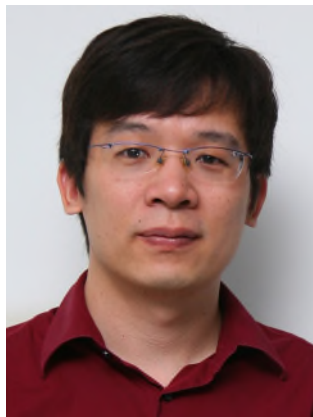


# CBC Virtual Seminar Series



**Professor Xing Chen**  
Peking University, China

## Chemical Approaches for Deciphering Glycosylation

As one of the major biomacromolecules, glycans mediate various important physiological and pathological processes. On the other hand, glycans are highly complex and heterogeneous. As a result, unlike nucleic acids and proteins, powerful tools for analyzing and profiling glycosylation are relatively lacking. Chemical methods can help address these challenges. For examples, metabolic glycan labeling has emerged as a central tool for glycan imaging and glycoproteomic profiling in live cells and living animals. Our group has developed several chemical tools to elucidate the biological function of glycosylation, with an emphasis on *in vivo* labeling, visualization, and profiling of glycosylation dynamics. We are particularly interested in how glycosylation regulates the physiology and pathology in the brain and during development. In this talk, I will introduce some of the recent progresses in this direction.

### References:

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2. Qin, W.; Qin, K.; Zhang, Y.; Jia, W.; Chen, Y.; Cheng, B.; Peng, L.; Chen, N.; Liu, Y.; Zhou, W.; Wang, Y.; Chen, X.\*; Wang, C.\* "S-Glycosylation-Based Cysteine Profiling Reveals Regulation of Glycolysis by Itaconate" *Nat. Chem. Biol.* 15, 983-991 (2019).
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### Biography

Dr. Xing Chen is currently Changjiang distinguished Professor and Dean of the College of Chemistry and Molecular Engineering at Peking University. He completed his bachelor's degree in chemistry from Tsinghua University in 2002 and his Ph.D. in chemistry from University of California, Berkeley in 2007, under the guidance of Prof. Carolyn Bertozzi and Prof. Alex Zettl. He then joined the laboratory of Prof. Timothy Springer at Harvard Medical School as a LSRF postdoctoral fellow, where his research focused on structural immunology. Dr. Chen started as an Assistant Professor of Chemistry at Peking University in 2010 and was promoted directly to Full Professor with tenure in 2016. He is also affiliated with Center for Life Science (CLS) and Synthetic and Functional Biomolecule Center (SFBC) of Peking University. Some of his recent awards include O'Keanos-CAPA Senior Investigator Award at the Chemical and Biology Interface (2019), CCS-RSC Young Chemist Award (2018), ACS David Y. Gin New Investigator Award (2016), IGO Young Glycoscientist Award (2015), and National Science Fund for Distinguished Young Scholars (2014). His current research interest focuses on chemical glycobiology.

**Date:** 24<sup>th</sup> July 2020, Friday  
**Time:** 10.00am to 11.30am  
**Venue:** Zoom Platform  
**Host:** Assistant Professor Qiao Yuan

**For Zoom registration:**

