



MMI 291 Seminar Series

Spring Quarter 2023 – CRN 51609 - Zoom

“Cryo-EM structure of SARS-CoV-2 spike protein”

Dr. Bing Chen received his Bachelor of Science degree in Biology from Fudan University, China, and his Ph.D. in Biochemistry from Ohio State University under the supervision of Dr. Alan Lambowitz. After his postdoctoral training in Structural Biology with Drs. Stephen Harrison and Don Wiley at Harvard Medical School and Boston Children’s Hospital, he rose through the ranks and is currently Rosalind Franklin Ph.D. Professor of Pediatrics at Harvard Medical School and Boston Children’s Hospital. Research in his laboratory centers on elucidating molecular mechanisms of how enveloped viruses, such as HIV-1 and SARS-CoV-2, enter host cells using biochemical and structural biology approaches. The long-term goal is to generate molecular pictures illustrating the viral entry process and to use structural information to facilitate development of diagnostics, vaccines and therapeutics.

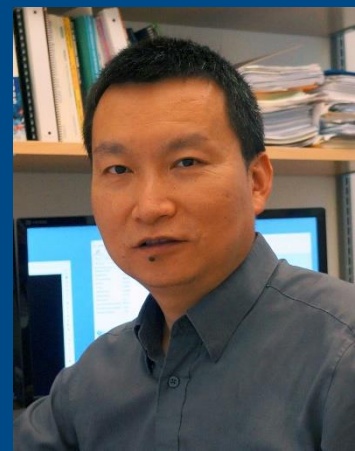
Publications

Zhang J, Xiao T, Cai Y, Lavine CL, Peng H, Zhu H, Anand K, Tong P, Gautam A, Mayer ML, Walsh RM, Jr., Rits-Volloch S, Wesemann DR, Yang W, Seaman MS, Lu J, **Chen B**. Membrane fusion and immune evasion by the spike protein of SARS-CoV-2 Delta variant. *Science*. 2021 Dec 10;374(6573):1353-1360.

Zhang J, Cai Y, Xiao T, Lu J, Peng H, Sterling SM, Walsh RM, Rits-Volloch S, Zhu H, Woosley AN, Wei Y, Sliz P, **Chen B**. Structural impact on SARS-CoV-2 spike protein by D614G substitution. *Science*. 2021 Apr 30;372(6541):525-530. PubMed PMID: 33727252; PMCID: PMC8139424.

Cai Y, Zhang J, Xiao T, Peng H, Sterling SM, Walsh Jr RM, Rawson S, Rits-Volloch S, **Chen B**. Distinct conformational states of SARS-CoV-2 spike protein. *Science*. 2020 Sep 25;369(6511):1586-1592. PubMed PMID: 32694201; PMCID: PMC7464562.

April
7



Bing Chen, Ph.D.
Professor

Rosalind Franklin Ph.D.
Professor of Pediatrics
Harvard Medical School
Boston Children's Hospital

April 7, 2023
12:10 – 1 p.m.

Medical Microbiology
and Immunology
School of Medicine

Seminar Contact:
Autumn Vega
530-752-9401
advega@ucdavis.edu

We hope to see you there!