With the ring of a telephone, Shelley Sekula-Gibbs, M.D., president of the Sylvan Rodriguez Foundation, brought exciting news — she informed us that the Foundation Board wanted to make a gift to the Graduate School. That was the starting point. Following a discussion of ideas, they determined they wanted to accomplish two things.

Dr. Sekula-Gibbs and the Sylvan Rodriguez Foundation Board first wished to support cancer research through graduate students and honor longtime friends, Joann Sowell and Marcia Huggins Jahncke, by contributing to the existing Andrew Sowell-Wade Huggins Endowed Scholarship they’d established through their charitable organization, Cancer Answers Inc. In 2000 Cancer Answers Inc. named a special award after Dr. Sekula-Gibbs’ late husband, Sylvan Rodriguez, a highly respected Houston newsman and community advocate. (Pictured above is Dr. Sekula-Gibbs with the 2012 Cancer Answers/Sylvan Rodriguez Scholar Tamara Laskowski.) Dr. Sekula-Gibbs said “without Joann and Marcia, there would not be any of the annual Sowell-Huggins scholarships to encourage top graduate students who work to understand the challenges of cancer, how it impacts the human body at a cellular level, and in turn, find potential new therapies.”

Next, the Sylvan Rodriguez Foundation, through Dr. Sekula-Gibbs, concluded that they wanted to establish their own endowment, The Sylvan Rodriguez Foundation Endowed Scholarship in Honor of George Stancel, Ph.D., then dean of GSBS. This also would provide a scholarship for a graduate student investigating the challenges of cancer. Finally, with these things in place, GSBS, along with Dr. Sekula-Gibbs, look forward to having the first of this new scholarship presented at the annual Cancer Answers Awards luncheon. What a wonderful legacy.

Wei Yu — an alumnus who gives back — and we hope this will inspire others

Wei Yu, Ph.D. is a humble person, with quiet reserve that belies his intellect — a characteristic of someone far less capable. He’s a family man with two children who shepherds them to music lessons, to school and back. And, he is also a scientist in a biotech company in Houston. This year the company was successfully acquired by GE Healthcare.

To celebrate the happy news, Dr. Yu decided to establish a scholarship endowment to be awarded for the first time this coming spring with the hope it will help other GSBS graduate students. When we asked what made him do so, Dr. Yu replied: “Even now I am still very grateful to GSBS for accepting me, an average student, for my Ph.D. education and training at GSBS. This not only benefited my career, but my family. I want to thank GSBS for offering such a great opportunity and hope I can make this small contribution to GSBS with support from my family.” In addition to this endowed scholarship, Dr. Yu has contributed to GSBS’ Brenda Gaughan Travel Fund for the past 10 years. Thank you, Dr. Yu!
You may be aware that veteran GSBS Dean, George Stancel, Ph.D., has moved to a new position of vice president for academic and research affairs at The University of Texas Health Science Center at Houston (UTHealth). We sincerely thank Dr. Stancel for his 13 years of outstanding leadership at GSBS. Following a year’s national search and deliberation, UTHealth and The University of Texas MD Anderson Cancer Center (MD Anderson) together have created a dual deanship to provide overarching leadership and guidance for GSBS.

For this purpose, we introduce ourselves: Michelle Barton, Ph.D., professor in the Department of Biochemistry and Molecular Biology at MD Anderson, and Michael Blackburn, Ph.D., professor and vice chair in the Department of Biochemistry and Molecular Biology at UTHealth Medical School. Because of the unique collaboration of these institutions we are delighted to serve jointly in the positions of deans of the Graduate School of Biomedical Sciences.

Strengths in both research and education are needed to be effective leaders of a major graduate school. Here is a brief picture of our capabilities:

Dr. Barton: I earned my Ph.D. in biochemistry from the University of Illinois at Urbana-Champaign in 1989. From 1989 to 1994, I was a postdoctoral fellow at the Salk Institute for Biological Studies in La Jolla, California. I served on the faculty at the University of Cincinnati before joining MD Anderson in 2000. I have been a member of the GSBS faculty since my arrival at MD Anderson, and my research is supported by the National Institutes of Health (NIH) and more recently by two major awards from the Cancer Prevention and Research Institute of Texas (CPRIT).

Dr. Blackburn: I earned my Ph.D. in developmental biology from Thomas Jefferson University in Philadelphia in 1993. From 1993 to 1997, I was a NIH postdoctoral fellow in the Department of Biochemistry at Baylor College of Medicine. I’m a faculty member in the Department of Biochemistry and Molecular Biology at UTHealth Medical School and have been a member of the GSBS faculty since 1997. My work has been continuously funded by the NIH for 15 years, and I have received several awards including an American Lung Association Career Development Award and a Young Investigator Award from the American Asthma Foundation.

Our vision for the Graduate School, which we shared with GSBS faculty and students in town hall meetings in July, is to create a collaborative and innovative academic environment that inspires and lays the foundation for new generations of biomedical scientists to realize their potential, commit to success and make discoveries that have major impact on the treatment of diseases worldwide, and provide an unprecedented breadth of opportunities for today’s outstanding graduate students to train with leading biomedical scientists at MD Anderson and UTHealth.

Check out the news in full from our student town hall meeting at http://go.uth.edu/GSBS2012townhallvideo.

It is not the strongest of the species that survives, nor the most intelligent, but the one most responsive to change.

– Charles Darwin
Mary-Claire King, Ph.D., is American Cancer Society Professor in the Department of Medicine and the Department of Genome Sciences at the University of Washington in Seattle. She was the first to prove that breast cancer is inherited in some families as the result of mutations in the gene that she named BRCA1. In addition to inherited breast and ovarian cancer, her research interests include genetics of hearing loss, the genetic bases of schizophrenia, and human genetic diversity and evolution. She also pioneered the use of DNA sequencing for human rights investigations, developing the approach of sequencing mitochondrial DNA preserved in human remains, then applying this method to the identification of kidnapped children in Argentina and subsequently to cases of human rights violations on six continents.

She received her B.A. *cum laude* in Mathematics from Carleton College in Northfield, Minnesota; her Ph.D. in Genetics from the University of California at Berkeley; and her postdoctoral training at UC San Francisco. She has served on the Advisory Committee to the Director of National Institutes of Health, the National Commission on Breast Cancer of the President’s Cancer Panel, the National Academy of Sciences’ Committee on Science, Engineering, and Public Policy (COSEPUP) and multiple councils and study sections of the NIH and the NAS. She was consultant to the Commission on the Disappearance of Persons of the Republic of Argentina and carried out DNA identifications for the United Nations War Crimes Tribunals. Currently, King is the president of the American Society of Human Genetics.

To view King’s speech and the entire commencement ceremony, please visit http://go.uth.edu/GSBS2012gradvideo.
As the current president of the faculty of the Graduate School of Biomedical Sciences, it is my sincere pleasure to convey our congratulations on your achievements. I think I speak for all of us when I say that this is one of the happiest duties we have as faculty – to formally recognize your status as degreed scientists in this ceremony today.

It is important to recognize how rare an achievement it is. According to the latest statistics, approximately 10 percent of the U.S. population hold a Master’s or equivalent degree. Three percent hold a doctorate or its equivalent, and less than 1 percent of the total are Ph.D.s. Thus your hard work, dedication and innate awesomeness have placed you in a select group of educated citizens.

With that level of education comes certain expectations. We anticipate that many of you will become leaders in discovery and invention. However, we also realize that the scientific world is in a state of flux, and with it the role of the science professional. Science graduates today consider a breadth of career choices non-existent a generation ago. For a variety of reasons, the traditional path of poor graduate student to incredibly wealthy tenured professor is no longer the only option. You have before you a broad array of directions to take your professional life, and it is our hope that we have given you the tools to be successful whatever you choose.

What tools are you talking about, you might ask. All I remember is running gels, growing cells and taking tests. But you see we are tricky like that — along the way you also learned how to identify a problem, how to frame a question that directly addresses that problem, and how to answer it. You learned to be constructively critical of your own work, and the work of others. And lastly how to communicate the results of your work in a persuasive manner to convince others. These are immensely portable skills that will serve you well as you begin to tackle important problems and projects that benefit society at many levels – your community, your country and beyond.

The faculty-student relationship is not that different from that of a parent, and like any parent we feel qualified and indeed compelled to offer you unsolicited advice. I’ll keep it short: Trust yourself. No matter what directions, twists and turns your career might take after leaving us, trust your training, trust your experience and skills, and trust your smarts. You’re the best society has to offer, and we are very proud of you today.

Thanks and good luck.

---

The McGovern Award for Outstanding Teaching recognizes a GSBS faculty member, Joya Chandra, Ph.D., who has significantly contributed to the education and training of GSBS students. Dr. Chandra is an associate professor at the Graduate School and The University of Texas MD Anderson Cancer Center, Department of Pediatrics. She is a GSBS alumna who obtained her Ph.D. in Cancer Biology in 1998. After GSBS, Dr. Chandra studied at the Institute for Environmental Medicine, Karolinska Institute in Stockholm, Sweden. Dr. Chandra has served as president of the Graduate School’s Alumni Association, and has received several awards including the Texas Federation of Business and Professional Women’s Club Award, 2004, and Faculty Educator of the Month, MD Anderson Cancer Center, May, 2009.
Alvarez, Ricardo (Janet Price, Ph.D.)
Effects of combined bavacizumab and paclitaxel on tumor interstitial fluid pressure in a preclinical breast cancer model

Bolner, Michelle (Ellen Richie, Ph.D.)
Effects of thymus size and involution on the contribution of recent thymic emigrants to the peripheral T cell pool

Bruno, Debora (Gordon Mills, M.D., Ph.D.)
Glycogen synthase kinase3 is required for optimal AKT activation

Cvjetkovic, Nevena (Jacqueline Hecht, Ph.D.)
FZD6, MATN2 and SLC25A32, possible candidate genes in nonsyndromic cleft lip and palate

Del-Aguila, Jorge (Eric Boerwinkle, Ph.D.)
Genetic predictors of hyperglycemia due to hydrochlorothiazide therapy

Domain, Delora (Thomas Buchholz, M.D.)
Clinical trial enrollment in a multidisciplinary prostate cancer

Duncan, Aundrietta (Michelle Barton, Ph.D.)
Dissecting the interaction between P53 and TRIM24

Gallegos, Juan (Shoudan Liang, Ph.D.)
Prediction of DNA Methylation based on Genomic architecture and application of positional weight matrices

Garby, Carolyn (Banu Arun, M.D.)
Accuracy of the BRCAPRO risk assessment model in males presenting to MD Anderson for BRCA testing

Gireud, Monica (Vidya Gopalakrishnan, Ph.D.)
Study of rest as a negative regulator of P16INK4A

Gonzalez, Dennisse (Claudio Soto, Ph.D.)
Induced-pluripotent stem-derived neuronal progenitor cells as a novel treatment for neurodegenerative diseases

Han, Amy (Kapil Mehta, Ph.D.)
Significance of increased tissue transglutaminase in hormone refractory prostate cancer

Huang, Tzu-Chuan (Milind Javle, M.D.)
Study of genotypic variations and protein expression of the xCT subunit of cystine/glutamate transporter in patients with advanced pancreatic cancer

Joy, Sarah (Thomas Guerrero, M.D. Ph.D.)
Assessment of collimator jaw optimization in reducing normal tissue irradiation with intensity modulated radiation therapy

Lee, Soo Yeon (Hyunggun Kim, Ph.D.)
Echogenic liposomes for nitric oxide delivery and breast cancer treatment

May, Sarah (Eric Wagner, Ph.D.)
A cell biological determination of integrator subunit localization

Morris, Christopher (Jeffrey Frost, Ph.D.)
Regulation of NET1A subcellular localization by the small GTPase RAC1

Mostafavi, Roya (Claire Singletary, S.M.S.)
Long term follow-up of morbidity and quality of life associated with isolated gastroschisis

Mueller, Jonathon (Dianna Cody, Ph.D.)
In vivo CT dosimetry during virtual colonoscopy

Nassef, Salma (Cathy Sullivan, M.S.)
Knowledge, attitudes and utilization of BRCA testing among obstetricians and gynecologists

Neubauer, Emily (Stephen Kry, Ph.D.)
The effect of shoulder variation on IMRT and SMARTARC for head and neck cancer

Nosavanh, LaGina (Vicki Huff, Ph.D.)
Dysregulation of MEOX2 following WT1 mutation in kidney development and Wilms tumorigenesis

Ow, Thomas (Jeffrey Myers, M.D., Ph.D.)
TP53 as a biomarker in head and neck squamous cell carcinoma

Penney, Samantha (Sarah Noblin, M.S.)
Evaluation of knowledge regarding diagnostic strategies for genetic diseases in select residents

Plummer, Joshua (Feng Wang-Johanning, M.D., Ph.D.)
Evidence of human endogenous retrovirus K involvement in human cancer

Poteete, Alissa (Raymond Grill, Ph.D.)
A pre-clinical assessment of minocycline for treatment of chronic neuropathic pain after spinal cord injury

Pulliam, Kiley (Stephen Kry, Ph.D.)
Clinical impact of couch top and rails on IMRT and ARC therapy

Raof, Mustafa (Steven Curley, M.D.)
Chemosensitization of hepatocellular carcinoma to gemcitabine by non-invasive radiofrequency field-induced hyperthermia

Rock, Katherine (Louise Strong, M.D.)
Attitudes about predictive MEN1 genetic testing in minors

Shroff, Rachna (James Abbuzzese, M.D.)
Ptjologic markers of prognosis in ampullary carcinoma

Simmons, Ann (Banu Arun, M.D.)
Predictors of contralateral breast cancer in BRCA negative women

Summers, Paige (Geoffrey Ibbott, Ph.D.)
The development and implementation of an anthropomorphic head phantom for the assessment of proton therapy treatment procedures

Tito, Antonio (Myriam Fornage, Ph.D.)
The expression profile of a GWAS detected gene (NINJ2) in the brain of a mouse model of ischemic stroke

Tonacci, Jacqueline (David Followill, Ph.D.)
Evaluation of Intensity modulated radiation therapy (IMRT) delivery error due to IMRT treatment plan complexity and improperly matched dosimetry data

Tudor, Sarah (Eric Boerwinkle, Ph.D.)
Gene by BMI interactions influencing C-reactive protein levels in European-Americans

Yin, Bingnan (Feng Wang-Johanning, M.D., Ph.D.)
Expression and immunological characterization of HERV-K transmembrane envelope protein in human breast cancer

Zaid, Tarrik (Samuel Mok, Ph.D.)
The role of acidic fibroblast growth factor and fibroblast growth factor receptor 4 in high grade serous carcinoma
Adams, Rhys  
(Davor Balazsi, Ph.D.)  
Determining the genotype-phenotype connection in synthetic inducible gene expression systems

Allen, Julie  
(Anil Sood, M.D.)  
Chronic stress promotes tumor growth through increased BDNF production and neo-innervation

Badeaux, Mark  
(Dean Tang, Ph.D.)  
Understanding NANOG’s role in cancer biology

Baskin, Kedryn  
(Heinrich Taegtmeyer, M.D., Ph.D.)  
Regulation of protein degradation in the heart by AMP-activated protein kinase

Berrout, Jonathan  
(Roger O’Neil, Ph.D.)  
Role of TRP channels in mediating the calcium signaling response of brain endothelial cells to mechanical stretch

Bindal, Krithi  
(Eugenie Kleinerman, M.D.)  
The histone deacetylase inhibitor, MS-275, sensitizes metastatic osteosarcoma to FASL-induced cell death: a role for C-FLIP

Bonilla-Claudio, Margarita  
(James Martin, M.D., Ph.D.)  
BMP-signaling regulates a common transcriptional program to control facial form and skeletal morphogenesis

Bowser, Jessica  
(Russell Broaddus M.D., Ph.D.)  
Purinergic signaling regulates filopodia-induced zippering

Brewer Savannah, Kari  
(Dina Lev, M.D.)  
Identifying and targeting molecular deregulations in uterine leiomyosarcoma: a role for MTOR inhibition-based combination therapies

Cardenas, Kim  
(Ellen Richie, Ph.D.)  
Enforced expression of TBX1 in fetal thymic epithelial cells antagonizes thymus organogenesis

Castillo, Richard  
(Thomas Guerrero, M.D., Ph.D.)  
Evaluation of deformable image registration for improved 4D CT-derived ventilation for image guided radiotherapy

Chang, Zhe  
(Paul Chiao, Ph.D.)  
The mechanism of tumorigenesis in the immortalized human pancreatic cell lines: cell culture models of human pancreatic cancer

Charo, Chantale  
(Craig Logsdon, Ph.D.)  
Role of prostaglandin E2 in the regulation of pancreatic stellate cells hyper activity associated with pancreatic cancer

Chen, Jie  
(David Johnson, Ph.D.)  
The role of E2F1 in the response to DNA double strand breaks

Chen, Chun-Te  
(Mien-Chie Hung, Ph.D.)  
Dual targeting of tumor angiogenesis and chemotherapy by endostatin-cytosine deaminase-uracil phosphoribosyltransferase

Chen, Yi Chun  
(Sharon Dent, Ph.D.)  
Role of the GCNS histone acetyltransferase in spinocerebellar ataxia type 7 and in immature neurons

Dale, Jennifer  
(Theresa Koehler, Ph.D.)  
Control of the master virulence regulatory gene ATXA in bacillus anthracis

D’Amelio, Anthony  
(Carol Etzel, Ph.D.)  
Development of a Bayesian joint logistic model to better study the association between Haplotypes and disease

Daniels, Isadora  
(Cheng Lee, Ph.D.)  
Uptake and metabolism of 5’-AMP in the erythrocyte play key roles in the 5’-AMP induced model of deep hypometabolism

Du, Yi  
(Mien-Chie Hung, Ph.D.)  
Syntaxin 6- and microtubule-mediated intracellular trafficking contributes to GOLGI and nuclear translocation of EGFR

Dulin, Jennifer  
(Raymond Grill, Ph.D.)  
Novel use of dual anti-inflammatory therapy to overcome drug resistance and improve functional recovery following spinal cord injury

Duong, Mylinh  
(Khandan Keyomarsi, Ph.D.)  
LMW-E mediates mammary tumorigenesis by deregulating acinar morphogenesis & generating cancer stem cells

Duzkale, Hatice  
(Lynne Abruzzo, M.D., Ph.D.)  
LDOC1, a novel biomarker of prognosis in chronic lymphocytic leukemia

Elmore, Lauren  
(Anthony Wright, Ph.D.)  
Change detection memory in Rhesus monkeys and humans

Ferrati, Silvia  
(David Gorenstein, Ph.D.)  
Cellular trafficking of single and multistage vectors

Garnett, Jeannine  
(Oliver Bogler, Ph.D.)  
Regulation of HGF expression by dAEGFR-mediated C-MET activation in glioblastoma cells

Giebeler, Annelise  
(Wayne Newhauser, Ph.D.)  
The role of cell sterilization in population based studies of radiogenic second cancers following radiation therapy

Gonzalez, Gabriel  
(Richard Behringer, Ph.D.)  
Role of SOX9 in uterine gland development and disease initiation

Gowin, Joshua  
(Scott Lane, Ph.D.)  
The role of cortisol in the cycle of violence

Hall, Mandy  
(Dennis Hughes, M.D., Ph.D.)  
Increased geranylated K-RAS contributes to antineoplastic effects of farnesyltransferase inhibitors

(continued)
Hammerstrom, Troy (Theresa Koehler, Ph.D.)
Functional characterization of ATXA, the bacillus anthracis virulence regulator

Hansen, Bryan (Valentin Dragoi, Ph.D.)
Population coding in laminar cortical circuits

Holmes, Kristen (Wei Zhang, Ph.D.)
Elucidating the IGFBP2 signaling pathway in glioma development and progression

Hsu, Jung-Mao (Mien-Chie Hung, Ph.D.)
Crosstalk between R1175 methylation and Y1173 phosphorylation negatively modulates EGFR-mediated ERK activation

Hu, Ruozhen (Shiaw-Yih Lin, Ph.D.)
Function of ZNF668 in cancer development

Huang, Miao (Chun Li, Ph.D.)
Applications of EPHB4 receptor specific peptides in targeted cancer imaging and therapy

Hui, Cheukkai (Ponnada Narayana, Ph.D.)
Improved techniques for acquisition and analysis of dynamic contrast-enhanced magnetic resonance imaging for detecting vascular permeability in the central nervous system

Huijuan, Huijuan (Kwong-Kwok Wong, Ph.D.)
Downregulation of PAX2 suppresses ovarian cancer cell growth

Jacob Vayttaden, Sharat (Richard Clark, Ph.D.)
Modeling B2AR regulation

Juneja, Vaibhav (Ponnada Narayana, Ph.D.)
Novel phantoms and post-processing for diffusion spectrum imaging

Khalili, Jahan (Gregory Lizee, Ph.D.)
Roles of BRAF kinase activating mutations in melanoma: microenvironmental immunosuppression

Kim, Soo Jin (Paul Wong, Ph.D.)
Upregulation of reactive oxygen species during the retrovirus life cycle and their roles in a mutant of moloney murine leukemia virus, TS1-mediated neurodegeneration

Kim, Eun Ah (Sharon Dent, Ph.D.)
Definition of the landscape of chromatin structure at the frataxin gene in Friedreich’s ataxia

Kong, FanLin (David Yang, Ph.D.)
Novel amino acid transporter-targeted radiotracers for breast cancer imaging

Liu, Can (Dean Tang, Ph.D.)
MicroRNA regulation of prostate cancer stem/progenitor cells and prostate cancer development

Liu, Qian (Marsha Frazier, Ph.D.)
Aberrations of a putative tumor suppressor gene SEL1L in pancreatic ductal adenocarcinoma

Mann, Aman (Mauro Ferrari, Ph.D.)
Targeted multistage delivery of nanoparticles to the bone marrow

McGrath, Danielle (Renata Pasqualini, Ph.D.)
Eluding antibiotic resistance: capitalizing on antimicrobial peptides interaction with the lipid bilayer

Nguyen, Thang Van (Edward Yeh, M.D.)
Sumo-specific protease 1 controls lymphoid development through regulation of sumoylation/acetylation switch in STAT5

Nguyen-Jackson, Hoainam (Stephanie Watowich, Ph.D.)
STAT3 controls the neutrophil migratory response to CXCR2 and its ligand MIP-2 (CXCL2)

Passaro, Antony (Andrew Papanicolau, Ph.D.)
The dissociation of location and object working memory using FMRI and MEG

Rambhadran, Anu (Vasanthi Jayaraman, Ph.D.)
Conformational changes in the extracellular domain of glutamate receptors

Rodriguez Cruz, Tania (Patrick Hwu, M.D.)
The cytoplasmic tail of MHC class I molecules plays a critical role in dendritic cell-induced T cell immunity

Rojas, Marta (Oliver Bogler, Ph.D.)
Contribution of ectodomain mutations in epidermal growth factor receptor to signaling in glioblastoma multiforme

Roybal, Jonathon (Jonathan Kurie, M.D.)
The role of cancer-associated fibroblasts in lung tumorigenesis

Rycaj, Kiera (Feng Wang-Johanning, M.D., Ph.D.)
Human endogenous retrovirus K as a novel tumor-associated antigen for development of an ovarian cancer vaccine

Singh, Christopher (Chinnaswamy Jagannath, Ph.D.)
Novel mechanisms of antigen processing that enhance BCG vaccine efficacy

Song, Xianzhou (Huamin Wang, M.D., Ph.D.)
The role of receptor tyrosine kinase AXL in pancreatic ductal adenocarcinoma and its regulation by hematopoietic progenitor kinase1
**2011-2012**

**Doctor of Philosophy Degree**

**Stonier, Spencer**  
(Kimberly Schluns, Ph.D.)  
Determining the roles of dendritic cells and ICAM-1 in the transpresentation of IL-15 to CD8 T cells

**Xu, Jia**  
(Dihua Yu, M.D., Ph.D.)  
14-3-3ZETA overexpression serves as a novel molecular switch turning TGF-BETA from tumor suppressor to tumor promoter

**Suire, Colby**  
(Brian Davis, Ph.D.)  
Identification and characterization of distinct populations of clonogenic bone marrow stromal cells capable of transferring the hematopoietic microenvironment in vivo and supporting LT-HSCs in vitro

**Yang, Jun**  
(Dihua Yu, M.D., Ph.D.)  
Developmental deregulation and tumorigenesis inhibition in 14-3-3ZETA knockout mouse

**Tavana, Omid**  
(Chengming Zhu, Ph.D.)  
Understanding the roles of non-homologous end joining and P53 after DNA damage

**Yang, Lin**  
(Donald Berry, Ph.D.)  
Bayesian phase I dose finding in cancer trials

**Tsunashima, Yoshikazu**  
(X. Ronald Zhu, Ph.D.)  
Verification of the clinical implementation of the respiratory gated beam delivery technique with synchrotron-based proton irradiation

**Yang, Ming**  
(Lei Dong, Ph.D.)  
Dual energy computed tomography for proton therapy treatment planning

**Vinogradskiy, Yevgeney**  
(Mary Martel, Ph.D.)  
Improving the accuracy of radiation pneumonitis dose response models

**Zhang, Rui**  
(Wayne Newhauser, Ph.D.)  
Quantitative comparison of late effects following photon versus proton external-beam radiation therapies: Toward an evidence-based approach to selecting a treatment modality

**Vincent, Bryce**  
(Zhengxin Wang, Ph.D.)  
The role of the androgen receptor cofactor p44/WDR77 in astrocyte activation

**Zhang, Rui**  
(Chun Li, Ph.D.)  
Annexin A5-conjugated polymeric micelles for dual SPECT and optical detection of apoptosis

**Windsor, Erin**  
(Juan Fueyo, M.D.)  
Mechanisms of adenovirus-mediated autophagy

**Zhang, Yan**  
(Jean Pierre Issa, M.D.)  
Identification of factors involved in DNA methylation of CPG-island-promoters

**Wu, Hanjing**  
(Yong-Jian Geng M.D., Ph.D.)  
Autoimmune responses to atherosclerotic

**Zhang, Hui**  
(Peng Huang, M.D., Ph.D.)  
Biological mechanisms and clinical implications of BCR-ABL-induced mitochondrial oxidative stress and cell survival in chronic myeloid leukemia

**Xia, Qianghua**  
(Paul Chiao, Ph.D.)  
The role of TAK1 in pancreatic cancer development

**2011-2012**

**Doctor of medicine/Doctor of philosophy degree**

**Colorado, Rene**  
(Ponnada Narayana, Ph.D.)  
Brain activation and connectivity in non-disabled multiple sclerosis patients

**Salazar, Katrina**  
(Kenneth Aldape, M.D.)  
TAZ as a regulator of mesenchymal transformation and clinical aggressiveness in gliomas

**Reynoso, David**  
(Russell Broaddus M.D., Ph.D.)  
BIM mediates IMATINIB-induced apoptosis of gastrointestinal stromal tumors: translational implications

**Sen, Shiraj**  
(Heinrich Taegtmeyer, M.D., Ph.D.)  
Metabolic regulation of MTOR activation and endoplasmic reticulum stress in the heart
MEMBERS REAPPOINTED WITH HIGHEST COMMENDATION

Jacqueline T. Hecht
David J. McConkey
Anthony A. Wright

MEMBERS REAPPOINTED WITH COMMENDATION

Christopher I. Amos
Ruth Heidelberger
Diane L. Hickson-Bick
Ralf Krahe
William Margolin

Jagannadha Sastry
Heinrich Taegtmeyer
Feng Wang-Johanning
Charles E. Willis

NEW REGULAR MEMBERS

Jichao Chen
Assistant Professor
Pulmonary Medicine
MD Anderson Cancer Center
Ph.D., Johns Hopkins University School of Medicine, 2006
Research interests: lung development; organ size control; lung cancer

Robert Danzer
Professor
Symptom Research
MD Anderson Cancer Center
D.V.M., University Paul Sabatier, 1967
Ph.D., University Paul Sabatier, 1977
Research interests: behavioral and psychopathological consequences of the effects of cancer therapy on the brain

Peter Friedl
Professor
Genitourinary Medical Oncology
MD Anderson Cancer Center
M.D., University of Bochum (Germany), 1992
Ph.D., McGill University (Canada), 1996
Research interests: cancer invasion and metastasis; integrins; collective invasion; chemo-/radioresistance; bone metastasis; hypoxia regulation of invasion/resistance; multiphoton microscopy; intravital imaging

Yong Li
Associate Professor
Pediatric Surgery
UTHealth Medical School
M.D., Second Military Medical University, 1993
Ph.D., Third Military Medical University, 1996
Research interests: stem cells; tissue engineering; regeneration medicine; scarless wound healing

Qingyun (Jim) Liu
Professor
Institute of Molecular Medicine
UT Health Medical School
Ph.D., Yale University, 1990

Research interests: mammalian signal transduction; receptor endocytosis; Wnt signaling; cancer biology; stem cell biology; drug discovery

Peng Qiu
Assistant Professor
Bioinformatics and Computational Biology
MD Anderson Cancer Center
Ph.D., University of Maryland- College Park, 2007
Research interests: bioinformatics and computational biology; machine learning; statistical signal processing; visualization

Xiaodong Zhang
Assistant Professor
Radiation Physics
MD Anderson Cancer Center
Ph.D., Ohio University, 2001
Research interests: automatic treatment planning for radiotherapy; proton therapy; optimization algorithm development and application for radiotherapy

Mian M. Alauddin
Associate Professor
Experimental Diagnostic Imaging
MD Anderson Cancer Center
Ph.D., The University of Manitoba, 1987
Research interests: radiofluorination; radiosynthesis of nucleoside analogues; PET radiopharmaceuticals

David T. Fuentes
Instructor
Imaging Physics
MD Anderson Cancer Center
Ph.D., The University of Texas at Austin, 2008
Research interests: finite element modeling; uncertainty quantification; laser-induced thermal therapy; bioheat transfer; Kalman filtering; magnetic resonance temperature imaging; laser tissue interaction; inverse problems; mathematical model constrained optimization

Xiaochun Wang
Assistant Professor
Radiation Physics
MD Anderson Cancer Center
Ph.D., Ohio University, 2001
Research interests: fully automated IMRT treatment planning; proton radiotherapy for breast patients; patient setup for breast radiotherapy using the OBI system; effects of cardiac motion to radiotherapy for left breast patients

Shouhao Zhou
Instructor
Biostatistics
MD Anderson Cancer Center
Ph.D., Columbia University, 2011
Research interests: applied Bayesian hierarchical modeling; Bayesian model selection methods
The University of Texas MD Anderson Cancer Center President Ronald DePinho, M.D., was elected to the National Academy of Sciences (NAS) – one of the most prestigious accolades in the United States bestowed in the field of science and engineering. DePinho is the first member of the MD Anderson faculty to be recognized with this distinction.

John Hancock, Ph.D., was appointed the executive director of (UTHealth) Medical School’s Brown Foundation Institute of Molecular Medicine for the Prevention of Human Diseases (IMM).

Hope Northrup, M.D., director of the Division of Medical Genetics in the Department of Pediatrics at the UTHealth Medical School, was named the 2012 Wise Woman HER Award recipient by Houston Woman Magazine.

Several members of the GSBS faculty received The University of Texas System Regents’ Health Awards for Outstanding Teaching. The UT Regents’ Outstanding Teaching Awards are the Board of Regents’ highest honor with monetary awards ranging from $15,000 for contingent faculty to $30,000 for tenured faculty members. The following GSBS faculty members are the 2012 honorees:

Shine Chang, Ph.D.  
Len Cleary, Ph.D.  
Gary E. Gallick, Ph.D.  
Varsha Gandhi, Ph.D.  
Jacqueline T. Hecht, Ph.D.  
Henry W. Strobel, Ph.D.  
Dihua Yu, M.D., Ph.D.

EMERITUS PROFESSORS

R.W. Butcher, Ph.D.  
John DeMoss, Ph.D.  
Thomas Haynie, M.D.  
Beng Ho, Ph.D.  
Dah Hsi Ho, Ph.D.  
*Kenneth Hogstrom, Ph.D.  
*John Horton Ph.D.  
*Samuel Kaplan Ph.D.  
*Margaret Kripke, Ph.D.  
*Julia Lever, Ph.D.  
Doris Ross, Ph.D.  
Barbara Sanborn, Ph.D.  
William Schull, Ph.D.  
Robert Shalek, Ph.D.  
Harry Sperling, Ph.D.  
Anna Steinberger, M.D.  
Karen Storthz, Ph.D.

Sharing their point of view

On July 17 and 18, GSBS Deans Michelle Barton, Ph.D., and Michael Blackburn, Ph.D., hosted town hall meetings entitled This is YOUR Graduate School: Our Vision and Your Suggestions to introduce their strategic plan for the Graduate School to faculty and students.
GSBS Photography

Competition 2012 Winners

Seen here are four award-winning pictures from the Graduate Student Association’s 2nd annual photography contest held in June. The competition was open to students, postdocs and faculty members of UTHealth and MD Anderson, and prizes were awarded in four categories: Nature, Abstract, Science and Messy/Ugly. These artworks are on display at the GSBS administrative offices.

1st Place: Science
Happy Cells
Alessandra Di Lorenzo

1st Place: Abstract
Marching On
Stephen Herrmann

1st Place: Nature
Beautiful morning at Yosemite National Park
Shuangxing Yu

1st Place: Messy/Ugly
Super Power
Mustafa Raoof
Samuel Brady received the Ruth L. Kirschstein National Research Service Award for Individual Predoctoral Fellows from the NIH. His advisor is Dr. Dihua Yu.

David Savage was named a Schweitzer Fellow. He will spend the next year working to improve the health and well-being of vulnerable communities across the Houston area while continuing his studies. His community site will be the Alliance for Multicultural Community Services.

Jason Williams was awarded a 2012 Student Scholarship in Cardiovascular Disease from the scientific councils of the American Heart Association. His advisor is Dr. Yong-Jian Geng.

Six GSBS students participated in The John P. McGovern Award for Presentation Skills Contest on May 16. The event is part of an oral presentation competition based on the student’s current research project. This year’s winners were: 1st: Brian Pickering 2nd: Ping Chieh (Benjamin) Chou; 3rd: Jennifer Dulin; People’s Choice: Thuy Thanh Le.

Samuel Brady
Secretary
MDACC, Molecular Pathology

Christine Shiang
President
MDACC, Breast Medical Oncology

Ryan Bosca
Vice President
MDACC, Imaging Physics

Adam Yock
Vice President
MDACC, Radiation Physics

William (Tre’) O’Brien
President
UT Medical School, Biochemistry & Molecular Biology

Patty Dimarco-Duarte
Secretary
MDACC, Biochemistry & Molecular Biology

Welcome!
2012-2013 Officers

McGovern Award finalists, from left: Jennifer Dulin, Brian Pickering, Kausar Riaz Ahmed, Callie Kwartler, Thuy Thanh Le and Ping Chieh (Benjamin) Chou.

STUDENT LIFE @ GSBS

Left: GSBS students Ann Simmons, Nevena Cvjetkovic and Carolyn Garby participated in the March of Dimes March for Babies event on April 29, 2012. The GSBS team raised more than $1400 for the cause.

Right: Food competitors Ale Klauer and Mai Tran show off their finest fare during a tasting contest at the International Food Festival & Friday Afternoon Club on April 27, 2012. The GSA and Student Affairs Committee (SAC) partnered to bring the combined event which featured food from diverse countries and cultures. Organizers plan to hold it annually.

Find more about GSA meetings and events http://www.uthouston.edu/gsbs/gsa/
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 $500 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**  
Richard Castillo  

**Advisor**  
Dr. Thomas Guerrero

Harry S. & Isabel C. Cameron Foundation Fellowship

This fellowship provides $20,000 for one year and is awarded to an exceptional post-candidacy student working in research fields related to Alzheimer’s or cardiovascular diseases. The 2011-2012 recipient is:

**Student**  
Meredith Rees  

**Advisor**  
Dr. Heinrich Taegtmeyer

Barbara L. Kennedy Memorial Scholarship

This $1,000 scholarship was established in 2002 for a student in the Specialized Masters Program in Genetic Counseling. The winner is selected by a review committee appointed by the WINGS Chapter of the American Business Women’s Association. The recipient for 2011-2012 is:

**Student**  
Roya Mostafavi  

**Advisor**  
Ms. Claire Singletary

Shown here: Roya Mostafavi and Ms. Grace Pary, president of WINGS.

Alfred G. Knudson Outstanding Dissertation

In 1997 an annual Alfred G. Knudson Outstanding Dissertation Award was established by MD 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, *LMW-E mediates mammary tumorigenesis by deregulating acinar morphogenesis & generating cancer stem cells*. This year’s recipient is:

**Student**  
MyLinh Thi Duong  

**Advisor**  
Dr. Khandan Keyomarsi

P.E.O. Scholarship

The P.E.O. National Scholarship Awards were established in 1991 with a focus on assisting women of the United States and Canada who are pursuing a graduate degree, or undertaking advanced study or research. Since that time over 1,000 women have become P.E.O. scholars. Each year the “A.C.” Chapter of the group, from Houston, nominates a student to follow in the footsteps of several earlier GSBS recipients of this highly competitive, prestigious and valuable ($15,000) award. Previous GSBS students who were named P.E.O. Scholars include Raegan Hunt, Pamela Yang, Ruth Ann Barkley, Cameron Jeter and Sara Scarboro. This year’s recipient is:

**Student**  
Jacquelyn Reuther  

**Advisor**  
Dr. Ann Killary
Andrew Sowell-Wade Huggins Endowed Scholars, Professor and Fellow
Cancer Answers/Sylvan Rodriguez Scholar

The Andrew Sowell-Wade Huggins Scholars, Professor and Fellow, and the Cancer Answers/Sylvan Rodriguez Scholar represent the culmination of 20 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 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 more than 70 scholars and six 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 2011-2012 Sowell-Huggins Endowed Scholars receiving $5,000 are:

Student
Michelle Reith
Alessandra Di Lorenzo
Anthony San Lucas
Lawrence Bronk

Advisor
Dr. Pramond Dash
Dr. Mark Bedford
Dr. Paul Scheet
Dr. Renata Pasqualini

The 2011-2012 Professor/Fellow team is:

Student
Aarthi Goverdhan

Advisor
Dr. Mien-Chie Hung

The 2011-2012 Cancer Answers/Sylvan Rodriguez Scholar is:

Student
Tamara Laskowski

Advisor
Dr. Brian Davis

The Schissler Foundation Fellowships

This dynamic family foundation has been a major benefactor to the Graduate School of Biomedical Sciences for over 10 years and has a sincere commitment to graduate education. The Schissler Foundation Fellowships foster collaboration with the emphasis on basic science projects with the greatest likelihood of translational application to human health. The Fellowship requires that all students receive a broad exposure to the biomedical sciences and ethical concepts that underlie their research. These prestigious awards give significant help to research studies that will seek to make major contributions to the therapies and cures of common human disease through genetics. In 2011-2012 The Schissler Foundation provides $25,000 stipend funding for four Schissler Foundation Fellowships with at least one expressly designated for a student working on cancer research with faculty at MD Anderson. The 2011-2012 recipients are:

Student
Michelle Reith
Alessandra Di Lorenzo
Anthony San Lucas
Lawrence Bronk

Advisor
Dr. Pramond Dash
Dr. Mark Bedford
Dr. Paul Scheet
Dr. Renata Pasqualini

The GEORGE M. STANCEL, PH.D., SCHOLARSHIP IN BIOMEDICAL SCIENCES

This award honors GSBS Dean George Stancel, Ph.D., and was established by members of the Graduate School’s Advisory Council, 2010-2011, chaired by Diana Hawkins. Donors include: Gail and Louis Adler; Leslie and Jack S. Blanton, Jr.; William H. Drushel, Jr. and Nancy Drushel; Harry Gee, Jr. and Antje Gee; Diana and Russell Hawkins; Jesse B. Heath, Jr. and Hetta Heath; Barrett and Susan Reasoner; Beth Robertson; Richard P. Schissler III and the Schissler Foundation; Britt and Helen Schmidt; Ralph and Bette Thomas.

The first recipient of this $4,000 award is Thuy Thanh Le. Her advisor is Dr. Michael Blackburn
Alumni Spotlight

Suneeta Mahagaokar, Ph.D., D.A.B.T. (Rao/1979)

Mahagaokar is currently the Manager of Business Improvement and Operations in the Environmental and Product Health (EPH) group of Shell. Her group optimizes delivery of scientific (toxicology, ecotoxicology and industrial hygiene) expertise for global business applications. She is also active in advocacy and implementation of health-related regulations.

By training, Mahagaokar is a board certified toxicologist. She started her career in the oil industry as a toxicologist and progressed to discipline lead and manager of toxicology for Shell, where she served as Shell’s lead toxicologist and managed a global group of 12 toxicologists. Mahagaokar was the first woman to lead toxicology for one of the largest five oil majors.

Mahagaokar enjoys spending time with her husband, Uday, and their two grown sons. She also loves to travel, read, play tennis and cook. Her heroes are Mahatma Gandhi and her dad. Mahagaokar earned her Ph.D. at GSBS in Cell Biology and Biochemistry followed by a post doctorate fellowship in toxicology. Her advice to GSBS students is to know yourself and be true to yourself, pursue work you truly enjoy and that gives you a sense of fulfillment. Keep challenging yourself as “nothing that is worth it comes easy.”

Career Day

Saturday, June 16, 2012

Career Day is an event hosted by the GSBS Alumni Association that gives alumni the opportunity to share their professional experiences with the student body. This year, 18 presenters talked to students about a variety of scientific career fields. Pictured below are some images from the seminar. If you are interested in participating in the next Career Day, please contact Linda Carter: Linda.M.Carter@uth.tmc.edu.

In Memory

Margery W. Shaw, M.D. (1923-2012) — Shaw was a professor and director of the Medical Genetics Center at the Graduate School of Biomedical Sciences in 1967; GSBS faculty member from 1968 to 1984; and served as Acting Dean of GSBS in 1977. Shaw passed away July 29, 2012, in her hometown of Evansville, Indiana. Shaw developed acute leukemia in June. She was 89.
Special Thanks and Gratitude  
March 21, 2012 - August 8, 2012

Our Benefactors

<table>
<thead>
<tr>
<th>Anonymous</th>
<th>Hetta &amp; Jesse Heath, Jr.</th>
<th>The Schissler Foundation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leslie and Jack Blanton, Jr.</td>
<td>Morgan McKeller</td>
<td>W.A. &amp; Madeline W. Smith Foundation</td>
</tr>
<tr>
<td>Mimi Cho-Rohlfson</td>
<td>Dee Osborne</td>
<td>The Union National Bank of Mount Carmel</td>
</tr>
<tr>
<td>Cullen Trust for Higher Education</td>
<td>Joy &amp; Edward Randall, IV</td>
<td>Welcome Foods, LP &amp; William Chu</td>
</tr>
<tr>
<td>Fidelity Charitable Gift Fund</td>
<td>Susan &amp; Barrett Reasoner</td>
<td></td>
</tr>
</tbody>
</table>

Our Contributors

| Norma Ayers                                  | John Graham                    | Robert Ku                |
| The Blackwell Foundation                    | E. Joseph Grant                 | Dolores Lamb             |
| Yanis Boumber                                | Suzanne Hampton                | Eunice Laurent           |
| Ivone Bruno                                  | Jacqueline Hecht               | Steven Lott              |
| Carrie Cameron                               | Beng Ho                         | Nancy Matney             |
| Shine Chang                                  | Vicki Huff                      | Kirstin Matthews         |
| Gilbert Cote                                 | Geoffrey Ibbott                 | Peggy Mazoch             |
| Rena D’Souza                                 | Cameron Jeter                   | Pierre McCrea            |
| Peter Davies                                 | Faye Johnson                    | Trula Meglasson          |
| Janet Davis-Travis                           | Kathleen Jones                  | Diane Merry              |
| Teresa Deis                                  | Celestine Kan-Sutton            | Yuko Miyamoto            |
| Susan Diederich                              | Edward Karbon                   | Paul Nemeth              |
| Cindee Ewell                                 | Rodney Kelles                   | Sarah Noblin             |
| Kevin Farquhar                               | Ann Killary                     | Jacqueline Peltier Horn  |
| Betsy Frantz                                 | Theresa Koehler                 | Meredith Raine           |
| Chuan Gao                                    | Ralf Krahe                      | Ellen Richie             |
| Brenda & James Gaughan                       | Richard Krakaur                 | Aaron Roome              |
| Millicent Goldschmidt                        | Karen Krakower Kaplan           | Leanne Scott             |
|                                               | Anne Sereno                     | Peter Seferian           |
|                                               |                                 | Robert Shalek            |
|                                               |                                 | Joseph Sorrentino        |
|                                               |                                 | Cheryl Spitzenberger     |
|                                               |                                 | Susan Stephenson         |
|                                               |                                 | Michael Stern            |
|                                               |                                 | Hongmin Sun              |
|                                               |                                 | Ming Tan                 |
|                                               |                                 | Ifeoma Umeh              |
|                                               |                                 | Hernan Vasquez           |
|                                               |                                 | Jacob Verghese           |
|                                               |                                 | Brenda Whaley            |
|                                               |                                 | Ann Wright               |
|                                               |                                 | Wan-Song Wun             |
|                                               |                                 | Jijun Xu                 |

All gifts at any scale and to any category:

- Will be acknowledged.
- Are tax deductible.
- 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.

Discovery consists of seeing what everybody has seen and thinking what nobody has thought.

— Albert von Szent-Gyorgyi

Staff News

Pat Cruz Bruesch (right), Business Systems Analyst, is the 2012 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 Dr. Stancel, GSBS Dean 1999-2012, in memory of Melva Ramsay, long time beloved employee of GSBS.
Hello Alumni,

Mark your calendars for the annual Alumni Reunion on Friday, November 16, 2012. We will be celebrating our newest GSBS Distinguished Alumnus, Steven Patierno, Ph.D. (1985/Costa). With over two decades of experience managing over $30 million of grants, Dr. Patierno has secured and implemented many large, complex biomedical and public health-related research grants (both laboratory and population sciences), as well as patient-centered and community-based grants in cancer disparities. He is internationally recognized as a leading expert in cancer causation and environmental carcinogenesis. There will be more information coming about the Reunion and Dr. Patierno on the GSBS website and Facebook, so stay tuned.

Commencement May 5, 2012, honored more than 70 new M.S., Ph.D. and M.D./Ph.D. graduates. It was great fun to congratulate them on their new esteemed status as GSBS alumni. Several were recipients of named scholarship and fellowship awards, others received recruitment awards provided through our alumni annual gifts — praise goes to you for your vision in giving back to GSBS.

Career Day brought 41 graduate students and postdocs from not only UT-GSBS at Houston, but Rice University, Baylor College of Medicine, and UTMB at Galveston to hear the latest about a variety of scientific career paths. Thank you to our 18 presenters from academia, governmental policy and agencies, industry, intellectual property, the pharmaceutical industry, scientific writing, start-ups and even wealth management: Joy Marshall, Barbara Williams, Doug Botkin, Dianne Hammond, Carla Kinslow, Steve Lott, Sangeeta Cheema, Cindee Ewell, Leisa Peschel, Alex Abuin, Marya Chaney, Morgan McKeller, Qi Melissa Yang, Kimberly Mankiewicz, Orlando Saldana, Ben Thomas, Vern Montross and yours truly. This was a most impressive line-up.

See you November 16th!

Best regards,

GSBS Alumni Association Steering Committee President
2011-2012

P.S. Watch for a new Mocktail Career Seminar in early December.