



1807 – 2007

“The Enduring Power of Leadership”



“... The said College shall be founded and maintained forever upon a most liberal plan, for the benefit of students of every country and every religious denomination, who shall be freely admitted to equal privileges and advantages of education, and to all the honors of the College, according to their merit, without requiring or enforcing any religious or civil tests.”

FOUNDING ACT, DECEMBER 18, 1807

Throughout 2007, the School of Medicine will celebrate the bicentennial of its founding as America's first public medical school. Only Penn, Columbia, Harvard, and Dartmouth are older. The school also was the first entity in what is now Maryland's 11-campus public higher education system.

To appreciate the atmosphere in which the school was created, it is necessary to go back to 1789. A group of trained physicians, exasperated with the unskilled charlatans in town, formed the Medical Society of Baltimore and began teaching medical students in their homes. They were joined by John Beale Davidge (in 1796), James Cocke (in 1805) and James Shaw (in 1807). Davidge and Cocke held medical degrees, while Shaw had attended medical lectures around the world.

In 1807, at their own expense, Davidge, Cocke, and Shaw built an anatomical theater behind Davidge's home on Saratoga Street. It was popular with students but short-lived. On the night of November 21, neighbors rioted to protest using dissections in teaching and demolished the structure. The Medical Society gave its support for legislation that would provide legal protection and create an official, private medical school. Coincidentally, a bill to incorporate the school was introduced in the Maryland General Assembly the day of the riot. The legislation was passed on December 18.

In 1812, the school was re-chartered as the University of Maryland, which evolved into the first public university created on the foundation of a private medical college. From the initial class of seven students, instruction was primarily at the bedside of patients at the Baltimore Almshouse, a workhouse and infirmary for the poor on Howard Street, now the site of Maryland General Hospital. Classes continued in physicians' homes; other buildings were used with less success. Chemistry classes were moved to the old schoolhouse on Fayette Street, but the roof leaked so badly that in the winter the chemicals and specimens froze. For a while, a ballroom on Commerce Street was available without charge between noon and 2 p.m. The need for a new facility was overwhelming.

The Founding Act prohibited tax support for a building but authorized a lottery to raise up to \$40,000. Instead, fundraising came primarily from the faculty, and a parcel of land was purchased on Lombard Street, considered at the time to be far out in the country, and in view of the Patapsco River. Legend has it that the bombardment of the city during the War of 1812 could be seen from the new building.

The building was named Davidge Hall in honor of the first dean and person most responsible for its construction. It is owned and maintained by the Medical Alumni Association and has been used continuously for medical education longer than any other building in the northern hemisphere. It was designated a National Historic Landmark in 1997.

This is a glance at the beginnings of the long and rich history of the school, which is now a top-tier research, patient care and teaching institution, and a vital economic force. More stories of the school's rich heritage and details of bicentennial events will be available in every issue of SOMNews from now through the end of 2007. For more information, contact Jo Martin at x6.2007 or jmartin@som.umaryland.edu.

Bicentennial Events for 2007

The following is the preliminary bicentennial calendar. Some events are created specifically for the celebration year, while others are on-going campus programs that will have bicentennial themes. Please note that dates for the bulleted events have not yet been determined.

January

30th—Breakfast for the Maryland General Assembly, Governor and Cabinet

February

- Black History Month campus event with a School of Medicine speaker

26th—Free public lecture on diabetes at the Hippodrome Theatre with celebrity guest

March

- “Maryland Women in Medicine” exhibit opens at the Health Sciences and Human Services Library

27th—Women's History Month campus event with Dr. Pamela Peeke, faculty member, author and national advocate for women's health

April

- School of Medicine night at Camden Yards

27th—Student public service project

May

18th—Pre-commencement at the Meyerhoff Symphony Hall
—Commencement at the First Mariner Arena
—Gala at the Convention Center

18th–20th—Medical Alumni Association events all weekend

June

Leadership Summit at the Hippodrome Theatre

July

To be announced

August

- Project Medical Education legislative day
- “Women Changing the Face of Medicine” national exhibit opening at the Health Sciences and Human Services Library

September

- Mini-Med School

24th—Free public lecture on the central nervous system at the Hippodrome Theatre with celebrity guest

October

- Mini-Med School
- Founders Week

November

To be announced

December

18th—Charter signing re-enactment in Annapolis



Celebrate 200 Years of Medicine at Maryland

Order Your Bicentennial License Plates!

Alumni, faculty and friends of the University of Maryland School of Medicine can now obtain bicentennial license plates celebrating the medical school's 200th anniversary. Demonstrate your pride by displaying these special license plates as we approach our bicentennial in 2007. Each set costs \$25 and can be ordered by Maryland residents by visiting www.fundformedicine.org and selecting the license plate link or by calling 6.8669.



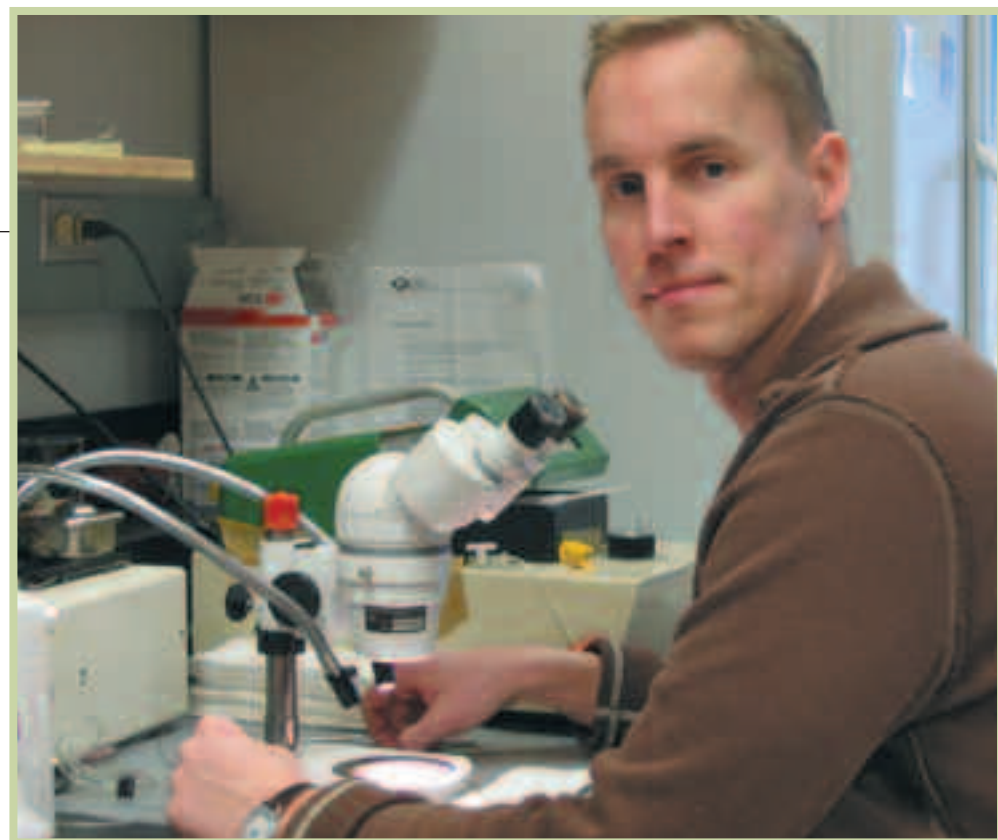


QUICK STUDIES

► **Edson Albuquerque, MD, PhD**, professor and chair, Department of Pharmacology & Experimental Therapeutics, was awarded a three-year \$1 million grant entitled "A Novel Countermeasure against Nerve Agents' Toxicity and Lethality in Guinea

Pigs: A Comparison with Cholinesterase Inhibitors" from the Department of the Army's Defense Threat Agency under the FY06 Medical Chemical and Biological Defense Science and Technology Program. ► **Abdu Azad, PhD, MPH, PharmD**, professor, Department of Microbiology & Immunology, received a one-year \$371,201 non-competing renewal grant from the National Institutes of Health National Institute of Allergy and Infectious Diseases for his work entitled "Murine Typhus: Vector Biology & Transmission."

► **Angela H. Brodie, PhD**, professor, Department of Pharmacology & Experimental Therapeutics, has been selected to receive the 2006 University System of Maryland Board of Regents Faculty Award for Excellence in Research, Scholarship and Creative Activity. This award is the highest honor that the Board of Regents bestows and is reflective of Dr. Brodie's work as a pioneer in the research of aromatase inhibitors for the treatment of postmenopausal women with breast cancer.



Marc Spehr, PhD

Postdoctoral Fellow Establishes Unique Link Between the Immune and Olfactory Systems

A

fter receiving his PhD from Ruhr University in Bochum, Germany, Marc Spehr moved to the United States in 2004 to do a postdoctoral fellowship with Frank Zufall, PhD, in the Department of Anatomy & Neurobiology. Since arriving here, Dr. Spehr and his colleagues have identified a unique link between the immune system and the sense of smell. Using the mouse as a model system, they found for the first time that small immune peptide molecules function as olfactory cues and influence behavioral decision-making in a social preference test. The results of this work were published in the February 15, 2006, issue of the *Journal of Neuroscience*.

"Our findings are new and interesting because this novel class of olfactory signals could provide a mechanistic explanation for the widely observed phenomenon that an individually unique body odor affects a number of important social behaviors such as mate choice or kin recognition in mammals," says Dr. Spehr.

Since the 1970s, a great deal of research has revealed that many mammals, including humans, can recognize and distinguish individuals based on their specific body odor. The individually unique repertoire of an important group of immune genes—the major histocompatibility complex (MHC) genes—directly affects body odor. Despite numerous studies, the nature of the odor signal and the exact mode of its detection have remained a mystery.

"We focused our attention on a novel mechanism by which small peptide molecules of the immune system directly function as chemosignals," Dr. Spehr says. "These peptides are critical in immunological surveillance and represent a direct mirror image of an individual's MHC gene repertoire. Since these MHC peptides are found in various body secretions such as sweat and urine, they can access the nose during social or sexual behavior. Our experiments show that MHC peptides enter the mouse nasal cavity in behavioral situations, activate olfactory neurons through an evolutionary conserved signaling pathway and trigger social preference."

By using a combination of dye tracing, electrophysiological imaging, and behavioral approaches in wild-type and transgenic mice, Dr. Spehr and his colleagues were able to identify a gene that is critical for olfactory recognition of MHC peptides. This gene encodes a protein that is an essential part of an ion channel in olfactory neurons. Without this channel, MHC peptides are not detected and mice do not display peptide-mediated social preference.

"The next step towards a deeper understanding of social recognition mediated by MHC peptides will be to identify the receptors that detect these molecules and decipher the peptide signaling code," Dr. Spehr says. "This knowledge will ultimately provide new and exciting information, further integrating the nervous system with the immune system."

According to Dr. Spehr, these are novel findings extending previous work done in Dr. Zufall's lab that shows that

MHC class I peptide ligands function as social recognition signals via the mouse vomeronasal organ. Therefore, two different sensory mechanisms are involved in MHC peptide detection in mice—the main olfactory and vomeronasal pathway—and parallel peptide signaling induces different but equally important social behaviors.

Co-authors on the *Journal of Neuroscience* paper are Kevin Kelliher, PhD, assistant professor, Xiao-Hong Li, MD, research assistant, Terese Leinders-Zufall, PhD, associate professor, Frank Zufall, PhD, professor, all from the Department of Anatomy & Neurobiology, and Thomas Boehm, MD, professor and director of the Max-Planck Institute for Immunology in Germany.



Dean Wilson and Tyson Tildon

the major architect in establishing the Sudden Infant Death Syndrome (SIDS) Institute, a major multidisciplinary research program designed to provide new treatment and prevention of SIDS. Dr. Tildon was the school's first African American basic science faculty member. He conducted research in the biochemistry of certain types of mental retardation. Colleagues said he coined the term "metabolic trafficking," by which one cell type supplies nutrients to another.

In 1994 he became the medical school's first associate dean for research and graduate studies and its first African American associate dean. In this position he played a significant role in the school's advancement as a major research institution. He was remarkably effective in bridging the gap that exists between administration and faculty in large institutions.

As a faculty member, Dr. Tildon served as a member of the medical school's executive committee, the committee on admission policies and the faculty senate. He was chairman of the senate review committee. As professor of pediatrics and biochemistry & molecular biology Dr. Tildon was highly respected as a research investigator. He was also revered as a mentor. He went out of his way to assist younger faculty, students and post-doctoral fellows with planning and advancing their careers.

In addition to his memberships in numerous scientific societies, Dr. Tildon participated in many local boards and societies. He was chair of public policy for the American Society for Neurochemistry from 1983 to 1985 and chair of the National Institute of Child Health & Mental Retardation Review Committee from 1993 to 1994. He also chaired the Baltimore City Public Schools' Board of School Commissioners. He served on the boards of the Maryland Academy of Sciences, Associated Black Charities, the Civil Services Commission of Baltimore, the Enoch Pratt Library, the American Red Cross, and the public radio station WYPR.

Dean Wilson remarked of Dr. Tildon, "He was a man of great integrity and straight talk. You could be certain that whatever he told you was his honest evaluation of the situation, even if you did not like the assessment. Tyson always had time to help others with their problems. He was a truly genuine individual. He will be sorely missed by the administration, faculty, staff and student body of the University of Maryland School of Medicine. I, especially, will miss him."

A memorial service celebrating Dr. Tildon will be held on Saturday, April 22, at 11:00 a.m. in Morgan State University's Murphy Auditorium.

Program Studies Connection Between Mental Illness and Substance Abuse

The Maryland Psychiatric Research Center (MPRC), a facility that is funded and governed jointly by the University of Maryland School of Medicine's Department of Psychiatry and the Maryland Department of Health and Mental Hygiene (DHMH), received a \$13 million grant from the National Institutes of Health's National Institute on Drug Abuse to establish a research program in the treatment of people with serious mental illnesses who also have substance abuse problems. The program will be conducted by staff of the MPRC, which is located on the grounds of Spring Grove Hospital Center in Catonsville, Maryland.

"Individuals with mental illness and addiction issues comprise at least half of the patients in most mental health treatment facilities," says Robert Conley, MD, professor of psychiatry at the School of Medicine and chief of treatment research at the MPRC. "This combination increases the risk of frequent psychiatric relapses, poor medication compliance, violence, suicide, legal problems and high utilization of the emergency room or inpatient services. Traditional mental health and addiction treatments have not adequately addressed this combination of disorders."

The award will fund development of a clinical research support program to foster work in the fields of functional brain imaging, substance abuse treatment, drug development and pharmacology. The work will be done in conjunction with staff at Spring Grove Hospital Center and the DHMH.

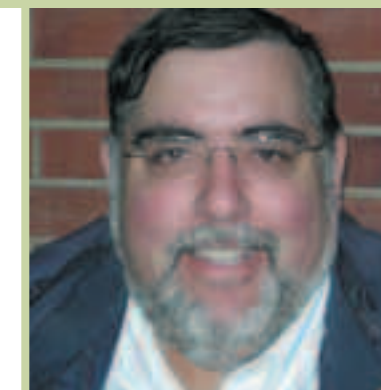
"We want to understand why people are more vulnerable to one condition if they have the other," says Dr. Conley. "Instead of focusing on which problem came first, the mental illness or the substance abuse, we plan to create ways to effectively treat both conditions at the

same time. Treatment integration is key to helping these patients deal with their problems."

Under the grant, volunteers will be able to participate in a variety of clinical trials to study dual diagnosis. "Better understanding of the connection between substance abuse and psychiatric disorders could have a profound effect on prevention and treatment," says Dr. Conley, principal investigator on the grant. The grant will also fund basic science research on molecular biology, neurotransmitter systems and neural circuitry involved in mental illness and substance abuse disorders.

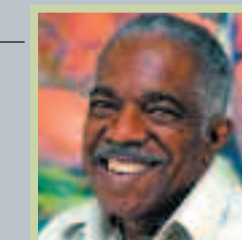
"The partnership between DHMH, the University of Maryland School of Medicine and the MPRC has brought Maryland national recognition over the years," said DHMH Secretary S. Anthony McCann. "This trend continues with this grant, which will help to restore health to those Maryland citizens who suffer from both mental illnesses and chemical substance abuse disorders."

The Maryland Psychiatric Research Center is dedicated to providing treatment to patients with schizophrenia and related disorders, educating professionals and consumers about schizophrenia, and conducting basic and translational research into the manifestations, causes and treatment of schizophrenia and other serious mental illnesses.



Robert Conley, MD

In Memoriam: J. Tyson Tildon, PhD Brilliant Mind, Pure Leader and Inspiration to Others



J. Tyson Tildon, PhD, a neuroscientist and a member of the University of Maryland School of Medicine community for nearly 30 years, died of cancer on February 28 at the age of 74.

A native Baltimorean, Dr. Tildon was a 1950 graduate of Frederick Douglass High School, where he was valedictorian of his class. He earned a chemistry degree from Morgan State University in 1954 and a doctorate in biochemistry from Johns Hopkins University in 1965. He was also a Fulbright scholar at the Institut de Biologie Physico-Chimique in Paris. Dr. Tildon then studied at Brandeis University, and in 1967, he joined the Goucher College faculty.

In 1968, the University of Maryland School of Medicine recruited him to its Department of Pediatrics, where he taught and conducted research until retiring in 2000. He was director of pediatric research from 1972 until 1983, during which time he received more than \$10 million in funding from the National Institutes of Health. While in the Department of Pediatrics he was



QUICK STUDIES

► **Alice D. Ackerman, MD, FAAP, FCCM**, associate professor, Department of Pediatrics, and departmental colleagues, **Mo Gafour, MD**, third year fellow in pediatric critical care, **Courtney Robertson, MD**, assistant professor, **John Straumanis, MD**, assistant professor, and **Vinay Vaidya, MBBS**, assistant professor, participated in the recent Annual Meeting of the Society of Critical Care Medicine held in San Francisco. Drs.

Ackerman, Vaidya and Straumanis gave invited presentations, while Dr. Robertson moderated a number of abstract sessions and conducted professor walk-rounds. Additionally, the group presented five abstracts on research conducted by the faculty and fellows in the Department of Pediatrics, two of which were "Research Citation Finalists." ► **Bruce Jarrell, MD**, senior vice dean for academic affairs and professor, Department of Surgery, has been selected to receive the 2006 University System of Maryland Board of Regents Faculty Award for Collaboration in Public Service. This award is the highest honor that the Board of Regents bestows to recognize exemplary faculty achievement. ► **Thomas M. Scalea, MD**, professor, Department of Surgery, and director, Program in Trauma, received the Speaker's Medallion Award from Speaker of the House Michael Busch during a presentation in February in Annapolis. The award is presented to a Maryland citizen who has made outstanding contributions to the state and has had an outstanding career of service. ► **William J. Weiner, MD**, professor and chair, Department of Neurology, and departmental colleagues **Karen E. Anderson, MD**, assistant professor, **Stephen G. Reich, MD**, professor, and **Lisa Shulman, MD**, associate professor,

participated in the first World Parkinson Congress in Washington, DC, in February. Dr. Shulman was on the organizing committee and all four were speakers. This meeting was unique because it brought together neuroscientists, neurologists, patients and caregivers. Additionally, the aforementioned are all co-authors of new national guidelines covering the diagnosis and prognosis, treatment and alternative therapies for Parkinson's disease in the April 11th issue of *Neurology*, the premier journal of the American Academy of Neurology. ► **Donald E. Wilson, MD, MACP**, vice president for medical affairs, University of Maryland, dean, School of Medicine, and professor, Department of Medicine, has received the Theodore E. Woodward Award from the Maryland Chapter of the American College of Physicians. Dr. Wilson was chosen as this year's recipient not only because of his outstanding commitment to medical education, but also as a teacher and scholar of the highest order. Additionally, Dr. Wilson was recognized on February 22 in Annapolis with a House Resolution by the Maryland House of Delegates and Speaker of the House Michael Busch for dedicating his career and life to the advancement of science, medical education, diversity and equity in health care. On that same day, Dr. Wilson also received a Resolution from President of the Senate of Maryland Thomas V. Mike Miller, Jr., in recognition of his ideal that all Americans have a birthright of equality that includes their access to health care, evident in his leadership as dean.

Dean Wilson on the Maryland Senate Floor with (L-R) State Senators Lisa Gladden, Paula Hollinger, Nathaniel McFadden, and Verna Jones. Maryland Senate President Mike Miller is pictured in the back.

SOM Students Win at PROMISE Research Symposium

PROMISE is the state of Maryland's Alliance for Graduate Education and the Professoriate. It is a multi-campus AGEP, which is an alliance of Maryland's three public research universities:

- University of Maryland, Baltimore County (UMBC)
- University of Maryland, College Park (UMCP)
- University of Maryland, Baltimore (UMB)

Led by UMBC, PROMISE is dedicated to increasing the number and diversity of PhD graduates, particularly in the sciences and engineering, who go on to academic careers.

Students can participate in PROMISE regardless of their status (full-time or part-time), ethnicity, discipline or source of funding. Students who are underrepresented are strongly supported as they utilize the services and resources of PROMISE; these students can be encouraged to consider PROMISE to be one of their major mechanisms of support.

Faculty, staff and students who support PROMISE at UMB and at the School of Medicine are committed to raising the numbers of underrepresented minorities who graduate from Maryland universities in science, technology, engineering and math fields. The PROMISE program recognizes that environments can contribute to students' academic and professional development, and is committed to developing positive, community-based learning environments that encourage achievement and recognize basic human needs.

Five UMB graduate students participated in the first annual PROMISE research symposium. All participants received certificates; all winners received plaques and monetary prizes ranging from \$100 to \$250. Winners from the School of Medicine included:

Biomedical/Health, Chemical and Life Sciences Orals Category


1st: Erica Martin Richards • 2nd: Kimberly Raines • 3rd: Kimberly Barnett

- Erica is an MD/PhD student working with Gary Fiskum, PhD, a professor in the Department of Anesthesiology and the Graduate Program in Life Sciences (GPILS).
- Kimberly is a PhD student working with Gerald Rosen, PhD, JD, the Department of Pharmaceutical Science's Isaac E. Emerson Professor at the School of Pharmacy.
- Kimberly is a PhD student working with Jodi Flaws, PhD, an associate professor in the Department of Epidemiology & Preventive Medicine and GPILS.

Biomedical/Health, Chemical and Life Sciences Posters Category

1st: Sean Vasisitis • 3rd: Jocelyn Reader

- Sean is a PhD student working with Angela Brodie, PhD, a professor in the Department of Pharmacology & Experimental Therapeutics and GPILS.
- Jocelyn is a PhD student working with Yi Ning, MD, PhD, an assistant professor in the Department of Pathology and GPILS.

The luncheon keynote speaker was Dr. Angela H. Brodie, who was introduced by Jordan E. Warnick, PhD, assistant dean, Office of Student Education and Research, and professor, Department of Pharmacology & Experimental Therapeutics, and UMB's co-PI for the PROMISE program. 

For more information and upcoming events, visit the PROMISE Website at <http://www.umbc.edu/promise/>.


{MINI-MED SCHOOL}

The School of Medicine's popular Mini-Med School program is once again spreading beyond campus with its first ever high school version being held at Harbor City High School for six weeks this spring.

In collaboration with students from the School of Pharmacy and the Dental School, first and second year School of Medicine students will lead a series of classes on general health topics for students at the high school. Classes will cover asthma, hypertension, genetics, alcohol, forensics, diabetes, dental health, drug abuse, trauma and ethics. The program will culminate with a graduation ceremony and a campus tour.

With guidance from Jordan E. Warnick, PhD, assistant dean for student education and research and professor of pharmacology & experimental therapeutics, students from the Academic Medicine Research Interest Group, the Community Health Advocacy Team, and the Student National Medical Association chapter at the School of Medicine created a program tailored to the specific interests of the students at Harbor City High School. "These high school students expressed an interest in finding out more about what careers exist in the health care industry," says Dr. Warnick. "They approached us with a list of topics they were interested in and we were able to create 10 really interesting and dynamic programs for them."

Starting on March 29, two students from the campus will present each week to a group of high school students during an afternoon session at the school.

"High School Mini-Med is an excellent opportunity to reach beyond the walls of the School of Medicine and share our excitement about academic medicine and its diverse career opportunities," says Dr. Warnick. "It's also an excellent opportunity to discuss health topics like alcohol and drug abuse that are a very real part of everyday life for many high school students in our community. I hope that the students learn some valuable health information and see how easily they, too, can have a career in a health profession." 

Mark Your Calendars!

The dedication ceremony for the newly renovated

Taylor Lecture Hall

(formerly the Freshman Lecture Hall)

will be on Thursday, May 4, 2006,
at 10:00 a.m.

in the lobby of the Bressler Building.

All are welcome.

Questions? Call the Office of Development at 6.8503.



You are invited to a luncheon
for the UMB community to honor
Dean Wilson

on the occasion of his retirement
on May 8

at noon in Westminster Hall.

Invitations to follow.

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Call for Entries!



The Office of Public Affairs is asking for personal stories, anecdotes and messages about and for Dean Wilson for potential inclusion in an upcoming issue of SOMnews. Please send submissions to Jennifer Litchman, assistant dean for public affairs, at jilitchman@som.umaryland.edu by April 28.

Thank you