

# Rohit Suratekar

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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 | <b>Internal Bridging Postdoctoral Fellow</b> in Computational Cell Biology<br>National Centre for Biological Sciences, Bangalore, India  |
| 2012 - 2018    | <b>Doctor of Philosophy</b> in Computational Cell Biology<br>National Centre for Biological Sciences, Bangalore, India<br>Thesis topic: Understanding the structure and dynamics of <i>Drosophila</i> PIP <sub>2</sub> cycle with mathematical modelling |
| 2007 - 2011    | <b>Bachelor of Technology</b> in Biotechnology<br>Motilal Nehru National Institute of Technology, Allahabad, India<br>Thesis topic : Indirect and Direct Effect of Turbulence on Bacterial growth  |
| 2005 - 2007    | <b>Higher Secondary School Certificate</b><br>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<sub>2</sub> cycle. *FEBS Lett.* 2018 Mar ; 592(6):962-972. PubMed PMID: 29427502. doi: [10.1002/1873-3468.12998](https://doi.org/10.1002/1873-3468.12998)

### Preprint

- 2017 Suratekar R, Padinjat R, Krishna S (2017). Evidence of sinks and sources in the PLC activated PIP<sub>2</sub> cycle. *bioRxiv.* 183509 doi: [10.1101/183509](https://doi.org/10.1101/183509)

### Research talks

- 2018 *2<sup>nd</sup> International FishMed Conference on Zebrafish Research, FishMed2018*, Warsaw, Poland  
Evidence of sinks and sources in the PLC activated PIP<sub>2</sub> cycle (Mar 25–27, 2018)
- 2018 *Aspects of Gene and Cellular Regulation*, Chennai, India  
Evidence of sinks and sources in the PLC activated PIP<sub>2</sub> cycle (Jan 12–13, 2018)
- 2017 *Physical Concepts in Stem Cell Biology*, Tisvildeleje, Denmark  
Evidence of sinks and sources in the PLC activated PIP<sub>2</sub> cycle (Aug 6–10, 2017)

- 2015 *NCBS-RIKEN joint meeting for theoretical approaches in biology*, Wako, Japan  
Speeding up PI(4,5)P<sub>2</sub> 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<sub>2</sub> cycle (Mar 11–14, 2018)
- 2018 *2<sup>nd</sup> International FishMed Conference on Zebrafish Research, FishMed2018*, Warsaw, Poland  
Evidence of sinks and sources in the PLC activated PIP<sub>2</sub> 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<sub>2</sub> 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<sub>2</sub> 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<sub>2</sub> on the plasma membrane (Jan 5–8, 2015)
- 2014 *Aspects of gene regulation*, Chennai, India  
PI(4,5)P<sub>2</sub> dynamics during *Drosophila melanogaster* phototransduction (Dec 16, 2014)
- 2014 *NCBS Annual Talks*, Bangalore, India  
PI(4,5)P<sub>2</sub> dynamics during *Drosophila melanogaster* 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  
Basic: Partial Differential equations, Bayesian Analysis

### Programming languages

Above average: Python 3, Java, Matlab,  $\text{\LaTeX}$   
Average: C++, Perl, Javascript/Typescript  
Basic: Actionscript, CSS, C#, AngularJS 2, SQL/Non-SQL database

## References

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