



THE UNIVERSITY OF ARIZONA  
COLLEGE OF ENGINEERING

# Biomedical Engineering

DEPARTMENT OF BIOMEDICAL ENGINEERING SEMINAR SERIES  
*PRESENTS*

## Loi Do

PhD Candidate Biomedical Engineering - Trouard Lab

### “Quantitative Characterization of Diffusion MRI Analysis of Rodent Brains as a Function of Age and Cognition”

#### ABSTRACT:

Diffusion Weighted Magnetic Resonance Imaging (DW-MRI) is a unique imaging technique that enables the microscopic characterization the motion of water for imaging of neurology and neuropathology, i.e. the neuro-circuitry of the brain non-invasively with no ionizing radiation. These imaging indices are then correlated with a battery of behavioral (intelligence) tests on rodents at young (6 months) middle aged (15 months) and old (23months). DW-MRI mapping of the neurons in rodent brains and connectivity pathways allows for the structural characterization of the aging brain and the seminal step in translation to human studies in hopes of determining a correlation between cognition and early structural indicators.

*Please join us on*

**Monday, November 2<sup>nd</sup>, 2020**

12:00-12:50 pm, <https://arizona.zoom.us/j/94765815841>

**Hosts:** Dr. DK Kang and Dr. Russ Witte  
[dkkang@arizona.edu](mailto:dkkang@arizona.edu) and [rwitte@arizona.edu](mailto:rwitte@arizona.edu)

*Persons with a disability may request a reasonable accommodation by contacting the Disability Resource Center at 621-3268 (V/TTY).*

