PRACTICAL IMPLICATIONS

SCHAFFNER HAS SPENT DECADES INVESTIGATING PARADIGM SHIFTS IN MEDICINE.

BY SHARON TREGASKIS

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Schaffner, eminent philosopher of medicine, recalls taking classes with med students he was also teaching.

Fifty years ago, Kenneth Schaffner was chair of Pitt's Department of History and Philosophy of Science, investigating logic problems in biomedicine. At the same time, renowned Pitt Med diagnostician Jack Myers was heading up a team developing the first-generation AI and computer-based diagnostic tool, Internist I.

The two hit it off at a conference, then teamed up to fine-tune how Internist diagnosed patients with symptoms of multiple diseases. They developed the course Logic Problem Solving in Clinical Diagnosis for second-year medical students that featured a mix of conventional diagnostic tactics of the time and analyses of the results Internist produced.

There was only one problem, which was that Schaffner, whose PhD is in philosophy from Columbia University, struggled to keep pace with Myers and the students.

"So I made the arrangements to do two years of medical education," says Schaffner, now 83 and a Distinguished University Professor Emeritus. After starting courses at Pitt Med in 1980, Schaffner ended up completing an MD in 1986.

For the past four decades, Schaffner has grappled with profound paradigm shifts in medicine by expanding his work on how disease states are understood, digging into the benefits and risks of using nematodes and other model organisms to understand human health and disease and seeking insights from genetic discoveries to make sense of the interplay between nature and nurture. In 2016, Oxford University Press published his book "Behaving: What's Genetic, What's Not, and Why Should We Care?" His sequel is in progress.

Paul Appelbaum was a Pitt assistant professor of psychiatry when he met Schaffner in 1980. Still a clinical psychiatrist and now director of an ethics center at Columbia, Appelbaum has stayed in touch.

"Ken's thinking about diagnosis and diagnostic categories, including in psychiatry, and his thinking about genetics—especially how we should be thinking about the genetics of behavior—are real contributions."

As cofounding director of Pitt's Center for Medical Ethics—now the Center for Bioethics and Health Law—Schaffner and his colleagues formed a multidisciplinary brain trust for clinical consultations and to drive research. Their training programs in philosophical and practical approaches to bioethics for medical students, researchers and health care professionals continue to this day.

Lisa Parker, a PhD, the Dickie, McCamey & Chilcote Professor of Bioethics and professor of human genetics in the School of Public Health, now directs the center. Schaffner sat on her Pitt dissertation committee in the late 1980s.

"Ken really understands and analyzes the scientific methods, not just the output of the science," she says. "He looks at an earlier stage—how the methods within the science affect its findings and then how those findings affect people."

Consider Schaffner's analyses of paradigm shifts in immunology and their implications for early clinical trials in transplant medicine. Pitt transplant pioneer Thomas Starzl reached out after reading Schaffner's essay on a problem with institutional review board standards to safeguard human subjects in clinical trials and how it could impede discoveries emerging in transplant medicine. The pair wound up guest-editing a special issue in Theoretical Medicine and Bioethics on immunological tolerance.

Colleagues and trainees alike credit Schaffner's generosity with introductions and collaborations. Thomas Cunningham, a PhD who is now a director of clinical bioethics at Kaiser Permanente West Los Angeles Medical Center, notes Schaffner connected him to Robert Arnold, Distinguished Professor of Medicine and director of Pitt's Institute for Doctor-Patient Communication. The introduction yielded an ongoing partnership to understand and improve how clinicians work with surrogate decision makers for patients in intensive care.

"Together, Ken and Bob showed me that if you want to talk about medical reasoning, talk about things that are familiar and happen a lot," says Cunningham.

"In disagreement, we could come back to focus on what we know, what we don't know, and how people reason about hard choices."

—Rachel Bittner contributed to this article.