

slas
2016

5th annual
INTERNATIONAL
CONFERENCE & EXHIBITION

JANUARY | **SAN DIEGO CONVENTION CENTER**
23-27 | **SAN DIEGO :: CALIFORNIA**

**REGISTER BY
DECEMBER 18**
FOR ADVANCE
DISCOUNTS

SHORT COURSES | JANUARY 23-24
CONFERENCE | JANUARY 25-27
EXHIBITION | JANUARY 25-27

INFORMATION.
INNOVATION.
INSPIRATION.

**CONFERENCE
PREVIEW**
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SLAS2016.ORG

Premier Sponsor: **HAMILTON**

 **slas**
Come Transform Research

 **#SLAS2016**

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 piece together specific solutions for your lab
- Hear updates on breakthrough research, and have direct access to the participating scientists, giving you 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 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 catered 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. SLAS2016 is no exception. Check out these new and improved aspects on tap for SLAS2016:

NEW TRACK: Cellular Technologies

This track will focus 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.

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.

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)
- 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)



FUND Run

To commemorate the new SLAS Educational Fund, SLAS2016 will feature 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 will receive a commemorative FUND Run shirt.

INSPIRATION.

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:

1

Advances in Bioanalytics, Biomarkers and Diagnostics

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

2

Assay Development and Screening

High-Throughput Screening of Metagenomic DNA Libraries

PRESENTER: Louis Cohen, The Rockefeller University

3

Automation and High-Throughput Technologies

Development of a Platform to Enable Fully Automated
Cross-Titration Experiments

PRESENTER: Jason Cassaday, Merck & Co., Inc.

4

Cellular Technologies

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

PRESENTER: John Doench, The Broad Institute

5

Drug Target Strategies

Drug-Target Residence Time: Target Engagement, Target Vulnerability
and Predictions of In Vivo Drug Activity

PRESENTER: Peter Tonge, State University of New York (SUNY), Buffalo

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

6

Informatics

Identifying Druggable Cells: Automated Methods for High-Content Single-Cell Screening

PRESENTER: Tiffany Chen, Cytobank, Inc. and Stanford University

7

Micro/Nano Technologies

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

PRESENTER: Sindy Tang, Stanford University

KEYNOTE SPEAKERS

Monday | January 25 | 8:30 am



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

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.

Wednesday | January 27 | 3:45 pm



Adam Diedrich Steltzner
Engineer, 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.



SHORT COURSES

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. For a list of courses, instructors, abstracts, costs and schedules, visit SLAS2016.org.

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

3D Cell-Based Assays for Drug De-Risking

Instructors: Ursula Graf-Hausner, *University of Applied Sciences Zurich*; Jens M. Kelm *InSphero AG*; Ty C. Voss, *PerkinElmer*

Introduction to Laboratory Automation

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

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

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!)

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

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

Cross Functional Project Management for Technical Professionals

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

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

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

Instructors: David J. Kahler, *NYU Langone Medical Center*; Justin Ichida, *University of Southern California*

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

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

Establishing Cell-Based Assays for Screening

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!)

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

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

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

Liquid Handling Essentials (Interactive Course)

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

Next Generation Sequencing Technology Fundamentals and Applications

Instructor: Dawei Lin, *National Institutes of Health*

Sample Management: Best Practice, Trends and Challenges

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

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

Instructor: Robert Nadon, *McGill University*

HALF-DAY SHORT COURSES

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Sunday | January 24

Screening Strategies for Drug Discovery: Matching Tools with Solutions (NEW!) - 8:30 am - Noon

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

Gene Editing for Drug Discovery (NEW!) - 1:00 - 4:30 pm

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

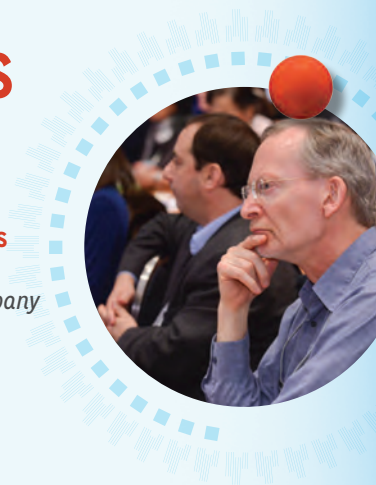
TWO-DAY SHORT COURSE

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

Getting Started With Excel & VBA in the Laboratory; Laptop Required

Instructors: William Neil, Martin Echols



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



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

SPECIAL INTEREST GROUPS (SIGS)

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
- 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



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.

Tuesday Evening Celebration Aboard the USS Midway

Sponsored By: **HAMILTON**

The final evening of SLAS2016 will be one to remember as SLAS commandeers the retired aircraft carrier USS Midway for a celebration exclusively for SLAS2016 attendees. The festivities will include access to the Midway's 60+ exhibits, flight simulators, a self-guided audio tour, multimedia presentations, knowledgeable docents, and a bountiful buffet with select wines, beer and soft drinks. See details on SLAS2016.org.



Photos: Courtesy of USS Midway Museum

ALLIANCES

SLAS is proud to partner with many other leading organizations dedicated to serving scientists and related professionals. The following organizations will be 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.

Technology to Propel Science: GNF Automation Tour and Seminar



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.





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 will be 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

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Negotiating Work and Life - Stay happy on and off the job with "Kamens' Ten Commandments of Work/Life Balance"

Transitions - After the training ends...taking steps for a fulfilling career in science

Mentoring - Enriching your mentoring relationships from both sides



Dan Eustace, Ph.D.
University of
Connecticut

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The Negotiation Process - 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





**FOR THE LATEST INFORMATION AND
TO REGISTER, VISIT SLAS2016.ORG.**

Registration

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. Significant registration discounts are also available for groups of five (5) individual registrants from the same organization, for professionals from academic institutions and government agencies, and for student participants. For complete rates and deadlines, visit SLAS2016.org/registration.

Hotel & Travel

SLAS has negotiated discounted housing 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. All of 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. Information on discounted air travel, car rental, airport transportation and convention center parking for SLAS2016 attendees can also be found on SLAS2016.org.

