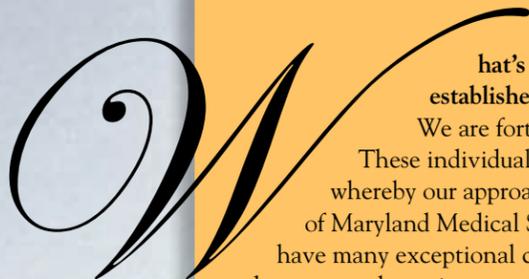




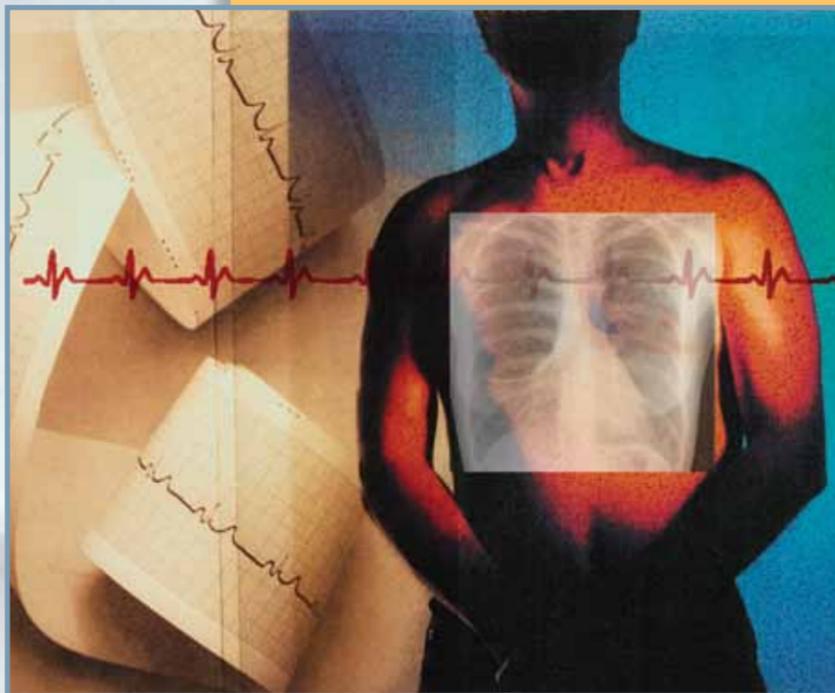
DEAN'S MESSAGE: What's On My Mind



What's on my mind this month is what it means to become known as a national leader with an established program of excellence in a medical specialty.

We are fortunate to have multiple faculty leaders who are among the best in their respective fields.

These individuals truly embody the School of Medicine's guiding principle of "discovery-based medicine," whereby our approach to treatment, procedures and management of patients at hospitals across the University of Maryland Medical System are based on fundamental research conducted in the laboratory. I am pleased that we have many exceptional clinical programs at the University of Maryland: cancer; cardiac valve replacement; pediatric heart transplantation; comprehensive cardiovascular medicine & surgery; sports medicine; multi-organ transplantation; and diabetes and metabolic disorders.



I have often written or spoken about our top-tier clinical programs, but what does it mean to have a "Center of Excellence?" A 2013 *Becker's Hospital Review* article about investing in a clinical Center of Excellence articulated well the importance of having such a center. "Developing Centers of Excellence can provide a platform for hospitals and health systems to align physicians in quality improvement, reduce costs through greater efficiencies and create market differentiation through clinical excellence and high patient satisfaction," it explained. The article went on to discuss six important components, or targets, which set Centers of Excellence apart from their peers. These include enhancing quality; alignment of physicians; attracting physicians; market differentiation; setting industry standards; and cost savings. A Center which consistently delivers in each component can guarantee the highest-quality, patient-centered care, given by physicians whose practice is rooted in evidenced-based medicine, and in the most streamlined and cost-effective manner.

The University of Maryland Medicine—the brand which encapsulates the strong partnership between the School of Medicine and the Medical System—stands out among other academic medical centers because it hits all the targets mentioned in the *Becker's Hospital Review* article. However, we can always do better. No top-tier institution stays ahead

of the pack while resting on its laurels. This is why we launched the new Program in Lung Healing last month. As the center spread of this issue summarizes, this new program will not only address pulmonary diseases, but will do so by bringing together some of our best physician-scientists, who will use new scientific approaches to lung healing, including stem cell therapy, tissue engineering, personalized diagnostics, and advances in solid organ transplantation, as well as new technology platforms being developed for artificial respiration.

While I have great expectations that the Lung Health Program will become our newest program of excellence, I strongly encourage everyone to strive to meet the high standards we have set for the School of Medicine, further establishing ourselves as the pre-eminent leader in discovery-based medicine and a thriving biomedical research enterprise.

In the relentless pursuit of excellence, I am

Sincerely yours,

E. Albert Reece, MD, PhD, MBA
Vice President for Medical Affairs, University of Maryland
John Z. and Akiko K. Bowers Distinguished Professor and
Dean, University of Maryland School of Medicine

Point of Pride

School of Medicine researchers were the **first** in the United States to use a **microscope** for **cancer diagnosis** as far back as 1853.

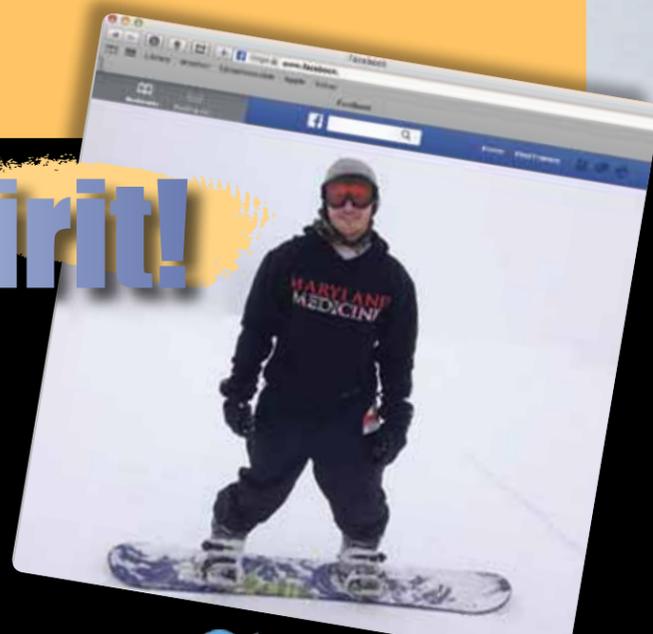
This makes us proud!

Catch the Spirit!

As we continue our strong momentum as one of the leading biomedical research institutions in the nation and the world, it is a perfect time to celebrate how far the School of Medicine (SOM) has come and how we continue to reach for new heights. We have much to be proud of, and we invite all of you to share that pride.

Here is a new way you can catch the SOM Spirit:

Enter the SOM Spirit contest. We want everyone to get in on the action. Simply take a photo of yourself wearing any kind of School of Medicine gear and post it to our Twitter page with the hashtag #SOMspirit. Each month, we will select a student, staff or faculty winner to be featured in SOMnews, as well as on the SOM website and on the flatscreen TVs around the School. Prizes will be given for those with the most interesting locations, creativity and overall spirit.



Spencer Todd, a student in the Graduate Program for Life Sciences (GPILS) showing off his SOM spirit on the slopes.

New National Program in Lung Healing

Program Builds on UM Medicine's Longstanding Clinical, Research and Educational Leadership in Trauma, Surgery and Pulmonary Medicine

University of Maryland School of Medicine (UM SOM) Dean **E. Albert Reece, MD, PhD, MBA**, and **Jeffrey A. Rivest, MS**, President and Chief Executive Officer of University of Maryland Medical Center (UMMC) recently announced the official launch of a new "Program in Lung Healing" that will further the School's position as a national leader in research, education and clinical innovation for acute ailments of the lung and respiratory system.



The new program is led by Executive Director Bartley P. Griffith, MD, the Thomas E. and Alice Marie Hales Distinguished Professor in Transplant Surgery. Dr. Griffith is regarded as one of the leading surgeons in the nation for heart and lung transplantation, aortic diseases and pulmonary thromboendartery.

The Program's leadership structure also includes Aldo T. Iacono, MD, the Hamish S. and Christine C. Osborne Professor in Advanced Pulmonary Care, who will serve as Director of Outreach and Consultative Services. Dr. Iacono is nationally recognized as an outstanding transplant pulmonologist and a translational investigator focusing on novel

Program Integrates Leading Departments and Programs

The program integrates many of UM SOM's leading departments and programs, including the Department of Medicine's Division of Pulmonary & Critical Care, under the leadership of **Stephen N. Davis, MBBS**, **Jeffrey Hasday, MD**, and **Aldo Iacono, MD**; the Department of Surgery, under the leadership of **Stephen Bartlett, MD**, **Richard N. Pierson III, MD**, and **Bartley P. Griffith, MD**; and the Program in Trauma's Critical Care Division, under the leadership of **Thomas M. Scalea, MD**, **Si M. Pham, MD**, **Jay Menaker, MD** and **Karen Doyle, MBA, MS, RN**.

According to the National Institutes of Health (NIH), COPD, or Chronic Obstructive Pulmonary Disease, is the third leading cause of death in the U.S. The NIH also reports that more than 320,000 Americans are affected by acute respiratory failure each year, with COPD exacerbations, Acute Respiratory Distress Syndrome (ARDS), influenza, and progressive pulmonary fibrosis as the primary underlying causes. The annual incidence of ARDS alone in the U.S. is 200,000, with more than 70,000 deaths each year.

"The Program in Lung Healing unifies and leverages our key assets and pioneering leadership in understanding how to treat the most critical patients with pulmonary failure," said Dr. Reece, who is Vice President for Medical Affairs at the University of Maryland and the John Z. and Akiko K. Bowers Distinguished Professor and Dean in the School of Medicine. "With our longstanding leadership in pulmonary medicine, trauma, transplantation and critical care, we are clearly establishing the University of Maryland Medicine's pre-eminence in the area of vital organ preservation—when the patient's life is truly on the line."



Reece

the
PLAYERS



Davis



Scalea



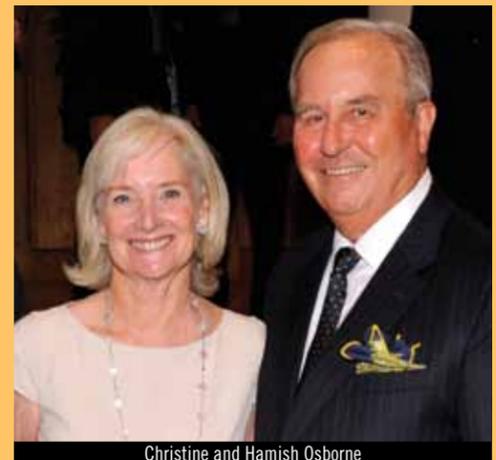
Griffith



Iacono



Bartlett



Christine and Hamish Osborne

anti-rejection therapy.

Hamish S. Osborne and Christine C. Osborne are among the founding supporters of the Program. Mr. Osborne's diagnosis of idiopathic pulmonary fibrosis resulted in a life-saving double-lung transplant at the University of Maryland Medical Center. He is the only reported patient to survive re-transplantation after contracting a rare fungal disease called pulmonary mucormycosis following his first single lung transplant. "Implementing the University of Maryland's national pulmonary rescue and healing magnet program will be neither easy nor inexpensive," Mr. Osborne said. "It can only happen with generous philanthropic support and the hard work and innovative ideas of nationally and internationally acclaimed physicians and scientists. The end result will be well worth all of the hard work, innovation and expense, however, because at the end of the day, there will be a Program in Lung Healing where patients can come and have their diseased lungs repaired, regenerated, or replaced, and, upon discharge, they will be able to live long, productive

Added UMMC's Mr. Rivest: "This new program is a great example of how we continue to invest in unique programs that ultimately will deliver the highest value for our critically-ill patients. By bringing together our unparalleled strengths in time-sensitive critical care medicine, we can maximize the potential outcome for our patients with the most severe cases of respiratory failure."

Dr. Scalea, who is the Honorable Francis X. Kelly Distinguished Professor in Trauma Surgery, Director of the UM SOM Program in Trauma, and Physician-in-Chief for the R Adams Cowley Shock Trauma Center, commented that "we are fortunate to have some of the most talented and dedicated physicians and nurses in the country—now mobilized under this new national program. It is very exciting to see this vision come to fruition, where we have a multi-disciplinary approach, access to all of the tools, a proven model for critical care, and a broad focus on research, education and clinical innovation all under the same umbrella."

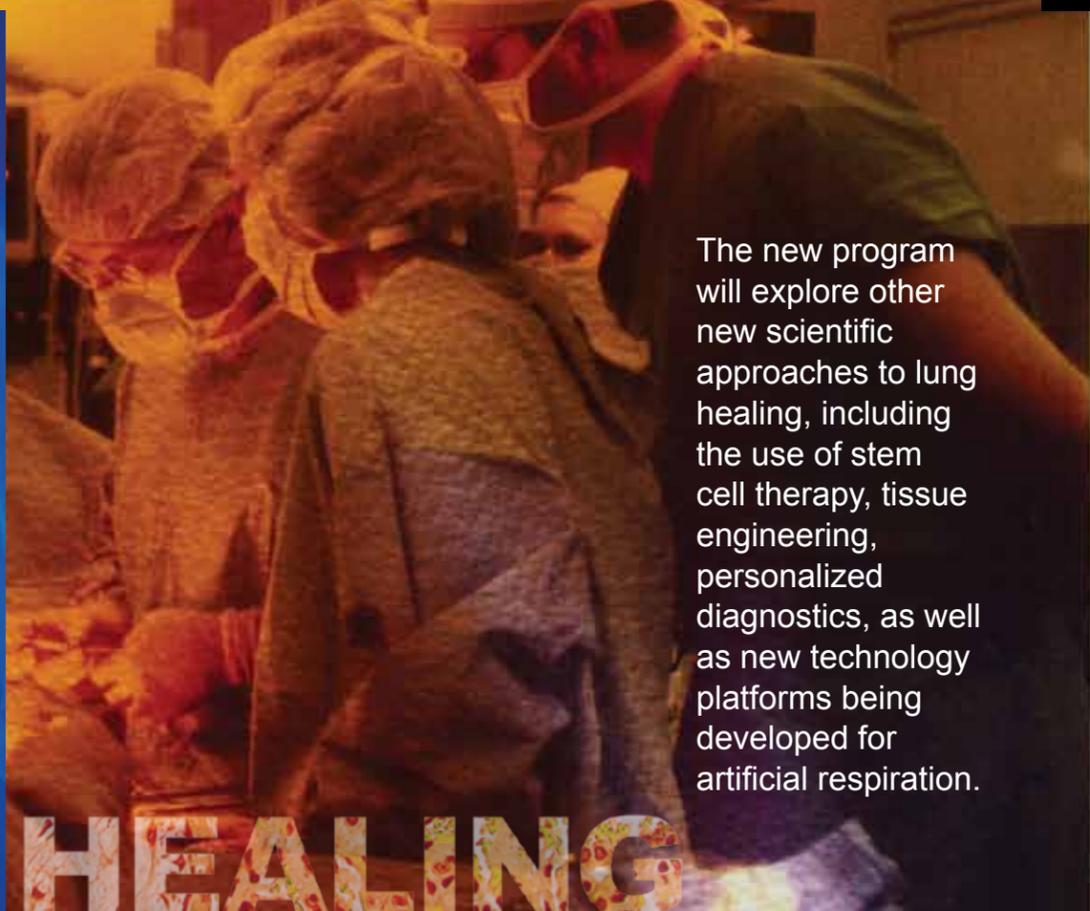
lives free from breathlessness." Other founding philanthropic gifts have been provided by the Grayce B. Kerr Fund and an anonymous donor.

The new Program brings together and leverages UM Medicine's leadership in surgery, lung transplantation, critical care, trauma and pulmonary medicine, with an emphasis on research and education.

Nationally-Recognized Strengths in Lung Transplantation

UMMC is already established as a national leader in lung healing. Its Lung Transplantation Program has saved the lives of hundreds of patients who have received transplants. By replacing lungs that have ceased to function effectively, the program has given new life, new energy and new possibilities to people whose lives have been restricted by debilitating conditions.

"Faculty within the Department of Surgery have a superb reputation for redefining pulmonary research and advancing surgical options for patients with critical lung illnesses," said Stephen Bartlett, MD, the Peter Angelos Distinguished Professor of Surgery and Chair, Department of Surgery. Richard N. Pierson, III, MD, Professor and Senior Associate Vice Chair for Research,



The new program will explore other new scientific approaches to lung healing, including the use of stem cell therapy, tissue engineering, personalized diagnostics, as well as new technology platforms being developed for artificial respiration.

LUNG HEALING

Department of Surgery, he noted, is a recognized leader in basic and translational research related to transplant immunology and xenotransplantation.

“Each year our researchers and surgeons earn millions of dollars in grant funding so that we can better understand and address lung disease for patients at our institution and around the world. This Program in Lung Healing will pave the way for even more research opportunities to change the lives of patients and families who are desperate for answers,” added Dr. Bartlett, who is also the Surgeon-in-Chief and Senior Vice President for the University of Maryland Medical System.

Leveraging Leadership in Shock Trauma and Critical Care

The UM SOM is regarded as a world leader in trauma. Last year, the University of Maryland Medical Center (UMMC) opened its new 140,000 square foot Shock Trauma Critical Care Tower as the new home of its pioneering R Adams Cowley Shock Trauma Center, with the capacity of providing more than 8,000 patients with lifesaving care annually. In August, the Center opened a Lung Rescue Unit to evaluate and immediately determine the most effective treatment for each lung patient and to serve as a bridge to either lung healing or transplantation. Si M. Pham, MD, Professor of Surgery, serves as surgical director of the Lung Rescue Unit, and Jay A. Menaker, MD, Associate Professor of Surgery, whose clinical specialty is in Emergency Medicine and Trauma/Critical Care, is medical director of the Unit.

Building on Discovery and Innovation in Pulmonary Medicine

The UM SOM is widely recognized for its significant research and discovery in the field of pulmonary medicine. Led by Stephen N. Davis, MBBS, the Theodore E. Woodward Endowed Chair and Professor in the Department of Medicine and Physician-in-Chief at UMMC, and Jeffrey D. Hasday, MD, the Herbert Berger Professor of Medicine and Head of the Pulmonary & Critical

COPD; mechanisms of acute lung injury, including the benefit of blocking fever and developing new drugs; cutting-edge therapy for severe asthma using bronchial thermoplasty; and multiple basic mechanisms of lung injury, fibrosis and recovery that have the potential to lead to the next generation of therapeutics and diagnosis.

“This is an exciting development for UM Medicine in the field of lung healing, where we continue to conduct breakthrough clinical studies that focus on optimizing supportive care in patients with acute lung injury and developing new therapies that block lung injury,” said Dr. Davis. “Creation of the new Lung Program in Lung Healing provides a catalyst to reorganize and streamline how we deliver appropriate, state-of-the-art care for patients with acute lung injury. Through enhanced clinical care and integrated training and research activities, the Program in Lung Healing will save lives, generate important new knowledge, and produce the next generation of superbly trained lung and critical care physicians and scientists,” he said.

Karen Doyle, MBA, MS, RN, Vice President of Nursing & Operations, R Adams Cowley Shock Trauma Center, who oversees clinical operations and patient care for trauma, said, “This program is very exciting because it truly brings an organized, multi-disciplinary team approach together into a single unit—which is really the future of patient care. Essentially we are able to bridge the gap between cardiac surgeons and lung patients and create a bridge from acute lung injury to pre-lung transplant that will enable us to save many more lives.”

Utilizing New Approaches for Lung Healing

According to Dr. Griffith, the School of Medicine’s new program will explore other new scientific approaches to lung healing, including the use of stem cell therapy, tissue engineering, personalized diagnostics, as well as new technology platforms being developed for artificial respiration.

Dr. Griffith and his team were the first



Pierson



Pham



Menaker



Hasday



Doyle

“THIS NEW PROGRAM IS AN EXAMPLE OF WHAT LEADERS DO.”

Care Medicine Division, faculty in the Division, along with faculty in the UM SOM Departments of Surgery and Anesthesiology, have participated in the NIH-funded ARDSNet (Acute Respiratory Distress Syndrome Clinical Research Network) for over two decades. ARDSNet studies performed at UM SOM have tested various approaches to ventilation, fluid support, optimal nutrition, and existing medications, including statins and pentoxifylline. The low tidal volume study, which was the first to show improved survival in patients with ARDS, was based on an original study performed at the University of Maryland School of Medicine.

Additional clinical research is focused on optimizing supportive care in patients with acute lung injury and developing new therapies that block lung injury. Dr. Hasday’s laboratory is internationally recognized in the field of thermobiology, specifically how fever may worsen and hypothermia may improve ARDS. Other research in the Division focuses on a broad range of issues related to the prevention, arrest and reversal of lung disease. Current studies focus on the deconditioning of ICU patients using an integrated program of physical rehabilitation, ventilator weaning and nutrition; genetic causes of

in the world to free a patient from a mechanical ventilator, allowing the patient to walk with the aid of an ambulatory artificial lung device. Two weeks later the patient received donor lungs. UMMC was also the first hospital in the U.S. to enroll a patient in a clinical trial that could expand the availability of donor lungs.

“There is a new awareness that lung failure can be treated in much better ways that are both time sensitive and that prevent further injury,” Dr. Griffith said. “Simply put, we can save more lives using the Shock Trauma model, developing and utilizing new tools for lung treatment and mobilizing our teams of expert surgeons.”

Added Dr. Scalea: “This new program is an example of what leaders do. We are already one of the busiest medical centers for patients with respiratory failure of all types. And, we are internationally recognized as a leader in each of the key areas that impact lung and respiratory failure. This program brings together our academic and research leadership with the vision and the clinical expertise to treat patients in ways that are unique anywhere in the world.”

transforming medicine
beyond imagination



SUPPORTING SCHOLARSHIPS: Transforming a Student's Dreams into Reality

There can be no greater mission, and no more worthy association, than to support our ability to transform any bright student's dream of becoming a physician into a reality.

In today's dynamic healthcare environment, the need has never been greater for attracting the best and brightest students to careers in medicine. Breakthroughs occur every day in established and emerging areas of medicine. Such innovations raise the bar for today's physicians and researchers and create demand for more talented and skilled professionals.

In fact, the future of medicine is dependent upon the ability of medical schools to attract the most passionate, gifted students. However, many factors contribute to a student's ability to earn a medical degree, including the capability to pay for an education that is continually rising in cost.

Tuition at the University of Maryland School of Medicine is currently more than \$29,000 for Maryland residents and more than \$54,000 for non-resident students.

Many students, both nationally and at Maryland, must obtain bank loans and leave medical school with enormous debt. The May 2013 graduates of the University of Maryland School of Medicine were no exception, leaving with an average debt load of \$152,626. More than one-third of these students already carried a pre-medical education debt of upwards of \$24,000.

The impact of such a large financial burden can be devastating. Some qualified students are forced to abandon a career in medicine. Others must choose a higher-paying specialty instead of pursuing their passion. Therefore, to attract pre-

mier students of all backgrounds and ensure that today's medical education is not limited only to those who can afford it, it is vital to offer scholarship support.

In the 2013, the School of Medicine gave out more than \$1.1 million to deserving students in the form of both merit and need-based scholarships and awards. However, in light of the increasing costs of a medical education, it is simply not enough.

The School's endowment, though significant, is on average much lower than our peer schools, many of which are able to offer better financial aid packages and incentives, potentially luring away many quality applicants. Private phil-

anthropy is the only way we can bridge this gap and increase scholarship awards.

In an effort to attract new scholarship gifts, a matching gift program was formally launched in December 2013. Until December 2015, the University of Maryland Baltimore Foundation, Inc. will match 1:2 (fifty cents for each dollar) any gift to establish a new endowed scholarship fund. The medical school is seeking contributions of \$66,666, which would be matched to create a \$100,000 fund.

If you are interested in creating a named scholarship fund in your name or in honor of someone and would like to learn more about the matching gift program, please contact Brian DeFilippis at 410-706-8503.



Scholarships allow us to attract top students to the School of Medicine.

CIBR Space



Attention Investigators: Easier Access to the Cores that Support YOUR Research is Coming Soon!

The Center of Innovative Biomedical Resources (CIBR), which works to serve the unique administrative and educational needs of the School's research core facilities,

will shortly begin the process of implementing an online cores management system. After an extensive review by administrators and core facility directors, i-Lab Solutions was selected for deployment.



For investigators, the implementation of such a system means easier access to the equipment and technical expertise available to support their research via an intuitive online scheduling portal. This system will be accessible via your myUMB log-in and will integrate with eUMB financials.

A cores management system will provide those managing our cores with a contemporary set of management tools, including service request management, equipment reservation and usage tracking, project tracking, sample processing, inventory management, billing and invoicing, and business intelligence reporting.

CIBR plans to bring 9-12 of the School's cores online over the next 14-16 months; three cores at a time. To follow the progress of this project or to learn more about the core facilities and services available to support your research, please visit <http://medschool.umaryland.edu/cibr>

UNIVERSITY OF MARYLAND SCHOOL OF MEDICINE CENTER FOR INTEGRATIVE MEDICINE HEALTH WELLNESS conference

Join the Center for Integrative Medicine on May 9th for a day of health and wellness education and hands-on learning.

In-depth, evidence-based explorations into topics such as:

- Optimizing Gut Health
- Endocrine Disruptors in Our Lives
- Science Behind Acupuncture
- Treating Chronic Fatigue
- Local Sustainable Food Strategies
- Yoga Therapy
- And much more!

- Includes a healthy, delicious lunch.
- Opportunities to experience wellness tools and techniques!

CEUs are available for many health professions.
Everyone is invited to attend!

May 9, 2015 | Baltimore, MD

www.UWellnessConference.com

Questions? CIMEvents@som.umaryland.edu

somnews

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