

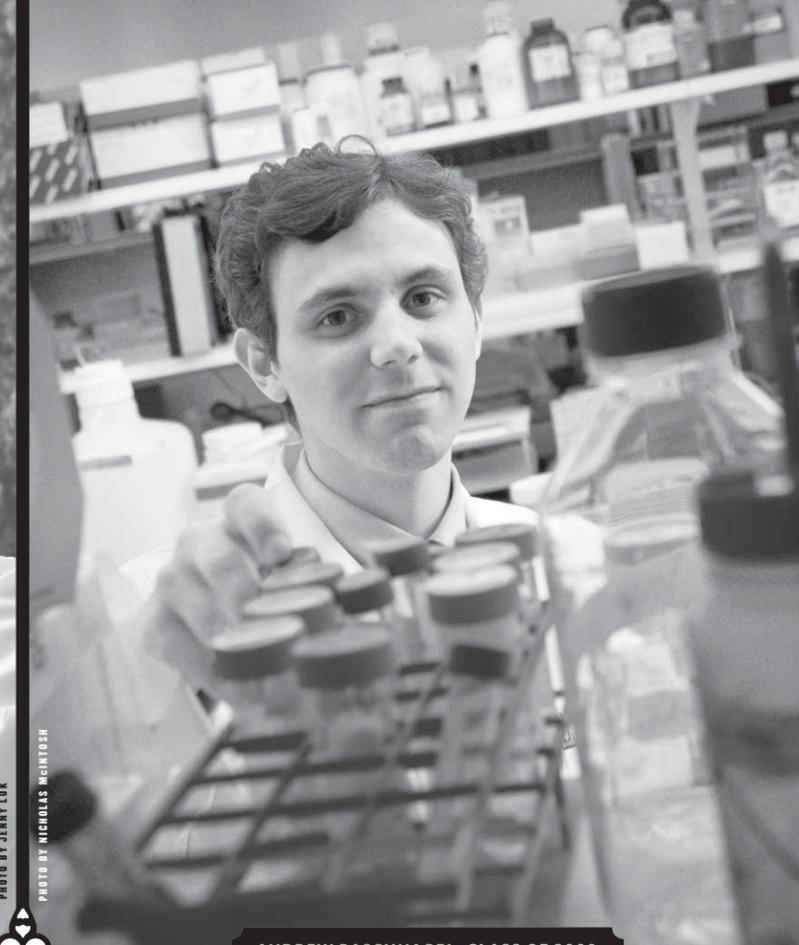
On the Physician- SCIENTIST Track

BY S. A. UNGER

STUDENTS ACCEPTED INTO THE NIH'S CLINICAL RESEARCH TRAINING PROGRAM



PUNEET PANDA, CLASS OF 2010



ANDREW BASCHNAGEL, CLASS OF 2009

Two students in the School of Medicine and Biomedical Sciences are currently participating in the prestigious Clinical Research Training Program at the National Institutes of Health (NIH).

Puneet Panda began the 12-month program in July 2008, and Andrew Baschnagel began in July 2007. Both entered the program as third-year students and will return to UB and graduate from medical school in 2010 and 2009, respectively.

The Clinical Research Training Program brings some of the nation's most talented research-oriented medical and dental students to the NIH's intramural campus in Bethesda, Maryland, where they spend a year engaged in a mentored clinical or translational research project in an area that matches their professional interests and goals.

An individualized program is developed for the students, who attend clinics, see patients on the wards and work with a principal investigator in his or her laboratory. They also attend lectures given by former program participants and Nobel laureates and participate in group activities with other members of the class and top NIH physicians and scientists.

If they choose, Fellows, as the participants are known, can conduct research at the NIH for a second year, depending on the support of the sponsoring NIH institute, availability of funds and permission from the student's home institution.

"The NIH Clinical Research Training Program is one of four outstanding opportunities for our students to immerse themselves in robust mentored-research training while still in medical school," says Michael E. Cain, MD, dean of the School of Medicine and Biomedical Sciences. "This unique experience complements their clinical training and enables them to start to determine early in their careers the role scientific discovery through biomedical research will have in their own developing careers. These programs provide the next generation of physician-scientists with lifelong mentors and key networks for their career development. I am pleased that UB has student participation at this very high level of research training."

Prepared and Supported

Puneet Panda is a native of Ithaca, New York, and attended Cornell University, where he majored in biological and environmental engineering with a minor in biomedical engineering. His current research interests are in ocular oncology and immunology.

Panda says he was "bitten by the research bug" while at Cornell, where he served as a research assistant under the guidance of Matthew P. DeLisa, PhD, assistant professor in the Department of Chemical and BioMolecular Engineering. "With the help of Dr. DeLisa and the members of his lab, I learned to push my intellectual limits, question everything and find a logical reason behind the method," says Panda.

He explains that faculty and staff in the UB Office of Medical Education have supported his interests and research goals from the start by providing him with timely information, guidance and encouragement.

"During my first year, Debbie Stamm [assistant dean for student services at UB] introduced me to my options, and it was through her that I first learned about the NIH program," says Panda. "I was also inspired by Dean Cain when he spoke to our class last year about research and its growing impact on clinical medicine. This fortified my conviction to take a year off from the traditional medical school track to do research."

Once Panda determined to take this alternative course, he says that Nancy Nielsen, MD '76, PhD, senior associate dean for medical education, "was awesome. . . . She helped me elucidate my specific interests in research, which centered around patients more than the science behind it all, which led to my pursuit of clinical research."

Panda says he is determined to make the most of his year as a CRTP Fellow and anticipates that the program will allow him to develop a "clinical research-oriented eye" to complement his future training in medicine.

"I hope to become a physician-investigator with firsthand access to disease presentations along with the ability

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to improve the current standards of care with therapies yet to be proven," he says.

Andrew Baschnagel is a native of Lockport, New York, and attended the University at Buffalo, where he majored in biophysics.

"I have always had a desire to pursue research and have always envisioned myself

becoming a physician-scientist," he explains. "I thrive on the idea that medicine can be improved, and I believe in taking ideas from the bench to the bedside and visa versa."

Like Panda, Baschnagel feels that UB medical school helped prepare him to successfully compete for entry into the NIH program and to pursue his long-term career goal, which is to become a radiation oncologist and work at a comprehensive cancer center where he can both treat patients and conduct research.

"UB's curriculum is on par with other schools and has given me a foundation in medicine that is needed to understand and solve research-related questions. Also, the school's faculty are supportive of students who want to pursue a career in academic medicine," he says. "Lastly, the opportunity I had to rotate through Roswell Park [Cancer Institute] helped me reaffirm my desire to work in a comprehensive cancer center."

When Fellows first enter the CTRP, they have a month to explore which laboratory and projects they would like to work in, and when Panda learned of his acceptance to the program in March, he began this process by reading descriptions of various labs at the National Eye Institute (NEI), as well as papers written by NEI investigators.

During his year at the NIH, Baschnagel worked with Kevin Camphausen, MD, in the Radiation Oncology Branch of the National Cancer Institute, investigating the mechanism of a drug that enhances the effect of radiation in a breast-cancer-brain metastatic cell line and in an animal model. He also investigated potential biomarkers in the urine and blood of patients with glioblastoma multiforme and wrote a clinical protocol

to examine the neurocognitive function of brain metastases patients treated with whole-brain radiation therapy.

"The program was an amazing and highly rewarding experience," he says, "and I highly recommend it to any medical student who has an interest in research. At the National Institutes of Health you are surrounded by outstanding scientific leaders and peers who share your same enthusiasm for science and for treating patients.

"While UB has given me all the tools I need to become an outstanding physician," he adds, "this program has supplemented my training by giving me hands-on research experience. It has made my goal of becoming a physician-scientist much clearer." **BP**

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—Andrew Baschnagel, Class of 2009

A Tradition of Excellence

Former scholars, and where they are today

The following are recent UB medical school graduates who participated in the Howard Hughes Medical Institute-National Institutes of Health's Research Scholars Program (Cloister Program).

2000 SCHOLARS

CHARMAINE GREGORY, MD '02, completed emergency medicine residency training at Duke University in Durham, North Carolina, in 2005. Currently she is the medical student site director of the Emergency Medicine Department at St. Joseph's Mercy Hospital (SJM) in Ypsilanti, Michigan. SJM is a community hospital that houses a level II trauma center and serves as a major training site for the University of Michigan's emergency medicine residency program.

MARGO (MCKENNA) BENOIT, MD '03, currently is in year five of a seven-year research-track residency at Harvard University Medical



BENOIT

School. Her program includes the following schedule: Year 1, general surgery internship; Year 2, clinical ear, nose and throat (ENT); Years 3 and 4, research funded by a T32 NIH grant through the ENT Department; Years 5, 6 and 7, clinical ENT.

Benoit completed her general surgery internship at the Brigham and Women's Hospital. For her clinical years, she has trained at all of Harvard University's teaching hospitals, including Massachusetts Eye and Ear Infirmary, Massachusetts General, Children's Hospital of Boston, Brigham and Women's Hospital, and Beth Israel Deaconess Medical Center.

After residency, she says, "I will most likely do a fellowship and then join an academic practice as a physician-scientist."

PHOTO BY JOHN CURTIS

JANICE SUNG, MD '03, completed her residency in diagnostic radiology at the University of Pennsylvania this June, and in July she began a breast/body imaging fellowship at Memorial Sloan-Kettering Cancer Center in New York City.

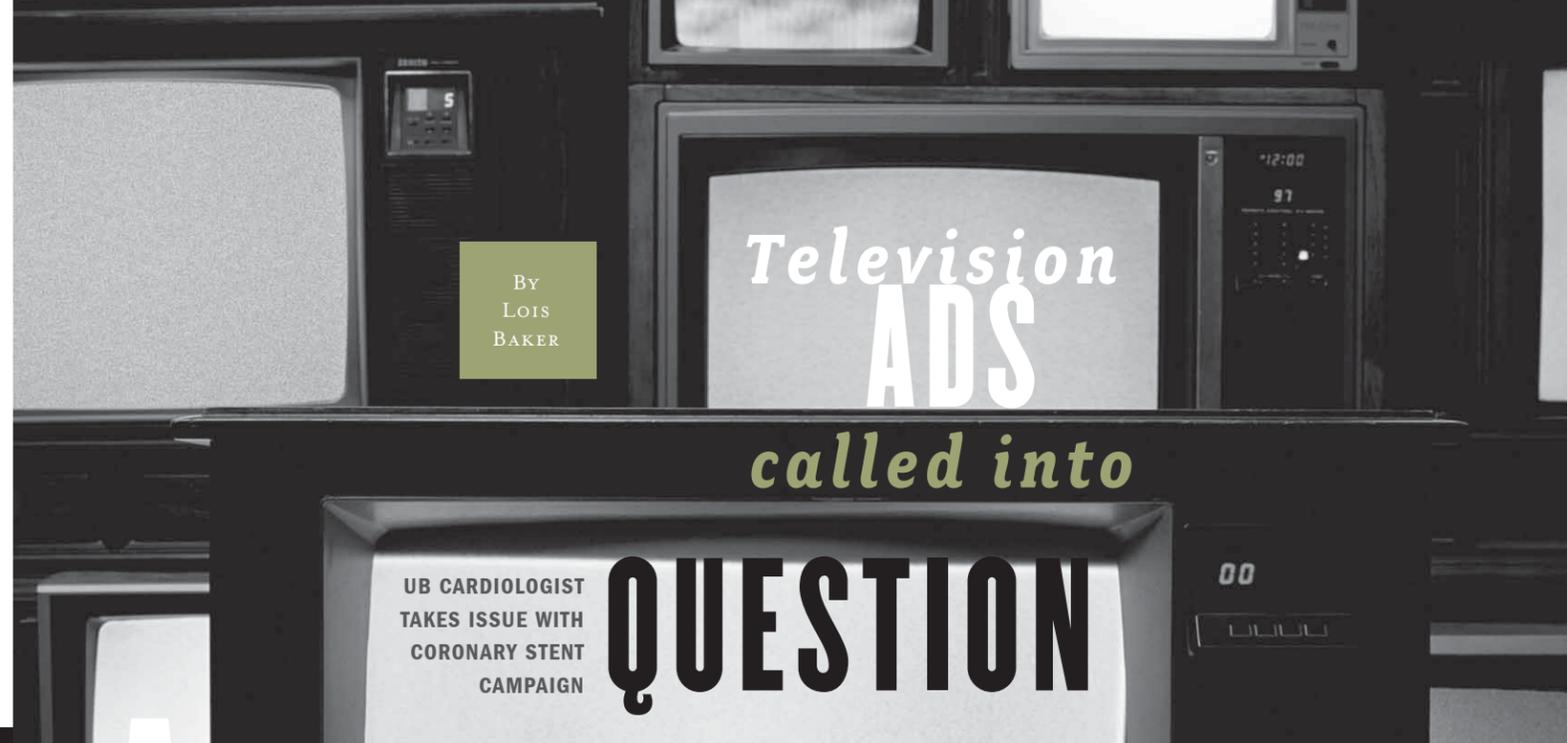
2003 SCHOLARS

JESSICA (KARL) SHAND, MD '06, currently is training in pediatrics at the University of Rochester's Strong Memorial Hospital in Rochester, New York.

JOELLE KARCH, MD '06, currently is training in obstetrics and gynecology at Wake Forest University Baptist Medical Center in Winston-Salem, North Carolina.

2005 SCHOLAR

MAY CHAN, MD '07, currently is training in pathology at Beth Israel Deaconess Medical Center in Boston, Massachusetts.



BY
LOIS
BAKER

A "direct-to-consumer" advertising (DTCA) campaign shown on network television touting the benefits of a specific stent device used to prop open clogged arteries should be viewed as "potentially deceptive," asserted a commentary co-authored by a UB cardiologist in the May 15, 2008, online issue of the *New England Journal of Medicine (NEJM)*.

The article, written by William E. Boden, MD, professor of medicine and social and preventive medicine in the UB schools of Medicine and Biomedical Sciences and Public Health and Health Professions; and George A. Diamond, MD, senior scientist in cardiology at Cedars-Sinai Medical Center/UCLA, calls for the FDA to conduct a critical review of the television ad campaign.

Originally scheduled to appear in the May 22 issue of the *NEJM*, the commentary, titled "DTCA for PTCA [percutaneous transluminal coronary angioplasty]—Crossing the Line in Consumer Health Education?" was posted online a week early to coincide with FDA hearings on direct-to-consumer advertising, which began on May 15, 2008.

The advertisement campaign, called "Life Wide Open," debuted during the heavily watched Dallas Cowboys–New York Jets football game on Thanksgiving Day 2007. The ad promotes a device called the Cypher stent, a tiny, wire-mesh tube

that emits a dose of medication to prevent re-narrowing of a once-clogged artery.

This was the first time a branded medical device used during angioplasty was advertised to the general public, an event Boden and Diamond say marked the dawn of a new era in television marketing. Brand-name drugs, but not medical devices, have been advertised commercially for 10 years.

"In making the leap from pharmaceuticals to medical devices, the ad campaign raises important questions regarding the net societal benefit of medical advertising directly to the lay public," the authors write.

"Has industry crossed the line this time?" they question. "In the ad for the Cypher stent, a device is being promoted to millions of people who are ill-equipped to make judgments about the many clinically relevant, but subtle and complex, therapeutic issues even specialists continue to debate."

Discussing the larger picture of DTCA, the authors note that, unlike print advertisements, which are required by law to provide explicit information about associated risks, major side effects, contraindications and precautions of drugs, a 60-second television commercial is required only to direct viewers to other sources that provide this more complete information.

"This lower standard for disclosure is of great concern to physician opponents

of DTCA, as well as to congressional oversight committees, which have objected that DTCA plays down the risks of certain medications while promoting their [supposed] benefits," the authors state. "As such, there is a fundamental inequality between the more comprehensive and balanced content of print advertising (newspapers, magazines, etc.) and broadcast advertising, which is too brief to provide health consumers with important and relevant safety information.

"The notion that television viewers, inspired by such an ad, would go to their physicians and request not only a stent, but a specific brand and model of stent, is frightening, if not utterly absurd. . . .

"In making the leap from pharmaceuticals to medical devices, the ad campaign raises important questions regarding the net societal benefit of medical advertising directly to the lay public."

"For the FDA, the acid test is the degree to which the Cypher stent ad promotes fair balance with respect to risks and benefits in terms that patients can and need to understand," the authors continue.

"The 'Life Wide Open' DTCA campaign may not meet these basic FDA regulatory requirements for non-deceptive prescription drug advertising, an issue that is likely to emerge in scheduled FDA Advisory Committee hearings in Washington, DC," say Boden and Diamond. **BP**