SPREADING THE MESSAGE

Jeannette South-Paul, an MD and UPMC Andrew Mathieson Chair in Family Medicine, has long been impressed by the Susan G. Komen organization and its ubiquitous pink. “The publicity has made it so that every woman is screened for what was once a silent killer,” she says.

But the ailments that plague Pittsburgh’s Hill District neighborhood have few such campaigns, South-Paul says. Because of this, she has spoken at a series of community health forums sponsored by the New Pittsburgh Courier, the Urban League of Greater Pittsburgh, and Pitt’s Clinical and Translational Science Institute. Her talks highlight not only breast cancer but also other important diseases, including heart disease, cancer, diabetes, and depression.

To make her point, she brings photos of African Americans who died in middle age of common medical issues—including them, Grammy Award–winning musician and arranger Barry White, who died of renal failure. Like many, White’s death was preventable: “The important thing to note is that the issues were not impossible to control. The moral is: Your health is partially in your hands.” —Nick Keppler

FLASHBACK

It was a terrifying time. In 1980, a San Francisco resident was identified as the first American with AIDS. In 1983, HIV was isolated (though the virus wouldn’t be known as HIV for another three years). In 1984, the Graduate School of Public Health responded by launching the Pitt Men’s Study, now one of the longest-running studies of the natural history of AIDS. Pitt’s Charles Rinaldo’s proposal to the NIH was to recruit 7,000–10,000 men ages 18–55 for a “prospective study of AIDS in homosexual men in Pittsburgh.” Now in its 30th year, the ongoing study has contributed to more than 1,000 research papers; it’s also credited with diminishing the impact of AIDS in Pittsburgh.

BOYS II MEN

Conceived by the Ad Council and the nonprofit Futures Without Violence, Coaching Boys into Men is a program about positive dating habits for high school sports coaches to teach to their players. There are 12 lessons, one for each week of a season.

When she first heard about it, Elizabeth Miller, MD, PhD, suspected the program could be useful. “Coaches are in a unique position compared to phys ed and health teachers,” says Miller, an associate professor of pediatrics at the University of Pittsburgh and chief of the Division of Adolescent Medicine at Children’s Hospital of Pittsburgh of UPMC. For many kids, coaches “are seen as a second dad.”

Miller led a study, published in the American Journal of Preventive Medicine, showing CBIM’s effectiveness. The study compared survey results from male athletes in schools that used the program versus a control group that did not. It showed a statistically significant increase in positive attitudes and willingness to intervene in situations of partner abuse among peers.

Miller is now interested in developing a version for middle school athletes and teen cricket players in India. —NK
Follow the ’script

Medications make such persistent ailments as hypertension, high cholesterol, and many other conditions manageable—if the patient takes the drugs as prescribed. We spoke with Zachary Marcum (shown above), PharmD and Pitt assistant professor of medicine, who contents that non-adherence to prescribed drugs results in preventable deaths and at least $100 billion in costs to the U.S. economy per annum (some estimates peg that figure at $300 billion) because of hospitalization and quality-of-life issues. Marcum, along with Steven Handler, MD/PhD Pitt assistant professor of biomedical informatics and of geriatric medicine, authored a thought piece in the May 22 issue of the Journal of the American Medical Association that they hope will begin to lay out a plan of cooperation between patients and clinicians to increase medication adherence.

What kinds of patients are at risk for medication nonadherence?
There have been countless studies looking at the risk factors. ... What it really comes down to are complex medication regimens. ... In my mind, from a patient level, for someone who might have a cognitive impairment, [adherence is] very difficult. And, of course, there’s cost. The other thing you have to keep in mind ... is [patient] values and beliefs about medication. ... Some people would prefer an herbal supplement or an over-the-counter to a prescription drug. Some people have very strong feelings about the pharmaceutical industry. Some people just think, I’m on too many pills. I don’t care what this next one is. I’m not taking it.

How much of an impact would greater medication adherence have?
“[Adherence] may have far greater impact on the health of the population than any improvement in specific medical treatment,” the World Health Organization says. So, rather than create a new drug, why don’t we help people adhere to what we know works? Innovation is important, but let’s try to have a quick direct impact and apply what we know.

On how to get the adherence ball rolling.
Why not start screening for it? [A clinician needs to] get a better understanding of what the patient’s thinking about before even writing ... a prescription. There are countless instruments you can screen with, but until you start measuring [adherence], you don’t know what the problem is in a clinical setting. —Interview by Joe Miksch

Facility Snapshots

Prof. Yoel Sadovsky, an expert in reproductive sciences and the Chair in Women’s and Infants’ Health Research, has been elected to the Institute of Medicine, which honors the nation’s finest scientists. Sadovsky, scientific director of Magee-Womens Research Institute, is renowned for his research on the placenta and the function of specialized placental cells called trophoblasts. He has elucidated molecular pathways responsible for placental development and the organ’s adaptation to stress.

Charleen Chu’s work on “eat me” signals in injured cells appeared in Nature Cell Biology’s October 2013 issue. Chu, a professor of pathology, and colleagues Hilya Bayir and Valerian Kagan study cardiolipin, a lipid component of the mitochondrion (the cell’s energy center), and how its movement from the inside of mitochondria to their surface triggers the breakdown of damaged mitochondrion by lysosomes, digestive centers of cells. Chu hopes that understanding the quality control process by which impaired mitochondria are eliminated in neurons could lead to better understanding of Parkinson’s and its treatment.

Bernard Macatangay, assistant director of Pitt’s immunology specialty lab and research assistant professor, has discovered that decreased numbers in a subset of CD4 T cells (a white blood cell) associated with HIV may contribute to increased inflammation in affected individuals. This progress in the understanding of what contributes to inflammation could be helpful in developing new treatments to improve health and increase life expectancy in patients infected with HIV-1. This research was done in cooperation with investigators at Pitt’s Graduate School of Public Health, the University of Pittsburgh Cancer Institute, Pitt’s Department of Pharmacology and Chemical Biology, and the Pitt Men’s Study—part of the Multicenter AIDS Cohort Study. The paper was published in the journal AIDS.

In May 2013, Lisa Grandinetti, associate professor of dermatology, opened UPMC’s Gastrointestinal Dermatology Clinic. The clinic’s inception was a response to the increasing referrals Grandinetti received from her GI colleagues, highlighting a demand for a specialized care center. The clinic is open the first Monday of every month on the fifth floor of the Falk Medical Building. It offers care for patients with skin-related problems secondary to their GI diseases, such as celiac disease and inflammatory bowel disease, and patients with ostomy-related skin issues. Grandinetti works closely with gastroenterologists, colorectal surgeons, and enterostomal-therapy nurses. As demand increases, she plans to expand clinic hours. —Rachel Puralewski
Those who can, teach

Cynthia Lance-Jones, a Pitt PhD associate professor of neurobiology and assistant dean for medical student research, is one of four winners of the Association of American Medical College (AAMC) 2013 Alpha Omega Alpha Robert J. Glaser Distinguished Teaching Award.

Her success as a teacher, she thinks, comes from her ability to think like a student: “I’m good at explaining things to them because I spend a lot of time trying to put myself in their heads and trying to figure out what would make [a topic] clearest to them.”

This student-centric thinking led her to develop a combined course in cell biology and pathology and create a computer module on vascular structure, atherosclerosis, and the potential use of non-invasive biomarkers. She also delivers almost all lectures on medical embryology.

“It’s important to give students different ways to learn and to practice what they have learned,” Lance-Jones says of the computer module. “In the lab, they tend to memorize, and this gives them the opportunity to test and enrich themselves.” —JM

KANTER LAUNDED

Steven Kanter speaks quietly but has made a resounding impact on medical education, an achievement recognized by the AAMC, which named him the 2013 recipient of its Merrell Flair Award. As vice dean of the University of Pittsburgh School of Medicine, Kanter oversees all academic programs at Pitt, as well as faculty affairs. The MD and professor of medicine and of neurological surgery has long been involved with the AAMC’s Group on Educational Affairs and served as editor-in-chief of the AAMC’s peer-reviewed journal, Academic Medicine. At Pitt, he guided the implementation of a new curriculum for students and a new, and fairer, system for the appointment and promotion of faculty.

“This is a wonderful award and a special honor,” Kanter says. “It’s especially meaningful to me because it comes from colleagues who wake up every day thinking about how to do a better job of educating the next generation of physicians.” —JM

A GOOD REVIEW

John Mahoney, MD, also took home some AAMC hardware. The associate professor of emergency medicine and associate dean for medical education won an AAMC Outstanding Peer Reviewer award. Mahoney ranks in the top 20 of about 550 peer reviewers who examine work submitted to the MedEdPORTAL, the leading organization for publication of peer-reviewed medical educational materials. —JM

FLASHBACK

When it comes to the history of Civil War medicine, often the surgeons, physicians, and nurses take the spotlight for their heroism in practicing medicine on the battlefield. The Falk Library of the Health Sciences’ exhibit, Life and Limb: The Toll of the American Civil War, swung the spotlight toward “an aspect of the war that has not received the attention it deserves: the experiences of injured soldiers,” says Jeffrey S. Reznick, chief of the History of Medicine Division of the U.S. National Library of Medicine and featured lecturer during the exhibition’s fall run. Advances in weaponry in the Civil War shattered bone, tore skin, and increased infection rates, resulting in a horrific number of amputations, which accounted for 75 percent of the 60,000 surgeries during the war. With little knowledge of sterilization, rampant infections, limited use of anesthesia, and long waits for treatment, surgery was no panacea. Soldiers often viewed doctors as butchers and faced a post-war life full of challenges.
Hammering the sickle (cell)

Enrico Novelli, MD assistant professor of medicine in the Division of Hematology/Oncology and member of the Pittsburgh Heart, Lung, Blood and Vascular Medicine Institute (VMI), has been director of the UPMC Adult Sickle Cell Program since 2007. Over the years, the program has added a physician assistant, a clinical psychologist, and a project manager. In 2013, three more senior faculty members arrived to dramatically expand the program.

“This was a long process because there is a well-recognized dearth of ... hematologists [who work with adults] dedicated to sickle cell in the United States,” Novelli says.

Sickle cell disease (SCD) affects about 100,000 Americans. Because of a genetic mutation, the usually donut-shaped red blood cells form into a crescent and become stiff and sticky, tending to block blood flow. The disease causes pain and organ damage. SCD can also raise the risk of infection. There is only one FDA-approved sickle cell drug.

Pitt’s new recruits are Gregory Kato, an MD formerly of the National Institutes of Health and Johns Hopkins University, Solomon Ofori-Acquah, a PhD formerly of Emory University, and Laura DeCastro, an MD formerly of Duke University.

Kato, a clinician-scientist, investigates pulmonary hypertension and other ways SCD presents in patients. Ofori-Acquah has published in the Journal of Clinical Investigation on a new understanding of acute chest syndrome, a devastating complication of SCD. In addition to her clinical work, DeCastro researches the impact of SCD on end-organ damage and the psychosocial issues relating to SCD.

“It’s incredibly special not only to the sickle cell community but also to the national research community to bring three of the brightest minds on this disease together in one place,” says Mark Gladwin, an MD and director of VMI, home of the UPMC Adult Sickle Cell Program. —JM
Editors
The Anatomical Staff

PITT ANATOMY SNOOZE

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The deserted Professor

A tragedy with a moral for all student assistants, M.Y.A.'ers and other helpers of the past.

In a day that belongs like our tires
To a past that will no more return
We had but to speak our desires
To helpers all eager to learn.

Each project was done in a jiffy,
Each reform carried out in a trice.
The skulls were made bright and spiffy
The quizzes were always on ice.

Yet that Eden we failed to enjoy;
We pros. were all grouchy and grim;
We felt that all gold was alloy,
That assistants did nothing but swim.

Now our sins have caught up with our footsteps.
Nor assistant nor helpers we see.
We must hoist from the tanks with our boot straps
All we need on the tables. Ah me!

Each lantern slide thumb marked so clearly,
Each bookcase that's scratchad on the top,
Each slide-label spelled a bit queerly,
Each tool that is not in the shop.

These speak of our helpers so skillful
Now gone where we can't reach their necks
While we are left here with a hill full
Of troubles and are we the wrecks!

Oh, for even one F.Y. Assistant
On whom we could unload a groan
But our cries tho' long and insistent
Are answered by echo - alone.

So you who once labored to help us
And got only more jobs for your pains
Know now that we know whose the work was
As well as the brawn and the brains.

We hope that whenever you get this,
In spring, or in summer or fall,
You will know that for you our thought is
And we're wishing you luck through it all.

Davenport Hooker was Pitt’s master anatomist. He was also a pack rat. The med school’s Falk Library received a raft of his papers in 1997 (along with the whistle he, in the words of Pitt history of medicine librarian Jonathon Erlen, “used to terrorize medical students during tests”). Among the miscellany was the Pitt Anatomy Snooze, a typewritten newsletter mailed ‘round the world from 1943 to 1949. The Snooze (“Issued Now and Then”) was “an effort to keep all former Pitt medical students, not just anatomists, in the information loop,” Erlen says. Poems, errata, and news about World War II and the roles of Pitt docs in it, fill the now-yellowed pages.

Humor abounds. Even in wartime. The Snooze notes that faculty are no longer bothered by life insurance salesmen because, “one came up here one pay-day and found the place bristling with sub-machine guns.” And student griping, in 1943, was 90 percent Army-related and 10 percent faculty-related, compared to the peacetime figure of “110 percent about the faculty.”

The Snoozes, catalogued in 1999, languished. Until University archivists realized that they hadn’t been scanned and digitized. “This material seemed to be of special value since it’s so ephemeral,” says Ed Galloway, head of the University Library System Archives Service Center. University Archivist Marianne Kasica adds, “We’re trying to identify and put online more materials about Pitt and its involvement in the two world wars. Adding the Snooze was an easy choice.”

To peruse the Snooze, go to documenting.pitt.edu.

—Joe Miksch
—Newsletter courtesy University Archives, ULS Archives Service Center