# Rohit Suratekar

National Centre for Biological Sciences,
Tata Institute of Fundamental Research,
GKVK Campus, Bellary Road, Bangalore 560065 India

Phone : +91-802-366-6602 (Work), +91-988-082-8956 (Mobile)

Work Email: rohitcs@ncbs.res.in
Personal Email: rohitsuratekar@gmail.com
Webpage: https://rohitsuratekar.com

Date of Birth: October 16, 1989
Nationality: Indian
Languages: English, Marathi, Hindi

## Current position

*Internal Bridging Postdoctoral Fellow*, National Centre for Biological Sciences, Bangalore

## Areas of specialization

Computational Cell Biology

## Education

2018 - present **Internal Bridging Postdoctoral Fellow** in Computational Cell Biology
National Centre for Biological Sciences, Bangalore, India

2012 - 2018 **Doctor of Philosophy** in Computational Cell Biology
National Centre for Biological Sciences, Bangalore, India
Thesis topic: Understanding structure and dynamics of the *Drosophila* PI(4,5)$P_2$ cycle with mathematical models.

2007 - 2011 **Bachelor of Technology** in Biotechnology
Motilal Nehru National Institute of Technology, Allahabad, India
Thesis topic : Indirect and Direct Effect of Turbulence on Bacterial growth

2005 - 2007 **Higher Secondary School Certificate**
Vivekanand College, Kolhapur, India

## Research Projects

2013-present **Searching potential feedback links in existing signaling pathway**
Supervisors : Dr. Sandeep Krishna and Prof. Raghu Padinjat
National Centre for Biological Sciences, Bangalore.

2014-present **Understanding lipid transfer across membranes**
Supervisors : Dr. Sandeep Krishna and Prof. Raghu Padinjat
National Centre for Biological Sciences, Bangalore.

2013-2018 **Regulation of lipid signaling pathway in *Drosophila melanogaster***
Supervisors : Dr. Sandeep Krishna and Prof. Raghu Padinjat
National Centre for Biological Sciences, Bangalore.

2013 **Modeling of Phosphatidic Acid turnover in *Drosophila melanogaster***
Supervisors : Prof. Raghu Padinjat and Dr. Sandeep Krishna
National Centre for Biological Sciences, Bangalore.

2012 **Exploring connections between protein content, codon bias and GC content**
Supervisor : Dr. Mukund Thattai
National Centre for Biological Sciences, Bangalore.

2010-2011 **Indirect and Direct Effect of Turbulence on Bacterial growth**
Supervisor : Dr. Shivesh Sharma
Motilal Nehru National Institute of Technology, Allahabad.

## Publications and Talks

2018 Suratekar R, Panda A, Padinjat R, Krishna S (2018). Evidence of sinks and sources in the phospholipase C activated $PIP_2$ cycle. *FEBS Lett*. 2018 Mar ; 592(6):962-972. PubMed PMID: 29427502. doi: 10.1002/1873-3468.12998

### Preprint

2017 Suratekar R, Padinjat R, Krishna S (2017). Evidence of sinks and sources in the PLC activated $PIP_2$ cycle. *bioRxiv*. 183509 doi: 10.1101/183509

### Research talks

2018 *$2^{nd}$ International FishMed Conference on Zebrafish Research, FishMed2018*, Warsaw, Poland
Evidence of sinks and sources in the PLC activated $PIP_2$ cycle (Mar 25–27, 2018)

2018 *Aspects of Gene and Cellular Regulation*, Chennai, India
Evidence of sinks and sources in the PLC activated $PIP_2$ cycle (Jan 12–13, 2018)

2017 *Physical Concepts in Stem Cell Biology*, Tisvildeleje, Denmark
Evidence of sinks and sources in the PLC activated $PIP_2$ cycle (Aug 6–10, 2017 )

2015 *NCBS-RIKEN joint meeting for theoretical approaches in biology*, Wako, Japan
Speeding up PI(4,5)$P_2$ recovery with top gear (Apr 7–10, 2015)

### Posters

2018 *EMBL Symposium: Tissue Self-Organisation*, Heidelberg, Germany
Evidence of sinks and sources in the PLC activated $PIP_2$ cycle (Mar 11–14, 2018 )
2018 *2$^{nd}$ International FishMed Conference on Zebrafish Research, FishMed2018*, Warsaw, Poland
Evidence of sinks and sources in the PLC activated $PIP_2$ cycle (Mar 25–27, 2018 )
2018 *Celebrating Diversity in Biology - NCBS Annual Talks*, Bangalore, India
Evidence of sinks and sources in the PLC activated $PIP_2$ cycle (Jan 3–5, 2018 )
2017 *Futures in Biology - NCBS Annual Talks*, Bangalore, India
The Hitchhiker's Guide to The Regulation of PI(4,5)$P_2$ Cycle During Drosophila melanogaster Phototransduction (Jan 11–14, 2017 )
2015 *Biology across scale - NCBS Annual Talks*, Bangalore, India
Regulation of levels of PI(4,5)$P_2$ on the plasma membrane (Jan 5–8, 2015 )
2014 *Aspects of gene regulation*, Chennai, India
PI(4,5)$P_2$ dynamics during Drosophila melagogaster phototransduction (Dec 16, 2014 )
2014 *NCBS Annual Talks*, Bangalore, India
PI(4,5)$P_2$ dynamics during Drosophila melagogaster phototransduction (Jan 15–17, 2014 )

## Fellowships and Awards

2018 Young FishMed Speaker and Travel Award, FishMed, Poland
2018 Best Poster and Travel Award, NCBS Annual Talks, India
2012 - 2018 NCBS-TIFR graduate fellowship, India
2012 Graduate Aptitude Test in Engineering (GATE) fellowship, India

## Minimum Skill Set

### Experimental Biology

Average: Molecular biology techniques, Protein purification
Basic: Fly pushing, Optical Microscopy, Electro-physiology (ERG)

### Computational Biology

Above average: Ordinary Differential Equations, Monte Carlo simulations, Diffusion reactions, Dynamical Systems, Parameter sensitivity analysis
Average: Optimization techniques, Stochastic Calculus, Boolean Modelling
Basic: Partial Differential equations, Bayesian Analysis

### Programming languages

Above average: Python 3, Java, Kotlin, Typescript LaTeX
Average: C++, Perl, Matlab
Basic: Actionscript, CSS, C#, SQL/Non-SQL database

## References

Dr. Sandeep Krishna (NCBS, Bangalore), email: sandeep@ncbs.res.in
Prof. Raghu Padinjat ( NCBS, Bangalore), email: praghu@ncbs.res.in