SHORT COURSES: February 3-4  |  CONFERENCE: February 3-7  |  EXHIBITS: February 5-7

SLAS2018
CONFERENCE PREVIEW

Register by October 31 for deepest early-bird discounts.
Advance discounts available through December 18

SLAS2018.org
Since its founding in 2010, SLAS has provided valuable education and information to the exclusive community of life sciences professionals that work at the intersection of discovery and technology. Helping innovative researchers and engineers pioneer new scientific horizons by leveraging the power of technology has been a hallmark of the Society since day one. And just as the life sciences are evolving at an accelerated pace, SLAS adapts to deliver the insights, access to technology and peer connection opportunities to ensure our members remain well-informed and well-connected to achieve breakthrough research.

Attending SLAS2018 enlightens you to the latest technology, research insights and peer perspectives that you need to stay ahead of the curve:

- **HEAR** lessons learned and best practices from the world’s leading life sciences researchers
- **SEE** the latest tools and technologies from more than 300 leading providers participating in the SLAS2018 Exhibition
- **BUILD** your knowledge through an array of peer-selected and peer-selected technical presentations, workshops, Short Courses and scientific posters
- **CULTIVATE** an expansive peer network that can be looked to year-round to provide insight, answers and feedback to your specific challenges
- **ENHANCE** your career trajectory with education and mentoring opportunities offered in SLAS Career Connections

**SLAS2018** is produced by life scientists for life scientists. Attend this preeminent annual event to grow knowledge, improve your research and expand your personal network of fellow researchers setting new standards in the life sciences.

**SLAS2018 Conference Chairs:**
Michelle Arkin  
University of California, San Francisco  
Tim Spicer  
Scripps Research Institute
WHAT’S NEW AT SLAS2018

NEW EDUCATIONAL TRACKS

Biologics Discovery
This track emphasizes innovative solutions to increase the breadth, depth and impact of early stage efforts to fuel the biologics pipeline. Learn how automation and screening can play a key role in the progression of new therapeutics as well as the impact of novel assays, microfluidics and biorepositories.

Chemical Biology
This track focuses on the challenges of addressing targets with small molecules including validation of targets using tool molecules and proof of target engagement through appropriate biomarker identification. This track also covers advances in library design, keeping libraries current and DNA-encoded libraries.

High-Definition Biotechnology Track
Focusing on the application of microfluidic, optical, and molecular tools in disease biology, diagnostics, screening, and translational medicine, this track highlights state-of-the-art quantitative high-throughput and high-resolution approaches in both simple cellular systems and complex tissues.

See a complete listing of podium sessions and session chairs on the following pages. Visit SLAS2018.org for details, presenter information and scheduling.

NEW SHORT COURSES

A series of new Short Courses shine an in-depth light on the latest theory and application of technology for the life sciences. New courses include:

• 3D Printing for Scientific Applications - Interactive Course (one day - Sun, Feb. 4)
• Microcontrollers, the IoT and our Laboratories - Interactive Course, Laptop Required (one day – Sun, Feb. 4)
• Phenotypic Screening: Why, When and How (one day – Sun, Feb. 4)
• Set-up and Validation of 3D Primary, Stem Cell and Immortalized Cultures for Downstream Microplate Reader and Imaging Applications (half-day – Sun, Feb. 4 morning)

Short Courses require an additional registration fee and include course materials. See the complete list of Short Courses later in this brochure and see detailed information on SLAS2018.org.

SLAS IGNITE (NEW!)

SLAS events have always enabled unique access and paved the way for mutually-beneficial collaborations and partnerships between researchers, between technology users and vendors and between organizations. To facilitate these connections even more, SLAS2018 hosts the debut of SLAS Ignite Academic Theater Presentations in the new Exhibition Theater. Be among the first to pilot this program where researchers from academic institutions showcase capabilities to industry counterparts with a goal of formalizing research partnerships. Presentations take place at 1:00 pm PT on Monday, Feb. 5 and Tuesday, Feb. 6.

KEYNOTE PRESENTERS

Benjamin Cravatt, Ph.D. | The Scripps Research Institute | Monday, Feb. 5
Delivering the opening keynote presentation on Feb. 5, Dr. Cravatt is a Professor and Co-Chair of the Department of Molecular Medicine at The Scripps Research Institute. His research group is interested in understanding the roles that enzymes play in physiological and pathological processes, especially as pertains to the nervous system and cancer.

Marc Abrahams | Founder, Ig Nobel Prize Ceremony | Wednesday, Feb. 7
Marc Abrahams writes about research that makes people LAUGH, then THINK. Marc founded Ig Nobel Prize Ceremony in 1991, and serves as its Master of Ceremonies. He co-founded and edits the magazine Annals of Improbable Research (AIR), hosts the improbably Research weekly podcast (distributed by CBS), and wrote This is Improbable, The Ig Nobel Prizes, and other books.
SCIENTIFIC PROGRAM

TWO KEYNOTES - 10 TRACKS – 144 PODIUM PRESENTATIONS – 21 SHORT COURSES – HUNDREDS OF POSTERS

1 ADVANCES IN BIOANALYTICS, BIOMARKERS AND DIAGNOSTICS
Track Chair(s): Melanie Leveridge, GlaxoSmithKline; Shaun McLoughlin, Abbvie
- Label-Free Bioanalytical Techniques In Drug Discovery
  Session Chair: Andreas Luippold, Boehringer Ingelheim
- Omics Approaches to Biomarker Analysis
  Session Chair: Christina Rau, Cellzome, GlaxoSmithKline
- Target and Mechanism Identification After Phenotypic Screens
  Session Chair: Shaun McLoughlin, Abbvie

2 ASSAY DEVELOPMENT AND SCREENING
Track Chair(s): Edward Ainscow, Carrick Therapeutics; Ralph Garripa, MSKCC
- Advanced Imaging-Based Phenotypic Assays
  Session Chair: Gianluca Pegoraro, NIH
- Biophysical, Biochemical and Label-Free Screening Technologies
  Session Chair: Keith Olson, Corning
- Advanced In Vitro Culture Systems to Identify Novel Targets and Therapies and Enhance Clinical Translation
  Session Chair: Deb Nguyen, Cellular Approaches
- Rational Screening to Optimize Chemical and Biological Space
  Session Chair: Fred King, Genomics Institute of the Novartis Research Foundation
- Assay Development and Screening in Higher Dimensions: 3D & 4D
  Session Chair: Ann Hoffman, GlaxoSmithKline
- Utilising the Power of NGS and Genomics in Screening
  Session Chair: David Piper, Life Technologies

3 AUTOMATION AND HIGH-THROUighTPUT TECHNOLOGIES
Track Chair(s): Taosheng Chen, St. Jude Children’s Research Hospital; Louis Scampavia, The Scripps Research Institute
- Automating Screens Using Physiologically-relevant Models
  Session Chair: Haian Fu, Emory University
- Advanced Imaging Technologies to Bridge the Gap Between High-Content and High-Throughput
  Session Chair: Franck Madoux, Amgen
- Automating Target-Based and Complex Phenotypic Drug Discovery
  Session Chair: Shane Horman, Genomics Institute of the Novartis Research Foundation
- Screening Automation: Modular vs. Highly-Integrated Systems
  Session Chair: Sam Michael, NIH/NCATS
- Emerging Strategies and Technologies for High-Throughput Automation
  Session Chair: Jason Matzen, Genomics Institute of the Novartis Research Foundation
- In-House Automation: Devices and Software Developed Internally
  Session Chair: Louis Scampavia, The Scripps Research Institute

4 BIOLOGICS DISCOVERY
Track Chair(s): Daniel Sipes, Genomics Institute of the Novartis Research Foundation; Rob Howes, AstraZeneca
- Biobanking: At the Intersection of Biospecimens and Discovery
  Session Chair: Andy Zaayenga, SmarterLab
- Next Generation Biologics Discovery
  Session Chair: Kevin Chapman, Berkeley Lights
- Assays and Screening for Biologics
  Session Chair: Rob Howes, AstraZeneca
 CELLULAR TECHNOLOGIES  
Track Chair(s): Benjamin Haley, Genentech; Prashant Mali, University of California, San Diego
- Advances in Genome Editing Technologies  
  Session Chair: Prashant Mali, University of California, San Diego
- Development of Cellular Models for Phenotypic Screening  
  Session Chair: Kristen Brennand, Icahn School of Medicine at Mount Sinai
- Applied Functional Genomic Technologies  
  Session Chair: Benjamin Haley, Genentech

CHEMICAL BIOLOGY  
Track Chair(s): Jonathan O’Connell, Forma Therapeutics; Gwen Hansen, Nurix
- Affinity-Based Lead Discovery Using DNA Encoded Chemistry  
  Session Chair: Gwen Hansen, Nurix
- Biology and Chemistry of Small Molecule Libraries  
  Session Chair: Stephen Johnson, Bristol-Myers Squibb
- Target Selection and Validation  
  Session Chair: Pete Rahl, Fulcrum Therapeutics

DATA ANALYSIS AND INFORMATICS  
Track Chair(s): Margaret DiFilippo, Dotmatics; Amy Kallmerten, Merck
- Data-Driven Decision Support and Digitizing Lab Workflows  
  Session Chair: Nicole Glazer, Merck
- Extracting Informed Decisions from Complex Data  
  Session Chair: Yohann Potier, Novartis
- Navigating Data from In Silico To In Vivo, Combing the Power of Experimental and In Silico Data to Maximize Efficiency and Accelerate Discoveries  
  Session Chair: Clare Tudge, GlaxoSmithKline

DRUG TARGET STRATEGIES  
Track Chair(s): Chun-wa Chung, GlaxoSmithKline; Peter Hodder, Amgen
- Multi-Modal Approaches to Mechanism of Action Determination  
  Session Chair: Anthony Orth, Genomics Institute of the Novartis Research Foundation
- Integrating Novel Target Engagement Strategies into Drug Discovery  
  Session Chair: David Israel, GlaxoSmithKline
- Platform Strategies to Exploit Atypical Modes of Actions  
  Session Chair: Rusty Lipford, Amgen

HIGH-DEFINITION BIOTECHNOLOGY  
Track Chair(s): Angela Cacace, Fulcrum Therapeutics; Paul Blainey, The Broad Institute
- High-Definition Technology Platforms For Single Cell Analysis  
  Session Chair: Paul Blainey, The Broad Institute
- Systematic Approaches For Therapeutic Target Identification  
  Session Chair: Benedict Cross, Horizon
- Genomic and Proteomic Assays and Devices For Diagnostics and Translatable Biomarker Approaches  
  Session Chair: Mats Nilsson, Stockholm University and Uppsala University

MICRO- AND NANOTECHNOLOGIES  
Track Chair(s): Andrew De Mello, ETH Zürich; Sammy Datwani, Labcyte
- Commercialization of Micro- and Nano-fluidic Devices  
  Session Chair: Sammy Datwani, Labcyte
- Droplet-Based Microfluidics and Single Cell Analysis  
  Session Chair: Amar Basu, Wayne State University
- Organ-on-a-Chip and Microphysiological Systems  
  Session Chair: Olivier Frey, InSphero

Visit SLAS2018.org for complete details on the scientific program, including presentation abstracts, presenter bios and to build your agenda.

#SLAS2018
Short Courses allow attendees to maximize their SLAS2018 experience by taking advantage of one (or more) deep dive educational offerings on Saturday-Sunday, February 3-4. Led by practicing scientists and subject matter experts, Short Courses impart significant knowledge, many by way of hands-on experience using the tools, technology and applications used in your lab and on your computer. Short Course attendance is limited and requires an additional registration fee. For more on Short Courses, instructors, abstracts, costs and schedules, visit SLAS2018.org.

FULL-DAY COURSES: SATURDAY | FEBRUARY 3 | 8:15 AM - 3:15 PM

3D Cell-Based Assays for Drug De-Risking
Instructors: Anthony Essex, Phenovista; Oliver Frey, InSphero AG; Patrick Guye, InSphero AG, Alex Ng, Harvard Medical School / Harvard University; Terry Riss, Promega Corporation

Introduction to Laboratory Automation
Instructors: Steve Hamilton, SLAS; Jay Gill, BFL Consulting

Lab-on-a-Chip: From Technology to Bioanalysis on Chip
Instructors: Jorg Kutter, Dept. of Pharmacy University of Copenhagen; Johan Nilsson, Department of Biomedical Engineering Lund University; Sabeth Verpoorte, Groningen Research Institute of Pharmacy / University of Groningen

Next Generation Sequencing Technology Fundamentals and Applications
Instructors: Abizar Lakdawalla, Proxeom; Dawei Lin, NIAID/NIH

FULL-DAY COURSES: SUNDAY | FEBRUARY 4 | 8:00 AM - 3:15 PM

3D Printing for Scientific Applications (Interactive Course) (NEW!)
Instructors: Matthew Fronheiser, Bristol-Myers Squibb Co., Clinical Translational Technologies and Operations; Mark Russo, Bristol-Myers Squibb Co., Translational Bioinformatics

Applications of Biophysical Methods in Small-Molecule Drug Discovery
Instructors: Christine Genick, Novartis Institutes for BioMedical Research Basel; Chemical Biology and Therapeutics, Protein Sciences Foundational Area; Stefan Geschwindner, AstraZeneca R&D Mölndal, Discovery Sciences, Structure & Biophysics

Data Management in the Age of Big Data, Mobile, and the Cloud
Instructors: Burkhard Schaefer, BSSN Software GmbH

Establishing Cell-Based Assays for Screening
Instructors: Terry Riss, Promega Corporation; Geoffrey Bartholomeusz, UT MD Anderson Cancer Center; Eric Johnson, WuXi AppTec; Lisa Minor, In Vitro Strategies, LLC

High-Content Screening: An Introduction to Instrumentation, Assay Development, Screening, Image and Data Analysis
Instructors: Steffen Jaensch, Janssen R&D, Pharmaceutical Companies of Johnson & Johnson; Eberhard Krausz, VIB - Discovery Sciences
Liquid Handling Essentials (Interactive Course)  
**Instructors:** Dana Campbell, Artel; Nathaniel Hentz, NC State University – BTEC; Lisa Knapp, Agilent Technologies

Microcontrollers, the IoT and our Laboratories (Interactive Course, Laptop Required) *(NEW!)*  
**Instructors:** Jay Gill, BFL Consulting; Erik Werner, University of California, Irvine

Pharmacology in Drug Discovery and Development: New Lives for Receptors as Drug Targets Through Allostery and Biased Signaling  
**Instructors:** Terry Kenakin, UNC School of Medicine

Phenotypic Screening: Why, When and How *(NEW!)*  
**Instructors:** Jonathan Lee, Eli Lilly; David Swinney, Institute for Rare and Neglected Diseases Drug Discovery (iRND3); Fabien Vincent, Pfizer

Sample Management: Best Practice, Trends and Challenges  
**Instructors:** Susan Crimmin, GlaxoSmithKline; Kathi Shea, Brooks BioStorage Technologies

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**TWO-DAY COURSES:** SAT-SUN | FEBRUARY 3-4 | 8:00 AM - 3:15 PM

Getting Started with Excel & VBA in the Laboratory *(Laptop Required)*  
**Instructors:** William Neil, Bristol-Myers Squibb; Martin Echols, EcholsTech

**HALF-DAY COURSES:** SUNDAY, FEBRUARY 4 | 8:00 AM - 11:15 AM

Gene Editing for Drug Discovery  
**Instructors:** John Doench, The Broad Institute of MIT and Harvard; Samuel Hasson, Pfizer, Inc.

Introduction to Flow Cytometry  
**Instructors:** John Nolan, Scintillon Institute; Paul Robinson, Purdue University

Set-Up and Validation of 3D Primary, Stem Cell and Immortalized Cultures for Downstream Microplate Reader and Imaging Applications *(NEW!)*  
**Instructors:** Brad Larson, BioTek Instruments, Inc.; Mark Rothenberg, Corning Incorporated

**HALF-DAY COURSES:** SUNDAY, FEBRUARY 4 | 12:00 PM - 3:15 PM

Advanced Flow Cytometry  
**Instructors:** John Nolan, Scintillon Institute; Paul Robinson, Purdue University

An Introduction to Mass Spectrometry and its Applications within Drug Discovery  
**Instructors:** Ian Sinclair, AstraZeneca, Discovery Sciences; Jonathan Wingfield, AstraZeneca, Discovery Sciences
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THE EXHIBITION

The SLAS2018 Exhibition is the bustling intersection where technology meets discovery. Renowned for its friendly, collaborative environment, the SLAS2018 Exhibition provides insight to the latest technological innovations and services from more than 300 multinational providers that serve the life sciences industries. Be sure to allow ample time to peruse the exhibition, meet with product developers, interact with poster authors, visit the SLAS Booth and enjoy a host of educational and community program offerings.

HIGHLIGHTS OF THE SLAS2018 EXHIBITION:

• State-of-the-art exhibits that showcase the latest scientific technologies in functional lab settings
• The SLAS2018 Scientific Poster Gallery, including opportunities to interact with poster authors
• Exhibitor-led tutorials that complement your technical education experience
• NEW! The SLAS2018 Exhibition Theater, featuring the Solution Spotlight series.
• Innovation Ave NEW, a dedicated area of the floor that hosts a select group of emerging companies offering high-potential new technologies

Visit SLAS2018.org for the latest list of exhibiting companies, company descriptions, an exhibition floorplan and a schedule of events in the SLAS2018 Exhibition.
SLAS is a thriving community of life sciences professionals from across the globe. As a community, SLAS members freely share information, connections and insights to help one another both personally and professionally. Nowhere is that community spirit more evident than at the Society’s flagship international conference. Attending SLAS2018 grants you access to an impressive portfolio of events and opportunities sure to broaden your professional network.

SLAS2018 networking activities and venues include:

- Daily lunches and receptions in the SLAS2018 Exhibition
- A 5k fun run benefiting the SLAS Educational Fund
- Special Interest Groups (SIGs)
- A Global Village especially for international attendees
- Special programs for students and early career professionals

**TUESDAY EVENING CELEBRATION**

OLD TOWN SAN DIEGO  
FEB. 6 | 6:30-9:30 PM

For this annual networking highlight, SLAS2018 is taking it back—way back to the 1700s in fact! Join in the fun at the birthplace of California and one of San Diego’s most popular destinations: Old Town. Founded in 1769, Old Town San Diego was California’s first settlement and is now one of the most visited state parks in The Golden State. Wander through lush gardens, indulge in authentic Mexican cuisine, and visit with local specialty vendors. Try your hand at poker in a restored 1870s-era hotel, The Cosmopolitan, or listen to live Spanish guitarists and watch Folklorico Dancers. Combining history with exceptional cuisine and timeless entertainment, this celebration should be considered “can’t miss” for all SLAS2018 participants.
SPECIAL INTEREST GROUPS (SIGS)

SLAS SIGs allow you to connect directly with peers who share similar interests and expertise in specific scientific technology disciplines. SIGs are a great way to discuss leading-edge trends, meet recognized experts and collaborate with peers. SIGs scheduled to meet at SLAS2018 appear below. For descriptions and a meeting schedule, visit SLAS2018.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
• Ultra-High-Throughput Screening
• Women Professionals in Technology
Looking to accelerate your career path? Would you like to meet with established researchers to hear their stories and benefit from their experience? Want to learn how to distinguish yourself in a competitive job market? SLAS2018 offers a host of resources to drive your career advancement.

**CAREER SERVICES**

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

**WORKSHOPS**

Multiple expert-led workshops are offered to help you hone your job search skills and to highlight your personal qualifications. Watch SLAS2018.org for workshop themes and for advance sign-up.

**MENTORING**

Benefit from a mentoring session with an established professional scientist or researcher. Experienced scientists are on hand to provide professional advice for individuals at any stage of their career in life sciences discovery and technology. Advance sign-up is offered through SLAS2018.org.