Title: The Patrie Lab receives grant from the Darrell K. Royal Foundation.

Summary: The Patrie Lab, directed by Steven M. Patrie, Ph.D., has received a grant from the Darrell K. Royal Research Fund Foundation for Alzheimer's Disease.

Darrell K Royal, a former football coach and Athletic Director at The University of Texas at Austin, is widely considered one of college football's greatest legends. Over the decades, he touched thousands of lives, in part by using his notoriety to make a difference in the lives of children in need, struggling artists, and now people across the country impacted by Alzheimer's disease (AD). The research fund, established in his name and directed by his family and a Board of Advisors consisting of leaders in business, entertainment, sports, and government, has made an enduring commitment to excellence in research and patient care for Texans that suffer from AD. The fund seeks to expand the paradigms of AD research and promote education and enable care access for Texan patients and their families combatting the disease.

The $165,000 three year grant, beginning in the Fall of 2015, will spearhead research in state-of-the-art proteomics technology created by Dr. Patrie. The technologies will characterize disease-associated proteins with an advanced biomarker screening tool called mass spectrometry, which essentially weighs disease associated proteins, to determine whether chemical modifications on the protein (called post-translational modifications) can be detected at the earliest stages of the disease, decades before clinical symptoms are observed.

Biomarkers for early diagnosis and monitoring disease progression in AD remain key issues in therapeutic management. If successful, the research is expected to not only inspire hospital diagnostics, but also inform clinical trials by providing researchers with independent measures of treatment efficacy and safety. Treatment at early stages, including life-style changes associated with environment enrichment, is expected to help prevent irreversible neuropathology, brain atrophy, and cognitive decline later in life.

Dr. Patrie, the research team, and the Department of Pathology thank the DKR fund for their support.

For more information on the DKR fund please see:

WEB http://www.dkrfund.org/

https://www.facebook.com/dkrfund/

https://twitter.com/DKRFund

For more information on Alzheimer's disease research at UTSW:

http://www.utsouthwestern.edu/education/medical-school/departments/neurology/programs/alzheimers-disease-center/index.html

For more information on Dr. Patrie and The Patrie Lab:

http://www.utsouthwestern.edu/labs/patrie/