

Stanford



Naima G. Sharaf

Assistant Professor of Biology and, by courtesy, of Structural Biology

Bio

BIO

Naima Sharaf got her undergraduate degree in Chemistry at the University of North Carolina-Chapel Hill. She carried out her Ph.D. studies at the University of Pittsburgh in the lab of Dr. Angela Gronenborn where she used fluorine solution NMR to understand inhibitor-induced conformational changes with HIV-1 reverse transcriptase. To expand her structural biology skill set, she undertook postdoctoral training at Caltech in the lab of Dr. Doug Rees where she characterized the structure and function of the *Neisseria meningitidis* methionine ABC transport system using x-ray crystallography and single-particle cryo-EM. This research sparked Dr. Sharaf's current interest in lipoproteins, particularly their roles in bacterial physiology and potential in vaccine design. Research in the Sharaf Lab bridges biochemistry, biology, microbiology, and immunology to translate lipoprotein research into therapeutics.

ACADEMIC APPOINTMENTS

- Assistant Professor, Biology
- Assistant Professor (By courtesy), Structural Biology
- Member, Bio-X
- Faculty Fellow, Sarafan ChEM-H

Teaching

COURSES

2021-22

- Frontiers in Biology: BIO 301 (Aut, Win)

STANFORD ADVISEES

Doctoral Dissertation Reader (AC)

Jessica Zhang

Publications

PUBLICATIONS

- **Characterization of the ABC methionine transporter from *Neisseria meningitidis* reveals that lipidated MetQ is required for interaction** *ELIFE*
Sharaf, N. G., Shahgholi, M., Kim, E., Lai, J. Y., VanderVelde, D. G., Lee, A. T., Rees, D. C.
2021; 10