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PROFILE: ANTHONY FAUCI

The View From The Top of the HIV/AIDS World

Science spends a day with immunologist and clinician Anthony Fauci, head of the single largest funder of HIV/AIDS research

Anthony Fauci runs a marathon every day.

Fauci heads the single largest funder of HIV/AIDS research, the U.S. National Institute of Allergy and Infectious Diseases (NIAID), and the job requires an early start and a late finish. Part of the U.S. National Institutes of Health (NIH), NIAID will dole out nearly one-third of its \$4.5 billion budget to HIV/AIDS researchers in 2012—and Fauci's imprimatur is visible at every level. An immunologist who made fundamental findings about HIV's destructive ways, Fauci was also a key architect of the President's Emergency Plan for AIDS Relief that

provides anti-HIV drugs to millions of the world's poor.

NIAID funds a wide portfolio of research, and controversies repeatedly erupt around Fauci. A native of Brooklyn, New York, who studied at a Jesuit college, Fauci, 71, enjoys a good debate, and this past year alone has found him at the center of hot topics such as mutant forms of the H5N1 bird flu virus that scientists engineered to transmit in mammals and a mouse retrovirus erroneously linked to chronic fatigue syndrome. He is just as comfortable doing rounds with patients as he is testifying to

Front runner. Anthony Fauci has headed NIAID for 28 years and tries to fit in a run every day to let off steam.

Congress. He's a go-to source for journalists, and photos that clutter one office wall show Fauci hobnobbing with the likes of presidents Bill Clinton, George H. W. Bush, and George W. Bush, and Mother Teresa, Elizabeth Taylor, and rock star Bono.

Fauci's critics say he is an obsessive-compulsive autocrat with a serious limelight addiction. But in his 28 years occupying the NIAID director's office on the seventh floor of NIH's Building 31 in Bethesda, Maryland, no serious charge against him has stuck—and no one has challenged his commitment.

On 10 May, reporting for the special issue HIV/AIDS in America (see p. 167), *Science* jogged alongside Fauci for the day.

6:30 a.m. Fauci answers the flood of e-mails that poured in overnight, reads briefing material, and puts finishing touches on a few papers. It's the only peace he'll have all day.

8:15 a.m. A dash to the first-floor cafeteria for a croissant egg sandwich includes brief chats with secretaries, janitors, cashiers, and scientists—but no stopping. "Things are going to seem kind of hectic, because that's my life," he says. "We don't waste time here. I'm a bit of a grump."

8:22 a.m. Back in his office, Fauci's three assistants bounce in and out, sitcom fashion. He swears like a scientist, and his rapid-fire patter mixes the demanding and caustic with a dollop of charm. Boston on the 22nd for a *New England Journal of Medicine* panel! NIH Director Francis Collins at *exactly* 6 p.m. to talk about the H5N1 thing! Get the staffer on the phone who attached a three-page memo in an e-mail! "You violated Fauci rule number 26," he barks at the staffer over his speaker phone. "No e-mail longer than one page!" But he likes the memo, which describes a new independent report about NIAID.

"We couldn't look better if we wrote it ourselves," Fauci crows. "Don't ever send me more than a one-page memo again."

He's kidding. But he's not.

8:51 a.m. Fauci speed-walks up the hill to the NIH Clinical Center to see patients, which he does 3 days a week. The center recently started treating difficult HIV/AIDS cases from the local community. "It's like the '80s again," he says. "It's great for the fellows." He first sees a woman, 51, who presented with zero CD4 cells—normal is above 600, and 200 is the cutoff for AIDS—

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and a skin rash diagnosed elsewhere as cutaneous T-cell lymphoma. “When they told me I had full-blown AIDS, that hurt me,” says the woman, explaining that she had been diagnosed 10 years earlier. “I said to the doctor, ‘What you telling me? I’m going to die?’ And he said, ‘Yeah.’” Clinical Center doctors started her on antiretroviral treatment, her rash resolved, and she now has a CD4 count of 122. Before leaving, Fauci notes that she used to live in Brooklyn. “Bensonhurst,” she says. “I was born in Bensonhurst!” bellows Fauci, whose Brooklyn accent remains undiluted. “It’s inexcusable for somebody to present here with zero CD4s,” he says as he exits. She is hardly an anomaly.

9:06 a.m. Fauci visits five more patients who have been close to the brink: lymphoma in the stomach, acute renal failure, blinding retinopathy caused by cytomegalovirus. One patient is a nurse who, apparently in denial about his disease, had only 23 CD4s when he presented. Another is a wheelchair-bound man who had a rare case of TB that spread to his knee and an even-rarer complication called chylothorax after starting on antiretroviral drugs. Lymph fluid drained from his lungs filled two 1-liter bottles. “You almost never see this,” Fauci said. “This is the 1940s.”

9:43 a.m. Fauci checks in with his wife, Christine Grady, chief of the Clinical Center’s Department of Bioethics. On the speed walk back down the hill to Building 31, he’s sorting out the bioethical dilemma he’s just witnessed in the clinic. “It’s unconscionable in the capital of our nation,” Fauci says. “What’s going on here?”

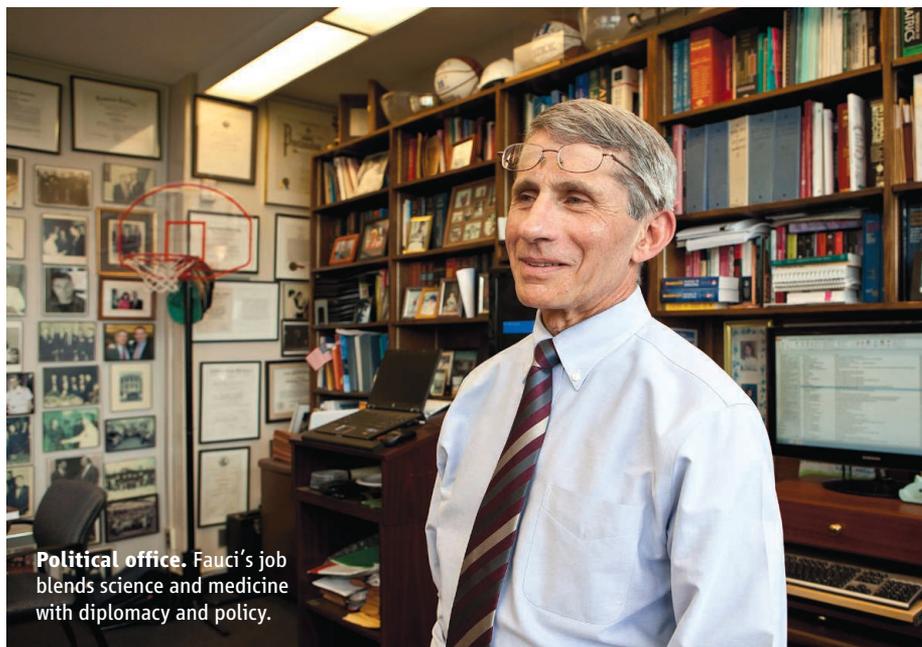
10:02 a.m. Fauci’s inner circle meets for a daily powwow about his schedule, including a commencement address at the University of Miami, an Institute of Medicine meeting on H5N1, and a request to sit on a panel about a revival of the AIDS play *The Normal Heart*, which was written by pioneering AIDS activist and Fauci-basher-turned-best-friend-forever Larry Kramer. “I said I’d only participate if he had De Niro play me,” Fauci says.

11:07 a.m. “Hugh!” Fauci hollers, calling for his top deputy, the mild-mannered Hugh Auchincloss Jr. Fauci wants to make sure the ExCom—the executive committee meeting later today with his division directors—runs like clockwork. “I have a phenomenal impatience for people who go over their allotted time,” Fauci says. One of his three adult daughters phones, and he speaks to her as though time does not exist.

12:00 p.m. Fauci changes into a T-shirt, shorts, and sneakers and heads off campus

for a 5-kilometer run, which is followed by a quick shower and a stop at the cafeteria for a yogurt and hummus with pretzels. He eats lunch at his desk, which is followed by a meeting with an investigator in his lab who updates him about cutting-edge HIV cure research.

1:47 p.m. “Patty!” Fauci, reviewing his schedule for his commencement talk in Miami, is pissed that he has to kill time at his beachfront hotel. “I have 5 hours of doing nothing,” he complains to Patricia Conrad, his right-hand woman, who formerly worked at the White House. He then puts finishing touches on slides for the opening plenary that he will give at the 19th International AIDS Conference. Fauci may be the only presenter at the meeting who has finished preparing for his talk 2 months early.



Political office. Fauci’s job blends science and medicine with diplomacy and policy.

3:30 p.m. The ExCom gathers 30 of NIAID’s top brass in a conference room, and the bland review of budgetary issues segues into a spicy discussion about H5N1 and the ripple effects of the bird flu controversy. NIAID funds studies of many other pathogens, and Fauci asks whether it should continue to support any “gain-of-function” experiments that aim to better understand how a bug transmits or causes disease. “We have to get this aired out,” Fauci says. “I would love to do this in a very transparent way.”

5:00 p.m. At a gathering of Fauci’s own lab members, a researcher reviews a study of a promising experimental hepatitis C drug. Fauci is wowed by possibilities: There are three times as many people in the United States infected with the hepatitis C virus as

with HIV, and the new drugs have little toxicity and can outright cure many infections.

6:01 p.m. NIH Director Collins summons Fauci to his office for a private meeting to discuss H5N1.

6:30 p.m. Two high school girls interview Fauci about global ethics. “What’s the most important issue you are now facing?” one of the girls asks. “My hope is that in the next 5 years, if we as a nation and a world have the political will to implement what we already have, we’re going to probably see a dramatic turnaround in the AIDS epidemic,” he says. The girls notice a photo of Fauci with Paul Farmer, the Harvard clinician widely celebrated for his HIV/AIDS work in Haiti. “What was it like meeting him?” one of the awestruck girls asks. Fauci, amused, dryly says that they met in

the late 1980s when he spoke to Farmer’s medical school class at Harvard. When they ask him to name his favorite person, he graciously embraces their exuberance and offers that Farmer is one of them. “He really walks the walk,” says the man who really runs the run.

7:12 p.m. A network television producer wants to preinterview Fauci for a possible appearance early tomorrow morning. “She said she wants you to send her home with something solid,” Conrad says. Fauci phones the producer, who has a shaky grasp about HIV/AIDS and needs a 101 lesson, which he obligingly gives. By the time he hangs up at 7:30, he’s spent. “It’s going to be one of those days tomorrow,” he says.

—JON COHEN