GSBS NEWS

Summer 2009

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at Houston

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Commencement 2009

DISTINGUISHED ALUMNUS

John B. Simpson, Ph.D. (1971/Hampton), **M.D.** will be the 14th Distinguished Alumnus and noted at the Alumni Reunion taking place **October 16, 2009.**

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October 28, 2008

The University of Texas
Graduate School of Biomedical Sciences
at Houston

6767 Bertner, Suite 3.8344 Houston, TX 77030 p.713.500.9850 f.713.500.9877

COMING SOON...

The Graduate School of Biomedical Sciences at Houston is a joint venture of
The University of Texas Health Science Center and The University of Texas MD Anderson Cancer Center

The University of Texas Health Science Center at Houston

The University of Texas MD Anderson Cancer Center

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Two Specialized Masters Programs—

Evolution, Progress, and Philanthropy

Genetic Counseling Celebrates 20th Anniversary

A celebration will be held October 3, 2009 marking the 20th anniversary of the start of the UT Graduate School of Biomedical Sciences Genetic Counseling Program. Founded by Jacqueline T. Hecht, Ph.D., and medical director Hope Northrup, M.D., (both are GSBS faculty at UT-Medical School)—the program is rich in its collaborative structure with faculty at several Health Science Center Schools, M. D. Anderson Cancer Center and Baylor College of Medicine. The initial graduating class in 1991 included a single person. Today the Program, lead by Director, Claire Singletary, MS, graduates 6 annually; it is the only accredited program of its kind in the state of Texas and only one of 31 in the country. Its dedicated purpose is to train health care professionals who provide supportive and educational counseling to families with genetic conditions, birth defects, and genetic predishpositions such as Achondroplasia, Down syndrome, cleft lip and palate, spina bifida, and hereditary breast and ovarian cancer.

Genetic Counseling graduate students do not receive tuition or stipend support because it is a terminal Masters degree program; however, winning a competitive scholarship provides a modest sum and triggers in-state rather than out-of-state tuition for the student (about four times as much). Right now there are only two endowments to help meet the needs of the twelve genetic counseling students: the James T. and Nancy Beamer Willerson Endowed Scholarship and the Barbara L. Kennedy Endowed Memorial Scholarship. We are especially grateful for their foresight and are working for additional support. Scholarship support can make the difference in bringing a nationally recruited student to UT. To that end, the GC Program is directing the receipts of the 20th Anniversary gala and silent auction fundraising benefit at the Hotel Icon on October 3rd to grow permanent scholarship support. **To attend the evening, donate to the event, or find out more information, please call Program Director, Ms. Claire Singletary at 713.500.5760.**

Medical Physics, One of Top-Ranked in the US

Texas was the first state to license medical physics as a profession, and it combines principles of physics and engineering with those of biology and medicine to affect better diagnosis and treatment of human disease while ensuring the safety of the public, patients and those caring for them. Founded in 1963, the Specialized Masters in Medical Physics is designed to provide didactic, research, and clinical training in medical physics that will prepare the graduate for a professional career in a clinical environment, a clinical support research laboratory, or a clinical support industry. The Program also prepares the graduate for entry into a medical physics residency program. This Program has been continuously accredited by the Commission on Accreditation of Medical Physics Education Programs (CAMPEP) since 1989 and is comprehensively reviewed every five years, according to Ed Jackson, Ph.D., Program Director.

Two GSBS scholarships help support the Medical Physics Program: The Michael Farley Moyers Endowed Student Travel Fund established by a GSBS alumnus in the field. The Aaron M. Blanchard Award was created to remember and honor Aaron, a second year student in medical physics who died in 1998 after a long battle with brain cancer. Thank you to these families for their continued support. Call Linda Carter at 713.500.9865 for information or to make a gift.

Front Cover

The kick-off date for the new GSBS website is October 2009. We look forward to connecting with faculty, students, and community friends, as well as future students. Members of the GSBS webteam who helped make this a reality are Patricia Cruz Bruesch, Cheryl Spitzenberger, Brenda Gaughan, Dr. Victoria Knutson, Laura Sanders, Eric Solberg, Michael Valladolid, Karen Weinberg, and Ty Williams. The beautiful template was designed by Eric Rasch of the UT Medical School Office of Communications.

Dean's Notes

The Write Stuff

Every five years or so GSBS conducts a survey of our 2,000 alumni asking a variety of questions about their experience at our school, their current positions, and how well we prepared them for their careers. We just completed our most recent survey, and as usual our graduates had many very positive things to say about their experience here as well as suggestions for improvement. The overall response was extremely positive, and I'll share specifics with you in the near future after we complete a detailed analysis.

However, even upon an initial, casual inspection of the raw data I was struck by the alumni response to the following question.

"Based upon your own experience since leaving GSBS, how important do you believe training in the following areas should be for GSBS students?"

There was virtually unanimous agreement that training in verbal communication (99%) and writing (98%) skills are important or very important based upon our alumni's own career experiences. Outside of the need for better parking, I have never seen this degree of concurrence during my 37 years as a faculty member.

In other questions a large majority of our graduates felt that their training in scientific communication skills was either effective or very effective, i.e., they were not dissatisfied with this aspect of GSBS. Rather, I believe their strong message - from the perspective of their real world careers - is that we should not just continue, but actively seek to enhance, the training we provide in communication skills.

We already offer formal courses, seminars, and career development activities to teach communication skills, and we should continue these valuable activities and try to improve them. However, I am a firm believer that to be maximally effective communication skills must also be taught repetitively in the context of the students' learning throughout their graduate education. In all our educational activities we should utilize every opportunity to help students develop their communication skills, e.g., in course-work and exams, lab writing assignments, oral presentations, and manuscript preparation. I also urge our students to understand the importance of this aspect of their training and to actively seek constructive criticisms for improvement even though these may seem humbling at times. GSBS alums in the real world of science, education, research, and public service are stressing the importance of these communication skills. When we hear this degree of unanimity in a survey of our own alumni we can't afford not to heed the message.

George

Front (from left): Kedryn Baskin; Christina Papke, Cameron Jeter, Proleta Datta; Jennifer Dale and Angela Bhalla.
Back: George M. Stancel, Ph.D.; Thomas J. Goka, Ph.D.; Cynthia Johnson, Ph.D.; Ms. Ruth Sorelle and Ms. Karen K. Kaplan

Scientific Writing Contest

For doctoral students in the Graduate School, writing ability is especially critical. In fact, it will continue to be important throughout their careers as they prepare the grants, reports, and papers on which the success of their professional work—and their funding—depend. To encourage students to hone their writing skills, this spring GSBS Dean George Stancel launched a competition to see who among graduate students could write best about their work both scientifically and for the general public.

On June 25 Dean Stancel, Assistant Dean Thomas Goka, and Linda Carter, Director, Public Affairs and Development, hosted a luncheon to honor the winners and thank the judges and organizers Karen Kaplan, Director of Communications, and Cynthia Johnson, Ph.D., Communications Manager for the UT Health Science Center at Houston and Ms. Ruth Sorelle, Chief Science Editor at Baylor College of Medicine.

For more information, please see page 19.

Commencement 2009 Address

MICHAEL J. ZIGMOND, PH.D.
Professor of Neurology
University of Pittsburgh

"Go Confidently in the Direction of Your Dreams"

For most of the past 40 years, I have focused on two issues. First, I have asked, "What is the basis of the progressive loss of neurons that underlies Parkinson's disease and what can be done about it?" Second, I have sought to understand and then to convey the important skills needed to survive as a professional with a doctoral degree. Today I will focus on the second issue. In taking on this task, I am ever mindful of a cartoon by Sidney Harris of a commencement speaker who said, "And as you go out into the world, I predict that you will gradually and imperceptibility forget all that you ever learned at this university." Sidney Harris was wrong, which is unusual for him. He was wrong, because he, like many others, was focusing on the specific content that you have been learning rather than on the overarching lessons. I wish today to list six of these lessons—lessons you should have learned, or must soon learn, if you are going to achieve a commendable level of success.

First: *Select your path wisely.*

As you now leave the research group in which you have completed your educational program—and later when you complete additional doctoral or postdoctoral training, should you should choose that route—you will have paid your debt to your advisors. They have helped train you; you have provided them with ideas and a highly skilled workforce. You are even. Now *you* must select the path that *you* want. This may or may not be what either you or your advisors had in mind when you began your training; it may not even be what your advisors still hope for you. But you are wiser now. You know more about what you like to do, what you are good at, and what is available.

And so you must ask, "What do *I* want to do?" Perhaps you want to be a faculty member at a research-intensive university and institute such as this one. Fine. But consider, also, teaching in a 4-year college, working in private industry, writing, editing, reviewing, policy development…or one of the dozens of other careers for which your training has provided an enviable base. Think broadly. And do not let *anyone* tell you that you are letting them down, because you are not making *their* choice.All too soon you will hear, "What is your 'business' address?" or "Do you have any time for a 'life'?" or "Thank goodness it is Friday; you have a nice weekend." Seek a career in which such phrases simply make no sense, a career in which the proper model is not business, however, admirable such a path would be, but art and poetry. Then aim to blur the boundaries that others make between career and "life." I believe that only then will you do your best, truly feel successful, and be happy.

Yes, certainly, take regular breaks, have a family or a garden or—perhaps—even both. But I side with James Baldwin who wrote, "Fires can't be made with dead embers, nor can enthusiasm be stirred by spiritless men. Enthusiasm in our daily work lightens effort and turns… labor into pleasant tasks." And with Confucius who advised, "Choose a job you love, and you will never have to work a day in your life."

Second: *Seek mentors.*

Mentor is a very special word, one to be treated with respect. Mentor was a Greek god, a friend of Ulysses, and chosen by him to guide his son Telemachus through life. This surely would have included overseeing experiments and editing manuscripts, and other tasks of an advisor. I do not for a moment wish to detract from the importance of such tasks, but there was much more on Mentor's list, for he was to play a very personal and long-lasting role in helping Telemachus achieve success. People with whom you can develop such a personal and long-lasting relationship are among the most precious components of your tool box for success. Seek them, nurture them. At first, they will tend to be more senior than you but over time you will find mentors who are also your peers or even junior to you.

I have had, and continue to have, a great many mentors, including these three:

- **Robert Moore**, whose University of Chicago hood I wear. He was my teacher at that institution when I was a graduate student and has provided me with mentoring in good times and bad ever since. And at the age of 77, he remains an active scientist, proving that chronological age is of little value in predicting productivity.
- **Lee Limbird**, the first person in her family who ever went to college and whose accomplishments include graduating Phi Beta Kappa from a prestigious college, completing a PhD in just 3-years, being co-editor of a prestigious textbook in her field, service as Department Chair and then as Vice Chancellor for Research at a major university, *and* campaigning for her local school board (the only task in which she was unsuccessful!).
- **Kenneth Olden**, the son of a Tennessee share cropper, was educated in all-black schools (including a one-room elementary schoolhouse) until completing his college degree, white-serving Tennessee schools being unavailable

to him at the time. Ken went on to become a productive cancer biologist, the chair of a department of oncology, and the director of one of the 18 National Institutes of Health, the only member of a minority group to have ever done so. Mentors listen, mentors advise, mentors inspire. Find yours.

Third: Having sought mentors, *trust yourself.*

The list of those responsible for great accomplishments is replete with the names of individuals who ignored bad advice, particularly advice from people who said that they were incapable of doing anything worthwhile:

- **August Wilson**, one of the greatest playwrights of the 20th Century, was expelled from a high school in Pittsburgh, because it was assumed that any Black student who wrote so well must have plagiarized. See his plays.
- **Marie Curie** overcame prejudice against Eastern Europeans and against women, as well as depression and the death of her husband, to win two Nobel Prizes. Read her recent biography, *Obsessive Genius*.
- **Christy Brown** was born with cerebral palsy and became a talented artist and writer, the author of "My Left Foot." Watch the movie based on that book.

Yes, seek advice but then *you* must make, and take ownership of, your own decisions.

Fourth: *Do not fear stress or even failure.*

The last several years have been hard, as they should have been. Yet, all too soon you will look back at this time as the "good old days." It can be cold out there, there will be great stress and even failures, and there are likely to be times when you will be very scared. Turn these experiences into your friends; let the stress strengthen you and the failure instruct you. Here my interest in promoting your success merges with my research, for we have shown that a moderate level of stress serves to "precondition" cells so that they are more resilient when intense stress comes along. I firmly believe that this is true for people, too.

- **Hellen Keller**, no stranger to stress or failure said, "Character cannot be developed in ease and quiet. Only through experience of trial and suffering can the soul be strengthened, ambition inspired, and success achieved." And she said, "Life is either a daring adventure or it is nothing." Live a daring life.

Fifth: *Be responsible*.

Do not plagiarize, falsify, or fabricate; never misrepresent your data or your accomplishments. Always treat others with respect, whether they are more important or less accomplished than you are. But go way beyond that; be a responsible member of society. Study the accomplishments of such people as:

- **Arthur Galston**, a plant biologist who, learning that the Army had used his PhD thesis as the basis for the development of the defoliant Agent Orange, campaigned for years against its use in Vietnam and eventually prevailed.
- **Rachel Carlson**, who changed her focus from nature writing to environmental pollution when she realized what we were doing to our planet and sparked a movement with her book *Silent Spring*.

At the 2009 meeting of the Advancing Science, Serving Society (AAAS), Al Gore—no stranger to failure—addressed an audience of thousands and said: "Scientists can no longer in good conscience accept…[the] division between the work you do and the civilization in which you live." And be mindful of the words of the philosopher Abraham Heschel, "Indifference to evil is worse than evil itself… In a free society *some* are guilty but *all* are responsible." When I was a youngster, the cartoonist Walt Kelly created a character named Pogo. And in a cartoon strip about pollution, Pogo said, "We have met the enemy and he is us." Recently, this theme has been restated in the positive by our President, Barack Obama, "We are the ones we've been waiting for. We are the change that we seek."

Sixth and finally: Never, <u>ever</u> settle.

You have achieved a great deal, and with great effort—yours, teachers, family, partners, friends. Some of you may be the first to have graduated from high school; most are likely to be the first to obtain a Master's or Doctoral degree. You are proud, and should be. But you have only arrived at a way station along a much longer journey – a journey *upward*. In fact, so long as you wish to be creative, you must *never* feel that you have arrived at the top. It does not exist, not for you. As Goethe said, "Whatever you do, or dream you can, begin it. Boldness has genius and power and magic in it." And so I close with the words of Henry David Thoreau, "Go confidently in the direction of your dreams. Live the life you have imagined."

Congratulations and thank you.

Dr. Zigmond is an internationally recognized leader in the field of neuroscience, specializing in neurodegenerative disease, or Parkinson's disease. In addition to his interest in research, Dr. Zigmond has a passion for education, having worked as a professor and an administrator at research institutions and universities across the country and around the world. At present, Dr. Zigmond teaches a basic neuroscience course, a course on the neurobiology of disease, a lecture on neurodegenerative disease, and instruction in professional skills and research ethics.


The University of Texas
Health Science Center at Houston and M. D. Anderson Cancer Center
Graduate School of Biomedical Sciences


The University of Texas

Commencement Greetings from GSBS Faculty President

Guillermina Lozano, Ph.D.
Graduate Faculty President
2008-2009

Good morning. In preparation for this short message to you, the graduating class of 2009, I spent some time reflecting on what I have learned since I stood in your shoes 23 years ago and what advice to give you today.

First, this is just the beginning. You have just begun to learn; this degree is your license to learn. Consider yourself just finishing first grade. You have just acquired the tools to read; to think.

- You can read any scientific paper and critique it.
- You can ask any question and design an experiment to answer that question.
- You can interpret your data and reach your own conclusions.

Congratulations! Now in turn you must *use* those abilities to discover new things, to educate new students; to make the world a better place. Learn from *anyone* around you who knows more than you do. I have fond memories of a faculty member at Princeton University who came and sat in my chair and asked me about the function of promoters and enhancers. I was a lowly post doc. Never be afraid to ask a question. It is the ones that appear inconsequential that are thought provoking.

Second, follow your instincts and trust those instincts; they are always right. Go where you want to go. Take the path that interests you most, but do not always take the easy road. Challenge yourself; go where it is sometimes uncomfortable (interesting, but uncomfortable). If you don't, you will never reach your full potential.

- Never shy from the unknown. I am first generation American, and believe it or not, I started high school and wasn't sure it was a three or four year program. I started high school anyway.
- Know yourself; play to your strengths but work on your weaknesses.
- Do not be afraid to make a decision. Make that decision. If you make a mistake, admit it, learn from it, grow, and move forward. I quit the first graduate program I started. I finished the second program in record time: three years and two months.
- Stay positive. Life is full of ups and downs. Today's job market may not be the best but you are the best and the opportunities to excel, therefore, are enormous. You can make a difference.

Lastly, if you do not already know it, time flies. So celebrate your achievements and enjoy your family; life. Speeches at graduation ceremonies are usually long and onerous, so let me summarize three key concepts (as I often do after a lecture):

- This is just the beginning
- Push yourself
- Stop and enjoy life

I wish you the best in your career and in life.

McGovern Award for Outstanding Teaching: Mong-Hong Lee, Ph.D.

Mong-Hong Lee, Ph.D.

The McGovern Award for Outstanding Teaching recognizes a GSBS faculty member who has significantly contributed to the education and training of GSBS students. Each year, students nominate faculty by writing an essay addressing these criteria and including specific examples. Dr. Mong-Hong Lee is the McGovern Outstanding Teacher for the 2008-2009 school year. In addition to regularly teaching in five courses, he serves as advisor to eight Ph.D. students and has served on 64 student advisory/supervisory committees. He maintains an active role at GSBS in reviewing fellowship applications and has served as a poster contest judge.

When his students were asked to describe their mentor Dr. Lee, the overarching theme was dedication. They all spoke of "his patience, kindness and emphasis on independent thought." "He stimulates research in the lab by asking questions that open the door to new ideas and is enthusiastic about his research." Students admired "his wealth of knowledge and appreciate his willingness to always help them overcome any obstacles they face as graduate students."

Masters of Science Degree

Alma, Christopher **(Guillermina Lozano, Ph.D.)**
The disruption of MDM2 alternative splicing in mice

Amendola, Laura **(Banu Arun, M.D.)**
Comparison between BRCA1 and BRCA2 positive and negative women diagnosed with breast cancer at 35 years of age or less

Bellon, Maria **(David Followill, Ph.D.)**
Risk of secondary fatal malignancies from cyberknife radiosurgery

Bowen, Rebecca **(Susan Fischer, Ph.D.)**
The prostaglandine E2 EPA receptor is pro-tumorigenic in mouse skin

Carter, Rebecca **(Marianna Horz Raia, M.S.)**
Stress and well-being among parents of children with Potocki-Lupski Syndrome

Chowdhury, Shahreen **(Barbara Murray, M.D.)**
TRI locus sequence typing of enterococcus faecalis

Crawford, Adrianne **(Eugenie Kleinerman, M.D.)**
The effect of radiation therapy on vasculogenesis that supports tumor vessel expansion in Ewing's sarcoma

Deniger, Drew **(Laurence Cooper, M.D., Ph.D.)**
Interaction between flotillin-2 and the protease activated receptor-1 confers invasive potential in metastatic melanoma

Fowler, Jennifer **(Claire Singletary, M.S.)**
Self-perceptions of siblings and sibling relationships in families with Down Syndrome

Gonzalez, Gabriel **(Richard Behringer, Ph.D.)**
Function of dicer in female reproductive tract development

Gowin, Joshua **(Scott Lane, Ph.D.)**
Effect of alcohol and zomig on computer-based social interaction

Greene, Toni **(John Spudich, Ph.D.)**
ASR and ASRT: Bioinformatics, biosynthesis and photophysiology

Hammond, Shirley **(Angabin Matin, Ph.D.)**
Mapping modifiers of the Ter mutation

Homnick, Jaclyn **(Geoffrey Ibbott, Ph.D.)**
Evaluation of aluminum-oxide (Al203:C) optically stimulated luminescence (OSL) dosimeters as a potential alternative to thermoluminescent dosimeters (TLDs) for remote dosimetry services

Howard, Adrienne **(Joya Chandra, Ph.D.)**
The effects of increased Fyn kinase activity on growth and cell cycle in BCR/ABL-expressing cells

Huang, Maosheng **(Xifeng Wu, M.D., Ph.D.)**
Genetic variants in the nucleotide excision pathway as predictors of second primary tumors and recurrence of early stage head and neck cancer

Isaguirre, Rosanna **(Raymond Grill, Ph.D.)**
The perivascular macrophage and its association with a chronically dysfunctional blood spinal cord barrier after spinal cord injury

Jones, Jimmy **(Sam Beddar, Ph.D.)**
Study of the radiation damage to plastic scintillating fibers and optical fibers

Lopez-Storey, Michelle **(Ralph Arlinghaus, Ph.D.)**
Neutrophil gelatinase-associated lipocalin (NGAL) expression in non-small cell lung cancer (NSCLC)

McNamara, Katharine **(Yong-Jian Geng, M.D., Ph.D.)**
Expression of functional beta-adrenergic receptors during myogenic development of murine embryonic stem cells

Morgan, Travis **(Hope Northrup, M.D.)**
Live versus online environment and learning style effect on genetic knowledge acquisition and retention

Nick, Alpa **(Anil Sood, M.D.)**
The clinical and biological significance of p130cas in ovarian carcinoma

Pung, Nathan **(Firas Mourtada, Ph.D.)**
Validation of a conversion method of low dose rate to pulsed dose rate intracavity brachytherapy prescription for the treatment of cervical carcinoma

Purrington, Tiana **(Pramod Dash, Ph.D.)**
NMDA and AMPA receptors as potential targets for dopamine modulation in working memory

Masters of Science Degree

Raza, Alina **(Kwong-Kwok Wong, Ph.D.)**
Expression profiling of juvenile pilocytic astrocytomas

Richards, Kristen **(Dennis Hughes, M.D., Ph.D.)**
In vitro and in vivo response of neuroblastoma to ERBB inhibition

Rojas, Ricky **(Louvenia Carter-Dawson, Ph.D.)**
Reduction of RGC-5 cell viability by oxidative insult is attenuated by albumin

Schoberle, Taylor **(Gregory May, Ph.D.)**
Elucidating the MAP kinase signaling pathways in aspergillus nidulans

Soimo, Kipruto **(Rick Wetsel, Ph.D.)**
Generation of C4b binding protein (C4bBP) mice: evaluation of putative biological functions of C4bBP in vivo

Sowell, Ryan **(Kimberly Schluns, Ph.D.)**
The role of dendritic cell-restricted IL-15Ralpha expression in generation and maintenance of CD8 memory T cells

Spannuth, Whitney **(Anil Sood, M.D.)**
EphB4 expression in ovarian cancer and its biological and clinical significance

Vineyard, Marisa **(Karen Lu, M.D.)**
A study of association between low-grade serous ovarian cancer and hereditary breast and ovarian cancer based on family history

Vinogradskiy, Yevgeney **(Mary Martel, Ph.D.)**
Verification of 4D dose calculations

Wilson, Charmaine **(Ralf Krahe, Ph.D.)**
DNA mythylation as an epigenetic modifier in Li-Fraumeni Syndrome (LFS)

Yong, Raymund **(Frederick Lang, M.D.)**
Mesenchymal stem cells as delivery vehicles for delta-24-RGD in the treatment of malignant glioma

Zullo, John **(Karl Prado, Ph.D.)**
Validation of intensity modulated radiation therapy point dose calculation accuracy performed using a scatter integration based algorithm

Graduate Student Association Officers

Thank you!

2008-2009 Officers

Christopher Singh, Vice President
UTHSC, Pathology & Laboratory Medicine

Katelyn Weymouth, Secretary
UTHSC, Pediatrics

Brett Chiquet, President
UTHSC, Pediatrics

Welcome!

2009-2010 Officers

LaGina Nosavanh, Secretary
MDACC, Genetics

Jacob Verghese, President
UTHSC, Microbiology & Molecular Genetics

Nam Tonthat, Vice President
MDACC, Biochemistry & Molecular Biology

Find more about GSA meetings and events online at http://gsbs.uth.tmc.edu/current_gsa.htm

Doctor of Philosophy Degree

Abbott, April **(Jeffrey Actor, Ph.D.)**
11beta-hydroxysteroid dehydrogenases as regulators of pulmonary corticosterone during the granulomatous response to trehalose 6,6'-dimycolate

Adams, Melissa **(Phillip Carpenter, Ph.D.)**
Emerging roles for the double strand break repair protein 53BP1 in transcriptional regulation

Angkasekwinai, Pornpimon **(Chen Dong, Ph.D.)**
The role of IL-25 in allergic asthma

Armaiz Pena, Guillermo **(Anil Sood, M.D.)**
Src takes center stage in chronic stress-induced tumor growth

Barker, Katherine **(Howard Gutstein, M.D.)**
Why does low dose morphine augment fentanyl analgesia

Bhagat, Rina **(Varsha Gandhi, Ph.D.)**
The molecular consequences of an exonuclease deficient environment

Botkin, Douglas **(Steven Norris, Ph.D.)**
Identification and characterization of virulence determinants in the lyme disease spirochete borrelia burgdorferi

Brannan, Jennifer **(Faye Johnson, M.D., Ph.D.)**
EphA2 expression is regulated by EGFR and KRAS and promotes non-small cell lung cnacer progression

Carman, Aaron **(Michael Lorenz, Ph.D.)**
Acetate metabolism and control of environmental pH in Candida albicans and Saccharomyces cerevisiae

Chang, Hao **(Richard Behringer, Ph.D.)**
Beta-catenin in testicular development and tumorigenesis

Chavez, Violeta **(Danielle Garsin, Ph.D.)**
A dual oxidase generates a protective oxidative burst during infection In C. Elegans

Chen, Zhao **(Peng Huang, M.D., Ph.D.)**
A novel mechanism of 3-bromopyruvate-induced cell death through targeting hexokinase and ubiquitination

Christianson, Dawn **(Renata Pasqualini, Ph.D.)**
Targeting the lymphatic vasculature reveals a newly recognized surface protein

Ding, Tian **(Ralph Arlinghaus, Ph.D.)**
Involvement of lipocalin 2 in leukemia and breast cancer

Dujka, Melanie **(Chengming Zhu, Ph.D.)**
Role of ATM in the cell cycle control of V(D)J recombination

Fontenot, Jonas **(Wayne Newhauser, Ph.D.)**
Proton therapy versus intensity modulated x-ray therapy for treating prostate cancer: estimating second cancer risks

Fontenot, Shelly **(Anne Sereno, Ph.D.)**
The effects of antipsychotic medications in eye movements in schizophrenia

Frey, Jennifer **(Varsha Gandhi, Ph.D.)**
Multiple mechanisms of transcription inhibition by 8-amino-adenosine

Garcia-Prieto, Celia **(Peng Huang, M.D., Ph.D.)**
Anticancer activity of OSW-1: induction of apoptosis pathway in leukemia and autophagic death in pancreatic cancer through a calcium mediated mechanism

Gibney, Patrick **(Kevin Morano, Ph.D.)**
The eukaryotic cellular stress response: biochemical and genetic analyses in saccharomyces cerevisiae

Grabiner, Brian **(Xin Lin, Ph.D.)**
A study on CARMA3-mediated signaling pathways

Haddad, Yasmine **(David McConkey, Ph.D.)**
The transcriptional repressor deltaEF1 controls resistance to the EGFR inhibitor erlotinib in human HNSCC Cell Lines

Hatley, Jade **(Henry Strobel, Ph.D.)**
An integrated molecular biology and computational approach to CYPIA 1 expression in brain

Heard, Malcolm **(Geoffrey Ibbott, Ph.D.)**
Identification and characterization of an optimal three-dimensional dosimetry system for remote auditing by the RPC

Hickman, Mark **(Dale Hereld, M.D., Ph.D.)**
Ligand-stimulated internalization of a dictyostelium discoideum G protein-couples cAMP receptor

Hsu, Yen-Michael **(Xin Lin, Ph.D.)**
CARD9 functions as key regulator in monocyte homeostasis and pathogen clearance

Doctor of Philosophy Degree

Hu, Yumin **(Peng Huang, M.D., Ph.D.)**
Alterations in redox and energy metabolism in RAS-transformed cells: mechanisms and therapeutic implications

Jiang, Yingjun **(Lei Li, Ph.D.)**
The INO80 chromatin remodeling complex is involved in the nucleotide excision repair pathway

Kalmbach, Brian **(Michael Mauk, Ph.D.)**
Forebrain-cerebellum interactions revealed by trace eyelid conditioning

Kan Sutton, Celestine **(Robert Hunter, M.D., Ph.D.)**
Trehalose 6,6'-dimycolate promotes the survival of Mycobacterium tuberculosis in murine macrophages

Lafont, Andrea **(Dianna Milewicz, M.D., Ph.D.)**
Mechanotransduction pathway activation in familial thoracic aortic aneurysms and dissections

Lange, Sabine **(Karen Vasquez, Ph.D.)**
Involvement of HMGB1 in the repair of DNA adducts and the responses to DNA damage in mammalian cells

Lee, Tom **(Andreas Bergmann, Ph.D.)**
Analysis of the E1-ubiquitin activating enzyme, Uba1, in cell death and tissue growth in drosophila

Li, Qiang **(Keping Xie, M.D., Ph.D.)**
The critical role and regulation of transcription factor FoxM1 in gastric cancer development and progression

Lin, Jacki **(Ralph Arlinghaus, Ph.D.)**
Oncogenic activation of a-Abl tyrosine kinase in non-small cell lung cancer: FUS1 tumor suppressor down-regulates c-Abl tyrosine kinase

Liu, Yaobin **(Karen Vasquez, Ph.D.)**
Triplex-forming oligonucleotide directed psoralen interstrand crosslinks can induce targeted homologous recombination in mammalian cells

Mankiewicz, Kimberly **(Vasanthi Jayaraman, Ph.D.)**
Spectroscopic and functional investigations of the AMPA subtype of ionotropic glutamate receptors

Miller, Claudia **(Joya Chandra, Ph.D.)**
Caspase-8: mediating the effects of a novel proteasome inhibitor, NPI-0052

Mirnikjoo, Banafsheh **(Alan Schroit, Ph.D.)**
Membrane trafficking from lysosomes to the plasma membrane regulates phosphatidylserine externalization during apoptosis

Mogatadakala, Venkata **(Ponnada Narayana, Ph.D.)**
In vivo diffusion tensor imaging of rat spinal cord with a phased array coil at 7T

Pan, Feng **(Stephen Massey, Ph.D.)**
Functional architecture of mammalian horizontal cells

Park, Serk In **(Gary Gallick, Ph.D.)**
Role of Src family kinase activation in prostate cancer growth and lymph node metastasis

Planque, Stephanie **(Sudhir Paul, Ph.D.)**
Antibody chemical reactivity: beneficial and pathogenic roles

Prabhakaran, Sabitha **(Magnus Hook, Ph.D.)**
Characterization of the interactions between fibronectin and the borrelia burgdorferi lipoprotein, BBK32

Price, Michael **(Firas Mourtada, Ph.D.)**
The imaging and dosimetric capabilities of a CT/MR-suitable, anatomically adaptive, shielded intracavity brachytherapy applicator for the treatment of cervical cancer

Ramos, Gerardo **(Stephen Ullrich, Ph.D.)**
Molecular mechanism of jet fuel induced immune suppression

Reyes, Fredy **(Edgar Walters, Ph.D.)**
Depolarization-dependent synaptic potentiation and hyperexcitability induced by a Ca2+ - independent trigger

Roche, Cherie **(Chinnaswamy Jagannath, Ph.D.)**
Role of T cell response during vaccine immunity to tuberculosis

Rodriguez, Georgialina **(Robert Kirken, Ph.D.)**
cAMP regulates IL-2receptor signaling in human T lymphocytes

Ross, Cana **(Theresa Koehler, Ph.D.)**
The molecular basis for beta-lactamase gene expression in B. anthracis, B. cereus and B. thuringiensis

Doctor of Philosophy Degree

Sapparapu, Gopal **(Sudhir Paul, Ph.D.)**
Antigen-specific proteolytic antibodies

Shirley, Stephanie **(Robin Fuchs-Young, Ph.D.)**
Regulation of estrogen receptor alpha by the tumor suppressor p53 in breast cancer cells

Shu, Jingmin **(Jean Pierre Issa, M.D.)**
The effect of DNA methylation in carcinogenesis

Sinha, Meenal **(Rick Wetsel, Ph.D.)**
Evaluation of complement protein C5, anaphylatoxin C5a and its receptor in a mouse model of allergic lung disease

Srinivasan, Sankara Narayanan **(Renhao Li, Ph.D.)**
Contribution of transmembrane and cytoplasmic domains to membrane protein association

Taube, Joseph **(Michelle Barton, Ph.D.)**
Regulationof chromatin structure, SMAD binding and AFP expression by the forkhead box transcription factor: FOXA1

Tsai, Cheng-Yu **(William Plunkett, Ph.D.)**
The cellular and molecular responses to a novel nucleotide analogue, GS-9219

Tsai, Wen-Wei **(Michelle Barton, Ph.D.)**
Molecular mechanisms by which P53/LSD1 and Eralpha/TRIM24 complexes mediate gene regulation

Villares, Gabriel **(Menashe Bar-Eli, Ph.D.)**
Protease activated receptor-1 signaling plays a major role in melanoma growth and metastasis

Wang, Xiaofang **(Bing Su, Ph.D.)**
The role of MEKK3 in T cells homeostasis and IFNgamma production

Wang, Ying **(Henry Strobel, Ph.D.)**
Characterization of cytochrome P450 4F subfamily: response in traumatic brain injury and gene regulation

Wang, Yuan **(Andreas Bergmann, Ph.D.)**
EGFR and notch signaling pathways are regulated by distinct isoforms of Drosophila cbl

Wu, Jiaxin **(Ke-He Ruan, M.D., Ph.D.)**
Thromboxane A2 receptor intracellular domain structure and G alpha q C-terminal domain structure: their roles in receptor-G protein coupling

Yang, Jer-Yen **(Mien-Chie Hung, Ph.D.)**
A new fork for clinical application: targeting forkhead transcription factors in cancer therapy

Zhao, Jing **(Pramod Dash, Ph.D.)**
Protecting blood-brain barrier integrity following traumatic brain injury

Zhou, Xi **(Jian Kuang, Ph.D.)**
Regulation of alix by an autoinhibitory intramolecular interaction

Zhu, Jing **(Marsha Frazier, Ph.D.)**
CCND1 G870A polymorphism influences cancer risk - from epidemiological study to mechanism analysis

Zhu, Rui **(Angabin Matin, Ph.D.)**
Identification of germ cell tumor susceptibility genes from the 129.MOLF-CHR19 consomic mouse strain

GRADUATION CELEBRATION

{ Thursday, May 7, 2009 }

GSBS Faculty Membership Report

MEMBERS REAPPOINTED WITH COMMENDATION

Joseph Alcorn
Russell Broaddus
Geoffrey Ibbott
Lei Li
William Seifert
Dean Tang
Karen Vasquez

NEW REGULAR MEMBERS

James L. Abbruzzese
Professor and Chair, Gastrointestinal Medical Oncology
M. D. Anderson Cancer Center
M.D., Pritzker School of Medicine, 1978
Research interests: pancreatic cancer; translational research

Jan A. Burger
Assistant Professor, Leukemia
M. D. Anderson Cancer Center
M.D., Ph.D., Albert Ludwigs University School of Medicine, 1994
Research interests: tumor microenvironment; chemokine receptors; adhesion molecules; signaling pathways; B cell receptor signaling; development of new therapeutic strategies to overcome stromal cell-mediated drug resistance

Junjie Chen
Professor and Chair, Experimental Radiation Oncology
M. D. Anderson Cancer Center
Ph.D., University of Vermont, 1993
Research interests: cancer; genomic instability; DNA damage; DNA repair; aging; tumor suppressor

Scott E. Evans
Assistant Professor, Pulmonary Medicine
M. D. Anderson Cancer Center
M.D., UT San Antonio Medical School, 1999
Research interests: lung responses to microbial infections; innate immune roles of epithelial cells; antimicrobial peptides; therapeutic manipulation of inflammatory responses

David G. Gorenstein
Professor and Deputy Director
UT-H Institute for Molecular Medicine
Ph.D., Harvard University, 1969
Research interests: proteomics; structural biology; nanomedicine; structure-based drug design; NMR spectroscopy of proteins and nucleic acids; biophysics

Alemayehu A. Gorfe
Assistant Professor
Integrative Biology and Pharmacology
UT-H Medical School
Ph.D., University of Zurich, 2003
Research interests: multi-scale simulation and theoretical modeling of biomolecules; computer simulation of cell signaling and molecular transport; structure-based drug design; signaling complexes; membrane-protein interaction; structure and dynamics of interfaces; allostery in supra-molecular assemblies

Melvin E. Klegerman
Associate Professor
Internal Medicine – Cardiology
UT-H Medical School
Ph.D., Loyola University of Chicago, 1984
Research interests: atherosclerosis; molecular targeting; stem cells; ultrasound

Victor Krasnykh
Associate Professor,
Experimental Diagnostic Imaging
M. D. Anderson Cancer Center
Ph.D., Free University of Amsterdam, 1999
Research interests: gene therapy; viral vectors; adenovirus; tumor-targeting; imaging of gene expression

Angel W. Lee
Associate Professor
UT-H School of Health Information Sciences
M.D., Ph.D., Harvard University, 1984
Research interests: signal transduction in cell proliferation and differentiation; mouse models for monocyte and macrophage development; tumor associated macrophages; signal transduction in inflammation; systems biology

Dean A. Lee
Assistant Professor,
Pediatrics
M. D. Anderson Cancer Center
M.D., Loma Linda University, 1995
Ph.D., Loma Linda University, 1996
Research interests: adoptive immunotherapy of pediatric cancers; ex vivo expansion and gene-modification of NK cells; chimeric antigen receptors; platforms and devices for non-integrating gene transfer; immunosensitization of tumors to NK cell lysis using epigenetic drugs; VEGF receptor expression in T cell subsets; STAT3 signaling in NK cells

Yi-Ping Li
Associate Professor
Integrative Biology and Pharmacology
UT-H Medical School
Ph.D., Texas Tech University Health Science Center, 1990
Research interests: muscle stem cell; gene

Report includes April, June and August 2009 Membership Committee Meetings

expression; signal transduction; mechanotransduction; protein degradation; muscle regeneration

Emil Martin
Assistant Professor
UT-H Institute of Molecular Medicine
Ph.D., Institute of Molecular Genetics, Russian Academy of Science, 1993
Research interests: biochemistry and cell biology of nitric oxide/cGMP signaling

Samuel C. Mok
Professor, Gynecologic Oncology
M. D. Anderson Cancer Center
Ph.D., The Chinese University of Hong Kong, 1987
Research interests: ovarian cancer; tumor microenvironment; epithelial stromal interaction; prognostic markers; cancer genetics

David J. States
Professor and Director
Center for Systems Biology and Bioinformatics
UT-H SHIS
UT-H Institute of Molecular Medicine
M.D., Harvard Medical School, 1983
Ph.D., Harvard University, 1983
Research interests: bioinformatics

Eric C. Swindell
Assistant Professor, Pediatrics
UT-H Medical School
Ph.D., Baylor College of Medicine, 2001
Research interests: developmental biology; zebrafish; mouse; developmental neuroscience; developmental genetics

Hung Ton-That
Associate Professor
Microbiology & Molecular Genetics
UT-H Medical School
Ph.D., University of California at Los Angeles, 2000
Research interests: molecular assembly on the cell surface of Gram-positive bacteria, bacterial pathogenesis and host-pathogen interactions

Kenneth Y. Tsai
Assistant Professor
Dermatology and Immunology
M. D. Anderson Cancer Center
Ph.D., Massachusetts Institute of Technology, 2001
M.D., Harvard Medical School, 2003
Research interests: cancer immunology; skin cancer; graft versus host disease; epithelial-mesenchymal transition; genomics; microarray gene expression analysis

John N. Weinstein
Professor and Chair
Bioinformatics/Computational Biology
M. D. Anderson Cancer Center
M.D., Harvard Medical School, 1971
Ph.D., Harvard University, 1971
Research interests: bioinformatics; systems biology; genomics; proteomics; cancer; therapy; computer science

NEW ASSOCIATE MEMBERS

Tao Lin
Research Assistant Professor
Pathology/Laboratory Medicine
UT-H Medical School
D.V.M., Inner Mongolia Agriculture University, 1986
Research interests: bacteria genetics; bacteria pathogenesis; functional genomics; metagenomics; emerging tick-transmitted disease

Ganesh Rao
Assistant Professor
Neurosurgery
M. D. Anderson Cancer Center
M.D., University of Arizona, 1998
Research interests: mouse modeling of medulloblastoma; mouse modeling of gliomas; evaluation of novel therapeutics using mouse mode

Thomas K. Nishino
Assistant Professor
Imaging Physics
M. D. Anderson Cancer Center
Ph.D., Lehigh University, 2000
Research interests: image processing; digital radiography/ mammography; pedagogical methods for improving physics education

Sean Xiaoyuan Zhang
Assistant Professor
Radiation Physics
M. D. Anderson Cancer Center
Ph.D., UTHSC-San Antonio, 1998
Research interests: radiation physics; nanoparticle radiation dosimetry

GSBS welcomes **Dr. Victoria Knutson** in her new role as **Associate Dean of Academic Affairs.** Previously, Dr. Knutson served as the Associate Dean of Admissions for eight years. She continues to serve as an associate professor of molecular pathology.

Faculty News

Michelle Barton, Ph.D. has published an article in the Proceedings of the National Academy of Sciences Online Early Edition. Barton and her team identified a protein, called Trim24, which marks the tumor suppressor p53 for destruction, providing a potential new avenue for restoring p53 in cancer cells.

Massimo Cristofanilli, M.D. and **James Reuben, Ph.D.** are co-authors of a novel study which points toward a relationship between cancer stem cells and prognosis in primary breast cancer. Reuben presented the research at the American Society of Clinical Oncology's Annual Meeting. Other contributors are **Wendy Woodward, M.D., Ph.D., Bang-Bing Lee, Ph.D.** and GSBS student **Evan Cohen**.

Chen Dong, Ph.D. was honored with the AAI-BD Biosciences Investigator Award from The American Association of Immunologists at their 96th Annual Meeting in May for his groundbreaking T lymphocyte research.

Chen Dong, Ph.D. was noted in Science Express (the advance online publication of the journal Science) for his research on the expression of a single gene that programs an immune system helper T cell that fuels rapid growth and diversification of antibodies in a cellular structure implicated in autoimmune diseases and development of B cell lymphoma.

Herbert DuPont, M.D. was honored for Excellence in Research at the President's Scholar Awards in May 2009.

Isaiah J. Fidler, D.V.M, Ph.D. presented his novel theory about brain metastases' resistance to chemotherapy at the 100th Annual Meeting of the American Association for Cancer Research.

Margaret Foti, M.D., Ph.D. recently received the first ever Margaret Kripke Legend Award from The University of Texas M. D. Anderson Cancer Center. The award recognizes scientific and medical leaders who have made outstanding efforts to hire a diverse workforce, promote women to leadership roles, nominate women for awards and otherwise advance their careers.

Millicent Goldschmidt, Ph.D. received the 2009 American Society for Microbiology (ASM) Roche Diagnostics Alice C. Evans Award. This award recognizes contributions toward the full participation and advancement of women in microbiology.

Patrick Hwu, M.D. and **Sattva Neelapu, M.D.** presented their research to the American Society of Clinical Oncology (ASCO) conference this year. Dr. Hwu's study showed improved response rates for a melanoma vaccine when it is combined with the immunotherapy drug Interleukin-2.
Dr. Neelapu discussed his vaccine for Hodgkin's lymphoma.

Lovell Jones, Ph.D. chaired the week-long 7th Annual Disparities in Health in America Summer Workshop, hosted by the Center for Research on Minority Health. The workshop took place at the M. D. Anderson Cancer Center in the Hickey Auditorium.

Ann Killary, Ph.D. is senior author on a study of the DEAR1 gene, which is used to predict local recurrence in early-onset breast cancer. The research is featured in the journal PLoS Medicine. Co-authors are **Thomas Buchholz, M.D., Subrata Sen, Ph.D., Marsha Frazier, Ph.D., Khandan Keyomarsi, Ph.D.** and GSBS alumni **Steven Lott, Ph.D.,** and **Ralf Krahe, Ph.D.**

Shiaw-Yih Lin, Ph.D. and his team recently published their research online in Nature Cell Biology. Their focus is the tumor-suppressing protein, BRIT1, which overcomes a barrier to access damaged DNA, preventing it from being passed on as the cell divides. Co-author on the study is GSBS student **Rouzhen Hu**.

Dianna Milewicz, M.D., Ph.D. recently published her study, "Mutations in Smooth Muscle Alpha-Actin (ACTA2) Cause Early Onset Coronary Artery Disease, Stroke and Moyamoya Disease, Along with Thoracic Aortic Aneurysms and Dissections," in the American Journal of Human Genetics. The study is co-authored by **Eric Boerwinkle, Ph.D., Ali Marian, M.D., Sudha Veeraraghavan, Ph.D., Maximilian Buja, M.D., GSBS alumnus Hariyadarshi Pannu, Ph.D.** and GSBS student **Christina Papke**. Genetic statistics for the study were completed by **Sanjay Shete, Ph.D.** and **C.S. Raman, Ph.D.**

Gordon Mills, M.D., Ph.D. was senior author on a paper published in the June edition of Cancer Cell. The paper highlights his research on four new targets for breast cancer (3 LPA receptors and one LPA-producing enzyme, autotaxin).

Sanjay Shete, Ph.D. is part of the research team that discovered a link between genetic variations and the risk of developing a glioma brain tumor. He is co-author on their research that was reported online in Nature Genetics.

Keri Smith, Ph.D. has received a Career Development Award from the National Hemophilia Foundation. The award will support her research into the development of a therapy for people with hemophilia A, a bleeding disorder.

GSBS Alumni **Naoto Ueno, M.D., Ph.D.** and **Chandra Bartholomeusz, M.D., Ph.D.** presented their research at the 100th Annual Meeting of the American Association for Cancer Research. Their research focuses on overexpression of the protein PEA-15 and how it reduces breast cancer tumors. **Francisco Esteva, M.D., Ph.D.** is co-author on this project.

Xifeng Wu, M.D., Ph.D. presented her research at the 100th Annual Meeting of the American Association for Cancer Research in Denver. Collaborating with **Karen Lu, M.D.**, and GSBS student, **Xia Pu**, the research focuses on genetic variations in the micro-RNA (miRNA) processing pathway genes and miRNA binding sites to predict a woman's risk for developing ovarian cancer and her prospects for survival.

{ Please submit news items to Laura.Sanders@uth.tmc.edu }

The Center for Clinical and Translational Sciences Training Grant

By Harrison Harvey
Communications Intern

The Center for Clinical and Translational Sciences (CCTS) was born of a generous five-year grant from the National Institutes of Health (NIH) under the Clinical and Translational Science Awards in an effort to support and advance clinical and translational research. Clinical research is patient-oriented, using human subjects to conduct clinical trials, develop new technologies, employ therapeutic intervention and study the mechanisms of human disease. Translational research is, essentially, the process of applying the research conducted in labs to the development of treatments for humans. The CCTS training grant program currently sponsors sixteen full-time Ph.D. students whose research falls into either category. Students come from neuroscience, cancer biology, immunology, nursing, and MD/PhD programs. Now in its third year, the CCTS program offers selected students stipend support, modest training-related expenses, and tuition and fees for up to three years (based on successful reappointment each year).

Along with financial support, this grant program gives graduate student researchers a taste of the clinical world; students are required to shadow a working clinician two half-days each month. Additionally, recipients must present their research at a monthly, peer-evaluated seminar using language accessible to scientists in other fields. Students' abstracts must be written for three specific audiences: one for a specialist in their field, one for a diverse group of scientists, and one for the lay public. In this way, "the CCTS training program challenges researchers to broaden their horizons of communication, positively transforming their writing, " according to CCTS Program Administrator Patricia Cruz-Bruesch.

Cruz-Bruesch

To be eligible for selection, students must have already completed two years of their Ph.D. education and have at least two more years remaining. To be considered, students must have a faculty nomination and submit a research proposal to the CCTS advisory board. Stipends are only available to U.S. citizens or permanent residents, as the program is NIH-funded; however, all UTHSC-H students may participate in other training grant programs with permission. For additional information, call Pat at 713.500.9874 or visit http://ccts.uth.tmc.edu/ccts-services/t32-and-k12-programs.

GSBS Students and Faculty Bring the Wonders of Science to West University Elementary School Children

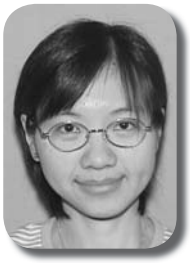
GSBS students and faculty volunteered at West University Elementary School's Annual Science Night held on April 23. The evening featured seven interactive stations with hands-on activities related to biology, chemistry, geology, and astronomy. GSBS volunteers Amanda Brock, Kim Busiek, Jennifer Juarez, Ale Klauer, Mark Nolte, Kate Pflughoeft, Jacob Verghese, Dr. Sandeep Agarwal, Dr. Michael Beauchamp, and Dr. Michael Galko organized and staffed the Brain Waves and Natural Selection stations. Over 500 children attended the event which also highlighted West U Elementary student Science Fair projects. Science Night was co-chaired by Drs. Theresa Koehler and Stephanie Watowich who created the program three years ago. It has become a significant outreach activity for the Graduate School.

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.S. or Ph.D.) for completion of an outstanding thesis or dissertation judged to make a significant contribution to cancer therapy or diagnosis.
This year's recipient is:

Student	Advisor
Jonas Fontenot	Dr. Wayne Newhauser



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
Pornpimon Angkasekwinai	Dr. Chen Dong

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

The Andrew Sowell-Wade Huggins Scholars, Professor and Fellow, and the Cancer Answers/Sylvan Rodriguez Scholars represent the culmination of seventeen 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, and especially Bobby Sue Smith Cohn and Bo and Amy Huggins. Originally started as the fundraising entity to support the Andrew Sowell-Wade Huggins Endowment which generates support for all of these awards to fund graduate education in cancer research, it has gained in size and prestige. Since 1991 over 50 scholars and 4 sets of professor/fellow teams (renewable up to three years) have been honored with awards ranging from $3,000 scholarships up to $20,000 in stipend support.
The 2008-2009 Sowell-Huggins Endowed Scholars receiving $5,000 are:

Student	Advisor
Kari Brewer	Dr. Chun Li
Gustavo Martinez	Dr. Chen Dong
Wen-Wei Tsai	Dr. Michelle Barton
Jer-Yen Yang	Dr. Mien-Chie Hung

The 2008-2009 Cancer Answers/Sylvan Rodriguez Scholar is:

Student	Advisor
Svitlana Kurinna	Dr. Michelle Barton

The 2008-2009 Professor/Fellow teams are:

Student	Advisor
Nicole Pinare	Dr. Timothy McDonnell
Angela Alexander	Dr. Cheryl Walker

Professor/Fellow teams are pictured here with Joann Sowell, Marcia Huggins Jahncke, Andy Sowell and Amy Huggins (left to right).

M. D. Anderson Alumni and Faculty Association
Graduate Student Award in Basic Science

Student	Advisor	
Guillermo Armaiz-Pena	Dr. Anil Sood	1st Place
Xia Pu	Dr. Xifeng Wu	2nd Place

Graduate Student Award
Clinical/Translational Research

Student	Advisor	
Angela Alexander	Dr. Cheryl Walker	2nd Place

Scientific Writing Contest
Awards in Fundamental Basic Research

Student	Advisor	
Angela Bhalla	Dr. Miles Wilkinson	1st Place
Jennifer Dale	Dr. Theresa Koehler	2nd Place
Proleta Datta	Dr. Ruth Heidelberger	3rd Place

Awards in Clinical and Translational Science

Student	Advisor	
Christina Papke	Dr. Dianna Milewicz	1st Place
Cameron Jeter	Dr. Anne Sereno	2nd Place
Kedryn Baskin	Dr. Heinrich Taegtmeyer	3rd Place

Tzu Chi Scholarship Award for Excellence

The Tzu Chi Foundation provides this $1,000 Scholarship to recognize and assist outstanding GSBS doctoral students. Successful applicants will be able to demonstrate both excellence in academic achievement and persistent community involvement. Students must be in a Ph.D. program; in good academic standing in GSBS; and making timely progress towards completion of their degree. Current Award Recipients:

Student	Advisor
Kari Brewer	Dr. Chun Li
Joseph Taube	Dr. Michelle Barton
Chirag Patel	Dr. Ponnada Narayana

James T. and Nancy Beamer Willerson
Endowed Scholarship in Genetic Counseling

This is the first year the James T. and Nancy Beamer Willerson Endowed Scholarship has been awarded. The scholarship, named for the outgoing President of The University of Texas Health Science Center at Houston who was a long-time supporter of the GSBS, is $1,000. In the years to come, there will be two separate scholarships from this endowment: one for an incoming student and one for a second year student. The first recipient is an incoming student:

Student	Advisor
Regina Nuccio	Ms. Claire Singletary

Summer Program Beneficial to Young Researchers

By Harrison Harvey
Communications Intern

In 2008, The University of Texas Graduate School of Biomedical Sciences (GSBS) at Houston became the latest of several institutions to offer a Summer Undergraduate Research Program (SURP). SURP provides a unique, ten-week research experience to college students who have yet to complete their senior year. A SURP candidate may work in almost any field, including oncology, neurology, toxicology, molecular biology, immunology, and genetics, to name a few. Students have the opportunity to do hands-on research on the projects of their faculty advisors, making SURP a mutually beneficial program; the student gets first-hand experience, while the faculty advisor gets another set of eager hands in the lab.

SURP is the ideal program for any student who shows notable scientific prowess and interest in a career in biomedical sciences, a student like Stuart Red, for example.

Red has a fervent interest in the human mind. He chose psychology as his major and began his undergraduate studies at The University of Texas at Austin. A few years down the road, however, he found himself disenchanted with the field he had so voraciously undertaken.

"My real interest, I realized, is research," says Red, "and in psychological research, you're dealing primarily in grey areas. I wanted a shift to something more black-and-white because I really felt stuck."

In search of a summer research opportunity, Red contacted Dr. Vicki Knutson, Associate Dean for Academic Affairs at GSBS, who introduced him to SURP. Red was admitted into the program and began working under Dr. Saumil Patel in the Department of Neurobiology and Anatomy.

"It's hard to find a research project that gives a student a taste of the life of a researcher in just ten weeks," says Knutson. "They'll experience the thrills of victory and the agony of defeat; but, the important part is rebuilding. Why didn't it work? What did we learn?"

Robert Newberry knows a thing or two about rebuilding.

"I had to redo my experiment five times during the program before I got any viable results," says Newberry, another UT-Austin student. "The last time I did the experiment was the day before I had to present my work. The data went into my presentation at ten o'clock that night."

Newberry, whose interests lie in biochemistry and molecular biology, largely blames his own novice cell culture technique for the initial failure of the experiment. In his inexperience, however, Newberry found a powerful motive.

"My goal in coming here was to learn how to do stuff. I'm interested in the chemical underpinnings of the human body. How can I expect to have a career as a researcher if I don't have the technical skills?" continues Newberry. "For me, that's what this program is all about: figuring out how to troubleshoot."

In fact, students need no prior research experience; as they plunge deeper into their work, they learn valuable lab techniques from both their faculty advisors and weekly seminars.

"These kids are testing the waters," says Knutson. "The question is: can they handle it? We watch very closely and encourage those students we find outstanding to apply for the Graduate School. We've had about an eighty percent success rate, which means eighty percent of our undergraduate researchers have come back to us for graduate research."

Summer Undergraduate Research Program students

Both Newberry and Red plan to apply to GSBS and anticipate research careers.

A total of 21 students registered for SURP this year, ten of whom are funded by the Graduate School of Biomedical Sciences (GSBS). The remaining students are funded by The Graduate Student Education Committee, the Molecular Basis of Infectious Diseases, St. Edward's University, the Department of Defense, and Minority Access to Research Careers (MARC).

Student News

Summer Undergraduate
Research Program
Science Expo and Poolside BBQ

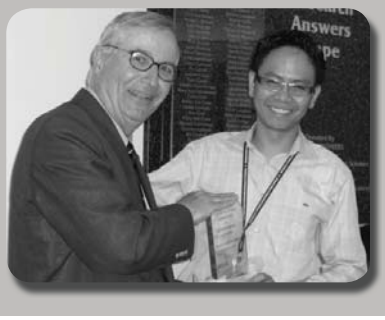
Friday, June 26, 2009

Staff News

Farewell!

Dr. Jon Wiener
Assistant Dean
of Academic Affairs
1999-2009

Congratulations to Dr. Jon Wiener on his recent retirement and his eventual move to North Carolina with his family. A reception was held on Monday, May, 18, 2009 in his honor. Dr. Wiener is currently assisting Dr. Gary Gallick part-time with his recent national metastasis grant award at M. D. Anderson Cancer Center. (Shown, left, with daughter and wife, Danielle and Julie Wiener); (Right with Dean Stancel commenting at the reception)



Melva S. Ramsay Award

A. Michael Valladolid (right), IT Manager, is the 2009 Recipient of the GSBS **Melva S. Ramsay Award** for outstanding service to faculty, students and staff. The award of $500 (and plaque) is presented by George Stancel, Dean, in memory of Melva Ramsay, long time beloved employee of GSBS.

New GSBS Staff Member: Wayne Turner, Programmer Analyst

I started at GSBS as a database consultant, helping to put together the various Access applications. I have been working here off and on for about nine years—how quickly time passes! Outside of the Graduate School, I teach finance at the University of Houston – Downtown.

When I am not working, I enjoy bicycling. I love classical music, and listen to it constantly. I am a complete computer geek, and love all electronic gizmos. I have a strange and wonderful son, Ned, who is in his second year of college. I have a fabulous daughter, Halley, who has an obscure syndrome, and is eternally 5 years old. So, if you hear me humming a Barney song, that's why. My wife Nancy is much too good for me. It's obvious I have been very, very, very lucky.

West Coast Reunion

A fleet of Graduate School Alumni!

Saturday, June 13, 2009

Humphrey's on the Bay

San Diego, CA

Shelter Island

{ See http://gsbs.uth.tmc.edu/alumni/San Diego_Reunion_09.html for names }

Alumni Spotlight

Virginia Wray, Ph.D. (Walborg/1970)

LESSONS LEARNED ALONG THE WAY...

Lesson 1: Get a mentor who will teach you how to ask basic questions, set up the experiments to get the answers and then report the results in a publication. Keep a mentor at all stages of your career.

I began doing basic cell biology research as an undergraduate. My research was focused on learning how to control cell division in mammalian cells. My sponsoring professor was a bacteriologist. Neither of us knew what we were doing. Scientists are still trying to figure out how to control cell division in mammals.

Lesson 2: All those classes you thought you would never need again, you will.

I still remember my last day in undergraduate Organic Chemistry class. I just knew I would never need that stuff again. I used organic and analytical chemistry all during my career. I took courses in public speaking. I use that all the time.

Lesson 3: Most graduate students will change their career focus at least twice, maybe three times before retirement. Some people consider that being a failure. I call it taking advantage of your training. Each career is a new beginning. Just think of the opportunities. There are many rewarding and important careers that make use of your education and research training.

I have been a bench research scientist, a technical sales representative, a scientific review administrator for the National Cancer Institute, and, finally, group supervisor and coordinator of review of large basic, clinical, and epidemiology research grants. I loved all of it and found strengths and talents I never knew I had.

Lesson 4: Learning to write in plain language is a critical skill.

I have seen many research programs fail because scientists are unable to write logically with specific, necessary details.

Lesson 5: Don't let science and research become your whole life. Take time for family and friends.

Many times I have met people who date their personal milestones like birth of their children by what research was going on in their life. There is something wrong with that.

{ Dr. Virginia Wray, Deputy Branch Chief
Research Programs Review Branch, Division of Extramural Activities
National Cancer Institute }

Special Thanks and Gratitude

March 2009 - August 2009

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Update:
Investing in Student Futures

Priscilla and Grady Saunders

August 2009 marks the third year of The Investing in Student Futures Endowment established by Dr. Priscilla Saunders in memory of her husband Grady Saunders, a wonderful scientist and mentor to graduate students. As you may recall the thought behind this was to start an endowed fund which would serve as a repository for both large and small gifts either "in memory" or "in honor of" to suit individual wishes. The ultimate hope is that it will grow to generate a full student stipend annually. We are on our way, but not there yet. To date, the Graduate School has received 55 gifts for this purpose and a total of $57,162.22 towards its $500,000 goal. Many thanks for what each of you have already given. If you would care to, note this on your calendar and make a commitment on an annual basis (UT-GSBS on your check and mailed to P. O. Box 20334, Houston, TX 77225-0334). Your investment goes of course towards one of the very best causes around—training future generations of scientists.

∞

<u>All gifts at any scale and to any category</u>:

Will be acknowledged.

Are tax deductible.

May be accomplished through an estate plan or will.

May be matched by a corporation to enhance the value of your gift.

May be used for memorial gifts to honor a favorite faculty, family member or friend. A notice will be sent to inform the family of the honor (not the amount) of your gift, and you will be acknowledged individually.

Consider a charitable gift annuity to increase your retirement earnings.

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Deadline for news to be included in the next newsletter is February 1, 2010

Hello Alumni,

Congratulations to John B. Simpson, (1971/Hampton) Ph.D., M.D., newly named Distinguished Alumnus for 2009-2010. Please plan to join me and the rest of your GSBS alumni and colleagues for the annual Alumni Reunion, Friday, October 16 at Trevisio Restaurant. Dr. Simpson is an interventional cardiologist, internationally recognized as a clinical pioneer, technology innovator, and successful entrepreneur. His efforts have spawned several companies dedicated to the creation of breakthrough medicines that provide positive outcomes for patients with cardiovascular disease.

As your Alumni president I thoroughly enjoyed welcoming 59 graduates at the May Commencement into the "fold" of this esteemed group—the Graduate School of Biomedical Sciences Alumni Association. We are growing, with now over 1,900 alumni, nearly 500 in the Houston area and the majority spread across the United States and around the world. GSBS alumni reflect leadership in academia, education, pharmaceutical and biotech industries, oil and energy corporations, governmental agencies, the media, and law offices with intellectual property expertise. It was exciting to see the confident and impassioned faces at the "Graduation Celebration" that the Alumni Association hosts a few nights before Commencement for our newly-minted alums and their families.

Special thanks to the Alumni Association Steering Committee: Ben Thomas, Ph.D., (1973), president ex-officio; Joy Marshall, Ph.D., (2003), president-elect; and members Dorrie Lamb, Ph.D., (1980); Maureen Goode, Ph.D., (1985); Mollianne McGahren Murray, Ph.D., (2007); and Jackie Peltier-Horn, Ph.D., (1981). This intrepid group has brainstormed some terrific ideas for the Alumni and soon to be arriving New and Improved GSBS alumni website—it should finally be up and running this fall.

Special thanks to Dean Stancel. I appreciate his foresight in starting the Alumni Association, and continued support that strengthens the organization and the School. I was privileged to carry the message to some of the GSBS Alumni in the San Diego area this June. Thank you Karen Arden, Ph.D. (1987) and Athanasia Panopoulos, Ph.D., (2007) as our on-site hosts, and to unofficial participation guru, Alice Robison, Ph.D. (1983). It was great to meet you and all the rest.

Hope you have had a wonderful summer and mark your calendars for October 16th!

Best wishes,

Vicky Estrera, Ph.D. (2001)
GSBS Alumni Association President
2008-2009