浙江大学基础医学院
School of Basic Medical Sciences, Zhejiang University

系列学术报告（十）

Mechanistic Studies on Diphthamide Biosynthesis

报告人：董敏 博士

时间：4月23日10:00-11:00

地点：医学院综合楼705

主持人：杨巍 教授

Dr. Dong is currently a research associate in the Department of Chemistry and Chemical Biology at Cornell University/Howard Hughes Medical Institute. He earned his Ph.D. degree in Chemical Biology from Peking University with Prof. Li He Zhang in 2010. Dr. Dong has a multi-disciplinary background in chemical biology, enzymology, medicinal chemistry, and organic chemistry. His research focuses on the mechanistic and functional studies on metalloproteins involved in diphthamide biosynthesis. Dr. Dong has published multiple papers in Science, J. Am. Chem. Soc., Nat. Chem. Biol., Org. Lett., etc.

1. **Dong, M.;** Kathiresan, V.; Fenwick, M. K.; Torelli, A. T.; Zhang, Y.; Caranto, J. D; Dzikovski, B.; Sharma, A.; Lancaster, K. M.; Freed, J. H.; Ealick, S. E.; Hoffman, B. M.; Lin, H. Organometallic and radical intermediates reveal mechanism of diphthamide biosynthesis. ***Science*** 2018. Just accepted. DOI: 10.1126/science.aao6595.

2. **Dong, M**.; Horitani, M.; Dzikovski, B.; Freed, J. H.; Ealick, S. E.; Hoffman, B. M.; Lin, H. Substrate-Dependent Cleavage Site Selection by Unconventional Radical S-Adenosylmethionine Enzymes in Diphthamide Biosynthesis. ***JACS***. 2017. 139, 5680-5683

3. **Dong, M*.;** Horitani, M*.; Dzikovski, B.; Pandelia, M. E.; Krebs, C.; Freed, J. H.; Hoffman, B.; Lin, H. Organometallic complex formed by an unconventional radical SAM enzyme. ***JACS***. 2016. 138, 9755-9758. * Equal contribution

4. Dong, M.; Su, X.; Dzikovski, B. G.; Dando, E. E.; Zhu, X.; Du, J.; Freed, J. H.; Lin, H. Dph3 is an electron donor for Dph1-Dph2 in the first step of eukaryotic diphthamide biosynthesis. ***JACS***. 2014, 136, 1754−7

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