AMOGH PRABHAV JALIHAL

@ jamogh@vt.edu amoghpj.github.io https://github.com/amoghpj

EDUCATION

Virginia Polytechnic and State University

August 2015 – May 2020

Blacksburg, VA

Doctor of Philosophy in Genetics, Bioinformatics, and Computational Biology

---

SASTRA University

June 2011 – May 2015

Thanjavur, India

Bachelor of Technology in Biotechnology

RESEARCH

- "Modeling and Analysis of Nutrient Signaling in *S. cerevisiae*", co-advised by Dr.s John Tyson and T.M. Murali, GBCB program, Virginia Tech
- Lab rotation, Fall 2015, Hauf Lab, Under supervision of Dr. Silke Hauf, Virginia Tech
- Laboratory Assistant, Spring 2015, Dernburg Lab, under supervision of Dr. Abby Dernburg, UC. Berkeley, Berkeley, CA
- Summer Intern NIGINTERN 2014, Summer 2014, Cell Architechture Laboratory, under supervision of Dr. Akatsuki Kimura, National Institute of Genetics, Mishima, Japan

PUBLICATIONS

3. **Jalihal, A. P.**, Kraikivski, P. , Murali, T. M. & Tyson, J. J., 2020, Modeling and Analysis of the Macronutrient Signaling Network in Budding Yeast, *bioRxiv*

2. Pratapa, A., **Jalihal, A. P.**, Law, J. N., Bharadwaj, A., & Murali, T. M. (January 2020). Benchmarking algorithms for gene regulatory network inference from single-cell transcriptomic data. *Nature Methods*, 1-8.

1. Pratapa, A., **Jalihal, A. P.**, Ravi, S. S., & Murali, T. M. (August 2018). Efficient Synthesis of Mutants Using Genetic Crosses. In *Proceedings of the 2018 ACM International Conference on Bioinformatics, Computational Biology, and Health Informatics* (pp. 53-62). ACM.

AWARDS

Silver award (second place), Flash talk, *Modeling Nutrient Signaling in Yeast*, Graduate Student Assembly Research Symposium, Spring 2018

PRESENTATIONS

- Work In Progress Seminar, Department of Biological Sciences, Blacksburg, VA, *Applications of Modeling to Biological Decision Making* **December 2019**
- Biology and Medicine through Mathematics, Richmond, VA, *Macronutrient Signaling in S. cerevisiae* **May 2018**
- Biological Sciences Research Day, Blacksburg, VA, *Macronutrient Signaling in S. cerevisiae* **February 2018**
- Computational Tissue Engineering Seminar, Blacksburg, VA, *Macronutrient Signaling in S. cerevisiae* **October 2017**
- International Conference on Systems Biology, Blacksburg, VA, *Macronutrient Signaling in S. cerevisiae* **August 2017**

TEACHING

Virginia Polytechnic and State University

- Graduate Teaching Assistant Integrated Science Curriculum II (ISC 1106), **Spring 2018**
- Graduate Teaching Assistant Integrated Science Curriculum I (ISC 1105), **Fall 2017**

SERVICE

- Organized the Computational Tissue Engineering IGEP Graduate Seminar **Spring 2017 – Fall 2019**
- Contributed to maintenance of the GBCB website **Summer 2019**
- Volunteer at Kid's Tech University, Virginia Tech **Spring 2017**
- Treasurer for the SPIC-MACAY chapter at Virginia Tech (Kala) **Summer 2018 – Spring 2020**

SKILLS

- **Languages** Python, MATLAB, Bash, C++, Lisp
- **Computing and graphics** Docker, Git, Emacs, LaTeX, GIMP, Inkscape
- **Mathematics** ODE modeling, Nonlinear dynamics, Numerical optimization
- **Laboratory** Live cell microscopy, PCR, yeast cell culture, nematode culture, worm dissection in *C. elegans*

MENTORSHIP

- Mentor for Computationally Driven Experiment Design REU at Virginia Tech, **Summer 2019**
- **Larissa Perara** Undergraduate, CS, Virginia Tech, **Spring 2018**
- **Alex Corrigan** Undergraduate, Virginia Tech, **Fall 2017**
- **Akshay Goel** Undergraduate, CS, Virginia Tech, **Fall 2017**

WORKSHOPS

- Attended the Parameter Estimation RTG workshop at NCSU, Raleigh **Summer 2018**

Last updated on **July 15, 2020**