## Peter P. Motavalli

Professor of Soil Nutrition Management, College of Agriculture, Food and Natural Resources MU faculty member since 1999

Peter Motavalli uses a rather unique approach to teach his students – a "living laboratory." Instead of relying on the traditional lecture format, Motavalli engages students through evidence-based active learning strategies. Motavalli's "living laboratory" includes a tour of MU's campus to learn about storm water drainage, water pollution and multiple environmental monitoring stations, including Sanborn Field.

Lindsey Anderson, a graduate student at MU, took two of Motavalli's classes: soils and the environment, and soil fertility and plant nutrition. She appreciated the way he connected real-world applications to what she learned in his classes.

"My favorite aspect of Dr. Motavalli's teaching was his ability to apply what we were learning to real world problems through in-class case studies," Anderson said. "I found this activity very beneficial because often in college we are lectured on topics, but rarely are we put in a setting where we must apply what we know to a real issue."

Also serving as her undergraduate advisor, Anderson says Motavalli's guidance was "invaluable."

"Dr. Motavalli is the type of advisor that not only makes sure you are doing well academically, but that you are doing well mentally and emotionally as well," Anderson said. "He truly cares for his students and wants to see them succeed."

Frank Johnson, a doctoral student studying soil science, noticed while taking Motavalli's soil fertility and plant nutrition class that his passion for teaching extends beyond the classroom.

"Dr. Motavalli encourages me, as well as his other students, through his patience, intellect, ability to listen and dedication to ensuring that his students succeed," Johnson said. "He is the kind of educator who resembles excellence and is invaluable to the University of Missouri. It is clear that teaching is a passion of his and that it never stops, whether we are inside or outside the classroom."

Motavalli encourages his students to produce writing and other media works that can be published and hold value on campus and beyond. Working with the MU Campus Writing Program, Motavalli was one of the first members of the editorial board of the undergraduate student writing journal, *Artifacts*. One semester, Motavalli's students wrote a manual for soil and plant testing that was requested by the Missouri National Guard stationed in Afghanistan to support agricultural development.

Brendan Zurweller, a former undergraduate and graduate student of Motavalli, is now an assistant professor of plant and soil science at Mississippi State University. He says Motavalli taught him to grow professionally outside his comfort zone.

"Throughout my mentorship from Dr. Motavalli, he directly transferred fundamental scientific knowledge in the classroom that has been necessary for solving complex problems in my profession," Zurweller said. "In addition to successfully teaching scientific principles in the classroom, his outside-the-classroom teaching and mentorship was critical in my professional development."

Motavalli earned a bachelor's degree from Georgetown University, a bachelor's degree from the University of Wisconsin, a master's degree from the University of Wisconsin and a doctoral degree from Cornell University. In recognition of his teaching excellence at MU, Motavalli received the Maxine Christopher Shutz Award for Distinguished Teaching in 2009. He created and now leads the Student Teaching as Research program at MU. Currently, he serves on the advisory board of the new Teaching for Learning Center. In the MU Office of Graduate Studies, he is the campus leader for the Center for the Integration of Research, Teaching and Learning, a network of 43 research universities in the U.S. and Canada dedicated to improving Science, Technology, Learning and Mathematics (STEM) education and increasing diversity in STEM fields.