

Mayank Chugh

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EXPERIENCE	Postdoctoral Research Fellow, Harvard Medical School, US 2020–Present <ul style="list-style-type: none">Understanding fluid mechanics and biochemical signalling in shaping of organs using zebrafishExpertise: Zebrafish, molecular and cell biology, CRISPR, quantitative live imaging, data analysis
	Postdoctoral Research Fellow, University of Tübingen, Germany 2019–2020 <ul style="list-style-type: none">Investigating the role of molecular motor kinesin-8 in cell divisionExpertise: Cell culture, protein purification, protein biochemistry, single-molecule biophysics
	PhD, Max Planck Institute for Developmental Biology and University of Tübingen 2014–2019 <ul style="list-style-type: none">Functional investigation of plant molecular proteins kinesin-12 in cell division plane alignmentExpertise: Arabidopsis, in vitro reconstituted assays, cell culture, protein biochemistry, optical tweezers, single-molecule and live imaging, mathematical modelling, data analysis
	M.S., Indian Institute for Science Education and Research (IISER) Mohali, India 2012–2014 <ul style="list-style-type: none">Understanding generation and regulation of blood cell number in drosophilaExpertise: Drosophila, fly genetics, molecular biology, immuno-histochemical staining, molecular cloning, confocal microscopy, data analysis
	Summer Fellow, School in Neurosciences, Joint Program of Harvard, MIT, IIT Delhi 2013 <ul style="list-style-type: none">Anatomical and functional understanding of human brain and independent project on Epilepsy
	Summer Fellow, Indian Institute for Science (IISc) Bangalore, India 2012 <ul style="list-style-type: none">Investigating the molecular mechanism behind what controls the curvature of leavesExpertise: Arabidopsis, Molecular cloning
	B.S. Student Researcher, IISER Mohali 2010–2012 <ul style="list-style-type: none">Investigating haematopoietic stem cells and niche regulation and functionExpertise: Drosophila, fly genetics, molecular biology, dissections, immuno-histochemical staining, confocal microscopy, data analysis
EDUCATION	PhD in Biology , Max Planck Institute for Developmental Biology and University of Tübingen, Germany 2014–2019 <i>Magna cum laude thesis</i> B.S.-M.S. in Biology , Indian Institute of Science Education and Research (IISER) Mohali, India 2009–2014 <i>Award for Academic Excellence in Biology, CPGA: 9.2/10, Biology: 10/10</i>
POSITIONS / SERVICES	Chair , Harvard Medical Postdoc Association (HMPA) 2021-present DEI Chair , Fair recruitment of postdocs and faculty 2021-present Ambassador , ASAPbio 2018-present Editor , <i>The Offspring</i> , Max Planck Society PhDnet Magazine 2016-2018 Organiser , International Max Planck Annual PhD Retreat 2015-16 President , Environment Club, IISER Mohali 2012-2013 Vice-President , Environment Club, IISER Mohali 2011-2012 President , Student Government, High School 2007-2009
AWARDS	International Max Planck Research School Fellowship 2014-2019 Best Poster Presentation, Max Planck Retreat 2015 K.V.P.Y. Government of India Science Fellowship 2009-2014

Award for Academic Excellence in Biology, Class of 2014	2014
Dean's list 4X	2012-2014
Indian Academy of Sciences (IAS) Summer Fellowship	2012
Meritorious Achievement Scholarship, High School	2007-2009

- RESEARCH PUBLICATIONS
1. Bugiel, M., **Chugh, M.**, Jachowski, T.J., Schäffer, E. and Jannasch, A., 2020. The kinesin-8 Kip3 depolymerizes microtubules with a collective force-dependent mechanism. *Biophysical journal*, 118(8), 1958-1967.
 2. **Chugh, M.**, Reißner, M., Bugiel, M., Lipka, E., Herrmann, A., Roy, B., Müller, S. and Schäffer, E., 2018. Phragmoplast orienting kinesin 2 is a weak motor switching between processive and diffusive modes. *Biophysical journal*, 115(2), 375-385.
 3. Livanos, P., **Chugh, M.** and Müller, S., 2017. Analysis of phragmoplast kinetics during plant cytokinesis. *In Plant Protein Secretion* (137-150). Humana Press, New York, NY.
 4. Schellhaus, A.K., Moreno-Andrés, D., **Chugh, M.**, Yokoyama, H., Moschopoulou, A., De, S., Bono, F., Hipp, K., Schäffer, E. and Antonin, W., 2017. Developmentally Regulated GTP binding protein 1 (DRG1) controls microtubule dynamics. *Scientific reports*, 7(1),1-16.
 5. Dey NS, Ramesh P, **Chugh M**, Mandal S, Mandal L., 2016. Dpp dependent Hematopoietic stem cells give rise to Hh dependent blood progenitors in larval lymph gland of *Drosophila*. *Elife* 5, p. e18295
- SCIENTIFIC OUTREACH PUBLICATIONS
1. **Chugh, M.** Back to bench is resetting my mental clock. *The node: The company of Biologists*, Jul. 2020.
 2. **Chugh, M.**, and Hermsdorf, G., 2019. Homemade low-frequency vibration isolation system matches or exceeds commercial options. *Laser Focus World Magazine*, Oct., 37-40.
 3. Hmadi, R., Jeschke, A., **Chugh, M.**, Ilangovan, V., 2017. Hacking genomes using CRISPR. *The Offspring magazine*, 20-21
 4. **Chugh, M.**, 2017. In conversation with Prof. Marja Timmermans. *The Offspring magazine*, 5-6.
 5. **Chugh, M.**, 2017. A journey decoded. *The Offspring magazine*, 12-13.
 6. **Chugh, M.**, 2014. MEETING REPORT: Resonance: bringing together disciplines. *Current Science*, 106(5), 655-657.