

regular dinner hours. When they recruited Tyler Giberson ('17) and Cody Rissman ('17), then first-year students, they were able to see patients every Monday.

"I like that the clinic is entirely run by medical students," Giberson says. "It really allows us to make a difference. With a nice set of protocols in place, it allows us to practice our interviewing and exam skills without overreaching our scope of practice."

Rissman agrees. He, too, wanted a boots-on-the-ground service learning experience, and like Breuer and Andrews, he wanted one that was entrepreneurial. "I knew that there would be an opportunity to shape the new program," he says.

Breuer and Andrews have put their heart and soul into making the clinic a success. They established a collabora-

tive relationship with Valley Regional Hospital in Claremont and with the Good Neighbor Health Clinic in White River Junction, Vt. They created electronic medical records for the health clinic's patients, making it easier to refer patients to physicians at Good Neighbor. And they came to an agreement with Valley Regional Hospital to provide physician oversight during open clinic hours.

"We've had success stories, but as it now stands, there are still unmet needs in Claremont," Rissman notes. "Over the past few months we've found that our reach could be broader. Our biggest challenge is to find a way to reach out to people who need our resources but who don't utilize the soup kitchen."

There's no doubt that it's a challenging population in a tough part of town. And although many patrons have both mental health issues and physical ailments, they hope to recruit and refer patients to appropriate existing services.

"First and foremost, we are here to promote health literacy—to help people understand and manage the conditions they already have," Rissman says.

Giberson and Rissman, who are now managing the clinic, are keenly aware of the necessity of establishing benchmarks to measure the clinic's success. "We need to find a baseline to measure how we were initially and then after three years check to see if our intervention improved health care in Claremont," Giberson says.

One of the great things about projects like this, and about what Geisel does really well, is to focus on preventative medicine—true *health* care rather than sick care, both Giberson and Rissman note.

Although there's more work to do, Boyle has been impressed by what the students have already accomplished. "It has been gratifying to see that if you give the students free rein to do something, and then let them do it, they'll do a magnificent job," Boyle says. "Just magnificent."

SUSAN GREEN

Lars Blackmore



Miguel Marin-Padilla

## FIFTY YEARS OF DEDICATION

**FOR NEARLY FIVE DECADES**, Geisel professor emeritus Miguel Marin-Padilla's dedication to a very old silver-staining technique has set him apart from other neuroscientists.

Long fascinated with the structure of the brain, Marin-Padilla's career profoundly changed in the 1960s when he learned a technique developed by Italian scientist Camillo Golgi more than 100 years ago. The painstaking method clearly reveals microscopic details of cells and the connections between neurons, and it enabled Marin-Padilla to make several fundamental and insightful discoveries that changed neuroscience.

"He was one of the first to describe pioneer cells, which are critical in setting up the pathways by which all other neurons in the brain migrate to their proper place," says Leslie Henderson, a Geisel professor of physiology and neurobiology who has known Marin-Padilla for 25 years.

Actively devoted to studying the brain, Marin-Padilla often refers to his more than 5,000 pristine rapid Golgi preparations. He gathered his observations in a book, *The Human Brain: Prenatal Development and Structure* (Springer, 2011).

And a recent paper, his 158th, on the brain's vascular system ("The Human Brain Intracerebral Microvascular System: Development, Structure and Function") published this winter in *Frontiers in Neuroanatomy*, has captured the imagination and interest of scientists.

SUSAN GREEN



### MEASURE TWICE

A recent study found important limitations in the way breast cancer is classified. Peter Kaufman, a physician and researcher at Dartmouth-Hitchcock Norris Cotton Cancer Center, led a research team that retested tumor samples from 552 women who had tumors that had been classified as negative for HER2, a protein that contributes to tumor growth. There are specific treatments proven very effective in improving outcomes and preventing recurrence of cancer for HER2-positive tumors, making accurate classification essential. The research team found that, in 22 of the women, the tumor type should have been classified as HER2-positive. "While it is comforting that only four percent of these women were misclassified initially, this is an enormous issue for those who fall into this group," Kaufman says.