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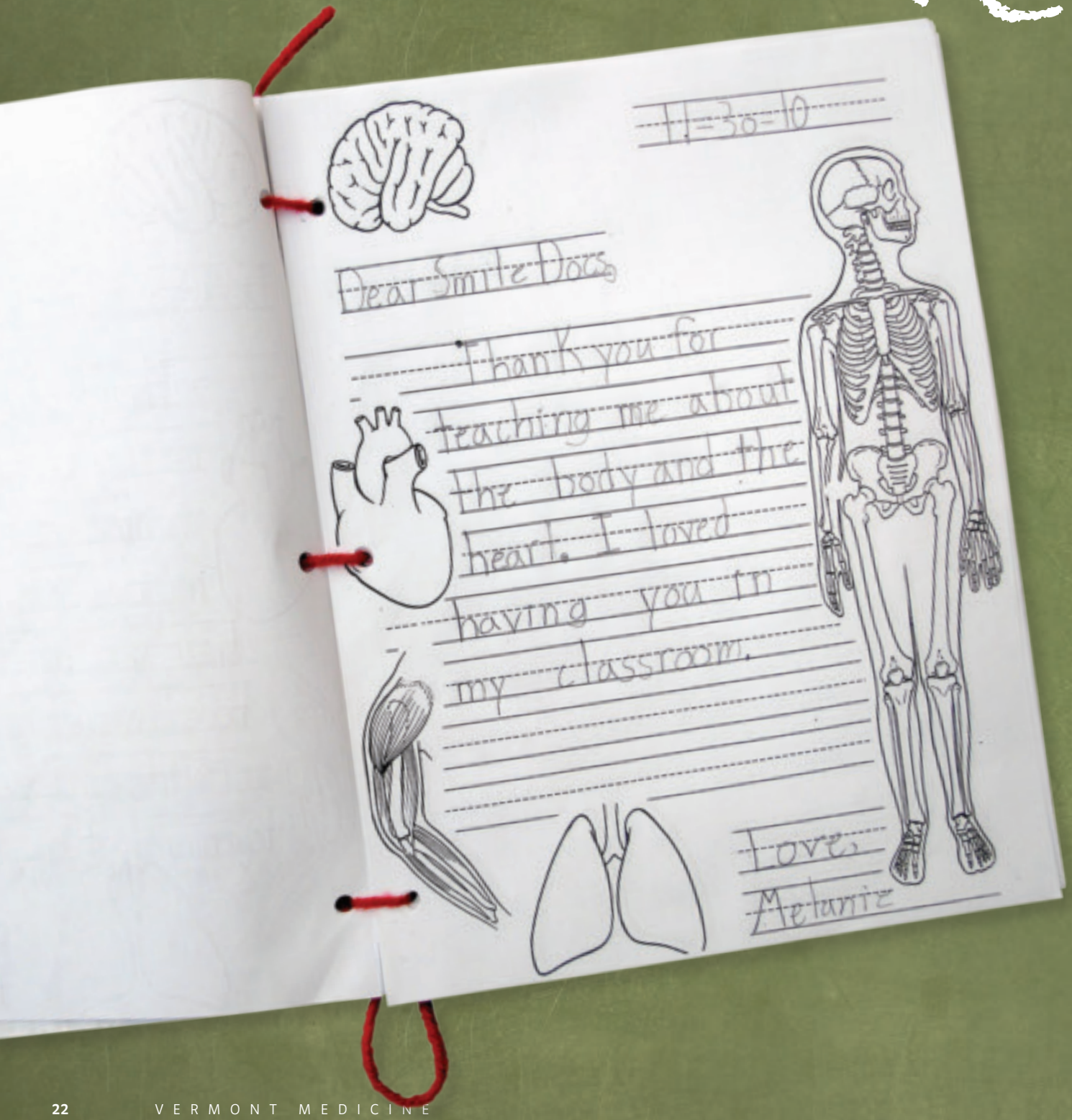
11-30-10
Dear Smile Docs,
Thank you for teaching me about the body and the heart. I loved having you in my classroom.
Love,
Melanie

young too ~~old~~ to learn.

by **Edward Neuert**

Even in elementary, middle, and high school, students get a taste for careers in the health sciences

The sounds of a second grade classroom on a December afternoon are usually not described as muted, but for the students of Sue Catozzi at St. Francis Xavier School in Winooski, Vt., the most interesting sound one such afternoon was the muffled, steady thump-thump-thump of their classmates' hearts, heard through the stethoscopes belonging to UVM medical students. This classroom was part of the SmileDocs program, a 15 year-old effort that brings medical students into elementary schools to teach elementary children about health and the human body. SmileDocs is just one of several ways in which students, faculty members, and staff of the College of Medicine reach out to elementary, middle, and high school students and, in the process, help build interest in science and health-related careers.

Second-year medical student Amanda Schwartz leads the medical student interest group of about two dozen students who regularly head out to local elementary schools to run SmileDoc sessions. These groups visit the same classrooms several times in a semester, with one of a number of educative modules that have been developed by the group

Second-graders in Sue Catozzi's class at St. Francis Xavier School in Winooski, Vt. listen to each other's heartbeat during their fourth SmileDoc session led by UVM medical students in December, 2010. Medical students have been a part of Catozzi's classes since 1996.

Raj Chawla, UVM Med Photo

At top: Torin Maggiani of Essex High School learns about eye examination by performing one on standardized patient instructor Kenny Bassett in the simulation laboratory at UVM. Bottom left: SmileDocs participant Jared Sutherland '13 explains lung function to two second graders at St. Francis Xavier School in Winooski; bottom right: UVM's Project Micro visits a Vermont middle school; facing page: MedQuest alumna and current medical student Gwen Fitz-Gerald instructs a high-school participant during the 2010 MedQuest health careers camp.

Top and right and facing page: Raj Chawla, UVM Med Photo; above right, Jan Schwarz

over the years. "We'll work through modules about heart function, the five senses, the lungs," she says. "And since we go back to the same class several times, we get to know the kids better and I think they really look forward to our coming." After their fall semester at St. Francis Xavier, this year's SmileDocs group was presented with a "thank you" book of letters from all the children in the classroom.

For nearly as long as medical students have been running their program, Janet Schwarz, senior laboratory technician at UVM's Microscopy Imaging Center, and Professor of Pathology Douglas Taatjes, Ph.D., have spearheaded Project Micro. Launched originally as an effort of the Microscopy Society of America, the Vermont Project Micro is now a national model of successful community interaction that uses microscopy to foster scientific interest in young people, reaching schools in every corner of Vermont with hands-on microscopy sessions presented by Schwarz, her colleagues, and interested graduate students. Schwarz and Taatjes have even published on the effort, presenting an overview of their work this past summer in the journal *Microscopy and Microanalysis.* As of this year, the Vermont Project Micro has reached more than 5000 schoolchildren through the state.

Vermont's Area Health Education Centers (AHEC) focus on high school students who are beginning to ask the question "what will I be when I grow up?" Many students have an interest in science, but only a vague notion of what a health care career can be like. AHEC's MedQuest HealthCareers Exploration Program is designed to give these students exposure to health care career opportunities that they would otherwise not encounter. Each of the three regional AHEC offices around Vermont run intensive, week-long MedQuest programs, where a group of about 30 high school students immerse themselves in the world of health care. At UVM/Fletcher Allen this summer, two MedQuest groups lived on campus for a week while they shadowed health care professionals at three hospitals and an elder care facility, conducted research in the College's laboratories, and learned about health challenges facing all Vermonters. UVM medical students serve as conselors all week.

More than 300 Vermont high school students have explored health care careers through MedQuest over the past eight years. Gwen Fitz-Gerald was one of those kids, and today she is a second-year medical student at the College. She credits MedQuest with inspiring her to choose a career in health care. "MedQuest convinced me that medicine was the direction I wanted to take," Gwen says. "My counselors — all medical students at UVM — were particularly inspirational." This summer, Gwen honored her MedQuest experience by serving as a counselor.

In addition to longstanding programs, the College also serves as an educational resource for science teachers and their students around the state. This past year, the College's simulation laboratory was visited by students from PILOT, the Program to Inspire Leadership, Opportunity, and Thought, a youth leadership program for high school juniors in Chittenden County. And, for the second year in a row, students from Vergennes Middle School became teachers on campus, taking part in a module on adolescent development with second-year medical students as a part of the College's "Generations" course. VM

Dean Rick Morin (right) and Associate Professor of Anatomy and Neurobiology Carson Cornbrooks, Ph.D., (left) present Nikon microscopes to Enosburg Falls Middle School science teacher Todd Remmers (center).

Microscopes Find New Life in Vermont Schools

This fall, the College of Medicine gave new purpose to 120 of its microscopes. As medical students moved to an online microscopy tool, the microscopes were stored in student lockers in the Medical Education Center until members of the COM Microscope Committee decided to donate them to local schools. Working with school science coordinators around the state, Microscope Committee members Cynthia Forehand, Ph.D., professor of anatomy and neurobiology, Carson Cornbrooks, Ph.D., associate professor of anatomy and neurobiology, Nicholas Hardin, M.D., professor emeritus of pathology, and Sheri Youngberg, Office of Medical Student Education manager, with the assistance of Tom Teel, COM research facilities coordinator, identified several schools in need of the equipment.

Beneficiary schools have included Bellows Free Academy Fairfax, Burr and Burton Academy, Cambridge Elementary, Camels Hump Middle School, Colchester High School, Enosburg Falls Middle School, Fletcher Elementary, Harwood Union High School, Hinesburg Community School, and Lamoille Union Middle School.

The microscopes have been a hit with staff and students at the schools. "The current fiscal issues facing public schools make it impossible for us to have purchased any equipment that even remotely resembles these microscopes," says Fletcher Elementary School principal Jeffrey Teitelbaum. "These will be a tremendous benefit for our students."