Srinivas Gorur-Shandilya

Postdoctoral Associate, Brandeis University
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Education

Ph.D.	2017	Yale University. Thesis advisor: Thierry Emonet
M.Sc.	2010	University of Göttingen.
B.Sc.	2008	St. Stephen's College, University of Delhi.

Research Experience

August 2017 - present	Post-doctoral associate with Eve Marder at the Volen National Center for Complex Systems, Brandeis University.
Jan. 2011 - Jul. 2017	Ph.D. research, Yale Universty. I worked with Prof. Thierry Emonet, studying adaptation and gain control in *Drosophila* olfactory sensory neurons
Sep. 2009 - August 2010	Research Assistant, Max Planck Institute for Nonlinear Dynamics and Self-Organisation, Göttingen, Germany. Working with Dr. Marc Timme, I developed a method for reconstructing networks from observations of their dynamics.

Professional Activities and Awards

ah-hoc reviewer, *New Journal of Physics* and *Scientific Reports*

* Presenters' Travel Grant, Cosyne, USA (2016)
* Conference Travel Fellowship, Graduate Student Assembly, Yale University, USA (2015)
* Anne S. And William H. Macmillian Fellowship, Yale University, USA (2011-2013)
* Research Fellowship, Max Plank Society, Germany (2009-2010)
* Fellowship from the Excellence Foundation for the Promotion of the Max Planck Society, Max Plank Society, Germany (2008-2009)
* KVPY Fellowship, The Indian Institute of Science, India (2005-2008)

Publications

S Gorur-Shandilya[1], M Demir[1], J Long, DA Clark and T Emonet (2017) "Olfactory receptor neurons use gain control and complementary kinetics to encode intermittent odorant stimuli" *eLife* ([1] = equal contribution)

D Raccuglia, LY McCurdy, M Demir, **S Gorur-Shandilya**, M Kunst, T Emonet, and M Nitabach. (2016) "Temporal contrast enhancement in the *Drosophila* olfactory system regulates behavioral responses to plume-like stimuli" *eNeuro*

T-W Koh, Z He, **S Gorur-Shandilya**, K Menuz, NK Larter, S Stewart and JR Carlson. (2014) "The *Drosophila* IR20a Clade of Ionotropic Receptors Are Candidate Taste and Pheromone Receptors" *Neuron.*

S Gorur-Shandilya and M Timme. (2011) "Inferring Network Topology from Complex Dynamics" *The New Journal of Physics.*

Public Talks

"Sequential gain control in *Drosophila* olfactory receptor neurons." Accepted talk at Sense2Synapse, New York, USA. (2016)

"Topology Predicts Dynamics; Dynamics Constrain Topology." Invited talk at SIAM Conference on Applications of Dynamical Systems (DS15), Snowbird, USA. (2015)

"Why is anything the way it is?" Short talk at the 30th Chaos Communication Congress (30C3), Hamburg, Germany. (2013)

Teaching

Teaching Fellow for Dynamical Systems in Biology (MCDB 361), taught by Profs. Thierry Emonet, Damon Clark and Jonathan Howard (2014)

Teaching Fellow for Neurobiology (MCDB 320a), taught by Profs. Haig Keshishian and Paul Forscher. (2010)

Projects

xolotl, a fast, flexible and interactive neuron and network simulator written in C++. Free software, available at https://github.com/sg-s/xolotl

kontroller, a MATLAB toolbox for data acquisition and control of experiments. Free software, available at https://github.com/sg-s/kontroller

spikesort, a MATLAB toolbox for sorting spikes from extracellular recordings of *Drosophila* ORNs. Free software, available at https://github.com/sg-s/spikesort