

Sahil Moza, PhD



CONTACT INFORMATION	EBRAINS, Human Brain Project SciLife Lab, KTH, Stockholm Solna, Sweden sahil.moza@gmail.com , moza@kth.se
RESEARCH INTERESTS	Systems Neuroscience, Neural syntax, Machine Learning approaches to Neuroscience
EDUCATION	Ph.D Neuroscience/Systems Biology July 2020 National Centre for Biological Sciences Bangalore, India Advisor: Prof. Upinder S. Bhalla M.E. Computational and Systems Biology , GPA 7.4/9.0 Aug 2012 Jawaharlal Nehru University New-Delhi, India B.E. Biotechnology , GPA 3.3/4.0 Jul 2010 Panjab University Chandigarh, India
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 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 (accepted)</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 (<i>In press</i>)
WORK EXPERIENCE	Scientist, EBRAINS, Human Brain Project Oct 2020 - Programmer, National Centre for Biological Sciences Oct 2018 - May 2020
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 HHMI, Ashburn, Virginia, USA	May 2016
	ICTP-ICTS Winter School on Quantitative Systems Biology	Dec 2013
INVITED 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
	Wellcome Trust Travel Award	Sep 2018
	Infosys Travel Award, Infosys Foundation	Dec 2017
	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
RESEARCH INTERNSHIP	University of Groningen , The Netherlands	May 2009 - Jul 2009
	Title <i>2D NMR Hydrogen/Deuterium exchange study of Haloalkane Dehalogenase (DhlA) from Xanthobacter autotrophicus</i>	
	Supervisor Prof. Frans Mulder	
SOFTWARE SKILLS	Programming	
	Python, 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	
STANDARDIZED TESTS	GRE General Test- 99% Verbal, 93% Quantitative	Feb 2010
	TOEFL iBT- 115/120	Dec 2009
	Basic French (DELF - A1, 65%)	Dec 2010
EXTRA- CURRICULAR	Curator and organizer, TEDxNCR	Dec 19, 2010
	Theater and Improvizational theater	10+ years

REFERENCES

Upinder S. Bhalla
Dean
Phone: +91-80-23666404
NCBS, Bangalore
bhalla@ncbs.res.in

Arvind Kumar
Associate Professor
Phone: +46 87906224
KTH, Stockholm
arvkumar@kth.se

Rishikesh Narayanan
Assistant Professor
Phone: +91-80-22933372
IISc, Bangalore
rishi@mbu.iisc.ernet.in

Sandeep Krishna
Assistant Professor
Phone: +91-80-23666226
NCBS, Bangalore
sandeep@ncbs.res.in