Your UMass Medicine

UMass Memorial Medical Center first in Massachusetts to implant “disappearing” heart device for treatment of heart disease

MEMBERS OF THE INTERVENTIONAL cardiology team at UMass Memorial Medical Center recently implanted Absorb™, an investigational bioresorbable vascular scaffold (BVS) manufactured by the health care company Abbott, as part of the ABSORB III clinical trial. This is the first U.S. clinical trial to evaluate the potential benefits of Absorb in comparison to a medicated metallic heart stent, also called a drug eluting stent, in patients with coronary artery disease (CAD), a form of heart disease. The patients enrolled in the trial were the first in Massachusetts.

CAD is a leading cause of death for men and women in the United States. Patients with CAD can experience symptoms such as chest pain and shortness of breath when the demand for blood to the heart is more than the heart’s ability to supply blood due to blockages in the vessels that supply blood to the heart. These blockages are caused by the buildup of fat and cholesterol inside the vessel. Absorb is a small mesh tube that is designed to open a blocked heart vessel, restore blood flow to the heart and then dissolve into the blood vessel over time.

“The Absorb scaffold is different from traditional stents because it has the potential to help repair blockages without leaving behind a permanent metallic stent. This could potentially give the blood vessel the ability to return to a more natural state and reduces the risk for some patients of additional

continued on page 2

Dr. Eileen L. Berman and Stanley I. Berman Foundation Chair in Biomedical Research Established

Dale L. Greiner, PhD, professor of molecular medicine, named inaugural recipient

THROUGH THE GENEROUS SUPPORT of Stanley Berman and his late wife, Eileen Berman, EdD, UMass Medical School has established the Dr. Eileen L. Berman and Stanley I. Berman Foundation Chair in Biomedical Research, supported through an endowed fund that the Bermans created at the UMass Medicine Cancer Center of Excellence in 2011. Dale Greiner, PhD, professor of molecular medicine, will be the inaugural recipient.

Eileen and Stanley Berman’s support of UUMMS grew out of their personal experience with cancer care and a deep love of Worcester, which is Stanley’s home town and the city in which they met. After Dr. Berman received treatment at the Cancer Center in 2010, she and her husband wanted to give back to an institution and a city that had given them so much. They chose to establish an endowed fund that focuses on early detection and prevention initiatives.

Prior to Dr. Berman’s passing from cancer on April 7, the Berman family announced that their fund would be

continued on page 3

Estate of Myles J. McDonough endows chair in rheumatology

Ellen M. Gravallese, MD, professor of medicine and cell & developmental biology, named inaugural recipient

A GIFT FROM THE ESTATE of local philanthropist and successful businessman Myles J. McDonough has established an endowed chair at UMass Medical School in the Department of Medicine’s Division of Rheumatology. Ellen M. Gravallese, MD, professor of medicine and cell & developmental biology, will be the inaugural Myles J. McDonough Chair in Rheumatology.

“This generous gift will allow one of our most accomplished faculty members to advance the science around this challenging condition and to potentially uncover novel treatments,” said Chancellor Michael F. Collins. “Myles McDonough was a wonderful friend of our institution. Creating an endowed chair in his memory is a very personal way to affect the future of medical research and clinical care in a targeted area, and we are grateful for this tremendous demonstration of support.”

“The Rheumatology Division is deeply indebted to the McDonough family for their generosity in establishing this endowed chair in rheumatology,” said Dr. Gravallese, who is dedicated to caring for patients with rheumatoid arthritis and to studying the mechanisms by which inflammation in the soft tissue lining of joints leads to joint cartilage and bone destruction. “This gift will enhance our research efforts to identify new strategies to prevent joint destruction in arthritis and will engage clinicians in efforts to translate our research into improved care for our patients.”

McDonough, who had a long illness with arthritis, was committed to improving the lives of other patients with arthritis and to supporting clinical and research efforts at UMass Medical School and UMass Memorial Health Care. He passed away in March 2012.

continued on page 5
A family gives back after beating cancer

When Jeff Gallahue was told in 2009 that he had throat cancer, he said “it was the worst feeling in the world ... a life-altering experience.” After a grueling treatment regimen of surgery, chemo and radiation therapy, his doctor pronounced him cancer-free on January 3, 2011. “That’s also a very defining moment,” he said. It certainly was. Gallahue’s cancer experience inspired him to establish the nonprofit Gallahue/ Rooney Family Foundation to celebrate his recovery and to help others going through their own cancer journey by providing support for everyday needs such as transportation, parking, meals and child care during treatment. At its first fundraising event—a Valentine’s Day dinner-dance held in 2012—the foundation raised more than $60,000. Soon after the foundation’s website (WeBeatCancer.org) was up and running, Gallahue was contacted by a social worker from the UMass Memorial Cancer Center of Excellence who told him about a patient undergoing daily radiation therapy who was having difficulty paying for parking. The foundation purchased a supply of parking vouchers and gave them to the nurses at UMass Memorial to give to cancer patients as they deemed appropriate. Later, during a tour of the Cancer Center, Gallahue and his wife, Pat, proposed that they buy what they dubbed “Let’s Make Pat Comfortable” chairs for the chemotherapy infusion suites. “When I was having chemo, Pat would sit in a hard, straight-backed chair for eight hours while I was in a comfortable recliner,” Gallahue explained. “If we could help other caregivers feel better after being with their loved ones all day, we would feel like we had given back a little bit.”

WeBeatCancer.org initially donated 30 comfortable guest chairs that were placed in the even-numbered infusion rooms in the Cancer Center. Patients soon began seeking out the rooms with the new chairs; some even preferred being treated in the new chairs, offering the reclaiming treatment chairs to their guests. “The foundation identified a real need for caregivers and family members that wasn’t on the Cancer Center’s radar,” said Alan Rosmarin, MD, the Gladys Smith Martin Chair in Oncology and professor of medicine at UMass Medical School, chief of hematology/oncology at UMass Memorial and co-deputy director of the Cancer Center. “As a result, these new guest chairs have enhanced the quality of the patient and family experience dramatically.”

This past spring, WeBeatCancer.org donated 30 additional guest chairs so that every infusion room has one. The organization also provided a BOSE sound system for the Remillard Meditation Room, a tranquil healing space for patients and family members located on the sixth floor of the Ambulatory Care Center at UMass Memorial’s University Campus. Gallahue is just grateful for the opportunity to help others going through what he endured. “I didn’t beat cancer alone; my family and friends, my doctors and nurses, and the people who prayed for me helped me get through it,” Gallahue said of the genesis of his family’s foundation. “I couldn’t go on in life without giving back.”

UMass Memorial Medical Center first in Massachusetts...

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UMass Memorial Medical Center first in Massachusetts...

interventions,” said Jeffrey Rade, MD, medical director of the Cardiac Catheterization Lab at UMass Memorial Medical Center. “This trial represents an important step in the process of establishing Abbott’s bioresorbable scaffold as a new therapeutic option to treat patients with heart disease, the number one killer of both men and women.”

Dr. Rade also noted that it is exciting to be part of groundbreaking work in the history of treating coronary artery disease. “There have been several landmark treatments for coronary artery disease, from angioplasty to the first stent, and it’s a great opportunity to be at the forefront of the newest treatment option available for patients,” he said.

Since the 1970s, physicians have treated patients with CAD with balloon angioplasty, metallic and drug eluting metallic stents, allowing many patients to avoid open heart surgery. About a decade ago, scientists at Abbott started development of Absorb. Now Abbott is the first company in the world to begin testing a bioresorbable vascular scaffold in patients in the United States. Unlike a metallic stent that remains permanently in the body, Absorb is referred to as a scaffold to indicate that it is a temporary structure. Abbott’s Absorb BVS is made of polylactide, a naturally dissolvable material that is commonly used in medical implants such as dissolving suture. The ABSORB® III clinical trial will enroll approximately 2,250 patients, the majority in the United States. In addition, a subset of patients within the trial will be evaluated for novel endpoints such as vasomotion, a measure of how much natural motion returns to the vessel as Absorb dissolves into the arterial tissue.
When Dawilmer Castillo moved to the United States from the Dominican Republic six years ago, he spoke little English. But with relentless determination, he went on to graduate from Boston International High School as class valedictorian and is now a junior majoring in biomedical sciences at Bridgewater State University. The aspiring neurosurgeon is focused on getting into medical school.

Castillo and 21 other Massachusetts undergraduates are closer to that goal after completing the UMass Medical School Summer Enrichment Program for college students who are economically or educationally disadvantaged, or from backgrounds under-represented in the health professions in Massachusetts.

“Coming to this country with nothing but a suitcase full of goals, dreams and motivation to move forward in life was a challenge that I knew was going to be hard, but I was determined to succeed,” Castillo wrote in his application. “Even during difficult events in my life, I persevered and pushed myself to accomplish more than my circumstances dictated.”

His experience at UMMS continues that trajectory. In an intense, four week dawn-to-dusk immersion, Castillo and his classmates were jolted with reality checks on time management, study skills and personal presentation; learned about contemporary and cultural health issues; collaborated in team research on health disparities; and—sweated through mock Medical Board exams and medical school admission interviews; and—the highlight for many—shadowed weekend shifts in the emergency room.

Funded by UMMS, the enrichment program strives to help college students like Castillo and his classmate Cassandra Ferragamo, a Framingham State University biology major and budding neurologist, improve their qualifications and competitive standings for admission to medical or other graduate schools for health care professions. The ultimate goal is to increase the diversity of the Massachusetts health care workforce.

“Besides learning the ins and outs of the medical school application process, one of the most important things I have become aware of is that, unfortunately, health care disparities exist in our back yard and in a range of diseases,” said Ferragamo. “I now have a desire to become a culturally competent physician who, with other physicians like myself, go into a community to raise awareness about diseases that may be affecting them, and decrease the disparity.”

Ferragamo attributes her lifelong dream of becoming a doctor to a combination of personal experience and academic interests. She was inspired by the health care providers who cared for her father during his frequent hospital visits; he was chronically ill, and succumbed to Alzheimer’s disease when she was just 13 years old. Ferragamo wants to explore research in neurodegenerative diseases so that she can do more than treat patients.

“Most of this year’s Summer Enrichment Program students hail from the University of Massachusetts and other state university campuses and many are participants in the UMass Baccalaureate MD Pathway Program, underwriting the Medical School’s commitment to supporting local students.”

“We set high expectations for you, and you’ve lived up to them,” said Robert Layne, director of outreach programs, at the closing ceremony for the program’s class of 2013, held Friday, June 21, with family members in attendance. “You now understand the commitment and dedication that is required for you to pursue your dreams and your goals.”

UMass Medical School receives Gates Foundation grant for groundbreaking research in global health and development

UMASS MEDICAL SCHOOL was recently awarded a Grand Challenges Explorations (GCE) grant, an initiative funded by the Bill & Melinda Gates Foundation. Stephen C. Miller, PhD, associate professor of biochemistry & molecular pharmacology, and Mark Alkema, PhD, assistant professor of neurobiology, will pursue an innovative global health and development research project titled “Delivery of Drugs into Parasitic Nematodes.”

GCE grants fund individuals worldwide to explore ideas that can break the mold in solving persistent global health and development challenges. Dr. Miller and Dr. Alkema’s project was one of more than 50 GCE Round 10 grants announced on May 21 by the Bill & Melinda Gates Foundation.

Neglected tropical diseases caused by parasitic nematodes (roundworms) affect more than a billion people worldwide. There are few options for the treatment and control of these debilitating diseases, which include elephantiasis and onchocerciasis, also known as river blindness. Existing treatments can have serious side effects and the development of resistance is an increasing cause for concern. Thus, there is a growing need for new drugs to combat these infections.

Many potential drugs that show selectivity for parasitic proteins in a test tube ultimately fail because they cannot breach the nematode’s natural defenses and enter the live organism. In this GCE Phase I grant, Miller and Alkema will research molecular scaffolds that can possibly evade these natural defenses and find their way into the nematodes. These scaffolds will be used to deliver novel inhibitors of invertebrate neurotransmitter synthesis into the parasite. It is hoped that this new delivery method will result in potential new treatments for a number of tropical diseases.

Dr. Eileen L. Berman... Continued from page 3

expanded to endow a chair whose primary goal is to explore and develop pioneering therapeutic advances. The focus during the chair’s first five years will be to stimulate innovative research in appendiceal cancer, the disease that Eileen battled for four years.

“We are proud and grateful that our academic medical center is the beneficiary of the Bermans’ support for cancer research,” said Chancellor Michael F. Collins. “Their generous support provides financial flexibility for faculty members such as Dr. Greiner to pursue novel research ideas that might otherwise not receive funding through traditional avenues. To a researcher, an endowment represents a special kind of freedom—the opportunity to investigate new avenues unencumbered, which can serve as a starting point for new cures and treatments for disease. We are fortunate to count the Bermans family among our supporters.”

“We wanted to take our money and see something come from it,” the Bermans said in 2011. “We chose UMass Medical School because it is local and we have emotional ties to Worcester. UMass Medical School is a growing, vibrant place. Our two children were born at UMass Memorial and most of our doctors are still there.”

Dr. Greiner’s research has focused on transplantation, autoimmunity and the use of specialized mouse models to study human cancers and infections, including cancer. The new funding will allow him to expand research that applies the use of these mouse models to the study of human cancer, in collaboration with cancer investigators at UMMS.

“I am honored to be the first recipient of the Bermans Chair, and deeply grateful for their support,” said Greiner. “We have already begun to use these specially developed mouse models to study human cancers and this additional funding will allow us to expand that work into new areas, including appendiceal cancer. We’ve successfully used these models to study human colon cancer and our hope is that these resources will lead us to new discoveries and bring us closer to new therapeutics.”
Novel mindfulness intervention may reduce anxiety in cardiac patients

FOR PATIENTS with serious heart conditions, an implanted cardiac defibrillator (ICD) can mean the difference between life and death. Unfortunately for some, it can also mean living in a constant state of anxiety, awaiting the next shock. Thanks to a feasibility study conducted by Elena Salmoirago-Blotcher, MD, PhD, these patients may soon be able to get relief from anxiety with a mindfulness intervention delivered by phone.

Overall, about one in four patients who have ICDs develop anxiety, either because they are fearful of the shock it might deliver or due to the severity of their underlying cardiac condition. Mindfulness-based interventions have been effective in treating depression and anxiety in patients for a number of chronic medical conditions. Dr. Salmoirago-Blotcher, assistant professor of medicine in the Division of Cardiovascular Medicine, in collaboration with colleagues in the Divisions of Cardiovascular Medicine and Preventive Behavioral Medicine, received funding from the National Institutes of Health National Center for Complementary and Alternative Medicine to conduct a pilot study examining the feasibility of delivering mindfulness training by phone to patients who had recently had cardiac defibrillators implanted.

The study, “Phone-Delivered Mindfulness Training for Patients with Implantable Cardioverter Defibrillators: Results of a Pilot Randomized Controlled Trial,” was published in Annals of Behavioral Medicine (2013). As many ICD patients have driving limitations and severe underlying cardiac conditions that limit their ability to attend group-delivered mindfulness training, Salmoirago-Blotcher was interested in testing an intervention that did not require vulnerable patients to drive to classes. Delivering the intervention by phone eliminated the transportation burden and any additional related anxiety.

“Our group designed a phone-delivered mindfulness intervention that adapted the basic elements of traditional mindfulness training to the needs of these patients,” said Salmoirago-Blotcher. Those basic elements of mindfulness training included the body scan, a technique in which participants are trained to bring attention to bodily sensations and cognitions, and the awareness of breath technique, in which participants are trained to bring awareness to the sensation of breathing as a means of focusing their attention. Participants were also gradually encouraged to bring their awareness to the activities of daily life that normally go unnoticed such as eating and drinking, sounds, visual objects, thoughts and emotions.

The study enrolled 45 patients from the ICD clinic at UMass Memorial Medical Center and randomized them into two groups: one received the mindfulness intervention and the control group received a weekly scripted phone call. The mindfulness training comprised weekly 30-minute, scripted mindfulness training sessions delivered over eight weeks by an expert mindfulness instructor. The control group received a weekly 10-minute scripted phone call addressing possible concerns regarding the defibrillators.

“By providing convenient access, local family support services, easier follow-up and ongoing medical management, this program allows kids like Jameson to transition seamlessly from pediatric to adult care as they get older,” Adel Bozorgzadeh, MD, chief of organ transplantation at UMass Memorial and UMass Medical School professor of surgery, attributes the program’s success to the hard work and expertise of the teams of specialists at the Medical Center.

“To provide this to our community is a major undertaking. It required the specialty skills of an interdisciplinary group of physicians to collaboratively offer the program,” said Dr. Bozorgzadeh in a recently published Worcester Telegram & Gazette article about Jameson’s successful transplant. “I credit UMass Memorial leadership in investing in the program, allowing the hospital to present the best possible care in Central Massachusetts.”

Jameson Laliberte had recently had cardiac defibrillators implanted. The study examining the feasibility of delivering mindfulness training by phone to patients as part of its successful adult transplantation program, the Medical Center decided to integrate that program with the expertise of the UMass Memorial Children’s Medical Center (CMC) to develop a program tailored to the pediatric population.

In 2011, the CMC formally launched its dedicated and comprehensive pediatric kidney transplant program, providing Central Massachusetts patients and families with an option that was closer to home. As the first, Jameson’s kidney transplant marked UMass Memorial’s program as a complete success. Since then, a second pediatric kidney transplant has been performed.

“There wasn’t a pediatric transplant center in Central or Western Massachusetts or in the eastern part of New York,” explained Neena Gupta, MD, medical director of the Pediatric Kidney Transplant Program. “Having a transplant program here helps make it a lot easier for these families.”

While the primary goal of the study was to determine the feasibility of the intervention, a secondary objective was to see if the intervention was acceptable. Overall, 86 percent of participants reported that the study intervention was helpful in coping with the defibrillator procedure and 90 percent reported that the intervention had moderate to great impact on their overall well-being.

Since this study had a small sample size and was designed to test the feasibility of the intervention and not its efficacy, no hard conclusions can be drawn as to whether the intervention was effective in reducing anxiety, although the results point in that direction.

“As the number of patients receiving ICD implants for the primary prevention of sudden cardiac death increases, it is important to find interventions that may improve psychological distress and thus the quality of life of these patients,” Salmoirago-Blotcher said. “Mindfulness training holds great promise and may reduce anxiety in these patients. However our pilot findings need to be reproduced in a large randomized clinical trial. I am planning to seek funding for a larger study that will assess the efficacy of the intervention.”
Reppert honored by Czech Academy of Sciences with Mendel Medal

STEVEN M. REPPERT, MD, the Higgins Family Professor of Neuroscience and chair and professor of neurobiology, was awarded the Gregor Johann Mendel Honorary Medal for Merit in the Biological Sciences by the Academy of Sciences of the Czech Republic for his seminal contributions to chronobiology and uncovering the molecular mechanisms of navigation in migrant organisms. Dr. Reppert received the medal in Prague on March 20.

The G. J. Mendel Medal was established by the Czechoslovak Academy of Sciences in 1965 and is named after the founder of the discipline of genetics, Gregor Johann Mendel. The Mendel Medal is the Czech Academy's highest research award and one of the world's top honors in the biological sciences. The medal is awarded by the Academy of Sciences of the Czech Republic in recognition of outstanding contributions in the biological and agricultural sciences. Previous recipients include J. Michael Bishop, James D. Watson, Fotis Kafatos and David Baltimore.

"I am very grateful to my Czech colleagues and deeply honored to receive this award named after the father of modern genetics," said Reppert.

An international expert in chronobiology and neuroethology, Reppert has made significant contributions to the molecular and genetic analysis of circadian timing of mammals, including humans, over his 30-year career. In addition to mammals, he uses insects, specifically the monarch butterfly, in his research. This combination has helped him elucidate the biology of circadian timing mechanisms at the molecular, cellular and neuroanatomical levels. Moreover, his field-leading work has contributed to uncovering the molecular mechanism of navigation in migrant organisms, including how animals perceive the Earth's magnetic field and use this information to orient themselves in space. Gregor Johann Mendel (1822-1884) was a Moravian priest, a natural scientist of German nationality and founder of the discipline of genetics. His experiments with cross-breeding culminated in a law that showed the nature of genetic factors and the statistical regularity of their transmission from generation to generation. Mendel’s laws are the foundation of the modern discipline of genetics, which has quickly grown into one of the most significant branches of biology.

Steven M. Reppert, MD, receives the Gregor Johann Mendel Honorary Medal for Merit in the Biological Sciences from Professor Jiří Drahoš, president of the Academy of Sciences of the Czech Republic.

Estate of Myles J. McDonough...

Continued from page 1

“Myles left this legacy because he understood the importance of funds to support research for all tough medical issues,” said Jean McDonough, his wife. She said that during his treatment at UMass Memorial Medical Center, he established a strong and longstanding relationship with his rheumatologist, Katherine Upchurch, MD, clinical professor of medicine. “He was treated with such caring and understanding by Dr. Upchurch, and that made the difference in how he coped with his illness.”

“Over the many years that I knew and treated Myles, I was repeatedly impressed by his intellect, his drive and his devotion to UMass Memorial,” said Upchurch, who is also the clinical chief of the Division of Rheumatology at the Medical Center. “His wonderful gift is deeply meaningful because it reflects his confidence in our division to continue his own personal quest to conquer the disease that compromised his body, but never his spirit.”

Founder and chairman of the board of FLEXcon Company, Inc., a leading manufacturer of pressure-sensitive film and adhesive products, McDonough served on the boards of several Worcester institutions including Memorial Hospital, Worcester County National Bank and Worcester Polytechnic Institute, where he received an award for distinguished service as a trustee. He also received the 2011 Harvey Ball Smile Award, given by the Worcester Historical Society to an individual, group or organization whose actions have improved the community’s quality of life. He and his wife were involved in many local institutions, including the Worcester Art Museum, the American Antiquarian Society, the Bancroft School, the Ecotarium, the Worcester Historical Museum and the Greater Worcester Community Foundation.

Gravallese is internationally known for her major discoveries in the pathogenesis of rheumatoid arthritis and the joint destruction that ensues. Her research has been funded by the National Institutes of Health, the American College of Rheumatology and the Arthritis Foundation, among others.

Patrick Muldoon takes the helm at UMass Memorial Medical Center

On August 26, Patrick Muldoon stepped into his role as the new president of UMass Memorial Medical Center. His appointment was announced by Eric Dickson, MD, MHCDS, FACEP, president and chief executive officer of UMass Memorial Health Care, in mid July.

Muldoon previously served as president and chief executive officer of Central New England HealthAlliance Hospital, a member of the UMass Memorial Health Care system. With campuses in Leominster and Fitchburg, HealthAlliance has net revenues of nearly $1.4 billion and more than 10,000 employees.

Muldoon, who serves as chair of the Massachusetts Hospital Association, has extensive experience in various administrative roles, including service as president and chief executive officer of South County Hospital and Healthcare System in Rhode Island and Northern Berkshire Health System in Massachusetts. He began his career in association management at the American Osteopathic Hospital Association before embarking upon his hospital administration work at Cranston General Hospital in Rhode Island. At age 28, Muldoon was named to his initial CEO position at Riverside Hospital in Michigan.

“Patrick is an ideal leader for UMass Memorial Medical Center,” said Dr. Dickson.

“Under his stewardship over the past nine years, HealthAlliance Hospital has built a tradition of delivering quality compassionate care and is recognized annually as one of the top ten hospitals in Massachusetts. Patrick’s extensive leadership will serve the Medical Center, its patients, physicians and staff exceptionally well, as we journey to become the best place to give care and the best place to get care.”

“One of the Medical School’s most important relationships is with UMass Memorial Medical Center, where the work of our clinical faculty is key to the success of our shared academic health sciences center,” said Michael F. Collins, MD, chancellor of UMass Medical School. “We benefit from and depend on strong and collegial leadership at the Medical Center to support a research, teaching and service environment focused on improving the health of the region, and we look forward to collaborating with Patrick Muldoon as he takes on this critical role.”

A fellow of the American College of Health Care Executives, Muldoon earned his undergraduate degree in Health Sciences Administration from Providence College and a Master’s Degree in Business Administration from Loyola University in Chicago.
STUDYING POST-PARTUM DEPRESSION IN NEW MOTHERS

Psychiatrist and neuroscientist Kristina Deligiannidis, MD, is using brain scans like the one pictured here to learn why women develop post-partum depression.

POST-PARTUM DEPRESSION affects one in eight new mothers—many of whom don’t realize what is wrong until weeks after giving birth when they are severely depressed, not bonding with their baby and even suicidal. But what if women at high risk for depression could be identified during pregnancy, so that their symptoms could be treated early or even avoided altogether?

"We want to be able to identify what the risk factors are, watch for the first symptoms before they’re in crisis mode, and be able to intervene before it’s harder to pull them out of it," said UMass Medical School psychiatrist and neuroscientist Kristina Deligiannidis, MD.

With a five-year, $900,000 grant from the National Institutes of Health (NIH), Dr. Deligiannidis will use hormone and brain imaging investigations to learn why women develop post-partum depression.

"This is one of very few currently funded NIH grants that are dedicated to understanding the biological underpinnings of post-partum depression," noted Deligiannidis, assistant professor of psychiatry and obstetrics & gynecology. "It will allow us to measure mood symptoms and hormones throughout pregnancy and use specialized, multimodal brain imaging techniques available at UMass to understand how brain areas important for mood and behavior are connected and how hormones affect brain circuitry in those women who develop depression."

The work will build on pilot studies (bit.ly/19nvXq1) made possible by seed funding and collaboration between researchers in the Departments of Psychiatry and Quantitative Health Sciences and the Proteomic & Mass Spectrometry Facility at UMMMS.

"We were struck by the extent to which our findings went beyond our initial hypotheses," Deligiannidis said. "We demonstrated for the first time that mothers who developed the condition had much weaker communication, or connectivity, between several brain areas compared to healthy post-partum mothers. We also identified a hormone related to progesterone that may be abnormal in pregnancy in those women who later on developed post-partum depression."

The ultimate goal for the neuroendocrine studies is to develop simple and inexpensive methods to detect, during pregnancy, those women at risk of developing post-partum depression.

"What we’re aiming to do in the long-run is to identify a biological marker of risk with an inexpensive blood test," Deligiannidis said. "With early risk detection, we can be more proactive in supporting the pregnant woman at an individual and family level so that we can reduce her risk of developing depression in the post-partum period."
Finding help for depression

What are the signs of someone suffering from depression?
Those who are depressed feel more than just temporary sadness and may experience the following symptoms:
- Loss of interest in most activities
- Feeling anxious or irritable
- Withdrawing from friends
- Having trouble at work
- Feeling tired
- Thinking about death

Nearly one in five Americans will experience depression sometime in their life. "Depression is a mental disorder that may profoundly affect an individual's quality of life and can affect people at any age," said Anthony Rothschild, MD, the Betty Brudnick Chair in Psychiatry and professor of psychiatry. "It may rob the sufferer of the ability to take pleasure in activities or relationships that were previously enjoyable."

There are a variety of treatments that can help ease symptoms and make people feel better about life. Often, a combination of medication and counseling is the most effective treatment for patients. "Depression, even in the most severe cases, is a very treatable disorder," said Dr. Rothschild.

Ultimately, it all starts with seeking help. The Depression Specialty Clinic at UMass Memorial Medical Center provides consultations for patients suffering from depression. Referrals to the clinic can be made by physicians, or consultations can be requested by calling 508-334-0366.

Do you think you may be depressed or know someone who may need help with depression?

HEALTH ADVICE

Calendar of Events

Pink—Lighting the Way to a Cure
Thursday, October 10, 6 p.m.
ALBERT SHERMAN CENTER AT THE UNIVERSITY OF MASSACHUSETTS MEDICAL SCHOOL, Worcester

Benefiting breast cancer research and patient care at the UMass Memorial Cancer Center of Excellence, this annual event features a community forum of physicians and survivors discussing the latest advances in treatment and care.

For more information, visit www.umassmed.edu/development/pink.aspx

Nutrition and Heart Health
Thursday, October 24, noon
DCU CENTER, Worcester

This free community event at the Senior Spectacular 2013, which includes exhibits, seminars and workshops, will feature Barbara Olendzki, RD, MPH, LDN, director of the Center of Applied Nutrition at UMass Medical School, who will talk about the important role of nutrition in keeping your heart healthy. No registration is required.

UMass Medicine Winter Ball
Friday, December 6, 6 p.m.
ALBERT SHERMAN CENTER AT THE UNIVERSITY OF MASSACHUSETTS MEDICAL SCHOOL, Worcester

The Central Massachusetts community will come together for the fifth consecutive year to raise funds in support of the lifesaving mission of the academic medical center formed by UMass Medical School and UMass Memorial Medical Center.

For more information, visit www.umassmed.edu/development/winterball.aspx

Community Fundraising Events
Ongoing throughout the year

Many dedicated individuals, businesses and community groups host fundraisers to support the mission of our academic health sciences system. From car washes to golf tournaments, marathons or other road races, volunteers in our community dedicate themselves to raising awareness of and support for research, treatment and patient care at UMass Medical School and UMass Memorial.

To learn about community-organized fundraising events, visit www.umassmed.edu/development/communityeventcalendar.aspx or click on the Events tab on the Your UMass medicine Facebook page at www.facebook.com/yourumassmedicine.

Hudson Hoagland Society annual meeting celebrates science, philanthropy

At the 28th Annual Meeting of the Hudson Hoagland Society (HHS) in May, celebrating science was on the top of the agenda. Thoru Pederson, PhD, the Vitold Arnett Professor of Cell Biology and professor of biochemistry & molecular pharmacology, welcomed the audience by pointing out the concrete value of their philanthropic support to UMass Medical School researchers, including newly-named Howard Hughes Medical Institute investigator Marc Freeman, PhD, who was a Worcester Foundation grant recipient.

In 2005, Dr. Pederson also noted that all four of the UUMS recipients of the UMass Technology Development Fund grants were previous recipients of Worcester Foundation grants, illuminating the importance of early philanthropic support for stellar young scientists.

Guest speakers for the HHS event were Heidi Tissenbaum, PhD, professor of molecular medicine, who engaged the audience by illustrating why the nematode C. elegans is an ideal model for the study of aging; and John F. Keaney Jr., MD, professor of medicine and chief of the Division of Cardiovascular Medicine at UMass Memorial Medical Center, who spoke about his "favorite part of the cardiovascular system, the endothelium."

Both talks illustrated how understanding the biology of aging has important implications for an aging population.

Chancellor Michael F. Collins presented an update on the past year at UUMS, focusing on how cuts in federal funding have a real world impact on the ability of great scientists to do their work, and pointing out how identifying alternate sources of funding for research is crucial to the continued success of an extraordinarily successful institution.

Pederson closed the evening by sharing the news that HHS now has a group of student bloggers on its Facebook page who are providing a window into the study of science at UUMS, and he encouraged the audience to "like" the HHS page at www.facebook.com/HudsonHoaglandSociety.
Christopher Philbin became vice president of government relations at UMass Memorial Health Care on Sept 3, 2013. Philbin previously served as chief of staff to U.S. Representative James P. McGovern.

Dennis Dimitri, MD, vice chair and clinical associate professor of family medicine & community health, was elected vice president of the Massachusetts Medical Society (MMS). He has served on the MMS House of Delegates since 1989 as well as a number of committees with emphasis on issues of advocacy, legislation and regulation, and physician workforce.

Lucy Candib, MD, professor of family medicine & community health, was honored in Prague as the 2013 recipient of the World Organization of Family Doctors’ (WONCA) Five Star Doctor Award. The award is given to a family doctor who, in the opinion of the WONCA council, has made a significant impact on the health of individuals and communities through personal contributions to health care and the profession.

Mark Price, MD, was awarded the Naval Bronze Star for his meritorious service in Afghanistan as a U.S. naval reservist. An orthopedic surgeon at UMass Memorial, he worked with a multinational team of doctors that followed the Green Berets, built a mobile hospital and performed surgery.

UMass Medical School has been accredited by the New England Association of Schools and Colleges (NEASC) for the maximum term. NEASC provides accreditation services for more than 2,000 public and private institutions in the six-state region.

Lynda Young, MD, pediatrics, and Richard Pieters, MD, radiation oncology, were recently appointed to the American Medical Association, a national organization dedicated to ensuring sustainable physician practices. Dr. Young to the Council on Medical Service and Dr. Pieters to the Council on Medical Education.

Barre Family Health Center marked its 40th anniversary in June. Staff and volunteers celebrated with patients and families for a day of fun, including a clinic for “sick” teddy bears, games, guest speakers, music and more.

Richard Irwin, MD, chair of critical care operations at UMass Memorial and UMMHS professor of medicine, received the Pioneering Spirit Award, one of the highest national honors given by the American Association of Critical Care Nurses, for his visionary advocacy of collaborative leadership and interdisciplinary practice between medicine and nursing.

Anne Marie Comeau, PhD, deputy director of the New England Newborn Screening Program and professor pediatrics, was awarded the 2013 Harry Hannon Laboratory Improvement Award in Newborn Screening for her contributions to the advancement of newborn screening for severe combined immunodeficiency. Her work involved laboratory development and the creation of a multidisciplinary team.

UMass Memorial Medical Center received Defect-free Care Award from the Stroke Collaborative Reaching for Excellence (SCORE), a voluntary statewide quality improvement program that supports Primary Stroke Service hospitals, administered by the Massachusetts Department of Public Health. Defect-free care is achieved when a patient receives the appropriate care based on clinical guidelines.

GSN faculty and graduate received Community Engagement Awards from the Colleges of Worcester Consortium. Associate Professor of Nursing Carol Boua, PhD, RN, ANP, received the Faculty Community Engagement Award for her work with Worcester patients infected with HIV. Recent GSN graduate Meredith Walsh, MS, RN, was honored for founding the Worcester Refugee Assistance Project (WRAP) for refugees from Burma living in Worcester. Walsh was also recently named as one of the “29 Who Shine,” a group of outstanding graduates selected from state universities in Massachusetts.

Marianne Felice, MD, professor of pediatrics and obstetrics & gynecology, is the inaugural recipient of the Massachusetts Medical Society’s Woman Physician Leadership Award for her contributions to UMMHS, pediatrician training and the care of infants and children. The award, which recognizes leadership and contributions to patients and the medical profession, will be presented in the fall.

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