Rohit Suratekar

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Date of Birth: October 16, 1989

Nationality: Indian

Languages: English, Marathi, Hindi

Current position

Research Scholar, National Centre for Biological Sciences, Bangalore

Areas of specialization

Computational Cell Biology

Education

2012 - present **Doctor of Philosophy** in Computational Cell Biology

National Centre for Biological Sciences, Bangalore, India

Thesis topic: Understanding the structure and dynamics of Drosophila PIP2 cycle with

mathematical modelling

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 Regulation of lipid signaling pathway in *Drosophila melanogaster*

Supervisors: Dr. Sandeep Krishna and Prof. Raghu Padinjat

National Centre for Biological Sciences, Bangalore.

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 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

Suratekar R, Panda A, Padinjat R, Krishna S (2018). Evidence of sinks and sources in the phospholipase C activated PIP₂ cycle. *FEBS Lett.* 2018 Mar; 592(6):962-972. PubMed

PMID: 29427502. doi: 10.1002/1873-3468.12998

Research talks

2018 2nd International FishMed Conference on Zebrafish Research, FishMed2018, Warsaw, Poland

Evidence of sinks and sources in the PLC activated PIP2 cycle (March 25-27 2018)

2018 Aspects of Gene and Cellular Regulation, Chennai, India

Evidence of sinks and sources in the PLC activated PIP2 cycle (January 12-13 2018)

2017 Physical Concepts in Stem Cell Biology, Tisvildeleje, Denmark

Evidence of sinks and sources in the PLC activated PIP2 cycle (August 6-10 2017)

NCBS-RIKEN joint meeting for theoretical approaches in biology, Wako, Japan

Speeding up $PI(4,5)P_2$ recovery with top gear (April 7–10 2015)

Posters

2015

2018 Evidence of sinks and sources in the PLC activated PIP2 cycle EMBL Symposium: Tissue

Self-Organisation, March 11–14 2018 Heidelberg, Germany

2018	Evidence of sinks and sources in the PLC activated PIP ₂ cycle 2^{nd} International FishMed
	Conference on Zebrafish Research, FishMed2018, March 25–27 2018 Warsaw, Poland
2018	Evidence of sinks and sources in the PLC activated PIP2 cycle Celebrating Diversity in
	Biology - NCBS Annual Talks, January 3–5 2018 Bangalore, India
2017	The Hitchhiker's Guide to The Regulation of PI(4,5)P2 Cycle During Drosophila melanogaster
	Phototransduction, Futures in Biology - NCBS Annual Talks, January 11–14 2017 Bangalore,
	India
2015	Regulation of levels of PI(4,5)P2 on the plasma membrane, Biology across scale - NCBS
	Annual Talks, January 5–8 2015 Bangalore, India
2014	PI(4,5)P ₂ dynamics during <i>Drosophila melagogaster</i> phototransduction, Aspects of gene
	regulation, December 16 2014 Chennai, India
2014	PI(4,5)P ₂ dynamics during <i>Drosophila melagogaster</i> phototransduction, NCBS Annual Talks,
	January 15–17 2014 Bangalore, India
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Fellowships and Awards

2018	Young FishMed Speaker and Travel Grant, 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, 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 Prof. Raghu Padinjat (NCBS, Bangalore), email: praghu@ncbs.res.in

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