SAUMYA JAIN

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School of Biological Sciences
Georgia Institute of Technology
Atlanta, GA

EDUCATION AND TRAINING

Postdoc	HHMI/ University of California, Los Angeles Research focus: Temporal control of post-mitotic neurodevelopment Advisor: Larry Zipursky	2016 - 2024
PhD	HHMI/ University of Arizona, Molecular & Cellular Biology Dissertation: The Analysis of mRNA-Protein Granule Composition and Structure Advisor: Roy Parker (currently at CU Boulder)	2009 - 2015
M.Tech/ B.Tech	Indian Institute of Technology, Delhi, Biochem. Engg. & Biotech. B. Tech Thesis: Mapping of active site of large family 3 glycosyl hydrolase family protein (BGL I) Advisor: Saroj Mishra	2004 - 2009

CURRENT EMPLOYMENT AND PRIOR WORK EXPERIENCE

Assistant Professor, Georgia Institute of Technology, Atlanta, GA	2024 -
Postdoctoral Researcher, Parker Lab, CU Boulder	2015 – 2016
Summer research scholar, Gerace Lab, The Scripps Research Institute, CA	2008
Research intern, Reliance Life Sciences, Mumbai, India	2007

ADDITIONAL TRAINING

CIMER Research Mentorship Training, UCLA 2020
Participated in evidence-based training in effective and culturally-responsive research mentorship developed by NRMN and CIMER.

FELLOWSHIPS AND AWARDS

Suzanne Eaton Memorial Prize for research excellence (UCLA)	2022
Winner, 10X Multiome Core Lab Grant Program	2022
Helen Hay Whitney Foundation Postdoctoral Fellowship	2017 – 2020
NIH T32 Neurobehavioral Genetics Training Grant	2016 – 2017
Rajindra Kumari Malhotra Memorial Award for all round performance (IIT Delhi)	2008
Ministry of Human Resource Development (Govt. of India) scholarship for excellent academic performance at the undergraduate level	2008 – 2009

PUBLICATIONS

Spatial profiling of the interplay between cell type- and vision-dependent transcriptomic programs in the visual cortex.
Xie F*, **Jain S***, Xu R*, Butrus S, Tan Z, Xu X, Shekhar K, Zipursky SL**. PNAS** 2025.

Temporal control of neuronal wiring.
Jain S, Zipursky SL. **Seminars in Cell and Developmental Biology** 2022.

A global timing mechanism regulates cell-type-specific wiring programmes.
Jain S*, Lin Y*, Kurmangaliyev YZ, Valdes-Aleman J, LoCascio SA, Mirshahidi P, Parrington B, Zipursky SL. **Nature** 2022.

Isolation of mammalian stress granule cores for RNA-Seq analysis
Khong A, **Jain S**, Matheny T, Wheeler JR, Parker R. **Methods** 2018.

The Stress Granule Transcriptome Reveals Principles of mRNA Accumulation in Stress Granules.
Khong A, Matheny T, **Jain S**, Mitchell SF, Wheeler JR, Parker R. **Molecular Cell** 2017.

Isolation of yeast and mammalian stress granule cores.
Wheeler JR, **Jain S**, Khong A, Parker R. **Methods** 2017.

Distinct stages in stress granule assembly and disassembly.
Wheeler JR*, Matheny T*, **Jain S***, Abrisch R, Parker R. **eLife** 2016.

Compositional Control of Phase-Separated Cellular Bodies.
Banani SF, Rice AM, Peeples WB, Lin Y, **Jain S**, Parker R, Rosen MK. **Cell** 2016.

ATPase-Modulated Stress Granules Contain a Diverse Proteome and Substructure.
Jain S*, Wheeler JR*, Walters RW, Agrawal A, Barsic A, Parker R. **Cell** 2016.

The discovery and analysis of P Bodies.
Jain S, Parker R. **Advances in Experimental Medicine and Biology** 2013.

Global analysis of yeast mRNPs.
Mitchell SF*, **Jain S***, She M, Parker R. **Nature Structural & Molecular Biology** 2013.

Elucidation of catalytically important residues in a large family 3 β-glucosidase from *Pichia etchellsii*.
Baranwal R, **Jain S**, Shah MA, Mishra S. **New Biotechnology** 2009.

*equal contribution

ORAL AND POSTER PRESENTATIONS

Oral presentation, “Control of spatial and temporal gene expression in developing nervous systems: Unprecedented insights from spatial and single-cell genomics”, AWSOM, Atllanta, 2025 (Invited talk).

Oral presentation, “How do nature and nurture shape the developing brain?”, University of Richmond, Richmond, 2025 (Invited talk).

Oral presentation, “How do nature and nurture shape the developing brain?”, Georgia State University, 2025 (Invited talk).

Poster presentation, “Investigation of Genetic Programs Regulating Vision-dependent Specification of L2/3 Neuron-types in the Mouse Visual Cortex”, Society for Neuroscience, Chicago, 2024.

Poster presentation, “Investigation of Genetic Programs Regulating Vision-dependent Specification of L2/3 Neuron-types in the Mouse Visual Cortex”, Molecular Mechanisms of Neuronal Connectivity, CSHL, 2024.

Oral presentation, “Temporal control of neuronal wiring programs”, Cell and Developmental Biology Club, UCLA, 2023.

Oral presentation, “Temporal control of neuronal wiring programs”, SiNaPS extramural postdoc seminar series, UT Southwestern, 2023.

Oral presentation, “Temporal control of neuronal wiring programs”, Synapse to circuit seminar, UCLA, 2022.

Oral presentation, “Temporal control of neuronal wiring programs”, Early Career Research in Neuroscience Seminar Series, virtual, Syracuse University, 2022.

Poster presentation, “A global timing mechanism regulates cell-type-specific wiring programs”, Molecular Mechanisms of Neuronal Connectivity, CSHL, 2022.

Poster presentation, “A global timing mechanism regulates cell-type-specific wiring programs”, Gordon Research Conference, Salve Regina University, 2022.

Oral presentation, “Ecdysone controls the cell-type specific timing of wiring genes for proper circuit formation”, Genetics Society of America – Annual *Drosophila* Research Conference, San Diego, 2022.

Oral presentation, “Ecdysone controls the cell-type specific timing of wiring genes for proper circuit formation”, International Insect Hormone Workshop, virtual, 2021.

Oral presentation, “Stimulus-induced genetic programs are the masterminds of brain wiring”, Synapse to circuit seminar, UCLA, 2021

Poster presentation, “Synchronized waves of gene expression control wiring in the fly visual system”, Nature Conference – Neurogenetics, virtual, 2020.

Oral presentation, “Coordinated hormone-driven waves of gene expression control neuronal circuit formation”, Department of Biological Chemistry seminar series, UCLA, 2020.

Oral presentation, “Coordinated, Ecdysone-driven genetic programs control circuit formation”, Neurobiology of Drosophila, CSHL, 2019.

Oral presentation, “Stress Granules are ATPase modulated liquids with a stable sub-structure”, Signaling and Cellular Regulation Symposium, University of Colorado, Boulder, 2016.

Oral presentation, “The Stress Granule proteome in yeast and mammalian cells”. RNA, University of Wisconsin, Madison, 2015.

SERVICE

Served as a judge for the Undergraduate Research Fellows Program (URFP) at UCLA every year from 2018 – 2021.

Served as a judge for the Undergraduate Research Scholars Program (URSP) at UCLA every year from 2019 – 2022.

Served as a moderator for the Undergraduate Research Showcase (2020, 2022).

Volunteered in the Assistive Technologies group (Assistech), IIT Delhi to develop a product testing protocol for the Smart Cane – a mobility aid for the visually impaired.