



CEMS COLLEGE OF Engineering and Mathematical Sciences

Imagine. Discover. Lead.



CEMS Home

About

News, Events & Multimedia

Prospective Students

Current Students

Faculty & Staff

Programs & Departments

Research

Alumni

Diversity

Outreach

CONTACT CEMS

ENGINEERING COMPUTER SCIENCE MATHEMATICS & STATISTICS COMPLEX SYSTEMS VACC CONTACT US

Dodds receives prestigious science award from National Science Foundation

Release Date: 08-24-2009

Share this article

Author: [Dawn Marie Densmore](#)
Email: Dawn.Densmore@uvm.edu
Phone: Array **Fax:** 802-656-8802



Peter Sheridan Dodds has received a prestigious five-year \$678,000 National Science Foundation (NSF) Faculty Early Career Development (CAREER) Award for research entitled, "Explorations of Complex Social and Psychological Phenomena through Multiscale Online Sociological Experiments, Empirical Studies, and Theoretical Models."

Dodds is a professor in the [Department of Mathematics and Statistics](#), [Vermont Advanced Computing Center \(VACC\)](#), and [Complex Systems Center](#) in the UVM College of Engineering and Mathematical Sciences (CEMS).

He is the twelfth UVM faculty member to receive the NSF Foundation CAREER Award given to recognize faculty for research that equals the highest expectations of colleagues around the world. Other UVM professors to receive NSF CAREER Awards are: Darren Hitt, CEMS; Britt Holmén, CEMS; Frederic Sansoz, CEMS; Naomi Chesler, CEMS (now at the University of Wisconsin-Madison); Adel Sadek, CEMS (now at SUNY Buffalo); Matthias Brewer, Chemistry Dept.; Chris Landry, Chemistry Dept.; Rory Waterman, Chemistry Dept.; Paul Bierman, Geology Dept.; and Randall Headrick, Physics Dept.

"Receipt of this award places Dr. Dodds among top American researchers in his field," says Bernard "Chip" Cole, CEMS Interim Dean. "Having so many national awards among our faculty members reflects the outstanding talent and creativity within the University of Vermont and the College of Engineering and Mathematical Sciences."

Dodds's CAREER grant will support both his research and education initiatives. His research program will entail a combination of large-scale, web-based experiments, collection and analysis of online data, and theoretical model development to study a wide range of sociotechnical phenomena, such as collective creativity and problem solving, social contagion, dynamics of emotions in online communities, and influence. Dodds has created and will continue to evolve two interrelated courses on complex systems and networks which form part of the core curriculum for UVM's Complex Systems Center.

Dodds most recent research — carried out with Dr. Christopher M. Danforth, a fellow professor in the Department of Mathematics and Statistics — propounds a novel method of measuring happiness (or well-being) at the population level based on online writings such as blogs and tweets. Their paper, "Measuring the Happiness of Large-Scale Written Expression: Songs, Blogs, and Presidents," has garnered world-wide media attention. [A New York Times article](#) quoted James P. Pennebaker, a leading social psychologist from the University of Texas at Austin, as saying "The new approach that these researchers are taking is part of movement that is really exciting, a cross-pollination of computer science, engineering and psychology. ... And it's going to change the social sciences; that to me is very clear."

For more information about Peter Sheridan Dodds and his research, [visit his website](#).