

Jordy Homing Lam

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High Performance Computing • Informatics • Geometric Deep Learning • Structural Biology

EDUCATION

University of Southern California <i>Ph.D. Candidate Bioinformatics</i>	2019 – Present
Hong Kong University of Science and Technology <i>M.Phil. Chemistry</i>	2017
The Chinese university of Hong Kong <i>B.S.(Hons) Chemistry</i>	2015

SERVICE

Teaching | *Methods in Computational Physics · Structural Bioinformatics · Medicinal Chemistry*
Reviewer | *Computer Physics Communications*

AWARD

Dornsife Graduate Fellowship <i>University of Southern California</i> • Ph.D. Funding	2019 – Present
Sir David Trench Scholarship <i>The Chinese University of Hong Kong</i> (1 per whole student body) • A scholarship "awarded to a final-year student in recognition of their all-round leadership".	2015
Grace Chiu Po Yuen Memorial Prize <i>The Chinese University of Hong Kong</i> (1 per class) • Academic award for Biochemistry or Chemistry student.	2015
Ho Man Sum Distinguished College Service Award <i>The Chinese University of Hong Kong</i> (1 per college) • Awarded to an achiever of "a balanced development in academic pursuit and contributions to the United College".	2012
Diploma, Violin <i>The Royal Academy of Music, United Kingdom</i> • Passed with Distinction.	2008

MISCELLANY

Languages: English · Cantonese · Mandarin · French · Beginning Japanese
Programming: Python · Cython · C · CUDA · Fortran90 · Matlab · Bash · Slurm · L^AT_EX
Music: Instrumental · Polyphony

PUBLICATION

† indicates co-first authorship.

Scalable anisotropic vibrations of megascale macromolecules Lam JH , Nakano A, Katritch V	NATURE COMMUN. 2024 <i>In Review, Revised.</i>
Nimrodd: Enhancing multi-resolution geometric neural hierarchy with an expectation maximization kernel Lam JH , Ferrari T, Liu Y, Nakano A, Katritch V	IN PREPARATION 2024
Structural Insights into Inverse Agonism of an Orphan Receptor Barekatain M [†] , Johansson L [†] , Lam JH [†] , Chang H, Sadybekov A, Han GW, Russo J, Bliesath J, Brice N, Carlton M, Saikatendu K, Murphy S, Monenschein H, Schiffer H, Popov P, Lutomski C, Robinson CV, Liu ZJ, Hua T, Katritch V, Cherezov V	SUBMITTED 2024 <i>In Review.</i>

- Constitutive activation mechanism of a class C GPCR** NAT. STRUCT. MOL. BIOL. 2024
Shin J, Park J, Jeong J, [Lam JH](#), Qiu X, Wu D, Kim K, Lee J, Robinson CV, Hyun J, Katritch V, Kim KP, Cho Y *In Press.*
- Structure of the dopamine D3 receptor bound to a bitopic agonist reveals a new specificity site in an expanded allosteric pocket** NAT. COMMUN. 2024
Arroyo-Urea S, Nazarova AL, Carrión-Antolí A, Bonifazi A, Battiti FO, [Lam JH](#), Newman AH, Katritch V, García-Nafria J *In Review.*
- Ligand and G-protein selectivity in the κ -opioid receptor** NATURE 2023
Han J, Zhang J, Nazarova AL, Bernhard SM, Krumm BE, Zhao L, [Lam JH](#), Rangari VA, Majumdar S, Nichols DE, Katritch V, Yuan P, Fay JF, Che T [\[DOI\]](#)
- Structural details of a Class B GPCR-arrestin complex revealed by genetically encoded crosslinkers in living cells** NAT. COMMUN. 2023
Aydin Y[†], Böttke T[†], [Lam JH](#)[†], Ernicke S, Fortmann A, Tretbar M, Zarzycka B, Gurevich VV, Katritch V, Coin I [\[DOI\]](#)
- Structural basis of GABA reuptake inhibition** NATURE 2022
Motiwala Z, Aduri NG, Shaye H, Han GW, [Lam JH](#), Katritch V, Cherezov V, Gati C [\[DOI\]](#)
- Structure of the full-length human Pannexin1 channel and insights into its role in pyroptosis** CELL DISCOV. 2021
Zhang S, Yuan B, [Lam JH](#), Zhou J, Zhou X, Ramos-Mandujano G, Tian X, Liu Y, Han R, Li Y, Gao X, Li M, Yang M [\[DOI\]](#)
- Structural basis of the activation of a metabotropic GABA receptor** NATURE 2020
Shaye H, Ishchenko A, [Lam JH](#), Han GW, Xue L, Rondard P, Pin JP, Katritch V, Gati C, Cherezov V [\[DOI\]](#)
- Self-assembling tetrameric peptides allow in situ 3D bioprinting under physiological conditions** J. MATER. CHEM. B. 2019
Rauf S, Susapto HH, Kahin K, Alshehri S, Abdelrahman S, [Lam JH](#), Asad S, Jadhav S, Sundaramurthi D, Gao X, Hauser CAE [\[DOI\]](#)
- A deep learning framework to predict binding preference of RNA constituents on protein surface** NAT. COMMUN. 2019
[Lam JH](#), Li Y, Zhu L, Umarov R, Jiang H, Héliou A, Sheong FK, Liu T, Long Y, Li Y, Fang L, Altman RB, Chen W, Huang X, Gao X [\[DOI\]](#)