Alum’s appointment as surgeon general a “home run”

In March 2001, Esther K. Choo, M.D. ’01, then a medical student, was bouncing around in a jeep on bumpy desert roads in Gujarat, India, feeling sick from the heat and the antiretroviral medications she was taking. At her side was fellow medical student Vivek H. Murthy, M.D. ’03, M.B.A. ’03. They were part of a team from Yale that was providing relief after an earthquake. On this mission they also addressed medical needs unrelated to the immediate crisis. While drawing blood samples at a screening for diabetes and cardiac disease, Choo pricked her finger with a used needle. She and Murthy were scouring the countryside for the woman whose blood she had been exposed to, so they could test her for HIV. They found the woman, and she tested negative. “Vivek volunteered to go with me to hold my hand and keep me from freaking out,” Choo said. “He is just that kind of person.”
While in Gujarat, said Choo, now an emergency physician at Brown University, one of their faculty preceptors told the students that they were all bright but that Murthy would make his mark in a very big way. “None of us took offense, because it was so obvious,” Choo said. “He was the moral center of the group. He was unflappable and calm, no matter what was going on.”

In January the U.S. Senate confirmed Murthy’s appointment as the nation’s 19th surgeon general. His nomination by President Barack Obama had been on hold for more than a year due to opposition from Republicans and the National Rifle Association. His offense? A 2012 tweet on gun violence: “Tired of politicians playing politics w/guns, putting lives at risk b/c they’re scared of NRA. Guns are a health care issue.” He was also criticized for his youth and relative inexperience—he is 38. Yet support came from more than 100 national health organizations, including the American College of Physicians, the American Public Health Association, the American Cancer Society, and the Association of American Medical Colleges, as well as from two former Surgeons General.

Anyone at the med school between the fall of 1998, when Murthy matriculated, and 2003, when he graduated, probably has a story about him. As one student of that time put it, “Everyone knows Vivek.” He arrived at Yale with a record of accomplishment dating back to his high school days in Florida, when he got his classmates to mentor middle school students. As a Harvard undergrad, he launched a peer education program that trained American college students to teach students in India about HIV/AIDS. He also started a community health partnership in rural India that trained young women to be health educators and basic health care providers. During his first year as a med student, he was profiled in The Chronicle of Philanthropy for his efforts.

When he spoke, classmates said, others paid attention. “He would often listen quietly to a discussion of a controversial topic,” former class president Andrew D. Norden, M.D. ’02, M.P.H., now a neurologist in Boston, wrote in an email. “He would wait until the opposing viewpoints were on the table and finally make a critical comment that recognized an understanding of each position, and suggest a thoughtful path to resolution. He frequently got the last word in because once he had spoken, everyone could be seen nodding in agreement.”

Auguste H. Fortin VI, M.D., M.P.H., associate professor of medicine, recalled Murthy returning from a visit to the
University of California, San Francisco (UCSF), where he’d sat in on “The Healer’s Art,” a class that explores the human dimensions of medicine, taught by Rachel Naomi Remen, M.D. “He came back very excited and enthusiastic,” Fortin said. “He said we have to do this at Yale. He recognized that there was a need for students to talk about meaning in medicine.”

Murthy worked with Fortin and Margaret J. Bia, M.D., FW ’78, professor of medicine, to establish The Healer’s Art, a small-group elective now in its 15th year. Over four weeks, students discuss such topics as what it means to be a healer, what it’s like to lose a patient, and how to avoid burnout. Yale was the first medical school after UCSF to offer the course, and now more than 70 medical schools have followed suit. “I think we have Vivek to thank for that,” Fortin said.

After graduating from Yale, Murthy founded TrialNetworks, a social networking platform for clinical trials that enhance communication, collaboration, and overall efficiency. During the 2008 presidential campaign Murthy and colleagues founded Doctors for Obama. After the election, the group became Doctors for America, a grassroots organization of doctors and medical students working to improve access to health care. In 2011, President Obama appointed Murthy to the national Advisory Group on Prevention, Health Promotion, and Integrative and Public Health. The following year Murthy served as co-chair of the health care advisory committee for Obama’s re-election campaign.

During the more than year-long wait for a vote on his nomination, Murthy remained optimistic. And when he returned to Yale as the medical school’s Commencement speaker last year, students wore decals on their gowns that read “Yale Stands with Vivek.”

“Those of us closest to Vivek during this time maintained our optimism,” said one of his mentors, Howard P. Forman, M.D., professor of diagnostic radiology, of economics, of management, and of public health (health policy), and director of the M.D./M.B.A. Program. “We were very certain there was a window of opportunity, and that his many supporters, including those in the White House, would use that to the best advantage. Despite the rhetoric before the confirmation, I think that he is a thoughtful, nonpartisan, very deliberate physician who sees the role of the Surgeon General as an amazing opportunity to be the nation’s leading spokesperson on health and public health issues.”

“Vivek does everything so selflessly and is one of the brightest, off-the-charts-smartest people that I know,” said Choo. “We hit a home run getting Vivek into this role.”

—John Curtis

Defending the “good” bacteria
When faced with dangerous bacteria like Salmonella, the gut releases inflammatory molecules to destroy the invaders. That immune response is so nonspecific that in theory at least, it should kill indiscriminately. Yet the many healthful and even beneficial bacteria that reside in the gut seem unaffected by the friendly fire. So-called commensal strains persist for years through one inflammatory event after another.

A group of researchers led by Andrew Goodman, Ph.D., assistant professor of microbiology and a member of the Microbial Sciences Institute at West Campus, recently figured out why: many of the prominent and stable commensals wield a protein that fends off the antimicrobial peptides (AMPs) that the host uses to attack the invaders. The team reported in Science in January that the protein LpxF serves a little like an umbrella, allowing bacteria to readily shed AMPs at concentrations thousands of times higher than those that kill pathogens.

The discovery, said Goodman, opens the door for researchers to learn “not only how the host tolerates the microbiome—which is well studied—but how the microbiome tolerates the host.”

LpxF works by removing a negatively charged phosphate group from the bacterial surface. That keeps the positively