

Stanford



Srijit Mukherjee

Postdoctoral Scholar, Chemistry

Bio

HONORS AND AWARDS

- T-32 Biophysics Training Grant, National Institutes of Health and University of Colorado at Boulder (2018-2020)
- Graduate Teaching Award, Department of Chemistry, University of Colorado at Boulder (2017)
- Prof. SN Kaul Gold Medal, IISER Mohali (2016)
- Inspire Fellowship, Government of India, DST (2011-2016)

STANFORD ADVISORS

- Steven Boxer, Postdoctoral Faculty Sponsor

Publications

PUBLICATIONS

- **Influence of Fluorescence Lifetime Selections and Conformational Flexibility on Brightness of FusionRed Variants.** *The journal of physical chemistry letters*
Mukherjee, S., Douglas, N., Jimenez, R.
2024: 1644-1651
- **Conformational Dynamics of mCherry Variants: A Link between Side-Chain Motions and Fluorescence Brightness** *JOURNAL OF PHYSICAL CHEMISTRY B*
Mukherjee, S., Manna, P., Douglas, N., Chapagain, P. P., Jimenez, R.
2022: 52-61
- **Directed Evolution of a Bright Variant of mCherry: Suppression of Nonradiative Decay by Fluorescence Lifetime Selections.** *The journal of physical chemistry. B*
Mukherjee, S., Manna, P., Hung, S., Vietmeyer, F., Friis, P., Palmer, A. E., Jimenez, R.
2022
- **Characterizing dark state kinetics and single molecule fluorescence of FusionRed and FusionRed-MQ at low irradiances.** *Physical chemistry chemical physics : PCCP*
Mukherjee, S., Thomas, C., Wilson, R., Simmerman, E., Hung, S., Jimenez, R.
2022
- **Photophysical Engineering of Fluorescent Proteins: Accomplishments and Challenges of Physical Chemistry Strategies.** *The journal of physical chemistry. B*
Mukherjee, S., Jimenez, R.
2022; 126 (4): 735-750
- **Engineering of a Brighter Variant of the FusionRed Fluorescent Protein Using Lifetime Flow Cytometry and Structure-Guided Mutations.** *Biochemistry*
Mukherjee, S., Hung, S. T., Douglas, N., Manna, P., Thomas, C., Ekrem, A., Palmer, A. E., Jimenez, R.
2020; 59 (39): 3669-3682

- **Enrichment of rare events using a multi-parameter high throughput microfluidic droplet sorter.** *Lab on a chip*
Hung, S. T., Mukherjee, S., Jimenez, R.
2020; 20 (4): 834-843

- **Fluorescence Enhancement of Tb-3(+) in the Tb3+-Trimesic Acid-Gd3+ Complex: Role of Polynuclear Structures** *CHEMISTRYSELECT*
Dubey, P., Mukherjee, S., Choudhury, A., Viswanathan, K. S.
2019; 4 (9): 2747-2752

- **Directed evolution of excited state lifetime and brightness in FusionRed using a microfluidic sorter.** *Integrative biology : quantitative biosciences from nano to macro*
Manna, P., Hung, S. T., Mukherjee, S., Friis, P., Simpson, D. M., Lo, M. N., Palmer, A. E., Jimenez, R.
2018; 10 (9): 516-526