Atchuta Srinivas Duddu

PhD student,
Center for BioSystems Science and Engineering,
Indian Institute of Science, Bangalore 560012, India

Email: atchutaduddu@iisc.ac.in
Phone: +91-7680853566

Education

Indian Institute of Science, Bangalore, India *Aug 2019 - present*
PhD, Bioengineering

University of California, San Diego, California, USA *Sept 2017 - March 2019*
MS, Electrical and Computer Engineering
majoring in Medical Devices and Systems

Indian Institute of Technology, Kharagpur, India *July 2013 - April 2017*
B.Tech, Instrumentation Engineering

Publications

- Hati S, **Duddu AS**, Jolly MK. (2021) Operating principles of circular toggle polygons. **Phys. Biol.** 18 046003
- **Duddu AS**, Sahoo S, Hati S, Jhunjhunwala S, Jolly MK. (2020) Multi-stability in cellular differentiation enabled by a network of three mutually repressing master regulators. **J. R. Soc. Interface.** 17:20200631

Preprints

- Sahoo S, **Duddu AS**, Biddle A, Jolly MK. (2021) Interconnected High-Dimensional Landscapes of Epithelial Mesenchymal Plasticity and Stemness. *doi: https://doi.org/10.20944/preprints202104.0415.v1*
- Hari K, Harlapur P, Gopalan A, Ullanat V, **Duddu AS**, Jolly MK. (2021) Emergent properties of coupled bistable switches. *doi: https://doi.org/10.1101/2021.06.15.448553*
- **Duddu A.S.**, Jhunjhunwala S., Jolly M.K. (2021) Emergent dynamics of a three-node regulatory network explain phenotypic switching and heterogeneity during helper T-cell differentiation. *doi: https://doi.org/10.1101/2021.11.03.465892*

Conferences, Seminars and Workshops

Poster Presentations

- *Decoding the dynamics of network topologies enabling multistability and phenotypic heterogeneity.* 2nd Phenotypic Heterogenity as a driver of cancer progression conference, Jan 2020
- *Multistability in cellular differentiation enabled by a network of three mutually repressing master regulators.* Society for Mathematical Biology annual meeting, eSMB virtual conference, Aug, 2020
- *Modelling epigenetic feedback in gene regulatory network consisting of three mutually inhibiting transcriptional factors.* Society for Mathematical Biology annual meeting, eSMB virtual conference, June, 2021

Workshops

- Workshop on Theoretical and Computational Biology. 6th BioSystems Science and Enginering Annual Research Symposium, Jan 2020