

THE UNIVERSITY OF TEXAS

MD Anderson
Cancer Center

Making Cancer History®

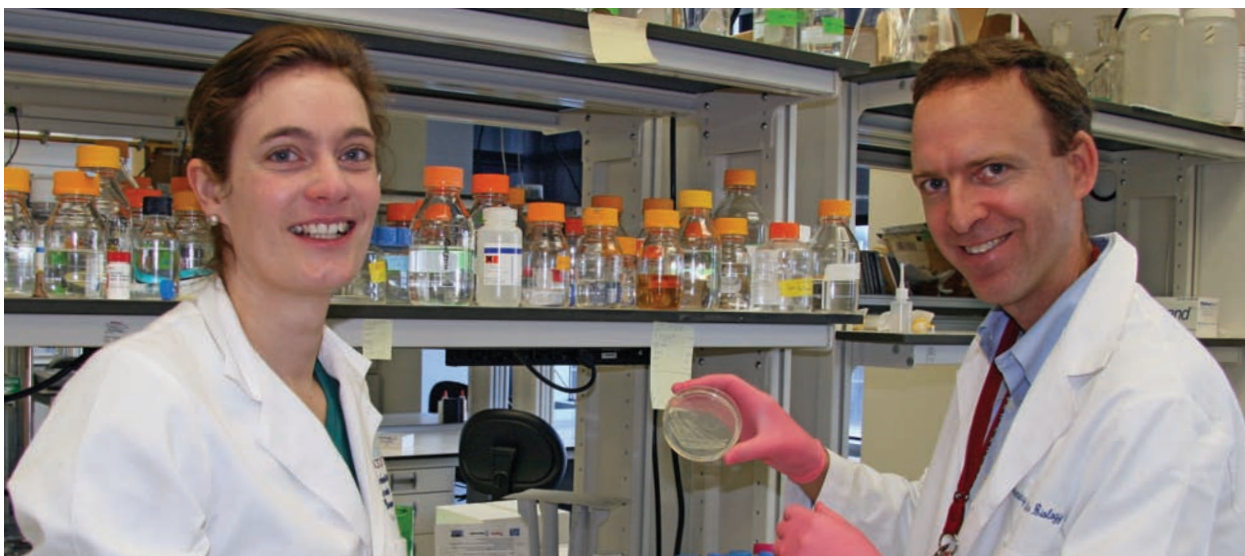
DIVISION OF

Internal Medicine

News  SPRING • 2011

Meet microbial sleuth Dr. Sam Shelburne

Discovering how bacteria cause disease in humans



Nicola Horstmann, Ph.D., postdoctoral fellow, Biochemistry and Molecular Biology, and Samuel Shelburne, M.D., assistant professor, Infectious Diseases, conduct genetic research to discover new ways that bacteria cause infection in their laboratory in the Mitchell Basic Sciences Research Building.

Samuel Shelburne, M.D., assistant professor, Infectious Diseases, has dedicated his professional life to advancing the understanding of how bacteria cause disease in humans. With his research, he aims to create new antibiotics to fight infection – an area that is of critical importance to MD Anderson’s immuno-compromised cancer patients, as well as the general population.

Shelburne explains that there are two ways to discover new antibiotics: the empirical approach and the genome approach. “The empirical approach is the method scientists have been using for many decades and is how all antibiotics have been discovered to date. It involves studying a large number of chemicals to see which

ones are active against bacteria,” he says, noting that this is how penicillin was discovered. “The second method targets specific bacterial genes and gene products, and only became a possibility about 10 years ago, following the revolutionary advances in genetic sequencing made possible by the human genome sequencing project. My research is using the newer genomic method to discover new genes that attack bacteria that cause infection. Hopefully by targeting these genes we could develop novel antibiotics.”

Shelburne explains his method, “The number of new antibiotics created over the past 15 years has been declining because the empirical

approach has run its course in terms of effectiveness. With the genomic approach, we have a better chance to boost the number of new, effective antibiotics.” This involves systematically inactivating between 2,000–4,000 individual genes to

look at how that affects a specific bacteria’s ability to cause infections.

The specific bacterium that Shelburne’s is studying is a Gram-positive bacterium called Group A Streptococcus. This bacterium, also known as the “flesh-eater,” causes several common diseases,

“... resistance to antibiotics has steadily increased in the general population over the past 30 years.”

Shelburne, continued on page 2



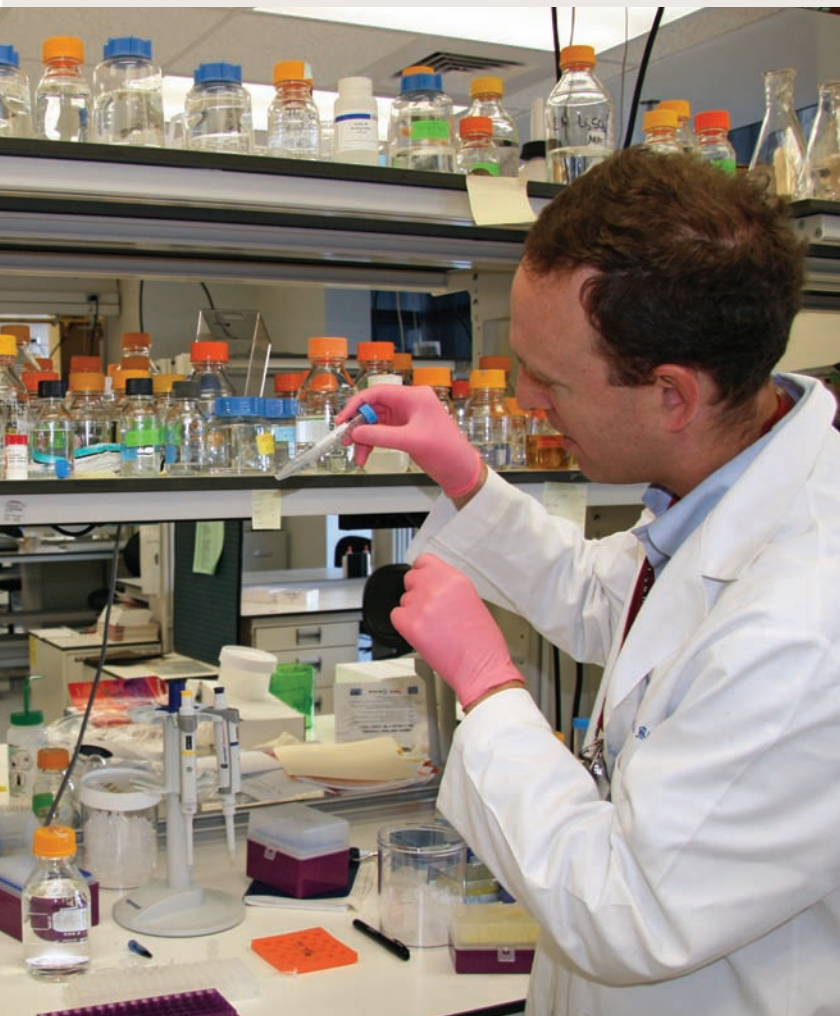
Dr. Shelburne, continued from page 1

including tonsillitis, skin infections, scarlet fever and acute rheumatic fever (ARF). It also readily translates to MD Anderson's population, in particular, this bacterium is a threat to patients with blood cancers, such as leukemia and lymphomas, and can even be fatal.

This field of research has become supremely important as a resistance to antibiotics has steadily increased in the general population during the past 30 years, when antibiotic resistant organisms first emerged. "As the bacteria become more and more resistant to the existing antibiotics, it's critical to develop new antibiotics to fight infection," he says.

Shelburne explains the hurdles that accompany such an undertaking. "The biggest challenge is trying to develop pharmaceuticals that inhibit the bacteria, but also do not have harmful side effects for the patient," he says. "We're about 10 to 20 years away from having a drug that will have direct clinical impact."

Despite the long-term nature of his research, Shelburne is enthusiastic about the intended outcome. "Although our work is unlikely to have an impact on this generation, it is laying the foundation for a whole new class of antimicrobial therapies for entire generations to come. It's what gets me up in the morning."



A FEW WORDS from Dr. Gagel

Internal Medicine Division Head

A couple of recurring themes have emerged from the past four Employee Opinion Surveys.

One positive trend is a higher level of dedication to the institution's mission to eliminate cancer. Another trend we need to improve on is trust and openness in the work environment. The survey indicated 72 percent of MD Anderson's departments score at or below 60 percent favorable on four questions related to this issue. For example, there is fear to say what you think in the workplace and a fear of retribution.

"... we take this feedback seriously."

We take these issues and the feedback seriously.

For all of us to grow and develop professionally, we need to have a free flow of constructive input and ideas from faculty and employees, at all levels. For this reason, MD Anderson has decided to tackle this issue of trust and openness and I'm pleased to lead this effort for our division.

Here's a sample of the division's immediate plan to address this issue: Communication of survey results and action plans will be addressed in townhall meetings, managers will participate in the institution's new training program "Building Tomorrow's Leaders," and further interviews will be conducted by our HR Generalist, Candace White. Additionally, our FY11 Anderson Award Goal for the division will focus on improving communication skills, such as how to convey constructive ideas.

I recognize that no two work units have exactly the same issues related to trust and openness, and therefore, a one-size-fits-all approach will not be effective. Departments and Centers will develop an action plan to address survey results that are specific to their work environment.

I ask that each and every member of the Division of Internal Medicine join me in this effort to foster a more trusting and open environment. As always, my door is open and I welcome your ideas and feedback.

New Bone Healthcare Program launches



A Bone Healthcare Program was launched in October to provide treatment for cancer patients with metabolic bone disorders or treatment-induced bone loss. Although treatment for patients with bone loss has been available at MD Anderson for many years, the new program streamlines referral and triage processes, and provides an identity for the institution's collective bone resources and services.

"Previously, referrals for bone services were received by several different areas, including Endocrinology, Rheumatology, and General Internal Medicine," says Mimi Hu, M.D., assistant professor, Endocrine Neoplasia and Hormonal Disorders, and Director of the Bone Healthcare Program. "Now, all bone patients can be referred to one central program."

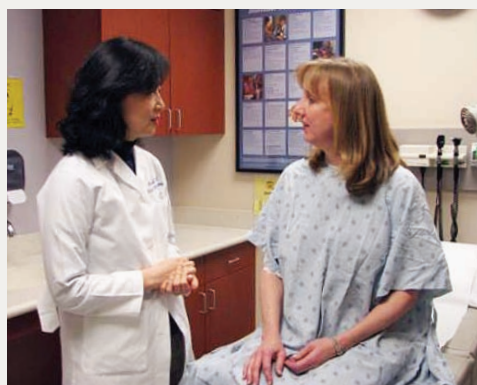
Another benefit of the new Bone Healthcare Program is increased availability of appointments and the addition of same-day consults. "We hope that streamlining scheduling will positively affect patients, especially those from out of town," Hu says. "We're able to accomplish this, thanks to an increase in clinicians focused on patients with osteoporosis, low bone mass, fracture,

height loss, Vitamin D deficiency, and other metabolic bone disorders." The program also expands research opportunities. "This program facilitates collaboration with other services across the institution, granting us the ability to research new comprehensive therapies as well as focus on prevention," Hu adds.

Consulting physicians from Endocrinology, Rheumatology and Pediatric Endocrinology are available for evaluation and treatment of metabolic bone disorders. Other supportive care is provided by clinicians from Radiology, Pain Management, Rehabilitation and Nutrition.

The Bone Healthcare Program provides services in these locations:

- The Internal Medicine Center Mays Clinic, Floor 6, near Elevator U
- The Internal Medicine Center Main Building, Floor 6, near Elevator A,
- The Endocrine Center, Main Building Floor 9, near Elevator A.



To refer a patient, access Consults Online and select "Bone Healthcare Program" for adult patients or "Endocrinology" under Child/Adolescent Center for pediatric patients.

For same-day consults, contact the Internal Medicine Center (Mays Clinic) at 713-563-7100, and ask for the Bone Healthcare Program staff.

For general information, contact **Mimi Hu, M.D.**, assistant professor, Endocrine Neoplasia and Hormonal Disorders, 713-792-2841, **or** **Huifang Linda Lu, M.D., Ph.D.**, assistant professor, Rheumatology, 713-745-2169.



Diabetes consults offered same day or next day



The diabetes management services of the departments of Endocrine Neoplasia and Hormonal Disorders, and General Internal Medicine are working together to provide same-day or next-day outpatient diabetes consultations for cancer patients who need assistance with blood glucose management.

To arrange an urgent outpatient diabetes consultation, Monday-Friday, 8:00 a.m.-5:00 p.m.:

- By an endocrinologist – page 713-404-4164
- By a general internist – page 713-404-3618

Calls will be answered by a nurse practitioner who will expedite the consultation. Both services will provide comprehensive care, including management of hypertension and hyperlipidemia, which are commonly seen in diabetic patients.

If you have questions regarding a consultation with Endocrinology, page **Victor Lavis, M.D.**, professor, Endocrine Neoplasia and Hormonal Disorders, 713-606-3921.

If you have questions regarding a consultation with General Internal Medicine, page **Ellen Manzullo, M.D.**, professor, General Internal Medicine, 713-713-404-2821.

New Leadership

New Emergency Medicine chair recruited from Albert Einstein College



Knox Todd, M.D., has been named chair of the Department of Emergency Medicine.

The Emergency Medicine department was created on Sept. 1, 2010, as the ninth department in Internal Medicine. MD Anderson is the first comprehensive cancer center to establish an academic department of Emergency Medicine.

Todd's most recent appointments were professor of Emergency

Medicine at Albert Einstein College of Medicine and director of the Pain and Emergency Medicine Institute at Beth Israel Medical Center in Manhattan.

Todd's research interests include emergency medicine pain management, palliative care and health disparities. In the early 1990s, he conducted seminal studies of ethnic disparities in analgesic use. Other research efforts include innovative CPR education techniques in the African-American church, practice guidelines for the use of cervical radiography in the setting of blunt trauma, and epidemiologic studies on the effects of Atlanta air pollution on the incidence of cardiovascular events presenting to the emergency department.

"I want to express tremendous appreciation to Carmen Gonzalez, M.D., for her leadership while serving as chair ad interim since the department officially launched on Sept. 1," says Robert Gagel, M.D., division head, Internal Medicine. "A native Texan, Dr. Todd is glad to be back in his home state. His work will focus on making oncology emergency medicine at MD Anderson the superior standard of care in the nation."

Endoscopy Care Center gets new medical director



William Ross, M.D., professor, Gastroenterology, Hepatology and Nutrition, is now medical director of the Endoscopy Care Center. Since Ross assumed the role of clinical medical director ad interim of the Endoscopy Care Center

in December 2009, extensive improvements have been accomplished. These include the achievement of a record volume of cases, creation of a new scheduling template that eliminated backlog for advanced therapeutic procedures, placement of new quality metrics, and substantial improvements to the care patients receive and the overall morale of the unit. There has been a 10% increase in endoscopy productivity over the past years.

Ross joined MD Anderson in 2002 as associate professor, Gastroenterology, Hepatology and Nutrition.

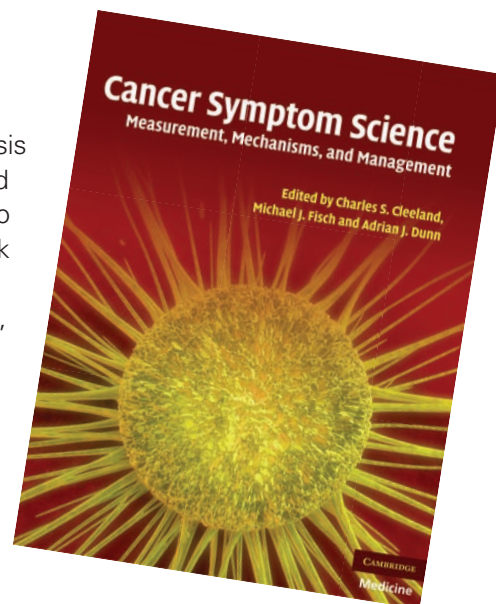
His current research focuses on endoscopic management of stem cell transplant recipients and graft-versus-host disease, and he is the principal investigator of three phase I studies in this field. Ross' vision is to build a new program in endoscopic electronic medical records focused on outcomes in bundling of health care for GI cancer prevention.

Recent happenings

New Cancer Symptom Science book, first of its kind

Cancer Symptom Science is the first interdisciplinary compilation of research on the mechanisms underlying the expression of cancer-related symptoms. It presents innovations in clinical, animal and in vitro research, research methods in brain imaging, and statistical-descriptive approaches to understanding the mechanistic basis of symptom expression. It also provides perspectives from patients, government and industry. By collecting and synthesizing the developing threads of new approaches to understanding cancer-related symptoms, the book promotes a pioneering framework for merging behavioral and biological disciplines to clarify mechanisms of symptom evolution, incorporating new technologies, testing novel agents for symptom control, and improving patient functioning and quality of life both during and after cancer treatment.

The editorial team includes Charles Cleeland, Ph.D., chair, Symptom Research; Michael Fisch, chair, General Oncology; and Adrian Dunn, Ph.D., The University of Hawaii at Manoa. The book is targeted toward surgical, clinical and medical oncologists, academic researchers, and pharmaceutical companies developing new agents to control symptom expression.



Interventional Pulmonology in Cancer Patients: An intensive hands-on course held February 10-12, 2011



Pulmonary Medicine's annual intensive hands-on, three-day course was designed to review the current concepts and recent advances in interventional pulmonology as it pertains to the cancer patient, and to introduce new technologic advances that are poised to revolutionize the diagnosis, staging and management of lung cancer. Malignancies involving the lungs continue to provide a significant challenge to chest physicians. With the exponential increase in technology, several minimally-invasive diagnostic and therapeutic strategies are becoming feasible. As the largest cancer center in the world, MD Anderson is able to offer a

depth and breadth of clinical experience and training that few can match. The course is designed to provide the participant with a state-of-the-art review of the principles and practice of interventional pulmonology in patients with thoracic malignancies and includes utilization of vivo animal models.

Milestones and achievements



• DERMATOLOGY

Dermatology trainee **Lisa Harn-Ging Shiue, M.D.**, graduate research assistant, was honored with three awards from MD Anderson's Graduate School of Biomedical Sciences— Center for Clinical and Translational Sciences T32 Training Grant, GSBS Travel Award, and MD Anderson Trainee Research Day second place abstract winner. Shiue's mentors are Madeleine Duvic, M.D., professor and deputy chair, Dermatology; and Xiao Ni, M.D., Ph.D., assistant professor, Dermatology – Research.

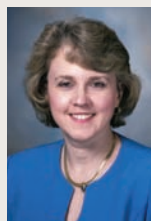


Robert Bresalier, M.D., professor, Gastroenterology, Hepatology and Nutrition, received funding for \$113,000 under the Partnership for Excellence in Cancer Research between The University of Puerto Rico and The University of Texas MD Anderson Cancer Center. His proposal was titled, "A Circulating Ligand for Galectin-3 Elevated in the Serum of Individuals with Colorectal Neoplasia."

• EMERGENCY MEDICINE



As a result of their commitment to quality improvement, **Terry Rice, M.D.**, left, assistant professor and medical director of the Emergency Center, and **Katy Hanzelka**, clinical pharmacy specialist, were invited to give poster presentations on their abstracts, "Improving Communication in the Emergency Center," and "Implementation of Early Goal Directed Therapy in a Cancer Center Emergency Room," at the International Forum on Quality and Safety in HealthCare. This is the third year in a row that Emergency Medicine has been invited to present at this forum.



• GENERAL INTERNAL MEDICINE

Ellen Manzullo, M.D., professor, General Internal Medicine, completed the first of her three-year term as chair of the Executive Committee of Medical Staff, which acts on behalf of the Medical Staff to carry out responsibilities within the context of the hospital functions of governance, leadership and medical peer review and/or professional review activity. It is the principal committee to which all standing and ad hoc Medical Staff committees report.



Michael Kallen, Ph.D., assistant professor, General Internal Medicine – Research, published an article in Quality of Life Research on item banks that has been nominated for the ISOQOL Outstanding Article of the Year Award. ISOQOL is the leading, international organization on quality of life research/measurement and QOLR is the top journal in the field. Recipients of the award will be recognized at the ISOQOL annual conference in London.

• GASTROENTEROLOGY, HEPATOLOGY AND NUTRITION



Lopa Mishra, M.D., chair, Gastroenterology, Hepatology and Nutrition, was awarded several research grants, including:

Program Project P01 in the amount of \$7,524,390, for her research, "Cellular and Molecular Mechanisms of Gastrointestinal Cancers"

R01 in the amount of \$1,503,600, for her research, "Metastatic Potential of Colorectal Carcinoma"

R01 in the amount of \$1,500,773, for her research, "Role of ELF/SMAD4 in Gastrointestinal Cell Proliferation and Cell Cycle Progression"

RC2 in the amount of \$596,550, for her research, "TLR4 and TGF-beta Interactions in HCC Induced by HCV and Alcohol"

• INFECTIOUS DISEASES, INFECTION CONTROL AND EMPLOYEE HEALTH



Issam Raad, M.D., chair, Infectious Diseases, Infection Control and Employee Health, was appointed to the Gerald P. Bodey, Sr., Distinguished Professorship of Infectious Diseases.

• PULMONARY MEDICINE

Roberto Adachi, M.D., assistant professor, Pulmonary Medicine received an R56 from NIH/NIAID. The award is for one year in the amount of \$230,260 direct costs. The title of his research is "Protective and Deleterious Roles of Regulated Exocytosis from Mast Cells."

Adachi's application to CPRIT was selected for an Individual Investigator Research Award. The title of his research is "Mast Cell Tryptases in Lung Cancer Development and Progression" and funding is for three years for more than \$900,000 in direct costs.



Burton Dickey, M.D., was invited to be a guest speaker at the 2nd Pacific Rim Airway Mucus Symposium in Taipei, Taiwan, Nov. 13-14, 2010, at National Taiwan University College of Medicine. The conference was co-hosted by the Formosan Medical Association, Taiwan. Dickey presented "Protective and Pathologic Roles of Airway Mucus."

A Medical Progress review article titled "Airway Mucus Function and Dysfunction" was published in the Dec. 2 issue of the New England Journal of Medicine. Authors are **Burton Dickey, M.D.**, and John Fahy, M.D., of the University of California San Francisco.



• SYMPTOM RESEARCH

Charles Cleeland, M.D., above, right, chair, Symptom Research, was honored by the Eastern Pain Association at its 2010 Winter Meeting, held at the New York Academy of Medicine. William Schmidt, M.D., EPA President, presented the Raymond W. Houde Lectureship Award to Cleeland in honor of his clinical assessment of opioids, work on cancer-related pain, superior mentoring and deep interest in patients as a whole. Dr. Cleeland's address included a comprehensive review of symptom research in patients with cancer, using pain as a model for promoting mechanism-driven methods for reducing symptom burden.

Promotions

Cardiology

- Aarif Khakoo, M.D., associate professor, Cardiology

Dermatology

- Betty Spears, program coordinator

Division of Internal Medicine

- Lucia Wang, senior financial analyst

Endocrine Center

- Mario Hernandez, patient services coordinator

Endocrine Neoplasia and Hormonal Disorders

- Clayton Dreyer, senior coordinator, research data

Gastroenterology, Hepatology and Nutrition

- Marta Davila, M.D., professor
- Alexander Dekovich, M.D., professor
- William Ross, M.D., professor

General Internal Medicine

- Sarah Baldwin, advanced practice nurse
- Rhodrick Haralson, senior coordinator, research data
- Wenli Liu, M.D., associate professor
- John Patlan, M.D., associate professor

Infectious Diseases, Infection Control and Employee Health

- Javier Adachi, M.D., associate professor
- Laura Claburn, coordinator, department publications
- Christine Cobb, executive assistant
- Victor Eduardo Mulanovich, M.D., associate professor

Pulmonary Medicine

- Diwakar Balachandran, M.D., associate professor
- Ola Golovinsky, program coordinator
- Denise Holcomb, operations manager
- Laila Noor, senior coordinator, clinical studies
- Amanda Orsak, senior administrative assistant
- Keegan Smiley, research assistant II

Symptom Research

- Kaiping Liao, senior data analyst
- Tito Mendoza, Ph.D., associate professor
- Kristin Van Houten, executive assistant

Division of Internal Medicine News

EDITORS:

Sarah Petrie, program manager, Internal Medicine
Lisa Welsh-Skiffington, project director, Internal Medicine

DIVISION LEADERSHIP:

Robert Gagel, M.D., division head, Internal Medicine;
and Loy Deloney, division administrator ad interim,
Internal Medicine, and department administrator,
Pulmonary Medicine

CONTRIBUTORS:

Amy Heaton, Chuck Stava, Jeanie Woodruff,
Mark Tansiongco, Cathy Pugh, Rosi Gonzalez,
Denise Holcomb, Regina Smith, Lisa Thomas,
Carol Cox, Norma Dorsey, Lorraine Medina,
Anabel Morales, Joel Ackerknecht and Londa Cravey

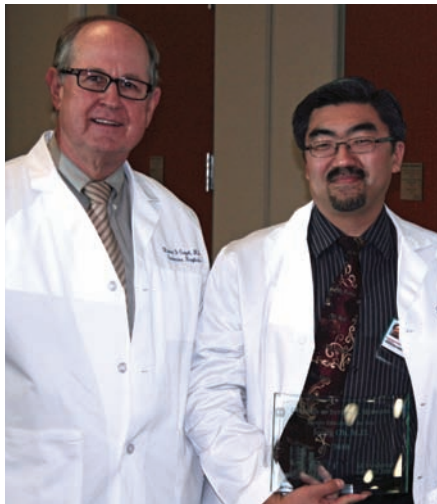
News contributions may be sent to:

Judy Overton, JBOverton@mdanderson.org

The University of Texas
MD Anderson Cancer Center
Division of Internal Medicine
1400 Pressler, Unit 1463
Houston, Texas 77030

ADDRESS SERVICE REQUESTED

Non-Profit Org.
U.S. Postage
PAID
Houston, TX
Permit No. 7052



Division honors two clinicians

Internal Medicine Division Head **Robert Gagel, M.D.**, presented two awards to outstanding faculty in the Division of Internal Medicine. **Jeong Oh, M.D.** (left), associate professor, General Internal Medicine, received the honor of Faculty Educator of the Year and **Sunil Sahai, M.D.** (right), associate professor, General Internal Medicine, was selected as Clinic Medical Leader of the Year. These inaugural awards will be given annually to recognize faculty who stand out among their peers.



Honoring MD Anderson's only diabetes educator



Pictured from L-R: June Kelsick, clinical administrative director, Internal Medicine Center; Mark Tansiongco, nurse manager, Internal Medicine Center; Judy Keaveny, coordinator, diabetes education and award recipient; and Steve Stuyck, vice president for Public Affairs.

Judy Keaveny, coordinator, diabetes education, Internal Medicine Center, was selected as a 2010 Outstanding Patient Educator as part of MD Anderson's annual Health Education Week. The award honors patient educators who go beyond what is expected in fostering interdisciplinary teamwork and building partnerships with patients and their families.

"Judy is the only diabetes educator at the institution and she has transformed our diabetes program," notes June Kelsick, clinical administrative director, Internal Medicine Center. "She has taken the lead in bringing the institution software that enables clinicians to view patients' glucose monitoring information electronically. She also developed and serves as chair for the kDiabetes PACT, which is critical to the success of our diabetes population. Overall, Judy has impacted the minds of our providers, patients and family members through her dedication and creativity."