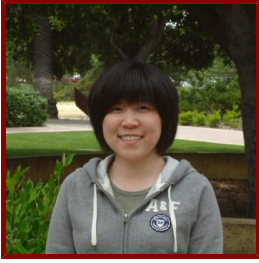


Stanford



Dan Song

Postdoctoral Research Fellow, Biochemistry

Bio

HONORS AND AWARDS

- National Research Service Award, National Heart, Lung, And Blood Institute of the National Institutes of Health (2018 - 2021)
- School of Medicine Dean's Postdoctoral Fellowship, Stanford University (2017 - 2018)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Member, Biophysical Society (2012 - present)

PROFESSIONAL EDUCATION

- Doctor of Philosophy, Harvard University (2017)
- Bachelor of Science, California Institute of Technology (2010)

STANFORD ADVISORS

- James Spudich, Postdoctoral Faculty Sponsor

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

My current research focuses on understanding how hypertrophic cardiomyopathy (HCM) causing mutations in human β -cardiac myosin alter the biomechanical function of the motor protein at the molecular level, which is a necessary prerequisite for the development of targeted therapies.

LAB AFFILIATIONS

- James Spudich, Spudich Lab (2/1/2017)

Publications

PUBLICATIONS

- **Controlling load-dependent kinetics of beta-cardiac myosin at the single-molecule level.** *Nature structural & molecular biology*
Liu, C., Kawana, M., Song, D., Ruppel, K. M., Spudich, J. A.
2018; 25 (6): 505–14
- **SETD3 is an actin histidine methyltransferase that prevents primary dystocia.** *Nature*
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2018
- **A network of cis and trans interactions is required for ParB spreading.** *Nucleic acids research*
Song, D., Rodrigues, K., Graham, T. G., Loparo, J. J.

2017

- **A general approach to visualize protein binding and DNA conformation without protein labelling** *NATURE COMMUNICATIONS*
Song, D., Graham, T. G., Loparo, J. J.
2016; 7
- **DNA Motion Capture Reveals the Mechanical Properties of DNA at the Mesoscale** *BIOPHYSICAL JOURNAL*
Price, A. C., Pilkiewicz, K. R., Graham, T. G., Song, D., Eaves, J. D., Loparo, J. J.
2015; 108 (10): 2532-2540
- **Tethered particle motion with single DNA molecules** *AMERICAN JOURNAL OF PHYSICS*
Song, D., Mousley, B., Gambino, S., Helou, E., Loparo, J., Price, A. C.
2015; 83 (5): 418-426
- **Building bridges within the bacterial chromosome** *TRENDS IN GENETICS*
Song, D., Loparo, J. J.
2015; 31 (3): 164-173
- **ParB spreading requires DNA bridging** *GENES & DEVELOPMENT*
Graham, T. G., Wang, X., Song, D., Etson, C. M., van Oijen, A. M., Rudner, D. Z., Loparo, J. J.
2014; 28 (11): 1228-1238
- **The Transcription Factor Titration Effect Dictates Level of Gene Expression** *CELL*
Brewster, R. C., Weinert, F. M., Garcia, H. G., Song, D., Rydenfelt, M., Phillips, R.
2014; 156 (6): 1312-1323