

## ***Modeling Human Biology, Drug Response, and Progressive Liver Disease using 3D Bioprinted Human Liver Tissue***

***Dr. Dwayne E. Carter***

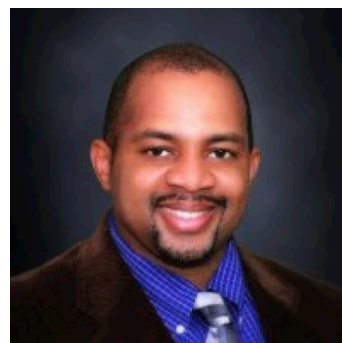
***Organovo Holdings Inc., San Diego***

**DATE:** Wednesday, August 16, 2017

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

**PLACE:** Skaggs Institute (Molecular Biology Building)  
10596 North Torrey Pines Road  
La Jolla, CA 92037

**RSVP:** By Friday, August 11, 2017  
<https://dcarter.eventbrite.com>



### **ABOUT THE SPEAKER:**

Dwayne Carter completed his doctoral training in cell biology at the University of Texas Medical Branch where he primarily focused on acute alcohol-induced liver injury. In 2016 he joined ORGANOVO Holdings Inc. as a post-doctoral researcher in liver tissue bioengineering with focus on modeling progressive liver diseases. Throughout his graduate training, Dwayne has received numerous awards for meritorious research from national scientific meetings and has two publications in peer reviewed journals.

### **ABOUT THE PRESENTATION:**

Nonalcoholic fatty liver disease (NAFLD) is a chronic condition that originates as lipid accumulation within hepatocytes (steatosis) and progresses into nonalcoholic steatohepatitis (NASH), characterized by lipid accumulation, inflammation, oxidative stress, and fibrosis. NAFLD is now recognized as the most common cause of chronic liver disease, with a prevalence of 25% worldwide, and is projected to become the leading indication for liver transplant by 2025. Despite decades of research in rodents and 2D cell cultures, the mechanisms of NAFLD progression, therapeutic approaches and non-invasive diagnostics are still resoundingly absent. Thus, there is a significant need for a more predictive human multicellular 3D *in vitro* model to study the progression of steatosis into NASH. Using immune competent ExVive™ Human Liver Tissue, an *in vitro* 3D bioprinted liver, I will show preliminary data where we model the key features of NASH such as steatosis, fibrosis and inflammation via nutrient overload followed by inflammatory stimulation using prototypical inducers.

### CHAIR NOTES

Dear ACS Members,

I write with great pride and admiration for all the wonderful people and programs that make your San Diego Local Section of the ACS so consequential! Your SDACS continues to promote scientific literacy in various venues, and it meanwhile takes time to celebrate and recognize longstanding commitment to the society and the profession. As per usual, I provide a summary of recent happenings in our Local Section:

On Friday, July 14, three hundred people gathered at the Hojel Hall of the Americas Auditorium to participate in our 20<sup>th</sup> Annual MedChem Symposium. This phenomenal day featured six outstanding scientific presentations, and it once again exemplified a fruitful collaboration between our ACS Local Section and the UCSD Department of Chemistry & Biochemistry. Thank you to **Ben Pratt, Mark Tichenor** and **David Wallace** for helping organize this event!

On Tuesday, July 18, over forty people gathered at Tom Ham's Lighthouse for our annual Fifty- and Sixty-Year ACS Member Luncheon. The food was delicious (including salmon and chowder), everyone enjoyed hearty mealtime conversations, and five of this year's honorees shared reflections on their careers in chemistry. It was amazing to see the variety of fields in which chemistry training can be used! Thank you to **Ken Poggenburg** for organizing this event!

I announced this last month, but I'd like to reiterate, on behalf of the SDACS, how pleased I am to congratulate our newest ACS Fellows: **Marjorie Caserio, Tammy Dwyer** and **Bill Szabo**. The ACS Fellows Program honors "outstanding achievements in and contributions to Science, the Profession, and the Society." Each of these three individuals will be honored at the ACS National Meeting cited below. Our Local Section should feel proud of its people and proud of its programming: the SDACS has been nominated for three ChemLuminary Awards: **Outstanding Local Section Industry Event; Best Activity or Program Stimulating Member Involvement; Best New Public Relations Program of a Local Section**. I'll be sure to share to news if we bring home any hardware from the awards ceremony!

Turning to August, there are two events I wish to put on your radar:

**August 16** – Dwayne E. Carter (Organovo) will deliver a seminar entitled "Modeling Human Biology, Drug Response, and Progressive Liver Disease Using 3D Bioprinted Human Liver Tissue" at TSRI. Register at <https://dcarter.eventbrite.com>

**August 20-24** – ACS National Meeting & Exposition in Washington, DC. Theme: "Chemistry's Impact on the Global Economy". Details at <https://www.acs.org/content/acs/en/meetings/fall-2017.html>

As always, you are welcome to join us – in person or remotely – at our next Executive Committee Meeting on Tuesday, August 1. Get involved and make your membership in the San Diego Local Section of the ACS a rewarding experience!

Jonathan W. Lockner, Ph.D.  
2017 Chair, San Diego Section  
American Chemical Society  
Email: [jlockner@sandiegoacs.org](mailto:jlockner@sandiegoacs.org)  
Web: [www.sandiegoacs.org](http://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 2017 Chair, **Jonathan Lockner**, at [jlockner@sandiegoacs.org](mailto:jlockner@sandiegoacs.org). Once approved, Jonathan will see that your announcement is published on our website ([www.sandiegoacs.org](http://www.sandiegoacs.org)) and, if received by the 20<sup>th</sup> 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](http://www.sandiegoacs.org) a separate notification is sent to the **2,500 members** of the ACS-San Diego Section, each potential customers for your products and services! **Quick turnaround:** Ad copy submitted by the 20<sup>th</sup> of each month will be published by the end of that month.

For more information, please contact: **Renate Valois**, [renate@sandiegoacs.org](mailto:renate@sandiegoacs.org)

**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 23<sup>rd</sup> 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](mailto:renate@sandiegoacs.org).

### 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](mailto: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](mailto: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 Date 2017

6:00 – 8:00 pm

<b>Tuesday</b>	<b>August</b>	<b>1</b>
<b>Tuesday</b>	<b>September</b>	<b>5</b>
<b>Tuesday</b>	<b>October</b>	<b>3</b>
<b>Tuesday</b>	<b>November</b>	<b>7</b>

**Meetings will be held at:**

**9381 Judicial Drive, Suite 160  
San Diego, CA 92121**



The San Diego Section of the American Chemical Society would like to thank our Corporate Sponsors. Here are a few examples of our annual outreach programs that are made possible by their generous donations:

**Mad Science** - Stage demonstrations for 4<sup>th</sup> and 5<sup>th</sup> graders which make science fun for kids! Last year the program was viewed by over 8000 students in low-income areas and from military families.

**ChemExpo** - A science event for middle and high school students held annually for the past 28 years. It features live stage demonstrations and interactive booths that teach kids about applied science. Last year over 1000 local students participated!

**EarthFair** - We participate in the world's largest free annual environmental fair, held in Balboa Park.

#### **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. **For further information please contact Jonathan Lockner at [jlockner@sandiegoacs.org](mailto:jlockner@sandiegoacs.org)**

#### **ORGANIZERS NEEDED!**

The San Diego Section of the American Chemical Society is looking for volunteers to organize an **ACS Western Regional Meeting**. Exact dates are flexible and yet to be determined, but it will be held between 2018 and 2020. We are currently looking to fill the positions of General Meeting Chair and Program Chair(s). If you are organized, work well with others, and want to expand your professional network to a national scale, you may be a great fit for either of these positions. The **General Meeting Chair** will be responsible for overseeing the planning of the meeting venue and logistics while the **Program Chair(s)** will fill events and speaker lists. Location, duration and desired attendance are based on the vision of the organizers. If you have an idea for a large meeting held here in San Diego, this is your way to make it happen.

For more information please contact:

**Jonathan Lockner**  
**2017 Chair**  
**San Diego Section of the American Chemical Society**  
[jlockner@sandiegoacs.org](mailto:jlockner@sandiegoacs.org)

#### **254TH ACS NATIONAL MEETING & EXPOSITION**

Chemistry's Impact on the Global Economy  
Washington, DC  
August 20-24

Visit the [Washington, DC national meeting homepage](#) to register, book housing, review programming and events, and get the latest information about the meeting.

#### **IT IS NOT TOO EARLY----**

#### **---- TO THINK ABOUT THE ANNUAL SAN DIEGO ACS LOCAL SECTION ELECTIONS 2018**

Nominations for Section offices are now in order. Per our Bylaws, the current Chair-Elect will assume the Chair, but other positions are open for election, including

**Chair-Elect • Secretary • Treasurer •  
1 Councilor • 3 Alternate Councilors • 1 Member-at-Large**

Councilors, Alternate Councilors, and Members-at-Large serve for three years, and all incumbents may succeed themselves. We encourage the active participation of our members! If you have an interest in becoming involved in the ACS-San Diego Section and want to make a self-nomination as a candidate for an elected position, please contact: **Jonathan Lockner at [jlockner@sandiegoacs.org](mailto:jlockner@sandiegoacs.org)**

Send your bios to **Renate Valois** at [renate@sandiegoacs.org](mailto:renate@sandiegoacs.org)

The voting will be done electronically using your e-mail address on record for the ACS. If you wish to receive a paper ballot instead, please call or e-mail **Jackie Trischman**, Election Coordinator, at 858-414-3323, or [trischma@csusm.edu](mailto:trischma@csusm.edu) by **Friday, November 3<sup>rd</sup>**, 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](http://www.chemistry.org)



**FAMILY PICNIC  
SAN DIEGUITO COUNTY PARK, SOLANA BEACH  
SUNDAY, JUNE 25, 2017**

Our family picnic was again a big success. Chef Jim Shih and a staff of chefs served Korean BBQ tacos, a favorite of all. There were all kinds of other delectable dishes and desserts. A thank-you to all volunteers, **Paul Bruinsma, James Caldwell, Charlesworth and Juliette Fraser, Desiree Grubisha, Jeff Hamnaker, Rodney Harris, Patrycja Hopkins, Julann Miller, Paul Michalkski, Ken Poggenburg, Ryan Smith and Riaz Zuberi.**

Dessert contest winners:

First place - **Chingying Smith**

Second place (Tied) - **Mohammad Ahmadian, Ramkrishna De**

Third place - **Tanya Bernard**



Ken and Sheila Poggenburg



Tom Beattie, Ken Poggenburg



Chef Jim Shih



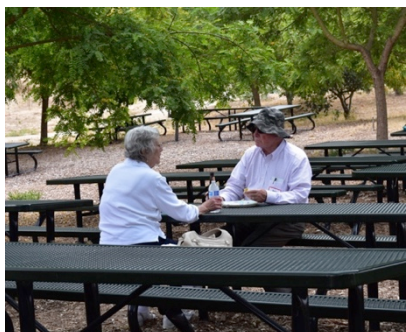
James Caldwell



Paul Bruinsma



Picnic attendees helping themselves



Mary Ann and Tom Beattie



Guests enjoying picnic



Bernard Family



Ryan Smith and Family



Wide view of the picnic





Everyone is having a good time!



Jim Shih and contest winners: Chingying Smith



Ramkrishna De, Mohammad Ahmadian



Tanya Bernard's daughter Amy



Plenty of amazing desserts



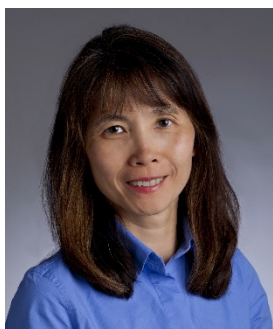
Text: Renate Valois  
Photo credits: Patrycja Hopkins  
Paul E Michalkski



## THE 20<sup>TH</sup> ANNUAL SAN DIEGO MEDICINAL CHEMISTRY SYMPOSIUM

The 20<sup>th</sup> Annual San Diego Medicinal Chemistry Symposium took place on July 14<sup>th</sup> at UC San Diego. Hojel Hall in the Institute of the Americas was filled with attendees who came to hear talks from an outstanding set of speakers. This year, the opening talk by **Dr. Pei-Pei Kung** described Pfizer's strategy for using ligand- and property-based design in the development of an EZH2 inhibitor development candidate. Next, **Professor Keary Engle** from The Scripps Research Institute spoke about his group's work on regioselective functionalization of alkenes *via* direct nucleometallation. **Dr. Paul Sprengler** from eFFECTOR Therapeutics presented the story of the discovery of the MNK1/2 inhibitor eFT508 using structure-based design. The morning session concluded with a presentation by **Professor Yitzhak Tor** from UC San Diego on his group's work on fluorescent nucleosides for biophysical and medicinal chemistry application. After the lunch hour, **Jeff Smith** from the Genomics Institute of the Novartis Research Foundation spoke about proteasome inhibitors for the treatment of neglected diseases. **Dr. Laurent Gomez** from Dart Neuroscience concluded the symposium with a talk about the discovery of selective PDE2a inhibitors for the treatment of memory disorders. The event was free for attendees because of the generous financial support of our sponsors, **Bioblocks, Dart Neuroscience, eFFECTOR, Fish & Richardson, Labnetwork/WuXi, Takeda, and UC San Diego**. ACS and UCSD are eager to collaborate on another symposium next year.

Please contact **Ben Pratt** ([bpratt@sandiegoacs.org](mailto:bpratt@sandiegoacs.org)), **Mark Tichenor** ([mtichenor@sandiegoacs.org](mailto:mtichenor@sandiegoacs.org)), or **David Wallace** ([davidmw@san.rr.com](mailto:davidmw@san.rr.com)), if your organization has an exciting new disclosure for this symposium in 2018!



Dr. Pei-Pei Kung  
Pfizer



Professor Keary Engle  
The Scripps Research Institute



Dr. Paul Sprengler  
eFFECTOR Therapeutics



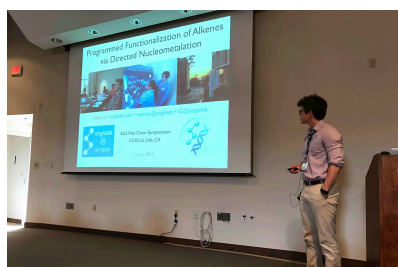
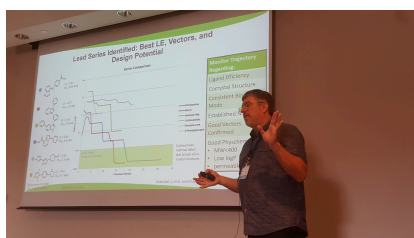
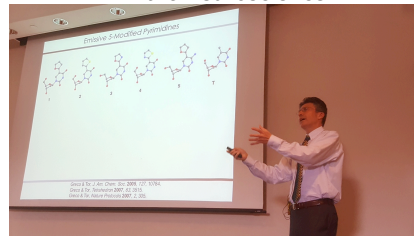
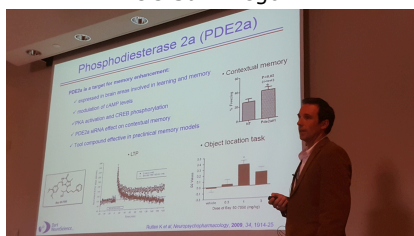
Professor Yitzhak Tor  
UC San Diego



Jeff Smith  
GNF



Dr. Laurent Gomez  
Dart Neuroscience



Text: Mark Tichenor  
Photo credits: Ben Pratt

## **FIFTY- AND SIXTY-YEAR MEMBER RECOGNITION LUNCHEON**

Tuesday, July 18<sup>th</sup>, the San Diego Section of the ACS honored its fifty- and sixty-year members at Tom Ham's Lighthouse Restaurant. This year's list of honorees had eight fifty-year members and five sixty-year members. In attendance were forty-one guests.

50-Year Members:

**Joseph W. Amshey, Jr., Robert C. S. Grant, Kurt George Grimm, Jerold S. Horn, Wayne A. Pletcher, Robert J. Sysko, William A. Szabo, Bhima R. Vijayendran**

60-Year Members:

**William T. Comer, David W. Henry, Theron Johns, William L. Nyhan, Roy T. Uyeda**

Local Section Chair, **Jonathan Lockner**, introduced the 50-Year members in attendance: **Jerold Horn, Wayne Pletcher, Bill Szabo, Bhima Vijayendran** and the 60-year member, **Bill Comer**. The honorees shared some of their career experiences with us.

The luncheon ended with Councilor **Tom Beattie** announcing various Local Section activities.

A thank-you to **Ken Poggenburg** for organizing the luncheon.



Chair Jonathan Lockner



Jerold Horn



Wayne Pletcher



Bill Szabo



Bhima Vijayendran



Bill Comer



Bhima Vijayendran, Bill Szabo, Wayne Pletcher  
Jerold Horn, *unavailable* Bill Comer



The crowd



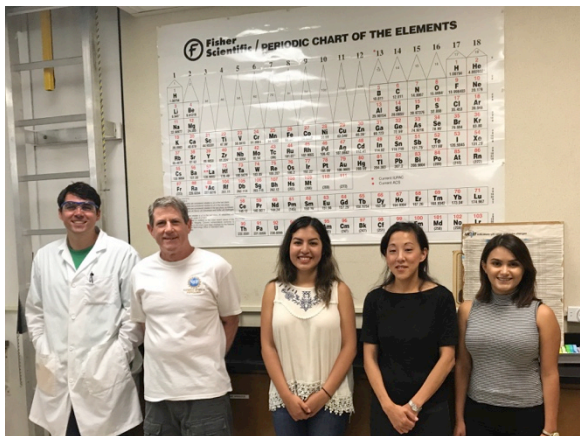
Tom Beattie

Text: Renate Valois, Photo credits: Jim Shih

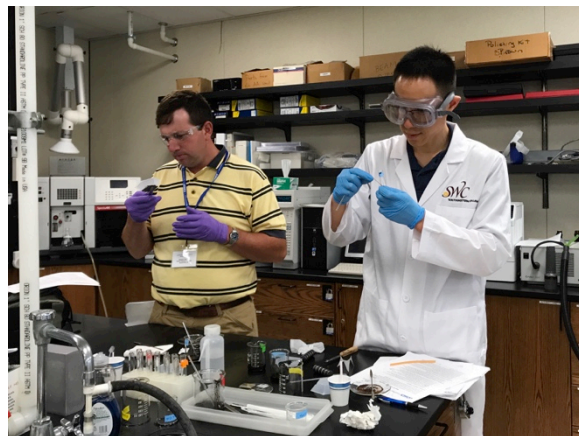


**Materials Science & Nanotechnology Workshop**  
**June 25-30, 2017**

Southwestern College hosted a week-long NSF-sponsored cCWCS (Chemistry Collaborations, Workshops, and Communities of Scholars) workshop, which attracted 14 chemistry faculty participants from around the country. Led by **Professor David Brown** and assisted by colleague **Joann Um** and students **Naomi Corral**, **Monica Lepe** and **Drew Watson**, the group explored ways of incorporating materials science and nanotechnology into undergraduate chemistry teaching curricula. In this hands-on workshop, participants synthesized and probed the properties of gold and silver nanoparticles, encapsulated materials, self-assembled monolayers, self-healing polymers, dye-sensitized solar cells, adsorbent magnetic composites, ferrofluid, nickel nanowires, and cadmium selenide quantum dots. A highlight of the week was **Dr. Shane Ardo's** (UC Irvine) inspiring presentation of his research. The workshop concluded with the capturing of sunlight to generate and store hydrogen fuel.



Southwestern College facilitators



Exploring ferrofluid



Testing a magnetic composite

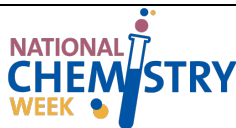


Harvesting sunlight to generate hydrogen fuel



The workshop participants on the evening of Dr. Ardo's lecture

Text: Joann Um  
Photos: David Brown and Joann Um



**MARK YOUR CALENDAR!!!**

**CHEM EXPO**, part of National Chemistry Week celebration, is a great opportunity to instill greater public awareness in the importance of chemistry in our everyday lives and the roles that chemists play in our community. Our event will take place on

**Saturday, October 28, 2017  
11 AM to 3 PM**

**Theme: Chemistry Rocks! Exploring the Chemistry of Rocks and Minerals**

**San Diego Miramar College, 10440 Black Mountain Rd, San Diego  
10440 Black Mountain Rd, San Diego**

We need the participation of local organizations! Please sign up for an exhibit at our event.

- Exhibits by Local Companies & Organizations
- Chemistry Demonstrations
- Hands-on Activities and Much More

**To volunteer and for free space to show education exhibit please contact:**

**Paul Bruinsma at [paulb@sandiegoacs.org](mailto:paulb@sandiegoacs.org)**

Sponsored by the San Diego Section of the American Chemical Society - <http://www.sandiegoacs.org>.

**ACS-Hach Programs**

**ACS-Hach Professional Development Grant**

Funds professional development experiences for secondary chemistry teachers

Award Amount: Up to \$1,500

**Application Period: October 15th - 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](mailto:hach@acs.org) -- Phone: (800) 227-5558 ext. 8178

**VOLUNTEER WITH KIDS & CHEMISTRY**

Kids & Chemistry is a community-based program that brings together scientists and children to do hands-on science activities. Volunteers include ACS members, ACS Student Chapters, and corporate groups. Volunteers include ACS members, ACS Student Chapters, and corporate groups.

Volunteer efforts can be implemented as a full program administered by an ACS local section or by an individual as a one-time classroom visit. The program can also be incorporated into an existing corporate outreach/education program, or serve as the focal point for a larger mentoring program.

For more details, please see: <http://www.acs.org/content/acs/en/education/outreach/kidschemistry.html>

**BE A CHEMISTRY AMBASSADOR!**

Volunteer to put a human face on science and help connect chemistry with everyday life! Promote chemistry to children, your community, lawmakers and others.

**Volunteer Opportunities**

Activities and ideas for getting involved in outreach. Explore to find activities that fit your interests and schedule!

For more details, please see: <https://www.acs.org/content/acs/en/volunteer/chemambassadors.html>

**It Pays to be a Volunteer!**

Volunteers have 27% higher odds of finding a job after being out of work than non-volunteers. The odds increase to over 50% for those without a high school diploma or who live in rural areas. Source: Corporation for National and Community Service. (June 2013). *Volunteering as a Pathway to Employment*.

## CONGRATULATIONS

Eighth-grader, **Nikhil Seshadri** from Standley Middle School, represented California at the National "**You Be The Chemist Challenge**" in Washington D.C. on June 19, 2017, and won 2<sup>nd</sup> place.

**Nikhil** will go to University City High School in Fall. He is a member of the San Diego Math Circle. He developed an interest in chemistry when he was in fifth grade. **Nikhil** participated in the California "You Be The Chemist Challenge" in 2015, 2016, and 2017" and was the first runner-up in 2015 and 2016, and finally was the California State champion in 2017.

**Nikhil** received a \$6000 scholarship and a trophy. He also received local news coverage.

<http://www.nbcsandiego.com/news/local/SD-Student-Competes-in-National-Chemist-Challenge-429474913.html>

<https://www.youtube.com/watch?v=fcUIH2uaj8>



Bruce Schechinger, President of the CEF Board and President & Owner, BHS Marketing LLC,  
Nikhil Seshadri,  
Miss USA, Kára McCullough, physical scientist and STEM education advocate

## SUMMARY OF THE SAN DIEGO SECTION EXECUTIVE COMMITTEE MEETING MINUTES July 11, 2017

Treasurer's Report – Received \$1K toward Project SEED, received total of \$5K for councilor travel reimbursement; disbursements: small amount for May Monthly Meeting, CPA for tax preparation, picnic; due: two invoices due to Mad Science

Website – Website received ~3K hits in 30 days

Project SEED – Section has assisted with placement of five students, students generally enjoying the experience

Chemical Education Foundation – Nikhil Seshadri, Stanley Middle School, 2<sup>nd</sup> place winner in "You be the Chemist" National Challenge, awarded \$6K scholarship, recognized in *Union-Tribune* article

Picnic – 90+ attendees, good volunteer help

MedChem Symposium – 320 registered to date, program set

50-/ 60- / 70-Year Member Luncheon – Currently projecting 30 attendees; charging \$25

Takeda "Bring Your Child to Work" Day – Takeda requesting representative from the Section for science demo on Aug 4

August Monthly - Dwayne Carter, Organovo, to present 3D printing of biological samples

National Meeting – Four councilors confirmed plans to attend, Section nominated for 3 Chem Luminary Awards – Best Activity stimulating member involvement for 75<sup>th</sup> Anniversary seminar, Best Public Relations Program for microbiome science café

Genius Project at Sage Creek High School – Targeting 5<sup>th</sup> – 8<sup>th</sup> grade girls to encourage them to study STEM, requesting SDACS presentation

Distinguished Scientist Award – Awardee - Charles Perrin, UCSD Chem Biochem Dept., event scheduled for Oct. 18

Mad Science – Continuing ~12 years of SDACS sponsorship of shows for 4<sup>th</sup>-5<sup>th</sup> grade students

YCC – SDSU students held an organizing meeting, planning two meetings / month, targeting to participate in ChemExpo, Dr. Purse as advisor, organizing a symposium with the topic of transition from grad school to professional position

Next meeting: August 1



## CHEMISTRY FOR YOU AND YOUR KIDS

### Let's HEAR it for Inventions!

Inventions in communication have also been very important. The radio, television, telegraph, telephone, computer, and satellite are all inventions that have helped people communicate over long distances. Try the activity below and then see if you can invent a better way to communicate overlong distances without having to scream!

#### You will need

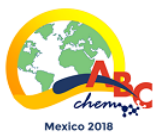
Safety glasses • 4 paper cups (7 oz) • kite string (at least 10 meters) • pencil or ball point pen • blunt end scissors

1. Use your pencil to poke a small hole in the center of two paper cups. Put the end of the string through the bottom of one of the cups. Tie a knot so that the string won't come out of the bottom of the cup. Do the same thing with the other cup at the other end of the string.
2. Have your adult partner hold the other cup a distance away so that the string is tight. Ask your partner to speak into the cup while you listen. Have your partner speak more and more quietly and see if you can still hear.
3. Pluck the string and see how it sounds. Scrape your fingernails along the string. If you had a tape player, could you invent a way to record these strange sound effects? Try it! Could you invent a way to listen to music being played in another room? Try it and see!
4. If you had more cups and string, could you get someone else in on the conversation? How about inventing a way to talk and hear without switching the cups back and forth between your mouth and ear? This would be more like the ear and mouth parts of a modern telephone receiver.

Try using different string or cups to see which works best.

See what else you can invent using your cup and strong communication system.

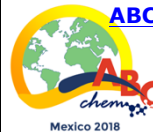
Excerpt: "The Best of WonderScience," pg. 30, Delmar Publishers, 1997



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#### ABCChem – Plenary Speakers Announced!

ACS is partnering with societies in North and South America, Europe, and Africa for the Atlantic Basin Conference on Chemistry (ABCChem) to be held January 23–26, 2018, in sunny Cancún, Mexico. A dynamic lineup of [plenary speakers](#) from across the region has been confirmed and will cover a range of topics including Chemistry in Biology, Green Chemistry, Materials & Nano Chemistry, and Physical & Analytical Chemistry.

#### Call for Papers – Submit Yours Today

The ABCChem Technical Programming Committee invites chemistry professionals across the regions to give oral and poster presentations on the topics listed above. The deadline to [submit abstracts](#) is Monday, September 18, 2017.

Submit your papers and [register now!](#) To ensure international collaboration, registration is limited by region. Make sure to register early to secure your spot!

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For information contact: **Renate Valois** - [renate@sandiegoacs.org](mailto:renate@sandiegoacs.org)

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### 2017 ACS REGIONAL MEETINGS

Midwest (MWRM)	October 18 - 20	Lawrence, KS
Rocky Mountain (RMRM)	October 25 - 28	Loveland, CO
Southwest (SWRM)	October 29 - November 1	Lubbock, TX
Southeastern (SERMACS)	November 7 - 11	Charlotte, NC

### ACS Webinars™

For upcoming Webinars in August see:

<https://www.acs.org/content/acs/en/acs-webinars.html>

### 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](mailto:trischma@csusm.edu)

760-750-4206

#### MiraCosta College

Linda Woods

[lwoods@miracosta.edu](mailto:lwoods@miracosta.edu)

760-757-2121 Ext. 6411

#### Palomar College

Greg Elliot

[gelliott@palomar.edu](mailto:gelliott@palomar.edu)

858-531-1149

#### Point Loma Nazarene University

Sara Choung

[SaraChoung@PointLoma.edu](mailto:SaraChoung@PointLoma.edu)

619-849-2627

#### San Diego Mesa College

Dwayne Gergens

[dgersens@sdccd.edu](mailto:dgersens@sdccd.edu)

619-388-2609

#### San Diego Miramar College

Fred Garces

[fgarces@sdccd.edu](mailto:fgarces@sdccd.edu)

619-388-7493

#### San Diego State University

Mikael Bergdahl

[bergdahl@sciences.sdsu.edu](mailto:bergdahl@sciences.sdsu.edu)

619-594-5865

#### Southwestern College, Chula Vista

David Hecht

[dhecht@swccd.edu](mailto:dhecht@swccd.edu)

619-421-6700x5461

#### University of California, San Diego

Joe Cribari

[jcribari@ucsd.edu](mailto:jcribari@ucsd.edu)

858-822-4055

Gourisankar Ghosh

[gghosh@ucsd.edu](mailto:gghosh@ucsd.edu)

858-822-0469

Judy Kim

[judyk@ucsd.edu](mailto:judyk@ucsd.edu)

858-534-8080

#### University of San Diego

Tammy Dwyer

[tdwyer@sandiego.edu](mailto:tdwyer@sandiego.edu)

619-260-4030



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**THE SAN DIEGO CHEMIST**

For information contact:

**Renate Valois - [renate@sandiegoacs.org](mailto:renate@sandiegoacs.org)**

## **UPCOMING EVENTS**

**DR. DWAYNE E. CARTER**  
**Organovo Holdings Inc., San Diego**  
**Skaggs Institute (Molecular Biology Building)**  
**10596 North Torrey Pines Road, La Jolla, CA 92037**  
**Wednesday, August 16, 2017**

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**254th ACS NATIONAL MEETING & EXPOSITION**  
**Washington, DC**  
**August 20-24, 2017**

\*\*\*\*\*

**CHARLES PERRIN, PHD**  
**2017 DISTINGUISHED SCIENTIST AWARD BANQUET**  
**University of California, San Diego, La Jolla, CA**  
**The Ida and Cecil Green Faculty Club – UCSD, 9500 Gilman Drive, La Jolla**  
**Wednesday, October 18, 2017**

\*\*\*\*\*

**SENIORS/RETIREES/CONSULTANTS/ETC. BREAKFAST**  
**Bristol Farms Café in the Costa Verde Shopping Center at Genesee Ave. and Nobel Drive**  
**University City**  
**Thursday, October 5, 2017, at 9:30 AM**

\*\*\*\*\*

**CHEM EXPO**  
**Chemistry Rocks!**  
**San Diego Miramar College, 10440 Black Mountain Road, San Diego**  
**10440 Black Mountain Road, San Diego**  
**Saturday, October 28, 2017**

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**HOLIDAY PARTY**  
**Sufi Mediterranean Cuisine**  
**5915 Balboa Avenue, San Diego, CA 92111**  
**Thursday, December 7, 2017**

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

Muhammad Altaf  
Kyle Boyar  
Steven Combs  
Ramkrishna De  
Karan Doppalapudi  
Mirabelle Fakhoury  
Yuan Fang  
Daniel Flores  
Carolina Gonzalez Bravo  
Katlyn Kennedy

Shao-Wei Li  
Ashok Luhadiya  
Cathy Luna  
Desirae Mellor  
Giulia Palermo  
Arrion Smith  
Lindsay Spishock  
Bryce Timm  
James West  
Naoki Yoshikawa



**2017 EXECUTIVE COMMITTEE & COMMITTEE MEMBERS  
SAN DIEGO SECTION OF THE AMERICAN CHEMICAL SOCIETY**

**EXECUTIVE COMMITTEE**

<i>Chair</i>	Jonathan Lockner, San Diego Miramar College, <a href="mailto:jlockner@sandiegoacs.org">jlockner@sandiegoacs.org</a>	(2017)	858-688-8143
<i>Chair-Elect</i>	Jennifer Barber-Singh, The Scripps Research Institute, <a href="mailto:jbsingh@sandiegoacs.org">jbsingh@sandiegoacs.org</a>	(2017)	858-869-7084
<i>Past-Chair</i>	Graeme Freestone, Dart NeuroScience LLC, <a href="mailto:gfreestone@sandiegoacs.org">gfreestone@sandiegoacs.org</a>	(2017)	858-246-8137
<i>Secretary</i>	William Tolley, Seacoast Science, Inc., <a href="mailto:w_tolley@juno.com">w_tolley@juno.com</a>	(2017)	858-780-0978
<i>Treasurer</i>	Graeme Freestone, Dart NeuroScience LLC, <a href="mailto:gfreestone@sandiegoacs.org">gfreestone@sandiegoacs.org</a>	(2017)	858-246-8137

**Councilors**

Thomas R. Beattie	(2018)	858-587-1210
Hui Cai, WuXi AppTec	(2019)	858-361-8838
Desiree Grubisha, Halozyme Therapeutics	(2018)	858-254-5497
John Palmer	(2017)	858-265-9198
Ken Poggenburg	(2019)	760-635-2573
David Wallace, Wallace Scientific Consulting	(2018)	858-638-1866

**Alternate Councilors**

Paul Bruinsma, HP Inc.	(2017)	858-655-8322
Surya K. De, Plex Pharmaceuticals, Inc.	(2019)	858-337-4961
Julann Miller, Waters Corporation	(2017)	800-252-4752 x6802
Ben Pratt, Allergan	(2019)	858-945-7893
John Schindler	(2019)	858-353-3943
Jim Shih, Eli Lilly & Co	(2017)	626-826-3561

**Members-at-Large**

James Caldwell	(2019)	815-262-9697
Ryan Clark, Inception Sciences, Inc.	(2017)	858-774-2095
Bill Szabo	(2019)	858-550-0306
Joann Um, Southwestern College	(2019)	510-823-8637

**STANDING & SPECIAL COMMITTEES**

**Awards Nomination Committee**

Valerie Kuck (Co-Chair)	973-744-5510
John Schindler (Co-Chair)	858-353-3943

**ChemExpo**

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

**Communications Committee**

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

**Distinguished Scientist Awards Nomination Committee**

Thomas R. Beattie (Chair)	858-587-1210
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**Education Committee**

Joann Um (Co-Chair), Southwestern College	510-823-8637
Haim Weizman (Co-Chair), UCSD	858-534-2963
Joan Schellinger, USD	619-260-7960

**EarthFair**

Julann Miller, Waters Corporation	800-252-4752 x6802
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**Finance Committee**

Bill Szabo (Chair)	858-550-0306
Tom Beattie	858-587-1210
John Schindler	858-353-3943

**Fundraising Committee**

**OPEN**

**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), Allergan	858-945-7893
Mark Tichenor (Co-Chair), Janssen Pharmaceuticals, Inc.	858-334-8914
David Wallace (Co-Chair), Wallace Scientific Consulting	858-638-1866

**Membership Committee**

Jennifer Barber-Singh, The Scripps Research Institute	858-869-7084
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**Nominations Committee**

**OPEN**

**Picnic Committee**

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

Bryce Timm	512-545-9287
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**Voice Mail – San Diego Section**

619-687-5570