

Assay Guidance Workshop for High-Throughput Screening and Lead Discovery

Tuesday Sept 24, 2024 – Wednesday Sept 25, 2024
1 Lilly Corporate Ctr, Indianapolis, IN 46285

AGENDA: Day 1

- 10:00 AM **Opening Remarks**
John Strelow, Eli Lilly and Company
The NCATS Assay Guidance Manual Program: Advancing the Practice and Rigor of Preclinical Translation
Sarine Markossian, National Center for Advancing Translational Sciences (NCATS), National Institutes of Health (NIH)
- 10:20 AM **Session 1: Target ID/Validation and Assay Development**
Chair: Stefan Grotegut, Loxo@Lilly
- 10:20 AM **Phenotypic Drug Screening: “You Get What You Look For”**
Chuck Dorsey, Eli Lilly and Company
- 11:05 AM **Strategies for Assay Selection and for the Development of Robust Biochemical Assays**
Nathan Coussens, Frederick National Laboratory for Cancer Research
- 11:50 AM **Treating Cells as Reagents and Measuring Viable, Dead, or Apoptotic Cell Number as Orthogonal Controls to Design Reproducible Assays**
Terry Riss, Promega Corporation
- 12:35 PM **Lunch Break**
- 1:30 PM **Session 2: HTS Assay Interpretation, Statistics and Data Analysis**
Chair: Allison Norvil, Eli Lilly and Company
- 1:30 PM **Assay Interference: Mechanisms and Methods**
Michael A. Walters, University of Minnesota
- 2:15 PM **Basic Assay Statistics, Data Analysis & Rules of Thumb (ROT)**
Thomas Chung, Sanford Burnham Prebys Medical Discovery Institute
- 3:00 PM **Break**
- 3:30 PM **Session 2: (continued)**
- 3:30 PM **Reproducibility Assessment of *In Vitro* Screening Results**
Philip Iversen, Luther College
- 4:15 PM **AGM Data Analysis Webtools Hands-on Training**
Philip Iversen, Luther College
Jason Manro, Eli Lilly and Company
Jeffrey Weidner, QualSci Consulting
- 5:00 PM **Networking Social**

AGENDA: Day 2

- 8:30 AM – 9:30 AM **Tour of Eli Lilly Museum**
- 9:50 AM **Welcome and Today's Agenda**
Sarine Markossian, NCATS, NIH
- 10:00 AM **Session 3: Biophysical Approaches**
Chair: Sarine Markossian, NCATS, NIH
- 10:00 AM **Small Molecule Discovery and Target Interaction Validation Using Biophysical Techniques**
Michael Ronzetti, NCATS
- 10:45 AM **Introduction to Mass Spectrometry for Drug Screening and Lead Optimization**
Mackenzie Pearson, Eli Lilly and Company
- 11:30 AM **Session 4: Lead Optimization**
Chair: Sarine Markossian, NCATS, NIH
- 11:30 AM ***In Vitro* Assessments of ADME Properties of Lead Compounds**
Michael Mohutsky, Eli Lilly and Company
- 12:15 PM **Lunch Break**
- 1:15 PM **Session 4: (continued)**
- 1:15 PM **Assay and Flowscheme Building for siRNA Therapeutics**
Marjoke F. Debets, Eli Lilly and Company
- 2:00 PM **Session 5: New Modalities and Novel Trends**
Chair: Mackenzie Pearson, Eli Lilly and Company
- 2:00 PM **ADC Assay Development and Design, Best Practices**
Carmen M Pérez, Eli Lilly and Company
- 2:45 PM **Break**
- 3:15 PM **Session 5: (continued)**
- 3:15 PM **Drug Screening with Engineered 3D Tissue Models**
Marc Ferrer, NCATS, NIH
- 4:00 PM **Building the Efficient Discovery of Actionable Chemical Matter from DNA-Encoded Libraries**
Timothy Foley, Pfizer
- 4:45 PM **Open discussion and additional Q&A**
- 5:00 PM **Adjourn**