

# 講演会のお知らせ

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Departments of Chemistry & Molecular Medicine

Natural Products Discovery Center

The Herbert Wertheim UF Scripps Institute for Biomedical Innovation & Technology

Skaggs Graduate School of Chemical and Biological Sciences at Scripps Research

## " Leveraging the Actinobacteria Strain Collection and Genome Database at NPDC for Eneidyne Natural Product Biosynthesis "

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場所： 大岡山 本館3階 理学院第2会議室 (本館345)

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## Leveraging the Actinobacteria Strain Collection and Genome Database at NPDC for Eneidyne Natural Product Biosynthesis

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**Abstract:** The Natural Products Discovery Center (NPDC) at The Herbert Wertheim UF Scripps Institute for Biomedical Innovation & Technology houses one of the world's largest actinobacterial strain collections and genome databases. The Actinobacterial Strain Collection, containing 122,522 strains isolated over the last eight decades and from 77 different countries, represents microbial and natural product (NP) diversities that are not available anywhere else. The Actinobacterial Genome Database, containing 14,646 sequenced and curated genomes, represents the largest Actinobacterial Genome Database with the sequenced strains publicly available. We have launched an interactive NPDC web portal to establish the Actinobacterial Strain Collection and Genome Database at NPDC as Community Resource (<https://npdc.rc.ufl.edu/home>), allowing users-driven searches cross the Strain Collection and Genome Database at NPDC and requesting strains of interests to enable physical experimentation. Lessons from our enediynes natural products program will be presented to highlight how such a Community Resource could radically transform the current paradigm of NPs research and associated application.



**Short biography:** Ben received B.Sc. from Hangzhou University (1982), M.S. from the Chinese Academy of Sciences (1984), Ph.D. from Oregon State University (1991), and carried out postdoctoral research at University of Wisconsin-Madison (1991-1995). Ben served on the faculty at the University of California Davis (1995-2001), University of Wisconsin-Madison (2001-2010), and The Scripps Research Institute, Scripps Research (2011-2022). Currently, Ben is a Professor in the Departments of Chemistry and Molecular Medicine, serves as Director of Natural Products Discovery Center at the Herbert Wertheim UF Scripps Institute for Biomedical Innovation & Technology (2022-), and is a Professor in the Skaggs Graduate School of Chemical and Biological Sciences at Scripps Research (2011-). Research in the Shen Lab centers on chemistry, biochemistry, and genetics of natural product biosynthesis and mining of actinobacterial genomes for natural products and drug discovery. The Shen lab has authored 306 publications and 13 published patents.