

Ji Seon (Jiseon) Min
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Employment/Education

University of Oregon, Postdoctoral Researcher (Kern-Ralph colab)	2022. Sep - Present
Oxford Statistical Genomics Summer School	2023. June
Harvard University, Ph.D. in Molecules, Cells and Organisms, M.S. in Applied Math (co-advised by Michael Desai and Ariel Amir)	2018. Sep - 2022. Nov
Boulder School for Condensed Matter and Materials Physics (Theoretical Biophysics)	2019. July
California Institute of Technology, B.S. in Physics	2014. Sep - 2018. June
University of Cambridge, NST Physics Part II, III	2018. Jan - 2018. Mar
MBL Physiology Course	2015. June - 2015. July

Selected Honors and Awards

Harvard NSF-Simons Qbio PhD Fellowship	2021 Fall - 2022 Spring
Certificate of Distinction in Teaching	2021 Spring, 2019 Fall
Korean Presidential Science Scholarship	2014. Aug - 2018. June
Monticello/Noland Summer Internship	2017. June - 2017. Aug
Caltech Summer Undergraduate Research Fellowship	2016. June - 2016. Aug
George W. Housner Student Discovery Fund	2017. Nov, 2015. June
Ph11 Research Fellowship	2014. June - 2014. Aug
International Young Physicists' Tournament - 2nd place, Gold	2013. May

Presentations

MIT Physics of Living system (invited talk), “Spatial structure alters the patterns of genetic diversity produced by hitchhiking”	2022. May
SMBE (poster), “Spatial structure alters the allele frequency spectrum produced by hitchhiking”	2021. June
APS March Meeting (oral), “Optimal segregation of proteins: phase transitions and symmetry breaking”	2019. March
CUWiP UCLA (poster), “Investigating metal to insulator phase transition of 5d pyrochlore using pump probe method”	2017. Jan
Boston Bacterial Meeting (poster) “Analysis of archaeal cell shape change induced by mechanical stress”	2016. May

Teaching Experiences

Bio 401 (Research), Mentor, University of Oregon	2023 Fall
Wellesley College Research Week, Mentor and Lecturer	2022 Winter
OEB 242 (Population Genetics), Teaching Fellow, Harvard	2021 Spring
AM 203 (Introduction to Disordered Systems and Stochastic Processes), Teaching Fellow, Harvard	2019-2020 Fall
Ph 11 (Freshman Seminar : Research Tutorial), Teaching Assistant, Caltech	2016 Fall - 2017 Spring

Publications and Preprints

1. **J Min**, M Gupta, MM Desai, MB Weissman, “Spatial structure alters the site frequency spectrum produced by hitchhiking.”, *Genetics* 222 (3), iyac139, (2022)
2. **JS Min**, “Coarse-grained Models of Biological Systems and Asymptotic Analyses on Population Dynamics” (2022)
3. **J Min**, A Amir, “A transport approach to relate asymmetric protein segregation and population growth.”, *Journal of Statistical Mechanics: Theory and Experiment* 7, 074503, (2021)
4. E Levien, **J Min**, J Kondev, A Amir, “Non-genetic variability in microbial populations: survival strategy or nuisance?”, *Reports on Progress in Physics* 84 (11), 116601 (2021)
5. F Barber, **J Min**, AW Murray, A Amir, “Modeling the impact of single-cell stochasticity and size control on the population growth rate in asymmetrically dividing cells.”, *PLOS Computational Biology* 17 (6), e1009080 (2021)
6. MS Johnson, S Gopalakrishnan, J Goyal, ME Gillingham, CW Bakerlee, PT Humphrey, T Jagdish, DR Jerison, K Kosheleva, KR Lawrence, **J Min**, A Moulana, AM Phillips, JC Piper, R Purkanti, A Rego-Costa, MJ McDonald, AN Nguyen Ba, MM Desai, “Phenotypic and molecular evolution across 10,000 generations in laboratory budding yeast populations.”, *ELife* 10, e63910 (2021)
7. PB Dieterle, **J Min**, D Irimia, A Amir, “Dynamics of diffusive cell signaling relays.”, *ELife* 9, e61771 (2020)
8. J Lin, **J Min**, A Amir. "Optimal segregation of proteins: phase transitions and symmetry breaking.", *Physical Review Letters* 122.6 (2019): 068101.