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Postdoctoral Scholar, Chemical and Systems Biology

Bio

PROFESSIONAL EDUCATION

- Bachelor of Science, Cornell University (2012)
- Doctor of Philosophy, University of California Berkeley (2016)

STANFORD ADVISORS

- Daniel Jarosz, Postdoctoral Faculty Sponsor

Publications

PUBLICATIONS

- **Metabolites control stress granule disassembly.** *Nature cell biology*
Jakobson, C. M., Jarosz, D. F.
2021
- **A prion accelerates proliferation at the expense of lifespan.** *eLife*
Garcia, D. M., Campbell, E. A., Jakobson, C. M., Tsuchiya, M., Shaw, E. A., DiNardo, A. L., Kaeberlein, M., Jarosz, D. F.
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- **What Has a Century of Quantitative Genetics Taught Us About Nature's Genetic Toolkit?** *Annual review of genetics*
Jakobson, C. M., Jarosz, D. F.
2020
- **Widespread Prion-Based Control of Growth and Differentiation Strategies in *Saccharomyces cerevisiae*.** *Molecular cell*
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2019
- **Molecular Origins of Complex Heritability in Natural Genotype-to-Phenotype Relationships** *CELL SYSTEMS*
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- **Molecular Origins of Complex Heritability in Natural Genotype-to-Phenotype Relationships.** *Cell systems*
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2019
- **Pervasive function and evidence for selection across standing genetic variation in *S. cerevisiae*.** *Nature communications*
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- **An estimate is worth about a thousand experiments: using order-of-magnitude estimates to identify cellular engineering targets** *MICROBIAL CELL FACTORIES*
Metcalf, K., Lee, M., Jakobson, C., Tullman-Ercek, D.
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- **Spatially organizing biochemistry: choosing a strategy to translate synthetic biology to the factory** *SCIENTIFIC REPORTS*
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- **Quantitative characterization of all single amino acid variants of a viral capsid-based drug delivery vehicle** *NATURE COMMUNICATIONS*
Hartman, E. C., Jakobson, C. M., Favor, A. H., Lobba, M. J., Alvarez-Benedicto, E., Francis, M. B., Tullman-Ercek, D.
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- **Organizing biochemistry in space and time using prion-like self-assembly.** *Current opinion in systems biology*
Jakobson, C. M., Jarosz, D. F.
2018; 8: 16–24
- **Evidence for Improved Encapsulated Pathway Behavior in a Bacterial Microcompartment through Shell Protein Engineering** *ACS SYNTHETIC BIOLOGY*
Lee, M., Jakobson, C. M., Tullman-Ercek, D.
2017; 6 (10): 1880–91
- **De novo design of signal sequences to localize cargo to the 1,2-propanediol utilization microcompartment** *PROTEIN SCIENCE*
Jakobson, C. M., Lee, M. F., Tullman-Ercek, D.
2017; 26 (5): 1086-1092