

# The Southern California Pharmaceutical Discussion Group (SCPDG) Announces our March 19, 2026, Meeting:

## Presentation 1 (15 Min)

### ***Light-Triggered Cardiac Structural and Functional Feedback Through a Flexible Polymeric Interface***

Presented by  
**Yuyao Kuang**  
Chemical and Biomolecular Engineering  
University of California, Irvine

**Abstract:** The exchange of biophysical signals between cells and their microenvironment governs tissue and organ function. To model these dynamics in vitro, my Ph.D. research focuses on engineering stimuli-responsive soft materials that mimic the electroactive nature of cardiac tissue. I design adaptive, hierarchically ordered macromolecular transducers—biomolecular assemblies and polymers—that both regulate and report signal transduction at tissue–ECM interfaces. Specifically, I developed  $\pi$ -conjugated soft materials as biomimetic transducers capable of (1) converting light into electrical or electromechanical cues for localized cardiac stimulation and (2) translating mechanical forces into optical signals for real-time sensing. These systems provide integrated platforms to modulate and visualize cardiac structure and function, advancing models for disease study and regenerative therapy.

**Biography:** Yuyao Kuang is a Ph.D. candidate in Chemical and Biomolecular Engineering at the University of California, Irvine. His research focuses on designing functional, stimuli-responsive polymeric and peptidic biomaterials that mimic the electroactive properties of cardiac tissue for functional regulation and sensing. He has extensive experience in the design, synthesis, and purification of small molecules, peptides, bioconjugates, and proteins, with strong expertise in analytical characterization and formulation development. Yuyao is skilled in method development, optimization, and problem-solving across chemistry, materials, and bioengineering. With a proven record of innovation, collaboration, and productivity demonstrated through patents, publications, and conference presentations, he is passionate about translating advanced biomaterial research into impactful industrial applications.

## Presentation 2 (45 Min)

### ***Measuring What Matters: The Strategic Role of Health Outcomes and Clinical Assessment in Pharma Today***

Presented By  
**Somali Misra Burgess, PhD**  
CEO and Research Director  
COA and Patient-Centered Research  
Sunlight Outcomes Research

**Abstract:** As pharma shifts toward patient-centered innovation, the ability to measure meaningful outcomes has become essential. This session, “*Measuring What Matters: The Strategic Role of Health Outcomes and Clinical Assessment in Pharma Today*,” examines how health economics and outcomes research (HEOR) and clinical outcome assessments (COAs) drive evidence generation and decision-making across the drug

development lifecycle. We will clarify the core concepts, explore cross-functional relevance—from Research and Development and Clinical Operations to Regulatory, Medical Affairs, and Commercial—and highlight emerging trends such as digital health technologies, novel endpoints, decentralized assessments, and real-world data integration. The session will conclude with practical recommendations for strengthening outcomes strategy and a moderated discussion to help participants apply these insights to their own programs. Attendees will leave with a clear understanding of why outcomes matter and how to leverage them to shape the next era of patient-centered drug development.

**Biography: Somali Misra Burgess, PhD** is the CEO and Research Director of Sunlight Outcomes Research, a boutique consultancy specializing in clinical outcomes assessment (COA) and patient-centered research strategy. With 27 years of experience across the consulting and pharmaceutical industries, she delivers tailored COA solutions that support strategy development, global regulatory success, patient-focused drug development (PFDD), and real-world evidence generation.

This is not Somali's first entrepreneurial venture. She previously founded Strategic Outcomes Services, a successful COA-focused consultancy, which led to her recruitment by Xcenda (now Cencora) to build and lead their Outsourcing Solutions team, where she also served as Senior Director and Patient-Reported Outcome (PRO) Thought Leader.

Before launching Sunlight Outcomes Research, Somali was a Senior Principal in IQVIA's Patient-Centered Solutions team, leading research across North America and serving as Scientific Lead for the Asia-Pacific (APAC) region. Her prior executive and leadership roles include Vice President (VP), Patient-Centered Outcomes at Endpoint Outcomes (now Lumanity); VP, Endpoint Development and Outcomes Assessment at Adelphi Values; Senior Research Scientist, Patient-Centered Research at Evidera; and Director, Global Health Outcomes Strategy and Research at Allergan (now AbbVie), where she led COA and outcomes research efforts across multiple therapeutic areas.

Somali's expertise spans COA strategy development, measure validation, regulatory submissions, and value demonstration across a broad range of therapeutic areas, including aesthetics, dermatology, gastrointestinal and respiratory conditions, immunology, neuroscience, oncology, ophthalmology, rare diseases, and urology. She has also played a pivotal role in advancing COA strategies in the APAC region, tailoring approaches to meet regulatory requirements.

Committed to advancing patient-centered research and regulatory success, Somali continues to collaborate with biotech and pharmaceutical partners to optimize COA strategies, elevate PFDD, and support market access.

**Date:** Thursday, March 19, 2026

**Location:** Waters Technologies District Office, 3540 Howard Way, Suite 100, Costa Mesa, CA 92626

**Agenda:** This is a hybrid event. Check-in and Networking from 4:00-4:30 PM PT. Presentation and Discussion will be from 4:30-6:00 PM PT. Login will open at 4:20 PM PT. There is a \$20 Charge for on-site attendance to cover refreshments costs. Discounts are available for AAPS members, Students and Retired.

**Registration:** Please register by Noon, Tuesday, March 17, using the link below or copy and paste into your browser : <https://www.eventbrite.com/e/scpdg-announces-our-march-19-2026-meeting-tickets-1984349612107?utm-campaign=social&utm-content=attendeeshare&utm-medium=discovery&utm-term=listing&utm-source=cp&aff=ebdsshcopyurl>

**Important Notes:** You must register to receive an emailed Zoom link for virtual attendance. You will receive the Zoom link after registration closes at noon on Tuesday, March 17th. If you need assistance logging in or during the presentation, please text me at 714 606 5907.

**Social Media Links:**

<https://www.linkedin.com/groups/6601347/>

Past Presentations and Calendar of Events are located on our web page at:  
<https://www.aaps.org/aaps/membership-and-community/regional-discussion-groups/southern-california?CLK=c1e0e09f-9f30-4360-8fe2-1daebb1091fa>