

## Reception celebrates opening of “Gregor Mendel: Planting the Seeds of Genetics”

An opening reception for the museum’s newest exhibition, “Gregor Mendel: Planting the Seeds of Genetics,” drew a crowd of more than 100 guests who explored the life and work of the 19<sup>th</sup>-century friar and former high school teacher whose experiments were ignored by the scientific community for decades.

The approximately 100-artifact exhibition traces the rise of genetics through its major milestones—from the discovery of chromosomes to the famous DNA model of James Watson and Francis Crick. While very few of Mendel’s papers or personal possessions were kept, his botanical specimens, scientific instruments, photographs, correspondence, original manuscripts, journal, books and gardening tools are on display.

The Deputy Chief of Mission of the Embassy of the Czech Republic Jaroslav Kurfurst spoke at the reception along with Adrienne Noe, Ph.D., the museum’s director. Kurfurst recognized the Czech-born father of modern genetics and described the exhibition as “truly a learning experience.”

“This is a once in a lifetime presentation about genetics and how we have come to learn about this science we use with such increasing achievement and expectation,” said Noe.

“Our national medical museum mission is never better fulfilled than when we weave together medicine, science, history and art into exciting exhibits and programs that allow our visitors to



*Adrienne Noe, Ph.D., the museum’s director, left, and Deputy Chief of Mission of the Embassy of the Czech Republic Jaroslav Kurfurst, right, address the museum’s guests as keynote speakers for the opening of “Gregor Mendel: Planting the Seeds of Genetics” on display in Washington, D.C.*

*Col. Charles Pemble, left, and Col. Randy Treiber (RET), right, were among the more than 100 guests in attendance.*

gain an appreciation for these National Historic Landmark holdings, and merge pioneering research with history that surrounds Mendel and his intellectual descendents.”

The exhibition incorporates five videos and ten hands-on interactive displays to make the fundamentals of genetics accessible to everyone.

Visitors can recreate the steps of Mendel’s experiment; identify their own dominant and recessive traits; look through a microscope to compare what scientists were able to see at different points in history; and analyze DNA sequences like modern-day scientists.

A highly unusual and innovative feature of this exhibition is the integration of contemporary works of art that explore the subjects of genetics. One featured artwork includes Christine Borland’s “A Treasury of Human Inheritance, Entres Case,” a mobile made of

Mendel, to page 4

# Students use their brain at eighth annual “Brain Awareness Week”

The National Museum of Health and Medicine hosted its eighth annual Brain Awareness Week March 12-16, 2007. More than 800 middle- and high-school students from Maryland, Virginia and Washington, D.C. were invited to learn about the brain and participate in hands-on activities with neuroscientists. Washington, D.C. Mayor Adrian Fenty and his office also issued a proclamation recognizing March 12-18 as Brain Awareness Week in the district.

Six stations were designed and operated by collaborating institutions called Partners-in-Education. This year’s Partners-in-Education included the Dana Alliance for Brain Initiatives, Georgetown University, George Washington University, Howard University, Rutgers University, the National Institutes of Health, Walter Reed Army Medical Center, and the National Museum of Health and Medicine.

Each organization was represented by a neuroscientist or researcher who conducted a station, highlighting an aspect of the brain allowing new insights. The program is designed to link scientists, students, clinicians, journalists and educators

together with the goal of bringing information to the public about the brain and brain science.

“This is a wonderful program that gives the students an opportunity to meet scientists with a unique perspective, and distinct and beneficial information about the brain,” said Adrienne Noe, Ph.D., the museum’s director.

The program lasted for an entire week with participants rotating through six stations that changed each day, and demonstrated different functions, influences on and disorders of the brain.

Monday was hosted by Georgetown University and George Washington University, and focused on brain injury, cranial nerves, parts of the brain and its functions. Eddie Billingslea, M.S., from Georgetown’s department of psychology, hosted the station “Altered Reality”

where students learned about the effects of alcohol on the brain and visual perception. After wearing goggles that simulate alcohol intoxication and participating in various activities that exercised motor skills, senior Mike Ellison of Langley High School in McLean, Va. asked, “Do you have some Advil?”

Tuesday’s activities were hosted by Howard University and highlighted memory, the senses and brain disease. Malcolm Marfam, a research assistant, hosted the station “The Important Stuff in Your Brain” where he engaged students to think about how memory is a function of the brain. Marfam began by asking a series of questions including, “What do you need a brain for?” Taylor Williamson of Maret School in Washington, D.C.

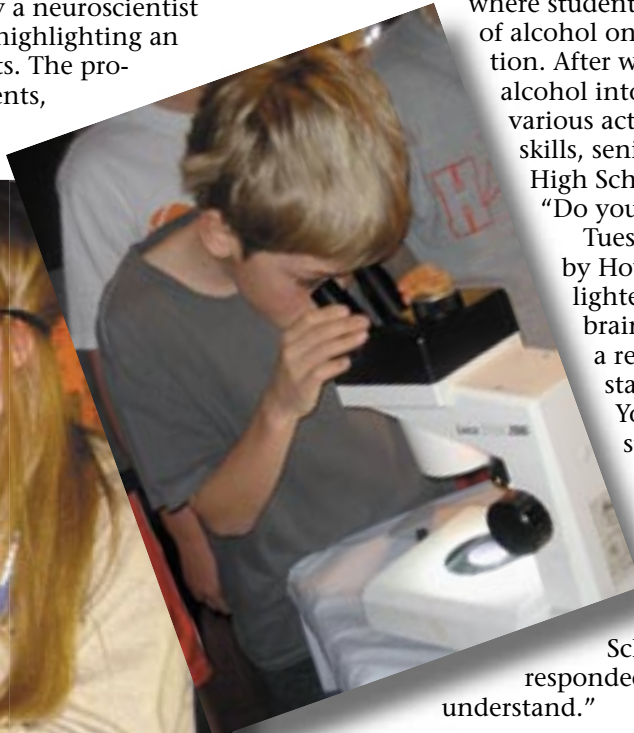
responded, “To move, think, learn and understand.”



Above: Senior Lindsay Colliton of Langley High School in McLean, Va. finds it hard to toss a ball with her partner while wearing goggles that simulate alcohol intoxication.

Upper right: Luke Kopezsky, a fifth-grader at Maret School in Washington, D.C., looks through the microscope at a slide of a brain during Howard University’s presentation “The Important Stuff in Your Brain.” MIS07-028

Right: “Brain Collector” Archie Fobbs, the museum’s neuroanatomical collections manager, assists a student who has the opportunity to hold a real human brain during Brain Awareness Week at the museum. Copyright © 2007, Society for Neuroscience. All rights reserved. Photo taken by Joe Shymanski.



MIS07-027

Wednesday and Thursday were hosted by the National Institutes of Health (NIH). NIH was represented by the National Institute on Neurological Disorders and Stroke (NINDS), the National Institute of Drug Abuse (NIDA), the National Institute of Mental Health (NIMH), and the National Institute of Alcohol Abuse and Alcoholism (NIAAA). These stations were designed to highlight different brain diseases that NIH studies including addiction, mental health and stroke. "The Drunken Brain Exhibit" demonstrated how alcohol slows down mental functions by using an oversized model of a brain, complete with flashing lights to show the neurons. Students also watched a video of a lab experiment testing the results on lab rats.

Friday's activities were presented by the Walter Reed Army Medical Center's Defense and Veterans Brain Injury Center (DVBIC), the Army Audiology and Speech Clinic, and Rutgers University. Students first learned how sound and hearing works at "Your Hearing – A Pathway to the Brain" through demonstrations of how the ear localizes sound. Students also were taught the importance of pro-

tecting their hearing and what levels of sound are safe to be around. DVBIC in conjunction with the Lynn A. Chiaverotti Memorial Fund, a group dedicated to the prevention of traumatic brain injury, also provided students on Friday with free brain safety helmets decorated with brain-like designs.

Each day of the program the museum hosted a station called "The Brain Collector" where the museum's neuro-anatomical collections manager, Archie Fobbs, handed out latex gloves to participants so they could hold a real human brain. As they held it, Fobbs pointed out the different parts of the brain, asking students what each was responsible for. He also showed students slides of real brain slices documenting brain disease and damage.

Brain Awareness Week is an annual program sponsored by The Dana Foundation for Brain Initiatives. The museum is an element of the Armed Forces Institute of Pathology (AFIP), a tri-service Army, Navy and Air Force agency of the Department of Defense with a threefold mission of consultation, education and research.



*Left: Dennis Twombly, Ph.D., from National Institute of Alcohol Abuse and Alcoholism (NIAAA), lights up an oversized model of a brain to demonstrate how alcohol slows down mental functions in "The Drunken Brain Exhibit."*

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*Below: Students from Nysmith School in Herndon, Va. were among those who received free brain safety helmets from Walter Reed Army Medical Center's Defense and Veterans Brain Injury Center (DVBIC) and the Lynn A. Chiaverotti Memorial Fund on Friday.*



*Society for Neuroscience (SfN) President David Van Essen engages students in an educational session about the cerebral cortex prior to the museum's Brain Awareness Week activities.*

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*Jason Choi, a National DNA Day High School Essay Contest finalist and student at Montgomery Blair High School in Silver Spring, Md., center, pauses in the exhibition in front of the mural of the Abbey library with his mother Insun Choi, left, and teacher Patricia Miller, right.*

Mendel, from page 1

polished agate stones representing five generations of the Entres family, which had various symptoms of Huntington Disease. Each agate section is unique in its configuration of crystals and rings, and the overall pattern represents various symptoms of the condition.

Before the exhibition opened to the public on April 28, members of the Armed Forces Institute of Pathology community were invited to a ceremonial "Planting of the Peas" and ribbon cutting to commemorate the opening of the exhibition. Participants were welcomed to explore the



*Adrienne Noe, Ph.D., the museum's director, plants pea seedlings commemorating the opening of the exhibit "Gregor Mendel: Planting the Seeds of Genetics" during the ceremonial "Planting of the Peas" and ribbon cutting.*

exhibition after the pea planting.

This exhibition and its national tour were developed by The Field Museum, Chicago, in partnership with the Vereinigung zur Förderung der Genomforschung, Vienna, Austria, and The Mendel Museum, Brno, Czech Republic.

The exhibition debuted at The Field Museum, Chicago, before embarking on its national tour. After closing at the National Museum of Health and Medicine, it will continue to Columbus, Ohio, Memphis, Tenn., and Philadelphia. The exhibition will be on display in Washington, D.C. through Sept. 16, 2007.

## Society for Neuroscience awards Museum

The Society for Neuroscience (SfN) awarded the National Museum of Health and Medicine Washington, D.C. Mayor Adrian Fenty's proclamation of Brain Awareness Week during the museum's brain awareness activities held March 12-16, 2007. SfN President David Van Essen and Marty Saggese, executive director, awarded the proclamation to Archie Fobbs, the museum's neuroanatomical collections manager, and Adrienne Noe, Ph.D., the museum's director.

In addition to presenting the museum with the proclamation, SfN joined a collaborative effort at the National Museum of Health and Medicine to assist with the week's worth of activities. A working team of professionals were on hand to help with students, and SfN provided educators with curriculum materials. Van Essen also led a March 15 session on the cerebral cortex for an audience of students and their teachers.

Fobbs organized the first "Brain Awareness Week" at the museum in 2000 when he joined forces with Benjamin Walker, Ph.D., assistant professor of psychology at Georgetown University, and Karen Graham, senior project manager at The Dana Foundation for Brain Initiatives. With the support of Noe, and through their creative collaboration to gather researchers, professors and organizations with the goal of introducing young scholars to neurology, a brainchild was born. Johanna

Medlin, the museum's HDAC collections manager, and Regina Hunt, the museum's acting tour program coordinator, co-coordinated this year's "Brain Awareness Week." The museum has educated more than 4,500 area students during "Brain Awareness Week" since 2000.



*Adrienne Noe, Ph.D., the museum's director, left, and Archie Fobbs, the museum's neuroanatomical collections manager, right.*

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Photo taken by Joe Shymanski.*

## Staff On The Go:

**Brian Spatola**, the museum's anatomical collections manager, attended the Armed Forces Institute of Pathology's 43<sup>rd</sup> Annual Forensic Dental Identification and Emerging Technologies lecture and mini workshop in Bethesda, Md. The focus of the course is to expose the experienced forensic scientist, and to introduce the novice, to state of the art techniques for forensic endeavors with an emphasis on mass disaster and dental identification. Spatola taught eight workshops on Forensic Anthropology with Marilyn London of the Smithsonian Institution National Museum of Natural History in Washington, D.C., and Maj. Laura Regan of AFIP.

**Mike Rhode**, the museum's chief archivist of the Otis Historical Archives, has written a chapter with JTH Connor entitled, "'A Repository for Bottled Monsters and Medical Curiosities': The Evolution of the Army Medical Museum," in the book "Defining Memory: Local Museums and the Construction of History in America's Changing Communities" published by AltaMira.

**Adrienne Noe, Ph.D.**, the museum's director, was presented with a certificate of appreciation from the College of Southern Maryland. Timothy Keating, dean of CSM's arts and sciences, and Lelia Allen, a psychology professor at CSM, who has been sending her students to tour the museum as part of their course curriculum, recognized the museum for its partnership with the college. More than 5,000 students at CSM have been impacted since Allen began sending her students to the museum in 1989.



MIS07-035

## New Staff

**Franklin Damann** is the museum's anatomical curator. He previously served as a forensic anthropologist for the Department of Defense Joint POW/MIA Accounting Command Central Identification Laboratory located at Hickam Air Force Base, Hawaii. While working for the Central Identification Laboratory, Damann led recovery missions throughout southeast Asia and northeastern China in search of missing service members from previous conflicts. In the laboratory, he analyzed and recommended identifications of recovered skeletal remains.

He holds a master's degree in physical and forensic anthropology and a bachelor's degree in anthropology, both from Louisiana State University, Baton Rouge. Damann is currently a Ph.D. candidate in physical and forensic anthropology at the University of Tennessee, Knoxville, with a dissertation on the biomarkers of human decomposition.

He resides in Washington, D.C. with his wife.



MIS07-036

## National Museum of Health and Medicine

The museum is an element of the Armed Forces Institute of Pathology on the campus of Walter Reed Army Medical Center in Washington, DC

**6900 Georgia Avenue, NW, Bldg 54  
Washington, D.C. 20307**

[www.nmhm.washingtondc.museum](http://www.nmhm.washingtondc.museum)

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[nmhminfo@afip.osd.mil](mailto:nmhminfo@afip.osd.mil)

202-782-2200, Fax: 202-782-3573

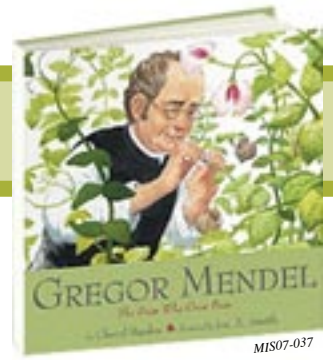
Open daily from 10 a.m. to 5:30 p.m. Closed Dec. 25.

Museum Director—Adrienne Noe, PhD

Public Affairs Specialist—Jennifer Heilman

Graphics—Fran Card

# Upcoming museum event



## Story Time: “Gregor Mendel: The Friar Who Grew Peas”

Every Tuesday, June through August, 10:30 a.m. to 11:30 a.m.

Audience: Ages 7-10 (2<sup>nd</sup> – 5<sup>th</sup> grade)

Hear excerpts from Cheryl Bardoe’s children’s book, “Gregor Mendel: The Friar Who Grew Peas,” learn the basics of heredity, and engage in hands-on activities based on Mendel’s experiments. Following these activities, children and parents/guardians may explore the exhibition, “Gregor Mendel: Planting the Seeds of Genetics,” on their own.

DEPARTMENT OF THE ARMY  
ARMED FORCES INSTITUTE OF PATHOLOGY  
WASHINGTON, D.C. 20306-6000