

THE WERTHEIM UF SCRIPPS INSTITUTE CHEMICAL BIOLOGY & 5TH UF DRUG DISCOVERY SYMPOSIUM | 2023 AGENDA

APRIL 20, 2023

8:00 – 9:00 am **REGISTRATION & COFFEE**

9:00 – 9:15 am **Welcome Address and Introductory Remarks**

Tom Kodadek, Professor of Chemistry, Department of Chemistry, Herbert Wertheim UF Scripps Institute for Biomedical Innovation and Technology, Jupiter, FL

Hendrik Luesch, Professor and Chair, Department of Medicinal Chemistry, Director, Center for Natural Products, Drug Discovery and Development (CNPD3), University of Florida, Gainesville, FL

Peter Swaan, Professor and Dean, College of Pharmacy, University of Florida, Gainesville, FL

Rolf Renne, Professor, Department of Molecular Genetics and Microbiology, Associate Director, UF Health Cancer Center, University of Florida, Gainesville, FL

SESSION 1: NATURAL PRODUCTS CHEMISTRY • 9:15 – 11:50 AM

(Moderators: Hendrik Luesch & Yousong Ding)

9:15 – 10:00 am **KEYNOTE ADDRESS**

Marine Polyketide Cancer Drug Candidates: Full Stereochemical Assignments by Genomic Bioinformatics

Bill Fenical, Distinguished Professor of Oceanography, Scripps Institution of Oceanography, University of California, San Diego, CA

10:00 – 10:25 am **Leverage a Large Actinobacterial Strain Collection for Natural Products and Drug Discovery**

Ben Shen, Professor, Herbert Wertheim UF Scripps Institute for Biomedical Innovation and Technology, Jupiter, FL

10:25 – 10:35 am **SHORT BREAK**

10:35 – 11:00 am **Behavior-guided Discovery of Natural Products**

Sandra Loesgen, Associate Professor, Whitney Laboratory for Marine Bioscience, University of Florida, St. Augustine, FL

11:00 – 11:25 am **Discovery, Biosynthesis, and Biological Roles of Hybrid Polyketide-Nonribosomal Peptides from Animals**

Rebecca Butcher, Associate Professor, Department of Chemistry, University of Florida, Gainesville, FL

11:25 – 11:50 am **Unlocking the Therapeutic Potential of Natural Products from Marine Cyanobacteria**

Hendrik Luesch, Professor, Department of Medicinal Chemistry, University of Florida, Gainesville, FL

11:50 – 1:00 pm **LUNCH**

SESSION 2: MANIPULATION OF PROTEIN HOMEOSTASIS • 1:00 – 2:35 PM

(Moderators: Hendrik Luesch & Jianfeng Cai)

1:00 – 1:45 pm **KEYNOTE ADDRESS**

Proximity Therapeutics as a New Drug Discovery Strategy

Nathanael Gray, Professor, Department of Chemical and Systems Biology, Stanford University, Stanford, CA

1:45 – 2:10 pm **New Directions in Degradable Development**

Tom Kodadek, Professor, Herbert Wertheim UF Scripps Institute for Biomedical Innovation and Technology, Jupiter, FL

2:10 – 2:35 pm **Discovery of Bcl-xL/Bcl-2 Dual Degradable**

Guangrong Zheng, Associate Professor, Department of Medicinal Chemistry, University of Florida, Gainesville, FL

2:35 – 2:55 pm **COFFEE BREAK**

SESSION 3: MEDICINAL CHEMISTRY & DRUG DEVELOPMENT • 2:55 – 4:30 PM

(Moderator: Tom Kodadek)

- 2:55 – 3:40 pm **KEYNOTE ADDRESS**
Co-opting the Ubiquitin System for Therapeutic Benefit
Ingrid Wertz, *Chief Executive Officer, Lyterian Therapeutics, San Francisco, CA*
- 3:40 – 4:05 pm **Rapid Generation of Ring Fusion Scaffolds from Indoles & Indole Alkaloids as a Platform for Discovery**
Rob Huigens, *Professor, Department of Medicinal Chemistry, University of Florida, Gainesville, FL*
- 4:05 – 4:30 pm **Targeting PRMT5 for MTAP-deleted Cancers**
Chenglong Li, *Professor, Department of Medicinal Chemistry, University of Florida, Gainesville, FL*
- 4:30 – 6:00 pm **POSTER SESSION & RECEPTION**

APRIL 21, 2023

- 8:00 – 9:00 am **REGISTRATION & COFFEE**

SESSION 4: CHEMICAL PROTEOMICS & METABOLOMICS • 9:00 – 10:50 AM

(Moderators: Tom Kodadek & Lina Cui)

- 9:00 – 9:45 am **KEYNOTE ADDRESS**
Reimagining Druggability using Chemoproteomic Platforms
Dan Nomura, *Professor, Department of Chemistry & Department of Molecular and Cell Biology, University of California, Berkeley, CA*
- 9:45 – 10:10 am **AI-driven Drug Discovery**
Yanjun Li, *Assistant Professor, Department of Medicinal Chemistry, University of Florida, Gainesville, FL*
- 10:10 – 10:35 am **Photocatalytic Proximity Labeling for Chromatin Biology**
Ciaran Seath, *Assistant Professor, Department of Chemistry, Herbert Wertheim UF Scripps Institute for Biomedical Innovation and Technology, Jupiter, FL*
- 10:35 – 11:00 am **What Does *Mycobacterium tuberculosis* Share with Marine Bacteria?**
Luiz Carvalho, *Professor, Department of Chemistry, Herbert Wertheim UF Scripps Institute for Biomedical Innovation and Technology, Jupiter, FL*
- 11:00 – 11:15 am **COFFEE BREAK**

SESSION 5: RECEPTORS & MEMBRANE PROTEINS • 11:15 – 12:30 PM

(Moderator: Chengguo Xing)

- 11:15 – 11:40 am **Macrocyclic Peptides as Potential Treatments for Substance Abuse**
Jane Aldrich, *Professor, Department of Medicinal Chemistry, University of Florida, Gainesville, FL*
- 11:40 – 12:05 pm **Kratom: Gas Station Garbage or Medical Magic**
Chris McCurdy, *Professor, Department of Medicinal Chemistry, University of Florida, Gainesville, FL*
- 12:05 – 12:30 pm **The Pharmacology of Mu Opioid Biased Agonists**
Laura Bohn, *Professor and Chair, Department of Molecular Medicine, Herbert Wertheim UF Scripps Institute for Biomedical Innovation and Technology, Jupiter, FL*
- 12:30 – 12:45 pm **Closing Remarks**
Tom Kodadek and Hendrik Luesch
- 12:45 – 2:00 pm **LUNCH & DEPARTURE (BOXED LUNCHES WILL BE PROVIDED)**