

That's where Dartmouth's Interactive Media Laboratory (IML) comes in. The IML, part of DMS's Department of Community and Family Medicine, produces interactive educational programs. The group recently won a competitive \$3-million grant from the Department of Homeland Security to create the Virtual Medical Incident Management Institute (V-MIMI). How competitive was the grant? "Dartmouth Medical School was one of only 15 grantees selected out of a pool of 267 applications," says Marlene Phillips of Homeland Security's Office of Public Affairs.

V-MIMI, which is still in the early phases of development, will offer health-care leaders "virtual tabletop" simulations and guidance on how to best use resources such as ventilators, hospital beds, and burn and trauma supplies—all with the look and feel of a video game. "The simulations we'll use will look familiar to anyone who's played games like 'SimCity' or 'Civilization,'" says Joshua Nelson, administrative director of the IML.

In addition to teaching health officials how to integrate their operations with formalized command structures, the simulations will require trainees to make critical decisions regarding how best to allocate finite resources when the demand for them outstrips supplies. Then they can watch the consequences of those decisions—good or bad—unfold. "They can see if their decisions overwhelm a particular trauma center, or burn facility, or if they run out of

INVESTIGATOR INSIGHT

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

Mary Jo Mulligan-Kehoe, Ph.D.

Research Assistant Professor of Surgery (Vascular Section)

Mulligan-Kehoe, a member of the Angiogenesis Research Center, studies how the anti-angiogenic activity of a truncated recombinant plasminogen activator inhibitor-1 protein inhibits tumor growth.

What was your career path in becoming a scientist?

I have a B.S. in biology and chemistry but waited to begin my career until my children were grown, a decision I will never regret. I took several graduate-level biology courses and—despite feeling certain I was enrolled in foreign language courses—I soon realized that molecular biology was for me. I completed my Ph.D. and, at the age of 43, began my postdoctoral training at the National Institutes of Health (NIH). In 1998, I accepted my first academic appointment in the Department of Surgery at Dartmouth.

Why did you decide to go into science?

Science provides me with an opportunity to express my creativity at each level of the investigation process. You conceive of, conceptualize, and design an original project. You watch the data emerge and evolve into a story that answers a significant biological question. The enthusiasm to forge ahead is infectious.



Of what professional accomplishment are you most proud and why?

I am proud that I was motivated and determined to continue my education despite my age. I think it sets an example for other women who choose to stay home with their growing children.

What about you would surprise most people?

My energy level surprises everyone. I move at a

rate that surpasses most people who are 25 years younger than I am. I attribute my high energy to eating healthy foods and to my zest for life and learning. The best part is that it is contagious.

What are your favorite nonwork activities?

Photography, skiing, and kayaking. My digital 35mm camera accompanies me to most social and special work events. Skiing is exhilarating. And I love kayaking after work in the summer (I live on Lake Mascoma).

What was the last book you read?

Ernest Hemingway's *For Whom the Bell Tolls*. I have reread many of the classics, mostly Hemingway, Steinbeck, and F. Scott Fitzgerald, and I have a better appreciation for their life messages than I did 30-plus years ago. I also recommend Leo Buscaglia's *Love* and Tim O'Brien's *In the Lake of the Woods*, which kept me wide awake on a flight from New York to Athens.

What advice would you offer to someone contemplating going into your field?

Be certain that you can handle negative results and negative feedback. You learn as much (if not more) from negative results as you do from an experiment that works perfectly the first time. And reviewers who make negative comments and reject your manuscripts and grant proposals are, for the most part, only trying to help you be better.

What do you admire most in other people?

I admire people who are direct and get straight to the point and those who follow through with what they said they were going to do.

What is the hardest lesson you ever had to learn?

The high energy level and passion related to my work is also prevalent in my personal life. The hardest lesson I have had to learn is that not everyone reciprocates at the same level of intensity. I have developed a philosophy, though: "Recognize and graciously receive the way in which another person chooses to show you that you are important in their life."

