The fourth and final installment of *Tufts Inventors, Adventurers and Other Pioneers* looks at the last 40 years, which have seen vast advances in the fields of medicine and technology as well as numerous changes to the way we live. Throughout, members of the Tufts’ community have been at the forefront. While space does not permit us to include all worthy candidates, we hope our choices fairly reflect the pioneering spirit and innovative thinking that strives at Tufts and will continue to do so in the 21st century.

For research on Tufts history, I am indebted to records at the Office of Digital Collections and Archives and the Health Sciences Library, and to Russell Miller’s Light on the Hill. All images, unless noted, are courtesy of the Office of Digital Collections and Archives.—Michele Gouveia
Healthcare For All

Tufts professor H. Jack Geiger had a dream. The lifelong human rights activist envisioned a place where a combination of primary care and community-based public health services could serve to lift neighborhoods out of poverty. His dream became a reality with the first community healthcare center model in America.

Geiger’s concerns for the poor began early on. While attending medical school, he was awarded a Rockefeller Foundation Scholarship to study the differences between healthcare centers in urban and rural South Africa. The situations he observed there were to influence his life’s work. Returning to America, he drew up plans for a medical school–sponsored community health center as part of his senior thesis. After graduating in 1958, he interned at Boston City Hospital while receiving a master’s degree in epidemiology from Harvard’s School of Public Health.

Joining the faculty at Tufts Medical School in 1965 as an associate professor, Geiger set about convincing the school to sponsor an urban health center in Boston’s Columbia Point neighborhood. Later that year, Geiger, along with Dr. Count D. Gibson Jr., developed the Tufts Comprehensive Community Health Action Program under the auspices of the Tufts Department of Preventive Medicine. The project was a success. Geiger’s belief that health services could intervene in the “poverty cycle of low income, low education and ill health,” proved correct. Yet Geiger wasn’t willing to stop there. He wanted to bring his model to one of the worst areas in the country, where a health center could be crucial to survival.

Bolivar County, in the Delta area of Mississippi in the mid-1960s, was one of the poorest sections of the country. The largely African-American population lived in horrible conditions, with infant mortality rates double those of whites and where 75 percent of the households were without running water. The task was daunting. Unlike what they found in the small Columbia Point area, Geiger and his team had to contend with helping more than 14,000 people in an area of 400 square miles.

Geiger was determined. In 1966 he and a team from Tufts moved to Mississippi to set up shop. The center garnered national attention, and Geiger eventually oversaw the establishment of 600 similar centers across the country. Upon his return to Massachusetts, he started an academic program in community-oriented primary care at Tufts.

Currently the Arthur C. Logan Professor of Community Medicine at CUNY Medical School, Geiger continues to work on human rights issues and fight for equal healthcare. Geiger, the founder of one of the earliest chapters of the Congress of Racial Equality, was honored in 2001 with one of UC Berkeley’s Public Health Heroes Awards for his fight for human rights.

Problem Solver

Transplants have become a viable part of medical treatment. Yet for years, doctors were unable to bypass the human immune center and make transplants a reality. Tufts professor Robert S. Schwartz solved the problem.

He was a hematologist at Tufts in 1958 when he was recruited to work on discovering immunosuppressive drugs. Schwartz had to begin at square one. Having never worked with laboratory animals before, he had to ask the simplest of questions, like “how do you get the rabbit out of the cage?”

Then a simple twist of fate put him on the right path. Requesting samples of methotrexate and mercaptopurine from their manufacturers, Schwartz received only mercaptopurine. He later discovered that rabbits are immune to methotrexate, so his results might have been permanently thwarted if he hadn’t received mercaptopurine.

Late one night, after months of work, he returned to his lab to discover that the mercaptopurine had bypassed the rabbits’ immune system without side effects. He published his findings and the news flashed through the medical community like a lightning bolt. Soon many others joined in the work.

He went on to conduct similar studies with the drug azathioprine and published reports of its effectiveness, this time on humans as well as rabbits. In 1972 he was named director of the Division of Hematology/Oncology at the New England Medical Center. Today he is an editor of the New England Journal of Medicine.

In 2000, Schwartz was awarded the Transplantation Society’s Medawar Prize, the field’s highest honor.