In the wake of tragedy

**PARTNERS HEALTHCARE** has announced it is committing $1 million to the newly created One Fund Boston to help the families who lost loved ones and the victims of the Boston Marathon tragedy. This donation is made in honor and recognition of the employees of the Partners HealthCare system who live and work in this community and dedicate themselves every day to our mission, enabling its hospitals to deliver some of the best patient care in the world.

“[This donation on behalf of the 60,600 men and women of Partners HealthCare](https://give.massgeneral.org/boston-marathon) will help fulfill the vision of the mayor and governor in delivering much needed financial support directly to the victims and families as they recover both physically and psychologically,” said Gary L. Gottlieb, MD, president and CEO of Partners.

Gov. Deval Patrick and Boston Mayor Thomas M. Menino last week announced the formation of The One Fund Boston, the purpose of which is to raise money to help those families most affected by the tragic events that unfolded during the Boston Marathon. For more information, visit [www.onefundboston.org](http://www.onefundboston.org).

**MGH Emergency Response Fund**

In the aftermath of the devastating events on April 15, many friends of the MGH also have asked how they can provide support directly to the hospital. In response, the MGH has established an Emergency Response Fund to support the institution's immediate handling of devastating events such as the Boston Marathon tragedy. Funds will be used to provide social services support for victims and families of disasters and will support emergency care, disaster relief and disaster preparedness training. For more information, visit [https://give.massgeneral.org/boston-marathon](https://give.massgeneral.org/boston-marathon).

**Community support**

A special gift also was given by the Canadian province of Nova Scotia, which donated $50,000 to the MassGeneral Hospital for Children to support pediatric palliative care in recognition of the treatment and support the hospital provided to the victims of the Marathon attacks. Boston and Nova Scotia have a long history of supporting one another. On Dec. 6, 1917, a munitions ship exploded in Halifax Harbour and an MGH contingent joined the relief efforts to help care for the wounded. “While there is a border and a number of miles between us, we share a common heritage and ancestors,” Premier Darrell Dexter wrote in a letter to the hospital. “Massachusetts was there for Nova Scotia 96 years ago during the tragedy of the Halifax explosion, and many times since then. Our hearts and minds are with the people of Boston now and in the future.”
Partners announces grants for community health centers

Patient Affordability is one of three pillars of Partners’ Strategic Initiative, along with care redesign and reputation and communications. By improving efficiency and removing costs from the system, Partners is taking important steps to help make health care more affordable. At the same time, Partners’ new affiliation with Neighborhood Health Plan has similar aims: care coordination, cost-effectiveness, and community-based, accessible care for the underserved.

Partners HealthCare has teamed with the Neighborhood Health Plan and the Massachusetts League of Community Health Centers to provide grants to community health centers across the state through the new “Partnership for Community Health” initiative, which aims to help the centers transform the way care is delivered and adapted to state and national reforms.

“Community health centers are, in many ways, the original patient-centered medical homes,” said Partners President and CEO Gary Gottlieb, MD. “We are committed to helping health centers do what they do best – provide accessible, high-quality primary and preventive care in the most efficient and cost-effective setting.”

Over the next 15 years, the “Partnership for Community Health” will provide up to $90 million in grant funding to help community health centers develop and launch measurable programs that enhance health outcomes, service, efficiencies and quality of care. Grants are awarded in four categories focused on expanding programs and improving the center’s infrastructure: health information technology reporting, meaningful-use training, medical coding training, and training and capacity-building for performance improvement.

The first round of grants, totaling $4.25 million, benefit 49 community health centers in the state – including the MGH Community Health Associates and the MGH health centers. Eileen Manning, executive director of MGH Community Health Associates, said the funds will help the organization further reduce health disparities by improving access to care through increased use of the MGH patient portal. Patients will be able to access new user-friendly computer kiosks in the waiting areas that will provide increased knowledge and comfort to those who have little or no previous computer knowledge or are hesitant to use computers.

“Additionally we will work with a consultant to develop a handbook of low-literacy and educational materials on how to access and navigate the portal successfully,” Manning said. “This project is important in meeting goals for meaningful use and for Patient-Centered Medical Home as well. A significant part of what the health centers do is to provide care in a way that reduces the health disparities that exist in the communities we serve. This project will greatly enhance that mission.”

PIE awards honor extraordinary MGHers

Despite a Difficult and Emotional Week following the Boston Marathon attacks, MGHers were resolute in their decision to come together April 22 to celebrate the annual Partners in Excellence (PIE) awards, which honor the extraordinary efforts that MGH employees make here each and every day.

“We briefly considered postponing today’s celebration but ultimately decided that Partners in Excellence is symbolic of what got us all through that very trying week – colleagues who rose to the occasion time and time again: providing the very best in patient care, teaching the medical leaders of tomorrow, researching the cures for the diseases that ail us, and helping the community around us,” said MGH President Peter L. Slavin, MD.

This year a total of 1,688 MGHers were selected as PIE award recipients. The program recognizes employees and teams nominated by their colleagues for outstanding contributions in the categories of quality treatment and service, leadership and innovation, teamwork, operational efficiency and outstanding community contributions.

“We are Partners in Excellence – all of us,” Slavin said. “That’s why we are here today. In my almost 30 years at the MGH, I have never been more proud. Thank you for all that you do for our patients, their families and each other.”

Partners in Excellence: A few of the 1,688 award recipients
Three MGH teams honored for clinical research achievements

Three Projects led by MGH investigators were named among the Clinical Research Forum’s Top 10 Clinical Research Achievements of 2012 at the organization’s annual meeting on April 18. The MGH-led teams were honored for the development of a system allowing people with paralysis to control computerized equipment via a small device implanted into their brains; a clinical trial showing that a combination of two targeted treatment drugs significantly delays the development of treatment resistance in a common form of melanoma; and a new approach to diagnosing hard-to-find chromosomal abnormalities that can provide critically important information.

“There’s never been a moment in the history of biology that’s more optimistic for spectacular breakthroughs to happen. However, it will require strategic investments at a most difficult time in our history,” says William F. Crowley Jr., MD, director of the MGH Clinical Research Program and founding chairman of the Clinical Research Forum. “America is a world leader in biomedical research, and if we are to retain that leadership role globally, we have to continue making these national investments.”

Awardees were selected from nominated projects by the Clinical Research Forum’s Board of Directors, senior leaders at some of the country’s top academic health centers.

MGH award recipients are:

Leigh Hochberg, MD, PhD, MGH Neurology, for a Nature paper describing the investigational BrainGate System – developed through a continuing collaboration with colleagues at Brown University and the Veterans Administration Medical Center in Providence – allowed two patients with paralysis in all four limbs to reach for and grasp objects using robotic arms controlled directly by their brain activity. Both study participants have been paralyzed for several years by brainstem strokes. This work also received the Clinical Research Forum’s Herbert Pardes Clinical Research Excellence Award as the most outstanding project nominated for this year’s Top 10 Awards.

Keith Flaherty, MD, MGH Cancer Center, for a New England Journal of Medicine paper reporting that combined treatment with two kinase inhibitors – dabrafenib and trametinib – delayed the development of treatment resistance in metastatic melanoma patients with tumors driven by mutations in the BRAF gene, which accounts for about half the cases of the deadly skin cancer. The phase I/II study, which found that combination treatment delayed resistance about four months longer than treatment with dabrafenib alone, is being followed with a larger phase III trial.

Michael Talkowski, PhD, MGH Center for Human Genetic Research, for two papers. The first, published in Cell, identified 33 genes associated with autism and related disorders, 22 for the first time, using a gene-sequencing method that detects DNA segments that have been moved within the same chromosome or exchanged with segments in other chromosomes, leaving the overall size of the chromosomes unchanged. The second paper, published in the New England Journal of Medicine, described use of the sequencing method to accurately determine the genetic basis of a prenatally detected structural abnormality.

Hochberg and Talkowski’s papers also received the MGH’s Martin Prizes for Basic and Clinical Research, respectively, at the annual Celebration of Science in March.

Investigators develop implantable, bioengineered rat kidney

Bioengineered Rat Kidneys developed by MGH investigators successfully produced urine both in a laboratory apparatus and after being transplanted into living animals. In their Nature Medicine report, published online on April 14, the research team described building functional replacement kidneys on the structure of donor organs from which living cells had been stripped, an approach previously used to create bioartificial hearts, lungs and livers.

“What is unique about this approach is that the native organ’s architecture is preserved, so that the resulting graft can be transplanted just like a donor kidney and connected to the recipient’s vascular and urinary systems,” says Harald Ott, MD, PhD, of the MGH Center for Regenerative Medicine, and senior author of the Nature Medicine article. “If this technology can be scaled to human-sized grafts, patients suffering from renal failure who are currently waiting for donor kidneys or who are not transplant candidates could theoretically receive new organs derived from their own cells.”

The study used a technology Ott developed as a research fellow at the University of Minnesota that involves stripping the living cells from a donor organ with a detergent solution and then repopulating the collagen scaffold that remains with the appropriate cell type – in this instance human cells to replace the lining of the vascular system and kidney cells from newborn rats. The research team first stripped cells from rat kidneys to confirm that the organ’s complex structures would be preserved and then showed the technique worked on a larger scale by stripping cells from pig and human kidneys.

The researchers introduced the appropriate replacement cells into the collagen scaffold through the renal artery or the ureter and then cultured the organs in a bioreactor for up to 12 days. Bioengineered kidneys transplanted into living rats from which one kidney had been removed began producing urine as soon as the blood supply was restored, with no evidence of bleeding or clot formation. While the overall function of the regenerated organs was significantly less than that of normal, healthy kidneys, the researchers believe that may be caused by the immaturity of the neonatal cells used to repopulate the scaffolding.

“Based on this initial proof of principle, we hope that bioengineered kidneys will someday be able to fully replace kidney function just as donor kidneys do,” says Ott. “In an ideal world, such grafts could be produced ‘on demand’ from a patient’s own cells, helping us overcome both the organ shortage and the need for chronic immunosuppression. We’re now investigating methods of deriving the necessary cell types from patient-derived cells and refining the cell-seeding and organ culture methods to handle human-sized organs.”
ALTHOUGH THE 2013 BOSTON MARATHON will forever be overshadowed by tragedy, there were also countless heartwarming and uplifting moments that occurred throughout the day. These images, taken at the famed mile marker 20, show just some of the dedicated runners, supporters and event organizers who spent countless hours training and preparing for this year's beloved Boston tradition. Currently the 107-runner Mass General Marathon Team: Fighting Kids' Cancer ... One Step at a Time has raised more than $621,000 on its way to its $750,000 goal, while the Miles for MassGeneral, Cystic Fibrosis Marathon Team, with 12 runners, has raised more than $70,000.