

**Ameya Pranav Jalihal**  
Ph.D Candidate, Nils Walter Lab  
Cellular and Molecular Biology Program  
University of Michigan, Ann Arbor

## Education

Degree	GPA	Year
PhD Candidate, U of M, Ann Arbor, MI, USA	4.0 / 4.0	2015-present
B.Tech(Biotech.), SASTRA, Thanjavur, India	8.87 / 10	2011-2015

## Awards and Fellowships

<i>Graduate</i>	Honorable Mention, Poster Presentation, 36th Ann. CMB Symposium 2018 Honorable mention, NSF GRFP, 2017 Conference Travel Grant, Rackham Graduate School, 2017 Pre-Candidate Fellowship, Rackham Graduate School, 2016 Bernard Maas Fellowship, 2015
<i>Past</i>	Khorana Scholarship, 2014 Indian Academy of Sciences Summer Fellowship, 2014 Department awards Dean's List, 2011, 2012

## Current Research Interests

Biophysical factors that influence intracellular protein phase separation.  
Single molecule fluorescence microscopy and applications to intracellular biochemistry.

## Publications

1. Pitchiaya S, Mourao MDA, *Jalihal AP*, Xiao L, Jiang X, Chinnaiyan A, Schnell S, and Walter NG. (2018) Dynamic recruitment of single RNAs to Processing bodies depends on RNA functionality". *Molecular Cell*. In revision.
2. *Jalihal AP*, Lund PA, and Walter NG. (2018) Coming Together: RNAs and Proteins Assemble under the Single-Molecule Fluorescence Microscope. *RNA Worlds CSH Perspectives*. In press.
3. Micheli F, *Jalihal AP*, Francia S, Meers C, Neeb ZT, Rossiello F, Gioia U, Aguado J, Luke B, Biamonti G, Nowacki M, Storici F, Carninci P, Walter NG and d'Adda di Fagnana F. (2018) From "cellular" RNA to "smart" RNA: multiple roles of RNA in genome stability". *Chemical Reviews*.
4. Ray JCJ, Wickersheim ML, *Jalihal AP*, Adeshina YO, Cooper TF, Balázsi G. (2016) Cellular growth arrest and persistence from enzyme saturation. *PLOS Comp. Bio.*

## Presentations

[Oral] Biophysical Society Meeting, Baltimore, Maryland "Multimeric proteins reversibly form condensates upon osmotic compression". Authors: <i>Jalihal AP, Pitchiaya S, Walter NG</i>	2019
[Oral] RNA Society Meeting, University of California, Berkeley "Intracellular single particle tracking of miRNA induced silencing complexes and mRNAs reveals sub-stoichiometric, transient binding and induced target aggregation". Authors: <i>Jalihal AP, Li H, Walter NG</i>	2018

<b>[Oral] RNA Society Meeting, Prague, Czech Republic</b>	<b>2017</b>
<i>"Microscopically visible liquid droplet P-bodies contribute minimally to miRNA mediated gene silencing".</i>	
<i>Authors: Pitchiaya S, Jalihal AP, Max Denies, Mourao M, Schnell S, Walter NG</i>	
<b>[Poster] Phase Separation Meeting, San Diego, CA</b>	<b>2017</b>
<i>"Characterizing hypertonicity induced P-Body aggregation".</i>	
<i>Authors: Pitchiaya S, Jalihal AP, Max Denies, Walter NG</i>	
<b>[Poster] Rustbelt RNA Meeting, Cleveland, OH</b>	<b>2016</b>
<i>"Microscopically visible P-bodies contribute minimally to miRNA-mediated gene silencing".</i>	
<i>Authors: Pitchiaya S, Jalihal AP, Mourao M, Schnell S, Walter NG</i>	

## Past Research Experiences

<b>Undergraduate thesis project, University of Kansas</b>	<b>Winter 2015</b>
<i>Design and implementation of synthetic genetic circuit in E. coli to study effect of bacterial cytosolic memory on growth phenotypes based on the Landauer Principle.</i>	
<i>Mentor: Dr. Christian Ray.</i>	
<b>Khorana Scholarship, Rice University</b>	<b>Summer 2014</b>
<i>Computational modeling of the role of stochastic frequency modulated pulses of alternative sigma factor transcription in bacterial stress response.</i>	
<i>Mentor: Dr. Oleg Igoshin.</i>	
<b>IISER Mohali Summer Internship</b>	<b>Summer 2013</b>
<i>Characterizing the functional role of cell adhesion molecules at neural synapses in learning and memory formation in C. elegans.</i>	
<i>Mentor: Dr. Kavita Babu</i>	
<b>Research Science Initiative-Chennai</b>	<b>Summer 2010</b>
<i>Qualitative analysis of lipase producing bacteria.</i>	
<i>Mentor Dr. P. Gautam</i>	

## Activites

<i>Mentorship</i>	Mentored four rotators (CMB) and an undergraduate student in 2017-18
<i>Organizations</i>	Treasurer, Association of Multicultural Scientists, 2016-18 Member, Website and Recruitment Committees of CMB Program, 2017-18
<i>Teaching</i>	Graduate Student Instructor, CDB 530 Fall 2018
<i>Service</i>	Assisted with reviewing article for PLOS ONE, 2018
<i>Service</i>	Highly involved in recruiting graduate students for PIBS/CMB, 2017-18
<i>Outreach</i>	Teaching Assistant for Computational Biology Summer Camp 2016, mirCore Science demonstrations volunteer at Michigan Science Center, Detroit, 2015-17
<i>Past</i>	President, Association of Multicultural Scientists, 2017 Head of the Dramatics Club "The Studio". Involved in, and won awards for script writing, direction and acting. 2014-15 Founder, "Science Arattai", an interdisciplinary forum for undergraduates in SASTRA to innovate in the life-sciences
<i>Other</i>	Learning and performing Hindustani vocal music. 2015-present