

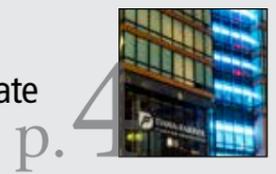
Study tests aspirin's
role in preventing
recurrence



Art comes to the
new Longwood
Center



Yawkey goes
blue for prostate
cancer



Brooklyn Dooley, now age 5, sits on a handmade quilt she received during treatment.



Quilting project brings smiles to young patients

Having just started her preschool teaching career, Danielle Rallo already has a jump-start on making children feel special – including several young cancer patients.

Rallo is the creator of a project that has delivered personalized quilts to younger patients at Dana-Farber/Boston Children's Cancer and Blood Disorders Center. The effort is a family affair, with Rallo's young niece and nephew doing much of the drawing and her aunt serving as primary seamstress.

The quilts are made for young kids and feature squared-off sketches of their favorite things, like princesses and superheroes. Those on the receiving end of Rallo's generosity come close to

Quilting, page 3

New Psychosocial Oncology leader puts priority on research

At a time of growing national interest in palliative and end-of-life care, James Tulsky, MD, believes Dana-Farber/Brigham and Women's Cancer Center (DF/BWCC) can be a powerhouse of research into this complex area.

Tulsky, the new chair of Psychosocial Oncology and Palliative Care at Dana-Farber, says he's excited about "the possibilities of what this department could do with the Longwood area's richness of talent, resources, and intellect – there are huge opportunities in research."

"There is great potential to study symptom management in a way that can only be done at a major cancer center," says Tulsky, who also is the first chief of the Division of Palliative Care in the Department of Medicine at Brigham and Women's Hospital (BWH). His appointments were effective Sept. 1.

Tulsky is widely known for research in areas



James Tulsky, the new chair of Psychosocial and Palliative Care at Dana-Farber, looks forward to building on the department's strengths.

like palliative care, end-of-life decision-making, racial and socioeconomic disparities, patient satisfaction, and improving communications between physicians and seriously ill patients, and has received many awards. Before joining Dana-Farber, he was professor of medicine and nursing and chief of palliative care at Duke University.

Tulsky is a longtime admirer of the department

Psychosocial Oncology, page 4

Radiation oncology welcomes Haas-Kogan as new chair

Daphne Haas-Kogan, MD, the new chair of Radiation Oncology at Dana-Farber/Brigham and Women's Cancer Center (DF/BWCC) says she was drawn to the field when colleagues suggested it to her during a fellowship year.

"The clinician-scientists in the lab saw my passion for research and working with children and adults," Haas-Kogan explains. "They told me that radiation oncology would be very conducive to wedding those interests."

This proved to be true. In her previous post at the University of California, San Francisco, Haas-Kogan led an active research program investigating novel therapies for adult and pediatric brain tumors and other childhood cancers. At DF/BWCC, she will continue to lead clinical trials of experimental agents aimed at blocking faulty molecular signaling pathways in low-grade glioma brain tumors.

She will also continue as principal investigator of a



Daphne Haas-Kogan

Haas-Kogan, page 3

New technique allows researchers to spot mutations in 'genomic jungle'

A particularly bewildering patch of the human genome is now more navigable thanks to a new gene-reading technique developed by Dana-Farber researchers. The result is a better picture of where dangerous mutations lurk, and an inkling of how they help tumors survive.

The section of the genome in question lies on chromosome 6 and is known as the HLA locus. It contains a series of genes that collectively are responsible for building the major histocompatibility complex (or MHC), a mounting on which cells display their credentials to the immune system. The credentials are bits of proteins called peptides that are held within the MHC for the immune system's inspection.

This region of the genome is especially important because the immune system's ability to recognize any cell depends on the peptides themselves and the proper functioning of the HLA genes. One way that cancer cells can grow without inhibition is to become invisible to the immune system by turning off expression of the HLA genes.

Although new sequencing technologies have made it possible to rapidly identify new cancer mutations, "using

Genomic jungle, page 2



Wendy Chen

Study to test aspirin for reducing breast cancer recurrence

Researchers at Dana-Farber and Brigham and Women's Hospital (BWH) will test whether regular aspirin use can lower the risk of breast cancer recurrence in a study funded by a \$10 million Breakthrough Award from the federal government.

Previous studies showed that breast cancer survivors who used aspirin had a 50 percent lower risk of cancer recurrence and death compared to women who didn't take aspirin, but the new clinical trial will be the first randomized, controlled study to examine the question.

Wendy Chen, MD, MPH, a senior physician at the Susan F. Smith Center for Women's Cancers at Dana-Farber, is co-investigator of the study, along with Michelle Holmes, MD, DrPH, of the Channing Division of Network Medicine at BWH.

The trial, called the Aspirin for Breast Cancer (ABC) trial, will recruit 3,000 women with stages II and III breast cancer. Half will be randomized to receive aspirin and half will take a placebo pill.

"Although chemotherapy and hormonal therapies have helped women with breast cancer live longer, they are expensive and have many side effects, and women whose tumors are not sensitive to hormones have limited treatment options," Chen says. If the trial results are positive, she says, aspirin could save as many as 10,000 lives a year in the U.S. and 75,000 lives in low-income countries.

"This is a treatment that needs to be evaluated further," says Eric Winer, MD, director of the Breast Oncology Program and Thompson Chair of Breast Cancer Research at Dana-Farber. He is a partnering principal investigator of the study.

The award was provided by the Department of Defense's Office of the Congressionally Directed Medical Research Program. [1]



Tracy Balboni

Editorial focuses on religious dimension of ICU discussions

Tracy Balboni, MD, MPH, and **Michael Balboni, PhD, MDiv**, recently co-authored an editorial in the journal *JAMA Internal Medicine* on a study that found references to religion or spirituality are rare in intensive care unit conversations between physicians and patients' families. The study, published in the same issue of *JAMA Internal Medicine*, found that religious or spiritual matters were raised in only 16 percent of 249 such discussions recorded by investigators.



Michael Balboni

In the editorial, written with George Fitchett, DMin, PhD, of Rush University Medical Center, the authors note that while the study makes a convincing case that religion often isn't brought up in ICU discussions, many questions remain. Among them: Did the researchers use too narrow a definition of what constitutes religious language? Why did only a small percentage of families for whom religion is important raise spiritual matters during their conversations with physicians? If religion and spirituality were to become a regular part of such conversations, are health care professionals capable of integrating these subjects into their discussions?

The authors lament that caregivers often do not "hear the spiritual reverberations of illness on [patients'] well-being and medical decisions... The question remains whether we who care for dying persons and their families will learn how to be present and listen." [1]

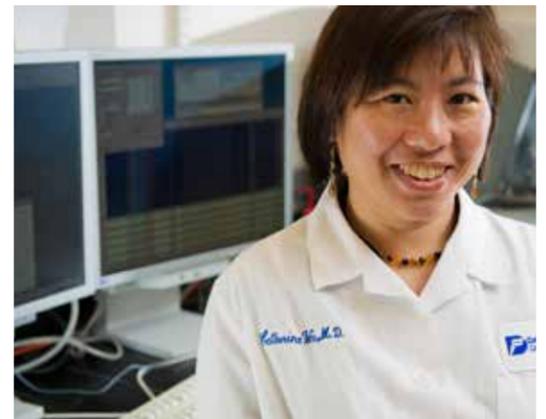
Genomic jungle, continued from page 1

these approaches for detecting mutations in the HLA locus has been extremely difficult," says Dana-Farber's Catherine Wu, MD, co-leader of a new study in *Nature Biotechnology*. This is because many of the genes in the HLA locus take multiple forms, each with a slightly different spelling of the genetic code, but all perfectly functional. The standard map of the human genome used in sequencing-based studies, however, contains only one "correct" form for these genes. The map serves as a reference guide to the normal human genome, much as a master recording of a symphony could be used to determine whether later copies have been altered from the original.

The divergence between the map and reality makes it difficult to find differences that may be related to cancer. If researchers can't be certain what constitutes normal DNA in the HLA locus, distinguishing between normal and mutated genes becomes exceptionally challenging.

For the new study, Wu and her colleagues developed an algorithm called POLYSOLVER that allowed them to identify many of the different forms that the HLA genes can take, based on DNA sequences in key sections of the genes.

"Once we have narrowed the list of possible HLA gene variants from several thousand to a mere handful for



Dana-Farber's Catherine Wu co-led a study involving a new technique to better distinguish between normal and mutated genes in a specific section of the human genome.

an individual, we can find mutations in these variants with greater ease and confidence," explains Sachet Shukla, PhD, the first author of the study.

When researchers compared the HLA locus in normal and cancerous tissue from 7,900 cancer patients, they found many more mutations in the HLA genes than had previously been discovered. They also found that these mutations were likely to result in misshapen MHCs, or in proteins that were completely nonfunctional, allowing the cancer to avoid detection by the immune system.

"Our findings support the idea that mutations in the HLA genes arose to help tumor cells escape or withstand an attack by the immune system," Wu says. "The possibility of HLA mutations should be a consideration in selection of immunotherapy choices."

The co-senior author of the study is Gad Getz, PhD, of Massachusetts General Hospital and the Broad Institute of MIT and Harvard. [1]

Ever Wonder?



Do sunscreens prevent the body from producing vitamin D?

The answer is a qualified "yes," which is why people who use sunblock or wear sun-protective clothing outdoors should take vitamin D supplements or multivitamins that include vitamin D.

Vitamin D is actually not a vitamin, but a prohormone, a compound that is produced in the skin in the presence of ultraviolet (UV) light and then modified by the liver and kidneys to create a final, active form. Broad-spectrum sunscreens protect against skin damage from UV rays – and potentially reduce the risk of skin cancer – but also can reduce the creation of vitamin D.

A deficiency of vitamin D is linked to rickets, a disease that can produce soft bones and skeletal deformities. Low

blood levels of the vitamin have also been linked to cardiovascular disease, cognitive problems in adults, asthma in children, autoimmune diseases, and some forms of cancer, although these associations are unproven and are the subject of current research. The amount of daily unprotected sun exposure needed to produce an adequate amount of vitamin D varies with the time of day, the season, the latitude, the amount of skin exposed, and how fair one's complexion is, but 15 to 20 minutes a day is sufficient for many people. People who receive less exposure – as a result of staying indoors, wearing long clothing, or using sunblock – can compensate by taking vitamin D supplements. [1]

Thanks to the specialists in Dana-Farber's Melanoma Treatment Center, for their help in answering this question.

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Story ideas are welcome and can be sent to Naomi Funkhouser at 450 Brookline Ave., 05301, Boston, MA 02215. You can also call 617-632-5560 or email Naomi_Funkhouser@dfci.harvard.edu. Visit the Dana-Farber website at www.dana-farber.org or the intranet at www.dfcionline.org.

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Art 'stirs the soul' of Longwood Center

Ever since Dana-Farber's Yawkey Center for Cancer Care opened in 2011, patients, families, and staff have been able to enjoy the building's diverse range of artwork, including Andy Warhol's *Souper Dress* and Donald Baechler's *Green Cone*. Now, research staff at the new Longwood Center also have a collection to complement their state-of-the-art space.

This month, the Friends of Dana-Farber's Art and Environment Committee installed more than 30 works of art by local and internationally-recognized artists on four floors of the Longwood Center. The majority were relocated from other Dana-Farber sites to complement new donations. *Panama Rocks*, for example, a large-scale Bruce Martin nature photograph that now resides on the fourth floor of the Longwood Center, was previously displayed in the Dana building. Art Program Administrator Elaine Tinetti and the committee, chaired by Jane Mayer, worked closely with Longwood Center architects from the initial planning stages to identify good locations for art in a building made up largely of lab spaces.

"The committee selected contemporary art in a variety of media that mirrors the Institute's core values of innovation, collaboration, and discovery," says Tinetti. "We strived to feature artists as diverse as the research community itself, incorporating the work of Asian and Hispanic artists, among others."

The Robert and Renée Belfer Center for Applied Cancer Science, which in the coming weeks will move to the fourth floor of the Longwood Center, brings with it art from the Harvard Institutes of Medicine building. This art includes photos of cells and landscapes taken by Belfer Center staff members, as well as patient photos by Dana-Farber staff photographer Sam Ogden, which are designed to serve as a way to help staff stay connected to the Institute's mission.

"Art enhances public spaces and provides a positive work environment," notes Tinetti. "It stirs the soul."



The new Longwood Center is home to more than 30 works of art by local and international artists, and also includes photographs like these, taken by Dana-Farber staff photographer Sam Ogden and staff members from the Robert and Renée Belfer Center for Applied Cancer Science.

Many artists featured in the Longwood Center are local or studied at Boston's School of the Museum of Fine Arts. This includes Columbian-born Gonzalo Fuenmayor and the Starn twins, Doug and Mike, whose intentionally deconstructed and rebuilt photograph of their Big Bambu installations – which have been on exhibit in museums everywhere from New York to Japan and Rome – is displayed on the Longwood Center's fourth floor.

Employees interested in learning more about art in the Longwood Center can contact Elaine Tinetti for a tour. More information on art at the Yawkey Center is available at www.dana-farber.org/audioarttour. ^{SEW}

Win an iPad or Fitbit for taking your AEU courses

Time is running out to qualify for a second-chance drawing for an iPad or a Fitbit! Everyone who has completed their 2015 Annual Education Update (AEU) courses in HealthStream before **Sept. 23** will be entered into the drawing.

The final deadline to complete courses is Sept. 30. Visit **DFCI Online** and click on **HealthStream** (under "Applications") to get started.



Haas-Kogan, continued from page 1

translational research lab funded by the National Institutes of Health.

Haas-Kogan succeeds Jay R. Harris, MD, previous chair of Radiation Oncology, who says the new leader is not only a researcher with a proven track record, but a "skilled and experienced clinician" who has "remarkable interpersonal skills and is a natural leader." He adds that she was the residency program director "and she will bring those abilities and commitment to training and mentoring young physicians here." ^{RS}

Joint Commission Corner

Staff reminders

- Wear your photo ID badge above the waist at all times.
- Become familiar with the National Patient Safety Goals, and know what your department is doing to comply.
- Review your departmental policies and procedures, and be ready to talk about how you follow them.
- Participate in practice patient tracers and other survey readiness activities.
- Review the policies for fire, disaster, infection control, code alerts, and incident and medication event reporting, and be prepared to describe your role in an emergency situation.

The Joint Commission will complete an extensive, on-site clinical review of Dana-Farber sometime between **now and February 2016**. The Joint Commission is an independent, nonprofit organization that accredits and certifies more than 20,500 health care organizations and programs in the United States. Joint Commission accreditation is recognized nationwide as a symbol of quality that reflects an organization's commitment to health care quality and a culture of excellence.

To learn more, visit **DFCI Online** and search "**Joint Commission**."



Quilting, continued from page 1

tears when expressing their appreciation.

"[My daughter] loves her quilt; it makes her feel like she's part of a larger community, and that people care about her," says Kerrin Dooley, whose daughter, Brooklyn, is a Dana-Farber/Boston Children's neuroblastoma patient who, at age 3, received a quilt from Rallo. "Brooklyn has had a lot of bumps in the road, but this quilt is a reminder of the goodness there is in the world. She sleeps with it every night."

The quilting idea came to Rallo a few years ago, when she was taking a course at Merrimack College. Her professor asked students to draw pictures that they felt encapsulated them as individuals, then put them together in a quilt-like formation to symbolize class bonding. When asked to do a community service project in the same class, Rallo decided to make a quilt for a girl needing a heart transplant in her nephew Haydan's elementary school.

"I invited over eight kids from Haydan's kindergarten class, read them the book *The Patchwork Quilt*, and then we taped off our squares and decorated them," recalls Rallo. "My aunt helped with the sewing, and we presented it to the girl at school. She loved it, and the kids loved making her happy."

One stitch led to another, so to speak. After the Dooleys told a fellow Jimmy Fund Clinic family about their quilt, that family requested one for their son. Then there was Cian Byrne, another patient at Dana-Farber/Boston Children's who Rallo was able to surprise with a blanket because Cian's mother, Sarah, worked at the same company as Rallo's dad, Paul.

"Paul asked what some of Cian's favorite things were, and I told him that he loved superheroes – and in fact reminded us of a superhero himself," says Sarah Byrne. "Before I knew it, Paul was at our doorstep with his grandson [Haydan] who had helped make this beautiful quilt for Cian."

"I closed the door and cried. The kindness of a stranger can touch your life in so many ways, and of all the kind and generous things people have done for us, this was extra special because it was from these amazing children and a woman I had never met."

Now that she's a certified teacher with a class of her own, Rallo plans to encourage her class to make more quilts for Dana-Farber/Boston Children's patients. While she knows that not every preschooler will understand or be ready to talk about cancer, all will enjoy the feeling that comes from making others happy.

"That's the best lesson I can teach them," Rallo says. ^{SW}

Antibody agent benefits some patients with drug-resistant multiple myeloma

In its first clinical trial, a breakthrough antibody therapy produced at least partial remissions in a third of patients with multiple myeloma who had exhausted multiple prior treatments, investigators at Dana-Farber and other organizations have reported in the *New England Journal of Medicine*.

The drug, daratumumab, proved generally safe in patients, even at the highest doses tested in the study. The results of the early-phase trial strongly support testing of the drug in a larger group of patients in phase 2 and 3 trials, the authors say.

“The treatment of multiple myeloma has improved significantly in recent years with the introduction of therapies such as proteasome inhibitors [which interfere with tumor cells’ protein-disposal system] and potent immuno-modulatory agents,” says the paper’s senior author and leading investigator, Paul Richardson, MD, clinical program leader and director of Clinical Research at Dana-Farber’s Jerome Lipper Multiple Myeloma Center, and the R.J. Corman professor at Harvard Medical School. “Unfortunately, while these agents generally work for a considerable period of time, resistance inevitably emerges, and far fewer treatment options are available in this setting. There is thus a great need to develop new treatments for this patient population in particular.”

Daratumumab is a monoclonal antibody agent that targets CD38, a protein profuse on the surface of myeloma cells but less abundant on normal cells. In laboratory studies, daratumumab caused the targeted killing of CD38-carrying tumor cells by several distinct mechanisms, including some that involve the immune system.

The new study involved 72 patients, all of whom had received at least two prior courses of therapy and whose disease had relapsed and no longer responded to treatment. Two doses of daratumumab were tested.

Of the 42 patients receiving the higher dosage, 36 percent experienced durable responses, including two who had complete remissions and two more whose remissions were deemed high quality (known as very good partial responses). In this group, the median period in which the disease was held in check was 5.6 months. Two-thirds of patients who benefited from the drug had no advance of the disease for at least 12 months.

Most side effects of the drug were relatively mild, the most common being fatigue, nasal congestion, and fever. More severe side effects were less frequent and included pneumonia, low blood platelets, low white blood cell counts, anemia, and excess blood sugar, but these were not thought to be a direct effect of the antibody itself.

“As a single-agent therapy, daratumumab showed significant promise against

difficult-to-treat disease in our patients with advanced myeloma and who have few other therapeutic options,” Richardson remarked. “Because it targets a key receptor and works through different mechanisms than other available agents, it clearly has merited comprehensive testing in larger clinical trials.”

“The results of this study clearly validate CD38 as an important therapeutic target in multiple myeloma,” says Jacob Laubach, MD, clinical director of the Multiple Myeloma Program and a co-author and co-investigator on the study. “Daratumumab was well tolerated and led to significant responses in patients who had received multiple prior therapies, a majority of whom were resistant to their most recent prior treatment.”

The lead author of the study is Henk Lokhorst, MD, of UMC Utrecht, The Netherlands, and VU University Medical Center, Amsterdam. [RL](#)



Flu Clinics

FLU
2015-16

It’s almost flu season! Occupational Health Services will offer free flu vaccinations for staff weekdays from **Oct. 5-16**. Get your flu shot from 8 a.m. to 4 p.m. in Dana 110 (behind the Cashier’s office).

Please note that there will not be a clinic on Oct. 12 (Columbus Day). On-site vaccination clinics for staff at off-site campuses and the Jimmy Fund Clinic will also be coming and dates will be communicated to staff in those areas. DFCI satellite staff will receive free flu vaccinations at their locations.

All staff members must get their flu vaccination this year by **Nov. 15**.

As an incentive, the Friends’ Corner Gift Shop will again offer a 10-percent discount to all employees who get their flu vaccine through the DFCI staff clinics.

For more details on upcoming staff flu clinics, visit the Occupational Health Services page on DFCI Online.



Yawkey Center goes blue for prostate cancer

A portion of Dana-Farber’s Yawkey Center was bathed in blue on the evening of Sept. 17 to honor the millions of men living with prostate cancer, as well as prostate cancer survivors and those who have lost their lives to the disease. About one man in every seven will be diagnosed with prostate cancer at some point in his life.

The one-time lighting was part of an effort to raise awareness for prostate cancer during Prostate Cancer Awareness Month (September), in collaboration with the Blue Cure Foundation’s national month-long campaign to [#lightitblue](#). [SEW](#)

Psychosocial Oncology, continued from page 1

and its former leader, Susan Block, MD, whom he succeeds in the leadership role. “I’ve known Susan since 1995, and watched the program grow as a national leader over the years,” he says.

Block remains on the faculty and will focus on the Serious Illness Care Program, which she directs, at Ariadne Labs, a joint center for health care innovation. Ariadne’s executive director is Atul Gawande, MD, PhD, the BWH surgeon and author whose recent book, *Being Mortal: Medicine and What Matters in the End*, has helped launch a national conversation on death and dying.

“His book really just nails it,” says Tulskey, referring to Gawande’s argument that the medical profession must do more to help seriously ill and frail older people to live a meaningful life and accept oncoming death – not just treat the illness no matter what.

Tulskey was on the committee that wrote the Institute of Medicine’s 2014 report, *Dying in America: Improving Quality and Honoring Individual Preferences Near the End of Life*. Its recommendations include referral to palliative care and hospice as an important component of patient- and family-centered end-of-life care.

A major strength of the department at Dana-Farber, says Tulskey, “is the integration of palliative care, psychosocial oncology, and social

work. It brings all the social support elements under one roof. It’s brilliant, and it’s sensible.”

Joanne Wolfe, MD, who Tulskey says has done “an extraordinary job” as interim chair of the department, will continue in her role as chair of the Division of Pediatric Palliative Care. Tulskey will oversee the Division of Adult Palliative Care while recruiting a permanent chief.

While at Duke, Tulskey led the development of an interactive, computer-based teaching program to help oncologists improve their skills in handling emotional conversations with patients with advanced cancer. Listening to recordings of their own encounters with patients and receiving feedback about their communication skills, the oncologists learned to express greater empathy and gained the trust of their patients, a study showed.

Tulskey has brought this project to Dana-Farber in the form of a module that he will test, in a new three-year PCORI-funded study, whether the training might be included in maintenance certification required by the American Board of Internal Medicine.

“If we can show it is effective and increases satisfaction, we’ll have an amazing platform for disseminating this tool to improve practice,” Tulskey says. [RS](#)