

# Structure Identification and Biosynthesis of Bioactive Compounds

By **Dr. Yang Bao**

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**Date:** 22<sup>nd</sup> August 2017, Tuesday

**Time:** 12 – 1 pm

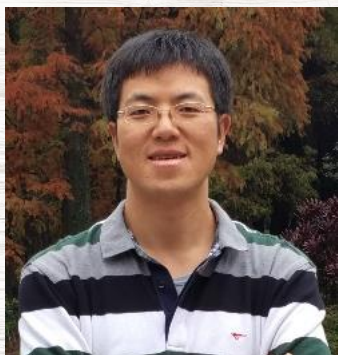
**Host:** Asst. Prof. Yang Hongshun

**Venue:** Seminar Room S14-06-19

## Abstract

Flavonoids and polysaccharides are two common nutraceuticals with great health benefits. Prenylated flavonoids show improved bioactivities compared to flavonoid precursors. However, their natural abundance is low. Production of prenylated flavonoids by metabolic engineering is a promising technique, and the key is to find an efficient prenyltransferase. In this presentation, I will introduce a prenyltransferase gene from *Fusarium oxysporum*. I will introduce the catalytic properties, including substrate specificity and kinetics, and the catalytic mechanism. As the precise identification of polysaccharide structure remains a big challenge in carbohydrate research, how to resolve this problem will be introduced as well.

## About the speaker



Prof Yang works on exploration, structure identification and biosynthesis of bioactive compounds, especially on prenylated flavonoids and polysaccharides. Prof Yang obtained his Ph.D. in Food Science from South China University of Technology, China in 2006. Then he worked at South China Botanical Garden, Chinese Academy of Science (CAS) as assistant Prof. (2006-2008), associate professor (2008-2013) and full professor (2014-till now). He has published more than 160 papers in international journals, including *Free Radical Biology & Medicine*, *Biomacromolecules*, *Trends in*

*Food Science & Technology*. These publications have achieved more than 3000 citations with H-index of 31. He has been selected as the **Top Cited Scholar of China** in Agriculture and Biology by Elsevier. His research has been financially supported by Distinguished Young Scientist Fund of Chinese Academy of Sciences, International Foundation for Science, Sweden, Guangdong Natural Science Foundation for Distinguished Young Scholar, National Natural Science Foundation of China and National Key Research and Development Program of China. In addition, he has been awarded the "Distinguished Young Scholar of CAS".