

HARNESSING POOP FOR THE CURE™, OMICS, AND MACHINE LEARNING TO CREATE NOVEL IMMUNOTHERAPIES

Stephanie Culler, PhD

**Co-Founder and CEO
Persephone Biome, San Diego**

DATE: Thursday, November 14, 2019

TIME: 6:00 PM Social Hour, Light Meal
7:00 PM Lecture

PLACE: Takeda, 9625 Towne Centre Drive, San Diego

RSVP: By November 6, 2019
<https://culler.eventbrite.com>



ABOUT THE SPEAKER

Stephanie Culler, Ph.D., is the co-founder and CEO of Persephone Biome, a business taking a unique approach to oncology, by understanding and leveraging the rich metabolic capabilities of the gut microbiome to develop better therapeutic drugs. Dr. Culler oversees the company's strategic growth and directs the discovery and product development platforms of the company. She is also a recent graduate of the prestigious Y Combinator accelerator, recipient of the Biocom Catalyst Award and has spoken at TEDx San Diego. She received her B.S. degree in Chemical Engineering from UC San Diego and her Ph.D. in Chemical Engineering from the California Institute of Technology. Dr. Culler has over a dozen publications and patents on synthetic biology and microbial based technologies.

ABOUT THE PRESENTATION

Persephone Biome uses artificial intelligence to rapidly decode the gut microbiome and its interaction with the immune system, enabling the development of novel microbe-based products to improve cancer therapies. We are focused on a class of groundbreaking and curative immunotherapy cancer drugs known as checkpoint inhibitors. Unfortunately, 70% of cancer patients fail to respond to therapy and recent literature published in *Science Magazine* demonstrated that gut microbes influence and modulate the efficacy of checkpoint inhibitors. These results have tremendous implications on using live biotherapeutics (FDA approved probiotics) to fully enable the curative power of immunotherapy. The presentation will discuss how machine learning and deep systems analysis of large omics datasets acquired from patient samples (Poop For The Cure™) are used to decode the metabolic relationship between the microbiome and the immune system. Using an iterative engineering approach, live biotherapeutics are rapidly developed. We will discuss how microbiome research is challenged by the lack of infrastructure and standard collection methods. Poop For The Cure™, a citizen scientist campaign for stool collection, has alleviated these research barriers. Data collected from systems-based analyses of patient biospecimens and pre-clinical studies will also be presented.

CHAIR NOTES

Dear ACS Members,

The Local Section is winding down following an event-filled year.

On Tuesday, October 15th, we had our Annual Distinguished Scientist Award Banquet. You can read about **Dr. Sabine Hadida's** lecture, "DISCOVERY OF CFTR MODULATORS FOR THE TREATMENT OF CYSTIC FIBROSIS", in this issue of our Newsletter. Other awards were presented to **Valerie Kuck** for *Outstanding Committee Chair – Project SEED*, and **Bill Tolley**, the *Tony Bottone Award for Continued Outstanding Service* for his 16 years of service to the Section as Board Secretary.

San Diego's celebration of National Chemistry Week, ChemExpo, took place on October 26th at the San Diego Miramar College – details on the fun-filled event will be included in our December newsletter.

We have one last monthly meeting for this year – on November 14th, **Dr. Stephanie Culler** from Persephone Biome will be presenting her work on the human gut biome, "Harnessing Poop for the Cure and Creating Novel Immunotherapies". The event will be hosted at Takeda and you can reserve your spot using the link <https://culler.eventbrite.com>

The last event of the year, the Holiday Party at Sufi Mediterranean Cuisine, will be held on Tuesday, December 3rd. Please join us. This is always a very good chance to mingle and meet new members and get involved in the Local Section. We will recap all the exciting events of 2019 and introduce the new board members for 2020!! RSVP by: Monday, December 2, 2019

https://acs_san_diego_annual_meeting_and_holiday_party.eventbrite.com

If you are unable to register online, please use voice mail: 1-619-687-5570

Happy Thanksgiving to all!

Jennifer Barber-Singh, Co-Chair
San Diego Section of the American Chemical Society
E-mail: jbsingh@sandiegoacs.org
Web: www.sandiegoacs.org

NON-PROFIT ORGANIZATIONS!

Does your non-profit organization have an upcoming event that might be of interest to members of the ACS – San Diego Section? If so, please send your announcement to our 2019 **Co-Chair, Jennifer Barber-Singh**, at jbsingh@sandiegoacs.org. Once approved, Jennifer will see that your announcement is published on our website (www.sandiegoacs.org) and, if received by the 20th of the month before the event, in *The San Diego Chemist* newsletter. This is a free service of the ACS – San Diego Section. Take advantage of it!

ATTENTION ADVERTISERS

Did you know that *The San Diego Chemist* is the only monthly e-newsletter that targets chemists and chemical engineers in San Diego and Imperial Counties? As soon as our newsletter is uploaded on www.sandiegoacs.org a separate notification is sent to the **2,500 members** of the ACS-San Diego Section, each a potential customer for your products and services! **Quick turnaround:** Ad copy submitted by the 20th of each month will be published by the end of that month.

For more information, please contact:

Renate Valois at renate@sandiegoacs.org

TREASURER NEEDED

The Executive Committee of the San Diego Section of the American Chemical Society is looking for someone to assume the Treasurer's position starting January 2020. If you are interested, please contact David Wallace at davidmw@san.rr.com.

THE SAN DIEGO CHEMIST, the official newsletter of the San Diego Section of the American Chemical Society, published on a monthly basis, can be viewed at <http://www.sandiegoacs.org/newsletter/>.

All contents are published at the discretion of the Section's Executive Committee. Events of interest to chemistry professionals in the community may be included in the events calendar as space permits and are subject to editing for brevity. Advertisements and announcements from the chemistry community are accepted at published rates. The deadline for items submitted is **the 23rd of the month** for publication by the end of that month.

Advertisers: Ad prices as of January 1, 2015:

Size (w x h)	Number of Issues & Price/Issue	1	3	6
2" x 3"		\$ 75	\$ 68	\$ 58
4.5" x 1.5"		\$ 80	\$ 74	\$ 67
4.5" x 4.75"		\$200	\$184	\$163
8.5" x 5.5"		\$400	\$360	\$310
full page		\$655	\$590	\$510

Discounts will be available for issues not shown
Please send your jpg to:

Renate Valois at renate@sandiegoacs.org.

CONSIDER SPONSORSHIP OF THE ACS SAN DIEGO SECTION!

The San Diego Section of the ACS is looking for organizations that are committed to advancing science and education in the greater San Diego area by providing financial support. There are several ways to get involved and each one comes with its own benefits and privileges. Please contact **James Caldwell**, Chair, Fundraising Committee, at jcaldwell@sandiegoacs.org for further information.

SECTION E-MAIL LISTSERVER!

Get up-to-the-minute reminders of local events and develop dialogs with your fellow members!

To subscribe to our moderated listserver:

1. Send an e-mail with SUBSCRIBE TO LISTSERVER in the subject line, and your name and e-mail in the body of the message to **Ken Poggenburg** at jkp135@att.net.
2. If you receive a message from the postman, reply to confirm that you wish to be added to the list, otherwise it will not take effect.
3. You will receive reminders approx. 5-7 days prior to upcoming events and messages of general interest to members.
4. To post topics for discussion, or informational items to the listserver members, send the message to sandiego-chemist-l@ucsd.edu.
5. If the moderator approves the post, it will be sent to the members.

NOTE: That is the letter "l", not the number "one" following the word "chemist".

Executive Committee Meeting Dates

6:00 – 8:00 pm

Changed: Thursday November 7
Lilly Biotechnology Center,
10290 Campus Point Drive, San Diego

**SUMMARY OF THE SAN DIEGO SECTION
EXECUTIVE COMMITTEE MEETING MINUTES
September 30, 2019**

Treasurer's Report – National sent 2 checks for Project SEED totaling \$6,625, waiting on 2nd Section dues payment; paid reimbursements for four councilors' travel and reimbursements for Section's booth at National Meeting; pending - need to pay rent for storage (paid annually), one payment due for Mad Science; approaching \$500K financial assets

Seminar on Transition to Professional Career – A 45-minute networking seminar followed by 2.5-hour Q&A session, 45 attended, ~35 students, September 19

Need for Section Treasurer – No one has stepped forward to date

AACC / SDACS Joint Meeting – Topic of Proteomics scheduled for Tues. Oct. 1

Senior Chemists' Breakfast – Tues. Oct. 8, two new names on registration list

Awards Banquet – Mrs. Grootenhuis to accept award on behalf of husband; letters sent to local universities offering four seats each to interested students

Mad Science – Local and national Mad Science organizations in disagreement regarding chemical hazard: California has new restrictions on use of liquid nitrogen, dry ice, hydrogen peroxide

ChemExpo – Student affiliate advisors all responded quickly, 400 e-mail invitations to local schools, event posted on Facebook, LinkedIn; Chemistry-in-a-Box event scheduled at Miramar College in the week before ChemExpo

November Monthly Seminar – Plans progressing for Nov. 14, venue - Takeda

Committee Positions – Reminder of committee chair openings: Nominations, Younger Chemists, Fundraising, Membership

Next meeting: Nov. 7, 2019

ACS-Hach Programs

ACS-Hach Professional Development Grant

Funds professional development experiences for secondary chemistry teachers.

Award Amount: Up to \$1,500

Application Period: ends December 15th annually

ACS-Hach Land Grant Teacher Scholarship

Provides financial support to obtain a chemistry undergraduate degree and chemistry teaching credentials at one of our 72 partner institutions.

Award Amount: \$10,000 for full-time study

Application Period: Contact participating universities directly for application details

ACS-Hach Post-Baccalaureate Teacher Scholarship

Provides financial support for chemistry graduates with limited work experience to obtain a masters degree in education or teacher certification in chemistry.

Award Amount: Up to \$6,000 for full-time study and up to \$3,000 for part-time study

Application Period: February 1st – April 1st

ACS-Hach Second Career Teacher Scholarship

Provides financial support for chemistry professionals to obtain a masters degree in education or teacher certification in chemistry.

Award Amount: Up to \$6,000 for full-time study and up to \$3,000 for part-time study

Application Period: February 1st – April 1st

About ACS-Hach Programs

The ACS-Hach Programs provide financial support for future and current high school chemistry teachers. [Learn more.](#)

Contact us: Email: hach@acs.org -- Phone: (800) 227-5558 ext. 8178

ACS Webinars™

Welcome to ACS Webinars, your source for online live and on-demand content, created by the American Chemical Society.

Please join us weekly, Thursdays at 2pm ET.

For more information and upcoming Webinars see: <https://www.acs.org/content/acs/en/acs-webinars.html>

ACS ELECTIONS ARE HERE!

Voting will be done electronically using your e-mail address on record with the ACS. If you wish to receive a paper ballot instead, please call or email **Jackie Trischman**, Election Coordinator, at **858-414-3323** or **trischma@csusm.edu**, by **Monday, November 4th**, and leave your name and mailing address. You will be mailed a paper ballot.

If you do not request a paper ballot, you will receive instructions on how to vote via e-mail. Please be sure your e-mail address on file with the ACS is current! To update your e-mail address with the ACS, use www.chemistry.org

REVISED
EXECUTIVE BOARD CANDIDATES FOR 2020
ACS SAN DIEGO SECTION
CANDIDATE BACKGROUNDS

CHAIR-ELECT

JIM SHIH

Jim is a protein chemist at Eli Lilly & Co's Lilly Biotechnology Center - San Diego. In the past 24 years he has worked in protein chemistry and analytical chemistry in companies including Ligand Pharmaceuticals, Amgen, and Quidel Corporation. A volunteer with the San Diego Section since 2007, he chaired the picnic and nomination committees in the past years, and is currently an Alternate Councilor. Jim received both his B.A. and M.S in biology (parasite biochemistry) from University of California at Riverside.

SECRETARY

WILLIAM TOLLEY

Bill earned a B.S. and M.S. in Metallurgical Engineering from the University of Utah and a Ph.D. in Inorganic Chemistry from the Brigham Young University. His research focused on the interactions of inorganic compounds with supercritical fluids. This work led to a patent describing novel processing to purify metals using vapor-phase chemistry. He worked for seven years as Production Manager, and then promoted to Director of Quality Assurance at Quantum Group Inc. in San Diego.

In 2008, Bill joined Seacoast Science, Inc., located in Carlsbad, CA, where he currently is Principal Scientist and Production Manager. He led development of the Mini-GC, which was successfully launched in August 2009. His responsibilities include sensor design and testing, and proposal development. In 2007, he chaired the subgroup to write new alarm certification protocols under UL 2035 - Single Station Gas Detectors. Bill is a member of the American Chemical Society, where he is a member of the San Diego Section executive committee and in his fifteenth year as Secretary to the Section. He is a lifetime member of Sigma Xi (The Scientific Research Society). He has authored or co-authored 26 U.S. patents and over 75 journal articles and presentations in chemical sensing, process control and materials production.

TREASURER

OPEN

COUNCILOR

HUI CAI

Hui was the 2009 Chair of the ACS San Diego Section, and has served on the executive committee of the ACS San Diego Section for over 10 years. Hui joined WuXi AppTec in 2009 as Vice President of Business Development. She has since taken leadership roles across Business Development, Corporate Alliances, PR and Corporate Communications, and now spearheads the company's Content Division. Prior to that, Hui spent ten years at Johnson & Johnson Pharmaceutical Research and Development, co-leading multiple small molecule drug discovery programs. She is a co-author and co-inventor to nearly 50 scientific publications and issued or pending patents. Hui served as a Commissioner at the City of San Diego Science and Technology Commission as appointed by the Mayor of San Diego. She was also Chairwoman of Board at Sino-American Biomedical and Pharmaceutical Professionals Association. She received her PhD from The Scripps Research Institute, and an MBA from the UCSD Rady School of Management as a DLA Piper - Athena FlexMBA Scholar.

COUNCILOR

JOHN SCHINDLER

John received a B.S. in Engineering Science (1970) and a M.S.C. (1972) in chemistry at the Cleveland State U. Concurrently, he worked at CA Litzler, at Republic Steel's Research Center and with Hydrotechnic Corporation and attended the 1970 Winter Institute of the Quantum Theory Project at the U. of Florida. At CSU in 1972, he was a Standard Oil Summer Research Fellow and a Lecturer in Engineering Technology (Fall). In 1973 he joined the Coatings Research Center of PPG (Pittsburgh) and was an evening post-graduate student at both Carnegie-Mellon U. and the U. of Pittsburgh. He entered USC (1976-80) Ph.D. (1980) and spent two years as NSF Post-Doctoral Fellow at UCLA. He joined the USD chemistry department in 1982 [DOE-ASEE Summer Faculty Fellow at JPL (1983)], leaving (1986) for an ONT-ASEE Fellowship in the Materials Research Branch of the Navy's Point Loma Labs. He joined Reagents Applications (1991-2) as Senior Chemist in Research and the San Diego Air Pollution Control District (1992), as Associate Chemist in the Monitoring & Technical Services Department, supervising outside contractors in the pollution testing of newly constructed potential sources until transferring (2006) to the ambient air monitoring section, performing GC organic vapor analysis on ambient air samples. John took early retirement (August 2009) in order to pursue other opportunities and objectives as Chief Scientist of Mayer-Spisak Engineering Sciences. He has authored/co-authored over 15 research papers. He is a member of the ACS, American Institute of Chemical Engineers, Society for Applied Spectroscopy, the Spectroscopy Society of Pittsburgh, an elected member of Sigma Xi; and is a Registered Professional Engineer (OH & PA). John has served the ACS San Diego Section for over 18 years [Chair-Elect, Chair & Past Chair (1983-85), Member-at-Large of the ACS Executive Committee (1986-89, 1997-99, 2012), & Alternate Councilor (2013-present)], and received the Outstanding Committee Chair Award in 2016.

COUNCILOR

JACKIE TRISCHMAN

Jackie teaches Chemistry at California State University San Marcos, where she has helped to build the department since 1995. Jackie studied under William Fenical and has a PhD in Marine Natural Products Chemistry from Scripps Institution of Oceanography. Her favorite part of her job is mentoring students in her research lab and serving as the director of the new EngiBeer Program at CSUSM. Jackie has been an active member of the San Diego Local Section for over 20 years. She served as Secretary 2002-2005, Chair in 2006, and has run the electronic election every year since then. Jackie is currently a Member-at-Large on the Board. She has also been active in the ACS Western Regional Meeting Board as Secretary from 2005-2016, and as Poster Chair for the 2007 meeting. Committed to outreach to girls in chemistry, Jackie is currently working on coordinating national Girl Scout Badges with National ACS and the National Girl Scouts organization. This is a natural growth from her work in setting up the Scout Badge experiences at ChemExpo each Fall since 2006. This work involves coordination of over 100 volunteers through her "Chemistry in the Community" class at Cal State San Marcos and coordination with the local Girl Scout and Boy Scout Councils. Along the same lines, Jackie has been active in setting up a North County mentoring program for women in chemistry, and plans to build on this nascent program in the future. Jackie is a Hokie at heart, with a BS in Biochemistry from Virginia Tech. Her first job involved making Kevlar and Teflon at DuPont, and she has since taught Organic Chemistry at both Tulane and UCSD before moving to CSUSM.

ALTERNATE COUNCILOR

SURAY K. DE

Surya K. De obtained his Ph.D. in Organic Chemistry from Jadavpur University, Kolkata (Calcutta), India. He worked at the University of Washington, (Seattle), Purdue University, (West Lafayette, Indiana), The Scripps Research Institute, and Sanford-Burnham-Prebys Medical Discovery Institute in several drug discovery programs. His research work was highlighted in *Nature Review*, *Drug Discovery* and *Chemical & Engineering News*. He is an author of almost 100 peer reviewed international journals and the inventor of 10 patents. He is the author of the book titled "Cancer and You: What Everyone Needs to Know about Cancer and its Prevention". He is an elected fellow of the *Royal Society of Chemistry, London, UK* (FRSC, 2010). He is a member of Indian Science Congress. He is actively involved in the ACS – San Diego Section since 2007. He has been an ACS member since 2001.

ALTERNATE COUNCILOR

KEN POGGENBURG

Ken has been a member of the ACS since 1959. He joined the San Diego Section in 1984 when he came to Hybritech. He served as Chair in 1991, when the San Diego Section celebrated its fiftieth anniversary, and again in 2002, after returning from a five year stay in Ohio. He was elected Alternate Councilor in 2004, and a Councilor in 2008. As a Councilor, he served as a member of the ACS Committee for Economic and Professional Affairs, the Committee for Public Relations and Communications, and most recently as Associate on Membership Affairs. Ken was also named a Society Fellow.

I believe it is now time to pass the Councilor role to a younger member to promote leadership development, but I would like to continue serving on the Executive Committee as an Alternate Councilor. I intend to continue serving the Section as Chair of the Senior Chemists Committee, Moderator of the Section listserver, organizer for our judges at the Greater San Diego Science and Engineering Fair, and arranging our annual Fifty-, Sixty-, and Seventy-year Member Luncheon.

ALTERNATE COUNCILOR

BEN PRATT

Ben is currently Principal at Pratt Pharma Consulting, specializing in the advancement of small molecules and natural products from early discovery through the clinic. He received his B.A. in chemistry with high honors from Dartmouth College and spent 3 years as a process chemist at Rhodia ChiRex in Boston, synthesizing chiral building blocks and optimizing the route to Vertex's VX-950 (Telaprevir). Ben earned his Ph.D. from The Scripps Research Institute where his work focused on the total synthesis of complex natural products and their analogues in the lab of Professor K.C. Nicolaou. Since leaving TSRI, Ben was a medicinal chemist at several San Diego based biotech companies focused in the areas of oncology, metabolic disease and cognitive function. His most recent endeavor before starting as a consultant was as Associate Director of Chemistry at Akarna Therapeutics, which was sold to Allergan in 2016, where he lead CMC efforts through IND, Phase 1 and preparation for Phase 2.

A 17 year member of the ACS, Ben became involved in the San Diego Local Section in 2010 and has served as co-chair of the Younger Chemists Committee, assistant treasurer, 2015 chair and was appointed as alternate councilor in 2016. With his colleagues in the YCC and the help of an ACS innovative projects grant, Ben co-founded the Academics 2 Industry lecture series in 2011 that serves as a primer course for aspiring medicinal chemists. Over the past few years, A2I has been presented multiple times at TSRI, UCLA, UCSB, and UCSD and won the 2015 ACS ChemLuminary "Creative Local Section Younger Chemists Committee Event". He is also co-organizer of the annual UCSD/ACS Medicinal Chemistry Symposium and was co-founder of the annual West Coast Analytical Chemistry Symposium.

ALTERNATE COUNCILOR

Open

MEMBER-AT-LARGE**BILL SZABO**

Bill received his undergraduate degree in chemistry from Lehigh University, worked for two years as an R&D chemist at Johnson & Johnson's McNeil Laboratories near Philadelphia, and earned his Ph.D. degree in heterocyclic and medicinal chemistry from the University of Florida. He held a two-year postdoctoral fellowship in natural product synthesis at Wesleyan University with Professor Max Tishler, former President of Merck Research Laboratories and a past ACS President.

Bill was recruited by Alfred Bader, co-founder of the Aldrich Chemical Company, and worked for 18 years at Aldrich in Milwaukee in various management positions in R&D, production and advertising. He then relocated to the Sigma-Aldrich corporate headquarters in St. Louis and spent four years in the sales and marketing of bulk pharmaceutical intermediates, positions which included Sales Director for North America and Vice President of International Sales.

In 1998 he took an early retirement, moved to San Diego, and consulted for the next 14 years in drug and business development. In 2012 he co-authored a chapter in a book on transition metal-catalyzed asymmetric cross-coupling reactions. He is a 42-year member of the AAAS and a lifetime member of the Japan Society of San Diego & Tijuana.

Bill is a 52-year member of the ACS and an ACS Fellow. He served on the Organizing Committee of the 2007 ACS Western Regional Meeting, was Chair of the San Diego Section's Public Relations and Fundraising Committees, and organized the Section's 2009 and 2010 San Diego Science Festival exhibits. Bill was Chair of the ACS-San Diego Section in 2011, for which year the Section received the ChemLuminary Award for Outstanding Performance by a Local Section (Large Size Category). He received the Section's Outstanding Committee Chair Award in 2014 and the Tony Bottone Award for Outstanding Service in 2015. Bill served as the Section's Treasurer for five years (2012-2016) and is currently a Member-at-Large.

MEMBER-AT-LARGE**JOANN UM**

Joann's passion for chemistry began as an undergraduate at Columbia University, where she synthesized retinal analogs in Koji Nakanishi's group for elucidation of the visual transduction pathway. Her synthesis career continued at Merck & Co., Inc. (Rahway, NJ), University of California, Berkeley, (M.S.), and Genentech, Inc. (South San Francisco, CA). Joann then earned her Ph.D. under the direction of K.N. Houk (University of California, Los Angeles), where she used quantum mechanical methods to investigate pericyclic, asymmetric, and organocatalyzed reactions. Joann has taught chemistry at numerous colleges in the San Francisco, Los Angeles, and San Diego areas and is currently Professor of Chemistry at Southwestern College (Chula Vista, CA). She has been a member of the American Chemical Society and 2YC3 (Two-Year College Chemistry Consortium) since 2011 and advised the Student Chapter of the American Chemical Society at Southwestern College from 2012 to 2018.

MEMBER-AT-LARGE**OPEN**

MEMBER-AT-LARGE**OPEN**

Vote

by

November 25th

2019 DISTINGUISHED SCIENTISTS AWARD BANQUET

The annual San Diego ACS Section Distinguished Scientist Award Dinner was held on Tuesday evening, October 15, at The Butcher Shop restaurant. Seventy-six attendees enjoyed a dinner of prime rib, salmon or pasta as they gathered to honor the awardees. This year the audience included students from UCSD, SDSU, SDSU-Georgia, USD, CSU-San Marcos, PLNU, Southwestern, Miramar and Palomar.

Two ACS Section awards were given. **Dr. Bill Tolley**, Section secretary for 16 years, received the *Tony Bottone Award for Outstanding Service*. **Ms. Valerie Kuck** received the *Outstanding Committee Chair Award* for her work in coordinating and growing the Section's ACS Project SEED program. In this program, economically disadvantaged students from local high schools are matched with college/university level mentors and paid a modest stipend to spend 8-10 weeks working in laboratories for their first research experience.

Drs. **Sabine Hadida** and **Peter Grootenhuis** of Vertex Pharmaceuticals were named as the 2019 San Diego ACS Section Distinguished Scientist Awardees. They were honored for their work in creating new drugs for alleviating the symptoms of cystic fibrosis, a genetic disease affecting 70,000 people. The awards were accepted by **Dr. Hadida** and Mrs. **Peter Grootenhuis**, on behalf of her husband **Peter** who passed away on August 23 due to complications of ALS. **Dr. Hadida** presented the award address entitled "Discovery of CFTR Modulators for the Treatment of Cystic Fibrosis".



Tom Beattie



Jennifer Barber-Singh



with Bill Tolley



Valerie Kuck



Tom Beattie, Sabine Hadida, Marjolein Grootenhuis



Sabine Hadida



Text: Tom Beattie
Photo Credit: Jim Shih



31st ANNUAL SYMPOSIUM

Friday, February 7, 2020 | 1:00PM – 5:30PM

Scripps Research Auditorium: 10620 John Jay Hopkins Drive, San Diego, CA 92121

Hosted by: Department of Chemistry | chemsem@scripps.edu | (858) 784-2400

DISTINGUISHED SPEAKERS

VÉRONIQUE GOUVERNEUR - Professor of Chemistry
University of Oxford

TIMOTHY M. SWAGER - John D. MacArthur Professor of Chemistry
Massachusetts Institute of Technology

FRANCES H. ARNOLD - Linus Pauling Professor of Chemical Engineering, Bioengineering &
Biochemistry
California Institute of Technology

AMIR H. HOVEYDA - Patricia and Joseph T. '49 Vanderslice Millennium Chair, **Boston College**

SPONSORSHIP OPPORTUNITIES - Sponsorship opportunities are available for our upcoming nationally recognized Symposium. Donations typically range from \$1,000-\$10,000. Donors will be generously acknowledged on our webpage, in printed materials and at the event. If you are interested, please let us know of your intentions to sponsor by October 25, 2019, so that appropriate acknowledgments can be included in our print advertisements.

www.scripps.edu/frontiers-in-chemistry

**Attention Companies!
Do you hire student workers?**

If you have open positions in chemistry and biochemistry that would be of interest to college students, such as summer internship opportunities, here is a list of contacts you'll want to keep handy. The people listed below are the faculty advisors of the ACS Student Affiliate groups for all chemistry programs in San Diego County. These professors can get the word out to all chemistry and biochemistry majors at their schools about jobs, career fairs, open houses, etc.

California State University, San Marcos

Jacqueline Trischman
trischma@csusm.edu
760-750-4206

Point Loma Nazarene University

Sara Choung
SaraChoung@PointLoma.edu
619-849-2627

San Diego Mesa College

Dwayne Gergens
dgergens@sdccd.edu
619-388-2609

San Diego Miramar College

Fred Garces
fgarces@sdccd.edu
619-388-7493

Linda Woods
lwoods@sdccd.edu
(619) 388-7750

Southwestern College, Chula Vista

David Hecht
dhecht@swccd.edu
619-421-6700x5461

University of California, San Diego

Stacey Brydges
sbrydges@ucsd.edu
858-246-0993

Thomas Bussey
tbussey@ucsd.edu
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University of San Diego

Tammy Dwyer
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2019 ACS REGIONAL MEETINGS

Southwest (SWRM)/RMRM November 13 – 16 El Paso, TX

2020 ACS REGIONAL MEETINGS

Central Regional (CERM)	May 27 - 29	Columbus, Ohio
Middle Atlantic (MARM)	June 12	New York, NY
Northwest (NORM)	June 28 – July 1	Bellingham, WA
Northeast Regional (NERM)	October 18-21	Rochester, NY



YOUR AD HERE!

Your ad in the next issue of

THE SAN DIEGO CHEMIST

For information contact:

Renate Valois - renate@sandiegoacs.org

UPCOMING EVENTS

HARNESSING POOP FOR THE CURE™, OMICS, AND MACHINE LEARNING TO CREATE NOVEL IMMUNOTHERAPIES

Stephanie Culler, PhD

Co-Founder and CEO, Persephone Biome, San Diego

Takeda, 9625 Towne Centre Drive, San Diego

Thursday, November 14, 2019

HOLIDAY PARTY

Sufi Mediterranean Cuisine

5915 Balboa Avenue, San Diego, CA 92111

Tuesday, December 3, 2019

SENIORS/RETIREES/CONSULTANTS/ETC. BREAKFAST

Bristol Farms Café - Costa Verde Shopping Center

Genesee Avenue and Nobel Drive, University City

Thursday, January 9, 2020, at 9:30 AM

SAN DIEGO FESTIVAL OF SCIENCE & ENGINEERING

EXPO DAY at PETCO Park

Saturday, March 7, 2020

<https://www.lovestemsd.org/>

THE 66th ANNUAL GREATER SAN DIEGO SCIENCE AND ENGINEERING FAIR

Judging Day, Wednesday, March 11

Balboa Park Activity Center (2145 Park Blvd.)

For information please see <http://www.gsdsef.org/>

March 10 - 15, 2020

259th ACS National Meeting & Exposition

Philadelphia, Pennsylvania

March 22-26, 2020

EARTH DAY - EARTHFAIR 2020

Balboa Park, San Diego, CA

<http://www.earthdayweb.org/>

Sunday, April 19, 2020

260th ACS National Meeting & Exposition

August 23 - 27, 2020

San Francisco, California

THE SAN DIEGO SECTION OF THE AMERICAN CHEMICAL SOCIETY WELCOMES ITS NEW MEMBERS

Taylor Allen
Paul Bogie
Alexander Burtea
Daniel Cassaro
Cara Eskelsen
Deane Gordon
Leah Grayson
Roberto Gutierrez Serrano
Tianru Jiang
Shetian Liu
Tom Martin
Jori Mills

Alexia Moore
Austin Moser
Eric Paul
Christina Rivera
Philomena Schlexer
Rajesh Seenivasan
Kristin Sevilla
Karl Wessendorf-Rodriguez
Shouliang Yang
Guoyin Yin
Raymon Ylagan

**2019 EXECUTIVE COMMITTEE & COMMITTEE MEMBERS
SAN DIEGO SECTION OF THE AMERICAN CHEMICAL SOCIETY**

EXECUTIVE COMMITTEE

<i>Co-Chair</i>	Jennifer Barber-Singh, BioFluidica, ibsingh@sandiegoacs.org	(2019)	858-869-7084
<i>Co-Chair</i>	David Wallace, Samumed, LLC, davidmw@san.rr.com	(2019)	858-638-1866
<i>Chair-Elect</i>	James Caldwell, Accelagen, Inc., jcaldwell@sandiegoacs.org	(2019)	815-262-9697
<i>Past-Chair</i>	Jennifer Barber-Singh, BioFluidica, ibsingh@sandiegoacs.org	(2019)	858-869-7084
<i>Secretary</i>	William Tolley, Seacoast Science, Inc., b_tolley@juno.com	(2019)	858-780-0978
<i>Treasurer</i>	Graeme Freestone, Ionis Pharmaceuticals, Inc., gfreestone@sandiegoacs.org	(2019)	858-539-6363

Councilors

Thomas R. Beattie	(2021)	858-587-1210
Hui Cai, WuXi AppTec	(2019)	858-361-8838
Desiree Grubisha, Halozyne Therapeutics	(2021)	858-254-5497
Valerie Kuck	(2020)	973-744-5510
Ken Poggenburg	(2019)	760-635-2573
David Wallace, Samumed, LLC	(2021)	858-638-1866

Alternate Councilors

Surya K. De, Plex Pharmaceuticals, Inc.	(2019)	858-337-4961
Julann Miller, Waters Corporation	(2020)	800-252-4752 x6802
Ben Pratt, Pratt Pharma Consulting LLC	(2019)	858-945-7893
John Schindler	(2019)	858-353-3943
Jim Shih, Eli Lilly & Co	(2020)	626-826-3561
Shannon Woodruff, HP Inc.	(2020)	949-735-9021

Members-at-Large

Paul Bruinsma, HP Inc.	(2020)	858-655-8322
James O'Brien	(2020)	858-336-0654
Bill Szabo	(2019)	858-550-0306
Jackie Trischman, CSUSM	(2021)	858-414-3323
Joann Um, Southwestern College	(2019)	510-823-8637

STANDING & SPECIAL COMMITTEES

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John Schindler (Co-Chair)	858-353-3943

ChemExpo

Julann Miller (Chair), Waters Corporation	800-252-4752 x6802
Paul Bruinsma, HP Inc.	858-655-8322

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Paul Bruinsma (Chair), HP Inc.	858-655-8322
Surya K. De, Plex Pharmaceuticals, Inc.	858-337-4961
Desiree Grubisha, Halozyne Therapeutics	858-254-5497
Ken Poggenburg	760-635-2573
Renate Valois (Newsletter Editor)	619-692-0638
David Wallace, Samumed, LLC	858-638-1866

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Barbara Sawrey	858-729-0689
David Wallace, Samumed, LLC	858-204-5412

Education Committee

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Valerie Kuck	973-744-5510
Joan Schellinger, USD	619-260-7960

EarthFair

James Caldwell, Accelagen, Inc.	815-262-9697
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Tom Beattie	858-587-1210
John Schindler	858-353-3943

Fundraising Committee

James Caldwell, Accelagen, Inc.	815-262-9697
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Government Affairs Committee

Hui Cai, WuXi AppTec (Chair)	858-361-8838
Ken Poggenburg	760-635-2573

Law Committee

Ryan C. Smith, Duane Morris LLP	619-744-2220
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Mad Science Program

Thomas R. Beattie	858-587-1210
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MedChem Symposium

Ben Pratt (Co-Chair), Pratt Pharma Consulting, LLC	858-945-7893
Mark Tichenor (Co-Chair), Janssen Pharmaceuticals, Inc.	858-334-8914
David Wallace (Co-Chair), Samumed, LLC	858-638-1866

Membership Committee

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Nominations Committee

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Jim Shih, Eli Lilly & Co.	626-826-3561

Professional Development Committee

Valerie Kuck	973-744-5510
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Public Relations Committee

John Schindler	858-353-3943
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Senior Chemists Committee

Ken Poggenburg (Chair)	760-635-2573
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Seniors Breakfasts

Thomas R. Beattie	858-587-1210
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Women Chemists Committee

Valerie Kuck	973-744-5510
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Younger Chemists Committee

OPEN

Voice Mail – San Diego Section

619-687-5570