



**NIGHT CAP:** Dr. Da-Shih Hu, a DMS psychiatrist, hopped into his pj's right after work this summer. But not because he was tired. Well, maybe he was—he capped off his workdays by playing the lead in North Country Community Theatre's production of *The Pajama Game!*

## Two students get to spend a year in "mecca"

No, not the Mecca of Islam, but the mecca of biomedical research—the National Institutes of Health (NIH). Its sprawling Bethesda, Md., campus represents the cutting edge of laboratory science in the U.S. Thanks to fellowships from the Howard Hughes Medical Institute (HHMI), two Dartmouth medical students are spending a year there.

Andrea Russo '08 and Abigail Rao '09 joined 40 other medical and dental students—selected in a highly competitive national process—as 2007 HHMI-NIH Research Scholars. The purpose of the fellowships is to encourage future physician-scientists to make research a part of their careers and to help bridge the gap between scientific discoveries and clinical care.

**Tumor:** Neither student is a stranger to research. Russo, a Massachusetts native, majored in molecular biology and biochemistry and minored in Spanish at Middlebury. She spent a year in a molecular genetics lab at Boston University working out the methylation status of various tumor suppressor genes and their role in lung cancer.

Rao had spent her entire life in Madison, Wis., before coming to DMS. She was accepted to the University of Wisconsin Medical School straight out of high school, on the condition that she attend UW-Madison as an undergraduate. As a neurobiology major there, she studied neural

stem cells and adult neurogenesis. But as graduation neared, she decided to go someplace new for medical school.

Both are following up on their early interests, they explained by e-mail from Bethesda.

**"I want to continue asking those questions through research."**

Wrote Russo: "I have always been interested in cancer, both

the science behind it and its clinical implications. In oncology, where many of your patients cannot be cured, I feel that research is a rewarding way to give back to those . . . you can no longer help. I wanted to get involved . . . now, before the de-



**Russo, top, and Rao, bottom, are spending this year in Bethesda, Md.**

mands of residency. . . . And where better to do it than the NIH, where you have nearly limitless resources and world-renowned scientists?"

And Rao wanted to "prepare . . . for doing basic neuroscience research as a practicing neurosurgeon. During college, I began thinking about some of the exciting questions underlying neuroscience research, many of which ask what makes the brain so unique in comparison with the rest of the body? I want to continue asking those questions through research."

**Year:** As to what they are doing this year, Russo is studying "the various effects of new drugs on radio-sensitivity by targeting the molecular pathways that are involved in radiation-induced cell damage. The NIH is the ideal institution in which to carry out such studies because the lab work can easily be translated into clinical trials, which is the hope [for the] molecule that I'll be working on."

Rao is injecting mice with a virus that targets a potassium channel in their hippocampal neurons. "With a certain amount of patience, optimism, and luck, I will then record the electrical signals from these neurons whose potassium channels and patterns of synaptic signaling we have disrupted. We hope this will elucidate the molecular and electrical components underlying synaptic plasticity in neurons."

**Lure:** Who knows—it's possible the lure of mecca may draw one or both back to Bethesda for an eventual career there.

ROGER P. SMITH, Ph.D.

## Worthy of note: Honors, awards, appointments, etc.

**Charles Barlowe**, Ph.D., a professor of biochemistry (top photo), and **Ronald Taylor**, Ph.D., a professor of microbiology and immunology (bottom photo), both received MERIT awards from the National Institutes of Health (NIH). MERIT stands



for Method to Extend Research in Time. The awards, based on "superior competence and outstanding productivity," are designed to spur scientific creativity with long-term, stable funding. Barlowe studies intracellular transport and Taylor the bacterium *V. cholerae*.

**Robert Gougelet**, M.D., an assistant professor of medicine, was appointed to the Federal Emergency Management Agency's National Advisory Council.

**Lori Alvord**, M.D., an assistant professor of surgery and associate dean of student and multicultural affairs, was appointed to the National Advisory Council of the National Center for Complementary and Alternative Medicine, a component



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