New doctoral program looks to promote the bench-to-bedside link

New doctoral program coming soon to a medical school near you!” At least that’s how the marketing flyer might read.

DMS is developing a Ph.D. program, called the Program in Experimental and Molecular Medicine (PEMM), to focus on translational research—bringing discoveries quickly from the lab bench to the bedside.

There has been a growing realization by the biomedical community of a disconnect between discoveries made in the laboratory and their translation into practical applications for patients. “One of the reasons we have not been able to move things forward more efficiently is that we don’t have the workforce that . . . understands how to do this,” explains PEMM’s director, Murray Korc, M.D.

Idea: Traditionally, Ph.D. scientists have been trained in basic research and M.D.’s in patient care. A few individuals have worked in between to turn lab findings into treatments or preventive strategies. “The idea for PEMM is to help contribute to the pool of individuals who are trained in the basic sciences and who also understand the concept of clinical investigations, clinical trials, how to advance discoveries more quickly, how to translate them into something that will benefit everybody,” says Korc, who also chairs the Department of Medicine.

PEMM will have five tracks:

- Cancer biology
- Molecular pharmacology and toxicology
- Systems biology
- Vascular biology
- Neuroscience

Train: Michael Cole, Ph.D., associate director of PEMM and a professor of pharmacology-toxicology and of genetics, says the program will “train a new generation of health-care researchers that will be better prepared to do translation research.”

Once PEMM receives final approval from the Dartmouth College Board of Trustees, discoveries made by this “new generation” will be coming soon to a clinic near you.

Kristen Garner