

Sahil Moza, PhD



CONTACT INFORMATION	Postdoctoral Fellow at Zhang Lab Harvard University sahil.moza@gmail.com , sahilmoza@fas.harvard.edu	Website: https://sahilmoza.com
RESEARCH INTERESTS	Neural basis of behavioral timing, circuit computations, interaction between chemical and electrical computation in neurons, tight theory-experiment loops.	
EDUCATION & TRAINING	Postdoctoral Research Dept of Organismic & Evolutionary Biology Harvard University , Cambridge, USA Mentor: Yun Zhang	Sep 2022-
	Postdoctoral Research Boston Children's Hospital Harvard Medical School , Boston, USA Mentor: Michael Crickmore	Jul 2021-Sep 2022
	Ph.D Neuroscience/Systems Biology National Centre for Biological Sciences Bangalore, India Mentor: Upinder S. Bhalla	July 2020
	M.E. Computational and Systems Biology , GPA 7.4/9.0 Jawaharlal Nehru University New-Delhi, India	Aug 2012
	B.E. Biotechnology , GPA 3.3/4.0 Panjab University Chandigarh, India	Jul 2010
PHD THESIS	Robust memory and precise balance: Computation with biological network motifs	
RESEARCH PUBLICATIONS	Bhatia, A.*, Moza, S.* , Bhalla, U.S., "Precise excitation-inhibition balance controls gain and timing in hippocampus.", <i>eLife</i> , Apr 2019 (*Equal contribution) Faculty Opinions (Exceptional) Recommendation. In Faculty Opinions , 04 May 2020	
	Moza S. , Bhalla, U.S., "Different dimensions of robustness- noise, topology and rates - are nearly independent in chemical switches.", <i>bioRxiv</i> Aug 2020	
	HarshaRani, G.V., Moza, S. , Ramakrishnan, N., Bhalla, U.S., "SWITCHES: Searchable Web Interface for Topologies of CHEmical Switches.", <i>Bioinformatics</i> Jan 2021. http://SWITCHES.ncbs.res.in	
BOOK CHAPTERS	Bhatia, A., Moza, S. , Bhalla, U.S., "Patterned Optogenetic Stimulation using a DMD-projector", <i>Channelrhodopsin, Chapter 11, Springer Protocols</i> , 2020	
WORK EXPERIENCE	Scientist, EBRAINS , Human Brain Project , KTH , Stockholm	Oct 2020 - July 2021

TEACHING EXPERIENCE	Teaching Assistant and Organization	
	Computational approaches to memory and plasticity (CAMP)	Summer 2014-18
	National Centre for Biological Sciences, Bangalore	
	Boston Bangalore Biosciences Beginnings Neuroscience school	Winter 2016
	Harvard University, Boston	
	National Centre for Biological Sciences, Bangalore	
WORKSHOPS AND CONFERENCES	Transylvanian Experimental Neuroscience Summer School , Romania	Jun 2019
	Quantitative approaches to Behaviour & Neural Systems, Lisbon, Portugal	Oct 2018
	Neuroscience 2017, Society of Neuroscience, Washington DC, USA	Nov 2017
	Molecular Mechanisms at the Synapse, Janelia Research Campus	May 2016
	HHMI, Ashburn, Virginia, USA	
	ICTP-ICTS Winter School on Quantitative Systems Biology	Dec 2013
TALKS	NeuroMatch Conference, Online Webinar	March 2020
	No Garlands Neuroscience, IISER Pune, India	Jan 2020
	Molecules and Memory, NCBS, Bengaluru, India	Mar 2019
	Spikes lecture series, Centre for Neuroscience, IISc Bengaluru, India	Jan 2018
	No Garlands Neuroscience, IISER Pune, India	Oct 2017
	BSSE Symposium, IISc Bengaluru, India	Jan 2017
AWARDS & FELLOWSHIPS	Fellowships	
	Council of Scientific and Industrial Research (CSIR)	
	Senior Research Fellowship (SRF), Biology	Jul 2014 - July 2017
	Junior Research Fellowship (JRF), Biology (All India Rank 36)	Dec 2011
	DBT Bioinformatics National Certification (All India Rank 33)	Feb 2011
	Jawaharlal Nehru University- Masters Fellowship	Aug 2010 - Jul 2012
	University of Groningen, The Netherlands- Research Traineeship	Apr - Jun 2009
	Panjab University- Extra-mural grants	2008, 2009
	Travel Awards	
	IBRO-PERC, The Brain Prize and FENS stipend	May 2019
WET SKILLS	Wellcome Trust Travel Award	Sep 2018
	Infosys Travel Award, Infosys Foundation	Dec 2017
DRY SKILLS	Department of Biotechnology Travel Award, Government of India	Nov 2017
	Janelia Research Campus, HHMI, Ashburn, Virginia, USA	May 2016
	Magnetic Resonance Society, EUROMAR, Gothenburg, Sweden	Jun 2009
	Fly genetics and behavior, optogenetics, 2P and FLIM live imaging	
	Electronics and Programming	
	Python, Arduino, Perl, R, UNIX shell scripting, Octave, GNU make, C, L ^A T _E X	
	Relevant scientific libraries/software	
	<i>Machine Learning:</i> scikit-learn, TensorFlow	
	<i>Simulators:</i> MOOSE , CoPaSi , Brian , MCell	
	<i>Cluster and supercomputing:</i> Sun Grid Engine	