

Professor approaches science with infectious enthusiasm

By Julia Zhou
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Walk into Harvey Rubin's office, and the first thing he'll do is ask if you recognize the two men in the poster on his wall.

The men are the Kennedy brothers, John and Robert, and Rubin can talk passionately and knowledgeably about the Cuban missile crisis, Kennedy's leadership style and his assassination.

"I've probably read every one of" Kennedy's biographies, Rubin says.

But history isn't his department, nor is political science. Rubin is a professor of Infectious Diseases in the Medical School.

He is also the associate dean of student affairs for the Medical School, chair of the committee on the faculty and director of the Institute for Strategic Threat Analysis and Response, the University's terrorism research umbrella organization.

As if all that weren't enough, Rubin also has a secondary faculty appointment in the Department of Computer and Information Science.

Working across, between and around disciplines is nothing new to Rubin. When younger, "I was never interested in medicine," he says with a grin.

As a child in Flatbush, Brooklyn, the self-described "painfully shy" Rubin found himself drawn to theoretical physics and mathematics, which is what he majored in as an undergraduate at the State University of New York at Stony Brook.

"I never took any bio in college," Rubin says. "It was physics and math all the way."

After graduating in 1969, Rubin came to Penn to pursue a Ph.D. But there was more than physics on his mind -- the draft lottery for service in Vietnam was held that year.

Based on his age and health, Rubin would have been drafted had his birth date been one of the first picked out of the drum.

"It just shows you how much life is chance," Rubin says. But luckily, he says, his number was one of the last.

Chance could also be held responsible for the drastic change in his career. That same year, Rubin happened to attend a seminar on the biological applications of physics -- and was fascinated.

More than 30 years later, he can still describe in loving detail what that seminar was about. Statistical models of chain molecules, he says enthusiastically.

Almost on a whim, Rubin applied to Columbia's College of Physicians and Surgeons. He didn't want to tell anyone about his sudden interest in medicine, so he kept his application a secret until he was accepted to the Class of 1976.

Rubin spent the next few years between Penn and Columbia, working on his Ph.D. and his M.D. simultaneously. Along the way, he found that he loved medicine and helping people.

At the time, M.D-Ph.D programs were a new concept.

"I like that, being on the edge. I mean, what the heck, right?" Rubin says.

"If you try to put people in a pigeonhole, it doesn't work," he adds.

His philosophy towards work is "trying to find the intersections" among his many different occupations.

ISTAR, one of Rubin's more recent projects, builds off of that idea. The organization incorporates faculty from all 12 of Penn's schools, seeking to encourage collaboration between different disciplines.

Overseeing the institute is just one small part of Rubin's typical workday.

Since completing his degrees, he has been a professor, a clinical doctor, a researcher and more, all at once.

Rubin's days start at 5 a.m. as he shuttles between meetings, patients, classrooms and conference calls. Lunch is a handful of candy corn grabbed en route from one of his offices to the other.

"I'm having a blast," says Rubin, striding down the halls of the Johnson Pavilion at a New Yorker's quick clip, white lab coat in one hand and candy corn in the other.

But if his pager rings with his wife's number, everything gets dropped to return her call.

"He has, like, 10 jobs and he still manages to pick up his kids from school every day," says Michael Buckstein, one of the dozen or so Ph.D students who work in Rubin's laboratory researching tuberculosis in its dormant state.

Another Ph.D. student, Andrew Avarbock, says, "He treats us like we're his kids, he invites us to his house for barbecue... students have even lived in Rubin's house."

Rubin's weekends are devoted to squash and homework with his two sons, Matt, 10, and Ben, 8.

At the end of the day, "I always try to set aside time to read something irrelevant," Rubin says. "History, biographies, a little philosophy."

But it's hard to imagine what, exactly, Rubin would consider irrelevant.