

**AChemS**

Association for Chemoreception Sciences

**ANNUAL**

*Newsletter*

2024

FOSTERING CHEMICAL SENSES RESEARCH AND UNDERSTANDING SMELL AND TASTE IN HEALTH AND DISEASE

## MESSAGE FROM THE PRESIDENT



Paul Breslin, PhD  
President, AChemS

Dear AChemS Members:  
AChemS is having a great year and we have reached some major milestones for our society that I am excited to tell you about. We all eagerly look forward to our upcoming Annual AChemS Conference at the Hyatt Bonita Springs, FL April 17 to 20. Program Chairs Emily Liman and Bob Datta have put together a great program and I look forward to seeing you there. We will be at this location for

one more year (2025) and then will move to the TradeWinds in St. Petersburg, FL on St. Pete's Beach for 2026 & 2027.

Our Mentoring and Networking Committee chaired by Arianna Maffei have been offering AChemS programming throughout the year with remote speakers. This is part of our initiative to support our Society and to build community throughout the year, including ongoing efforts to support regular matrix mentoring meetings. To this end, we have aspirations of supporting summer rotations in labs for junior faculty and trainees; fund raising for this objective is ongoing.

We have also updated and revised our Mission, Vision, and Values statements to be both more descriptive of what we are and do, as well as to be more aspirational and forward thinking. You can find these new statements here: <https://achems.org/web/about-mission.php> Many thanks to Rachel Herz and the Strategic Planning Committee for undertaking this rewrite.

We had our first ever 'Hill Day' in which several AChemS members went to Washington DC to visit the offices of congressional representatives to teach them about the significance of smell and taste research to health and disease and to the economy, especially among primary sectors such as food, agriculture, fishing, and secondary sectors like flavor, fragrance, and beverage manufacturing. Many thanks to Susan Travers, Tyler Lorig, the Federal Liaisons Committee and all who participated. It was a great success and will occur

each year going forward. If you are interested in joining the trip, please see the Hill Day poster at our annual meeting and contact Susan Travers or Danielle Reed.

We have also been working to grow our relationships with several sibling societies including the European Chemoreception Research Organization (ECRO), the Society for the Study of Ingestive Behavior (SSIB), the International Society for Chemical Ecology (ISCE), the International Society for Neuroethology (ISN), to name a few. Ann-Marie Torregrossa and Rachel Herz have been leading these efforts with the Committee on Cross-Society Collaboration – a joint effort of the Membership Committee and the Strategic Planning Committee. Future efforts could include joint symposia in each other's annual meetings and joint conferences. If you have thoughts on how to mutually benefit sibling societies please contact Ann-Marie or Rachel.

We recently voted and passed an amendment to our by-laws to make the President's term two years instead of one. It has been very difficult for presidents to accomplish major goals, especially financial development goals, in a one year term. This change will allow more and larger objectives to be accomplished by the president.

The Corporate Liaisons Committee led by Linda Flammer and Kathryn Deibler has been successful in helping to bring in new industry partners Sensonics, Cargill, Ajinomoto, Kerry, W2O Food Innovation, Coca-Cola with whom we look forward to working on symposia and societal programming. We are also currently looking for partners to support our awards and keynote addresses in the future.

We are actively engaged in a plan to become more fiscally forward-looking. We wish to develop funds to enable the envisioned programs for training and travel that we desire. To this end, much credit is due to Julian Meeks our treasurer who has been balancing our books and planning for our future and fiscal growth. We are structuring new dues to meet the societies expenses and needs.

## PRESIDENT'S MESSAGE (continued)

We are also aiming to have the resources so that in 12 years that we can merge the AChemS annual meeting with the International Symposium on Olfaction and Taste (ISOT) when ECRO hosts. Every four years ISOT meets, rotating among ECRO, JASTS, and AChemS in a 12 year cycle. Presently, we must hold an AChemS annual meeting every year to keep us viable. This is why we are meeting the same year (2024) that ECRO hosts ISOT (only two months later). To help us achieve this and myriad other long-range goals, we have brought on a development consultant, Robert Balthasar, who has graciously been helping us create a fiscal development plan. The Executive Committee has also decided to hold a members' vote to amend our By-Laws to include a new Long Range Fiscal Planning Committee. This vote will be put before the membership for vote shortly, stay tuned. The Grants Committee led by Diego Restrepo will also by resubmitting our NIH R13 renewal which supports guest speakers and diversity fellowships. We also have plans to submit an NIH R25 proposal for AChemS to further support our society, its programs, the annual Meeting and diversity equity, inclusion and belonging. Our diversity planning and activities continue to grow within the society thanks to the efforts of Paule Joseph who leads the Diversity Committee. We continue to enhance the program, and bring in Diversity Fellows and Distinguished Speakers.

I also want to remember some of our beloved society members who have passed away in the previous year. This list includes: Harriet Baker, Lawrence Cohen, Bill Cain, and Steve Van Toller. They will be remembered on the AChemS home web page and at the In Memoriam poster at the annual meeting. Their presence and spirit within our community will be missed.

In closing, the Chemical Senses continue to be an amazing frontier of biology and biomedicine encompassing cutting edge discoveries in neuroscience, neurodegenerative disease, immunobiology, regenerative medicine, developmental biology, metabolic health, social communication, and behavioral science & psychology. I could not be more excited for our field and I anticipate great new discoveries in all of these areas.

Sincerely,



Paul A.S. Breslin, Ph.D.  
President AChemS

## TREASURER'S REPORT

Julian Meeks, PhD

There is no way around starting this update without stating the facts: AChemS' financial position has taken significant hits in 2 consecutive years, and we are facing a 3rd straight "down year" financially, since the 2024 AChemS Annual Meeting in April partially competes with ISOT 2024 in June.

### In numbers (report date 3/1/2023 – 2/29/2024):

Annual Meeting Income:	\$206,250	(-\$86,266 compared to '22-23)
General Income:	\$98,784	
Grant Income:	\$40,000	
<b>TOTAL INCOME:</b>	<b>\$345,034</b>	(-\$73,042 compared to '22-23)

Administrative Expenses:	\$128,106	
Chemical Senses Journal:	\$15,718	
Annual Mtg Expenses & Awards:	\$357,356	
<b>TOTAL EXPENSES:</b>	<b>\$501,180</b>	(+\$9,872 compared to '22-23)

<b>NET OPERATING REVENUE:</b>	<b>-\$156,146</b>	(-\$82,914 compared to '22-23)
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Investments/Other Income:	\$38,174	(+\$56,538 compared to '22-23)
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<b>NET REVENUE:</b>	<b>-\$117,972</b>	(-\$26,376 compared to '22-23)
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Cash Reserves:	\$151,967	
Investment account:	\$194,828	
<b>TOTAL ASSETS:</b>	<b>\$346,795</b>	

## TREASURER'S REPORT (continued)

These are sobering numbers, and they require a strong response. That response, as Dr. Breslin mentions in his remarks, includes both immediate steps and longer-term restructuring of AChemS' overall financial model.

Briefly, the financial model for many years had been to use revenue surpluses from Annual Meetings to pay for non-meeting expenses (management company fees, Chemical Senses Journal, webinars, outreach, etc.). Annual Meeting revenue was supplemented by grants, corporate sponsorships, philanthropic gifts, and investment income. These revenue sources were important, but effectively served as "bonus" revenue, and fluctuated a lot year-to-year. Starting in 2022, all our expenses substantially increased, but our revenue did not keep pace. The financial turmoil from 2020-2022 decreased much of AChemS "bonus" revenue, resulting in budget deficits that exceeded predictions (see the graphs following this message for more details).

On paper, the solution to the financial situation is simple: we need to secure more revenue. Answering "how?" to secure more revenue is where the work is being done.

Here is what we on the Finance Committee and Executive Committee have done so far:

- Increased Annual Meeting revenue, and decreased Annual Meeting expenses:
  - o updated fee structure (Dues, Registration) for the first time in 8+ years
  - o made the Welcome Banquet a ticketed event
  - o eliminated printed meeting programs
- Expanded grant applications (NIH R13, CZI)
- Increased communication with industry partners/sponsors
- Worked with a consultant to start growing our base of philanthropic support

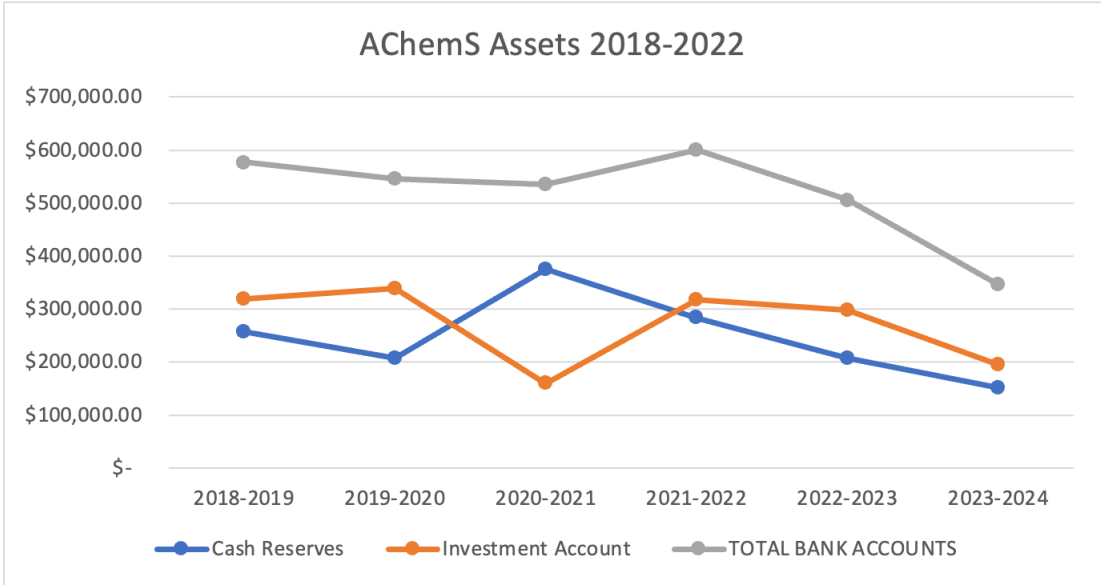
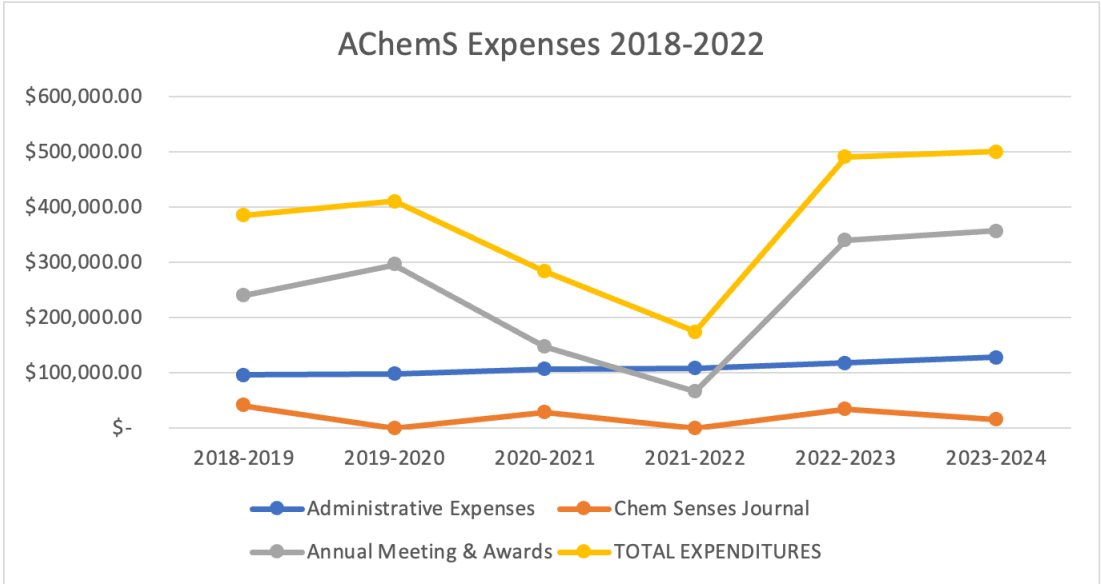
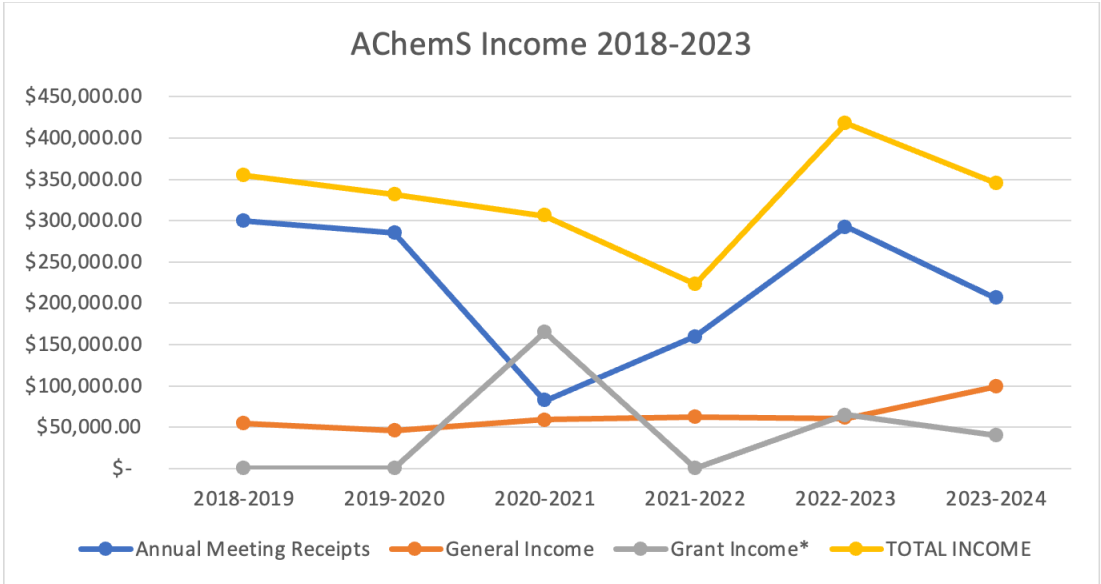
We know the changes to the fee structure affect everyone, and we want to keep the costs of attending AChemS as low as is financially responsible. To make sure that AChemS fee increases were reasonable, we compared AChemS 2023 Membership Dues and Meeting Registration costs to other academic research societies. We found that AChemS' fees were systematically lower than other societies. We estimated the financial gap created by our outdated fee structure, and it was striking: replacing our prior fee structure with the average of the comparison group would have netted more than \$60,000 in additional revenue if they had been in place for 2023 meeting. We proposed, and the Executive Committee approved, the current fee structure for the 2024 meeting. Going forward, we expect to adjust fees on a yearly basis to ensure that the fees are consistent with a balanced budget.

These immediate steps do not represent an attempt to perpetuate the existing financial model. We cannot and should not lean more heavily on our membership for revenue. AChemS needs grants, corporate sponsorships, philanthropic gifts, and investment income to provide a larger, and more reliable, share of our financial needs.

Fortunately, early work on each of these fronts is already bearing fruit! However, completing the financial overhaul is going to require time, energy, and patience. It will come with new challenges (for example, as we move to different conference venues) and people to help overcome them. As always, this work is being done by regular members who volunteer their time and talent to AChemS. If you are interested and able to join these efforts, don't hesitate to reach out! If you happen to have any feedback or questions on any of the efforts we are making, please don't hesitate to contact me.

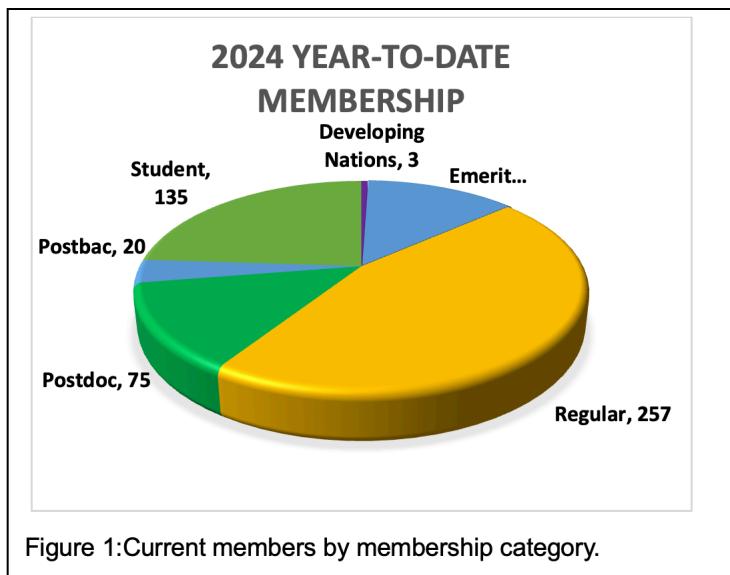
All the best,  
Julian Meeks, Treasurer  
Julian\_Meeks@urmc.rochester.edu

TREASURER’S REPORT (continued)



# MEMBERSHIP REPORT

Ann-Marie Torregrossa, PhD



As of March 4 2024, AChemS has 563 members including: 257 Regular members, 135 Student members, 75 Post-doctoral members, 20 Post-baccalaureate and 73 Emeritus members.

Our membership has remained elevated from the dip in 2020 and 2021 but as of the writing of this report our numbers appear lower than last year's numbers. There may not be cause for concern. We expect an increase concurrent with 2024 early bird meeting registration deadline. However, the timing of ISOT may leave us with a delay in membership until ISOT's registration deadline this year.

Last year, the Executive Committee voted to modify membership costs to scholars from developing nations and we are happy to have three scholars in

this category this year. We are hoping that number will continue to grow. This year membership collaborated with the Strategic Planning Committee to develop ways to interact with other societies with similar interests. These interactions may serve to expose other groups to AChemS and increase our membership. The Executive Committee has formed the Committee on Cross-Society Collaborations to develop these interactions, both the Membership Chair and the Chair of Strategic Planning will serve as members of this committee. Lastly, I will renew my pleas from last year that the membership fill in our optional fields for gender and race. Our data on the gender and race distribution are sorely lacking. I would encourage our members to report their data in these fields so that we can get a good sense of our trajectory.

Year	Emeritus	Regular	Post Doc*	Student	Post Bac *	Developing Nations*	Total membership
2014	19	519	N/A	163	N/A	N/A	701
2015	23	514	N/A	150	N/A	N/A	687
2016	27	462	N/A	168	N/A	N/A	657
2017	44	417	41	144	N/A	N/A	646
2018	47	363	52	124	N/A	N/A	586
2019	56	326	63	132	N/A	N/A	577
2020	53	297	61	120	N/A	N/A	531
2021	56	291	51	100	3	N/A	501
2022	60	315	74	179	8	N/A	636
2023	63	309	72	156	13	N/A	613
2024	73	257	75	135	20	3	563



# SECRETARY'S REPORT

Christina Zelano, PhD

AChemS has several mechanisms in place to provide communication with members, prospective members, and the general public. These are summarized below.

## The AChemS Newsletter

The newsletter is published annually and includes a summary of the society's annual activities.

An archive of previous newsletters can be found here: <https://achems.org/web/resources-newsletter.php>

## AChemS Webpage

We have made efforts to improve the AChemS website based on elicited feedback from the Executive Committee.

Improvements included the addition of a search bar on the main page and improved organization of the presentation of information. The AChemS webpage is updated regularly with news items and announcements, and it has received nearly 120,000 views in the past year. Website traffic is greatest around the dates of the annual meeting, with additional traffic in the time leading up to the meeting. AChemS members are encouraged to contact [info@achems.org](mailto:info@achems.org) with any updates or potential postings, including training and job opportunities. AChemS members are also encouraged to contact [info@achems.org](mailto:info@achems.org) with any feedback on website usability.

## AChemS Monthly Highlights

The Monthly Highlights newsletters are distributed to AChemS members through email, and include highlights of recent events, upcoming events, society deadlines, reports of fellow AChemS members featured in the news, and other important and timely information. AChemS members are strongly encouraged to use the Monthly Highlights email to help bring attention to recent news stories about themselves and their work. News stories in which a member or a member's work is featured or even just mentioned are appropriate for inclusion in the Monthly Highlights. If you have recent news coverage that you would like featured in the Monthly Highlights, please send a message to [info@achems.org](mailto:info@achems.org) for consideration to be included in the next Monthly Highlights.

## AChemS Wikipedia Page

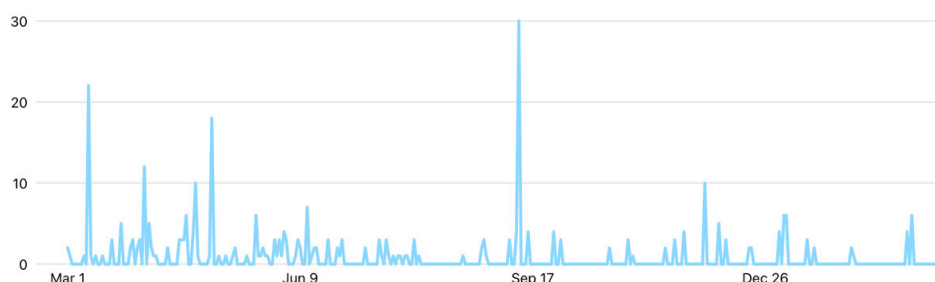
The AChemS Wikipedia page mainly targets non-AChemS members. This page serves as a one-stop content source wherein the public can learn about our Society. Basic content, including the origins of AChemS and some major events, are listed to orient visitors to the mission and history of AChemS. This page is important for our society to maintain. If you have any new or noteworthy items that you think should be included on the Wikipedia page, send an email to [info@achems.org](mailto:info@achems.org).

## AChemS Social Media Presence

The AChemS presence on X (formerly Twitter) (@AchemsInfo) is maintained through the efforts of SPLtrak with some additional content contributed from the AChemS Social Media Committee, co-chaired by Matt Smear, and including members Putu Agus Khorisantono, Marga Veldhuizen, Jake Saunders, Claire Martin and Snigdha Mukerjee. A list of members and their terms can be found here <https://achems.org/web/about-committees.php>. All members have agreed to the AChemS social media policy. AChemS uses X to communicate important information to both members and the general public. For members, AChemS posts information relevant to the annual meeting, chemosensory event announcements, announcements about funding opportunities, alerts to new issues of Chemical Senses), and other pertinent information. For the general public, AChemS posts information of interest on smell and taste, such as Members in the News items. The @AchemsInfo X presence is further heightened by our AChemS members who thoughtfully mention it and retweet. @AchemsInfo has 1,706 followers as of March 2024. The AChemS LinkedIn account acquired more than 100 new followers over the last year, currently totaling 199. LinkedIn provides AChemS members opportunities for networking with entities not officially on X or Facebook, including direct ways to engage with potential industry partners or employers. The AChemS presence on Facebook is maintained by SPLtrak. Updates to the Facebook page typically co-occur with the webpage and X.

Facebook visits ⓘ

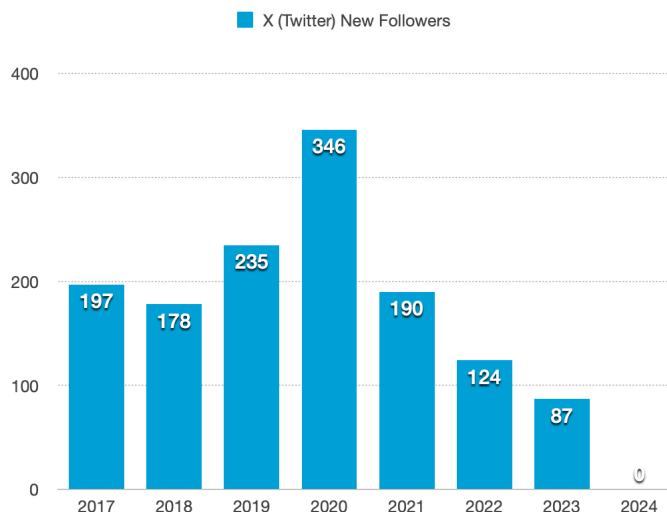
324 ↑ 110.4%



## SECRETARY'S REPORT (continued)

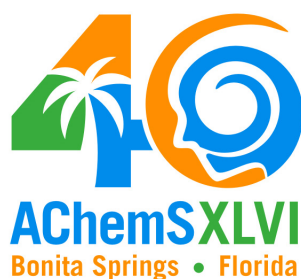
The AChemS social media committee recently created a Blue Sky account. Blue Sky, also known as Blue Sky Social, is a new microblogging social platform that has increased in popularity since Twitter transitioned to X. For the general public, AChemS posts information of interest on smell and taste, such as Members in the News items. The @ACheMSInfo Twitter presence is further heightened by our AChemS members who thoughtfully mention it and retweet. @ACheMSInfo has 1,618 followers as of March 2023. Issues of concern regarding this social media account include recent reports of increasing instability of the Twitter platform, along with rapidly changing policies on platform safety and content moderation, account verification, advertising, and fee structures. New follower numbers for our Twitter account (see right) have declined coincident with new Twitter ownership and the issues noted above. This likely reflects changing dynamics of public use of the platform and may indicate a declining utility of Twitter for the Society. AChemS should remain particularly alert to these changes—

especially the widely reported increase in and tolerance for hate speech on the platform—and how they may reflect on or affect the Society's participation. Input of these issues is welcome and encouraged, and should be directed to [info@achems.org](mailto:info@achems.org).



## PROGRAM COMMITTEE REPORT

Emily Liman, PhD and Bob Datta, PhD Co-Chairs



We are looking forward to the 46th ACHEMS meeting and we hope you are too! We have put together what we think will be an exciting and balanced program of symposia, workshops and networking opportunities, with plenty of time to enjoy the Florida sun and the lazy river. We will kick off the meeting with the awards ceremony followed by a Keynote talk by Daniel Kronauer from Rockefeller University on “Pheromone communication in ants.” This will be followed by the welcome banquet, a great opportunity for the whole community to come together.

Ten symposia will be held over the next three days, with the free time scheduled on Friday afternoon. The symposia cover the range of interests of our membership, from structures of chemosensory receptors, to coding in the olfactory and gustatory cortex, and human disease. Each symposium will feature four regular invited talks, as well as a presentation from a trainee, giving our junior most investigators an opportunity to showcase their work. Posters will be up all day and unscheduled time will be set aside on mornings (8-10) and evenings (9-11) just for poster viewing, often a highlight of the meeting. Members of NIDCD will present a workshop on grant funding and participants can learn about publishing in the society journal, *Chemical Senses*, from its editors. And for those who like to engage in a healthy debate, we bring together the leading experts to talk about the role of artificial intelligence in olfaction and whether it will achieve the holy grail of predicting a molecule's smell from its structure.

Thursday and Friday evenings will be devoted to presentations by our awards winners. As in past years, we will celebrate diversity with a special lecture, given this year On Saturday afternoon by M. Yanina Pepino from University of Illinois at Urbana-Champaign on “Building your scientific clan by nurturing diversity and mentorship – sharing insights from my journey.” This will be followed, after dinner, by an exciting Presidential symposium on regenerative medicine in the chemosensory system and audition. And we will end the meeting, as always, with a dance party!

And if you are able to come early, new this year, there will be a pre-meeting symposium open to all, featuring collaborative work on olfactory coding by teams of chemosensory scientists. The symposium will feature scientists participating in the Osmonauts and Odor2Action consortiums, and will include talks on everything from neural representations for natural odor statistics to behavior. We look forward to catching up with everyone at what promises to be an exciting and productive meeting!

# POSTDOC AND GRADUATE STUDENT REPRESENTATIVE REPORT

Rosario B. Jaime-Lara, PhD, Claire De March, PhD and Cecilia Bouaichi

We are excited to share the accomplishments of the AChemS Postdoc and Undergraduate Representatives over the past year. Our aim has been to formulate opportunities for engaging graduate students and postdoctoral researchers within our community and foster a vibrant network of young professionals passionate about the chemical senses.

One of our achievements of this past year was a novel initiative for the AChemS Conference 2023. Our goal was to provide graduate students and postdoctoral researchers a dedicated space for interaction, networking, and camaraderie. We introduced a new concept aimed at facilitating meaningful connections within the chemosensory community. This initiative was designed to create an environment where young investigators could engage informally and comfortably with like-minded peers. To accomplish this, we scheduled three opportunities throughout the conference to connect with fellow postdocs and graduate students during breaking times. There were two Student and Postdoctoral Member Tables that were designated at the Welcome Banquet, allowing for a safe and stress free space to discuss with peers. Another Student and Postdoctoral Member Table was assigned during the Welcome Breakfast with another chance to connect, especially for those who might not have arrived in time for the Welcome Banquet. Finally, we instilled a brand new Networking Ice-breaker Activity that took place during the first Coffee Break. Here, individuals participated in an ice-breaker activity designed to facilitate introductions and foster connections. This icebreaker will also take place in the next AChemS Conference 2024.

These opportunities hopefully achieved our intention of creating a welcoming space for students and postdoctoral members who may be seeking to expand their networks or establish connections. Upon hearing feedback from a select few, it seems as though these initiatives were not well-advertised. Many graduate students and postdoctoral researchers were unaware of the designated tables and the ice-breaker activity. For this upcoming conference, we hope to spread the word of these opportunities so more young researchers can take advantage of this potential for networking and collaboration.

The AChemS Postdoc and Undergraduate Representatives believe that by fostering a supportive and inclusive environment, we can strengthen the bonds within the chemical senses community and empower the next generation of researchers by creating an early researcher network. We look forward to seeing you at this year's conference and optimizing these initiatives for a more inclusive environment.

Lastly, we wish that our initiatives are shared with the next students and postdoctoral representatives to ensure the "memory" of this section of the AChemS board as there is no overlap between representatives. To assure a smooth transfer of knowledge and responsibilities, we believe that setting up a formal meeting between past and future representatives is necessary.

## COUNCILORS REPORT

Ricardo Araneda, PhD and Sanne Boesveldt, PhD

In June 2023, the AChemS councilors, in collaboration with the Smell and Taste Association of North America (STANA), held a virtual outreach event. The event aimed to foster connections and mutual understanding between individuals affected by taste and smell disorders, their advocates, and researchers. The event consisted of panel of experts of both patients and researchers that generously shared their experiences and expertise with an audience of about 50 attendees. The patient panel included Katie Boateng, an individual with acquired anosmia and President of STANA, Dia Kline, an individual with congenital anosmia, and Fifth Sense Ambassador, and Julie Carty, a person who struggles with parosmia, and founder of GetSMELP. The panel of researchers included, Professor Thomas Hummel from the Smell and Taste Clinic of the Technical University of Dresden, Dr. Joshua Levy, the Clinical Director of the National Institute on Deafness and Communication Disorders and Chief of the Sinonasal and Olfaction Program, and Dr. Eric Holbrook, the Director of the Division of Rhinology at Massachusetts Eye and Ear. Drs. Monica Dus and Ricardo Araneda, the AChemS councilors, and Katie Boateng from STANA facilitated the dialogue. Pre-and post-event surveys were conducted which allowed the gathering of insight into the event's effectiveness and attendees' perceptions. In all, this event underscored the importance and need for collaboration as well as continued dialogue between patients and researchers to study and treat taste and smell disorders.



## Max Mozell Award



## IFF Award



## Polak Young Investigator Award



## Diversity Travel Fellowship Award



**AChemS**

Association for Chemoreception Sciences

### 2023 AChemS Polak Young Investigator Award Recipients

Lindsey A Czarnecki  
Naz Dikecligil  
Priyanka Gupta  
Siddharth Jayakumar  
Joshua Raji  
Sushan Zhang

### 2023 AChemS Fellowships for Diversity Award Recipients

Elvis Freeman Acquah  
Tatiana Adkins  
Mamoon Ali  
Paola Alicea-Roman  
Nicholas Amado  
Gabrielle Audu  
Natasha Baas-Thomas  
Solomon Beckford  
Luis Ezequiel Boero  
Gemma Camara  
Zhen Chen  
Anamaria Cotelu  
Frances Friason  
Thomas Gray  
Jordan Gregory  
Evan Guerra  
Julien Habib  
Eyerusalem Haile  
Leah Hall  
Payton Harmon  
Brigit High  
Rosario Jaime-Lara  
Charlotte Klimovich  
Zoey Miller  
Mariel Molina Castro  
Kevin Monk  
Angel Munos  
Thomas Myers  
Marcela Navarrete  
Valentina Nisi  
Kamila Nixon  
Stephanie Okoye  
Joshua Raji  
Daniel Ramirez-Gordillo  
Andrea Rocha  
Yuryanni Rodriguez  
Oluwadamilola Shallie  
Aracely Simental-Ramos  
Sofia Stansbury  
Rodrigo Tomas  
Joseph Villanueva

## 2023 AWARD RECIPIENTS



**Don Tucker Memorial Award**  
Emily Hanselman  
Rutgers University



**Don Tucker Memorial Award**  
Natalie Johnson  
University of Florida



**ACChemS Undergraduate  
Research Award**  
Lena Terlau  
RWTH Aachen University



**ACChemS Undergraduate  
Research Honorable  
Mention**  
Milayna Kokoska  
University of Florida



**ACChemS Undergraduate  
Research Honorable  
Mention**  
Sarah Sywanycz  
Rutgers University



## 2023 AWARD RECIPIENTS



Alan Spector

### *Max Mozell Award Recipient*

**Research Focus:** I started the journey of my professional life when, as a junior at Penn State, I took a psychology course taught by a visiting Professor named James C. Smith. Jim was studying olfaction in pigeons, and he convinced me to come to FSU to be his graduate student.

While there, my research was more focused on taste aversion learning and meal pattern analysis in rats. I attended my first AChemS in 1980 (the second one) and it was Scott Herness and I who loaded the poster boards, handmade by Jim Smith, onto a rental truck and drove them to Sarasota and set them up in a conference room at the Hyatt – we did that for the next several years. During my graduate studies, I spent some long hours in the library (the internet was still a dream) where I became a big fan of the work of Harvey Grill at Penn. Harvey was working with a chronic decerebrate preparation in rats and had developed a procedure to quantify stereotypical oromotor and somatic responses to taste stimuli referred to as taste reactivity – an interpretively powerful procedure that my lab still employs today. Harvey offered me a postdoc and, while I was there, my work decidedly took on a more neural and physiological focus. But at the same time,

I was developing various prototypes of gustometers to allow us to add rigorous psychophysical procedures to our methodological toolbox. As a postdoc, I had the propitious opportunity to interact with Ralph Norgren (Harvey's former postdoctoral mentor) who was collaborating with Harvey and I on some studies involving the effects of PBN lesions on taste-related behavior. I also began studying the psychophysical and behavioral effects of gustatory nerve transections. I got my first Assistant Professor position at the University of Florida, which at the time had one of the world's leading groups in behavior analysis. Collectively, I playfully called them the children of Skinner; these scientists were some of the most rigorous and logically demanding when it came to the analysis of behavior. They had a tremendous influence on me. In 2007, I moved to FSU, where my graduate studies began almost 30 years earlier. My core research interest is, and always has been, trying to understand the functional organization of the gustatory system especially in relation to eating and drinking. The strategy that I adopted very early was to make theoretically meaningful manipulations of the gustatory system – be they anatomical, physiological, pharmacological, or genetic – and then assess the consequences by applying an array of psychophysical/behavioral procedures each focusing on a different aspect of taste function. It has, for the most part, been a very satisfying journey and I am grateful to all those who helped me along the way.

**Acknowledgements:** Nothing I have done in science was done alone. We all know an academic scientist never rests, even on holidays, and so first and foremost, I am eternally grateful to my wife Mary Jo and my sons Aaron and Eliot for their tolerance and support. I would also like to thank my late parents who themselves never went to college but who worked hard to see that I did. I have to thank the holy trinity of my mentors – Jim Smith, Harvey Grill, and Ralph Norgren – who taught me how to walk scientifically. I had the privilege of directly mentoring some terrific graduate students over the years including Steven St. John, Stacy Markison, Laurie Geran, Stacy Kopka, Shawn Dotson, Connie Grobe, Yada Treesukosol, Kimberly Smith, Michele Bales, Kelley Hyde, Ginger Blonde, Liz Hamel, and Valentina Nisi and indirectly mentoring others. The postdocs and research faculty that have spent time in my lab including Camille King, Shachar Eylam, Enshe Jiang, Koji Hashimoto, Clare Mathes, Lindsey Schier, Chizuko Inui, Tadashi Inui, and Carolina Cawthon were central to its success, and I also relished my interactions with Ann-Marie Torregrossa. I have enjoyed my experiences with numerous undergraduate students passing through my lab and I benefitted greatly from the dedicated and skilled assistance of excellent lab techs, notably Mircea Garcea, over the decades. I have learned much from and have thoroughly enjoyed interacting with my many collaborators and colleagues over 40 years too numerous to mention here, but grateful nonetheless. Last but not least, I would like to express my sincere thanks for the steady support I have received from the National Institutes of Health that consistently nourished my research program.

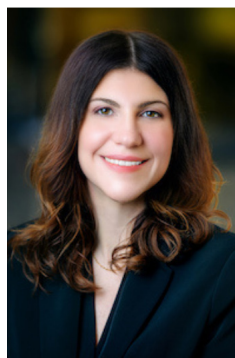


Richard Gerkin

### *IFF Award Recipient*

**Research Focus:** I am interested in developing theory and models that link the structure of the world “out there” with our internal olfactory experience. In this work I hope to answer questions about the dimensionality and geometry of olfactory perception and to discover primary odors and the rules by which they mix to form complex olfactory scenes. This work critically relies on the production of high-quality, high-volume data about what things smell like and how they relate to one another. I have been fortunate to work with many amazing chemosensory scientists who have shared such data with me, and I look forward to further increasing the scale of such efforts in the coming years to match the needs of cutting-edge machine-learning and AI frameworks. I would like to thank Arizona State University, the National Institutes of Health, Google Research, and Osmo for their support over the last decade, as well as every researcher and clinician with whom I have shared exciting and unexpected collaborations.

## 2023 AWARD RECIPIENTS (continued)



Monica Dus

### *Ajinomoto Award Recipient*

**Research Focus:** My research focuses on how dietary components interact with genes to shape taste function and feeding behavior. My long-term goal is to uncover the rules that regulate the relationship between food and the brain and to understand how they play a role in metabolic and neural diseases. Because the interactions between nutrients and neural physiology are so complex and far-reaching, my lab uses animal models like flies and rats and integrates the tools of neuroscience, molecular biology, and metabolism. Since 2015, my trainees and I have (1) developed models to study nutrient-gene pathways in the brain, (2) characterized how they regulate the anatomy and physiology of taste and reward circuits, and (3) defined how they impact nutrition and metabolic disease. My lab has been generously supported by the NIDDK (K99/R00, DP2, and R01), the NSF CAREER, and private foundations such as The Klingenstein-Simons, Rita Allen, Sloan, and the Brain and Behavior Research Foundation. Beyond studying nutrition and the senses, I enjoy being a college professor in the College of Literature, Sciences, and the Arts, where I teach Genetics and Neuroepigenetics to ~500 students every year. I am also passionate about communicating science and making it accessible to the public. I have

created opportunities for learning within communities of all ages by organizing and leading science workshops, museum exhibits, health fairs, and public lectures in formal and informal settings. I have contributed to documentaries and radio programs, hosted my own science podcasts, written for The Conversation, and published Sugarbuzz, a children's coming book about nutrition and the senses. I am so grateful to have found AChEMs. It is a wonderfully inclusive and welcoming environment, and I am thankful for all the opportunities, mentoring, and support I have received over the years from its amazing members. I look forward to giving back by actively participating in the society, supporting the next generation of chemosensory and nutrition scientists, and communicating the beauty and importance of the senses to the world.



Jonas Olofsson

### *AChEMs Young Investigator Award Recipient*

**Research Focus:** Our research focuses on the neural circuits and computations that support reward-based learning and decision-making, with a particular emphasis on the role of olfaction in appetitive behaviors. We measure brain activity using high-resolution functional magnetic resonance imaging and use pattern-based analysis and other computational approaches to extract information from distributed activity patterns. In addition, we use transcranial magnetic stimulation to test the causal contribution of brain areas and distributed networks to neural computations and behavioral functions. Over the past several years, we have shown how the orbitofrontal cortex represents specific expectations about chemosensory rewards (i.e., food odors), how these specific expectations are learned via sensory prediction errors in the dopaminergic midbrain, and how this information is used to guide adaptive decision-making and inference. Additional work in the lab has mapped the human olfactory tract using structural imaging and is exploring mechanisms that support the state-dependent modulation of olfactory perception and decision-making.

**Acknowledgements:** I would like to thank the AChEMs awards selection committee, Theresa White and Donald Wilson for their nominations, and Jay Gottfried, Maria Larsson, Steven Nordin, Mats Olsson, Christina Zelano, Thomas Hummel, Ilona Croy, Richard Stevenson and Claire Murphy for supporting their nominations. I thank the members of my research team - the Sensory Cognitive Interaction Laboratory - our collaborators, and colleagues at Stockholm University. My research is funded by grants from the Wallenberg Foundations, The Swedish Research Council and the Swedish e-Science Research Center.

# MENTORING/NETWORKING COMMITTEE REPORT

Arianna Maffei, PhD *Chair*

The Mentoring/Networking Committee is dedicated to connecting AChemS members throughout the year, to facilitate and promote scientific exchange, innovation, and support the growth of our society. For this purpose, the committee leads the organization of two year-long initiatives: the Career Networking Seminar Series and the Matrix Mentoring Program.

**Career Networking Seminar Series.** This initiative is generously sponsored by dms-Firmenich and is now in its fourth year. The Series pairs senior AChemS members with early-career members (graduate students, postdocs, junior faculty) who do not have a prior connection. These pairs are then tasked with identifying common scientific interests and delivering a joint session of talks that connects two different chemosensory research themes. These monthly meetings offer a valuable networking opportunity for the speakers and provide the entire AChemS community with an opportunity for scientific exchange. Non-members are also welcome to attend and learn more about AChemS and the ongoing research by its members. Over the past 12 seminars, over 70 people on average registered to attend. Career Networking Seminars remain available online (<https://achems.org/web/seminars-archive.php>) to facilitate access at convenient times and in different time zones. As AChemS members, you can view the full calendar of future events, access the recordings of past seminars, and apply to present here (<https://achems.org/web/seminars-calendar.php>).

If you are interested in being considered as a speaker for the Career Networking Seminar, you can submit your application here: <https://achems.org/web/seminars-applications.php>. The Committee will start working on the next calendar series soon.

**The Matrix Mentoring Program** provides another way for AChemS trainees to benefit from interactions with other trainees and investigators at every career level. The goal of the Mentoring Matrix Program is to bring together a diverse group of colleagues, from undergraduates to emeritus professors, and provide each other support and advice on topics such as science, career development, grant writing, life in academia and industry, and other topics that the group deems relevant to their scientific growth. Members who are interested in the Program are still on time to sign up, until April 1, 2024, by completing a quick survey (<https://fs10.formsite.com/spltrak/0csa95njic/index>). The Matrix Mentoring Program for 2024 will be launched at the Career Networking Social event during the AChemS Annual meeting. Please join us and meet your mentoring matrix in person. After the Annual AChemS meeting, the matrix will then meet virtually at least three other times between April 2024 and March 2025.

Nominations for the Career Networking Seminar Series and suggestions for improving our initiatives are very welcome. Please email [info@achems.org](mailto:info@achems.org) with the subject "Suggestions for Mentoring/Networking Committee" to get involved.

I would also like to put in the spotlight three upcoming events at the AChemS meeting. On Thursday April 18th in the afternoon, there will be two workshops and one ancillary talk about research support mechanisms from the NIH. These are important career development opportunities for trainees interested in continuing their academic career.

On Friday April 19th in the afternoon, Bob Datta organized an exciting workshop on the implications of the role of artificial intelligence in olfaction. This event will discuss important implications of the use of artificial intelligence in experimental and industry work and will provide food for thought for anybody interested in developing a career in the chemical senses. Finally, on Saturday April 20th in the afternoon, Yanina Pepino will deliver the Diversity, Equity, Inclusion and Belonging lecture, highlighting the importance of creating and maintaining a diverse and nurturing community for current and future generations of scientists.

On a personal note, I would like to thank Patrick Pfister at dms-Firmenich for their continued support for the Early Career Seminar Series. I am also indebted to the work of Kara Fulton, Jess Kanwal, Gemma Camara, Hojoon Lee, who stepped up to support the activities of the Networking and Mentoring Committee with me. I look forward to meeting everybody at the Annual Meeting!



## AWARDS COMMITTEE REPORT

Alfredo Fontanini, PhD *President-Elect and Committee Chair*

As Chair of the Awards Committee, I would like to thank the members of this year's committee for carefully evaluating the outstanding nominees and selecting phenomenal awardees.

The members of this year's committee are: Ricardo Araneda, Adam Dewan, Shawn Dotson, Paule Joseph, Juyun Lim, Hong-Xiang Liu, Alissa Nolden, Sunil Sukumaran, and Christina Zelano.

I would also like to thank all the AChemS members who nominated and wrote letters in support of a group of truly exceptional candidates. Among these candidates, the committee selected the following awardees:

- The Achems Young Investigator Award for Research in Olfaction or Nasal Chemosensation: **Claire de March, PhD, CNRS Paris Saclay University (France)**
- The Ajinomoto Award for Young Investigators in Gustation or Oral Chemosensation: **Lindsey Schier, PhD, University of Southern California (USA)**
- The Award for Research in the Psychophysics of Human Taste and Smell: **Janina Seubert, PhD, Karolinska Institute (Sweden)**
- The Max Mozell Award for Outstanding Achievement in the Chemical Senses: **Diego Restrepo, PhD, University of Colorado Anschutz Medical Campus (USA)**

The above four awardees will be recognized on Day 1 of our 2024 AChemS meeting during the AChemS Awards Ceremony (5:30-6:00 pm on Wednesday April 17th), and they will present their research during the Career Award Lectures at 7:00-9:00 pm on Thursday, April 18th.

During the Awards Ceremony on April 19, we will also honor the 2023 recipient of the AChemS Award for Undergraduate Research, Lena Terlau, and the recipients of the Don Tucker Memorial Award, Emily Hanselman and Natalie Johnson. These awards were selected for posters presented during AChemS 2023.

## CLINICAL RELATIONS COMMITTEE

Caroline Huart, Chair  
Alexander Fjaeldstad  
Bradley Goldstein  
Eric Holbrook  
Bob Pellegrino  
Christina Zelano

At this year's ACHEMS conference, we are excited to present a clinical symposium that shines a spotlight on the extensive influence of chemosensory pathway disruptions across various disease areas. This gathering will unite experts from the clinical and scientific communities to delve into the significance of various chemosensory structures, drawing upon clinical evidence.

The symposium will be chaired by Robert Pellegrino of the Monell Chemical Senses Center. Our opening presentation will be a collaborative effort by Linda Bartoshuk from the University of Florida and Derek Snyder from the University of Southern California, delving into the intricate relationship between taste and oral sensations. Following this, Thomas Hummel from TU Dresden will take the stage to discuss the effects of olfactory system lesions or damage to other neural structures on trigeminal function. Concluding the symposium, William Nobis of Vanderbilt University will illustrate how insights from epilepsy research are pivotal in enhancing our understanding of the clinical importance of olfactory structures.

Through this symposium, we aim to foster a deeper understanding of how alterations in chemosensory pathways not only affect these systems directly but also have far-reaching implications for other disease domains. Join us for a comprehensive exploration of this critical area of clinical research.

## HISTORY COMMITTEE REPORT

Claire Murphy, Chair; Gary Beauchamp; Jessica Brann; Susan Travers; Don Wilson

Journal Club Meeting, Thursday 3:30 pm in the Great Egret Room

The history committee has been at work organizing the program for this year's Journal Club. We will highlight the classic work of Anthony Sclafani in uncovering key principles of a phenomenon that he coined "appetition". In contrast to satiation, where post-ingestive signals suppress gustatory pleasantness (that third piece of cake doesn't taste nearly as good!), appetition refers to the processes that promote ingestive behaviors. Tony's work emphasized a paradigm-shifting concept- that there are also post-ingestive reward signals. This has a number of important implications-- not only do such signals amplify the innate positive hedonic value of tastes but they can also differentially condition liking. The interaction between taste and post-ingestive reward signals has major implications for driving eating behavior and food choice. During the Journal Club meeting, we will also discuss recent work by other groups who have begun to uncover a peripheral and central mechanistic basis for these phenomena. Please join us Thursday afternoon at 3:30!

In Memoriam.

A poster honoring the legacies of AChemS members Harriet Baker, William S. Cain, and Steven Van Toller who passed away this year will be in the lobby throughout the meeting.

## CHEMICAL SENSES REPORT

Chemical Senses, the official journal of AChemS and several other chemosensory societies, is in good health. The most recent Impact Factor (2022) is 4.2, a very strong number for a specialty journal in a relatively small field. Clearly, manuscripts published in the journal are being seen and cited not only by our peers, but also scientists in other fields. Submission numbers have remained steady across the last five years (with the exception of a brief spike in 2020 that coincided with the early days of COVID-19). Turnaround time for review continues to be a strength, with an average time to first decision of 24 days and an average time to final decision of 66 days.

The editorial and publishing team is continuing our work to further strengthen Chemical Senses and to better serve our chemosensory community. However, we depend on that community in all that we do. Please say yes when an editor reaches out to ask for your help in peer review of a submitted manuscript. Knowledgeable review from experts in our field helps set Chemical Senses apart from other journals where the editorial team may not have a keen appreciation of smell, taste, chemesthesis or internal chemoreception. You can also benefit from that expertise, along with a generally quick turnaround time, when you send your latest manuscript to Chemical Senses for consideration for publication. We would love to help you communicate your impactful science to a broad audience.

It is with a mixture of sadness and profound gratitude that we announce that longtime Executive Editor Dr. Susan Travers completed her final term in that position in December, 2023. Susan leaves this position with our many thanks for her immeasurable contributions to the journal. But it is not entirely sad news: as of January, 2024, we are lucky to have Dr. Patricia DiLorenzo join the team as our newest Executive Editor.

Please come Meet the Editors at the 2024 AChemS Annual Meeting to learn more about how Chemical Senses could be a great publishing option for your research or a timely review article. The Editorial Board will also hold an in-person meeting at the 2024 ISOT meeting in Reykjavik.

Sincerely,

Steven D. Munger, Ph.D.  
Editor-in-Chief  
Chemical Senses

## DIVERSITY, EQUITY, INCLUSION, AND BELONGING (DEIB)

Paule Joseph, PhD, CRNP, and Jeremy McIntyre, PhD, Co-Chairs

The Diversity Committee selected 11 Diversity Fellows for awards at this year's in-person AChemS meeting. Please greet, introduce yourself, and warmly welcome all returning and new members at this year's annual meeting. This year's cohort of Diversity Fellows are supported by the National Institute on Deafness and Other Communication Disorders, the directed giving of generous individual AChemS members, and the support of AChemS and the Executive Committee. If you represent a corporation or are an individual who is looking to help support Diversity Fellowships, please contact the Executive Office at [info@achems.org](mailto:info@achems.org) or go to this link: <https://achems.org/donate/> and select Diversity Fund.

We will also have our third in-person "Distinguished Speaker for DEIB" this year at AChemS on Saturday, April 20, from 3:30 to 5:00. I am delighted to announce that this year's speaker will be our own Dr. Yanina Pepino, who is an Associate Professor of Ingestive Behavior at the Department of Food Science and Human Nutrition, and the Division of Nutritional Sciences and a Health Innovator Professor in Carle Illinois College of Medicine at the University of Illinois at Urbana-Champaign. We decided to feature someone in our community who thrives in mentoring and supporting DEIB initiatives. Dr. Pepino will share insights from her journey as a Latix woman in STEM and how she leverages her experiences to support students from diverse backgrounds in STEM.

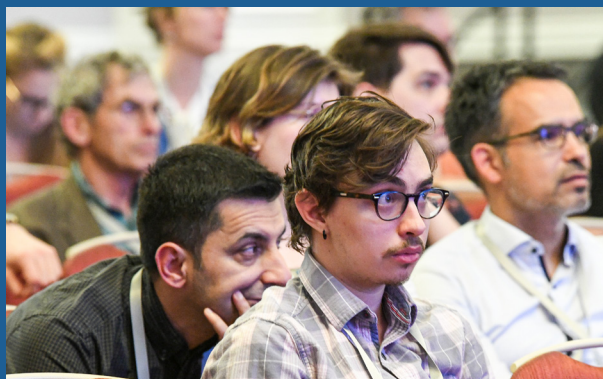


## 2023 Annual Meeting

Hyatt Regency - Bonita Springs, FL











## ***SAVE THE DATE***

***AChemS XLVII***  
***April 23-26, 2025***  
***Bonita Springs, Florida***

