

JANUARYSAN DIEGO CONVENTION CENTER23-27SAN DIEGO :: CALIFORNIA

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SHORT COURSES | JANUARY 23-24 Conference | January 25-27 Exhibition | January 25-27

NFORMATION. NOVATION. INSPIRATION.

PRELIMINARY PROGRAM SLAS2016.ORG

#SLAS2016



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WHY YOU SHOULD ATTEND SLAS2016:

- Learn the latest and best practices for how to apply technology for life sciences research & development
- See the latest products, services and technology showcased in action, allowing you to envision and assemble specific solutions for your lab
- Hear updates on breakthrough research, and have direct access to the participating scientists, providing inspiration towards your own research efforts
- Meet thousands of peers who, like you, continually aspire to leverage technology to advance their own development goals
- Form career-long professional connections with peers and partners invested in your success

INFORMATION.

Podium presentations, case studies, posters, tutorials, exhibits, short courses, user perspectives, career services, panel discussions, off-site facility tours...SLAS2016 is five days of high-volume, high-impact information that caters to the needs of today's life sciences R&D technology professional.



INNOVATION.

What's new in scientific innovation is at SLAS2016. From breakthrough products to breakthrough application of established technology, you will gain a full appreciation for what's coming – and what's arrived – and how that innovation can drive value for you, your research and your organization's priorities.

INSPIRATION.

Be it in a hallway conversation with a fellow attendee or hearing a case study from a podium, SLAS2016 will be serving up a full dose of aha moments. As a community united by pioneering new scientific horizons using technology, and with a program curated by a committee of practicing researchers, you will leave SLAS2016 inspired with new ideas and new connections to add immediate and lasting value to your laboratory.



WHAT'S NEW At Slas2016

SLAS strives to continually improve the quality of all the Society's programs. Check out these new and improved aspects on tap for **SLAS2016**:

New Track: Cellular Technologies

This track focuses on recent methodology and applications underlying gene editing approaches in target knockdown studies, the introduction of reporters into cells, cell growth for tissue regeneration, and applications to control gene expression. Preliminary session titles include:

- Application of CRISPR and RNAi in Genetic Screens for Target Discovery and Validation
- Scaling Challenging Cell Models for High-Quality High Throughput Screens

Gene Editing for Disease Models

Special Sessions & Workshops

Biobanking: Evolving from Managing Small Molecules to Biological Molecules is a special podium session presented in partnership with ISBER (the International Society for Biological and Environmental Repositories). This session is included with full conference registration and will feature presentations from four top researchers in this focus area.

Assay Guidance Workshop for High-Throughput Screening and Lead Discovery is a full-day workshop that will be held on Saturday, January 23. This workshop serves as an introduction to assay development for high-throughput screening (HTS) and lead discovery projects. Based on the popular NCATS/NIH Guidance Manual, presenters will convey a host of "tribal knowledge" gleaned from years of experience in pharma development and related fields. (Admission to this workshop requires an additional registration fee.)

Tuesday Night Celebration Aboard the USS Midway

Celebrate five years of SLAS conferences while celebrating history aboard the number-one rated tourist attraction in San Diego.

Sponsored By: HAMILT@N*

Satellite Event at the Genomics Institute of the Novartis Research Foundation

SLAS is pleased to partner with the Genomics Institute of the Novartis Research Foundation (GNF) to present **Technology to Propel Science: GNF Automation Tour and Seminar** on Sunday, January 24. This event will highlight technology and research at the Foundation, including presentations by leading researchers and technologists affiliated with GNF and a tour of facilities. An additional registration fee of \$75 is required for this event, and space is limited so early registration is recommended. Participants will receive round-trip bus transportation from the San Diego Convention Center.

New Short Courses

Two new half-day courses and four new full-day courses highlight what's new in scientific technology. Offerings include:

- Gene Editing for Drug Discovery (half-day)
- Screening Strategies for Drug Discovery: Matching Tools With Solutions (half-day)
- Study Design and Statistical Analysis for High-Throughput Screening (HTS) Experiments (full-day)



FUNd Run Sponsored By:

To commemorate Agilent Technologies the new SLAS Educational Fund, SLAS2016 features the first annual SLAS FUNd Run. Whether a competitive runner or just looking for some casual exercise along the Pacific coast, mark your calendar to attend the SLAS FUNd Run on the morning of Monday, January 25. Advance registrants who make a donation to the SLAS Educational Fund receive a commemorative FUNd Run shirt.

- High-Content Screening: An Introduction to Instrumentation, Assay Development, Screening, Image and Data Analysis (full-day)
- Lab-on-a-Chip: Case Studies in Diagnostics and Screening (full-day)
- Multiparametric Analysis of Scientific Image Data (full-day)

SLAS2016 Conference App

Use your smartphone, tablet or Amazon Kindle to stay on top of the latest SLAS2016 news, plan your itinerary, review session abstracts, take notes, visit the e-poster gallery, view a virtual exhibition floor map and exhibitor listing, and more with the newly designed SLAS2016 conference app for iOS and Android devices, available as a free download in early 2016. Watch SLAS2016.org for information.



Visit SLAS2016.org for complete details on the scientific program, including presentation abstracts, presenter bios and to build your agenda.

SCIENTIFIC PROGRAM

The scientific program is the cornerstone of SLAS2016. Compiled by a team of practicing scientists and scientific technology users, the program represents original research, case studies and innovative technology uses that will provide inspiration and help you drive more value to your organization. The scientific program includes 136 podium presentations across seven in-depth tracks, hundreds of posters, two keynote presentations and 19 Short Courses. Highlighted podium presentations by track include:



Advances in Bioanalytics, **Biomarkers and Diagnostics**

Session: Biomarkers and Translational Sciences Enabling Deep Tissue Proteomics with Limited Prefractionation

PRESENTER: Harsha Gunawardena, Amgen

Mpseg is a Whole Genome Sequencing Platform That has Been Used to Develop Biomarker Tests **PRESENTER: George Vasmatzis, Mayo Clinic**

Session: MS and Other Label-Free Bioanalytics for Screening

HT-MALDI-MS as a Complete Label-Free Drug **Discovery Platform: From Target Characterization** Through High-Throughput Screening to Hit Follow Up

PRESENTER: Scott Busby, Novartis

Continuing the Quest for a Mass Spectrometry-**Based Plate Reader: Evaluating Laser Diode** Thermal Desorption (LDTD) Coupled with Nanoliter **Dispensing for HTS and HT-ADME Applications PRESENTER: Andrew Wagner, Bristol-Myers Squibb**

Session: Advances in Biomarkers Discovery: Sample **Preparation, Analysis and Data Processing**

Urine Proteomics: From New Developments to New Insights

PRESENTER: Hanno Steen, Harvard University

Imaging Mass Spectrometry Applied to Biomarker Discovery PRESENTER: Richard Yost, University of Florida

See complete details on 136 podium presentations in the SLAS2016 Event Scheduler.



Assay Development and Screening

Session: Assay Platforms for Biologics

High-Throughput Screening of Monoclonal Antibodies to Multiplexed Antigens PRESENTER: Ben Hoffstrom, Fred Hutchinson **Cancer Center**

Session: Cellular Biosensors and Genome Editing in Screening Assay Design

Lessons Learned Using BRET2+ in High-Throughput Screening **PRESENTER: Mary Ellen Digan, Novartis**

Session: Compound Libraries and Medicinal Chemistry in Screening

Histone Acetyltransferase Inhibitors, from Screening to Optimization - A Tricky Track **PRESENTER: Jonathan Baell, Monash**

High-Throughput Screening of Metagenomic **DNA Libraries**

PRESENTER: Louis Cohen, The Rockefeller University

Session: Phenotypic, Model Organism and High **Content Screening Assays**

High Content Screening is Made Alive **PRESENTER: Florian Fuchs, Novartis**

Session: Secondary Screens, ADME-Tox, Removing **Artifacts and Compound Profiling Assays in HTS**

Predicting the In Vivo Phospholipidosis-Inducing Potential of Drugs by a Combined In Vitro High-Content Screening and In Silico Modeling Approach **PRESENTER: Clive Dilworth, Cyprotex**

Session: Biochemical and Biophysical Screening Assays

Small Molecule Inhibition Amenability of Nucleotide Pyrophosphatases Involved in DNA Repair - From MTHI to dUTPase **PRESENTER: Thomas Lundbäck. Karolinska Institutet**



Automation and High-Throughput Technologies

Session: Automating Novel Analytical Tools for PKA, Drug-Drug Combination and Synergy Assays, Drug Repurposing

Automated and High-Throughput Studies of Drug Combinations Using Acoustic Liquid Handling in Multiple Biomedical Fields

PRESENTER: Giovanni Paternostro, Sanford-Burnham Medical Research Institute

Session: Automating Phenotypic and Target Based Discovery Using Parallel Automated Approaches

Fully Automated 3D Cell Culture Provides Standardized, Biologically Relevant, and High Production for Human Cells

PRESENTER: Robin Felder, The University of Virginia

Session: Emerging Techniques for Clinical Laboratory Automation

MALDI-TOF MS as a High-Throughput Identification System for Clinical Microbiology PRESENTER: Omai Garner, University of California, Los Angeles

Session: Extreme Automation

Extreme Automation: From Hypoxic Chambers to the World's Oceans and 3 Billion Poor People in the Developing World

PRESENTER: Brian Rasnow, Etaluma Inc. and CSUCI

High-Throughput Discovery of Solar Fuels Materials for Operation Outdoors in Corrosive Electrolyte PRESENTER: John Gregoire, Joint Center for Artificial Photosynthesis, California, Institute of Technology

Session: High Content and High-Throughput Automation

Cell-Based Assay Development Through Design of Experiment and Automation

PRESENTER: Mitchell Hull, Calibr

Session: Screening Automation: Modular Systems vs. Highly Integrated Systems

Analysis of Automated Robotic Platforms Used to Accommodate Various Screening Processes and Peripheral Operations

PRESENTER: Carleen Klumpp-Thomas, NIH



Cellular Technologies

Session: Application of CRISPR and RNAi in Genetic Screens for Target Discovery and Validation

Genetic Screens with CRISPR-Cas9 Technology: A New Hope in Functional Genomics

PRESENTER: John Doench, The Broad Institute

A Pooled FACS Based Genome Scale RNAi and CRISPR Hit Follow up Loss of Function Screen Identifies Genes Involved in Maintaining HIV Latency in a Jurkat Cell Model of HIV Reactivation PRESENTER: John Feder, Bristol-Myers Squibb

Session: Gene Editing for Disease Models

Genome Engineering with Zinc Finger Nucleases PRESENTER: Edward Rebar, Sangamo

Modeling Human Cancer in the Mouse via Somatic Genome Editing

PRESENTER: Andrea Ventura, MSKCC

Session: Scaling Challenging Cell Models for High-Quality, High-Throughput Screen

Toward Minimally Invasive Readouts for Unlocking the Potential of Complex Cell Models in Lead Discovery PRESENTER: Christophe Antczak, Novartis

Integrating Bioengineering and Optical Imaging Approaches for Quantitative Assessment of Treatment Response in 3D Tumor Models PRESENTER: Imran Rizvi, Harvard University



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Drug Target Strategies

Session: Phenotypic and Systems-Based Strategies for Novel Drug Targets

Fratricidin: An Agonist Antibody That Induces Human Malignant Cells to Kill One Another PRESENTER: Richard Lerner, Scripps

New Tools for the Study of Lysine Methylation Signaling in Epigenetic and Disease Regulation PRESENTER: Or Gozani, Stanford University

Session: Physiologically Relevant Target Strategies High-Throughput Drug Discovery in Zebrafish

Models for Dravet Syndrome

PRESENTER: Scott Baraban, University of California, San Francisco

Harnessing Ligand-Directed Signaling for Improving Opioid Receptor therapeutics

PRESENTER: Laura Bohn, Scripps Florida

Session: Successful Strategies for Difficult Targets

Drug-Target Residence Time: Target Engagement, Target Vulnerability and Predictions of In Vivo Drug Activity PRESENTER: Peter Tonge, Stony Brook University



Informatics

Session: Collaboration: Drug Discovery in the Internet Era CDD Vault: Co-Evolving Collaborative Drug Discovery 3 Ways

PRESENTER: Barry Bunin, Collaborative Drug Discovery Session: Crowdsourcing Science

Orphan Disease Drug Discovery Using Model Organisms Presenter: Ethan Perlstein, Perlstein Labs

Crowdsourced Lead Discovery: Accelerated Neglected Tropical Disease Medicinal Chemistry Using a Distributed Model

PRESENTER: Michael Pollastri, Northeastern University

Session: Data Visualization: Expert Data for Non-Experts

The Needs for Chemistry Standards, Database Tools and Data Curation at the Chemical-Biology Interface PRESENTER: Antony Williams, Environmental Protection Agency, National Center of Computational Toxicology

Ensuring Chemical Structure, Biological Data and Computational Model Quality

PRESENTER: Sean Ekins, Collaboration in Chemistry

Bioassay Variability and Reliability in the Published and Patent Literature PRESENTER: John Overington, Stratified Medical

Session: Handling Complex Data: Phenotypic, High-Content, Integrative

Identifying Druggable Cells: Automated Methods for High-Content Single-Cell Screening PRESENTER: Tiffany Chen, Cytobank, Inc. and Stanford University

Session: Machine Learning to Optimize Experiments Why Have One Model When You Could Have Thousands? PRESENTER: Alex Clark, Molecular Materials Informatics



Micro/Nano Technologies

Session: Commercialization Perspectives for Micro and Nanofluidic Devices

Advanced Genomic Analyses Using Massively Parallel Molecular Barcoding

PRESENTER: Rajiv Bharadwaj, 10X Genomics

Session: Diagnostics and Point-of-Care Microdevices

Electrokinetic Micro- and Nanofluidic Technologies for Quantitative Detection of Viral Nucleic Acids PRESENTER: Sumita Pennathur, University of California, Santa Barbara

Session: Digital and Droplet Microfluidics

Droplet Microfluidics: Amphiphilic Nanoparticles as Droplet Stabilizers for High-Fidelity and UltraHigh-Throughput Droplet Assays

PRESENTER: Sindy Tang, Stanford University

Session: Emerging Micro and Nanosystems for Pathogen Detection

New Devices for the Detection and Classification of Antibiotic-Resistant Bacteria PRESENTER: Shana Kelley, University of Toronto

PRESENTER. Shaha Keney, University Of Toront

Session: Microphysiological Systems

Paper-Based 3D Culture for the Study of Cancer Cells In Vitro

PRESENTER: Bobak Mosadegh, Cornell University

Sesson: Single Cell Analyses Plasmonics-Enabled Single-Molecule and Temperature Detection

PRESENTER: Somin Eunice Lee, University of Michigan



KEYNOTE SPEAKERS

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Monday | January 25 | 9:00 am



Michael Gottesman Chief, Laboratory of Cell Biology, National Cancer Institute

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Dr. Gottesman is the Deputy Director for Intramural Research at NIH, where he oversees research and training in the federal laboratories. Dr. Gottesman became Chief of the Laboratory of Cell Biology in the National Cancer Institute in 1990. He is an elected fellow of the AAAS, the American Association of Physicians, and has been a member of the Institute of Medicine since 2003 and the American Academy of Arts and Sciences since 2008.

Analyzing the Complexity of Drug Resistance in Cancer

Drug resistance is the major impediment to successful chemotherapy of cancer, but the detailed study of mechanisms of drug resistance in cancer cells reveals the daunting complexity of resistance mechanisms. Our goal is to define as many mechanisms of drug resistance in cancer as we can, and then determine the clinical relevance of these mechanisms so that we can develop means to circumvent or target these resistance mechanisms. Mechanisms of resistance can be cell-based, or may be due to the interactions of cancer cells with their host. Our studies have emphasized cell-based mechanisms, including the expression of energy-dependent efflux pumps for anti-cancer drugs such as the ABC (ATP-binding cassette) transporters, ABCBI (P-glycoprotein, or P-gp), ABCCI (MRP), and ABCG2 (BCRP, MXR).

Wednesday | January 27 | 3:45 pm



Adam Diedrich Steltzner

Chief Landing Phase Engineer and Aeronautics Expert, NASA Jet Propulsion Laboratory

Adam Diedrich Steltzner is a renowned aeronautics engineer from the Jet Propulsion Laboratory (JPL). He has worked on several high profile NASA flight projects including Galileo, Cassini, Mars Pathfinder, and the Mars Exploration Rovers (MER). Most impressively, in 2012, Steltzner led a breakthrough team of engineers that invented the pioneering landing system that spectacularly placed the Curiosity rover on the Martian surface.

From Leading a High Performance Team to Landing on Mars

With a rich and varied background, Adam Steltzner had many of the needed skills to lead the landing team for the Curiosity rover. That said, his team would struggle for almost a decade with design challenges and setbacks.

How did he keep the team focused and on task? What makes a team gel and enables truly innovative thinking? How do team dynamics drive that process forward or inhibit it? And how can organizational culture create an environment for sustained performance? The challenges he and the team faced and the lessons learned from those struggles can help audiences understand how to better lead their high performing teams, manage innovation and drive towards excellence.



SLAS Point-to-Point E-News Brief

This mobile-friendly weekly e-mail news brief keeps you up to date with SLAS news announcements, deadline reminders and selected industry headlines. Visit SLAS.org to sign up for a free subscription and browse the archives.

SHORT COURSES

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19 Short Courses will commence SLAS2016 on Saturday-Sunday, January 23-24. This revamped lineup includes six brand new offerings covering topics such as Lab-on-a-Chip Case Studies, Gene Editing for Drug Discovery and Study Design and Statistical Analysis for HTS Experiments. Short Course instructors are recognized subject matter experts with proven ability to impart even complex lessons in a style and pace suited to all students. Short Course attendance is limited and requires an additional registration fee.

Saturday | January 23 | 8:30 am - 4:30 pm

3D Cell-Based Assays for Drug De-Risking

The continually rising numbers of compound failures and increasing costs of drug and substance development are fostering the use of biologically more complex cell models. Physiological relevance is a key parameter to improve the predictive power of cell-based assays. The course covers advanced 3D cell culture technologies and their use in substance testing.

Instructors: Ursula Graf-Hausner, *University of Applied Sciences Zurich*; Jens M. Kelm, *InSphero AG*; Terry Riss, *Promega*

Introduction to Laboratory Automation

This course presents a broad introduction to laboratory automation in the R&D laboratory environment (i.e. non-clinical). A general understanding of a laboratory environment is helpful.

Instructors: Steven D. Hamilton, *SLAS Director of Education;* James M. Gill II

Lab-on-a-Chip: From Technology to Bioanalysis on Chip

This course is aimed at researchers who are interested in learning more about new developments in the technology behind lab-on-a-chip systems. This course is a "how-to" primer that could form the basis for the development of prototypes having integrated functions for a variety of purposes.

Instructors: Sabeth Verpoorte, *University of Groningen;* Johan Nilsson, *Lund University;* Jörg P. Kutter, *University of Copenhagen*

Multiparametric Analysis of Scientific Image Data (Laptop Required) (NEW!)

This hands-on course analyzes multiparametric data typically extracted from images in high content analysis using the open source platform KNIME. The course shows how to transform complex datasets into biological insights using advanced data mining techniques without programming.

Instructors: Marc Bickle, *Technology Development Studio (TDS)*; Antje Janosch, *Technology Development Studio (TDS)*

Sunday | January 24 | 8:30 am - 4:30 pm

Affinity-Based, Biophysical Methods for Screening and Mechanistic Studies

This course provides an overview of the most relevant biochemical biophysics/label-free technologies for screening and lead finding/characterization. Learn how this toolbox of novel technologies helps advancing target-based drug discovery projects.

Instructors: Christine Genick, Novartis Institutes for BioMedical Research Basel; Stefan Geschwindner, AstraZeneca R&D Mölndal

Cross Functional Project Management for Technical Professionals

The course reviews both the art and science involved in running successful cross-functional project teams. Course work stresses the planning activities required for success as well as the keys for project execution. Upon completion of this course, attendees are exposed to the key activities required in planning and managing successful cross-functional projects.

Instructor: Barry Weinstein, *Barry M. Weinstein and Associates*



SHORT COURSES (Continued)

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Sunday | January 24 | 8:30 am - 4:30 pm

Data Management in the Age of Big Data, Mobile, and the Cloud

This data management course provides decision makers and practitioners from bio-pharma, healthcare, and academia with a comprehensive overview of IT trends in laboratory automation, data management, and systems integration. It highlights the current hot fields in the area of data management, big data, cloud computing and mobile technologies. This course provides crucial guidance for assessing how these new technologies fit into your laboratory data landscape. The instructor supplies practical guidance and examples for how to apply these techniques to laboratory workflows.

Instructor: Burkhard Schaefer, BSSN Software

Derivation of iPS Cells and Maintenance Techniques of iPS-Derived Cells for Use in High-Throughput Screening and Disease Modeling

This course provides general overview on the basic stem cells biology and laboratory techniques used to derive and maintain human induced pluripotent stem cell (iPS). The application of using iPS- derived lines in high-throughput screening (HTS) and disease modeling. Additional topics include manual and semi-automated reprogramming techniques, characterization of iPS assays and Embryonic Stem cells (ES) protocols and HTS strategy with emphasis on the derivation of neural and other lineage cell lines.

Instructors: David J. Kahler, NYU Langone Medical Center; Kamal Garcha, GFY Biotech Consulting

Digital Image Processing and Analysis for the Laboratory Scientist: Theory and Application (Laptop Required)

This course takes a practical, hands-on approach to the application of digital image processing and analysis in a life-sciences laboratory. Diverse techniques and applications will be covered. Upon completion the attendee is prepared to apply learned methodologies to their own experimental images and to summarize results.

Instructors: Matthew Fronheiser, *Bristol-Myers Squibb*; Mark F. Russo, *Rowan University*



Establishing Cell-Based Assays for Screening

This course describes developing standard procedures for handling cultured cells to set up cell-based assays, techniques for measuring cell health and the pathways leading to cytotoxicity, developing siRNA screening assays, and an overview of various GPCR screening methods.

Instructors: Terry Riss, *Promega;* Lisa Minor, *In Vitro Strategies, LLC;* Geoffrey Bartholomeusz, *UT M.D. Anderson Cancer Center;* Eric Johnson, *WuXi AppTec*

High-Content Screening: An Introduction to Instrumentation, Assay Development, Screening, Image and Data Analysis (NEW!)

High-content screening is a powerful technology platform for implementing functional cell-based assays that allow truly multi-parametric analysis in the physiological context of intact cells. This course provides a state-of-the-art overview of the components of HCS (instrumentation, reagents, HC assay development, automated image analysis and multi-parametric data analysis, and data standards) together with some showcases of small molecule and RNAi high-content screens in industry and academia.

Instructors: Eberhard Krausz, *VIB*; Steffen Jaensch, Janssen R&D Pharmaceutical Companies of Johnson & Johnson

SHORT COURSES (Continued)

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Sunday | January 24 | 8:30 am - 4:30 pm

Lab-on-a-Chip: Case Studies in Diagnostics and Screening (NEW!)

This course is aimed at researchers who already have a good basis in lab-chip technologies and are interested in exploring more recent applications, in particular how lab-chip systems have been or could be developed for researchers in cutting-edge drug development and the life sciences. Lectures will be presented using a case-study approach, using a number of selected examples – such as cell-based assays, drug screening and bioassays – to emphasize which aspects and issues play a deciding role in how a particular system is developed.

Instructors: Sabeth Verpoorte, *University of Groningen;* Johan Nilsson, *Lund University;* Jörg P. Kutter, *University of Copenhagen*

Liquid Handling Essentials (Interactive Course)

This course is designed to introduce important concepts that affect liquid handling performance so that the overall quality and efficiency remain high. With a balanced mix of discussions and activities, this course will focus on applying key practices on live systems and measuring performance metrics.

Instructors: Nathaniel Hentz, *North Carolina State University*; Dana Campbell, *Artel*; Lisa Knapp, *Agilent Technologies*

Next Generation Sequencing Technology Fundamentals and Applications

Next generation sequencing (NGS) technologies allows laboratories to do genome-wide research that was previously only possible at large genome centers. This course teaches key concepts and applications of major sequencing technologies (Illumina, 454, SOLiD, Ion Torrent & PacBio) including their technology basics, sample preps, data analysis and associated IT supports.

Instructor: Dawei Lin, National Institutes of Health

Sample Management: Best Practice, Trends and Challenges



Presented in Partnership With the International Society for Biological and Environmental Repositories (ISBER)

This course provides current status and considered best practice in the discipline of sample management. It focuses on the traditional aspects of compound management (including how to maintain and measure quality of compounds) but cover the synergies and differences in managing biologics. Consideration is given to key challenges and future directions. With the growth and interest in biological sample management the course has been expanded to cover this discipline.

Instructors: Sue Holland Crimmin, *GlaxoSmithKline;* Katheryn Shea, *Precision for Medicine*

Study Design and Statistical Analysis for High-Throughput Screening (HTS) Experiments (NEW!)

As data analysis methods for high-throughput screening continue to evolve, methodological research has shown that the reproducibility and validity of HTS screens can be greatly improved by modern design and statistical methods.

Approximately one-third of the course covers basic study design principles (e.g., randomization, internal validity, avoiding confounding variables) and introductory statistical principles (e.g., systematic versus random error, data visualization, inferential versus exploratory data analysis, false positive versus false negative errors). The remaining time is spent applying these principles to HTS experiments, covering both primary and secondary (validation) screens.

Instructor: Robert Nadon, McGill University



HALF-DAY SHORT COURSES

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Sunday | January 24 | 8:30 am - Noon

Screening Strategies for Drug Discovery: Matching Tools with Solutions (NEW!)

A half-day short course on drug discovery screening strategies with an emphasis on effectively using and integrating phenotypic-based and target-based screening approaches into drug discovery programs. This course provides a broader context of the drug discovery process to help understand how to best utilize existing knowledge, tools and technologies.

Instructors: David Swinney, *iRND3*; Jonathan Lee, *Eli Lilly and Company*

Sunday | January 24 | 1:00 - 4:30 pm

Gene Editing for Drug Discovery (NEW!)



This half-day short course serves as an introduction to genome engineering applications in drug discovery with an emphasis on the rapidly developing CRISPR/Cas9 technology platform. Given the pace that genome editing tools are reshaping what is possible within the biological sciences, it is timely to survey their proven and potential impact on the process of drug discovery. This course introduces the audience to the exciting possibilities of what can be achieved with genome editing, the current limitations, and the fundamentals of how to apply these technologies to enhance the pursuit of novel therapeutics.

Instructors: John Doench, Broad Institute; Samuel Hasson, Pfizer

Learn More in SLAS ELN

VIEW HERE:

TWO-DAY SHORT COURSE

Saturday | January 23 & Sunday | January 24 | 8:30 am - 4:30 pm

Getting Started With Excel & VBA in the Laboratory (Laptop Required)

Excel is widely used in scientific laboratories to automate tedious data manipulation and presentation tasks. This course reviews many of the tools built-in to Excel for handling problems commonly encountered in the laboratory. It also introduces the Visual Basic for Applications scripting language as a way to customize Excel and expand upon its functionality.

Instructors: William Neil, Martin Echols





SLAS is proud to partner with many other leading organizations dedicated to serving scientists and related professionals. The following organizations are generously contributing education, expertise, research and people that will enhance the SLAS2016 attendee experience:



Members of the ACS San Diego chapter serve as mentors to attendees interested in discussing career opportunities in the life sciences.

ALDA will present an invitation only breakfast session for senior executives featuring presentations on global trends in laboratory automation and their strategic implications.





Regional FIRST teams will demonstrate their ingenious robotic inventions in the exhibition.

GNF will host SLAS2016 attendees for a satellite symposium and automation tour, entitled Technology to Propel Science: GNF Automation Tour and Seminar.



Genomics Institute of the Novartis Research Foundation



ISBER partners with SLAS to deliver the short course Sample Management Best Practice, Trends and Challenges and a special session on Biobanking.

LPA and SLAS host a special session to announce the preliminary results of the annual North American Survey of Laboratory Purchasing Trends.





Late Night with LRIG – Rapid Fire Innovation Session: Sponsored by LRIG and ELRIG; an interactive forum that showcases new technologies and their developers.

SLAS and SBI2 together present the HCS/HCA Data and Informatics SIG at SLAS2016. For more information visit: http://www.slas2016.org/ program/sigs.cfm

SBI2 Society of Bismalecular Imaging and Informatics

CONFERENCE-AT-A-GLANCE (Schedule Subject to Change)

Short Course Program is held on Saturday, January 23 and Sunday, January 24. For complete listing see pages 9-12.

7:30 am - 5:00 pm	Registration Open
8:30 am - 4:30 pm	Short Courses: 3D Cell-Based Assays for Drug De-Risking: Introduction to Laboratory Automation; Lab-on-a-Chip: From Technology to Bioanalysis on Chip; Multiparametric Analysis of Scientific Image Data: Laptop Required (NEW)
	Two-Day Course: Getting Started with Excel & VBA in the Laboratory Laptop Required
JNDAY, JANUARY 24,	2016
7:30 am - 5:00 pm	Registration Open
8:30 am - Noon	Half-Day Course: Screening Strategies for Drug Discovery: Matching Tools with Solutions (NEW)
8:30 am - 4:30 pm	Short Courses: Affinity-Based, Biophysical Methods for Screening and Mechanistic Studies; Cross Functional Project Management for Technical Professionals; Data Management in the Age of Big Data, Mobile, and the Cloud; Derivation of iPS Cells and Maintenance Techniques of iPS-Derived Ce for Use in High-Throughput Screening and Disease Modeling; Digital Image Processing and Analysis for the Laboratory Scientist: Theory and Applicat Laptop Required; Establishing Cell-Based Assays for Screening; High-Content Screening: An Introduction to Instrumentation, Assay Development, Screening, Image and Data Analysis (NEW); Lab-on-a-Chip: Case Studies in Diagnostics and Screening (NEW); Liquid Handling Essentials (Interactive Course); Next Generation Sequencing Technology Fundamentals and Applications; Sample Management: Best Practice, Trends and Challenges; Study Design and Statistical Analysis for High-Throughput Screening (HTS) Experiments (NEW)
	Two-Day Course: Getting Started With Excel & VBA Laptop Required
1:00 - 4:30 pm	Half-Day Course: Gene Editing for Drug Discovery (NEW)
5:30 - 7:00 pm	SLAS Student and Early Career Professionals Networking Event at Tin Roof, San Diego, CA
ONDAY, JANUARY 25	, 2016
6:30 am Start	2016 SLAS FUNd Run Sponsored by: Agilent Technologies
7:00 - 8:00 am	Laboratory Products Association (LPA) Special Session
7:30 - 8:30 am	Career Connections: The Negotiation Process: Dan Eustace, University of Connecticut
7:30 am - 6:00 pm	Registration Open
8:00 - 8:30 am	Morning Beverage Break
8:30 - 9:00 am	Keynote Session: Welcome and Opening Remarks
9:00 - 10:00 am	Keynote Speaker: Michael Gottesman, Chief, Laboratory of Cell Biology, National Cancer Institute; Sponsored by: Thermosocial Sponsored by: Social Sponsored by: So
10:00 - 10:30 am	Beverage Break in the Exhibition Hall
10:00 am - 6:30 pm	Exhibition Open
10:00 am - 6:30 pm	Poster Viewing in Exhibition Hall



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Our online communities are growing every day. Stay up-to-date and join in the discussions. **Sign-up now!**

Monday | January 25 | Continued

Session One	Advances in Bioanalytics, Biomarkers and Diagnostics	Assay Development and Screening	Automation and High-Throughput Technologies	Informatics	Micro/Nano Technologies			
10:30 am - 12:30 pm	Biomarkers and Translational Sciences Session Chair: Peter Grandsard, <i>Amgen</i>	Biochemical and Biophysical Screening Assays Session Chair: Thomas Lundback, Karolinska	Automating Phenotypic and Target Based Discovery Using Parallel Automated Approaches Session Chair: Taosheng Chen, St. Jude Children's Research Hospital	Machine Learning to Optimize Experiments Session Chair: Alex Clark, Molecular Materials Informatics	Digital and Droplet Microfludics Session Chair: Sindy Tang, Stanford University			
10:30 am - 12:30 pm	Career Connections: Mentoring Sessions/One-on-One Career Counseling Sessions/Job Boards							
10:30 am - 2:00 pm	2016 SLAS Leadership Forum (Invitation Only)							
12:30 - 1:15 pm	Exhibitor Tutorials: Artel; BMG Labtech; Nanion Technologies; PerkinElmer; TTP Labtech							
12:30 - 1:30 pm	Career Connections Workshop: Negotiating Work and Life; Joanne Kamens, Addgene							
12:30 - 1:30 pm	Lunch in the Exhibition Hall							
12:30 - 1:45 pm	Exhibitor Tutorials: Brooks Automation; IntelliCyt Corporation; Labcyte Inc.; Thermo Scientific							
12:30 - 2:30 pm	Exhibitor Tutorials: Beckman Coulter Life Sciences							
1:00 - 1:30 pm	SLAS JALA & JBS VIP Meet & Greet in Member Center: JALA Editor-in-Chief Edward Kai-Hua Chow, National University of Singapore							
1:00 - 3:00 pm	Poster Presentations (Odd Numbered Posters)							
1:30 - 2:00 pm	SLAS JALA & JBS VIP Meet & Greet in Member Center: Development of a Highly Sensitive Cell-Based Assay for Detecting Botulinum Neurotoxin Type A Through Neural Culture Media Optimization; JBS Author: David Beebe, University of Wisconsin							
2:00 - 2:30 pm	SLAS JALA & JBS VIP Meet & Greet in Member Center: Advancing Scientific Innovation with Acoustic Droplet Ejection; JALA Special Issue Guest Editor: Joe Olechno, Labcyte							
2:00 - 2:45 pm		Exhibitor Tutorials: Cellular Dynamics international; Eppendorf; Genedata, Inc.: Horizon Discovery Ltd; InSphero, Inc.; IonField Systems; Molecular Devices; Multispan; SILA Consortium; Universal Robots USA, Inc.						
2:00 - 5:00 pm	Career Connections in SLAS Member Center: Mentoring Sessions/One-on-One Career Counseling Sessions/Job Boards							
2:30 - 3:00 pm	Beverage Break in the Exhibition Hall							
Session Two	Advances in Bioanalytics, Biomarkers and Diagnostics	Assay Development and Screening	Automation and High-Throughput Technologies	Informatics	Micro/Nano Technologies	Special Events		
3:00 - 5:00 pm	MS and Other Label-Free Bioanalytics for Screening Session Chair: Wilson Shou, Bristol- Myers Squibb	Cellular Biosensors and Genome Editing in Screening Assay Design Session Chair: Jim Inglese, National Institutes of Health	High-Content and High-Throughput Automation Session Chair: Jason Matzen, <i>GNF</i>	Data Visualization: Expert Data for Non-Experts Session Chair: Christopher Lipinski, Lipinski Consulting	Microphysiological Systems Session Chair: Bobak Mosadegh, Cornell University	Biobanking: Evolving from Managing Small Molecules to Biological Molecules Session Chairs: Jonathan O'Connell, Forma Therapeutics, Inc. and Andy Zaayenga, LRIG/ISBER		
5:00 - 5:15 pm	Student Poster Award Winner Announcement							
5:30 - 6:30 pm	Reception in Exhibition Hall Celebrating 2016 SLAS Journal Achievement Award Honorees							
5:30 - 6:30 pm	Student and Early Career Professionals Mixer in the SLAS Member Center							
6:30 - 8:30 pm	Late Night with LRIG - Rap	id-Fire Innovation Sessio	in					

See a complete listing of podium presentations, abstracts and presenter bios on the SLAS2016 Event Scheduler.

TUESDAY, JANUARY 26	, 2016							
7:15 - 9:00 am	n Analytical, Life Science and Diagnostic Association Special Session (ALDA) (Invitation Only)							
7:30 - 8:00 am	Morning Beverage Break							
7:30 - 8:30 am	Career Connections Workshop: Transitions; Joanne Kamens, Addgene							
7:30 am - 6:00 pm	Registration Open							
8:00 - 9:15 am	Special Interest Groups							
9:30 - 10:15 am	Exhibitor Tutorials: Formulatrix; Genedata, Inc.; Lumigen, a Beckman Coulter Company; PerkinElmer; Thermo Fisher Scientific							
9:30 am - 6:00 pm	Exhibition Open							
9:30 am - 6:00 pm	Poster Viewing in the Exhibition Hall							
9:30 am - 6:00 pm	SLAS Member Center Open	SLAS Member Center Open						
9:45 - 10:15 am	Live Podcast from The Lab Man: JBS Guest Editor, Jonathan Wingfield of AstraZeneca; JBS Special Issue on Advances in Mass Spectrometry Within Drug Discovery							
10:00 - 10:30 am	Beverage Break in the Ext	ibition Hall						
Session Three	Advances in Bioanalytics, Biomarkers and Diagnostics	Assay Development and Screening	Automation and High-Throughput Technologies	Cellular Technologies	Informatics	Micro/Nano Technologies		
10:30 am - 12:30 pm	Advances in Biomarkers Discovery: Sample Preparation, Analysis and Data Processing Session Chair: Dieter Drexler, Bristol-Myers Squibb	Phenotypic, Model Organism and High Content Screening Session Chair: Florian Fuchs, <i>Novartis</i>	Emerging Techniques for Clinical Laboratory Automation Session Chair: Omai Garner, University of California, Los Angeles	Application of CRISPR and RNAi in Genetic Screens for Target Discovery and Validation Session Chair: John Doench, Broad Institute	Data Wrangling Session Chair: Matt Hahn, <i>BioVia</i>	Commercialization Perspectives for Micro and Nanofluidic Devices Session Chair: Josh Molho, Zephyrus Biosciences, Inc.		
10:30 am - 2:00 pm	Career Connections in SLAS Member Center: Mentoring Sessions/One-on-One Career Counseling Sessions/Job Boards							
12:30 - 1:15 pm	Exhibitor Tutorials: Artel, E	Exhibitor Tutorials: Artel, Biodesy; Festo Corporation; Hamilton Company; PerkinElmer; TTP Labtech						
1:00 - 2:00 pm	Career Connections Workshop: Mentoring; Joanne Kamens, Addgene							
12:30 - 1:30 pm	Lunch in the Exhibition Hall							
12:30 - 1:45 pm	Exhibitor Tutorials: Brooks	Exhibitor Tutorials: Brooks Automation; Labcyte, Inc.; Molecular Sensing; PerkinElmer; Promega Corporation						
12:30 - 2:30 pm	Exhibitor Tutorial: Agilent Technologies Inc.; Beckman Coulter Life Sciences							
1:00 - 1:30 pm	SLAS JALA & JBS VIP Meet & Greet in Member Center: JBS Editor-in-Chief, Robert Campbell, Eli Lilly and Company							
1:30 - 2:00 pm	SLAS JALA & JBS VIP Meet & Greet in Member Center: "Mass Spectrometry within Drug Discovery", JBS Special Issue Guest Editor Jonathan Wingfield of AstraZeneca							
1:00 - 3:00 pm	Poster Presentation (Even Numbered Posters)							
2:00 - 2:15 pm	New Product Award Announcement							
2:00 - 2:30 pm	SLAS JALA & JBS VIP Meet & Greet in Member Center: "Assembly and Transformation of a Synthetic Yeast Artificial Chromosome with a Multigene Cassette that Enhances Xylose Utilization into Saccharomyces Cerevisiae", JALA Author Steve Riedmuller, Hudson Control Group							
2:00 - 2:45 pm	Exhibitor Tutorials: Axol Bioscience; Biosero; BMG Labtech, Inc.; Clontech Laboratories, Inc.; Helix Linear Technologies, Inc.; Icagen, Inc.; InSphero, Inc.; Labcyte, Inc.; Molecular Devices; Nexcelom Bioscience; Titian Software							
2:00 - 5:00 pm	Career Connections in the SLAS Member Center: Mentoring Sessions/One-on-One Career Counseling Sessions/Job Boards							
2:15 - 2:45 pm	Live Podcast from The Lab Man: JALA Guest Editor, Joe Olechno, Labcyte; JALA Special Issue on Advancing Scientific Innovation with Acoustic Droplet Ejection							
2:30 - 3:00 pm	Beverage Break in the Ext	ibition Hall						

See a complete listing of podium presentations, abstracts and presenter bios on the SLAS2016 Event Scheduler.

Tuesday | January 26 | Continued

Session Four	Assay Development and Screening	Automation and High-Throughput Technologies	Cellular Technologies	Drug Target Strategies	Informatics	Micro/Nano Technologies			
3:00 - 5:00 pm	Compound Libraries and Medicinal Chemistry in Screening Session Chair: Jonathon Baell, <i>Monash</i>	Extreme Automation Session Chair: Brian Rasnow, Etaluma Inc.	Gene Editing for Disease Models Session Chair: Ed Rebar, <i>Sangamo</i>	Physiologically Relevant Target Strategies Session Chair: David Swinney, IRND3	Collaboration: Drug Discovery in the Internet Era Session Chair: Barry Bunin, CDD	Diagnostics and Poin of-Care Microdevices Session Chair: Michelle Khine, University of California, Irvine			
5:00 - 6:00 pm	Reception in Exhibition H	all							
6:30 - 9:30 pm	SLAS2016 Tuesday Night C	elebration: USS Midway	Sponsored by: HA	MILT@N					
/EDNESDAY, JANUAR'	Y 27, 2016								
8:00 - 9:15 am	Special Interest Groups	Special Interest Groups							
8:00 - 9:15 am	JALA & JBS Author Worksh	op: How to Get Your Work	Published						
8:00 am - 1:30 pm	Registration Open	Registration Open							
9:00 - 9:30 am	Morning Beverage Break								
9:00 am - 1:00 pm	Career Connections in the	Career Connections in the SLAS Member Center: Mentoring Sessions/One-on-One Career Counseling Sessions/Job Boards							
9:00 am - 1:00 pm	Exhibition Open								
9:00 am - 1:00 pm	SLAS Member Center Open								
Session Five	Assay Development and Screening	Automation and High-Throughput Technologies	Cellular Technologies	Drug Target Strategies	Informatics	Micro/Nano Technologies			
9:30 - 11:30 am	Assay Platforms for Biologics Session Chair: Robert Damoiseaux, University of California, Los Angeles	Automating Novel Analytical Tools for PKA, Drug-Drug Combination and Synergy Assays, Drug Repurposing Session Chair: Peter Chase, Bristol-Myers Squibb	Scaling Challenging Cell Models for High-Quality High- Throughput Screens Session Chair: Imran Rizvi, <i>Harvard</i>	Phenotypic and Systems-Based Strategies for Novel Drug Targets Session Chair: Marcos Milla, JRDUS	Crowdsourcing Science Session Chair: Ethan Perlstein, <i>Perlstein Labs</i>	Emerging Micro and Nanosystems for Pathogen Detection Session Chair: Weian Zhao, University of California, Irvine			
11:30 am - Noon	Lunch in Exhibition Hall				·				
11:45 am - Noon	Passport to Prizes Award Announced in Exhibition Hall								
Noon - 12:45 pm	Exhibitor Tutorials								
Noon - 1:15 pm	Special Interest Groups								
Session Six	Assay Development and Screening	Automation and High-Throughput Technologies	Drug Target Strategies	Informatics	Micro/Nano Technologies				
1:30 - 3:30 pm	Secondary Screens, ADME-Tox, Removing Artifacts and Compound Profiling Assays in High- Throughput Screening Session Chair: Cathy Tralau-Stewart, University of California, San Francisco	Automating Phenotypic and Target Based Discovery Using Parallel Automated Approaches Session Chair: Sam Micheal, National Institutes of Health	Successful Strategies for Difficult Targets Session Chair: Chun-Wa Chung, GlaxoSmithKline	Handling Complex Data: Phenotypic High-Content, Integrative Session Chair: Anne Carpenter, Broad Institute of Harvard and MIT	Single Cell Analyses Session Chair: Amy Herr, University of California, Berkeley				
3:30 - 3:45 pm	Beverage Break								
3:45 - 5:00 pm	Closing Remarks, Keynote Presentation and Announcement of the SLAS Innovation Award Winner Adam Diedrich Steltzner, Chief Landing Phase Engineer and Aeronautics Expert, NASA Jet Propulsion Laboratory; From Leading a High Performance Team to Landing on Mars								

SLAS SPECIAL INTEREST GROUPS (SIGS)

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SLAS SIGs allow you to connect directly with peers who share similar interests and expertise in specific life sciences technology disciplines. SIGs are a great way to discuss leading-edge trends, meet recognized experts and collaborate with peers. A listing of the SIGs scheduled to meet at SLAS2016 appears below. For descriptions and a meeting schedule, visit **SLAS2016.org**.

- Academic Drug Discovery
- ADMET
- Automated Sample Preparation of Pharmaceutical Dosage Forms
- Automation Quality Control
- Drug Repurposing
- HCS/HCA Data and Informatics
- Informatics
- Labware Leachables

CELEBRATE EXCELLENCE

Phenotypic Drug Discovery

- Sample Management
- Screen Design and Assay Technology
- Standards Initiatives
- Stem Cells and 3D Microtissues
- Technology Transfer and CRO/CMO Project Management
- Women Professionals in Science and Technology



The Society's highest honors recognize significant contributions to the field of laboratory science and technology by SLAS members, students, conference participants and companies.

\$10,000 SLAS INNOVATION AWARD This \$10,000 cash prize award

INNOVAT♥ON™ Award

SLAS

recognizes the work behind one SLAS2016 scientific podium presentation that is exceedingly innovative and contributes to the exploration of technologies in the laboratory. Last year's winner was Jonathan Wingfield, AstraZeneca, for his award winning presentation: *Novel Acoustic Loading of a Mass Spectrometer – Towards Next Generation High-Throughput MS Screening.* The Innovation Award winner is named during the closing session of SLAS2016 on Wednesday afternoon, January 27.

TONY B. ACADEMIC TRAVEL AWARDS

The Tony B. Academic Travel Award Program recognizes up-and-coming researchers who demonstrate

outstanding achievement in laboratory science and technology. The Tony B. Academic Travel Awards include roundtrip coach airfare, conference registration and hotel accommodations. Each scholarship recipient actively participates in the conference by presenting a podium presentation or a poster. See a listing of award recipients participating at SLAS2016 on **SLAS2016.org**.

STUDENT POSTER COMPETITION

This cash award of \$500 is awarded to the top three student poster winners at SLAS2016. The winning posters are showcased in the SLAS Member Center and on **SLAS2016.org**. Additionally, the winners are interviewed by The Lab Man for his blog and podcast. The poster award ceremony takes place Monday, January 25, 5:00 pm.

NETWORKING

A hallmark of the SLAS experience is intelligent network building. SLAS is a global community, and our members pride themselves on being well-connected, inviting and helpful – just as they were once welcomed into the SLAS community. Attend SLAS2016 and see how much you will benefit being a part of SLAS not only at the conference, but for the other 360 days of the year. Networking activities at SLAS2016 include daily meals and receptions in the exhibit area, evening functions, a fun run with fellow attendees, Special Interest Groups (SIGs), special programming for students, early career professionals and international guests, and much more.

SLAS2016 Tuesday Night Celebration Anchors Away! SLAS to Commandeer the USS Midway!

Sponsored By: HAMILT®N

Tuesday | January 26 | All aboard at 6:30 pm | Abandon ship at 9:30 pm

The final evening of SLAS2016 will be one to remember as conversations continue aboard the USS Midway - one of America's longest-serving and most impressive aircraft carriers. All hands on deck to celebrate the fifth anniversary of the SLAS Annual International Conference and Exhibition! From stem to stern, the entire ship will belong exclusively to the SLAS community. Explore the 20 stories high, 1,000 ft. long, 64,000 ton, 212,000 horsepower aircraft carrier while meeting old friends and making new professional contacts. Enjoy:

- 60+ Exhibits
- Flight Simulators
- 29 Restored Vintage Aircraft
- Self-Guided Audio Tour
- Six Minutes that Changed the World" 15-Minute Multimedia Presentation
- Bountiful buffet, select wines, domestic beers and soft drinks







Photos: Courtesy of USS Midway Museum

SLAS MEMBER CENTER



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The SLAS Member Center is THE place for members – and non-members – to learn everything there is to know about the many year-round benefits and services available through SLAS. Conveniently located in the SLAS2016 Exhibition Hall, the Member Center is central hub for SLAS information and activity, including:

Career Services

Take advantage of FREE career services, see page 22 for additional details.

Live Podcasts with The Lab Man

Monday | January 25 5:00 pm - Interview with the Student Poster Competition Winners

Tuesday | January 26 9:45 am - JBS Guest Editor Jonathan Wingfield, JBS Special Issue on Advances in Mass Spectrometry within Drug Discovery

2:25 pm - JALA Guest Editor Joe Olechno, JALA Special Issue on Advancing Scientific Innovation with Acoustic Droplet Ejection

Wednesday | January 27 10 am - Interview with the SLAS New Product Award Designation Winners

Award Announcements

Student Poster Competition Award winners announced on Monday, January 25 at 5:00 pm.

Passport to Prizes

Play the Passport to Prizes game and you could win fabulous prizes. To play, simply visit some of the many exhibitors participating in the SLAS2016 Exhibition and have your passport card stamped at their booth. Submit your completed passport to the SLAS Member Center and return for the prize drawing on Wednesday, January 27 at 11:45 am *(Only those present at the prize drawing will be eligible to win.)*

FIRST Robotics Teams

AB MAN

SLAS is proud to partner with FIRST to showcase the amazing ingenuity of the next generation of scientific engineering. Local FIRST teams demonstrate their remarkable robotic inventions in the SLAS2016 Exhibition. Stop by to congratulate these remarkable future engineers.

In addition, in the Member Center you can receive a guided tour of SLAS.org, a review of your SLAS member benefits, and some great giveaways. Members of the SLAS leadership and the Society's professional team are available to answer questions and point out all that SLAS has to offer to benefit you not only at SLAS2016, but year-round.



SLAS SCIENTIFIC JOURNALS AT SLAS2016

SLAS publishes two rigorously peer-reviewed, MEDLINE-indexed scientific journals in partnership with SAGE Publications – the *Journal of Biomolecular Screening* (JBS) and the *Journal of Laboratory Automation* (JALA).

Visit the SLAS Journals Information Station (located in the SLAS Member Center on the Exhibit Floor) to meet members of the publishing team, learn more about each journal's editorial scope and find out:

- How to search, secure and manage information via JALA Online and JBS Online
- How to submit an original scientific manuscript
- How to increase awareness, discoverability and citations of your published manuscripts
- How to vote for your favorite finalist in the 2016 JALA & JBS Art of Science Contest
- Sign up for 30 days FREE ACCESS to JALA and JBS Online
- Receive sample copies of JALA and JBS (while supplies last)

Schedule of Special Events and Appearances

Monday | January 25

1:00 - 1:30 pm

JALA Editor-in-Chief Edward Kai-Hua Chow, National University of Singapore

1:30 - 2:00 pm

"Development of a Highly Sensitive Cell-Based Assay for Detecting Botulinum Neurotoxin Type A through Neural Culture Media Optimization," JBS Author David Beebe, University of Wisconsin

2:00 - 2:30 pm

"Advancing Scientific Innovation with Acoustic Droplet Ejection," JALA Special Issue Guest Editor Joe Olechno, Labcyte

Tuesday | January 26

1:00 - 1:30 pm JBS Editor-in-Chief Robert Campbell, Eli Lilly and Company

1:30 - 2:00 pm

"Mass Spectrometry within Drug Discovery," JBS Special Issue Guest Editor Jonathan Wingfield, AstraZeneca

2:00 - 2:30 pm

"Assembly and Transformation of a Synthetic Yeast Artificial Chromosome with a Multigene Cassette that Enhances Xylose Utilization into Saccharomyces Cerevisiae," JALA Author Steve Riedmuller, Hudson Control Group

Wednesday | January 27

8:00 - 9:15 am

Convention Center Room 114A JALA & JBS Author Workshop: How to Get Your Work Published



There is no magic bullet, but there are important tips that every prospective author should know before submitting a scientific manuscript for consideration by a peer-reviewed journal. Edward Chow, PhD, of National University of Singapore (editor-in-chief of the *Journal of Laboratory Automation*) will share step-by-step advice on how to design and write scientific research papers more clearly and effectively to improve their chances for successful publication.

sias CAREER**+** CONNECTIONS[™]

Accelerate your career and distinguish yourself in a competitive job market.

Career Services

Review job postings in the Career Connections section of the SLAS Member Center. Discreetly share your resume with prospective employers. Participate in an individual career coaching session, or have your resume reviewed by a scientific career expert.

Mentoring

Practicing scientists, including members of ACS San Diego, will be on hand to provide advice for those looking to pursue a career in life sciences research & development. Advance sign-up offered through **SLAS2016.org**.

Workshops

Multiple interactive workshops will help you polish your job search skills and distinguish yourself from other candidates. Watch **SLAS2016.org** for workshop themes and for advance sign-up.



Joanne Kamens, Ph.D. Executive Director, Addgene

Negotiating Work and Life Monday, January 25, 1:00 - 2:00 pm -Stay happy on and off the job with "Kamens' Ten Commandments of Work/Life Balance"

Transitions

*Tuesday, January 26, 7:30 - 8:30 am -*After the training ends...taking steps for a fulfilling career in science

Mentoring

*Tuesday, January 26, 1:00 - 2:00 pm -*Enriching your mentoring relationships from both sides



Dan Eustace, Ph.D. University of Connecticut

The Negotiation Process Monday, January 25, 7:30 am – Learn how to motivate others to achieve win-win solutions

One-On-One Career Counseling – bring your questions, along with your resumes, CVs, cover letters, research summaries and Linkedin profiles for a comprehensive review

INNOVATION.



THE EXHIBITION

The SLAS2016 Exhibition is an all-in-one venue to see the latest technologies and to visit with product experts and developers from more than 300 leading multinational providers of scientific technologies. From robotics to reagents, the SLAS2016 Exhibition is a unique opportunity to see, hear, touch and feel breakthrough innovation, with narrative often provided by the product developer. Nowhere else will you have such convenient access to a wealth of new technology, product expertise and user experiences that will help you chart the automation roadmap for your laboratory.

The SLAS2016 Exhibition includes:

- Exhibitor-led tutorials that further your educational experience by way of technical presentations by exhibiting companies
- SLAS Innovation AveNEW, a dedicated area of the floor that hosts a select group of emerging companies offering high-potential new technologies
- The SLAS New Product Award (NPA) designation that recognizes up to three new products being showcased in the exhibition
- The SLAS Member Center, where you can meet other attendees, SLAS leaders and professional team members, representatives of SLAS technical journals, and watch live interviews by The Lab Man.

Visit **SLAS2016.org** for the latest list of exhibiting companies, product descriptions, an exhibition floorplan and a schedule of events in the exhibition.

SLAS 2016 Exhibition Hours

Exhibition runs Monday - Wednesday with new hours: Monday | January 25 | 10:00 am - 6:30 pm Tuesday | January 26 | 9:30 am - 6:00 pm Wednesday | January 27 | 9:00 am - 1:00 pm

EXHIBITOR TUTORIALS

Learn About the Science Behind the Technology

As of press time, the following companies are presenting tutorials that offer an in-depth look at topics of ongoing practical interest. Visit **SLAS2016.org** for the latest list of participating companies and schedule of tutorials.

Monday | January 25

12:30 - 1:15 pm

Artel BMG Labtech Nanion Technologies PerkinElmer TTP Labtech

12:30 - 1:45 pm

Brooks Automation IntelliCyt Corporation Labcyte Inc. Thermo Scientific

12:30 - 2:30 pm

Beckman Coulter Life Sciences

2:00 - 2:45 pm

Cellular Dynamics International Eppendorf Genedata, Inc. Horizon Discovery Ltd InSphero, Inc. IonField Systems Molecular Devices Multispan SiLA Consortium Universal Robots USA, Inc.

Tuesday | January 26

9:30 - 10:15 am

Formulatrix Genedata, Inc. Lumigen, a Beckman Coulter Company PerkinElmer Thermo Fisher Scientific

12:30 - 1:15 pm

Artel Biodesy Festo Corporation Hamilton Company PerkinElmer TTP Labtech

12:30 - 1:45 pm

Brooks Automation Labcyte, Inc. Molecular Sensing PerkinElmer Promega Corporation

12:30 - 2:30 pm

Agilent Technologies Inc. Beckman Coulter Life Sciences

2:00 - 2:45 pm

Axol Bioscience Biosero BMG Labtech, Inc. Clontech Laboratories, Inc. Helix Linear Technologies, Inc. Icagen, Inc. InSphero Inc. Labcyte, Inc. Molecular Devices Nexcelom Bioscience Titian Software

SLAS2016 Exhibition only registration is available free-of-charge. Register at SLAS2016.org.

EXHIBITOR LISTING

For additional information on participating companies and to access the exhibition map, VIEW HERE

4titude Ltd A&D Precision, Inc. AAT Bioquest, Inc. Abcam AccuBioMed Co, Ltd ACEA Biosciences, Inc. Advanced Analytical Technologies, Inc. Advanced Microfluidics SA Agilent Technologies Inc. AllMotion Alpaqua Engineering LLC Alveole amsbio LLC Analytical Sales and Services, Inc. Analyticon Discovery Analytik Jena US, Inc. AnaSpec, EGT Group Andrew Alliance Anton Paar USA Applied BioPhysics, Inc. APRICOT DESIGNS **Arc-Tronics Art Robbins Instruments** Artel Arxspan **ASI/Applied Scientific** Instrumentation Inc. Astech Projects Ltd. Atlantic Lab Equipment LLC Aurora Biomed, Inc. Automator America Inc. Axion Biosystems, Inc. Axxam SpA Balluff, Inc. Bangs Laboratories, Inc. Beckman Coulter, Inc. Bigneat Containment Technology **BioAscent Discovery Ltd** Biodesy **Biodirect Inc.** BioDot, Inc.

Biomatrica, Inc. BioMedTech Laboratories, Inc. BioMicroLab. Inc. Biomiga, Inc. Bioneer BioNex Solutions, Inc. **BioreclamationIVT** BioSero, LLC BioTek Instruments, Inc. Biotix, Inc. Black Dog Technical Services, Inc. BlueCatBio BMG Labtech, Inc. **BPS Bioscience Inc.** BrandTech Scientific, Inc. Brookline Scientific Ltd **Brooks Automation Bruker Corporation Burkert Fluid Control Systems** Cellular Dynamics International Cetoni GmbH ChemBridge Corp. Chieftek Precision Co., Ltd. Cisbio Bioassays Clippard Instrument Lab., Inc. Clontech Laboratories, Inc. **Cognex Corporation** Collaborative Drug Discovery (CDD) Inc. Computype Conductive Technologies Inc. Confluence Discovery Technologies Contour Motion Cooperative Human Tissue Network (CHTN) Corning Life Sciences Cosmo Biotechnologies LTD CryoXtract Instruments CSEM Cyprotex DDNews

Diba Industries Inc.

Digilab, Inc. DiscoveRx **Dotmatics Inc. Douglas Scientific** Dover, a Division of Invetech Drug Discovery World Dynamic Biosensors GmbH **Dynamic Devices** E&K Scientific Products Inc. emp Biotech Eppendorf **EPSON Robots EQUIcon Software** etaluma, Inc. **Evotec** Excel Scientific, Inc. **Exquiron Biotech AG Festo Corporation** FlowJo, LLC FluidX/Brooks Automation Fluotics. Ltd Formulatrix, Inc. Fraunhofer IPA **Frontier Scientific Services** Genedata, Inc. Genetic Engineering & **Biotechnology News** Gilson, Inc. **GNF** Systems Greiner Bio-One Grenova, LLC Hamamatsu Corporation Hamilton Company HD Biosciences Co, Ltd Hettich **HighRes Biosolutions HIWIN Corporation HNP Mikrosysteme GmbH** Horizon Discovery Ltd Hudson Robotics, Inc. Icagen, Inc.

IDEA Bio-Medical Ltd IDEX Health & Science, LLC Igus, Inc. IKO International, Inc. ILS Immunosite Technologies infoteam Software AG **INHECO GmbH** Innoprot InSphero, Inc. **INTEGRA Biosciences** IntelliCyt Corporation IonField Systems LLC Kailash Biosciences, LLC Kawator **KBiosystems Ltd** KMC Systems, Inc. **KNF** Neuberger Inc. Kuraray, Co. Ltd Lab Services B.V. Labcon Labcyte, Inc. LabMinds Ltd LabRepCo LabSmith, Inc. LABVANTAGE Solutions, Inc. LabWare. Inc. LabX Media Group Lathrop Engineering Inc. **LEAP Technologies** The Lee Company Liconic Lin Engineering, Inc. Lonza LVL Technologies GmbH & CoKG Machery-Nagel Maxon Precision Motors, Inc. MeCour Temperature Control microfluidic ChipShop GmbH **Micronic America Micronit Microfludics BV**

EXHIBITOR LISTING (continued)

For additional information on participating companies and to access the exhibition map, View Here

MIMETAS BV MiniFab Minitubes MipTec Congrex Switzerland **MK Fluidic Systems** Moeller Medical Molecular Devices Molecular Sensing, Inc. Multispan, Inc. Nanotec NanoTemper Technologies, Inc. New England Small Tube Corporation Nexcelom Bioscience Nippon Pulse America, Inc. Norgren, Inc Nova Biostorage Plus, LLC Omega Bio-Tek, Inc. Omni International, Inc. OMS Motion, Pro-Dex **On-Chip Bio** Opticon Oriental Motor USA Corp. Pall Laboratory Panasonic Industrial Devices Sales Company of America

Parker Precision Fluidics/EMM Peak Analysis and Automation PerkinElmer PharmaCo-Cell Co, Ltd PHENIX Research Products Phytronix Technologies, Inc. Plastic Design Corporation Precise Automation Precision for Medicine Precision System Science **Prior Scientific** Promega ProQinase GmbH PureHoney Technologies Quantifoil Instruments GmbH **Reaction Biology Corporation** Renishaw Inc. Retisoft. Inc. Roche **Russell Publishing** S-BIO. SUMITOMO Bakelite SAMDI Tech. Inc. Sarstedt, Inc. Sartorius (formerly TAP Biosystems) SCIENION US. Inc.

Scientific Device Laboratory, Inc. Scigilian Software, Inc. Scinomix. Inc. SCIVAX Life Sciences, Inc. Seahorse Bioscience Seyonic SA Sias AG Sigma-Aldrich SiLA Consortium SMC Corporation of America Solid State Cooling Systems Sony Biotechnology, Inc. **Sparton Corporation** Specs Spectral Instruments SPEX SamplePrep LLC STACS DNA, Inc. Steinmeyer Inc. Stratasys Direct Manufacturing Symbient Product Development Tecan Technology Networks Ltd Tek-Matic, Inc. Tensor ID **Thermo Fisher Scientific**

thinXXS Microtechnology AG Thorlabs Titian Software Torrey Pines Scientific, Inc. TriContinent Trinean **TTP Labtech TubeWriter** TWD TradeWinds, Inc. Union Biometrica, Inc. USA Scientific, Inc. V&P Scientific. Inc. Vala Sciences, Inc. Valcor Engineering VICI Valco Instruments Volpi USA Wagner Life Science Weidmann Medical Technology AG Wheaton Wyatt Technology Xavo Systems AG Zaber Technologies, Inc. ZenBio, Inc. Zhejiang Huawei Scientific Instrument Co, Ltd Zinsser Analytic

REGISTRATION AND HOTEL ACCOMMODATIONS



Registration

SLAS2016 is pleased to offer significant registration discounts to advance registrants, for groups of registrants from the same industry organization, for professionals from academic institutions and government agencies, and for students. Deepest early-bird discounts are available for SLAS members who register by **October 30, 2015**. (Become an SLAS member to take advantage of these discounts, plus receive year-round benefits through the end of 2016 for just one year's dues.) Advance discounts are available through December 18, 2015.

SLAS is pleased to offer group discounts on SLAS2016 registration for groups registering individuals in increments of five (5) registrants from the same company.Student registrants are not eligible for SLAS2016 Group Discounts. **See terms and conditions for Group Registration discounts at SLAS2016.org.**

Hotel Accommodations

SLAS has negotiated discounted hotel room rates at three of San Diego's premier convention hotels: the San Diego Marriott Marquis & Marina (headquarters hotel), the Hilton San Diego Bayfront and the Omni San Diego Hotel. These hotels are located within convenient walking distance to the San Diego Convention Center, where the majority of conference activities will take place. Booking a room at one of these properties using official SLAS reservation methods will ensure you receive the exclusive SLAS attendee discount rate, plus other benefits and safeguards, including complimentary guest room internet access. **See complete information and access the unique SLAS attendee reservation link on SLAS2016.org.**

SLAS2016 TAKES PLACE AT THE San Diego Convention Center | 111 W. Harbor Drive | San Diego, CA 92101

San Diego Marriott Marquis & Marina (Headquarters Hotel)

333 West Harbor Drive, San Diego, CA 92101 **Telephone Reservations:** +1.877.622.3056 (reference SLAS2016 when calling)

- Standard Nightly Rate: \$257 + state and local tax
- Complimentary Guest Room Internet
- Complimeentary Access to Fitness Center

Hilton San Diego Bayfront

One Park Boulevard, San Diego, CA 92101 **Telephone Reservations:** +1.800.445.8667 (reference SLAS2016 when calling)

- Standard Nightly Rate: \$257 + state and local tax
- Complimentary Guest Room Internet
- Complimeentary Access to Fitness Center

Omni San Diego Hotel

675 L Street, San Diego, CA 92101 **Telephone Reservations:** +1.619.231.6664 (reference SLAS2016 when calling)

- Standard Nightly Rate: \$257 state and local tax
- Complimentary Guest Room Internet
- Complimeentary Access to Fitness Center

To reserve your room online using official SLAS2016 channels, visit the Hotel and Travel page of SLAS2016.org.

The deadline for booking hotel accommodations at the negotiated SLAS2016 rate is **December 24, 2015**. Bookings made after this date will receive the discounted rate based only on individual hotel availability.

San Diego Convention Center Parking

Parking is available at the San Diego Convention Center. To access the parking garage enter on Harbor Drive between 1st and 5th Avenue. For parking questions call ACE Parking at: +1.619.237.0399.

- The daily rate is \$15. Parking rates may range from \$15 to \$25 on days when there is special event activity at Petco Park or other downtown events.
- Payment is due upon entry and there are no in and out privileges.
- No overnight or RV parking is permitted.

TRAVEL INFORMATION

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Air Travel Information

You may book your air travel directly with SLAS2016's official travel agent, National Travel at: vipservices@nationaltravel.com; +1.800.557.0842 (toll free); +1.304.357.0808 (international).

Delta Discounted Fares

Delta Airlines offers discounted fares to SLAS2016 travelers who book through National Travel. Discounts range from 2%-10% dependent on the class of service.

Airport Transportation Information

Travel from San Diego International Airport (SAN) to the three official SLAS Hotels and the San Diego Convention Center takes approximately 15 minutes. The following options are available in addition to standard rental car options:

- Taxi: Approximately \$15 per ride.
- SuperShuttle: Approximately \$7 per ride; \$1 per ride discount for SLAS2016 attendees
- Telephone Reservations: 1-800-BLUE-VAN; Discount Code: SLAS

Rental Car Information

Avis is the official rental car agency of SLAS2016. Receive up to a 25% discount off the lowest applicable published rate on Avis car rentals. National Travel automatically applies the discount to flights booked through their agency. If you use your own agency or book with Avis directly, reference Avis Authorization Number D017106 when booking to receive the discount.

The Benefit of Staying in the Official SLAS2016 Hotels

SLAS2016 has negotiated special rates and benefits for conference attendees at three of San Diego's premier hotels, the San Diego Marriott Marquis & Marina, the Hilton San Diego Bayfront and the Omni San Diego Hotel.

Not only are these hotels conveniently located adjacent to the convention center, but SLAS2016 attendees benefit in several other ways:

- Significant discounts off standard guest room rates
- Complimentary guest room Internet service (value of up to \$15 per night)
- Complimentary guest access to hotel fitness center
- Flexible booking policies
- Simplified ability to make reservation changes, if required

Staying in one of the official SLAS2016 hotels enables SLAS to contract with premier facilities, such as the San Diego Convention Center, and helps keep registration fees as affordable as possible. Your support of these hotels during SLAS2016 is important and will be greatly appreciated.

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