Weihan Li, PhD

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Professional Employment	
Assistant Professor Department of Molecular Biology, Cell Biology, and Biochemistry Brown University, USA	07/2025-now
Education & Postgraduate Training	
Postdoctoral Fellow Albert Einstein College of Medicine, USA Mentor: Dr. Robert H. Singer	11/2018-06/2025
Ph.D. in Biophysics University of California, San Francisco (UCSF), USA Mentor: Dr. Peter Walter	09/2011-10/2018
Visiting Research Assistant Niels Bohr Institute, Denmark Mentor: Dr. Mogens H. Jensen	07/2010-10/2010
B.Sc. in Applied Physics Hong Kong Baptist University (HKBU), Hong Kong Mentor: Dr. Leihan Tang	09/2007-07/2011

Awards & Honors

RNA Society Member Spotlight (<u>link</u>)	03/2024
Dennis Shields Research Award (<u>link</u>)	10/2023
K99/R00 NIH/NIGMS Pathway to Independence Award	08/2023-07/2028
American Heart Association Postdoctoral Fellowship	01/2022-08/2023
Invited speaker at the ASBMB Annual Meeting	05/2020
UCSF Zaffaroni Family Fellowship	09/2011
China Youth Science and Technology Innovation Award	06/2011
Gold Medal, International Genetically Engineered Machine (iGEM) competition	10/2009
College Full Scholarship, Hong Kong Baptist University	09/2007-07/2011
Funding	
K99/R00 NIH/NIGMS Pathway to Independence Award K99GM148788 (PI: Weihan Li)	08/2023-07/2028
"Spatial coordination of cytosolic and mitochondrial translation."	
American Heart Association Postdoctoral Fellowship 903024 (PI: Weihan Li)	01/2022-07/2023
"Spatial coordination of cytosolic and mitochondrial translations."	01/2022 01/2020
RNA Salon (MPI: Robert H. Singer, Weihan Li, Sulagna Das, Dong Woo Hwang)	11/2022-10/2024
"The Einstein RNA Club", sponsored by the RNA Society	
UCSF Zaffaroni Family Fellowship (PI: Weihan Li)	09/2011-09/2013
	03/2011-03/2013
Service & Leadership	
Junior lead editor, special issue "RNA Cell Biology" in Molecular Biology of the Cell (MBoC)	2024
Peer reviewer for American Heart Association Pre- and Postdoctoral Fellowships	2023
Co-organizer and chair of subgroup sessions at 2022 & 2023 ASCB EMBO Annual Meeting	s 2022-2023
Advisory committee and poster judge of the 1st Pan-NYC RNA Symposium	09/2023

Publications

- Hendrik Glauninger, Jared A.M. Bard, Caitlin J. Wong Hickernell, Edo M. Airoldi, Weihan Li, Robert H. Singer, Sneha Paul, Jingyi Fei, Tobin R. Sosnick, Edward W. J. Wallace, and D. Allan Drummond. "Transcriptome-wide mRNA condensation precedes stress granule formation and excludes stress-induced transcripts." *bioRxiv*, 2024.
- Weihan Li*,[†], Anna Maekiniemi*,[†], Hanae Sato, Christof Osman, and Robert H. Singer[†]. "An improved imaging system that corrects MS2-induced RNA destabilization." *Nature Methods*. 19(12), 1558-1562. (2022) (* equal contribution, † correspondence).
- 3. Weihan Li[†], and Robert H. Singer. "Detecting the non-conventional mRNA splicing and translational activation of *HAC1* in budding yeast." *Methods in Molecular Biology*, vol. 2378: 113-120 (2022). († correspondence)
- Adrien Le Thomas, Elena Ferri, Scot Marsters, Jonathan M. Harnoss, David A. Lawrence, Iratxe Zuazo-Gaztelu, Zora Modrusan, Sara Chan, Margaret Solon, Cécile Chalouni, Weihan Li, Hartmut Koeppen, Joachim Rudolph, Weiru Wang, Thomas D. Wu, Peter Walter, & Avi Ashkenazi. "Decoding non-canonical mRNA decay by the endoplasmic-reticulum stress sensor IRE1α." *Nature Communications*, 12, 7310 (2021).
- Ravi V. Desai, Xinyue Chen, Benjamin Martin, Sonali Chaturvedi, Dong Woo Hwang, Weihan Li, Chen Yu, Sheng Ding, Matt Thomson, Robert H. Singer, Robert A. Coleman, Maike M.K. Hansen, Leor S. Weinberger. "A DNA-repair pathway can affect transcriptional noise to promote cell fate transitions." *Science*, 373, no. 6557: eabc6506 (2021).
- 6. Jeetayu Biswas, **Weihan Li**, Robert H. Singer, and Robert A. Coleman. "Imaging Organization of RNA Processing within the Nucleus." *Cold Spring Harbor Perspectives in Biology*, a039453 (2021). [review]
- Weihan Li*, Kelly Crotty*, Diego Garrido Ruiz, Mark Voorhies, Carlos Rivera, Anita Sil, Dyche Mullins, Matthew Jacobson, Jirka Peschek, and Peter Walter. "Protomer alignment modulates specificity of RNA substrate recognition by Ire1." *eLife*, 10: e67425 (2021). (* equal contribution)
- Weihan Li[†], Voytek Okreglak, Jirka Peschek, Philipp Kimmig, Meghan Zubradt, Jonathan Weissman and Peter Walter[†]. "Engineering ER-stress dependent non-conventional mRNA splicing." *eLife*, 7:e35388 (2018). († co-correspondence)
- 9. Lu, Dan, Juliet Girard, **Weihan Li**, Arda Mizrak, and David O. Morgan. "Quantitative framework for ordered degradation of APC/C substrates." *BMC biology*, 13(1), 96 (2015).
- 10. Weihan Li, Sandeep Krishna, Simone Pigolotti, Namiko Mitarai, and Mogens H Jensen. "Switching between oscillations and homeostasis in competing negative and positive feedback motifs." *Journal of Theoretical Biology*, 307, 205–210 (2012).
- 11. Weihan Li and Changsong Zhou. "Topological determinants of synchronizability of oscillators on large complex networks." *The Open Bioinformatics Journal*, 5, 42-52 (2011). [review]

Conference Talks

Cold Spring Harbor Meeting on Single Biomolecules, USA	10/2024
ASCB EMBO Annual Meeting, Boston, USA	12/2023
Gordon Research Conference (GRC) RNA Nanotechnology, USA	01/2023
ASCB EMBO Annual Meeting, Washington DC, USA	12/2022
Cold Spring Harbor Meeting on Single Biomolecules, USA	08/2022
ASBMB Annual Meeting, Philadelphia, USA	04/2022
FASEB the ER Conference (virtual)	06/2021
Invited talk at the ASBMB Annual Meeting (virtual)	05/2020
The Annual Meeting for the Chilean Society for Cell Biology, Chile	10/2018
Cold Spring Harbor Meeting on Protein Homeostasis in Health & Disease, USA	04/2018
ASCB EMBO Annual Meeting, Philadelphia, USA	12/2017
Gordon Research Seminar (GRS) on Nucleic Acids, Biddeford, USA	06/2017
Cold Spring Harbor Meeting on Cell Biology of Yeasts, USA	10/2015

Symposium/Seminar Talks

RNA Symposium at Brown University	01/2025
Seminar at UMass Chan Medical School	12/2023
Seminar at Columbia University	05/2023
Seminar at University of California, San Diego	01/2023
Seminar at University of California, Santa Barbara	01/2023
Tri-Institutional RNA Symposium, Rockefeller University, USA	12/2022
Seminar at Colorado State University	06/2022
The 8th Annual RNA Symposium, SUNY Albany, USA	03/2022
Northern California Symposium of Computational Biology, USA	10/2018
Seminar at Princeton University	12/2017
Seminar at Genentech	11/2017
HHMI Collaborative Innovation seminar	10/2017
Seminar at University of Pittsburgh	04/2017

Teaching Experience

Mentor of the intern program of the European Master's Degree in Genetics	2022-2024
Mentor of the UCSF High School Intern Program	06/2018-08/2018
Mentor of the HHMI EXROP undergraduate research program	07/2017-08/2017
Teaching assistant of Physical Chemistry at UCSF	09/2012-12/2012