Tau Beta Pi Announces Brendan J. O’Toole, Ph.D., as 2014 McDonald Mentor

Tau Beta Pi, the engineering honor society, has named its ninth McDonald Mentor. The award celebrates excellence in mentoring and advising among Tau Beta Pi educators and engineers who consistently support the personal and professional development of their students and colleagues. While the primary goal of Tau Beta Pi is to recognize students of superior scholarship and exemplary character and to honor eminent practicing engineers, the Association also lauds excellence in engineering education and in the ethical practice of engineering.

Brendan J. O’Toole, Ph.D., Nevada Beta ’86, is professor of mechanical engineering and director of both the Center for Materials and Structures and the Mendenhall Innovation Program at the University of Nevada, Las Vegas (UNLV). He is the 2014 Tau Beta Pi-McDonald Mentor, and will be honored on October 3, 2014, at the 109th annual Convention to be held in Spokane, WA. Tau Beta Pi President Larry A. Simonson, Ph.D., P.E., will present $1,000 and an engraved medallion to Dr. O’Toole. Another $1,000 grant will be presented to the Nevada Beta Chapter of Tau Beta Pi for nominating him.

Established in 2005 by Marion and Capers W. McDonald (NC G ’74) and the Association, the McDonald Mentor Award recognizes engineering educators or professionals in industry, government, or service organizations who have shown true concern for the individual, supporting an environment for developing talents, and who have earned respect and recognition for their contributions to their field and to the greater community.

Dr. O’Toole was endorsed for being a professor, mentor, and tireless leader with the ability to motivate students. He has demonstrated a commitment to advising young engineers, guiding winning teams, and giving back to the local community in the form of improving education opportunities.

(more)
Dr. O’Toole received his B.S. in mechanical and aerospace engineering from the University of Delaware (UD) and a master’s and Ph.D. in mechanical engineering from UD as well. He has been a faculty member at UNLV for more than 20 years.

He has been a long time faculty advisor to the student sections of the Society of Automotive Engineers (1994– ), Society for the Advancement of Materials and Process Engineering (2005– ), ASME Human Powered Vehicle Team (1993-2009), and the TBP Nevada Beta Chapter (2008– ).

Dr. O’Toole has mentored 82 individual or team undergraduate student projects that were part of national competitions for these organizations or capstone design projects. He is also an active mentor of graduate students, being the primary advisor for 64 graduate students. As Director of the Mendenhall Innovation Program, his primary goal is to improve hands-on education and innovation and entrepreneurial opportunities for all engineering students.

His mentorship extends beyond the collegiate classroom as he believes in supporting the local K-12 education community as well, especially the FIRST Robotics program. He obtained a NASA grant to help mentor three southern Nevada high schools in developing a robotics team. One of those teams has grown to be one of the best in the country. They compete at the highest level each year and have won the world championship.

In addition, Dr. O’Toole has created a university class for engineering majors, “High School Mentoring for Engineering Design,” in which college students are paired with local high schools and act as engineering consultants to help design, build, and test robots for competitions.

His nomination packet included a strong recommendation of Dr. O’Toole’s teaching abilities, “he is one of the best teachers in the college and always tries to explore innovative teaching methods that can give his students hands-on design experience in both graduate and undergraduate courses.”

In recognition of this dedication to education, mentoring, and teaching he has been recognized with awards on campus and nationally. He and his student teams have won 26 education awards, five research awards, eight professional society awards, and over 50 design awards. A few of the personal award highlights include: the Carnegie Foundation State of Nevada Professor of the Year Award, the SAE Ralph R. Teetor Award, and multiple outstanding teacher awards.

Dr. O’Toole’s commitment to providing students with confidence, encouragement, necessary resources, and an environment which stimulates learning has made him a role model for mentorship of all ages. For these contributions as an advisor and for inspiring students and colleagues in contributing to the STEM community, Brendan J. O’Toole, Ph.D., is the 2014 Tau Beta Pi McDonald Mentor.

---

Tau Beta Pi is the Engineering Honor Society, founded at Lehigh University in 1885. It has collegiate chapters at 242 engineering colleges in the United States and active alumni chapters in 39 cities. It has initiated more than 554,000 members in its 129-year history and is the world’s largest engineering society. (See www.tbp.org)