery methods” appear frequently. (I do not recall these terms from Econ 101 as a college freshman; the professor always seemed to make it simpler—the choice between guns and butter rather than trying to get someone else to pay for both for you!).

Amidst discussions of “innovative delivery,” “creative financing,” etcetera, it is easy to lose sight of the educational goals that I think ought to drive strategic planning, and this is where “SLO” comes into the discussion. SLO stands for student learning outcomes, and we will hear a lot about these in the future as they have become a focal point of educational planning, outcomes assessment, program reviews, accreditation, and I predict will become increasingly important in National Institutes of Health (NIH) training grant evaluations.

Once upon a time, I would have thought that a discussion about SLOs was silly in a graduate school because everyone knew what we were trying to do. It’s simple: we teach people how to think, we produce problem solvers, and we train independent researchers and scientist educators. Few would disagree with these general principles. Unfortunately, generalized statements, no matter how appropriate, will be subject to a broad range of interpretations that can surface when people discuss specific aspects of graduate training, for example, the purpose of the candidacy exam, publication requirements for graduation, the format of the Ph.D. dissertation, and so forth. These issues become increasingly complicated as graduate training becomes more interdisciplinary and as the size and diversity of the faculty increase. Imagine an NIH study section discussion of a research proposal that had a terrific hypothesis, but did not list any specific aims. Every reviewer might assume that she or he knew the specific aims the investigator was planning to use to evaluate the hypothesis, but their priority scores would likely be based upon different assumptions.

I would like to see us develop and enunciate explicit SLOs to help us achieve our overall goal of insuring that every graduate leaves GSBS as a well-trained scientist. We all know our goal in a general sense, but as GSBS and our parent institutions grow in size and complexity we need to be certain that all students and faculty members have the same set of expectations and standards—then we can confidently continue to assign advisors and supervisory committees to be primarily responsible for helping all students achieve them. This does not have to be a time consuming or slow process, and it may only require explicitly describing what we are already doing—it would just be a SLO approach.

Best regards,

George
It is a privilege to be here with you all tonight and I feel honored to be recognized as a distinguished alumnus of GSBS—an institution that has shaped my professional career and aided me in many ways. For all my professional life I have regarded my experience at GSBS with appreciation. Typically, experience is the name we give to our mistakes, but The University of Texas proved to be the notable exception in jump-starting and re-directing my life. GSBS had then, and continues today, to have a world-renowned faculty, and during these last four decades has continued to distinguish itself through its high level of education, its richly fostered research environment, and its commitment to progress in the Biomedical Sciences. All of this and more was conceived and brought about by alumni and faculty who are among the most eminent in the world. So, when I look out on this gathering, I can easily see myself interchanged with almost any one of you. I see so many who could or should just as easily be receiving this recognition. Not that I am questioning GSBS’ judgment—or choice—mind you, I am just offering testament to the accomplishments of this institution. The opportunity to accept this award in this company is an honor and I do thank you for this uplifting recognition.

You know, a man is touched by many lives in his time and is aided by them in innumerable ways. For me it was the guidance, education, and most of all “examples” received from my mentors that inspired me. Truly fortune smiled on me. To be instructed by the likes of Drs. Robert Shalek, Peter Almond, Marilyn Stoval, Rodney Withers, Ronald Humphrey, Raymond Meyn and Vincent Sampiere was a great blessing for a young aspiring student. They each had strong scientific foundations, solid work ethics, impeccable moral values and they were world-renowned in their field of expertise. It seemed to me as if I had been allowed into the company of giants. Through them I found my way, but not on a road less traveled. Their footprints were there for me to follow. They gave me the tools. But to my wife I owe all else. I received the gift of her everlasting company in the corridors of Favrot Hall. No one has supported and cared for me such as she has. She even typed my thesis in spite of being surrounded by mice in Dr. Withers lab.

They say luck or chance favors the trained mind. In my life serendipity also played some role. Fate, in my case, has a capital F. I cannot say why I came to GSBS. As difficult as it is to imagine, when I was a small boy in a small village in an obscure part of India, I did not roam the farmlands with a UT T-shirt on aspiring to the day when I would be surrounded by legions of fans screaming “hook’ em horns.” I did not start doing that until last week! My greatest hope was to be a train engine operator. Sadly, in my application for training I was found to be lacking in the skills needed and was denied. So I needed a Plan B: America and GSBS. That’s not totally accurate. When I did come to America, I WAS pursuing a project—her name was Miss Koyna Bam. Well, many projects fail due to poor planning, but they lead to new ideas and perspectives and opportunities, especially in a great country like the one we are privileged to live in. In many ways I did not come to GSBS, GSBS came to me, and opened its doors to me, and Medical Physics was a thing I never pursued until caught. There is a line in Much Ado About Nothing that sums up the totality of my experience:

“O what men dare do, what men may do, what men daily do, not knowing WHAT they do.”

Here was an opportunity, and I had the good sense to grab on to it. This may not be very inspirational, but it does show how sometimes, almost magically, things have a way of falling into place, and square pegs slip into round holes; not unlike the traveler in that poem of Robert Frost’s “where two roads diverge in the woods....” I acted and I haven’t looked back. I saw the ocean of opportunity made open to me. I set sail. And, I am still on the waters, though my voyage is nearly done. So, these were the dreams of a train operator destined to become a medical physicist.

My first day in Houston was on the wings of Delta Airlines. My plane arrived late, past midnight, at the International Airport and no limo service was available. I was depressed to find the cost of taxi fare. My meager monthly budget could not support it. I appealed to the authorities that it was not my fault that the flight was late. Realizing my state, the officer asked me to wait a moment and lo and behold there was a whole big bus just for me to take me to the medical center. Total fare was four dollars. It was then I understood why they say, “Texas is a big COUNTRY” – you
ask for a screwdriver and they give you a workshop! I also discovered the cost of gasoline was 20 cents a gallon, a new VW bug was $1,500 and a cup of coffee was a mere dime! Now a cup of coffee will cost the same as that gallon of gas...at least for the next week or so.

Once at GSBS, I had to memorize all the proteins and amino acids and learn all the A’s: DNA, RNA, mRNA, as well as the mysteries of the cell cycle and the Crebb’s cycle. The list goes on. I can honestly tell you that there are few people who have forgotten as much as I have. It has its upside though. I assume you are all familiar with the film, Eternal Sunshine of the Spotless Mind.

My squeaky clean mind not withstanding, the core program of biological sciences did give me some insight into those famous building blocks of life: some secrets revealed—as well as more questions. But it IS those questions that keep scientific minds challenged. Life is, in many ways, figuring out what you don’t know—and sometimes what you’ll never know—and coming to terms with that.

GSBS schooled me to understand the significance of mapping the genome and appreciating the similarities we share with other forms of life on this planet. How connected we are and how dependent we all are on each other. In my childhood days my elders used to tell me I cannot be happy unless the people around me are happy too. I used to think that it meant belonging to a mutual admiration society! Instead, now I know better; my well-being is the well-being of all life forms, the totality of the eco-system—the environment of the entire planet. Walt Whitman put it better in his poem Song of Myself:

I celebrate myself, and sing myself,
And what I assume you shall assume
For every atom belonging to me as good belongs to you
My tongue, every atom of my blood,
formed from this soil, this air
Born here of parents, born here from parents the same,
and their parents
...the same

I’ll admit that poets sometimes have a facility with words that a physicist lacks, but it would seem that we have developed tools to exploit our planet’s resources at a faster pace than nature can replenish. We are on a planet that many say faces a host of environmental problems. We need to seriously focus on the development of ways to minimize adverse practices and effects, and lay greater emphasis on conservation, nurturing vegetation and life forms, and to find a balance and harmony with nature. George Bernard Shaw very aptly said: “The reasonable man adapts to his environment. The unreasonable man makes his environment adapt to him. Therefore, all progress depends upon unreasonable men.”

GSBS also prepared me in the technological applications of linear accelerators, CT, US, MRI and PET. This progress continues with IMRT, Tomotherapy, and 4D CTPE. These developments, along with numerous others, spearheaded and supported by biomedical scientists, have contributed to the success of the National Cancer Institute and, more importantly, have led to MAJOR improvements in the early detection and treatment of cancer. Where we once had a hammer, we now have a blade. Where we once took aim from afar, we now look nearer on our foe. Work being done by Drs. Hazel, Jackson, Mohan, Smith, Starkshall, and their colleagues is truly pioneering in advancing their fields. The future of medical physics in GSBS is in good hands.

More universities need to establish graduate departments of biomedical sciences where broad-based scientific education and research can be pursued. Our education and training programs currently produce an inadequate number of biomedical scientists needed to face the challenges of tomorrow.

The explosion of new scientific knowledge, gene mapping, functional MRI, molecular imaging and computer optimization for precision therapies are increasing the biomedical scientist’s role in the treatment of human diseases and improvement in quality of life. We ARE making a difference. Finally, I would like to close by addressing the oldest and newest of our discipline. As for us elder statesmen in our lingering days, I would ask you to try and remember your first days at GSBS. Think about what you saw, who impressed you, and who inspired you. Are you surprised we have come this far? I know I am. I found my way. For that I am proud, and I hope you are too; yet, be mindful of that pride when you consider:

“If we have seen further, it has been by standing on the shoulders of giants.”

For you rookies, with your freshly minted minds, eager to embark on your careers, I ask you to pause for a moment and consider all you have seen and learned. I know it is more than I know. I received my degree over thirty years ago. But for just a moment, imagine that all that skill and brilliance you have is but a drop in the bucket. I do not mean to derogate, I only hope to illustrate the possibilities ahead. Consider Sir Isaac Newton’s final estimate of his own epic achievement:

“I do not know what I may appear to the world; but to myself I seem to have been only like a boy playing on the seashore, and diverting myself in now and then finding a smoother pebble or a prettier shell than ordinary, while the great ocean of truth lay all undiscovered before me.”

This ocean that Newton brought us to has not yet even got our feet wet. You are the pilgrims. You are the ones that will travel daily farther from the East. Always a little further, until one day, one of you perhaps, will bring us in sight of the opposite shore, narrowing the chasm and expanding our horizon. This challenge falls on you. Embrace it.

Dr. Paliwal is Professor of Human Oncology and Medical Physics, and Director of Radiation Therapy Physics; University of Wisconsin Comprehensive Cancer Center. He is a Fellow of the International Atomic Energy Agency.
<table>
<thead>
<tr>
<th>Name</th>
<th>Degree(s)</th>
<th>University/Academic Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elizabeth Anderson</td>
<td>Ph.D. Molecular Pathology, B.A. 5/1/2005</td>
<td>University of Colorado - Boulder</td>
</tr>
<tr>
<td>Marc Anderson</td>
<td>Ph.D. Neuroscience, B.S. 5/1/2004</td>
<td>University of Houston - Main Campus</td>
</tr>
<tr>
<td>Daniel Babcock</td>
<td>Ph.D. Neuroscience, B.A. 5/1/2005</td>
<td>University of Delaware</td>
</tr>
<tr>
<td>Mark Badeaux</td>
<td>Ph.D. Molecular Carcinogenesis, B.S. 5/18/2002</td>
<td>University of Texas at Austin</td>
</tr>
<tr>
<td>Elizabeth Barba</td>
<td>Ph.D. Cancer Biology, B.S. 5/1/2005</td>
<td>St. Mary's University</td>
</tr>
<tr>
<td>Kedryn Baskin</td>
<td>Ph.D. Toxicology, B.A. 12/21/2002</td>
<td>Baylor University</td>
</tr>
<tr>
<td>Corinne Bell</td>
<td>Ph.D. Virology and Gene Therapy, B.S. 5/1/2005</td>
<td>Saginaw Valley State University</td>
</tr>
<tr>
<td>Jordan Bell</td>
<td>Ph.D. Neuroscience, B.S. 5/1/2004</td>
<td>University of Rochester</td>
</tr>
<tr>
<td>Whitney Bivens</td>
<td>Ph.D. Medical Physics, B.S. 5/1/2005</td>
<td>Texas A&amp;M University-College Station</td>
</tr>
<tr>
<td>Kim Cardenas</td>
<td>Ph.D. Molecular Pathology, B.S. 12/1/2004</td>
<td>University of Texas at San Antonio</td>
</tr>
<tr>
<td>Eliseo Castillo</td>
<td>Ph.D. Biochemistry and Molecular Biology, M.S. 5/1/2005</td>
<td>Eastern New Mexico University</td>
</tr>
<tr>
<td>Xin Chen</td>
<td>M.S. Cancer Biology, B.S. 6/1/2005</td>
<td>Tong Ji Medical College of Hua Zhong University of Science and Technology</td>
</tr>
<tr>
<td>Pai-Chun Chi</td>
<td>Ph.D. Medical Physics, M.S. 4/1/2004</td>
<td>UT-Houston GSBS</td>
</tr>
<tr>
<td>Min Soon Cho</td>
<td>Ph.D. Cancer Biology, M.S. 2/1/1999</td>
<td>Seoul National University</td>
</tr>
<tr>
<td>Hyun Ho Choi</td>
<td>Ph.D. Cancer Biology, M.S. 2/1/1997</td>
<td>Korea University</td>
</tr>
<tr>
<td>Amanda Clark</td>
<td>Ph.D. Virology and Gene Therapy, B.S. 5/1/2005</td>
<td>University of Arizona</td>
</tr>
<tr>
<td>Rene Colorado</td>
<td>M.D./Ph.D. Neuroscience, B.S. 5/1/2004</td>
<td>University of Texas at Austin</td>
</tr>
<tr>
<td>Jennifer Dale</td>
<td>Ph.D. Microbiology and Molecular Genetics, B.S. 5/13/2005</td>
<td>North Dakota State University</td>
</tr>
<tr>
<td>Andrew Daniele</td>
<td>M.S. Cancer Biology, B.S. 5/1/2002</td>
<td>University of the South</td>
</tr>
<tr>
<td>Proleta Datta</td>
<td>Ph.D. Neuroscience, M.B.B.S. 1/2/2004</td>
<td>Kasturba Medical College</td>
</tr>
<tr>
<td>Jessica De Orbeta-Cruz</td>
<td>Ph.D. Cancer Biology, M.S. 5/1/2005</td>
<td>University of Puerto Rico Mayaguez Campus</td>
</tr>
<tr>
<td>Jennifer Defant</td>
<td>S.M.S. Genetic Counseling, B.S. 8/1/2003</td>
<td>Florida State University</td>
</tr>
<tr>
<td>Kevin DeHoff</td>
<td>Ph.D. Biomathematics and Biostatistics, B.S. 5/1/2004</td>
<td>Trinity University</td>
</tr>
<tr>
<td>Renee Dickinson</td>
<td>S.M.S. Medical Physics, B.S. 5/1/2005</td>
<td>Stetson University</td>
</tr>
<tr>
<td>Yi Du</td>
<td>Ph.D. Immunology, B.S. 7/1/1996</td>
<td>Sichuan University</td>
</tr>
<tr>
<td>Andrea Dural</td>
<td>Ph.D. Cell and Regulatory Biology, B.S. 12/1/2004</td>
<td>University of Louisiana-Lafayette</td>
</tr>
<tr>
<td>Jesse Flynn</td>
<td>Ph.D. Biochemistry and Molecular Biology, B.S. 5/15/2004</td>
<td>Texas A&amp;M University-College Station</td>
</tr>
<tr>
<td>Kristin Fouk</td>
<td>M.S. Immunology, B.S. 8/15/2003</td>
<td>Texas A&amp;M University-College Station</td>
</tr>
<tr>
<td>Juan Gallegos</td>
<td>Ph.D. Biomathematics and Biostatistics, B.S. 5/1/2005</td>
<td>University of Houston - Downtown</td>
</tr>
<tr>
<td>Shilpa Gandhi</td>
<td>Ph.D. Neuroscience, B.S. 5/1/2004</td>
<td>Southern Methodist University</td>
</tr>
<tr>
<td>Jeannine Garnett</td>
<td>Ph.D. Microbiology and Molecular Genetics, B.E. 11/1/2002</td>
<td>Durban Institute of Technology</td>
</tr>
<tr>
<td>Mandy Geryk</td>
<td>Ph.D. Biochemistry and Molecular Biology, B.S. 5/1/2005</td>
<td>Texas Tech University</td>
</tr>
<tr>
<td>Aron Goins</td>
<td>Ph.D. Biomathematics and Biostatistics, B.S. 5/1/2004</td>
<td>Texas A&amp;M University-College Station</td>
</tr>
<tr>
<td>Fabiola Gomez</td>
<td>Ph.D. Toxicology, B.S. 12/1/2004</td>
<td>University of Texas at El Paso</td>
</tr>
<tr>
<td>Jennifer Gonzalez</td>
<td>Ph.D. Biochemistry and Molecular Biology, B.S. 5/1/2005</td>
<td>St. Mary’s University</td>
</tr>
<tr>
<td>Brian Grabner</td>
<td>Ph.D. Immunology, B.A. 5/11/2002</td>
<td>SUNY College at Buffalo</td>
</tr>
<tr>
<td>Kristen Greathouse</td>
<td>Ph.D. Molecular Carcinogenesis, M.S. 8/1/2001</td>
<td>Texas Woman’s University</td>
</tr>
<tr>
<td>Josh Gregorio</td>
<td>Ph.D. Immunology, J.D. 7/1/2005</td>
<td>University of the Pacific</td>
</tr>
<tr>
<td>Randala Hamdan</td>
<td>Ph.D. Cancer Biology, B.S. 5/1/2004</td>
<td>University of North Texas</td>
</tr>
<tr>
<td>Troy Hammerstrom</td>
<td>Ph.D. Microbiology and Molecular Genetics, B.S. 5/1/2005</td>
<td>Texas A&amp;M University-College Station</td>
</tr>
<tr>
<td>Shirley Hammond</td>
<td>Ph.D. Reproductive Biology, B.S. 5/15/2004</td>
<td>Angelo State University</td>
</tr>
<tr>
<td>Violeta Hennessey</td>
<td>Ph.D. Biomathematics and Biostatistics, M.S. 5/1/2005</td>
<td>University of Nevada-Las Vegas</td>
</tr>
<tr>
<td>Rachel Hicklen</td>
<td>Ph.D. Neuroscience, B.S. 5/7/2005</td>
<td>University of Alabama</td>
</tr>
<tr>
<td>Floyd Holsinger</td>
<td>Ph.D. Cancer Biology, M.D. 5/12/1995</td>
<td>Vanderbilt University</td>
</tr>
</tbody>
</table>
Ji Yeon Hong  -  Ph.D.  Biochemistry and Molecular Biology,  M.S. 2/1/2004 Seoul National University
Shaoyi Huang  -  Ph.D.  Molecular Pathology,  M.S. 12/1/2004 Wuhan University-PRC
Jaimis Jackson  -  M.S.  Physiology,  B.A. 5/1/2002 Rice University
Lori Jackson  -  M.S. Biomathematics and Biostatistics,  B.S. 5/1/2003 Abilene Christian University
Sharat Jacob Vayttaden  -  Ph.D.  Cell Biology,  M.Sc. 8/1/2001 University of Kerala
Johanna James  -  Ph.D.  Cancer Biology,  B.S. 5/1/2004 Morgan State University
Vaidhav Junega  -  Ph.D.  Neuroscience,  M.E. 5/1/2004 University of Connecticut
Vaidhav Kapuria  -  Ph.D.  Cancer Biology,  M.S. 7/1/2004 All India Institute of Medical Sciences
Jahan Khalili  -  Ph.D.  Immunology,  B.A. 5/19/2003 Reed College
Eun Young Kim  -  Ph.D.  Cell and Regulatory Biology,  M.S. 2/2/2002 Kwangju Institute of Science and Technology
Tae Kon Kim  -  Ph.D.  Cancer Biology,  M.D. 6/1/2001 Seoul National University
Alyssa Kinsley  -  S.M.S.  Genetic Counseling,  B.S. 5/1/2005 Miami University
E. Scott Kopetz  -  Ph.D.  Cancer Biology,  M.D. 5/1/2001 Johns Hopkins University
Christopher Krantz  -  Ph.D.  Cancer Biology,  B.S. 5/1/2005 Southern Ill University at Carbondale
John Kwon  -  M.D./Ph.D.  Molecular Biology,  B.S. 12/18/2004 Baylor University
Michael Lago  -  Ph.D.  Biochemistry,  B.S. 8/1/2004 Florida State University
John Lahad  -  Ph.D.  Cancer Biology,  M.S. 8/1/2004 UT-Houston GSBS
Aimee Lake  -  Ph.D.  Cancer Biology,  B.S. 7/1/2004 University of Texas at Austin
Stacy Langmeyer  -  Ph.D.  Virology and Gene Therapy,  B.S. 5/1/2005 Indiana University-Purdue University at Fort Wayne
Susannah Lazar  -  S.M.S.  Medical Physics,  B.S. 8/1/2005 Louisiana State University & Agricultural & Mechanical College
Hua Li  -  Ph.D.  Human and Molecular Genetics,  B.S. 9/1/2005 Shanghai Jiao Tong University
Minjun Li  -  Ph.D.  Biochemistry and Molecular Biology,  M.S. 7/1/2002 East China Normal University
Yufeng Li  -  Ph.D.  Virology and Gene Therapy,  M.S. 3/1/2005 Shanghai Jiao Tong University
Zhuojing Li  -  Ph.D.  Biomathematics and Biostatistics,  M.S. 5/1/2004 Texas State University in San Marcos
Qingtang Lin  -  Ph.D.  Human and Molecular Genetics,  M.S. 6/1/2005 Joint program CUMS and Beijing Normal University
Ya-Chi Lin  -  Ph.D.  Human and Molecular Genetics,  M.S. 6/1/2002 National Cheng Kung University
Han Liu  -  Ph.D.  Cancer Biology,  M.Sc. 6/1/2004 University of Aberdeen
Qian Liu  -  Ph.D.  Cancer Biology,  M.D. 6/1/1998 China Medical University
Dorothy Long  -  M.S.  Immunology,  B.A. 8/1/1996 University of Texas at Austin
Alanna McDermott  -  S.M.S.  Medical Physics,  B.S. 5/1/2003 Tulane University
Katharine McNamara  -  M.S.  Cancer Biology,  B.S. 5/1/2005 Southwest Texas State University
William Merritt  -  M.S.  Cancer Biology,  M.D. 5/1/2001 University of South Carolina
Aaron Mobley  -  Ph.D.  Immunology,  B.S. 12/1/2004 Texas A&M University-College Station
Amy Monier  -  Ph.D.  Microbiology and Molecular Genetics,  B.S. 5/1/2005 University of New Mexico
Audrey Nath  -  M.D./Ph.D.  Neuroscience,  B.S. 5/14/2005 Rice University
Anne Netek  -  Ph.D.  Pharmacology,  B.S. 12/1/2004 University of Kentucky-Main Campus
Paige Nitsch  -  S.M.S.  Medical Physics,  B.S. 5/1/2005 Texas A&M University-College Station
Evan Norcom  -  M.S. Microbiology and Molecular Genetics,  B.A. 5/1/2004 Houston Baptist University
Michael Ozawa  -  M.D./Ph.D.  Cancer Biology,  B.S. 5/1/2001 University of California at San Diego
Christina Papke  -  Ph.D.  Human and Molecular Genetics,  B.S. 5/1/2005 Cedarville University
Vani Pariyadath  -  Ph.D.  Neuroscience,  M.S. 6/1/2005 University of Allahabad

Student-Faculty-Staff gather for a “friday afternoon club”
Hyun Jun Park - Ph.D. Cancer Biology, M.S. 12/1/2004 Baylor University

Purvi Patel - M.S. Molecular Biology, B.A. 12/30/1998 Duke University

Liem Phan - Ph.D. Cell and Regulatory Biology, B.S. 7/1/2005 University of Natural Sciences Vietnam National University

Prasad Phatarpek - Ph.D. Microbiology and Molecular Genetics, M.S. 6/1/2004 Texas State University - San Marcos

Christina Pichot - Ph.D. Cancer Biology, B.S. 8/1/2003 University of Texas at Austin

Stephanie Planque - Ph.D. Molecular Pathology, B.S. 6/1/1999 Universite de Technologie

Gerardo Ramos - Ph.D. Toxicology, M.S. 5/11/2002 UT-Houston GSBS

Amy Reid - M.D./Ph.D. Neuroscience, B.S. 5/1/2002 Stanford University

Christina Renneke - M.S. Molecular Pathology, B.S. 5/1/2005 Kansas State University

David Reynoso - M.D./Ph.D. Immunology, B.S. 5/1/2004 University of Texas at Austin

Adam Riegel - Ph.D. Medical Physics, B.A. 5/1/2004 Vassar College

Kristin Roden - M.S. Human and Molecular Genetics, B.S. 5/1/2003 Texas Woman’s University

Tania Rodriguez Cruz - Ph.D. Immunology, B.S. 12/1/2003 University of Puerto Rico

Cana Ross - Ph.D. Microbiology and Molecular Genetics, M.S. 12/1/2004 UT-Houston GSBS

Joshua Rother - M.S. Virology and Gene Therapy, B.S. 12/1/2002 University of Texas at Austin

Jonathon Roybal - Ph.D. Virology and Gene Therapy, B.S. 5/1/2005 New Mexico State University

Daniel Ryder - Ph.D. Toxicology, M.P.H. 8/1/2005 University of Texas HSC-Houston SPH

Katrina Salazar - M.D./Ph.D. Human and Molecular Genetics, B.S. 5/1/2003 Carnegie-Mellon University

Erin Salo - S.M.S. Genetic Counseling, B.A. 5/1/2005 University of Delaware

Keri Schadler - Ph.D. Cancer Biology, B.S. 12/1/2004 Texas A&M University-College Station

Taylor Schoberle - M.S. Immunology, B.A. 5/10/2003 Southwestern University

Shiraj Sen - M.D./Ph.D. Physiology, B.A. 5/21/2005 University of Texas at Austin

Tushar Sharma - M.D./Ph.D. Cell and Regulatory Biology, B.A. 5/1/2005 Duke University

Johnny Shen - M.S. Cell Biology, B.A. 5/1/2003 University of Pennsylvania

Christopher Singh - Ph.D. Molecular Pathology, M.S. 8/1/2005 UT-Houston GSBS

Nolan Smith - Ph.D. Cancer Biology, B.S. 6/1/2005 University of Washington

Kipruto Soimo - M.S. Immunology, B.S. 12/1/2005 Abilene Christian University

Hui Song - Ph.D. Cancer Biology, M.S. 6/1/1994 Beijing Medical University

Ryan Sowell - M.S. Immunology, B.S. 5/1/2005 University of Northern Colorado

Sara Spikes - M.S. Immunology, B.S. 12/1/2004 Sam Houston State University

Amy Stanford - S.M.S. Genetic Counseling, B.S. 5/1/2005 Texas A&M University-College Station

Ying-Wen Su - Ph.D. Human and Molecular Genetics, M.S. 6/1/2004 National Chiao Tung University

Ying-Wen Su - Ph.D. Cancer Biology, M.S. 6/1/2002 Taipei Medical University

Cathy Sullivan - S.M.S. Genetic Counseling, B.S. 5/1/1997 University of Texas at Austin

Brian Taylor - Ph.D. Medical Physics, B.S. 5/1/2005 Union University

Jeremy Tchaicha - Ph.D. Cancer Biology, B.S. 5/1/2002 Lafayette College

Catherine Tipps - S.M.S. Genetic Counseling, B.A. 6/1/2002 Stanford University

Yoshikazu Tsunashima - Ph.D. Medical Physics, M.S. 7/1/2003 University of Tsukuba

Deon Ufford - M.S. Toxicology, B.S. 12/15/2003 University of Houston - Downtown

Hilary Vass - Ph.D. Medical Physics, M.S. 5/1/2005 UT-Houston GSBS

Bryce Vincent - Ph.D. Neuroscience, B.S. 5/1/2003 Schreiner University

Shanzhi Wang - Ph.D. Biochemistry and Molecular Biology, M.S. 6/1/2003 Southeast University

Jimnetra Watson - Ph.D. Cancer Biology, B.S. 3/1/2005 Prairie View A&M University

Sharon Way - Ph.D. Microbiology and Molecular Genetics, 5/1/2005 Rice University

Lauren Williamson - Ph.D. Virology and Gene Therapy, B.S. 5/1/2005 Texas A&M University-College Station

Charmaine Wilson - M.S. Human and Molecular Genetics, B.S. 5/1/1999 Bennett College of North Carolina

Cheng Han Wu - M.D./Ph.D. Cancer Biology, B.S. 5/23/2005 Southern Methodist University

Yujane Wu - Ph.D. Cancer Biology, B.S. 5/1/2005 Texas A&M University-College Station

Lin Yang - Ph.D. Biomatics and Biostatistics, M.S. 6/1/2005 Purdue University

Hsin-Hsien Yeh - Ph.D. Radiation Biology, M.S. 8/1/2002 National Yang-Ming University

Ming Yin - Ph.D. Cancer Biology, M.S. 6/1/2003 Nanjing University

Hui Zhang - Ph.D. Molecular Pathology, M.S. 7/1/2003 Nanjing University

Yang Zhou - Ph.D. Biochemistry, B.S. 6/1/2005 Nanjing University

Maya Zigler - Ph.D. Cancer Biology, B.S. 5/1/2004 Tel Aviv University
The Office of Admissions: Challenges and Opportunities
by Victoria P. Knutson, Ph.D., Assistant Dean of Admissions

Over the past few years, I have found that there appears to be an aura of mystery surrounding the review of applications for admission to GSBS. With applications in hand, how can the Admissions Committee prospectively gauge which applicants will be successful in a scientific career? What do we look for? Are we really able to identify that “spark” that predicts future success as a scientist? I would like to take this opportunity to tell you a little about how the Admissions Committee pursues the challenge to admit diverse, highly-qualified students into GSBS—and solicit your input.

Currently, the Admissions Committee evaluates the applicant’s GPA and GRE scores, personal statement, and three letters of recommendation. All of these are utilized in the evaluation process, and no single index is used as justification for a recommendation of either admission or rejection of the application.

The GPA and GRE scores are an index of how well the applicant will do in their didactic coursework; the scores provide no information on performance in the lab. Since GSBS does require that the PhD students complete some coursework with grades of A or B, use of GPAs and GRE scores in evaluation of applications has some merit.

The personal statement is, in my estimate, the most important part of the application. This provides insight into the “scientific maturity” of the applicant. Can the applicant describe the “big picture” of the research going on in the labs in which he worked? How does the applicant’s research fit into this big picture? Was the applicant acting simply as a pair of hands in the lab (describing only the techniques that he’s familiar with), or was he intellectually engaged? Did the applicant do his homework by identifying faculty in whose research he has an interest? Last, but not least, the personal statement provides information about the writing skills of the applicant. The assessment of the personal statement is very subjective. It is curious, though, how easy it is to differentiate between a good one and an uninformative one. The Admissions Committee is remarkably consistent in evaluating this index of quality.

Interpretation of the letters of recommendation is usually very useful, especially when they are obtained from faculty members who have supervised the applicant in the laboratory. It is always interesting to see if the description of the research from the faculty member matches the description from the applicant! This point alone provides insight into the research acumen of the applicant. The Committee as a whole develops considerable skill in reading between the lines of the letters of recommendation to glean information about the applicant’s ability to survive and flourish in the demanding environment of the lab. Has the Committee ever rejected an applicant with a 3.8 GPA, and 1260 GRE but with culpable letters of recommendation? Yes! It is important to the Committee that admitted applicants are not only able to successfully complete the didactic coursework, but also that their interpersonal skills, drive, and motivation are appropriate for success in the research arena.

Is the Admissions Committee successful in identifying highly qualified applicants? What’s the track record? Let’s start with those students who have graduated. Based on the Alumni Survey conducted in 1998 (mounted on the GSBS web site at http://gsbs.uth.tmc.edu/alumni/surv98.html), GSBS graduates indicated that their graduate studies prepared them for a career in science, that they are finding jobs that utilize their scientific skills, and that they find their jobs to be fulfilling. What about enrolled students? I would anticipate that if the Admissions Committee were making poor choices, we would see a high level of attrition—due either to poor academic performance or student dissatisfaction with the program. However, our enrolled students drop out of GSBS at rates below the published rates of most other graduate schools in the US. So, our students complete the degree programs, and our graduates are happy with the education they received at GSBS. Overtly, these data suggest that the Admissions Committee (and, of course, the faculty members) is doing their job.

But, what do you think? You who are Faculty are in the heat of it, working with our graduate students on a daily basis. Should the Admissions Committee change tack? Modify the admissions process? Recommend the admission of more students? Fewer? Students: You are on the receiving end of the process. Do you feel you were adequately prepared for graduate school? As you view your fellow-students, do you feel the Admissions Committee did a good job? Should the Committee place more (or less) emphasis on any of the specific aspects of the application documents? Alumni, we have heard from most of you in the Alumni Survey. But, do you feel, as suggested in the survey, that you were well-served by GSBS? Are there aspects of the admissions process that should be re-evaluated? I would really like to hear from you. The job of the Admissions Committee is a difficult one: while there are some aspects of the application that are quantifiable, the most important components rely on subjective evaluation. Please give me your insights on how we should tweak, nudge or totally overhaul the process. You can reach me at

Victoria.P.Knutson@uth.tmc.edu, or 713-500-9860.

Regards,

Vicki
The City Federation of Women’s Clubs Endowed Scholarship in the Biomedical Sciences

In 2004 the City Federation of Women’s Clubs endowed a Scholarship in the Biomedical Sciences for 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 arena. Each year the Dean of the GSBS will define the area of research for this scholarship and for 2005-2006 the scholarship recognizes research in the area of molecular genetics of human disease. The current award is $2,000 and the recipient for 2005-2006 is:

**Student**
- Andrea Lafont

**Advisor**
- Dr. Dianna Milewicz

McGovern Scientific Poster Competition

In its 24th year, the McGovern Scientific Poster Competition now plays an integral part in The University of Texas Health Science Center at Houston Research Day. Awards are based on research excellence and presentation and were judged this year by a Faculty Committee including Drs. Carol Etzel, Yong-Jian Geng, Thomas Goka, Khader Hasan, Peng Huang, Xin Lin, Srikanth Mahankali, Sankar Maity, Prahlad Ram, Rajagopal Ramesh, Georgios Rassidakis, and Judith Smith. Awards are $400, $300, and $200 for First, Second, and Third place, respectively. Top posters include:

**Ph.D. Pre-candidacy Category**

<table>
<thead>
<tr>
<th>Student</th>
<th>Advisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Christopher Singh</td>
<td>Dr. Chinnaswamy Jagannath</td>
</tr>
<tr>
<td>Dunyapom Trachootham</td>
<td>Dr. Peng Huang</td>
</tr>
<tr>
<td>Vaibhav Juneja</td>
<td>Dr. Karen Vasquez</td>
</tr>
<tr>
<td>(1st year, undecided)</td>
<td>Dr. Sharon Dent</td>
</tr>
</tbody>
</table>

**Post-candidacy**

<table>
<thead>
<tr>
<th>Student</th>
<th>Advisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amir Mohsenin</td>
<td>Dr. Michael Blackburn</td>
</tr>
<tr>
<td>Dr. Ellen Richie</td>
<td>Ann Griffith</td>
</tr>
<tr>
<td>Jennifer Carter</td>
<td>Dr. Subrata Sen</td>
</tr>
</tbody>
</table>
In 2004 the $2,000 Sam Taub and Beatrice Burton Fellowship in Vision Disease Award was established by Mary Wright and her sister, Joanna Ross, in honor of their grandfather and great aunt, for a graduate student to support excellence in the research area of eye and sight-related problems, and the genetics and potential therapies behind these life-altering health concerns. The recipient for 2005-2006 is:

<table>
<thead>
<tr>
<th>Student</th>
<th>Advisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Xueyao Fu</td>
<td>Dr. William Klein</td>
</tr>
</tbody>
</table>

Alfred G. Knudson Outstanding Dissertation Award

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:

<table>
<thead>
<tr>
<th>Student</th>
<th>Advisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ke Zhang, Ph.D.</td>
<td>Dr. Sharon Dent</td>
</tr>
</tbody>
</table>

Presidents’ Research Scholars

Through generous funding from President James T. Willerson, The University of Texas Health Science Center at Houston, and President John Mendelsohn, The University of Texas M. D. Anderson Cancer Center, recognition is given to advanced GSBS students who have demonstrated excellence in research. The applications are reviewed by a committee consisting of past, present and future presidents of the Graduate Faculty, including Dr. Gary Rosenfeld, Dr. Raymond Meyn, and Dr. Magnus Hook. This year’s Presidents’ Research Scholars each received a cash award of $5,000 and are shown here in left to right:

<table>
<thead>
<tr>
<th>Student</th>
<th>Advisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jae-II Park</td>
<td>Dr. Pierre McCrea</td>
</tr>
<tr>
<td>Lance Shaner</td>
<td>Dr. Kevin Morano</td>
</tr>
<tr>
<td>Brian Corbin</td>
<td>Dr. William Margolin</td>
</tr>
<tr>
<td>Hannah Wingate</td>
<td>Dr. Khandan Keyomarsi</td>
</tr>
</tbody>
</table>

Committee on the Status of Women

The Committee on the Status of Women provides a $200 Award for travel to a scientific research meeting. The GSBS recipient for 2005-2006 is:

<table>
<thead>
<tr>
<th>Student</th>
<th>Advisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joanna Koch</td>
<td>Dr. Guillermima Lozano</td>
</tr>
</tbody>
</table>

Minority Faculty Association Awards

<table>
<thead>
<tr>
<th>Award</th>
<th>Student</th>
<th>Advisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jones-Wharton Award (Cancer Research)</td>
<td>Jheri Dupart</td>
<td>Dr. Wei Zhang, Advisor</td>
</tr>
<tr>
<td>L. D. Mehta Memorial Award (Infectious Diseases Research)</td>
<td>Christopher Singh</td>
<td>Dr. Chinnaswamy Jagannath, Advisor</td>
</tr>
<tr>
<td>Minority Faculty Association Scholarship</td>
<td>Diana Medrano</td>
<td>Dr. Juan Fueyo-Margareto, Advisor</td>
</tr>
</tbody>
</table>
Dean Stancel presents Kay Onstead with yellow roses at the formal dedication of the new **Onstead Auditorium** in the George and Cynthia Mitchell Basic Sciences Research Building. Mrs. Onstead and her family’s significant gift provided for this wonderful space used by graduate students, The University of Texas M. D. Anderson faculty, guest speakers, The University of Texas Health Science Center activities and Baylor College of Medicine.
Faculty Appointments 2005-2006

NEW REGULAR MEMBERS

Lynne V. Abruzzo
Associate Professor
Hematopathology
M. D. Anderson Cancer Center
M.D., Ph.D., University of Chicago, 1986, 1984
Research interests: chronic lymphocytic leukemia (CLL); gene expression profiling; cancer cytogenetics

Brad A. Amendt
Associate Professor
Environmental and Genetic Medicine
Texas A&M University, Institute of Biosciences and Technology
Ph.D., University of Iowa, 1994
Research interests: gene expression mechanisms controlling embryonic development; protein interactions; molecular basis of genetic defects; tooth development; transcriptional regulation

Hesham M. Amin
Assistant Professor
Hematopathology
M. D. Anderson Cancer Center
M.D., Cairo University Faculty of Medicine, 1982
Research interests: signal transduction; apoptosis; cell cycle; cytokines; molecular targets

Oliver Bögler
Associate Professor
Neurosurgery
M. D. Anderson Cancer Center
Ph.D., Ludwig Institute for Cancer Research, 1991
Research interests: molecular and cellular biology of gliomas; signal transduction; adaptor proteins; receptor tyrosine kinase regulation; glial transformation; regulation of DNA methylation; response to chemotherapeutics; cancer genetics

Sangdun Choi
Assistant Professor
Neurobiology/Anatomy
UT Houston-Medical School
Ph.D., Texas A & M University, 1997
Research interests: signal transduction; Toll-like receptors; G protein coupled receptors; immunology; functional genomics; gene expression; RNA interference

Julie A. Ellerhorst
Assistant Professor
Experimental Therapeutics
M. D. Anderson Cancer Center
M.D., Baylor College of Medicine, 1984
Ph.D., UT Houston-GSBS, 1998
Research interests: autoimmunity as a means to control kidney cancer; the role of nitric oxide in melanoma biology; promotion of melanoma by metabolic hormones

Randa El-Zein
Assistant Professor
Epidemiology
M. D. Anderson Cancer Center
M.D., University of Alexandria, 1984
Ph.D., University of Texas Medical Branch, 1997
Research interests: gene-environment interaction; molecular epidemiology; genetic instability; DNA damage; molecular cytogenetics; HPRT gene mutation assay; DNA repair; susceptibility genotypes

Gregory N. Fuller
Professor
Pathology
M. D. Anderson Cancer Center
Ph.D., UT Houston-GSBS, 1983
M.D., Baylor College of Medicine, 1987
Research interests: brain tumor; molecular neuropathology; tissue microarray; genomics

REAPPOINTMENT WITH HIGHEST COMMENDATION

Dr. Michael Blackburn
Dr. Gary Gallick
Dr. Randy Johnson
Dr. Mien-Chie Hung
Dr. Bradley McIntyre
Dr. Steven Norris
Dr. Henry Strobel

REAPPOINTMENT WITH COMMENDATION

Dr. Michelle Barton
Dr. Eric Boerwinkle
Dr. Gilbert Cote
Dr. Peter Davies
Dr. Pramod Dash
Dr. William Dowhan
Dr. Elizabeth Grimm
Dr. William Mattox
Dr. Raymond Meyn, Jr
Dr. Dianna Milewicz
Dr. Janet Price
Dr. Ellen Richie
Dr. Stephen Ullrich
Dr. Edgar Walters
Dr. Jack Waymire
Michael J. Galko  
Assistant Professor  
Biochemistry/Molecular Biology  
M. D. Anderson Cancer Center  
Ph.D., University of California-San Francisco, 1999  
Research interests: molecular genetics of tissue repair; *Drosophila* genetics; cell migration; cell signaling; signal transduction

Michel Gilliet  
Assistant Professor  
Immunology and Melanoma Medical Oncology  
M. D. Anderson Cancer Center  
M.D., University of Zurich, 1995  
Research interests: DC-vaccination for cancer; plasmacytoid dendritic cells (PDC) in immunity; PDC in autoimmunity and cancer

Thomas Guerrero  
Assistant Professor  
Radiation Oncology  
M. D. Anderson Cancer Center  
M.D., University of California-Los Angeles, 1997, 1994  
Research interests: radiation oncology; image registration; radiation physics; pulmonary function

Dennis P.M. Hughes  
Assistant Professor  
Pediatrics - Research  
M. D. Anderson Cancer Center  
Ph.D., Yale University, 1995  
M.D., Yale University Medical School, 1996  
Research interests: cell signaling; small molecule inhibitors; ERBB family members (EGFR, Her-2, Her-4, etc.); nuclear trafficking of receptors; osteosarcoma; Ewing Sarcoma; clinical monitoring

Lin Ji  
Associate Professor  
Thoracic and Cardiovascular Surgery  
M. D. Anderson Cancer Center  
Ph.D., University of Nebraska-Lincoln, 1993  

Faye M. Johnson  
Assistant Professor  
Thoracic/Head and Neck Medical Oncology  
M. D. Anderson Cancer Center  
Ph.D., University of Nebraska-Lincoln, 1993  

Larry W. Kwak  
Professor and Chair  
Lymphoma/Myeloma  
M. D. Anderson Cancer Center  
M.D., Northwestern University Medical School, 1982  
Ph.D., Northwestern University Graduate School, 1984  
Research interests: tumor immunology; cancer vaccines; adoptive T-cell therapy; lymphoma and myeloma

Krishna V. Komanduri  
Assistant Professor  
Blood and Marrow Transplantation  
M. D. Anderson Cancer Center  
M.D., University of Minnesota Medical School, 1991  
Research interests: human T cell immunology; thymopoiesis; regulatory T cell biology; immunity to human herpesviruses; adoptive cellular therapy

Shoudan Liang  
Professor  
Biostatistics/Applied Mathematics  
M. D. Anderson Cancer Center  
Ph.D., The University of Chicago, 1986  
Research interests: DNA sequences analysis; protein-binding DNA motif; microarrays probes design; mathematical modeling of immune systems; cancer vaccine; histo-compatibility antigens

Craig D. Logsdon  
Professor  
Cancer Biology  
M. D. Anderson Cancer Center  
Ph.D., University of California-Berkeley, 1981  
Research interests: physiology; pancreas; cell biology

Karen H. Lu  
Associate Professor  
Gynecologic Oncology  
M. D. Anderson Cancer Center  
M.D., Yale University School of Medicine, 1991  
Research interests: endometrial carcinogenesis; clinical cancer genetics

Anshu B. Mathur  
Assistant Professor  
Plastic and Reconstructive Surgery  
M. D. Anderson Cancer Center  
Ph.D., Duke University, 2001  
Research interests: cell and tissue engineering; nanotechnologies; tissue regeneration; biomaterials; atomic force microscopy (AFM); cell nanomechanics; total internal reflection fluorescence microscopy (TIRFM) and imaging of cell adhesions; biologically-derived polymers in medicine

Joseph H. McCarty  
Assistant Professor  
Cancer Biology  
M. D. Anderson Cancer Center  
Ph.D., University of California, Santa Barbara, 1998  
Research interests: cerebrovascular disease; angiogenesis; cell adhesion and signaling; blood-brain barrier; brain cancer and metastasis

Hui-Lin Pan  
Professor  
Anesthesiology/Pain Medicine  
M. D. Anderson Cancer Center  
M.D., Qingdao Medical College, 1982  
Ph.D., Tongji Medical University, 1991  
Research interests: mechanisms of chronic pain; regulation of ion channels in sensory neurons and synaptic transmission in the spinal cord and brain; hypothalamic control of sympathetic nervous system

Georgios Z. Rassidakis  
Assistant Professor  
Hematopathology  
M. D. Anderson Cancer Center  
M.D., University of Patras, 1992  
Ph.D., University of Athens, 2003  
Research interests: mechanisms of lymphomagenesis; signal transduction pathways; apoptosis; cell cycle; gene therapy targeting; biology and prognosis of Hodgkin and non-Hodgkin lymphomas

Kevin D. Ridge  
Associate Professor  
Center for Membrane Biology  
Department of Biochemistry and Molecular Biology  
UT-Houston Medical School  
Ph.D., University of Pittsburgh, 1989  
Research interests: visual phototransduction; mechanisms of HIV-1 infection; G-protein coupled receptors; heterotrimeric G-proteins; high-resolution NMR of activated GPCR/G-protein complexes

Sabrina M. Ronen  
Associate Professor  
Experimental Diagnostic Imaging  
M. D. Anderson Cancer Center  
Ph.D., The Weizmann Institute of Science, 1991
Research interests: magnetic resonance spectroscopy (MRS); magnetic resonance imaging (MRI); molecular imaging; noninvasive detection of oncogenic transformation; noninvasive detection of response to targeted therapies

Maria A. Schumacher
Assistant Professor
Biochemistry/Molecular Biology
M. D. Anderson Cancer Center
Ph.D., Oregon Health Sciences University, 1995
Research interests: structural biology; crystallography; DNA partition/segregation; transcription regulation; nucleic acid-binding proteins

Charles F. Streckfus
Professor
Diagnostic Sciences
D.D.S., University of Maryland School of Dental Surgery, 1978
Research interests: cancer; aging; salivary function

Xiaoping Sun
Assistant Professor
Laboratory Medicine
M. D. Anderson Cancer Center
M.D., Zhejiang Medical University, 1984
Ph.D., University of Nijmegen and Shanghai Institute of Cell Biology, 1994
Research interests: cancer biology; leukemogenesis; molecular target; oncogene; apoptosis; proliferation

Howard D. Thames, Jr.
Professor
Biostatistics & Applied Mathematics
M. D. Anderson Cancer Center
Ph.D., Rice University, 1970
Research interests: application of applied mathematics in cancer research; including problems involving the responses of cells and tissues to ionizing radiation; and the description of metastatic frequency

Stephen K. Tyring
Professor
Dermatology
UT-Houston Medical School
M.D., UT-Medical Branch, 1983
Ph.D., Texas Tech University, 1979
Research interests: viral oncology; viral immunology; human papillomaviruses (HPV); human herpesviruses (HHV); interactions between these viruses, HIV and local immunity; genetic resistance to oncogenic HPV

Johannes E. A. Wolff
Professor
Pediatries (Neuro-Oncology)
M. D. Anderson Cancer Center
M.D., University of Mainz, 1985
Research interests: preclinical models to test novel treatments; clinical trials to improve survival and quality of life of children and adolescents with poor prognostic diseases; pharmacokinetics; choroid plexus tumors

Kwong-Kwok Wong
Associate Professor
Gynecologic Oncology
M. D. Anderson Cancer Center
Ph.D., The Chinese University of Hong Kong, 1990
Research interests: gene expression; molecular genetics of low-grade tumors; biomarker discovery; bioinformatics; genomics; DNA methylation

Yang Xia
Assistant Professor
Biochemistry and Molecular Biology
UT-Houston Medical School
M.D., Hunan Medical University, 1992
Ph.D., UT-Houston GSBS, 1998
Research interests: molecular basis of cardiovascular diseases

Xingping Zhao
Assistant Professor
Ophthalmology and Visual Science
Ph.D., University of Georgia, 1992
Research interests: proton therapy dose calculation

Kit-Sing Au
Assistant Professor
Pediatric (Medical Genetics)
M. D. Anderson Cancer Center
Ph.D., University of Arizona, 1990
Research interests: molecular basis of cardiovascular diseases

Kirstin F. Barnhart
Assistant Professor
Veterinary Sciences
M. D. Anderson Cancer Center
D.V. M., Texas A&M University, 1993
Ph.D., Texas A&M University, 2004
Research interests: animal models of human disease; cancer biology; organotypic keratinocyte culture; comparative pathology; dermatopathology; cytopathology

M. Gabriela Bowden
Research Assistant Professor
Center for Extracellular Matrix Biology
M. D. Anderson Cancer Center
Ph.D., UT-Houston GSBS, 1999
Research interests: treatment planning QA and commissioning; brachytherapy; Monte Carlo methods; deterministic radiation transport; radiation dosimetry

Carlos Gonzalez Lepera
Adjunct Professor
Radiation Physics
M. D. Anderson Cancer Center
Ph.D., Instituto Balseiro and Centro Atomico Bariloche (Argentina), 1983
Research interests: production of radioisotopes; targetry; radiochemistry; production of radiopharmaceuticals; radiation detectors; design of automated equipment for radiopharmaceutical production

Khader Hasan
Assistant Professor
Diagnostic & Interventional Imaging
UT-Houston Medical School
Ph.D., University of Utah, 2000
Research interests: quantitative MRI methods; diffusion tensor imaging; computational MRI; clinical applications

Richard L. Holmes
Associate Professor
Diagnostic Imaging Physics
M. D. Anderson Cancer Center
Ph.D., La Salle University, 2002
Research interests: picture archival and communication systems (PACS); medical digital imaging; diagnostic imaging quality assurance/quality control; information technology; medical informatics; PACS workstation ergonomics; radiation safety
Research interests: human genetics; corneal development; corneal diseases; zebrafish and mouse models; transgenics
Vahn A. Lewis
Associate Professor
Neurobiology and Anatomy
UT-Houston Medical School
Pharm.D., University of California, 1971
Ph.D., University of Iowa, 1976
Research interests: mechanisms of pain and analgesia; neurophysiology; functional neuroanatomy

Srikanth Mahankali
Assistant Professor
Imaging Physics
M. D. Anderson Cancer Center
M.D., Osmania Medical College, 1987
D.N.B., The Nizam’s Institute of Medical Sciences, 1996
Research interests: functional magnetic resonance imaging (fMRI); central nervous system; neuro-oncology

Maurie Markman
Professor
Vice President for Clinical Research
Clinical Research
M. D. Anderson Cancer Center
M.D., New York University School of Medicine, 1974
Research interests: ovarian cancer; new drug development in the management of gynecological malignancies

Dragan Mirkovic
Assistant Professor
Radiation Physics
M. D. Anderson Cancer Center
Ph.D., State University of New York at Stony Brook, 1993
Research interests: numerical methods for radiation transport; numerical methods for image registration; computational physics; medical physics computational infrastructure

Shahla Nader-Eftekhari
Professor
Internal Medicine (Endocrinology) and Obstetrics, Gynecology & Reproductive Sciences
UT-Houston Medical School
M.D., University of Leeds, 1970
Research interests: endocrinology/reproductive endocrinology

Joe C. Ontiveros
Assistant Clinical Professor
UT-Houston Dental Branch
Restorative Dentistry and Biomaterials
D.D.S., UT-San Antonio Dental School, 1997
Research interests: oral biomaterials; mechanical properties; color; adhesion; curing lights; bleaching; esthetic dentistry

Rade D. Paravina
Faculty Associate
Restorative Dentistry and Biomaterials
UT-Houston Dental Branch
D.D.S., University of Niš, Serbia, 1988
Ph.D., University of Niš, Serbia, 2000

Research interests: optical properties of dental materials; color; translucency; gloss; visual color matching; esthetic dentistry; prosthodontics
Joyce E. Rundhaug
Assistant Professor
Science Park/Research Division
M. D. Anderson Cancer Center
Ph.D., University of Hawaii at Manoa, 1989
Research interests: mouse skin carcinogenesis; malignant progression; metastasis; matrix metalloproteinases; lipoxygenases

Kishore Shetty
Associate Professor
Restorative Dentistry
Director, Medically Complex Patient Clinic
UT-H Dental Branch
D.D.S., University of Bombay, 1994
Research interests: oral oncology; oral medicine; interaction of oral and systemic diseases; salivary physiology; dental implants

Melissa B. Strassberg
Clinical Instructor
Obstetrics, Gynecology & Reproductive Sciences
UT-Houston Medical School
M.S., University of Pittsburgh, Graduate School of Public Health, 2002
Research interests: genetic counseling; prenatal

Ramesh C. Tailor
Assistant Professor
Radiation Physics Outreach
M. D. Anderson Cancer Center
Ph.D., Ohio University, 1983
Research interests: medical physics, quality assurance, credentialing, brachytherapy

Raymond L. Warner
Associate Professor
Neurobiology and Anatomy
UT-Houston Medical School
Ph.D., University of California, 1970
Research interests: gross anatomy

Michael J. Wassler
Senior Research Scientist
Center for Cardiovascular Biology/Atherosclerosis Research
UT Houston-Medical School
Ph.D., Uppsala University, 1992
Research interests: stem cell differentiation; ubiquitinylation; early development; cardiomyogenesis

Michael Yafi
Assistant Professor
Pediatrics
UT-Houston Medical School
M.D., University of Damascus, 1992
Research interests: growth hormone; pediatric endocrinology

X. Ronald Zhu
Associate Professor
Radiation Physics
M. D. Anderson Cancer Center
Ph.D., University of Utah, 1989
Research interests: clinical applications of imaging guided therapy (cone beam CT and on-board imager); clinical implementation of proton therapy; improving IMRT delivery efficiency; IMRT dosimetry

In memory...

Laurence D. Etkin, Ph.D. 1945-2006
Originally from Philadelphia, Pennsylvania, Dr. Etkin became a Faculty member of GSBS in 1984 and was a full professor in the Department of Molecular Genetics at The University of Texas M. D. Anderson Cancer Center since 1992. We are deeply saddened by the untimely death of this fine scholar, teacher and mentor.

Marvin Magnus Romsdahl, M.D., Ph.D. 1930-2006
A long time resident of Houston, Texas, Dr. Romsdahl was a well-known cancer surgeon and educator for more than 30 years at The University of Texas M. D. Anderson Cancer Center in Houston and GSBS Alumnus and Faculty member since 1967. Dr. Romsdahl combined his surgery skills and strong interest in laboratory research with a zeal for teaching students pursuing advanced degrees.
Peter Seferian, Ph.D. (1991) **In-Reach Mentor**

I am currently working in intellectual property as a patent agent and liaison [at Lexicon Genetics]. A patent agent is generally a scientist or engineer who now does patent prosecution. Patent prosecution is the process of obtaining patent protection. After years at the bench, I learned that if you don't own an idea, you can't raise money on it, and without money your idea is dead in the water. Liaison means that I spend a good deal of time with the scientists [who have the original idea] as a scientist in scientific discussions and meetings, doing data analysis and teaching the dark art of classic lab techniques.

I think a quote by Martina Horner, President of Radcliffe College, is as good as any. She once said, _What is important is to keep learning, to enjoy challenge, and to tolerate ambiguity. In the end there are no certain answers._ But I would add _plow around it._

In graduate school we learn to think and to learn on our own. These are powerful tools for any field and for everyday life—use them early and often and don’t let ambiguity or challenges stop you, enjoy them for the mental challenges they are. But if you found a big rock in the middle of your field that you couldn’t remove, would you give up plowing or plow around it? There is a way around, over or under most challenges—find it.

---


Paul Cizdziel, Ph.D. (1987) retired from Invitrogen and now senior scientist with Riken Genome Science Center in Yokohama, Japan.

Matt Lewin, M.D., Ph.D. (1999) quoted in the _NY Times_ about his fossil hunting expedition in the Gobi Desert. Splits his time between emergency medicine departments at Stanford University and University of California at San Francisco—_Scoop 9/30/05_


Patricia Fults Maness (Tidwell), Ph.D. (1972) going strong as professor in the department of biochemistry and biophysics at The University of North Carolina.


Yoli Sanchez, Ph.D. (1993) moves to Dartmouth Medical School as Associate Professor.

Aurora Seminara, Ph.D. (2005) is assistant medical director at Health Science Communications and Health Science Center for Continuing Medical Education in NYC.

Jay Vivian, Ph.D. (1999) and Carolyn Foster, M.S. (1998) recently added a baby girl to their family.

Cathy Wicklund, M.S. (1993) new post at Northwestern University, and president-elect of the National Society of Genetic Counselors.
Alumni Reunion

Linda Bachinski
Donna Badgwell
Sul Bobb
Yanis Boumber
Molly Bray
Joan Breuer-McHam
Ivone Bruno
Joya Chandra
Melinda Chi
Paul Chiao
Nathan Childress
Jennifer Fernandez
Myriam Fornage
Lovely Fotedar
Hui Gao
Thomas Gegeny
Thomas Goka
Joe Grant
Diane Hammond
James Jabbur
Edward Jackson
Catherine Jett
Avinash Kalsotra
Sayee Anakk
Ann Killary
Deana Leonard
Michael Leslie
Xin Lin
Karln Loftin
Steven Lott
Joy Marshall
Marya McCarty
Nael McCarty
Shirlette Milton
Bay Van Nguyen
Karen Niederreither
Bhudev PalIWal
Madhu Purwals
Yongsheen Ren
Maribelis Ruiz
Eleni Maniatis Salicru
Alex Sandoval
JiJin Shen
Cynthia Skinner-Debord
James Smith
Carmen Tellez
Ben Thomas
Chad Wayne
Patricia Wong
Kendra Woods
Jianhua Yang
Bengt Yang
Donghoun Yoon

In memoriam:
Marvin Romstadt
Sue Keeling Malloy
Howdy Y’all,

Just finished — rodeo season in Houston, and what better than to round up some of the latest developments at the GSBS. Before I get too far, I do want to mention the wonderful Alumni Reunion hosted last November, complete with music, in the George and Cynthia Mitchell Basic Sciences Research Building, new home for the GSBS. (Find your reunion photos at http://gsbs.uth.tmc.edu/alumni/reunions.html). We honored Bhudatt Paliwal, Ph.D. (1973) as the GSBS Distinguished Alumnus for 2005-2006. Dr. Paliwal brought us an extraordinary tale of his journey from a small village in India to a position of note in the world of medical physics radiation dosimetry and imaging.

In January we said farewell to immediate past-president Steven Lott, Ph.D. (1997), who has gone on to head a brand new lab at the University of Florida Health Science Center-Jacksonville. Steve continues his loyalty to GSBS with willingness to help us host the first-ever locality-based alumni gathering, this year in the Palo Alto area—think fine California dining. More about this later—watch for a Save-the-Date postcard for the evening of May 20, 2006. Thanks to you Steve, and thanks to our California on-site partners, Patty Wong, Ph.D. (2001) and David Voehringer (1998) who are helping us to organize the evening. Thank you, Steve, for your many efforts as president and for your vision of a cross-country network that will support the GSBS in many ways, and grow collegial, professional, and personal connections.

Speaking of support, it was good to have Kendra Woods, Ph.D. (1995) be elected vice president/treasurer during the Reunion—she’s got her work cut out for her. And, speaking of the future, I would like to see a way that the remarkable resource of GSBS Alumni be utilized, in some fashion, to inform and assist current GSBS students with their career potential—perhaps through a career day. Stay tuned, and please consider in the meantime, signing on to be an In-Reach mentor. I welcome your thoughts via jchandra@mdanderson.org.

Joya Chandra, Ph.D. (1998)
President, 2005-2006
GSBS Alumni Association

The University of Texas
Graduate School of Biomedical Sciences at Houston
PO Box 20334
Houston, Texas 77225-0334

Address Service Requested