Ata B. Karagoz, B.S.

Center for Learning and Memory, University of Texas at Austin
832-738-8196 | atabk@utexas.edu

EDUCATION

The University of Texas at Austin, Austin, TX May 2018
Bachelor of Science in Neuroscience

RESEARCH INTERESTS

My research interests include studying spatial coding in healthy young adults using neuroimaging. I am also interested in the formation of conceptual cognitive maps and hierarchical structures in the brain to accurately represent the relationships between items.

MANUSCRIPTS IN PREPARATION

- Pederson, A.M.*, **Karagoz, A.B.*,** Dean, D., Dembny, K.E., Dodla, M., Duncan, L., Fahmy, R., Kuo, A., Haimes, D.B., Golding, N.L. (In Preparation). Role of Kv1 channels in regulating the excitability and firing patterns of neurons in the medial geniculate body.
- Roome, H.E., Sherrill, K.R., Coughlin, C.A., **Karagoz, A.B.,** Preston, A.R. (In Preparation) The development of spatial navigation: Importance of cue integration.
- Sherrill, K.R., Molitor, R.J., **Karagoz, A.B.,** Atyam, M., Mack, M.L., Preston, *A.*R. (In Preparation) Hippocampal and medial prefrontal cognitive maps formed through spatial navigation influence processing in non-spatial contexts.

** denotes equal first author*

CONFERENCE/POSTER PRESENTATIONS

Sherrill, K.*, Molitor, R., **Karagoz, A.,** Atyam, M., Mack, M., Preston, A. (2019) Hippocampal and medial prefrontal cognitive maps formed through spatial navigation influence processing in non-spatial contexts. Talk presented at the Context and Episodic Memory Symposium

Pederson, A.M.*, **Karagoz, A.B.*,** Dean, D., Dembny, K.E., Dodla, M., Duncan, L., Fahmy, R., Kuo, A., Haimes, D.B., Golding, N.L. (2017). Role of Kv1 channels in regulating the excitability and firing patterns of neurons in the medial geniculate body. Poster presented at the Society for Neuroscience Conference
** denotes presenter*

RESEARCH CONTRIBUTIONS

- Ongoing Projects
    - Measuring effects of trans-Cranial Direct Current Stimulation (tDCS) on associative learning
    - The effect of emotional congruence on associative learning
    - The Development of Spatial Navigation: Importance of Cue Integration

CERTIFICATIONS AND CREDENTIALS

The University of Texas Biomedical Imaging Center, Level 1 and 2 Siemens fMRI Operator

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PROFESSIONAL EXPERIENCE

The Preston Lab, The University of Texas at Austin Jan. 2018 – Present
Supervisor: Alison Preston, Ph.D.
Lab Manager

- Assisted in data collection and analysis for various memory integration and navigational projects.
- Scheduled and built a participant pool for behavioral and scanning projects.
- Managed IRB approval for lab studies for amendments and continuing reviews.
- Assisted in developing a streamlined process for data archival.
- Managed cash advances and lab administration.

RESEARCH EXPERIENCE

The Preston Lab, The University of Texas at Austin Nov. 2015 - Jan. 2018
Supervisor: Alison Preston, Ph.D.
Undergraduate Research Assistant

- Assisted in fMRI scanning studies.
- Wrote analysis scripts in MATLAB for ongoing projects.
- Designed a study and developed presentation code in MATLAB.

SKILLS

- Programming Languages: Python (fluent), MATLAB (fluent), R (beginner), bash scripting (intermediate)
- Reproducible Science Workflows: Docker/Singularity (beginner), Jupyter Notebooks (intermediate), GitHub (intermediate)
- Management of Open Science Protocols and Data
- Deep Learning Framework: Tensorflow (beginner)
- High Performance Computing Cluster: Texas Advanced Computing Center
- Whole-cell patch clamping
- fMRI data preprocessing: ANTS, FEAT, FSL
- Microsoft Office Suite
- Languages: English (native), Turkish (native), German (beginner)

PROFESSIONAL MEMBERSHIPS AND AFFILIATIONS

- Society for Neuroscience, student member
- Cognitive Neuroscience Society, student member