Curriculum Vitae - Ekaterina Gribkova

Contact Information

gribkov2@illinois.edu

Education

08/2016-present: *Ph.D. Candidate, Neuroscience*
University of Illinois at Urbana-Champaign, Urbana, IL

08/2012-04/2016: *B.S., Mathematics*
B.S., Molecular and Cellular Biology
University of Illinois at Urbana-Champaign, Urbana, IL

Research

01/2018-present *Graduate Researcher, Neuroscience Program*
Computational Neuroscience: Neuron Models of Plasticity,
Models of Behavior; Scientific Programming
Research advisor: Dr. Rhanor Gillette

08/2016-01/2018 *Graduate Researcher, Neuroscience Program*
Computational Neuroscience: Neuron Models; Electrophysiology;
Calcium Imaging; Scientific Programming
Research advisor: Dr. Daniel Llano

02/2014-04/2016 *Undergraduate Researcher, Beckman Institute*
Computational Neuroscience: Neuron Information Processing;
Scientific Programming
Research advisor: Dr. Daniel Llano

09/2013-02/2014 *Undergraduate Researcher, Beckman Institute*

Brain Tissue Processing: Imaging and Histology

Research advisors: Dr. Daniel Llano and Alexandria Lesicko

Teaching Experience

01/2019-05/2019: *MCB 462 Spring 2019: Integrative Neuroscience*

Teaching Assistant

Instructors: Rhanor and Martha Gillette

08/2018-12/2018: *MCB 253 Fall 2018: Experimental Techniques in Cell Biology*

Teaching Assistant

Instructor: Elizabeth Good

01/2018-05/2018 *MCB 462 Spring 2018: Integrative Neuroscience*

Teaching Assistant

Instructors: Rhanor and Martha Gillette

Publications

Present **Gribkova E. D.**, Catanho M., Gillette R. (2018). ASIMOV: A General Computational Model for the Addiction Process. Journal Publication in Preparation.

9/5/2018 **Gribkova, E. D.**, Ibrahim, B. A. E., & Llano, D. A. (2018). A novel mutual information estimator to measure spike train correlations in a model thalamocortical network. *Journal of Neurophysiology*. doi:10.1152/jn.00012.2018

2/26/2018 Brown J. W., Caetano-Anollés D., Catanho M., **Gribkova E. D.**, Ryckman N., Tian K., Voloshin M., Gillette R. (2018). Implementing Goal-Directed Foraging Decisions of a Simpler Nervous System in Simulation. *eNeuro*, 5(1), ENEURO-0400.

8/19/2015 Willis, A. M., Slater, B. J., **Gribkova, E. D.**, & Llano, D. A. (2015). Open-loop organization of thalamic reticular nucleus and dorsal thalamus: A computational model. *Journal of Neurophysiology*, 114(4), 2353-2367.

Presentations

Local

2/7/2019	Gribkova E. D., Gillette R. (2019). The emergence of addiction in a computational model of goal-directed foraging. Poster session at the Beckman Institute Open House, Urbana, IL.
10/23/2018	Gribkova E. D., Gillette R. (2018). The emergence of addiction in a computational model of goal-directed foraging. Poster session at Society for Neuroscience Night at the Beckman Institute, Urbana, IL.
10/31/2017	Gribkova E. D., Gillette R. (2017). A novel learning and extinction algorithm enhances goal-directed foraging decisions. Poster session at Society for Neuroscience Night at the Beckman Institute, Urbana, IL.
10/31/2017	Gribkova E. D., Ibrahim B.A., Llano D.A. (2017). A novel mutual information estimator to measure spike train correlations in a model of the thalamocortical network. Poster session at Society for Neuroscience Night at the Beckman Institute, Urbana, IL.
4/13/2017	Gribkova E. D., Ibrahim B.A., Llano D.A. (2017). Computational studies of a thalamocortical network containing the thalamic reticular nucleus, using a novel mutual information estimator to measure network performance. Poster session at the Molecular and Integrative Physiology Retreat, Monticello, IL.
2/9/2017	Gribkova E. D., Ibrahim B.A., Llano D.A. (2017). Computational studies of a thalamocortical network containing the thalamic reticular nucleus, using a novel mutual information estimator to measure network performance. Poster session at the Beckman Institute Open House, Urbana, IL.
4/29/2016	Gribkova E. D., Llano D.A. (2016). Computational studies of a thalamocortical network containing the thalamic reticular nucleus, using a novel mutual information estimator to measure network performance. Poster session at the Molecular and Integrative Physiology Retreat, Monticello, IL.
10/6/2015	Gribkova E. D., Llano D.A. (2015). Computational studies of a thalamocortical network containing the thalamic reticular nucleus, using a novel mutual

information estimator to measure network performance.
Poster session at Society for Neuroscience Night at the Beckman Institute, Urbana, IL.

National

11/4/2018 Gribkova E. D., Gillette R. (2018). The emergence of addiction in a computational model of goal-directed foraging. Poster session at the Society for Neuroscience 2018, San Diego, CA.

11/14/2017 Gribkova E. D., Gillette R. (2017). A novel learning and extinction algorithm enhances goal-directed foraging decisions in simulation. Poster session at the Society for Neuroscience 2017, Washington, DC.

11/13/2017 Gribkova E. D., Ibrahim B.A., Llano D.A. (2017). A novel mutual information estimator to measure spike train correlations in a model of the thalamocortical network. Poster session at the Society for Neuroscience 2017, Washington, DC.

10/20/2015 Gribkova E. D., Llano D.A. (2015). Computational studies of a thalamocortical network containing the thalamic reticular nucleus, using a novel mutual information estimator to measure network performance.
Poster session at the Society for Neuroscience 2015, Chicago, IL.

Awards/Honors

05/2018 *Neuroscience Program 2018 Special Recognition Award*

University of Illinois at Urbana-Champaign

05/2016 *C. Ladd Prosser Outstanding Achievement Award*

University of Illinois at Urbana-Champaign

05/2016 *Graduating with High Distinction in Molecular and Cellular Biology*

University of Illinois at Urbana-Champaign

05/2016	*Graduating with Distinction in Mathematics* University of Illinois at Urbana-Champaign
05/2016	*Neuroscience Certificate in the School of Molecular and Cellular Biology* University of Illinois at Urbana-Champaign
08/2012-05/2016	*James Scholar Honors* University of Illinois at Urbana-Champaign
04/2014-05/2016	*Molecular and Cellular Biology Honors Concentration* University of Illinois at Urbana-Champaign
08/2012-05/2015	*Dean's List* Received for Fall 2012, Spring 2013, Fall 2013, and Spring 2015 University of Illinois at Urbana-Champaign

Other Activities and Interests

2016-present	*Computational Neuroscience Journal Club*
2017	*Ad hoc reviewer for Frontiers in Neural Circuits*
2008-present	*Piano, including performance and composition*
2006-present	*Computer Programming, including games and interactive graphic apps*