



THE UNIVERSITY OF ARIZONA
COLLEGE OF ENGINEERING

Biomedical Engineering

DEPARTMENT OF BIOMEDICAL ENGINEERING SEMINAR SERIES

PRESENTS

Adam Bernstein

MD/PhD Candidate
Biomedical Engineering

**“Characterizing the effects of carotid
endarterectomy using advanced
neuroimaging techniques”**

ABSTRACT: Carotid artery stenosis (CAS), a narrowing of the carotid arteries due to the development of atherosclerotic plaques, has been associated with an increased risk of stroke, and has been hypothesized to have a negative impact on cognition, although the latter is still not certain. It has been shown that carotid endarterectomy (CEA) reduces the risk of stroke in patient’s with severe carotid stenosis, but the impact of CEA on cognition is still unclear. In this work, we investigate the impact of CEA on the brain using diffusion MRI to identify structural changes, functional MRI to identify changes in functional connectivity, and cognitive testing to determine changes in cognition. While the results are preliminary, and the cohort small, our findings suggest that improved cognition following CEA may be related to functional and structural changes in the brain.

Please join us on

Monday, November 19th, 2018

12:00-12:50 pm, Keating Bldg., Room 103

Refreshments will be available at 11:50 am

Host: Minkyu Kim, Ph.D.
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Persons with a disability may request a reasonable accommodation by contacting the Disability Resource Center at 621-3268 (V/TTY).

