

SPRING
2008



INNOVATIONS

IN THIS ISSUE

Triology²: The Healing
Power of Two Trilogy
Linear Accelerators

Letter from the Director

Preventing Lung Cancer
Through Early Detection

News & Accolades

Pancreatic Cancer Therapy
Team Are Experts in
Whipple procedure

University of Maryland
Oncology Associates

New Faculty
Grants Awarded

TRIOLOGY²: THE HEALING POWER OF TWO TRIOLOGY LINEAR ACCELERATORS

It was only two short years ago that the University of Maryland Marlene and Stewart Greenebaum Cancer Center (UMGCC) was the first academic medical center in the region to introduce the fully-integrated TrilogyTM System - the most advanced technology available in radiation treatment for cancer. Today, the Department of Radiation Oncology is embarking on a new journey with Trilogy: research.

Under the auspices of the Program of Excellence in Technology Translational Research, UMGCC has acquired a second Trilogy linear accelerator to be used solely for the purpose of research. The goal of the program is to improve cancer care and cure rates for patients. The acquisition of Trilogy is no small feat. The Department of Radiation Oncology is only one of four academic centers in the country to have a collaborative Master Research Agreement with the world's leading radiation therapy technology company.

"What's exciting about this new initiative is that not only do we have the most sophisticated technology available – a state-of-the-art linear accelerator used solely for scientific research – but now we will be able to translate our discoveries directly into patient care faster than ever," said **Mohan Suntha, MD**, professor and vice chairman of radiation oncology at the University of Maryland School of Medicine and associate director of clinical affairs for the Greenebaum Cancer Center.

The Program of Excellence will focus on improving target delineation and developing novel delivery systems to serve multiple disease sites. Given the Department of Radiation



To learn more about the advanced technology and care provided at the University of Maryland Marlene and Stewart Greenebaum Cancer Center, please call 1-800-373-411 or visit

www.umgcc.org

Continued on page 2



They say it takes a village. I would have to say that since my arrival in 2004 it has certainly taken a village to raise the level of research in our laboratories, recruit faculty with outstanding national reputations and exceed our own expectations in the quality of cancer care we offer. All of this refining has allowed us to grow beyond my expectations. It has also allowed us to apply for the prestigious National Cancer Institute Cancer Center designation.

On January 17, 2008 reviewers from the National Institutes of Health performed a site visit to evaluate our application for NCI cancer center designation. The day-long site visit went very well. The notification of the outcome is expected in early 2009; however, whatever the outcome of the visit, we should be very proud of what we have grown and look forward with great optimism for the future.

In the spirit of our NCI cancer center designation application, and putting our best foot forward, I would share with you some of the accomplishments that we as a cancer center should be proud of:

- More than 2,200 new patients admitted annually
- 30,000 outpatient visits per year in our modern outpatient facility—the Roslyn and Leonard Stoler Pavilion
- More than 150 cancer-specific clinical trials with hundreds of patients enrolled annually
- More than \$47 million a year in research grant funding
- Leading in minority participation in clinical studies. More than 30 percent of enrolled patients are minorities, far exceeding the U.S. average of less than 10 percent
- Outreach to thousands of uninsured Baltimore residents with free cancer screening supported by the Maryland Cigarette Restitution Fund Program
- Major partnership with the state through the Maryland Cigarette Restitution Fund Program
- More than 168 scientists and clinical investigators, many of them nationally recognized cancer experts.

Warm Regards,

Kevin J. Cullen, MD

Kevin J. Cullen, MD
 Director, University of Maryland Marlene and Stewart Greenebaum Cancer Center
 Professor of Medicine, University of Maryland School of Medicine

TRIOLOGY²


Continued from page 1

Oncology's track record, it is poised to make this advance in medicine. UMGCC is the very first center in the Mid-Atlantic region to offer Intensity-Modulated Radiation Therapy (IMRT), and Image-Guided Radiation Therapy (IGRT), Selective Internal Radiation Therapy (SIRT) with SIR-Spheres to treat liver tumors. We are also the first center to offer Stereotactic Body Radiation Therapy (SBRT) with 3D-Line and Trilogy, and Intracranial Stereotactic Radiosurgery (SRS) with the Gamma Knife.

In the past year, the Department of Radiation Oncology has received national recognition for its research efforts, including ranking 6th in the nation for research funding from the National Institutes of Health Rankings of Radiation Oncology. "It is our hope to leverage our outstanding reputation and the strength in our physics division to positively affect the way cancer is treated in the nation," said **William F. Regine, MD**, professor and chairman of radiation oncology at the University of Maryland School of Medicine and chief of radiation oncology at the University of Maryland Medical Center.



Above: Using the Trilogy linear accelerator, University of Maryland scientists will be looking at ways to improve sophisticated real-time imaging systems and technology that can target radiation therapy precisely to compensate for a patient's breathing and other physiological processes.

The University of Maryland Marlene and Stewart Greenebaum Cancer Center would like to extend a special heartfelt thank you to Roslyn and Leonard Stoler for their generous contribution to the Program of Excellence and their commitment to cancer research. 

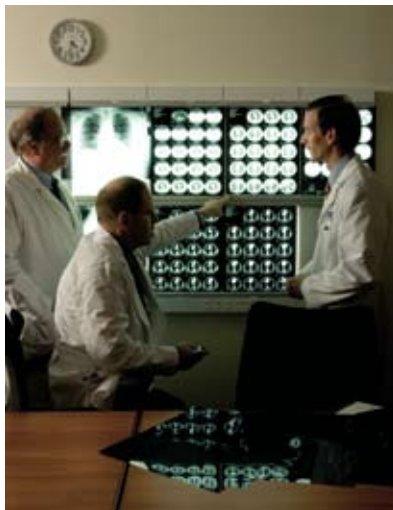
PREVENTING LUNG CANCER THROUGH EARLY DETECTION



Solitary pulmonary nodules are small round lesions that develop in the lungs. These lung nodules are typically asymptomatic and often identified by chance on a chest x-ray that was requested for another reason. They are usually less than 3-4 cm in diameter (no larger than 6 cm) and are always surrounded by normal, functioning lung tissue. The challenge lies in determining whether or not the nodule is malignant or benign.

In response to the growing number of lung nodules that are being detected in asymptomatic patients, due to the widespread availability of computer tomography (CT) scans, the University of Maryland Marlene and Stewart Greenebaum Cancer Center has launched an Indeterminate Lung Nodule Clinic. The clinic combines the expertise of a pulmonologist, radiologist and surgeon. The intent of the lung nodule clinic is the prevention of lung cancer and unnecessary surgery.

“Many lung masses are non-cancerous. Through careful evaluation of the size and radiographic character of the tissue, we can determine the best treatment approach for each individual patient, if any at all. If there are no changes over a period of time, no treatment is required and more importantly the patient is spared surgery,” said **Richard J. Battafarano, MD, PhD**, associate professor of the Department of Surgery and chief of the Division of Thoracic Surgery. Prior to coming to the University of Maryland Medical Center, Dr. Battafarano led the indeterminate lung nodule clinic at Barnes-Jewish Hospital in St. Louis, MO.




Above: (Left to Right) Lung Nodule Team: Dr. James Britt (pulmonologist), Dr. Richard Battafarano, (thoracic surgeon), and Dr. Charles White (radiologist).

A highlight of the program is the team’s quick response to patient needs. Patients referred to the clinic will meet with a team of physicians within 48 hours of their referral for a consultation and evaluation. “It is critical for us to see the patient as soon the mass is identified. Early detection of lung cancer is time-sensitive. The earlier a patient can be evaluated, the sooner an assessment can be made to determine next steps,” said **Charles S. White, MD**, professor of radiology and medicine and vice chairman of radiology.

Each patient evaluation includes:

- Baseline CT scan of the chest
- Expert interpretation by chest radiologists
- Examination by a thoracic surgeon and a pulmonologist
- Follow-up coordination with the patient’s primary care physician

The University of Maryland Medical Center has one of the largest general thoracic surgery programs in the country. We are one of the first programs in the United States to develop and use video-assisted thoracoscopy, which allows surgeons to complete procedures through small incisions, usually made between the ribs. The Division of Thoracic Surgery is nationally known for developing innovative treatments for thoracic disorders and using minimally invasive techniques for the most complicated surgeries. 

HIGHLIGHTS OF THE LUNG NODULE CLINIC INCLUDE:

- Low-Dose Spiral Computed Tomography (CT) Scan
- Multidisciplinary Care
- Appointment within 48 hours
- Proactive monitoring
- Consistent & coordinated appointments
- One-on-one care

NEWS & ACCOLADES



Left: *Jean Warner, MD, a breast imaging specialist at the University of Maryland Medical Center and an assistant professor of diagnostic radiology at the University of Maryland School of Medicine assists patient with advanced imaging procedure.*

UM BREAST CENTER

The newly built University of Maryland Breast Center offers all breast imaging services using all-digital imaging technologies for screening and early detection. Staffed by breast health experts and radiologists with advanced training in the sub-specialty of breast imaging, the Breast Center uses computer-assisted optimization to help radiologists detect micro-calcifications that might be missed on traditional film mammograms. Other services include diagnostic breast ultrasound with elastography, stereotactic biopsy, fine-needle aspiration, preoperative image-guided needle localization and 3 Tesla and 1.5 Tesla magnetic resonance imaging (MRI) and computerized tomography (CT). The multidisciplinary Breast Evaluation and Treatment Program, for women who need additional care, is also housed in the Breast Center.

RESEARCH MATTERS CONFERENCE

Scientists and clinicians from the University of Maryland Marlene and Stewart Greenebaum Cancer Center (UMGCC) and the Sidney Kimmel Comprehensive Cancer Center at Johns Hopkins held their annual Research Matters conference on November 15, 2007. The conference highlighted scientific research in the field of epigenetics. The event and the research presented are supported by the Maryland Cigarette Restitution Fund Program.

SPINE DIRECTED ONCOLOGY PROGRAM

Over 40 percent of all patients who have cancer elsewhere in their body will experience the spread of cancer to the spine in their lifetime. As a result of this staggering statistic, a Spine Directed Oncology Program offers a multi-disciplinary approach to providing the most effective treatment possible for patients with primary or metastatic spine disease. Potential treatment options include surgical resection and reconstruction for spinal stability, minimally invasive procedures including kyphoplasty and vertebroplasty to treat pain associated with painful collapsed vertebrae and Trilogy stereotactic body radiation therapy. The multidisciplinary spine team consists of neurosurgeons, orthopedic surgeons, medical oncologists, radiation oncologists and more.

UMMC LEAP FROG AWARD

The University of Maryland Medical Center has been named for the second year in a row to the Leapfrog Group's elite list of the nation's best acute-care hospitals. The Leapfrog Group survey is the most complete, up-to-date assessment of hospital quality and safety. It is based on outcomes and patient volume for selected high-risk procedures in addition to staffing levels and specific measures taken to ensure patient safety. This year's list includes only 41 hospitals, while last year there were 50 hospitals.



NOW OFFERING ROBOTIC PROSTATECTOMY



Using the da Vinci Surgical System, our urologic surgeons are now able to offer robot-assisted laparoscopic prostatectomy. The surgery offers all the benefits of traditional laparoscopic surgery, but with important new advantages, thanks to the latest in computerized robotic technology. Advantages of robot assisted laparoscopic prostatectomy include advanced optics that provide 10-times magnified, three-dimensional images of the prostate

surrounding nerves and tissues, and robotic arms that eliminate even the slightest human hand tremors. The benefit to patients includes smaller incisions and less scarring, shorter hospital stay and less pain.

UM EXPERTS LEAD NATIONAL STUDY IN ESOPHAGEAL CLINICAL TRIAL

The National Institutes of Health is initiating a national phase III trial to compare a combination therapy combining radiation and chemotherapy with Erbitux, a cancer-targeting agent that attacks specific receptors on the surface of tumor cells, with standard chemotherapy and radiation to treat esophageal cancer. In a Phase II clinical study conducted at the University of Maryland Marlene and Stewart Greenebaum Cancer Center and the Brown University Oncology Group, 75 percent of the patients treated with this therapy had no evidence of cancer after treatment.


UNIVERSITY OF MARYLAND ONCOLOGY ASSOCIATES

University of Maryland Marlene and Stewart Greenebaum Cancer Center (UMGCC) has opened University of Maryland Oncology Associates (UMOA), a new practice at Baltimore Washington Medical Center. The practice provides expert medical oncology services as part of the Cancer Center's comprehensive multidisciplinary approach to cancer treatment.

Two distinguished medical oncologists on the faculty of the University of Maryland School of Medicine, Dr. Mayer Gorbaty and Dr. Harvinder Singh, provide patient consultations, treatment and follow-up care for cancer management at UMOA. They also devote a portion of their time to teaching and consulting with other oncology specialists at the main UMGCC campus in Baltimore.

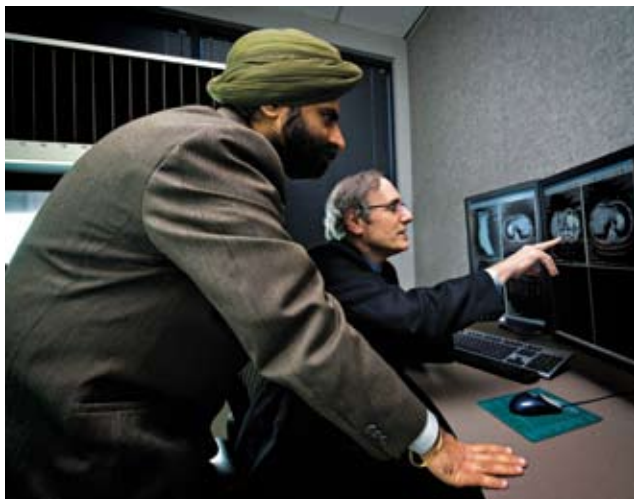
"This practice is part of our effort to make state-of-the-art cancer care and clinical trials available to patients in other parts of Maryland," says Kevin J. Cullen, MD, director of the University of Maryland Marlene and Stewart Greenebaum Cancer Center. "We are very excited about this opportunity to reach out to patients in the Anne Arundel County area."

Patients are able to receive the cutting-edge resources of a major academic cancer center, combined with the personal attention and convenience of community oncology practice. Physicians work closely with cancer experts at UMGCC's downtown Baltimore campus, using the latest teleconferencing technology. UMOA physicians review patient cases weekly with UMGCC oncology specialists to evaluate and consider all treatment options available. Patients of UMOA also have access to the 125 clinical trials offered at UMGCC. In this way, patients may be eligible for new treatments not yet commercially available elsewhere.

For more information or to schedule an appointment, please call 410-328-7904. 

UNIVERSITY OF MARYLAND ONCOLOGY ASSOCIATES SERVICES INCLUDE:

- Patient consultations
- Treatment, including the latest clinical trials
- Follow-up care
- Support Services
- Genetic Counseling



University of Maryland Oncology Associates at Baltimore Washington Medical Center

203 Hospital Drive, Suite 302
Glen Burnie, Maryland 21061
410-553-8360



MAYER GORBATY, MD

Assistant Professor of Medicine

Dr. Mayer Gorbaty earned his medical degree at State University of New York, Downtown Medical Center. He completed an internal medicine residency at George Washington University Hospital in Washington, D.C. and completed a medical oncology fellowship at Mount Sinai Hospital in New York. Dr. Gorbaty is board certified by the American Board of Medical Oncology, the American Board of Internal Medicine and the National Board of Medical Examiners. He also holds a membership in the American Society of Clinical Oncology.



HARVINDER SINGH, MD

Assistant Professor of Medicine

Dr. Harvinder Singh attended the University of Delhi, Maulana Azad Medical College in New Delhi, India. He completed his residency in internal medicine at the State University of New York, Downstate, and completed a fellowship in medical oncology, hematology, bone marrow transplant at Mount Sinai School of Medicine. Dr. Singh is board certified in medical oncology and hematology.

PANCREATIC CANCER THERAPY TEAM ARE EXPERTS IN WHIPPLE PROCEDURE



Above: Pancreatic cancer team specialists, from left to right: Dr. Nader Hanna, Dr. Peter Darwin, Dr. Michael Garofalo, Dr. Susan Kesmodel (seated), Dr. H. Richard Alexander, Dr. Naimish Pandya, and Dr. William Regine

The Pancreatic Cancer Therapy Program at the University of Maryland Marlene and Stewart Greenebaum Cancer Center (UMGCC) offers more hope than ever for patients with pancreatic cancer. UMGCC has the second largest volumes of pancreatic cancer cases in the region. As a sophisticated tertiary medical center, UMGCC specializes in complex surgical cases. The most curative option for treatment of pancreatic cancer is pancreaticoduodenectomy, most commonly called the Whipple procedure. Unfortunately, less than 15 percent of patients are eligible because the disease is usually diagnosed at an advanced stage.

The complicated surgery entails removing the head of the pancreas and the duodenum, which share the same arterial blood supply. These arteries run through the head of the pancreas, so that both organs must be removed. In addition, surrounding tissues are removed that consist of a portion of the common bile duct, gallbladder, and the regional lymph nodes. The second phase of the surgery includes reconfiguring the gastrointestinal tract so that digestion is possible. This involves attaching the pancreas to the small intestine and attaching the common bile duct to the small intestine to allow digestive juices and bile to flow into the gastrointestinal tract and then attaching the stomach to the small intestine. Once the six hour surgery is complete, patients are hospitalized for 7-10 days and can expect a three-week recovery.


Patient outcomes at UMGCC are well above the national average. It is well reported that the in-hospital mortality for the Whipple procedure in rural hospitals is significantly higher than that in urban teaching institutions. This is largely due to patient volumes and the multidisciplinary care that is offered at academic medical centers. The success of our efforts can be easily illustrated in a patient case study.

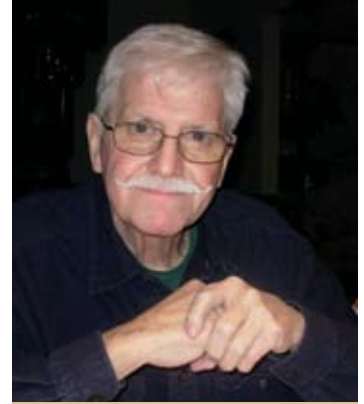
Gary Potter, a 66-year old retired electrician from Pennsylvania, was eligible for the surgery. Prior to surgery, he first needed radiation treatment to shrink the tumor and chemotherapy to kill any cancer cells that may have spread throughout his body. Under the guidance of **William F. Regine, MD**, professor and chair of the Department of Radiation Oncology and an expert in pancreatic cancer, Gary underwent radiation with the latest technology available in radiation therapy, the Trilogy™ System linear accelerator.

“The ability to shrink a pancreatic tumor is important because in order to eradicate the cancer, the tumor must be small enough to be completely removed without damaging major blood vessels surrounding the pancreas. This also reduces the risk of the cancer reoccurring in the same area,” said **Nader N. Hanna, MD, FACS**, associate professor of surgery and head of the Department of Surgical Oncology.

Dr. Hanna performed the Whipple procedure, removing the tumor along with the head of the pancreas, and leaving only a small margin of cancer on the artery. Several lymph nodes were also removed during the surgery to determine if the cancer had spread which, happily, it had not. Gary has since recovered and enjoys time with his grandchildren and being outdoors.

The medical staff members at UMGCC take a fully integrated, multidisciplinary approach to pancreatic cancer so that every phase of treatment is coordinated for maximum effectiveness. Patients receive the most advanced and comprehensive treatment available anywhere in the world, in a compassionate and supportive setting.

For more information on our Pancreatic Cancer Program or to see a surgical webcast of a Whipple procedure, visit us on the web at www.umgcc.org/gi_program or call 1-800-888-8823. 



Above: Pancreatic cancer survivor Gary Potter is enjoying life after undergoing the Whipple procedure.

NEW FACULTY


RICHARD J. BATAFARANO, MD, PhD

*Chief, Division of Thoracic Surgery
Associate Professor, Department of Surgery*



The University of Maryland is pleased to welcome Richard J. Battafarano, MD, PhD, as the new chief of the Division of Thoracic Surgery at the University of Maryland Medical Center. He has also joined the faculty of the University of Maryland School of Medicine as an associate professor of surgery. His clinical and research interests focus on lung and esophageal cancer, with experience in a full range of complicated lung procedures.

Before coming to the University of Maryland, Dr. Battafarano was an assistant professor of surgery in the Division of Cardiothoracic Surgery at the Washington University School of Medicine in St. Louis, MO. He was also a thoracic surgeon at Barnes-Jewish Hospital and a clinical fellow and instructor in the Department of Cardiothoracic Surgery at Memorial Sloan Kettering Cancer Center and New York Hospital. His research interests include the investigation of cellular pathways that speed cell growth in esophageal cancer.

Dr. Battafarano earned his medical degree from Hahnemann University School of Medicine in 1988 and completed a doctor of philosophy degree in biomedical sciences at the University of Minnesota in 1997. He served a surgical internship at Abington Memorial Hospital in Abington, PA, and was a surgical resident and administrative chief resident at the University of Minnesota. 


MARIA R. BAER, MD

*Director, Hematologic Malignancies Program
Professor of Medicine*



Maria R. Baer, MD, a nationally recognized leader in leukemia treatment and research, has joined the University of Maryland Marlene and Stewart Greenebaum Cancer Center as the director of the Hematologic Malignancies Program. She has also joined the faculty of the University of Maryland School of Medicine as professor of medicine.

Before coming to the University of Maryland, Dr. Baer had served as chief of the Leukemia Section and professor of oncology at Roswell Park Cancer Institute in Buffalo, NY. She was also professor of medicine and associate professor of molecular pharmacology and cancer therapeutics, University of Buffalo School of Medicine and Biomedical Sciences. Her clinical focus is leukemia and myelodysplastic syndromes, and her research interests include understanding drug resistance in leukemia cells and the development of strategies for overcoming or bypassing mechanisms of resistance.

Dr. Baer earned her medical degree from the Johns Hopkins University School of Medicine in 1979 after graduating from Harvard magna cum laude. She did her internship and residency in the Department of Medicine at Vanderbilt University in Nashville, TN, where she also completed a fellowship training program in hematology and was a National Research Service Award Trainee. 

RECENT GRANTS AWARDED

Angelika Burger, PhD, associate professor, Department of Pharmacology & Experimental Therapeutics and Program in Oncology, received a five-year \$1,195,570 R01 grant from the National Cancer Institute for her work entitled “The BCA2 Ubiquitin E3 Ligase as a Target in Breast Cancer.”

Saranya Chumsri, MD, oncology fellow, Department of Medicine, received a one year \$40,000 Amgen award entitled “Phase I Sequential Combination of Nab-paclitaxel followed by the Pan-aurora Kinase Inhibitor MK-0457 in Patients with Advanced Solid Malignancies.”

Amy M. Fulton, PhD, professor, Pathology and Oncology and Program in Oncology member received a three year \$455,500

Department of Defense Idea award entitled “Chemokine Receptor Targeting to Inhibit Breast Cancer Metastasis.”

Zhongmin Guo, PhD, assistant professor, Department of Otorhinolaryngology and Program in Oncology member received a three year \$325,000 FAMRI grant entitled “Roles of DNA Promoter Hypermethylation in Head and Neck Cancer Cisplatin Resistance.”

Bret Hassel, PhD, associate professor, Department of Microbiology and Immunology, received a four year \$1,000,000 VA Merit Review award, “Regulation and Mechanism of Action of the Tumor Suppressor, RNase-L.”

Continued on page 8

RECENT GRANTS *Continued from page 7*

Zhenqiu Liu, PhD, assistant professor, Department of Epidemiology and Preventive Medicine and Program in Oncology member received a one year \$74,250 RO3 grant from the National Cancer Institute entitled “Statistical and Computational Methods for Systematically Mining the SNDard Gene.”

Stuart S. Martin, PhD, assistant professor, Department of Physiology, received a five year \$1,410,750 RO1 grant from the National Cancer Institute entitled “Stabilized Microtubule protrusions in Detached Mammary Epithelia Cells.” Dr. Martin also received a three year \$325,000 Flight Attendant Medical Research Institute (FAMRI) award entitled, “How Second-Hand Smoke Affects Breast Tumor Dormancy in the Lung.” Lastly, Dr. Martin received a three year \$445,500 Department of Defense Idea award entitled “Targeting Detyrosinated Microtubule Protrusions to Reduce Breast Cancer Matastasis.”

Tony Passaniti, PhD, assistant professor, Department of Pathology and Program in Oncology member received a four year, \$842,800 VA Merit grant entitled “Transcriptional Regulation of Tumor Growth.”

Aaron Rapoport, MD, professor, Department of Medicine, received a two year \$570,000 R21 grant from the National Cancer Institute entitled “Immunotherapy after ASCT for MM Using hTERT Vaccination and Vaccine-primed T cells.”

Feyruz Rassool, PhD, associate professor, Department of Radiation Oncology, is co-investigator on a five-year \$520,000 R01 grant from the National Institutes of Health entitled “Mechanisms of Combined Epigenetic Therapy in Myeloid Malignancies. Dr. Rassool also received a one year \$148,000 new Exploration/Hypothesis Development award entitled “The Role of ‘Back-up’ NHEJ Repair in Creating Genomic Instability in CML.”

Douglas Ross, MD, professor, Department of Medicine, Pathology and Pharmacy and Program in Oncology member received a five year \$1,160,427 R25 National Cancer Institute grant renewal entitled “Hospice Educational Program for the School of Medicine.”

Edward Sausville, MD, PhD, professor, Department of Medicine and Program in Oncology, received a two-year \$300,000 national Susan G. Komen Foundation breast cancer translational grant for his work entitled “Role of Aryl Hydrocarbon Receptor and Cross Talk with Estrogen Receptor in the Response of Breast Cancer Cells to Novel Antitumor Agent Aminoflavone.”

Innovations is published by the Marketing Department of the University of Maryland Medical Center. Questions, comments or requests for copies of Innovations? Contact Denise Papathakis at 410-328-0153 or dpapathakis@umm.edu

ADVISORY BOARD

Kevin J. Cullen, MD

*Professor of Medicine, University of Maryland School of Medicine
Director, University of Maryland Marlene and Stewart
Greenebaum Cancer*

Barry Meisenberg, MD

*Professor of Medicine, University of Maryland School of Medicine
Deputy Director of Clinical Affairs, University of Maryland
Marlene and Stewart Greenebaum Cancer*

Mohan Suntha, MD

*Professor and Vice Chairman
Department of Radiation Oncology
Associate Director of Clinical Affairs, University of Maryland
Marlene and Stewart Greenebaum Cancer*

Jeffrey A. Rivest

President and CEO, University of Maryland Medical Center



To learn more about the advanced technology and care provided at the University of Maryland Marlene and Stewart Greenebaum Cancer Center, please call 1-800-373-411 or visit

www.umgcc.org.

UMGCC Programs

Blood and Marrow Transplant
Bone and Soft Tissue Oncology
Brain Tumor Center
Breast Evaluation and Treatment
Cutaneous Oncology
Genitourinary Oncology
Gynecological Oncology
Head and Neck Oncology
Hematologic Malignancies
Myeloma
Thoracic Oncology

22 South Greene Street
Baltimore, Maryland 21201

Non-Profit Org.
U.S. Postage
PAID
Permit #35
Baltimore, MD