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 \textit{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, Pharmechanics, LLC

12:15 PM  **Break**

12:30 PM  **Virtual lunch roundtables - Day 2**  
\textit{Data analysis} Host: Viswanath Devanarayan, GlaxoSmithKline  
\textit{New drug discovery technologies} Host: Timothy L. Foley, Pfizer  
\textit{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**