

The San Diego Chemist



American Chemical Society Volume 31, Number 3

San Diego Section March 2019

INTRODUCTION TO LILLY LIFE SCIENCES STUDIO (L2S2) - MEDICINAL CHEMISTRY AND AUTOMATION -

Presenters: Todd DeCollo & Jimmy Sastra

DATE: Tuesday, March 26, 2019

TIME: 6:00 PM - 7:00 PM Networking & Light Dinner

7:00 PM - 7:30 PM Seminar

7:30 PM - 9:00 PM Tour of L2S2 Facility

PLACE: Lilly Biotechnology Center

10290 Campus Point Drive, San Diego, CA 92121

RSVP: https://lillyevent.eventbrite.com/

There will be a registration limit of 80



Todd DeCollo

ABOUT THE SPEAKERS:

Todd DeCollo is a research scientist in the discovery automation research group at Lilly Biotechnology Center in San Diego, performing drug discovery research in the L2S2 facility.

Jimmy Sastra is the vice president of automation at Transcriptic, Inc. Lilly has licensed technology from Transcriptic to enable remotely accessible drug discovery operations at the L2S2 facility.



Jimmy Sastra

ABOUT THE PRESENTATION:

The talk will only last about 30 minutes, as the rest of the time will be dedicated to the tour of the facility. The talk will introduce the audience to the L2S2 facility and the type of organic chemical synthesis that takes place in the automated system. The tour will demonstrate the chemical synthesis in action.

CHAIR NOTES

Dear ACS Members,

As the cold and raining season begins to end and the flowers of spring begin to bloom, your Local Section is gearing up for its monthly meetings and many community outreach activities. Our first event of the year was held in February at the Claude "Bud" Lewis Carlsbad Desalination Plant in Carlsbad. The group enjoyed a lively and informative tour of the plant. Since the groups were required to be ≤ 20 people, we hope to organize a few more tours this year so others will have a chance to learn about the science behind San Diego's first desalination plant.

The March meeting will be held at Lilly Biotechnology Center and will include both, a lecture and tours of Lilly Life Science Studio which combines medicinal chemistry and automation. We will limit attendance to the first 80 people so it is very important that you pre-register, and if things change and you can't make it, please let us know, so we can free up the spot for someone else. I look forward to seeing many of you there.

As the year progresses, there are a variety of volunteer opportunities for our Section members. The San Diego Festival of Science and Engineering Expo Day at Petco Park on March 2nd, is an event that reaches thousands of local students and parents. ACS local members will also be judging student entries at the San Diego Science and Engineering Fair on March 13th, open to the public the weekend of March 14-17. Both of these events are a great way to share your enthusiasm and scientific experiences with the next generation of scientists.

Remember, all members are welcome to attend the Executive Board meetings. If interested, the next meeting will be March 7th at 6:00 PM at Samumed (9381 Judicial Drive, San Diego, CA 92121) and food will be provided. We hope to see new faces.

Finally, I would like to thank all of the **Board and Committee members** for their hard work providing great service to our members. If you are interested in serving your Local Section please contact any committee chair or me at davidmw@san.rr.com if you have any questions.

David Wallace, Co-Chair

San Diego Section of the American Chemical Society

E-mail: davidmw@san.rr.com 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 enewsletter 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

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"	<i>\$ 75</i>	<i>\$ 68</i>	<i>\$ 58</i>
4.5" x 1.5"	\$ 80	<i>\$ 74</i>	<i>\$ 67</i>
4.5" x 4.75"	\$200	\$184	\$163
8.5" x 5.5"	\$400	\$360	\$310
full page	<i>\$655</i>	\$590	\$510

Discounts will be available for issues not shown

Please send your jpg to:

Renate Valois at 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:

- 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.
- 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.
- 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 "I", not the number "one" following the word "chemist".

Executive Committee Meeting Dates 2019 6:00 - 8:00 pm Thursday March Thursday April 4 Thursday 2 May **Thursday** June 6 Thursday July 11 Thursday August 1 Thursday September 5 Thursday 3 October Thursday November Meetings will be held at: 9381 Judicial Drive, Suite 160, San Diego

CALL FOR NOMINATIONS ACS FELLOWS PROGRAM

The American Chemical Society Fellows Program (ACSF) was created by the ACS Board of Directors in December 2008 to recognize members of ACS for outstanding achievements in and contributions to: science, the profession, and the Society. Read more about the program purpose here:

https://www.acs.org/content/acs/en/funding-and-awards/fellows.html

The nomination period for the 2018 Class of ACS Fellows opened on February 1, 2018. It ended at 11:59 PM on 1 April 2018. We expect that the 2019 nomination period will follow similar dates.

Use the link below for 2018 guidelines from the ACS National Offices:

https://www.acs.org/content/dam/acsorg/funding/fellows/acs-fellows-program-guidelines 2018.pdf

If the volunteer work done by the nominee was performed on behalf of the San Diego Section, the chair and/or a designee from the executive committee familiar with the service and/or scientific work will be happy to write one or more of the required nominating letters. The awards committee will assist in guidance through the process. The overall purpose of the program is to recognize the top 1-2% of scientists-volunteers in the ACS community. (People who are generously compensated will not be considered.)

ACS-HACH PROGRAMS

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: ends 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: ends 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

AMERICAN CHEMICAL SOCIETY SAN DIEGO SECTION EDUCATION COMMITTEE

LOOKING FOR VOLUNTEERS

We are hosting the Chemistry Olympiad and the preliminary screening is scheduled on **March 2 and 3 (Sat. and Sun.) from 9-11 am at Shiley Center for Science and Technology, University of San Diego.** If you would be interested in proctoring on either days and/or have any questions, please contact: **jschellinger@sandiego.edu**. We specifically ask volunteers to arrive ~ 30 minutes to help set-up, register students and proctor the 2-hour exam.

CHEMISTRY JUDGES NEEDED

Judging by professional societies at the 65th Annual Greater San Diego Science & Engineering Fair will take place on **Wednesday**, **March 13**, **at 12:15 pm** in Balboa Park. If anyone is able to help choose exhibits for our Section's chemistry awards or wants more information, please contact **Ken Poggenburg**, **jkp135@att.net**.

CALL FOR VOLUNTEERS
EarthFair 2019
Sunday, April 28, 2019
Balboa Park • 10am - 5pm

ACS – San Diego Section volunteers will set up a table in the Children's Activity Area. This special area has crafts, games, face painting, storytelling, and hands-on activities for children of all ages. Activities are intended to educate, entertain and inspire youth, in the spirit of Earth Day.

Please contact **James Caldwell**, <u>icaldwell@sandiegoacs.org</u>, to volunteer on **Sunday**, **April 28**. We need 3-4 persons for each of the 3-4 hour shifts on April 28th. Please support us and share your care for our earth, chemistry education, and the San Diego ACS!

CONGRATULATIONS!

"THE SAN DIEGO CHEMIST" celebrates its 30th birthday! The first issue was Volume 1 - Number 1 - March 1989

> LET'S CELEBRATE AND EAT LOTS OF PIE Pi Day is March 14

THE PERIODIC TABLE BY PRIMO LEVI

See excerpt below

https://books.google.com/books/about/The_Periodic_Table.html?id=FfxvDwAAQBAJ&printsec=frontcover&source=kp_read_button#v=onepage&g&f=false

The "Guy" who Invented Kevlar and Other Stories: Women Chemists to the Forefront

Professor Mary Virginia Orna Speaker College of New Rochelle

In collaboration with the North County Higher Education Alliance, the San Diego Section hosted an event at Indian Joe Brewing in Vista on Tuesday, February 5th. Despite the rain, 35 scientists and engineers from freshman in college to graduate students to recent graduates and women with 20 or more years of experience attended the preliminary meeting. They were organized in seven groups for the Women in Chemistry Family Mentoring Program to foster mentoring for success at the bachelor's level and into the many career steps we go through as chemists. After the introductory mentoring session, another 15 attendees joined the group for a historical talk on prominent women in chemistry by ACS Fellow Mary Virginia Orna. The talk sparked much discussion and was perfectly tied into the goals of the new mentoring efforts. The following day, Professor Orna delivered an amazing talk entitled "Uncovering the Secrets of Ancient and Medieval Artists" to a group of 25 chemistry students, faculty, and community members on the Cal State San Marcos campus. Her amazing blend of science and the impacts it can have on our culture were appreciated in both events.













Text and Photo Credits: Jackie Trischman

THE CLAUDE "BUD" LEWIS CARLSBAD DESALINATION PLANT (Poseidon Water) Monday, February, 18, 2019

The San Diego Section of the American Chemical Society toured the largest seawater desalinization plant in the western hemisphere. We observed the state-of-the-art facility at The Carlsbad Desalination Plant, which processes 100 million gallons of seawater per day! The state-of-the-art operation turns saltwater from the Pacific Ocean into high-quality drinking water.

The trip from San Diego to Carlsbad took nearly an hour because of a bad wreck on Highway 5. We discussed the plant operation for 20 minutes while waiting for people to arrive for the sold-out tour. The plant takes in seawater from the cooling water intake of the adjacent (now defunct) power plant and releases 50,000,000 gallons of concentrated seawater back into the ocean.

We followed our guide into the plant where we were given hardhats, eye protection, and safety vests to wear. We learned many facts about the processing of seawater as we walked through the facility. The seawater intake is screen filtered to remove any sea life, then there are 2 types of filtration before the water is pumped to high pressure (800-900 PSI) for the reverse osmosis system. The water is so pure after passing once through the semi-permeable membrane that it must be passed through a limestone bed to replace minerals in the water.

Everyone enjoyed an all-you-can-drink free sample at the end of the tour. Delicious! Overall, we had fun asking questions and learning about the \$1 billion dollar facility that produces 50,000,000 gallons of high quality drinking water per day. Also, we are planning for another tour in the near future due to the number of interested ACS members.

















Text and Photo Credit: James Caldwell







The Drug Hunter Award Seminar Series

March 11, 2019, 4 PM Pharmacy School, UC San Diego

The Drug Hunter: Integrating Molecular Endocrinology to Discover Next Generation Drugs for Breast and Prostate Cancer

Richard A. Heyman, Ph.D.

Chairman of the Board and Co-founder of Metacrine Inc.



Dr. Richard A. Heyman is the second recipient of the WSGR Drug Hunter Award. The award recognizes significant contributions to bringing new drugs to the market. Dr. Heyman is a scientist and entrepreneur with more than 25 years of experience in building biotech and life science companies. Dr. Heyman has been involved in the discovery and development of multiple therapeutic agents approved by the FDA, including the recently approved drug Erleada. In a TED-style talk, Dr. Heyman will share insights from his time as co-founder and CEO of the San Diego-based biotech companies Aragon and Seragon as well as his experiences interfacing with Venture Capitalists, BODs, Pharma and Academia.

This seminar series is sponsored by the law firm of Wilson Sonsini Goodrich and Rosati, and is hosted by the UC San Diego Center for Drug Discovery Innovation and the UC Drug Discovery Consortium.

SUMMARY OF THE SAN DIEGO SECTION EXECUTIVE COMMITTEE MEETING MINUTES February 7, 2019

<u>Treasurer's Report</u> – Financial portion of 2018 Annual Report completed, need to add 2019 budget once it is approved; YTD – mostly expenses from last year: balance of Section Awards payments, Mad Science, Leadership Institute payment; income \$291; receivables: Section dues expected shortly; anticipated expenses: Tom Ham's deposit for 50-60 Year Member Luncheon, reservation for Earth Day booth, \$400 to SABPA from SABPA / ACS seminar proceeds; investment fund: Vanguard Fund growing again

Action: Graeme announced again that he will not run for Treasurer for 2020 and search for candidate is in order

<u>Proposed Budget</u> – Increased amount budgeted for picnic over last year to \$2K, added in projected dividends from Vanquard Fund of \$8500, which gives balanced budget. **Approved**

<u>January Monthly Seminar - Poseidon Desalination Plant Tour</u> – Deferred to 2/18, working on a social gathering after the tour

<u>Leadership Institute</u> - James Caldwell attended the ACS Leadership Institute, discussed celebrations of the International Year of the Periodic Table, National Chemistry Week theme: Marvelous Metals; suggestion to submit IPG grant for SDACS to participate in the Mineral Show in Tucson in conjunction with the Arizona ACS Section; another suggestion for IPG is to sponsor a brewing competition and potentially include a pre-event session on beer judging; noted that AACT membership entitles a teacher to free membership in ACS

Earth Day - Section needs to make reservation for San Diego event

Project SEED - Seven mentors lined up for this Summer; projects are being reviewed

<u>February Monthly Seminar</u> – Mary Orna speaker, ~50 attendees (filled the space), excellent talk and attentive audience, venue - Indian Joe's Brewery (woman owned) was opened after hours to hold the event; 35 attended the subsequent mentoring session, 17 have volunteered to serve as mentors

March Monthly Seminar - Lilly Automation - Working to confirm seminar arrangements

<u>April Monthly Meeting - SDSU / ACS Joint Meeting</u> - May need to defer until May when auditorium space becomes available

<u>May Monthly Seminar - Bernardo Winery</u> – Previous event well attended, the proposed seminar has the option of including a tour of winery, a quote for wine/cheese/chocolate plus two beverages for 100 attendees was \$4K, which could be covered by charging \$20 admission plus some sponsorships, on-site food outlets would be closed, so no other food will be available, suggest May 23 for the date

Motion: propose allocating up to \$4K for the seminar - Approved (1 abstained)

<u>Annual Mailing</u> – Suggesting annual mailing to provide alternative means to communicate with members, ~\$1600 for printing and mailing one announcement

Greater SD Science and Engineering Fair - Needs names of those willing to volunteer by Mar. 13

50-60 Year Member Luncheon - Planning for July 11

Next meeting: Mar. 7, 2019

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 please see: https://www.acs.o/content/acs/en/acs-webinars.html

Call for Abstracts - Fall 2019 ACS National Meeting & Expo

ACS is now accepting abstracts for oral and poster presentations at the Fall 2019 ACS National Meeting & Exposition, **to be held in San Diego**, California, August 25–29. The meeting theme, Chemistry & Water, promises to bring together chemists across disciplines to discuss impacts from, and to, water in various industries, sustainability, and more. <u>Visit the meeting website</u> to view topics by programming division.

Submission deadlines begin March 18 and vary by program area. Learn more and submit your abstract now!



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2019 ACS REGIONAL MEETINGS

Great Lakes (GLRM) Mav 1 - 4 Lisle, IL Middle Atlantic (MARM) May 30 - June 1 UMBC, Baltimore June 4 - 7 Central (CERM) Midland, MI Northwest (NORM) June 16 - 19 Portland, OR Northeast (NERM) June 22 - 27 Saratoga Springs, NY October 16 - 18 Midwest (MWRM) Wichita, KS Southeastern (SERMACS) October 20 - 23 Savannah, GA Southwest (SWRM)/RMRM November 13 - 16 El Paso, TX

BE A CHEMISTRY AMBASSADOR!

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

VOLUNTEER WITH KIDS & CHEMISTRY

For more, please see:

http://www.acs.org/content/acs/en/education/outreach/kidschemistry.html



LOOKING FOR A CHEMIST?

CHEMPLOYMENT IS THE ANSWER! THE SAN DIEGO CHEMIST

is read by nearly 3000 chemists and biochemists in San Diego and Imperial Counties.

A two-month ad costs only \$80.00

For information contact: Renate Valois - renate@sandiegoacs.org

TELL US ABOUT YOUR FAVORITE ELEMENT



What was the first element or element family that really inspired you? As part of the International Year of the Periodic Table (IYPT2019), we're asking ACS members to tell us about their favorite element, or element family.

Here are some ideas to get you started:

Is there an element that has been an ongoing source of fascination and inspiration?

Was your undergraduate or graduate research focused on a particular element? Has there been an element that has been a constant through your education or working life? We look forward to hearing from you—thanks for sharing-yourstory!

Image credit: C&EN

Office Depot Has Everything You Need for Home, School, or Work

ACS Members based in the U.S. can save 10% off the everyday web price on more than 30,000 office supplies available through the ACS Office Depot Partner Program. From pens to printing, for home, school, work, and anything in between, you'll find

everything you need at Office Depot to keep yourself well supplied and running efficiently. Register at www.1800member.com/od-acs, or call 1-800-636-2377. Once you're registered, you can shop in store or online. Sign up today and start saving!

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,

California State University, San Marcos

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

San Diego Miramar College

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

Point Loma Nazarene University

Sara Choung <u>SaraChoung@PointLoma.edu</u> 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

Southwestern College, Chula Vista

David Hecht <u>dhecht@swccd.edu</u> 619-421-6700x5461

University of California, San Diego

Stacey Brydges <u>sbrydges@ucsd.edu</u> 858-246-0993

Thomas Bussey tbussey@ucsd.edu 858-822-6665

University of San Diego

Tammy Dwyer tdwyer@sandiego.edu 619-260-4030

YOUR AD HERE!



For information contact:

Renate Valois - renate@sandiegoacs.org

"Don't dismiss the elements. Water soothes and heals. Air refreshes and revives. Earth grounds and holds. Fire is a burning reminder of our own will and creative power. Swallow their spells. There's a certain sweet comfort in knowing that you belong to them all."

Victoria Erickson

UPCOMING EVENTS

SAN DIEGO FESTIVAL OF SCIENCE & ENGINEERING **EXPO DAY at PETCO Park** Saturday, March 2, 2019

https://www.lovestemsd.org/

THE 65th ANNUAL GREATER SAN DIEGO SCIENCE AND ENGINEERING FAIR

Balboa Park Activity Center (2145 Park Blvd.)

For information please see http://www.gsdsef.org/ March 12 - 17, 2019

INTRODUCTION TO LILLY LIFE SCIENCES STUDIO (L2S2) -**MEDICINAL CHEMISTRY AND AUTOMATION**

Speakers: Todd DeCollo & Jimmy Sastra

Lilly Biotechnology Center, 10290 Campus Point Drive, San Diego, CA 92121

Tuesday, March 26, 2019

257th ACS NATIONAL MEETING & EXPOSITION

Orlando, Florida

March 31-April 4, 2019 ******

SENIORS/RETIREES/CONSULTANTS/ETC. BREAKFAST

Bristol Farms Café - Costa Verde Shopping Center -

Genesee Avenue and Nobel Drive, University City Tuesday, April 16, 2019, at 9:30 AM

EARTH DAY - EARTHFAIR 2019

Balboa Park, San Diego, CA

http://www.earthdayweb.org/

Sunday, April 28, 2019

BERNARDO WINERY TASTING & TOUR

13330 Paseo Del Verano Norte

San Diego, CA 92128

Thursday, May 23, 2019 ******

SUMMER PICNIC

San Dieguito County Park, Solana Beach

Sunday, June 30, 2019

FIFTY-/SIXTY-YEAR MEMBER LUNCHEON

Tom Ham's Lighthouse, 2150 Harbor Island Drive, San Diego

Thursday, July 11, 2019

22nd ANNUAL SAN DIEGO MEDCHEM SYMPOSIUM

Hojel Auditorium and Arango Foyer, UCSD

The Institute of the Americas

10111 North Torrey Pines Road, La Jolla, CA 92093

Friday, July 19, 2019

258th ACS NATIONAL MEETING & EXPOSITION

San Diego, California

August 25-29, 2019

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

Muhammad Asif Alimuddin Sharif Asad **Duncan Beniston** Mariel Cardenas Kristine Cay Pingyu Chen Deblina De Ghosh Anthony DePaul

Eric Hellie Alexandra Hoff Paul Joo Amanda Melanese Gillian Meyer Kelsey Morris Riley Mullinix Ongun Ozcelik

Brian Pankuch Jeffrey Roberts Atticus Salmon Andrey Samoshin Hyosuk Seo Lane Votapka Anne Zhou Jie Zhu

	COMMITTEE	N	SOCIETY	050 000 500
Co-Chair Co-Chair	Jennifer Barber-Singh, BioFluidica, jbsingh@ David Wallace, Samumed, LLC, davidmw@s		(2019) (2019)	858-869-7084 858-638-1866
				815-262-9697
Chair-Elect	James Caldwell, Accelagen, Inc., <u>icaldwell@</u>		(2019)	815-262-9697 858-869-7084
ast-Chair	Jennifer Barber-Singh, BioFluidica, <u>ibsingh@</u>		(2019)	
ecretary	William Tolley, Seacoast Science, Inc., b tol Graeme Freestone, Ionis Pharmaceuticals, Ii		(2019)	858-780-0978
reasurer ouncilors	Graeme Freestone, Ionis Pharmaceuticals, II	nc., grreestone@sandlegoacs.org	(2019)	858-539-6363
	R. Beattie	(2021)		858-587-1210
	NuXi AppTec	(2021)		858-361-8838
	Grubisha, Halozyme Therapeutics	(2019)		858-254-5497
Valerie K		(2021)		973-744-5510
Ken Pogo		,		760-635-2573
		(2019)		858-638-1866
	allace, Samumed, LLC	(2021)		828-038-1800
ternate Cou		(2010)		050 227 4061
	De, Plex Pharmaceuticals, Inc.	(2019) (2020)		858-337-4961 800-252-4752 x6802
	iller, Waters Corporation :, Pratt Pharma Consulting LLC	(2020)	(858-945-7893
John Sch		(2019)		858-353-3943
		(2019)		
	Eli Lilly & Co	,		626-826-3561
	Woodruff, HP Inc.	(2020)		949-735-9021
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	nsma, HP Inc.	(2020)		858-655-8322
James O'E		(2020)		858-336-0654
Bill Szabo		(2019)		858-550-0306
	ischman, CSUSM	(2021)		858-414-3323
	n, Southwestern College	(2019)		510-823-8637
	& SPECIAL COMMITTEES			
	nation Committee			
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	De, Plex Pharmaceuticals, Inc.			858-337-4961
	Grubisha, Halozyme Therapeutics			858-254-5497
Ken Pogo				760-635-2573
	alois (Newsletter Editor)			619-692-0638
	allace, Samumed, LLC			858-638-1866
	Scientist Awards Nomination Committee			
	R. Beattie (Chair)			858-587-1210
	Owyer USD			619-260-4030
Barbara :				858-729-0689
	allace, Samumed, LLC			858-204-5412
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