

## MGH Stands Up for Science

“Science is magic that works.” – Kurt Vonnegut



**AT NOON ON APRIL 22**, hundreds of MGH staff will gather to “Stand Up for Science” on the Bulfinch Lawn before marching to the Boston Common as part of the March for Science, an event taking place in more than 400 cities around the world.

The Boston March for Science will celebrate the discovery, understanding and sharing of scientific knowledge and will champion publicly funded and communicated scientific knowledge. The goal is to unite a diverse and nonpartisan group to celebrate Boston as an exceptional place for scientists and scientific research.

“We hope this day serves as a chance to reaffirm the message about the essential role that science – biomedical research, in particular – plays in improving life and health,” says Regina LaRocque, MD, of the Infectious Disease Unit. “Several MGH groups – including the MGH Healthcare Advocacy Committee, the MGH Research Institute and Physicians for Policy Action – are working together to ensure a significant presence at the Boston event.”

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## Home Base receives royal support at 2017 Boston Marathon

**AN AMERICAN AND A BRITISH** wounded veteran – retired U.S. Army Maj. Ivan Castro and Karl Hinett – are running both the 2017 Boston Marathon and the Virgin Money London Marathon to support Home Base, a Red Sox Foundation and MGH Program, and The Royal Foundation of The Duke and Duchess of Cambridge and Prince Harry’s Heads Together Campaign.

Castro sustained life-threatening injuries and was blinded in both eyes during combat in Iraq in 2006. Hinett was just 19 when he was involved in an attack on his 26-ton Warrior Tank while serving in Iraq in 2005, resulting in burns to his hands, legs, arms and face. Between them, Castro and Hinett have spent more than 100 hours on the operating table, more than 12 months confined to hospital beds and have endured more than 100 surgeries.

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**DEDICATED DUO:**  
Hinett and Castro

04.14.17



**SLAM DUNK SUPERSTARS:** The 2017 MGH league champions

## Pathology and a path to great clinical care

**IN LATE 2014**, after a routine annual physical, Cape Cod resident Barbara Porter was diagnosed with pancytopenia, a reduction of red and white blood cells and platelets. Following additional testing and a bone marrow aspiration, Porter learned she had acute myeloid leukemia and was transferred to the MGH.

A veteran of the Massachusetts State Police, Porter immediately stopped working as a client manager in senior care to focus on “a new journey in my life.” Characterization of her leukemia led to an experimental treatment option that has been successful; the leukemia is in remission in part due to the extensive laboratory testing results provided by MGH Pathology.

Along with Hanno Hock, MD, PhD, of Internal Medicine, many divisions of MGH Pathology – including experts in hematopathologist diagnosis, hematology, blood bank, chemistry, microbiology and molecular diagnostics – aided Porter in managing her care from initial diagnosis to the characterization of her leukemia to determine treatment options, to follow-up monitoring to maintain Porter’s health with blood transfusions and care management.

Today Porter is feeling good and is excited to spend more time with her three grandchildren and helping to organize a reunion for her Westborough High School class in August. Porter says she is grateful for the hard work and dedication of her care team whose decisions are powered by Pathology’s laboratory technologists. “When it came to my treatment, I had complete confidence in my care team at the MGH,” she says. “I don’t expect a guarantee but maybe I can help someone else that may be in my situation in the future.”

On April 24 – 28, the MGH joins the nationwide celebration of Laboratory Professionals Week, recognizing the laboratory community and all of their hard work. “It is due to the dedication and continued efforts of the Pathology laboratory workers that we have so many success stories, like Barbara’s,” says David Louis, MD, chief of Pathology Service. Join the MGH in celebrating National Lab Week, and stop by the White Lobby table for festivities throughout the week. ■

## Nothing but net

**THE MGH BASKETBALL LEAGUE** closed out its 40th season this month, marking the occasion with a free throw competition and a final championship game. The league has played at many locations throughout its four decades – most recently to the YMCA in Charlestown – and hundreds of MGH staff, past and present, have enjoyed the competition and camaraderie the group offers.

“We started the league as a way for more staff to get to know each other,” says Larry Washington, of MGH Police, Security and Outside Services. “It’s been great. We have people playing who were part of the original group, and we have newcomers all the time. It’s nice for some of the residents – they come and laugh and make friends for the three or four years that they are here at the MGH.”

The co-ed league is open to all MGH and Partners employees. Typically eight to 10 teams are formed to play 10 games, plus playoff rounds. The group meets every Wednesday night during the winter. ■



**FREE THROW FUN:** Peter L. Slavin, MD, MGH president, center, joined this year’s free throw competition along with Washington, Zirui Song, MD, PhD (competition winner), Zack Barq, Olaniyi Ogunbodede, Patrick Geraghty, and Jeff Davis, senior vice president of Human Resources.

## — Home Base

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They both discovered that a huge part of their recovery – both physical and mental – was through running. Combined, they have run more than 200 marathons and ultra-marathons around the globe, including the North Pole, Antarctica and the Amazon.

This month, Castro and Hinett will dedicate their miles to raise money and raise awareness for the mental well-being of veterans in both the U.S. and the U.K. With these two marathons, the two veterans are keen to build on the great work already taking place across the country and around the globe, to ensure people feel comfortable with their everyday mental well-being, feel able to support their friends and families through difficult times and that stigma no longer prevents people from getting help they need.

Funds raised in the U.S. by the American Friends of The Royal Foundation will directly support Home Base and its programs dedicated to healing the invisible wounds for post-9/11 veterans, service members and their families. Funds raised in the U.K. will support the Heads Together mental health projects currently in development and the work of its U.K. Charity Partners leading the way in mental health care and awareness.

*Congratulations to the MGH Marathon Teams, who will be running the marathon April 17. Funds were raised this year for Pediatric Oncology and Emergency Response Teams as well as the Miles for Mass General Program – including Botswana Oncology Global Outreach, Caring for a Cure, cystic fibrosis, Down syndrome and the Lurie Center for Autism.*

## What does it mean to be 'sleepy'?

**WITH NATIONAL SLEEP AWARENESS WEEK** quickly approaching April 23-29, Kenneth Sassower, MD, neurologist in the Sleep Disorders Unit, answers the most commonly asked questions about sleep, and shares his most important piece of advice.

### ARE SLEEP ISSUES THE SAME IN CHILDREN AS IN ADULTS?

There are some very distinctive differences between children's sleep and adult sleep. Adults become sleepy because they're sleep deprived, but that's not the case with children. Some problems with pediatric sleep are attention and behavioral disturbances and parasomnias (sleep walking and night terrors).

### WHAT DOES IT MEAN TO BE 'SLEEPY'?

Sleepiness can be drowsiness that affects daytime functioning. It also can manifest in daytime naps and feeling the need to nap. It could mean going to Starbucks a lot to keep yourself awake or a combination of all those things.

### IS BEING 'FATIGUED' THE SAME AS BEING 'SLEEPY'?

Fatigue refers to being more tired and exhausted, not necessarily sleepy. It might mean a lack of energy, a lack of inspiration or when someone doesn't feel like doing anything. Signs of fatigue include loss of exercise capability and endurance and may co-exist with sleepiness. Causes of fatigue could be a circadian rhythm sleep disorder, neuromuscular and mitochondrial disorders, anemia, cardiac or chronic lung disease, rheumatologic or endocrinologic disease or a psychiatric condition.

### WHAT ARE THE MOST COMMON SLEEP SYMPTOMS?

Out of all the symptoms of patients who come into our office the most common are insomnia, excessive daytime sleepiness and disturbed behavior during sleep. Patients can go years without knowing they have a disturbed sleep behavior because they do not have partners to inform them.

### IS THERE AN ACTUAL WAY TO MEASURE SLEEPINESS?

Yes. There are several diagnostic tools, but the most commonly used method is the Epworth scale used often in the MGH Sleep Lab. This method uses about six questions that suggest how likely a patient is to fall asleep in certain scenarios: If the patient is speaking to someone or driving a car, among other things. Other tools used to diagnose sleepiness are sleep diaries, performance tests and neurophysiologic tests.

### WHAT DOES ATTENTION DEFICIT DISORDER (ADD) HAVE TO DO WITH SLEEP?

There is an area of the brain called the prefrontal cortex. If there is an injury to that part of the brain, someone will become inattentive. It could be due to a structural reason, or a physiological reason. There is a very fine line between being relatively sleep-deprived and being inattentive, according to studies. If someone is in a lecture hall and becomes sleepy, there's no way they'll be able to pay attention. Paying attention is not a function that one can easily perform if they are sleepy. Often in our office we see patients who are inattentive as a result of being too sleepy. In addition, if you're sleep deprived and you have underlying ADD, it may make it worse.

### WHAT DOES AUTISM HAVE TO DO WITH SLEEP?

Autism and sleep disorders seem to co-exist. There have been several studies about the prevalence of sleep issues in those with autism and

the numbers are staggering. Up to 83 percent of kids with autism have some sort of sleep dysfunction, as opposed to 10 to 30 percent of kids who are otherwise typically developing. Autism is becoming so much associated with sleep issues that people are proposing that perhaps autism should be defined in the terms of some sleep issues. If you take 100 children who have some form of generalized developmental disability and you take 100 children with autism and you put them to sleep, the 100 children with a developmental disability will sleep. The children with autism will be up and down all night, and it can become a family issue. If there is a child on the spectrum who isn't sleeping, that means the family isn't either.



SASSOWER

### WHAT ARE THE MOST COMMON CAUSES OF DAYTIME SLEEPINESS?

The most common cause of daytime sleepiness, without question, is inadequate sleep hygiene. Sometimes people drink too much coffee, or they have a glass of wine and while they initially fall asleep, they wake up in the middle of the night and can't get back to sleep. We have to bear in mind that some people might be sensitive to certain things, like caffeine, and even if you have a cup of coffee in the morning, it might affect how one sleeps.

### WHAT ARE THE MOST COMMON INTRINSIC (PART OF THE ANATOMY) SLEEP DISORDERS?

Some of these disorders are sleep apnea, periodic limb movements of sleep and restless leg syndrome (RLS). RLS is when you feel like you have to move your legs. Other disorders include a non-REM parasomnia – such as sleepwalking – or a REM parasomnia such as REM behavior disorder. There are also conditions that cause excessive daytime sleepiness – such as narcolepsy or idiopathic hypersomnia. In narcolepsy, people suffer from very vivid dreaming, acute sleep attacks, sleep paralysis and an acute loss of motor tone in association with emotions. With idiopathic hypersomnia, you may feel as if you can't get enough sleep. With this disorder someone could be sleeping 12 to 18 hours per day, yet still feel exhausted; it can be very debilitating.

### WHAT ARE THE MOST COMMON EXTRINSIC (NOT HAVING TO DO WITH OUR INTERNAL MECHANISM) SLEEP ISSUES OR SLEEP DISORDERS?

Inadequate sleep is the most prevalent sleep issue. Common complaints about inadequate sleep hygiene are trouble falling asleep, difficulty staying asleep, not getting enough sleep, unrefreshing sleep or needing sleeping pills to fall asleep. Some medications can cause insomnia, for example, asthma medicines (bronchodilators), have an activating effect. Some conservative treatment guidelines would be having a consistent sleep time; avoid daytime naps; eliminate late afternoon caffeine use; reduce or eliminate tobacco use; avoid evening exercise if you can; keep the bedroom dark, quiet and cool; avoid computers, laptops, iPads and phones; and use the bedroom only for sleep. The best piece of generic advice I could give, and this is the most important: Try to go to bed at the same time and get up at the same time, every day. ■



## Cutting-edge cardiovascular care featured at forum

**THE WORLD MEDICAL** Innovation Forum will be held in Boston May 1-3. Hosted by Partners HealthCare, the third annual forum brings together nearly 1,000 international cardiovascular innovation decision-makers from industry, investment, clinical and research communities. Throughout the three days, the forum will review in detail the emerging cardiovascular therapies, 'omics, digital diagnostics, education and engagement with new delivery platforms that will become models of care for cardiovascular and related metabolic diseases. In addition to examining cutting-edge issues in the field through panel discussions and interviews, the forum offers presentations by early-stage investigators and luncheons with clinicians from Brigham and Women's Hospital, the MGH, NWH and Harvard Medical School. The forum features more than 120 speakers, including 19 CEOs, as well as key leaders from life science, government and venture capital sectors.



## Travel ban impact for laptops/cell phones

**THE CURRENT** Federal Administration's Executive Orders on Immigration and Travel have raised concern for some MGH researchers, providers and community members who plan to travel.

The Partners Information Security Department recommends that in regard to laptops, tablets and cell phones, comply with requests by an authorized representative of a sovereign nation. Within reason, no cyber-security, privacy or compliance obligation should affect one's personal health and safety. Staff should take due care when traveling internationally to protect their personal belongings and the data they travel with, the risk of theft or loss is greater than the actions of a Customs and Border Protection official.

### QUICK TIPS:

- If possible, bring a substitute laptop and/or phone instead of your regular device. This decreases the risk of losing confidential information.
- Store data remotely at Partners, not locally on the device (e.g. DropBox for Business, Partners Shared File Area)
- Be aware of password requirements and encryption restrictions in certain countries. You cannot have encryption enabled when traveling to: Cuba, Iran, North Korea, Sudan and Syria.

### FOR MORE INFORMATION, CONTACT:

Ryan Wildes: [rwildes@partners.org](mailto:rwildes@partners.org) for TravelSafe and general travel matters and Toby Tsuchida: [ttsuchida@partners.org](mailto:ttsuchida@partners.org) for Information Security matters

## — March for Science

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The day at a glance:

- Peter L. Slavin, MD, MGH president, will speak at 12:10 p.m. on the Bulfinch Lawn.
- Staff are invited to wear white lab coats or MGH apparel.
- Participants who are using social media to capture the event can use the event hashtags: #MarchForScience, #MarchForScienceBoston and #MGH. Staff also are invited to share a short video to Twitter sharing their reason for marching. The @MassGeneralNews Twitter account will retweet some of these posts.
- Downloadable templates for signs and social media icons will be available by visiting the new MGH intranet Apollo, at [apollo.massgeneral.org](http://apollo.massgeneral.org).
- Attendees are encouraged to use public transportation. For those who drive, the Nashua Street Orange lot (99 Nashua Street) will be open from 11 am to 6 pm.
- Volunteers are needed to serve as parade marshals along the route. For more information, contact LaRocque at [rclarocque@partners.org](mailto:rclarocque@partners.org).
- Questions can be directed to: [researchinstitute@mg.harvard.edu](mailto:researchinstitute@mg.harvard.edu)

"We hope more staff, and their families, are able to join in this free rally to send a strong message about the importance of sustaining the scientific leadership that has defined the MGH, Boston and our nation," says Harry Orf, PhD, senior vice president for Research.

To register, the information page is available on the [apollo.massgeneral.org](http://apollo.massgeneral.org) homepage. ■



**HIPPITY-HOPPITY HUNT:** MassGeneral Hospital for Children patients and their siblings, including patient Liam Stark, age 3, were treated to an egg-cellent adventure at the 13th annual Spring Egg Hunt April 13. More than 30 children scoured the Howard Ulfelder, MD, Healing Garden in Yawkey for colorful plastic eggs filled with candy, temporary tattoos, costume jewelry and more trinkets, stashing their goodies in pillow cases donated by Ryan's Case for Smiles. The Spring Bunny then helped the families decorate cupcakes and cookies in the Pediatric Hematology-Oncology Outpatient Clinic while posing for photos. He hopped over to the pediatric inpatient units on Ellison 17 and 18, as well as the Pediatric Intensive Care Unit.

