

MGH HOTLINE

A PUBLICATION FOR EMPLOYEES AND STAFF OF THE MASSACHUSETTS GENERAL HOSPITAL



From left, Clarke, Fernandes, Moura, Elkacemi and Norman

‘I am MGH’

Diversity is the richness of human differences. Inclusion is when everyone feels connected, valued and engaged. At the MGH, we believe that because of diversity we excel; through inclusion we respect; focused on equity we serve, heal, educate and innovate.

ON THE TRAIN. In a car. On foot. Aboard a bus. Riding a bike. MGH staff all come to the hospital via varied routes, methods and neighborhoods. Yet, they come together at the MGH with one common goal – providing and supporting the very best in patient care. These individuals bring with them different perspectives and backgrounds. As part of the MGH’s ongoing focus on diversity and inclusion hospitalwide, staff share their personal stories about what makes them unique, how their differences help their colleagues, patients and visitors to the hospital, and what their goals are for the future. This is the first installment in the “I Am MGH” series.

Lidia Moura, MD, MPH, of the Department of Neurology, was born in Alagoas, one of the most violent and poor states of Brazil. Moura lived in seven different cities – from Porto Calvo, a city in which more than half of the adult population remains illiterate, to Brasilia, the capital city. She witnessed barriers to access to health services in different settings and was determined to follow her dreams to better the lives of those around her. With a medical degree and a master’s degree in public health, she now is pursuing her doctorate at Harvard T.H. Chan School of Public Health. She has received six research
(Continued on page 4)

Demystifying disability

“**THIS MORNING WE CELEBRATE** the everyday heroes who remind us that a disability is just a part of an individual’s story,” said Steve Taranto, director of Human Resources, at the fifth annual Breakfast of Champions, hosted by the Employee Disability Resource Group (EDRG) Nov. 16. This year, a record number of 19 nominees were recognized and celebrated for the 2017 Disability Champion Award. “The nominees today exhibit extraordinary commitment to disability issues and really do work that goes beyond their everyday jobs.”

Of the nominees, the winner of this year’s award was Lori Palley, DVM, assistant director of Veterinary Services. “Lori has been instrumental in coordinating the program that supports emergency walks and care for the service animals of patients with disabilities who cannot care for them while at MGH,” said Rebecca Coburn Bassi, senior Satellite Operations manager, in her nomination of Palley. “Lori amazingly is available 24/7, 365 days a year, and she selflessly goes above and beyond to ensure patients with these unique needs never have to worry about their animal lifeline.”

Palley – who helped found the program – continues to actively solicit more volunteers. When she recently shared the need for more volunteers, more than 100 employees responded to her call. Palley reached out to every one of these people to determine if they were good candidates and now is in the process of organizing interviews.

The breakfast also featured a reflection from Oz Mondejar, vice president of Talent Management for Partners HealthCare and senior vice president of Mission and Advocacy at Spaulding Rehabilitation Network & Partners HealthCare at Home. “Thanks to the Disability Resource Group’s work, we are changing minds and changing hearts,” he said. “We are breaking down barriers and assumptions, we are learning so much more about each other by focusing on individuals’ strengths and their abilities, and we are making new friends.”



BEYOND THE CALL OF DUTY: Taranto and Palley at the breakfast.

Profiles in Education: *Lindsay Carter, MD*

This profile is part of a series designed to highlight the importance and impact of the hospital's teaching mission and the work of the MGH Executive Committee on Teaching & Education (ECOTE).

Lindsay Carter, MD, is a pediatric hospitalist, PCE Warren House director, and inpatient director for Pediatric Quality and Safety.



CARTER

WHO DO YOU TEACH AND WHAT DO YOU HOPE THEY LEARN FROM YOU? HOW HAS YOUR TEACHING STYLE OR APPROACH CHANGED OVER TIME?

I teach both medical students and pediatric residents, primarily in the inpatient setting. I also run simulations and small group sessions. What I want them to learn is *how* to think about a clinical problem, rather than *what* to think. When a student or resident can reason through the facts presented and generate independent ideas, it

is incredibly exciting for me. I want them to have confidence in their abilities but they should be led on that journey of building that skill set. It is crucial for them to trust themselves as physicians and as caretakers throughout their career. I have become more patient, more interactive and more creative as time has passed. Not all learners are the same, and it is important for me to adapt my style and technique to those I am teaching. The constant challenge is what makes it so enjoyable.

TELL US ABOUT A MAGICAL TEACHING MOMENT.

I was running a simulation for medical students about an infant in respiratory distress. This same group of students had done two previous simulations with me, and we had talked through how to approach a sick child. When this simulation began, initially each student was unsure of roles or how to approach the patient and anxiety levels started to rise. Then, it suddenly clicked. One student assigned roles, everyone began performing their piece of the puzzle, and they started to care for the patient and the mother. They implemented each clinical tool we had talked about previously in a calm, collected manner and did a great job. The most exciting part for me though was seeing the shift in mentality and the growth of confidence in the exercise. One student said to me, "Oh, so that's what it feels like to be a doctor!" It made my day.

WHAT DO YOU ENJOY ABOUT TEACHING?

I love being pushed as an educator. Students ask the most thought-provoking questions; they challenge dogmas that have been around for years just by asking "why." I then realize I don't know the answer and we go on the journey together to find out. Teaching means always learning. Every time I learn something new it rejuvenates me as a physician and as a learner. I feel like I'm always increasing my knowledge, honing my skills and enhancing the care I deliver. What I also enjoy about pediatrics is how much we involve families in the education. We often conduct teaching sessions in rooms and involve parents and patients. More often than not, the patient or parent becomes the teacher, and I think it helps families feel appreciated and recognized for their expertise.

WHAT DOES IT MEAN TO YOU TO WORK AT A TEACHING HOSPITAL?

My fear is that patients believe a teaching hospital means that they are being practiced upon by students and residents and that there are more mistakes or higher rates of error. To me, it is the exact opposite. Working in a teaching hospital means caring for patients in a place that is at the forefront of innovation with an entire community available to assist in that care. It means having the best resources, the best specialists, the best ancillary services, all at our fingertips. Most importantly, working in a teaching hospital means that as a physician, I cannot get complacent because someone is always asking "why." I couldn't imagine working anywhere else. These students and residents are fascinating people; they have done incredible things already; they have such rich knowledge bases and life experiences that I feel very lucky to be around them.

WHY IS MGH'S COMMITMENT TO EDUCATION IMPORTANT?

Education at MGH is one of the core missions of the institution, as it is imperative for the advancement of clinical care. The commitment to education by MGH and all who work here is what makes us so good at what we do. Learners elevate the environment, they ask hard questions, they probe beyond the surface of an issue and they push teachers to work harder. Most importantly, a culture of education is a culture of caring. To deliver the best and most comprehensive care, you must be learning at all times and from all those around you - patients, families and colleagues. For me, I look around and realize that I am training the physicians who will care for my kids one day. That's all the motivation I need. The students and residents are the future of medicine and we, as educators, get to shape that future. There is no better job. ■



Help for Puerto Rico

ON NOV. 25, a team of a 26 MGH staff members deployed to Puerto Rico to assist in the continued recovery following Hurricane Maria, which made landfall on the island in late September. The team, which was organized by the MGH Center for Disaster Medicine and the MGH Center for Global Health's Office of Global Disaster Response, includes five physicians, one physician assistant, 15 nurses, four nurse practitioners and one logistics/security staff. The team is expected to be deployed for two weeks and will work closely with federal and local partners to assess and address the needs of the local population.



Home Drive and Shared File Area issues, explained

Many MGH staff have had questions about enterprise-wide technology, including the occasional issue. Here, Keith Jennings, MGH/MGPO chief information officer, sheds some light on a variety of things from the Information Systems (IS) perspective. This is the first in a series of Hotline articles about all things IS-related.

Throughout the past few months, there have been recurring issues with Home (H) Drive slowness, Shared File Area (Isilon) slowness and Citrix workspace applications or Virtual Desktop Environment. To shed light on these issues, this Q&A will explain what Isilon is, how Isilon issues affect staff and what IS has done to correct the platform.

WHAT IS ISILON?

Isilon is a high-performance storage platform from Dell/EMC that Partners HealthCare Information Systems (PHS IS) uses to store, manage and secure information across the Partners enterprise. A key feature of Isilon is its scalability – the ability for customers to keep adding more storage as their needs grow. Isilon is comprised of several 100 terabyte nodes, and as our storage needs grow we purchase and install additional nodes. This platform is an industry leader used by many organizations, including some of our peer institutions such as Harvard and the Broad Institute. Partners has four separate Isilon platforms installed in our datacenters that store more than a petabyte of data – equal to almost 60,000 movies or 20 million 4-drawer filing cabinets. It is the largest of these platforms – which we refer to as the General Purpose or GP Isilon – that has been having issues.

“Much like your car dashboard may have a speedometer, tachometer and check-engine light, we have a growing set of tools we can use to monitor our servers...”

WHY DO ISILON ISSUES AFFECT US?

PHS IS uses the GP Isilon platform in many ways to support the needs of our clinicians and staff. That includes housing the H Drives and Shared File Areas, storing streaming data from neurophysiology monitors and storing content for various internet and intranet sites. The GP platform also houses connections/initialization files for many applications launched from the Partners/“P” menu, from within the Citrix MyApps/Workspace portal and the Virtual Desktop environment.

While PeC/Epic, often our bellwether for severity, was not affected by this spate of issues, the footprint of the GP Isilon platform is so large that the recent issues with it affected just about everyone at the MGH and across Partners.

WHAT EXACTLY HAPPENED?

About three months ago, various nodes in the GP Isilon began to go into spasm and either stop working or work extremely slowly. Users were unable to access or save files stored on the troubled nodes or, in some cases, could open or save files, but only after a 5- to 10-minute wait, making the application unusable from a practical standpoint. This same hang time would occur with some applications

on the Partners menu or Myapps Citrix portal.

When a node went into spasm we could occasionally get it functioning again. While it took time, it kept the disruption localized to the users with data on the nodes in question. Other times, we had to reboot the entire GP Isilon platform, which restored the nodes but resulted in a 20- to 30-minute outage for all users.

HOW WERE THE ISSUES IDENTIFIED AND FIXED?

At first, the only thing we could determine was that the nodes having issues tended to be older nodes installed a few years ago when we began using the Isilon platform. The newer nodes seemed unaffected.

Unfortunately, we also had little instrumentation allowing us to see inside any nodes or the platform. Much like your car dashboard may have a speedometer, tachometer and check-engine light, we have a growing set of tools we can use to monitor our servers in the datacenter and

the Partners computer network. But for now, we had little information on what was going on inside of the Isilon nodes. We knew when it was down but couldn't see when trouble was starting.

PHS IS storage engineers, working with Dell/EMC, took the traditional first step of adding memory and processor power to the older nodes hoping that would reduce or eliminate the problem.

Despite the increased horsepower, older nodes on the GP Isilon continued to experience spasms and outages.

Ongoing reviews proved inconclusive, while the outages continued to occur periodically. Dell/EMC suggested we purchase new nodes to replace the older, issue-prone nodes, but could not

guarantee resolution. Since a key selling point of the Isilon platform was the ability to expand by adding new nodes without having to immediately upgrade existing ones, we engaged in negotiations and settled on a “try before you buy” model, where we would put new nodes into service, retire the suspect older nodes and would only pay for the new ones if the Isilon issues subsided.

The new nodes arrived at our datacenter in mid-October and were placed in service right after Halloween. The plan was to install the new nodes, take two weeks to migrate all the data from the older nodes onto the new ones and then remove the old nodes. This plan immediately reduced the load placed on the suspect older nodes without incurring a multi-hour downtime an immediate one-for-one replacement would require.

WHAT WAS THE ROOT CAUSE OF ALL THESE ISSUES?

Unfortunately, even with the new nodes and the reduced load on the older ones, the older nodes continued to occasionally spasm. This reinforced for PHS IS and Dell/EMC that there was an underlying and as-yet undiscovered root cause. Dell/EMC sent a team of experienced engineers to us and we set up a 24/7 war room in Assembly Row to review, inspect and research the issue.

After six days we appeared to find the root cause. While the Isilon platform is intended to support nodes of various ages and performance, we discovered a bug in the underlying firmware – software deep inside the application not visible or customizable by a customer – that was causing our older nodes to fail. Being in the firmware, the bug exists in every Isilon installation, at Partners and all other customers. However, it took a unique set of circumstances – the size and makeup of our nodes, the amount of data we store and how often we read or update it – to express the bug.

“...we discovered a bug in the underlying firmware – software deep inside the application not visible or customizable by a customer – that was causing our older nodes to fail.”

Dell/EMC took the findings back to their engineering department and updated their firmware to address the bug. The updated firmware was applied to our GP Isilon platform the week of Nov. 13, and since then the platform has remained stable. While potentially unnecessary, we are keeping the upgraded nodes and have removed the older nodes from

the platform.

An additional positive outcome from the war room session with Dell/EMC was the creation of a set of monitoring tools that we will be able to use going forward. Initially designed to help diagnose the error, we can use them to monitor the help of the nodes and the platform, and respond quickly to any new issues that arise. ■

A giving community

THE NOV. 15 BLOOD DONOR RECOGNITION

BREAKFAST reflected a cross section of the MGH. Employees gathered around tables in the Thier Conference Room to share a meal together. Some were meeting for the first time, while others were old friends who had met while reclining in donor chairs.

"It's amazing," said Kimberley Cronin, manager of the MGH Blood Donor Center. "Employees from across the hospital take time out of their day to donate. Many come time after time, see familiar faces and become friends with those they meet in the center."

Buildings and Grounds staff, researchers, nurses, administrators and Massachusetts Eye and Ear Infirmary staff mingled together while sipping coffee, enjoying breakfast potatoes and checking out this year's donor gift – an MGH lunch bag.

Among those honored with awards for their donations was Karen Harty, the Orthopaedics Department. "I like giving blood and platelets," she says. "It relaxes me to sit and know that others are being helped by me donating."

Cronin said she often is asked by donors if they can find out where their donation had been used. Although exact uses of donations cannot be determined, she did share a variety of cases in which blood donations played a crucial role in saving a patient's life.

"On behalf of the many patients and their families, thank you for giving the gift of life," said Cronin.



GIVING THE GIFT OF LIFE: Robert Makar, MD, medical director of the MGH Blood Donor Center, presents Harty with a certificate.

– Diversity

(Continued from page 1)

awards during the past three years, while also being a mom to a 3-month-old son and 2-year-old daughter. One of her goals for the future is to reduce health inequities in neurology care.

Ailina Fernandes has spent the past six years as a supervisor in MGH Nutrition and Food Services. She speaks four languages: Portuguese, Portuguese Creole, English and Spanish. Fernandes has four sons with whom she loves to play soccer. Her goal for the future is to continue to pursue her dreams – making the impossible, possible. She also is striving to complete her college degree and become a dietician.

Dennis Norman, EdD, is a senior psychologist at the MGH where he has worked for 38 years. He also serves as chair of the Harvard University Native American Program. Norman – who grew up in Oklahoma, Wyoming and Idaho – has spent his career studying and teaching human development, culture and anthropology and clinical psychology. One of his goals for the future is to help build healthy Native American communities, which tend to have the highest degree of inequities and inequalities.

Mourad Elkacemi has worked at the front desk for pediatrics for the past three years at MGH Revere HealthCare Center. He speaks Arabic, French, English, Moroccan dialect and some Spanish. Soccer is his favorite pastime and says there is only one team to support – Real Madrid. One of Elkacemi's goals for the future is to continue to advance at the MGH, and continue to be a role model and provider for his children.

Chimwemwe Clarke, RN, has worked at the MGH for nearly 20 years, 17 of those as a nurse. She currently is a graduate student at Suffolk University, pursuing a degree in health care administration. Clarke's passion to help others includes her patients on Ellison 10, as well as underprivileged children in Malawi, where she was born and raised. She has traveled to the East African country three times in the past five years with donations of food and books for youth in area schools and shelters. One of her goals for the future is to travel to Italy.

Everyone is valued here.

Everyone is appreciated here.

Everyone is welcome here.

Everyone is different and unique here.

Watch the "I am MGH" video on the MGH Youtube Channel. ■

Don't forget to get a flu shot!

FROM DEC. 3 - DEC. 9, the National Influenza Vaccination Awareness (NIVA) week will be observed. Established 17 years ago by the Centers for Disease Control and Prevention (CDC), the week highlights the continued importance of getting a flu shot. The CDC chose this as NIVA week to remind people that even with the holiday season approaching, it is not too late to get a flu shot.

Here at the MGH, the following locations continue to offer the seasonal flu vaccine, and those who receive and document their flu shot – or their declination – in PeopleSoft by Dec. 8 will be entered into a special drawing to take home a New England Patriots jersey, signed by tight end Rob Gronkowski.

- **Central Flu Clinic:** Visit one of two locations – the Wang Lobby (Tea Leaves and Coffee Beans) or Yawkey 2 (above the Riverside Café). Both locations will be open Monday through Friday, 8 am to 6 pm through Dec. 8.
- **Occupational Health Services Office:** The office at 165 Cambridge St., 4th floor, is open weekdays from 7 am to 5 pm. Walk-ins are welcome, or call 617-726-2217 to make an appointment.

