



PETER BAKER

Don Nguyen, PhD, David Stern, PhD, and Valentina Greco, PhD

## Off to a Brilliant Start

**Don Nguyen dreamed of a career in cancer biology research** but knew there were no guarantees. Dr. Nguyen trained as a post-doctoral fellow at Memorial Sloan-Kettering Cancer Center, one of the best cancer institutes in the country. When it came time to establish his own laboratory, however, he faced a landscape of disappearing federal funding and intense competition.

Yale Cancer Center’s Cadet Program is designed to help young scientists navigate that landscape. When he came to Yale, Dr. Nguyen received advice on equipping and staffing his lab. He won YCC pilot funding set aside for young investigators. That support allowed him to get impressive results in his study of lung cancer metastases – so impressive that he has since obtained an RO1 grant from the National Cancer Institute, a milestone achievement for an investigator. He also benefitted from informal help. “For a highly competitive institution with so many accomplished scientists, people are extremely

collegial and generous with their time here,” said Dr. Nguyen.

When he has questions, Dr. Nguyen can stick his head in the office next door and confer with fellow cancer biologist David Stern, PhD, who is a Professor of Pathology, Associate Director of Shared Resources at YCC, and leader of the Cadet Program. YCC has seen a huge influx of young faculty, with almost 100 assistant professors, half of whom were recruited in the past four years.

“These are the individuals who are going to be running the cancer enterprise at Yale in the coming years,” explained Dr. Stern.

“What drew me to Yale was the emerging cancer biology program that is growing across different departments,” said Dr. Nguyen. Young faculty are typically attracted by the strength of Yale’s resources, both human and technical, adds Dr. Stern. YCC scientists can access advanced genome sequencing and stem

their game. They have great bench skills and they’re highly motivated.”

Becoming a manager and courting fame can be vexing for scholars who want to concentrate on science. “The need to devote time to financial planning and lab management rather than only focusing on scientific projects is challenging,” said Katerina Politi, PhD, another cancer biologist in the Pathology Department studying mutations associated with drug resistance in lung cancer. But she’s realized

It is particularly important to link basic scientists with faculty who care for patients so that research focuses on the areas where it can best advance clinical care. Providing a platform within YCC encourages young scientists to focus their work on cancer.

“The Yale Cancer Center Cadet Program builds bridges,” said Dr. Greco, noting that she’s a geneticist with an appointment in the dermatology department who regularly interacts with biologists.

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Valentina Greco, PhD

cell technologies and expect to collaborate with leading basic and clinical scientists.

Though YCC junior faculty are “extraordinarily strong” as scientists, they must also learn the work of managing a lab and establishing a reputation that will enable them to secure consistent funding, says Dr. Stern. A senior scientist tends to get a great deal of credit for any work that happens in a lab, thus overshadowing most of the accomplishments these younger researchers made in their post-doctoral years. “They’re at risk of falling off the map,” explained Dr. Stern.

Despite this vulnerability, the early years of a scientist’s career are often the most productive. “They’re at the top of

it’s “part of the new role” and is doing her best to excel at these ancillary skills.

Dr. Politi and Valentina Greco, PhD, in the Department of Genetics, have organized junior faculty development programs, including a retreat where they can consult with senior faculty and administrators as well as an organizational psychologist on the dynamics of managing lab personnel.

All departments throughout Yale University and the School of Medicine have programs to mentor young faculty, says Dr. Stern. The YCC Cadet Program works to augment these and to get scientists together across departments to enable them to excel in the increasingly interdisciplinary world of cancer research.

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Her lab developed a method to watch stem cells regenerate tissue in real time in living animals, an achievement with the potential to improve understanding of how cancers develop. Dr. Greco says that many senior faculty are helping her along the way, notably Daniel DiMaio, MD, PhD, YCC’s Scientific Director. But regular meetings with peers are also valuable. “A mentor is anybody who has gone through a process that I haven’t yet,” she explained. As her career progresses, she’ll continue to seek the kind of collegiality she’s enjoyed as a cadet. “You can go faster and be more effective,” Dr. Greco said. ↻