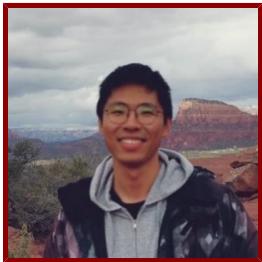


# Stanford

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## Haoqing Wang

Assistant Director, Cryo-Electron Microscopy  
Sarafan ChEM-H

### Bio

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#### ACADEMIC APPOINTMENTS

- Basic Life Science Research Associate, Sarafan ChEM-H

#### PROFESSIONAL EDUCATION

- BSc, Hong Kong University of Science and Technology , Molecular Biomedical Sciences (2013)
- PhD, California Institute of Technology , Biochemistry and Molecular Biophysics (2019)

#### LINKS

- <http://wanghaoqing.github.io>: <http://wanghaoqing.github.io>

### Publications

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#### PUBLICATIONS

- Discovery of VH domains that allosterically inhibit ENPP1.** *Nature chemical biology*  
Solomon, P. E., Bracken, C. J., Carozza, J. A., Wang, H., Young, E. P., Wellner, A., Liu, C. C., Sweet-Cordero, E. A., Li, L., Wells, J. A.  
2023
- Structural basis for activation of CB1 by an endocannabinoid analog.** *Nature communications*  
Krishna Kumar, K., Robertson, M. J., Thadhani, E., Wang, H., Suomivuori, C. M., Powers, A. S., Ji, L., Nikas, S. P., Dror, R. O., Inoue, A., Makriyannis, A., Skiniotis, G., Kobilka, et al  
2023; 14 (1): 2672
- Negative allosteric modulation of the glucagon receptor by RAMP2.** *Cell*  
Krishna Kumar, K., O'Brien, E. S., Habrian, C. H., Latorraca, N. R., Wang, H., Tuneew, I., Montabana, E., Marqusee, S., Hilger, D., Isacoff, E. Y., Mathiesen, J. M., Kobilka, B. K.  
2023; 186 (7): 1465-1477.e18
- Negative allosteric modulation of the glucagon receptor by RAMP2**  
O'Brien, E. S., Kumar, K., Habrian, C., Latorraca, N. R., Wang, H., Tuneew, I., Montabana, E., Marqusee, S., Hilger, D., Isacoff, E. Y., Mathiesen, J. M., Kobilka, B. K.  
CELL PRESS.2023: 161A
- Negative allosteric modulation of the glucagon receptor by RAMP2.** *Biophysical journal*  
O'Brien, E. S., Krishna Kumar, K., Habrian, C., Latorraca, N. R., Wang, H., Tuneew, I., Montabana, E., Marqusee, S., Hilger, D., Isacoff, E. Y., Mathiesen, J. M., Kobilka, B. K.  
2023; 122 (3S1): 161a
- Structural and dynamic insights into supra-physiological activation and allosteric modulation of a muscarinic acetylcholine receptor.** *Nature communications*  
Xu, J., Wang, Q., Hübner, H., Hu, Y., Niu, X., Wang, H., Maeda, S., Inoue, A., Tao, Y., Gmeiner, P., Du, Y., Jin, C., Kobilka, et al

2023; 14 (1): 376

● **Structure-based design of bitopic ligands for the  $\mu$ -opioid receptor.** *Nature*

Faouzi, A., Wang, H., Zaidi, S. A., DiBerto, J. F., Che, T., Qu, Q., Robertson, M. J., Madasu, M. K., El Daibani, A., Varga, B. R., Zhang, T., Ruiz, C., Liu, et al 2022

● **Insights into distinct signaling profiles of the OR activated by diverse agonists.** *Nature chemical biology*

Qu, Q., Huang, W., Aydin, D., Paggi, J. M., Seven, A. B., Wang, H., Chakraborty, S., Che, T., DiBerto, J. F., Robertson, M. J., Inoue, A., Suomivuori, C., Roth, et al 2022

● **3,4-Bis(hydroxymethyl)hexane-1,6-diol-based maltosides (HDMs) for membrane-protein study: Importance of detergent rigidity-flexibility balance in protein stability.** *Chemistry, an Asian journal*

Lee, H. S., Das, M., Mahler, F., Ahmed, W., Wang, H., Mortensen, J. S., Hariharan, P., Ghani, L., Byrne, B., Guan, L., Loland, C. J., Keller, S., Chae, et al 2022

● **Development of 1,3-acetonedicarboxylate-derived glucoside amphiphiles (ACAs) for membrane protein study.** *Chemical science*

Lee, H. J., Ehsan, M., Zhang, X., Katsume, S., Munk, C. F., Wang, H., Ahmed, W., Kumar, A., Byrne, B., Loland, C. J., Guan, L., Liu, X., Chae, et al 2022; 13 (19): 5750-5759

● **Development of 1,3-acetonedicarboxylate-derived glucoside amphiphiles (ACAs) for membrane protein study** *CHEMICAL SCIENCE*

Lee, H., Ehsan, M., Zhang, X., Katsume, S., Munk, C. F., Wang, H., Ahmed, W., Kumar, A., Byrne, B., Loland, C. J., Guan, L., Liu, X., Chae, et al 2022

● **Structure-based Evolution of G protein-biased mu-opioid Receptor Agonists.** *Angewandte Chemie (International ed. in English)*

Gmeiner, P., Wang, H., Hetzer, F., Huang, W., Qu, Q., Meyerowitz, J., Kaindl, J., Hubner, H., Skiniotis, G., Kobilka, B. K. 2022

● **Foldable detergents for membrane protein study: Importance of detergent core flexibility in protein stabilization.** *Chemistry (Weinheim an der Bergstrasse, Germany)*

Ghani, L., Kim, S., Wang, H., Lee, H. S., Mortensen, J. S., Katsume, S., Du, Y., Sadaf, A., Byrne, B., Guan, L., Loland, C. J., Kobilka, B. K., Im, et al 2022

● **Glyco-steroidal amphiphiles (GSAs) for membrane protein structural study.** *Chembiochem : a European journal of chemical biology*

Ehsan, M., Wang, H., Katsume, S., Munk, C. F., Du, Y., Youn, T., Yoon, S., Byrne, B., Loland, C. J., Guan, L., Kobilka, B. K., Chae, P. S. 2022

● **Sequential immunization of macaques elicits heterologous neutralizing antibodies targeting the V3-glycan patch of HIV-1 Env** *SCIENCE TRANSLATIONAL MEDICINE*

Escolano, A., Gristick, H. B., Gautam, R., DeLaitsch, A. T., Abernathy, M. E., Yang, Z., Wang, H., Hoffmann, M. G., Nishimura, Y., Wang, Z., Koranda, N., Kakutani, L. M., Gao, et al 2021; 13 (621): eabk1533

● **Maltose-bis(hydroxymethyl)phenol (MBPs) and Maltose-tris(hydroxymethyl)phenol (MTPs) Amphiphiles for Membrane Protein Stability.** *ACS chemical biology*

Ehsan, M., Wang, H., Cecchetti, C., Mortensen, J. S., Du, Y., Hariharan, P., Nygaard, A., Lee, H. J., Ghani, L., Guan, L., Loland, C. J., Byrne, B., Kobilka, et al 2021

● **Conformationally flexible core-bearing detergents with a hydrophobic or hydrophilic pendant: Effect of pendant polarity on detergent conformation and membrane protein stability.** *Acta biomaterialia*

Sadaf, A., Kim, S., Bae, H. E., Wang, H., Nygaard, A., Uegaki, Y., Du, Y., Munk, C. F., Katsume, S., Bae, J., Choi, C. W., Choi, H., Byrne, et al 2021

● **Construction, characterization, and immunization of nanoparticles that display a diverse array of influenza HA trimers** *PLOS ONE*

Cohen, A. A., Yang, Z., Gnanapragasam, P. P., Ou, S., Dam, K. A., Wang, H., Bjorkman, P. J. 2021; 16 (3): e0247963

● **Diastereomeric Cyclopentane-Based Maltosides (CPMs) as Tools for Membrane Protein Study.** *Journal of the American Chemical Society*

Das, M., Mahler, F., Hariharan, P., Wang, H., Du, Y., Mortensen, J. S., Patallo, E. P., Ghani, L., Gluck, D., Lee, H. J., Byrne, B., Loland, C. J., Guan, et al 2020

- **New Malonate-Derived Tetraglucoside Detergents for Membrane Protein Stability.** *ACS chemical biology*  
Ehsan, M., Katsume, S., Cecchetti, C., Du, Y., Mortensen, J. S., Wang, H., Nygaard, A., Ghani, L., Loland, C. J., Kobilka, B. K., Byrne, B., Guan, L., Chae, et al  
2020
- **Publisher Correction: Asymmetric opening of HIV-1 Env bound to CD4 and a coreceptor-mimicking antibody.** *Nature structural & molecular biology*  
Yang, Z., Wang, H., Liu, A. Z., Gristick, H. B., Bjorkman, P. J.  
2020
- **Publisher Correction: Asymmetric opening of HIV-1 Env bound to CD4 and a coreceptor-mimicking antibody.** *Nature structural & molecular biology*  
Yang, Z., Wang, H., Liu, A. Z., Gristick, H. B., Bjorkman, P. J.  
2019
- **Asymmetric opening of HIV-1 Env bound to CD4 and a coreceptor-mimicking antibody.** *Nature structural & molecular biology*  
Yang, Z., Wang, H., Liu, A. Z., Gristick, H. B., Bjorkman, P. J.  
2019
- **A functional enrichment test for molecular convergent evolution finds a clear protein-coding signal in echolocating bats and whales.** *Proceedings of the National Academy of Sciences of the United States of America*  
Marcovitz, A., Turakhia, Y., Chen, H. I., Gloudemans, M., Braun, B. A., Wang, H., Bejerano, G.  
2019