

Assay Guidance Workshop for High-Throughput Screening and Lead Discovery

Wednesday November 18, 2020 – Thursday November 19, 2020
Virtual (All times are in EST)

AGENDA: Day 1

- 8:30 AM **Introduction and Opening Remarks**
Christopher P. Austin, National Center for Advancing Translational Sciences (NCATS), National Institutes of Health (NIH)
- 8:40 AM **Robust or Go Bust: An Introduction to the Assay Guidance Manual**
Sarine Markossian and G. Sitta Sittampalam, NCATS, NIH
- 9:00 AM **Target Qualification Strategies**
Yueming Wang, Pfizer
- 9:45 AM **Strategies for Assay Selection and for the Development of Robust Biochemical Assays**
Nathan P. Coussens, Frederick National Laboratory for Cancer Research
- 10:30 AM **Break**
- 10:45 AM **Treating Cells as Reagents to Design Reproducible Assays**
Terry Riss, Promega Corporation
- 11:30 AM **HCS Assay Development**
Joe Trask, PerkinElmer
- 12:15 PM **Break**
- 12:30 PM **Virtual lunch roundtables – Day 1**
Cell based assays Host: Terry Riss, Promega Corporation
Biochemical assays Host: Douglas Auld, Novartis Institutes for BioMedical Research
Translational science careers Host: Mike Tarselli, TetraScience
- 1:30 PM **Biophysical Approaches to Small Molecule Discovery and Validation**
Michelle Arkin, University of California, San Francisco
- 2:15 PM **Compound-Mediated Interferences in Homogenous Proximity Assays**
Jayme L. Dahlin, Brigham and Women's Hospital, Harvard Medical School, Broad Institute
- 3:00 PM ***In Vitro* Toxicological Testing using a qHTS Platform**
Menghang Xia, NCATS, NIH
- 3:45 PM **Break**
- 4:00 PM **Lead Selection and Optimization by Medicinal Chemistry**
Samarjit Patnaik, NCATS, NIH
- 4:45 PM ***In Vitro* Assessments of ADME Properties of Lead Compounds**
Xin Xu, NCATS, NIH
- 5:30 PM **Virtual Happy Hour**

AGENDA: Day 2

- 8:50 AM **Opening Note**
Sarine Markossian and G. Sitta Sittampalam, NCATS
- 9:00 AM **Basic Assay Statistics, Data Analysis & Rules of Thumb (ROT)**
Thomas D.Y. Chung, Sanford Burnham Prebys Medical Discovery Institute
- 9:45 AM **Reproducibility Assessment of *In Vitro* Screening Results**
Viswanath Devanarayan, GlaxoSmithKline
- 10:30 AM **Break**
- 10:45 AM **Assay Operations: Keeping Your Assays Robust and Reproducible**
Jeffrey R. Weidner, QualSci Consulting, LLC
- 11:30 AM **Kinetics of Target Binding: Impact on Drug Activity from Bench to Bedside**
Sam Hoare, Pharmeconomics, LLC
- 12:15 PM **Break**
- 12:30 PM **Virtual lunch roundtables - Day 2**
Data analysis Host: Viswanath Devanarayan, GlaxoSmithKline
New drug discovery technologies Host: Timothy L. Foley, Pfizer
Translational science careers Host: Marcie Glicksman, EnClear Therapies
- 1:30 PM **Why You Want to Use Stem Cells for Drug Discovery**
Marcie Glicksman, EnClear Therapies
- 2:15 PM **Building the Efficient Discovery of Actionable Chemical Matter from DNA-Encoded Libraries**
Timothy L. Foley, Pfizer
- 3:00 PM **Break**
- 3:15 PM **Antibody Binding Sites as Therapeutics: From scFv to VHH and VNAR**
Mitchell Ho, National Cancer Institute (NCI), NIH
- 4:00 PM **COVID19 and Therapeutics: The NCATS Experience**
Matthew D. Hall, NCATS, NIH
- 4:45 PM **Closing Remarks**
Anton Simeonov, NCATS, NIH
- 4:55 PM **Open discussion and additional Q&A**
- 5:00 PM **Adjourn**