JCI The Journal of Clinical Investigation

2007 Association of American Physicians George M. Kober Medal: *Introduction of Anthony S. Fauci, MD*

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J Clin Invest. 2007;117(10):3131-3135. https://doi.org/10.1172/JCl33692.

AAP Kober Medal

President Ausiello, members and guests of the association: I am very proud to have the honor to introduce this year's George M. Kober medalist, my good friend Anthony S. Fauci, MD. George Martin Kober lived from 1850 to 1931 and was very active in the Association of American Physicians (AAP), serving as secretary from 1909 to 1917. From ". . . all accounts [he] . . . had great strength of character, loyalty both to persons and principles, together with humility and humanity of high degree" (1). This year's medalist has all these qualities. Anthony Stephen Fauci — Tony — was born on Christmas Eve, 1940. Headlines in the New York Times on that cool and cloudy winter day proclaimed "Churchill Bids Italy Oust Mussolini; Greeks Take Another Coastal Town; Germans Rain Bombs on Manchester." One article touted "Turkey and Fixins in Home only \$6.40." Roots Tony Fauci's family came from Italy. His maternal grandparents grew up in Naples. His maternal grandfather, Giovanni Abys, was an artist who painted landscapes and portraits, designed labels for commercial products such as cans of olive oil, and did illustrations for Italian magazines. Tony's maternal grandmother, Raffaela Trematerra, was a seamstress. Tony's paternal grandparents were from Sciacca, Sicily. His grandfather, Antonino Fauci, was from a family who ran a hot springs spa. In Sciacca, [...]

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Roots

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Tony's paternal grandparents were from Sciacca, Sicily. His grandfather, Antonino Fauci, was from a family who ran a hot springs spa. In Sciacca, he met and married Tony's paternal grandmother, Coligera Guardino.

Both sets of grandparents immigrated to New York City via Ellis Island at the turn of the twentieth century and initially settled in lower Manhattan's Little Italy, where Tony's mom, Eugenia Abys, and dad, Stephen Fauci, were born. Later, both families

This article is adapted from a presentation at the ASCI/AAP Joint Meeting, April 13–15, 2007, in Chicago, Illinois, USA.

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Citation for this article: *J. Clin. Invest.* **117**:3131–3135 (2007). doi:10.1172/JCI33692.

moved independently of each other to the Bensonhurst section of Brooklyn. Eugenia and Stephen met in eighth grade, attended high school together, and were married one year after graduation. Tony's dad attended Columbia University and became a pharmacist while his mom attended Hunter College. They had two children, first a daughter, Denise, and then a son, Anthony Stephen, who was born in Brooklyn Hospital.

The Faucis ran a neighborhood pharmacy at 13th Avenue and 83rd Street and lived in an apartment above (Figure 1). The whole family helped out in the business — his dad working in the back of the pharmacy while his mother and sister operated the register. Tony delivered prescriptions from the time he was old enough to ride a bike. He was raised in a Catholic tradition, receiving his first communion at age 7 and confirmation at age 12. Strong family relationships were an important part of Tony's upbringing.

Education

Tony was tops in his class at Our Lady of Guadalupe elementary school. He always

excelled academically, but he was not a nerd. In the 1950s Bensonhurst was a working-class Brooklyn neighborhood for Italians and Jews. You just didn't talk about your academic achievements. Tony became streetwise, which later would serve him well. He was a strong athlete, playing basketball from fall to spring and baseball from spring to fall at Dyker Heights Park. Tony rooted for the New York Yankees, and his early heroes included Joe DiMaggio and Mickey Mantle. This made him something of an outcast among his friends, who were Brooklyn Dodger fans.

In 1958, he entered Regis High School, a free school on the Upper East Side of Manhattan, with a special mission of educating sons of Catholic immigrants in the Jesuit tradition. The Jesuit philosophy, "To be men for others," was an important principle that ran through Tony's education. His high school training emphasized languages and the classics. He took four years of Latin, three of Greek, and two of French. His teachers drilled into him two ideals — precision of thought and economy of expres-



Figure 1
Fauci family pharmacy and apartment in Brooklyn, New York (13th Avenue and 83rd Street).





Figure 2
Anthony S. Fauci (circled) as captain of the Regis High School basketball team circa 1958.

sion, qualities he is known for today and instills in the people who work with him.

He continued to pursue his interest in athletics and captained the basketball team (Figure 2). Due to short stature, his career as a basketball player ended early.

At Regis High, it was an accepted fact that if you wanted to become a doctor you went to the College of the Holy Cross. Tony graduated Regis High School among the top in his class and in 1958 entered Holy Cross in Worcester, Massachusetts, where the strong Jesuit influence continued. His undergraduate work mixed classics and philosophy with pre-med courses. This broad academic background groomed the future Dr. Fauci for his destiny as an outstanding physician, scientist, educator, humanitarian, and public health leader.

During college summers, Tony worked on construction crews. Before his final year at Holy Cross he labored on a crew building a new library at Cornell Medical College at 69th Street and York Avenue. At the medical school's centennial celebration in April 1998 he recalled, "On lunch break when the crew were eating their hero sandwiches and making catcalls to nurses . . . I snuck into the auditorium to take a peek. I got goose bumps as I entered, looked around the empty room and imagined what it would be like to attend this extraordinary institution. After a few minutes at the doorway, a guard came and politely told me to leave since my dirty boots were soiling the floor. I looked at him and said proudly that I would be attending this institution a year from now. He laughed and said, 'Right kid, and next year I am going to be Police Commissioner'" (2).

In 1962 Tony Fauci did enter Cornell Medical College. He liked Cornell. Each day offered an opportunity to learn something new. He graduated in 1966, first in his class, and pursued house staff training in internal medicine at the New York Hospital (Figure 3).

NIH science

In 1966, during the Vietnam War, he was called to serve. He left New York City for the National Institutes of Health (NIH) to join what was affectionately called the "Yellow Berets" (3). He served his military obligation in the Public Health Service at NIH. He was a Clinical Associate in the program of Sheldon M. Wolff, MD, the Chief of the

Laboratory of Clinical Investigation and Clinical Director of the National Institute of Allergy and Infectious Diseases (NIAID) (Figure 4). It was during his fellowship at NIH that he completed his training in infectious diseases and in allergy/immunology and began his long, close clinical research partnership and friendship with Wolff.

From 1970 to 1971 he left the NIH to serve as Chief Resident at the New York Hospital Cornell Medical Center. His reputation as Chief Resident was legendary. Many of his house staff and medical students at Cornell became his personal friends, and Tony later recruited several of them to important positions at NIH.

Tony Fauci returned to NIH in July 1971 as a Senior Investigator in the Laboratory of Clinical Investigation and rapidly passed his clinical board examinations in internal medicine, infectious diseases, and allergy/immunology, with top scores. He then began his extensive and uninterrupted career in public service, serving continuously in the government.

I first met Tony in July 1972. He had the lab across the hall from where I worked as a clinical associate. I remember that day well. The two-module lab he entered was a dirty mess with missing equipment. He was quite rattled by what he saw, and I offered to help him clean it up. We have been friends ever since.

That small lab was where Tony's career as a clinical investigator really flourished. He rapidly assembled a strong team focusing on immune regulation. His early studies included demonstrating the therapeutic effect of cyclophosphamide on Wegener's granulomatosis and other vasculitides (4, 5). In 1980, Tony Fauci was made Chief of the new Laboratory of Immunoregulation. A 1985 Stanford University Arthritis Center Survey of the American Rheumatism Association ranked Dr. Fauci's work on



Figure 3
The New York Hospital house staff, 1966–1967 (Fauci circled).





Figure 4The Laboratory of Clinical Investigation, NIAID, NIH (Fauci and Wolff circled and enlarged, left and right, respectively).

the treatment of polyarteritis nodosa and Wegener's granulomatosis among the most important advances in patient management in rheumatology over the previous 20 years (6). And Dr. Fauci was not even a rheumatologist!

A transforming year for the field of infectious diseases — 1981 — had extraordinary impact on global health and Tony Fauci's career. I remember well when the first cases of gay men with unusual opportunistic infections were reported that summer (7, 8). Tony came up to me in the corridor, quite animated, saying how he believed this new disease had the potential to explode into a worldwide catastrophe. He quickly decided to shift the focus of his laboratory to study what would soon be called the Acquired Immunodeficiency Syndrome, or AIDS, a term he helped coin. And that was the beginning of his now historic studies on the pathophysiology of AIDS.

Tony Fauci's laboratory made major observations delineating a model of HIV pathogenesis, and his group's publications in the mid-1980s clearly established what is now considered to be the hallmark functional defect of CD4⁺ T cells in HIV-infected individuals, a defect in responsiveness to recall antigens. His 1988 publication in *Science* on the pathogenesis of HIV (9) was the most cited paper in medicine in 1989 (10). His group's publications in the early 1990s provided the scientific rationale for the early and aggressive suppression of HIV

replication with combination antiretroviral agents. His *Nature* paper in 1993 (11) was the most cited paper in AIDS research from 1993 to 1995 (12). Subsequent papers, considered by many as classics in the field, delineated the link between host-virus interactions and potential targets for therapy (13) and the complex network of host factors involved in the regulation of HIV expression (14). Based on these and subsequent publications, a 2003 Institute

for Scientific Information study indicated that for the 20-year period from 1983 to 2002, Tony Fauci was the thirteenth most cited scientist among the 2.5 to 3 million authors in all disciplines (15). From 1996 to 2006, he was the tenth most cited HIV/ AIDS researcher in the world. Currently Tony has over 1,100 publications.

In addition to all these scientific accomplishments, Tony is first and foremost an outstanding physician and teacher of clinical medicine. His clinical rounds are legendary. I say *are* because he still conducts them regularly. He is demanding of his staff but always gives back by sharing his wealth of clinical knowledge, constantly educating those around him. Every patient would love to have Dr. Fauci as their doctor. Every medical student and house officer would love to have Tony Fauci as their attending.

Over the years, 108 fellows joined Dr. Fauci's laboratory and have become members of his academic family. Many have become outstanding clinical investigators in their own right, and 7 have become members of the AAP.

Tony Fauci's accomplishments as a scientist and a clinician have brought him remarkable professional recognition. Since 1978 he has held 33 visiting professorships, given 490 major named lectureships, and received 31 honorary degrees and 124 awards and honors. He has served on 41 editorial boards, and for the past 25 years he has been on the editorial board of *Harrison's Principles of Internal Medicine*. He



Figure 5Protest in Rockville, Maryland, at the Parklawn Building (Food and Drug Administration), October 11, 1988.





Figure 6
Dr. Fauci shooting hoops after hours with James Ashton (left).

has been elected to the most prestigious societies in the United States and abroad. He has been a very active member of several societies, serving as President of the American Federation for Clinical Research and as a Council Member of the Institute of Medicine. In addition, for a 12-year period he held offices in this association, serving as Recorder, Councilor, Vice President, and President.

Administration

In 1984, NIH Director James B. Wyngaarden, MD, appointed Tony Fauci to be the fifth Director of NIAID. It was a perfect example of the right person being appointed to the right position at the right time. Under his direction, the funding for NIAID increased from about \$320 million in 1984 to about \$4.6 billion today. The size of NIAID relative to the other NIH institutes has grown from sixth to the second largest. But much more importantly, Tony has led the institute and the country through the incredible series of events his predecessor, NIAID Director Richard Krause, MD, described in his book, The Restless Tide: The Persistent Challenge of the Microbial World (16).

Politician

Tony's experiences as the streetwise kid growing up in Brooklyn undoubtedly helped him weather the storms of activist groups (Figure 5). He was the target of their criticism and even burned in effigy. Instead of being angry, Tony noted the pain of the people in these activist groups and approached them as a physician approaches a suffering patient. He began a dialogue that lasted for many years. Over time he won their trust and respect.

Tony is a great communicator. He has comforted the nation by appearing repeatedly on national television to explain one far-reaching crisis after another related to emerging and reemerging infectious diseases. On issues from AIDS, to anthrax, to SARS, to influenza, Tony provides confident, knowledgeable, realistic, and reassuring advice. He has earned the respect and trust of politicians on both sides of the aisle. He has advised every President from Ronald Reagan to the current George Bush. His knowledge, clarity, and frankness have made him so effective.

Personal traits

I had the privilege of working with Tony from 1985 to 1994 as his Scientific Director. Those were exciting years. Here is what I can tell you about Tony Fauci. Yes, he is very hard working. He is the best observer I've ever known. Nothing escapes him, nothing. He has a remarkable ability to contain his emotions.

Tony Fauci works hard and plays hard. He exercises about an hour every day. He enjoys fishing, occasional tennis, and cooking. To relieve stress in his office, he shoots hoops in a toy-sized net (Figure 6). One day as we were fishing on the Potomac River, he got so excited about a fish on the line that he flipped over our canoe. We survived, but I don't believe he caught that fish.

I would describe Tony Fauci as a realistic optimist. He demands perfection and that is good. He delegates authority and responsibility effectively. He is very sensitive and loyal to his staff. He can keep his mouth shut. He never tells a secret, ever. He is a fabulous doctor and his patients adore him. When he talks he knows what he is talking about. He is wise. He cares about all people. He knows the names of the janitors, elevator operators, and animal caretakers. They all love and respect Tony

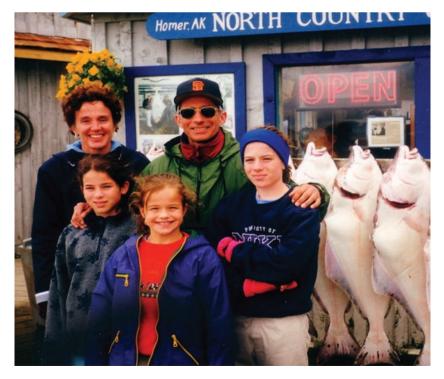


Figure 7Fauci family picture in Alaska after halibut fishing. Front (left to right): Megan, Allison, and Jennifer. Back: Christine and Tony.



Fauci because he talks with them, never at them. Tony Fauci is the kind of person you know you can call upon whenever you have a need, no matter what that need is.

And where do all these wonderful traits come from? I believe they come from his strong upbringing that instilled the importance of family. And that is reflected by his beautiful family. Tony met Christine Grady when she was a nurse at the NIH Clinical Center in 1983. They married two years later. Christine has gone on to build her own important career as one of the leading bioethicists in the world specializing on issues related to clinical research.

Christine and Tony have three fabulous children, Jennifer Ellen, a Harvard undergraduate, Megan Elizabeth, about to enter college, and Alison Christine, currently in high school (Figure 7). Tony is phenomenally devoted and especially proud of his family, whom, in my opinion, gives him more satisfaction than anything else in life.

The AAP has made an incredible choice this year in selecting Anthony S. Fauci as

their George M. Kober medalist. He is an exceptionally dedicated and talented physician, scientist, educator, administrator, spokesperson, politician, and advisor to our Congress and Presidents. His life's work will profoundly affect generations to come. He is, quite simply, an extraordinary man. It is for all these reasons that I am so honored that Tony Fauci asked me to introduce him as the 2007 Kober Medalist, the highest award of the Association. Please join me in saluting Anthony S. Fauci, MD, on the occasion of his receiving this very prestigious award.

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