

gree program in the hope that it will facilitate his ability to do clinical research. That will mean a minimum of nine years as a student, but he still has a smile on his face.

Policy: In addition, 108 students entered various programs of the Dartmouth Institute for Health Policy and Clinical Practice (formerly the Center for the Evaluative Clinical Sciences); 27 are seeking an M.S. in health policy, 63 a master's of public health, and 18 a Ph.D.

Matthew H. Davis entered the M.P.H. program to build on his long-time interest in the environment. He had an appreciation for nature from an early age and spent several summers working for the National Park Service and National Forest Service. After majoring in biology at Swarthmore, he worked for two years for the U.S. Public Interest Research Group, a consumer advocacy nonprofit, before founding Environment Maine, a similar organization focused on the environment. He then took a job overseeing environmental advocacy organizations in five states for Environment America.

True: When his wife's work brought him to the Upper Valley, Davis decided—with the help of a Switzer Environmental Fellowship, a prestigious award for early-career environmental leaders—to pursue an M.P.H. at Dartmouth. He plans to apply it by working on environmental health policy at a federal agency or a nonprofit organization.

Assuming *his* career course holds true, that is.

ROGER P. SMITH, PH.D.

INVESTIGATOR INSIGHT

In this section, we highlight the human side of biomedical investigation, putting a few questions to a researcher at DMS-DHMC.

Patricia Ernst, Ph.D.
Assistant Professor of Genetics

Ernst's field is developmental hematology. She studies how blood stem cells achieve a balance between staying quiescent, proliferating, and differentiating—currently in the context of a protein that causes leukemia. She has been at DMS since 2004.

How did you get interested in your field?

When I was an undergraduate, I was fascinated by what keeps us from getting sick every day; I found the immune system so intriguing that I wanted to be an immunologist. As a graduate student, I worked on biochemistry using *in vitro* systems and became conscious that what I was working on was potentially overly simplified compared to what occurs in a living organism. Then I went to a postdoctoral lab where I learned how to model biochemistry in the laboratory mouse—and found a field that was a nice combination of all my latent interests.

What do you like most about your job?

The opportunities to meet nice people from all sorts of places. Science is a pretty social field, since you are in the same space with your colleagues for long hours.



What is hot in your field right now?

In the last 10 years, many people have become excited by tissue and embryonic stem cells for the promise they hold for regenerative medicine. It may be possible to produce custom tissues to repair all sorts of damaged tissues.

When you were very young, what did you think you wanted to be when you grew up?

A jockey, but then I got too heavy.

What are your favorite nonwork activities?

Sleeping, eating, and drinking coffee. And riding horses.

What historical event would you most like to have been at?

The moment when French biologists Jacob and Monod figured out how genes are regulated (over coffee, no doubt).

If you could travel anywhere you've never been, where would it be?

Nanaimo, British Columbia.

If you could trade places with anyone, real or imaginary, who would it be?

I'd like to be The Tick, a superhero popular in the 1990s—to have superpowers and to be obliviously idealistic.

What is the quality you admire most in other people?

Honesty.

What do you think makes for a successful scientist?

Focus.

What is the greatest frustration in your work?

Knowing I'm competing with labs that have 10 times the funding and people of my lab. Being in a small, starting lab, you can visualize a lot of experiments—but it takes a long time to actually do them.

And the greatest joy?

Getting a really cool result that opens up a lot of new angles we can test. Sometimes you see a result where you know it's the last figure you need for a paper, a piece of information that you can really hang your hat on, and you know you'll be able to build a project around it.

What advice would you give someone interested in science?

Talk to many people in the field that you're interested in, at all stages of their careers, to get realistic advice. Then you have to just jump in and believe that you will make it. People who are genuinely and really committed to science stay in the field despite the long hours and the challenging nature of the work.

