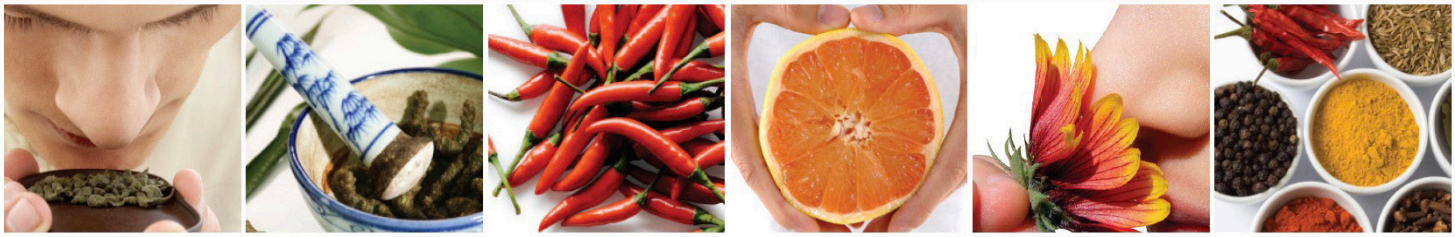


AChemS
Association for Chemoreception Sciences
ANNUAL Newsletter
2021 FOSTERING CHEMICAL SENSES RESEARCH AND UNDERSTANDING SMELL AND TASTE IN HEALTH AND DISEASE

MESSAGE FROM THE PRESIDENT

Linda Barlow, PhD
President, AChemS

It has been a tumultuous year. Since we last met at virtual ISOT in August 2020, the country has continued to suffer the enormous damage of the pandemic in loss of life, health, employment, and homes. Against this backdrop, we have also come to recognize the deeply entrenched systemic racism prevalent in American personal and professional life, with violence against our own seat of government and directed against people of color, including most recently Asian American citizens. As I said, it has been a tumultuous year.

How has our society fared and functioned through these tough times?

COVID-19 and the Chemical Senses

As you are aware, very soon after the pandemic was declared, reports of olfactory and taste loss associated with viral infection began to surface in the media. This prompted a rapid response from the chemical senses community to form the Global Consortium for Chemosensory Research - https://gcchemosensr.org/, which since has made enormous strides in understanding the prevalence and extent of chemosensory dysfunction amongst SARS-CoV-2-infected people. This effort has been led by Valentina Parma, Dani Reed, and many other AChemS members; the group now comprises close to 700 researchers from all over the world. In addition, to date, well over 1,000 published papers are listed on PubMed investigating the cellular, molecular, physiological and behavioral impacts of SARS-CoV-2 on olfaction and gustation. Thus, the pandemic has highlighted the importance of our chemical senses, allowing us to call attention to the need to better understand how to diagnose and treat chemosensory dysfunction in general. Steven Munger (AChemS President, 2016-2017) published an opinion piece in USA Today outlining the problems encountered by those suffering olfactory loss, and proposing policy changes to address these shortcomings in the USA.

Virtual ISOT 2020 was a resounding success.

We had long planned for an in-person ISOT meeting in Portland in June 2020, with Jay Gottfried constructing an exciting program to bring together chemical senses researchers from around the world. Due to the COVID-19 pandemic, that plan was blown up and forced the society, Jay and the Program Committee to pivot to an entirely virtual format which included the development of a COVID session. We were able to offer complementary registration, dramatically increasing access in the face of the upswell in interest in taste and smell in the context of COVID-19. As a result, the meeting was extremely well attended. Out of 1,737 participants, 1,110 were from the US. It was an invigorating and hopeful experience, demonstrating that we can continue to interact scientifically and develop new collaborations in our virtual world. We are especially grateful to those individuals who chose to support the meeting through their voluntary payment of registration.

AChemS 2021 will be virtual

Given the continued COVID19 pandemic, the AChemS Executive Committee was forced to make another tough decision in October 2020 to run AChemS 2021 as a solely virtual event. For a moderate fee, we were able to shift our contractual obligation to the Hyatt at Bonita Springs to 2025, extending our commitment to this venue through April 2025. With the format set, Max Fletcher, Program Chair, was able to plan the virtual annual meeting, building on what we learned from virtual ISOT. Many thanks to Max and the Program Committee for their work on the program; it can be viewed here.

Adoption of a new Strategic Plan

In April 2019, before the pandemic, the Executive Committee established an ad hoc Strategic Planning Committee to review the current state of the society and come up with a 5-year strategic plan. Many thanks to Steve Munger and his committee for their thoughtful work on this plan, which

PRESIDENT'S MESSAGE (continued)

was approved by the Executive Committee and is available to the membership for download on this page of the AChemS website. In particular, a large goal is to expand and improve diversity in the society in terms of membership and representation. Additionally, the Strategic Planning Committee made a number of suggestions as to how to add value to being a member of our society and the Chemical Senses research community more broadly. Simply put, AChemS can no longer exist simply to run an annual meeting. We need to become a more active society throughout the year, in order to build an inclusive chemical senses research community.

Value added – building community throughout the year
Discussion of the strategic plan proved to be timely, prompting the Networking/Mentoring Committee to launch a new monthly webinar series where talks by early stage investigators are paired with senior investigator talks. These sessions have been an excellent showcase for exciting research from diverse areas of the chemical senses. Thanks to Valentina Parma and the committee for getting this off the ground so efficiently, to SPLtrak for hosting these webinars so seamlessly, and to Firmenich for their support of this ongoing program.

The next initiative to be launched is a joint effort of the Networking/Mentoring and Diversity Committees to establish mentoring networks, where more senior AChemS members mentor junior members through topical and scientific mentoring sessions. At least for now, these quarterly meetings will be held virtually. The call for mentors will be released in the coming weeks, if not already. Given our virtual world, we expect this initiative to facilitate interactions and enhance diversity, as well as build community. As we return to an in-person meeting, we hope to combine these virtual mentoring efforts with personal interactions using a hybrid approach in the longer term. Thanks to Valentina and Paul Breslin and their innovative committee members who are working hard to make AChemS better.

Diversity, Equity and Inclusion (DEI)
From last summer's diversity session at virtual ISOT, it was clear that although we perceive ourselves to be a friendly welcoming group, newcomers often feel otherwise. In particular, people of color feel less than welcome. Feedback from the session included comments about the location of the meeting, which is not comfortable for many minorities participating in the meeting. Additionally, it was noted that few if any people of color have been speakers, or even session chairs at our annual meeting, nor do we have representation of minorities on our Executive Committee. Given all of these factors, it is not surprising that our Diversity Travel awardees often do not return after attending AChemS for the first time. This is a big problem and one we need to address.

The Diversity Committee has begun to work very closely with the Networking/Mentoring Committee to build DEI into the new mentoring program, as well as develop stand-alone initiatives and programs to improve representation at every level of our community. It is also imperative that these efforts be folded into the development of the scientific program for the meeting each year. Good communication amongst these 3 important committees – Program, Diversity, and Networking/Mentoring, will be essential going forward to improve diversity, which in turn, will raise the scientific caliber of our meeting.

Upcoming Business Meeting and Leadership Transition
The business meeting will be held virtually on April 22nd at 11:00am EDT, and at that time, I will step down and hand the virtual gavel to Nirupa Chaudhari, our incoming President. I know Nirupa will continue to build the society and pursue the goals we've set out this year. And I hope that the next Presidential transition in April 2022 will be an in-person affair.

It has been a long year. I realize that AChemS has an impressive history of hosting a successful annual meeting but now we need to step up and become a more active and inclusive society throughout the year. I feel our most important goal is to develop initiatives and programs to invite and encourage new and diverse chemosensory scientists to join our community. This will be a long but vital process, one that we all have likely begun at our home institutions, and in our personal lives. It involves a fair bit of introspection and recognition of what living in this country is and has been like for people of color. And then acting on that knowledge, and working hard to bring positive change.

As the pandemic wanes, and we reengage with each other, my hope is that our work to build community will continue throughout the year. We have learned that Zoom is a powerful tool that allows us to communicate easily and with little expense. It has facilitated new ways to interact and share our science, and going forward, will continue to connect us. However, virtual interaction cannot replace what we gain from in-person connections and conversations. I look forward to that future when we can all meet again.

TREASURER'S REPORT

Chris Lemon, PhD

AChemS financial status is stable after the prior year, with in excess of $530,000 in assets on February 28, 2021. Our income was down compared to previous years, contributed in part by decreased meeting receipts. However, our meeting expenses were significantly lower due to the virtual format of ISOT 2020. AChemS income was boosted by recent receipt of $165,000 in grant income. Overall, AChemS finances are in good standing. It has been an honor to serve as the Treasurer for the Association over the past three years.

Financials: July 2020 to February 2021:
Revenue from meeting receipts: $44,078
Dues & contributions: $39,071
Grant income: $165,000
Total revenue: $248,396

Administrative Expenses: $82,851
ISOT 2020 Expenses: $89,099
Total Expenses: $187,380

Total Assets on February 28, 2021: $535,033

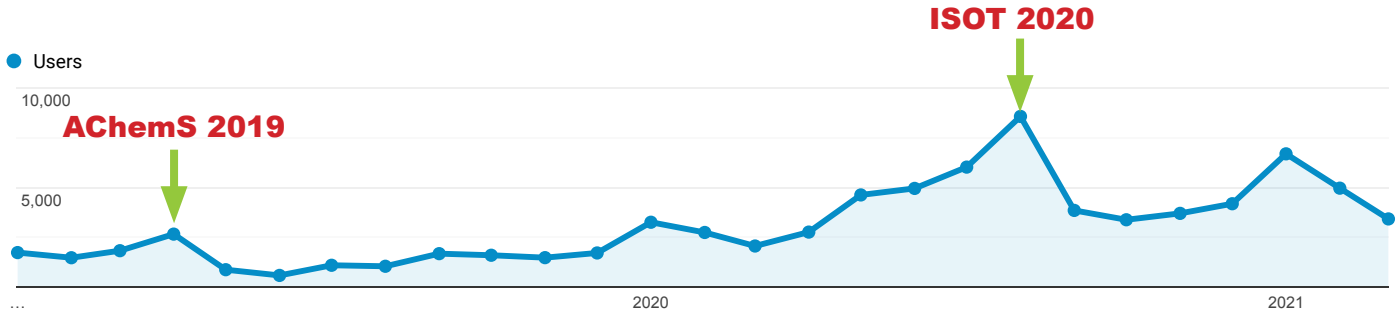
SECRETARY'S REPORT

Dan Wesson, PhD

AChemS has enhanced efforts to communicate with its members, prospective members, and with the general public through several mechanisms.

AChemS Monthly Highlights
The monthly Highlights newsletters are emailed to AChemS members with highlights of recent events, upcoming events and society deadlines, and opportunities to learn about fellow AChemS members featured in the news. The Monthly Highlights email is a great opportunity to help bring attention to recent news stories in which you or your research team are featured or even just mentioned. If you want to have any news featured in the Monthly Highlights please send a message to info@achems.org for consideration to be included in the next Monthly Highlights.

AChemS Webpage
The AChemS webpage has gained in the frequency of use over the past year. In just a little over a year, there have been nearly 650,000 page views. As represented in the timeline below, whereas in 2019 our monthly site users hovered around 1,600, since 2020 achems.org has experienced a stead increase in users. Some upticks in users can be noticed, which correspond to times of AChemS 2019, ISOT 2020 [wherein there was a major increase], and even at the start of 2021 which may be attributed to a variety of events ongoing at AChemS including calls for AChemS 2021 abstracts and registration.



Further, it is notable that visitors to achems.org, while largely from the United States, come from an array of countries with chemosensory scientists. As shown in the table below, over 45% of site visitors are from outside of the United States, with most arriving from Japan, India, China, and Germany. Together, the large number of page views and the global audience indicates that AChemS.org is an important outlet for our Societies' communications. The webpage is updated with news items and announcements regularly and AChemS members also encouraged to contact info@achems.org with any updates or postings, including training and job opportunities.

SECRETARY'S REPORT (continued)

	Country	Users	% Users
1.	United States	37,313	54.88%
2.	Japan	4,561	6.71%
3.	India	2,948	4.34%
4.	China	2,882	4.24%
5.	Germany	2,183	3.21%
6.	United Kingdom	1,660	2.44%
7.	Canada	1,493	2.20%
8.	France	1,374	2.02%
9.	South Korea	810	1.19%
10.	Italy	675	0.99%

AChemS Wikipedia Page

The AChemS Wikipedia page, which largely is targeting on-AChemS members, serves as a one-stop content source wherein the public may 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 our Society. This page is important for our society to maintain and as new noteworthy items arise which may be worthy for the page, please alert info@achems.org and we can help.

AChemS Social Media Presence

The AChemS presence on Twitter (@AchemsInfo) is maintained through the efforts of SPLtrak with content contribution from a committee that includes Hillary Cansler, Laura Martin, Lindsey Czarnecki, Maria Hatungil, Greg Pask, Andrew Moran, and Erika Calvo Ochoa, each of whom has agreed to the AChemS social media policy. We have communicated both internal (posting information relevant to the annual meeting, chemosensory event announcements, announcements about funding opportunities, alerts to new issues of Chemical Senses, and the obituaries of members), and external (general public information of interest on smell and taste, such as Members in the News items) messages regularly due to this system. The @AChemsInfo Twitter presence is further expanded by our AChemS members who generously mention it and retweet. The @AchemsInfo Twitter presence is quite notable, including for instance over 61,000 impressions in just the 80 days prior to drafting this newsletter (>750/day average).

The AChemS presence on Facebook is maintained by SPLtrak. Updates to the Facebook page typically co-occur on Facebook as they do on the webpage and on Twitter.

Press Releases

The Public Relations committee, headed by Martha Bajec, has been putting together a number of communications to connect with larger media outlets. We thank Martha for her hard work and continued service.

MEMBERSHIP REPORT

Jessica Brann, PhD

As of March 16, 2021, AChemS has 501 members, including 291 Regular members, 100 Students, 51 Postdocs, and 56 Emeriti. This number is a further reduction from the totals observed in 2020 (531 members) and 2019 (573 members). In 2020, the Coronavirus pandemic clearly impacted membership, as the in-person meeting was cancelled and the virtual ISOT meeting held in August 2020 was free. Given the early bird registration deadline for the upcoming virtual AChemS meeting is March 22nd, we likely can expect a modest increase in membership over the next month before the meeting. However, one point to consider is there is not a monetary incentive to become a regular member before registering. The registration fee for this year's virtual meeting is $200 for members and $300 for non-members (early bird pricing). Regular membership is $146. This results in a combined cost of $346 to maintain membership and register for the meeting. For other membership categories, there is a clear meeting registration cost savings benefit. Although we claim "Reduced registration fee for the annual meeting" as a benefit for regular members on our website, we may want to consider this perceived non-benefit for regular members in future pricing structures.

Last fall, I reported we were experiencing an apparent slow increase in the percentages of membership that are Student and Postdoc members compared to 2019 totals. However, these percentages have not continued to grow so far this year (2021). In an effort to recruit additional junior investigators, we created a new "Postbac" category to include those junior investigators who are not enrolled as either undergraduate or graduate students.

To additionally increase engagement with our existing members and to recruit new members we have initiated a series of actions. Some of these are duplicates from my last report; I repeat them to remind the committee of the efforts that span multiple years from multiple contributors.

1) We continue to directly email members their renewal date with monthly reminders thereafter (Kurt Illig began this approach during his term as Membership Chair).

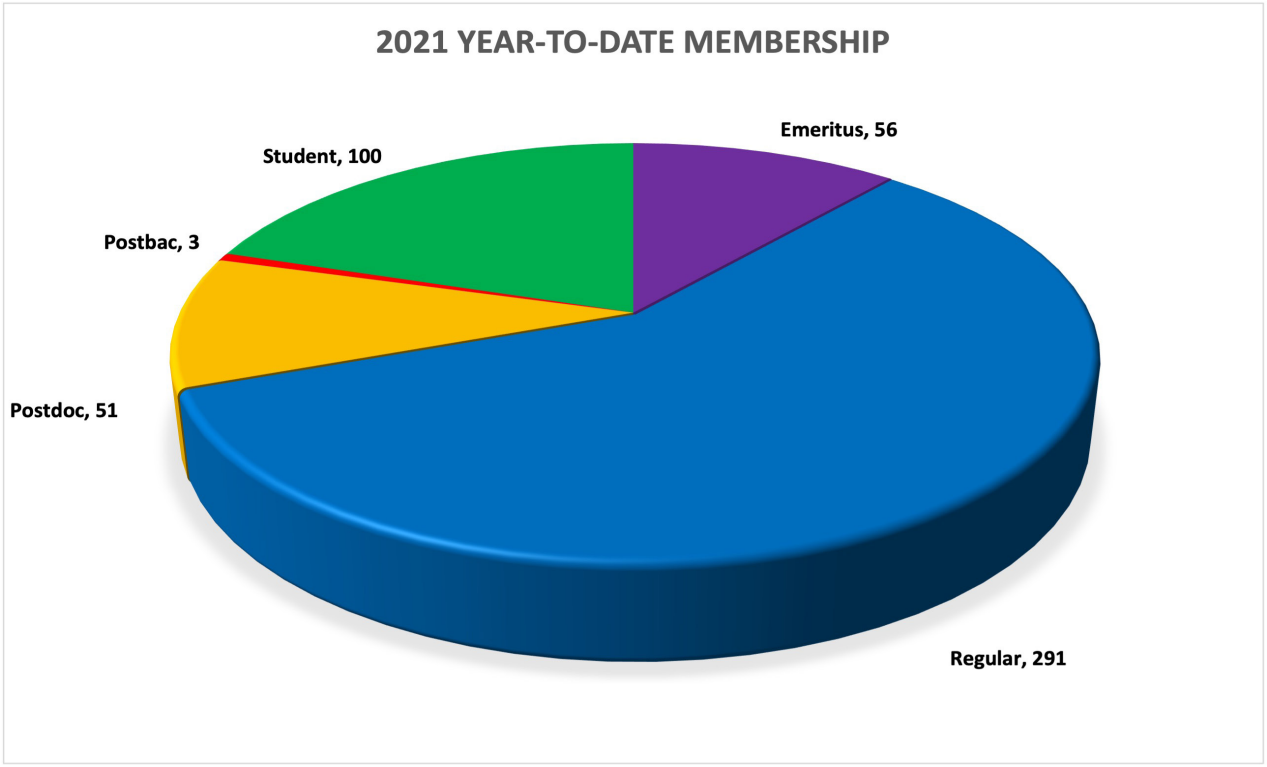
2) A Chemical Senses Social event at the Society for Neuroscience Meeting 2019 in Chicago, IL was held for the first time (began during Alfredo Fontanini's term as Membership Chair). While this Social was not directly linked or officially affiliated to AChemS (it is a SfN Social open to all the attendees), the application was prepared by a group of active AChemS members (Alfredo Fontanini, Leslie Kay, Minghong Ma, Steve Munger, Dan Wesson, Christina Zelano). Whether this can or will be repeated in 2021 (currently planned to be an in-person meeting in November 2021 in Chicago) should be a point of discussion amongst the membership.

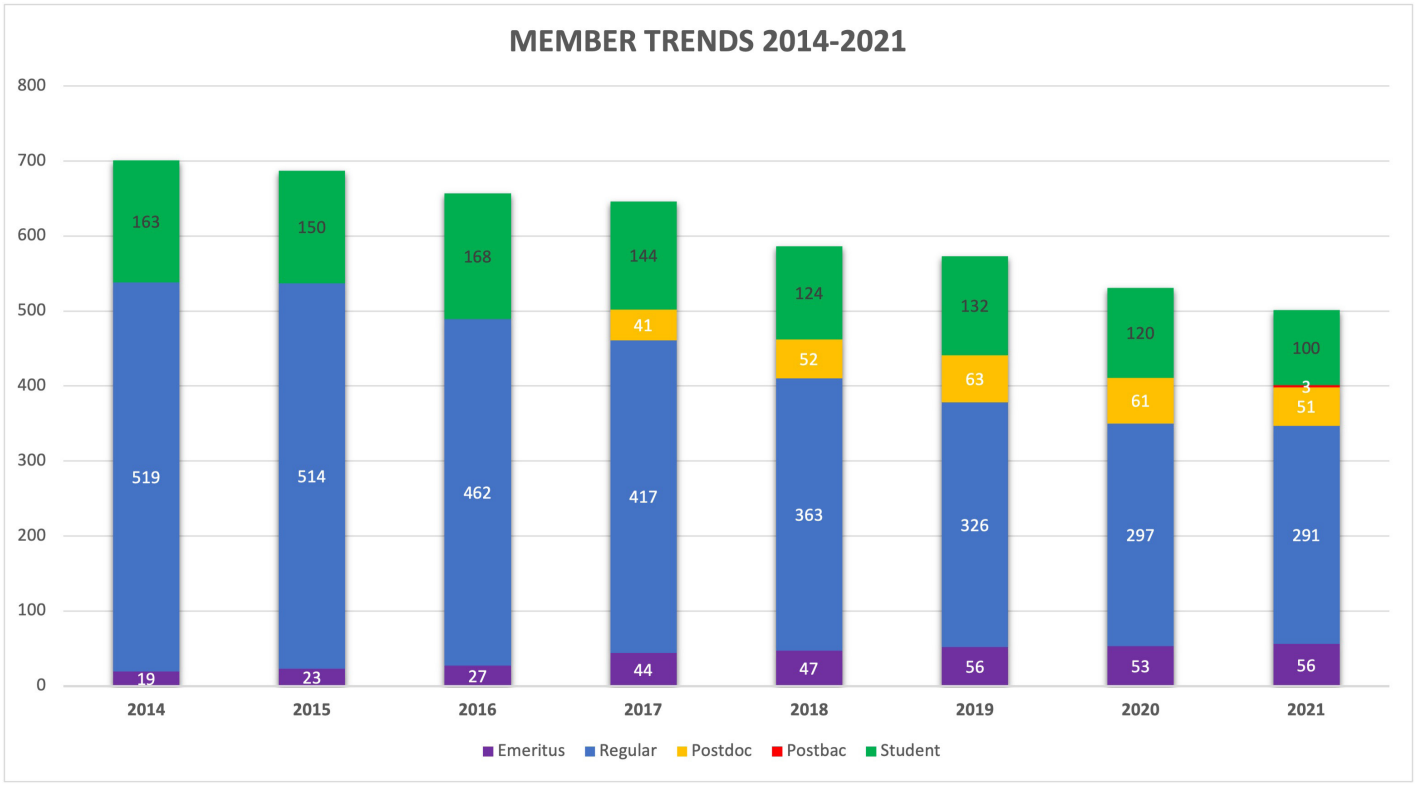
3) The Executive Committee opened the ISOT virtual meeting to all interested parties by reducing registration costs to $0. This allowed us to reach a much wider audience of chemosensory researchers, with a record attendance of 1737 registrants, 947 of which were first-time AChemS meeting attendees. In the future we can use this registration list to recruit new members and advertise upcoming meetings.

4) The Mentoring & Networking committee established a new "Early Career Investigator Seminar Series" in January 2021. At these events, through the kind support by Valentina Parma and the committee, we are also publicizing the benefits of AChemS membership. We do not currently have a mechanism in place to track return on this announcement, but are considering a mechanism by which to do so.

5) I would like to continue to develop plans for other virtual interaction opportunities to promote membership (e.g., career panels, grant-writing or publication workshops). This plan will clearly rely on the contributions, ideas and support of other Executive committee members and members of standing AChemS committees (e.g., Diversity, Mentoring & Networking, Social Media).

MEMBERSHIP REPORT (continued)





COUNCILOR'S REPORT

M. Yanina Pepino, PhD, S*enior Councilor* and Leslie Kay, PhD, *Junior Councilor*

We continued working on our online Education Corner and we are aiming to reach the global public. AChemS is pleased to announce that in addition to English and Spanish versions, the education Corner has been updated to include an Italian version, and two of the six demos have been translated to French and Japanese as well. You can visit the Education Corner in either language at this link: https://achems.org/web/resources-education.php. We are looking forward to post additional demonstrations on this site and need your help. Please contact one of the AChemS councilors for suggestions. We hope our website provides an entertaining and engaging way to increase awareness on the sense of smell and taste for participants of all ages. Help us spread the word among your friends, schools and general public!

Last year, our big plans for an outreach activity planned for ISOT 2020 at the Oregon Museum of Science and Industry (OMSI) were cancelled, like so many other plans, due to the COVID-19 pandemic. Nevertheless, the challenge brought some opportunities for growth. At ISOT2020, the outreach activity had two parts: a scientific symposium, showcasing new research on the study of smell and taste in COVID-19 and a community event, where we promoted experiences with smell and taste based on demos included on the AChemS Education Corner in five languages (English, Spanish, Japanese, French and Italian).

We were fortunate to have had an outstanding group of volunteers for the event. From the creation of the infographics used for the demos, to the translation and the deployment of the demos we had a great international team (Sachiko Koyama, Anna D'Errico, Charlotte Sinding, Rumi Ueha, Raul Alfaro, Christopher Aveline, Carla Mucignat, Jessica Nicanor, Huibo Li, Orietta Calcionni and Kenji Kondo).

After the successful experience with the virtual event during ISOT 2020, we are now planning on hosting an outreach event on zoom during one of the days planned for our virtual AChemS (April 19-23, 2021). Taking advantage of the virtual modality, we will be again offering tutoring of some of the demos described in our Education Corner in multiple breakout rooms with different languages. Let's connect with families across the globe to talk about some myths and facts about our senses of taste and smell.

2020 AWARD RECIPIENTS

Julie Mennella, PhD

Max Mozell Award Recipient

Research Focus: I continue to be intrigued by the simple question of why we like the things we like, and my quest for answers has always looked at our beginnings. After completing graduate studies on the biological basis of maternal and infant behaviors with Howard Moltz and Martha McClintock at The University of Chicago, my focus sharpened to studying the chemosensory component of this dyadic relationship in humans. The research program that began more than 30 years ago as a postdoctoral fellow of Gary Beauchamp—the second recipient of the Max Mozell Award—has led to the discoveries that there are sensitive periods in infant flavor learning and that first flavor experiences result from the transmission of volatiles from the mother's diet to amniotic fluid and breast milk, impacting her child's later preferences. Over the years, these findings have led to research ranging from the impact of alcohol and tobacco use on women's health to individual and age-related differences in chemosensory perception, including the taste of medicines. Together with a great group of colleagues, we aim to understand how people differ in how they perceive their flavor worlds — including how to measure it in children — which we hope will pave the way to dietary interventions and medicines tailored to fit individual variations, improving the health of both children and their mothers.

Acknowledgements:I am honored to have been recognized by my friends and colleagues at AChemS with this award and remain grateful for their support from the beginning of my career in the chemical senses. This research program began with Gary Beauchamp, whose mentorship changed how I see the scientific world and whose scientific insights continue to be inspiring. I have had the great honor of working with an incredible group of scientists and am grateful for the mentoring and friendships of Linda Bartoshuk, Beverly Cowart, Alan Spector, Karen Teff, Susan Knasko, Ana San Gabriel, Valerie Duffy, Jennifer Fisher and Jillian Trabulsi. I am also grateful for my pre- and postdoctoral fellows and research staff, who taught me more than I taught them — this research would not have taken the many different diverging paths without them, most notably M. Yanina Pepino, Catherine Forestell, Djin-Gie Liem, Ali Ventura, Nuala Bobowski, Paule Joseph, and current lab members Alissa Smethers, Sara Snell, and Jade Uffelman. And I am especially grateful to have the support of NIH, especially the NIDCD and NICHD, for these past 30 years. I dedicate this award to my family, particularly my father, with whom my passion for science began.

Ann-Marie Torregrossa, PhD

Ajinomoto Award Recipient

Research Focus: My work focuses on food choice and spans fields from behavioral ecology to neuroscience. The current focus of my lab is the role of salvia in taste and bitter food acceptance. Prior to reaching their receptor targets, chemical compounds must dissolve in saliva allowing the constituents of saliva the opportunity to interact with taste stimuli and their receptors at the most fundamental level. We now have compelling evidence that a select group of salivary proteins (SPs) increase acceptance of a bitter diet by altering bitter taste signaling. Our data suggest that the "profile" of an individual's SPs is altered by dietary exposure. Furthermore, a subset of these SPs increase diet acceptance via changes in taste-guided behaviors (i.e., increases in brief-access licking, increases in detection threshold and decreases in aversive oral motor responding). We have also recorded changes in taste signaling (as measured by chorda tympani nerve recordings) and behaviors driven by post oral feedback (e.g., meal size) in response to changes in SP profile. Together these findings have led us to hypothesize that SPs allow the animal to modulate their taste-driven responses to commonly consumed foods.

Acknowledgements: More people than I could possibly list here have supported this work (financially and emotionally). I would particularly like to acknowledge the contributions of Gerry Smith, Jim Smith, and Alan Spector, all of whom have been caring and thoughtful mentors and have encouraged me to think creatively about how to do science. I have learned along the way from many people including Greg Loney, Lisa Eckel, Rob Contreras, Denise Dearing, Diana Williams, Kathryn Medler and the faculty of the FSU CTP training grant. I am grateful to have the support of NIH and NSF. Lastly and most importantly, I could not have done any of this work without Michele Bales, Laura Martin, Kristen Kay, Kimberly James and Verenice Ascencio Gutierrez who worked endlessly in the lab and have helped challenge and mold the hypotheses we are examining.

2020 AWARD RECIPIENTS (continued)

Maria Veldhuizen

IFF Award Recipient

Research Focus: My research focuses on behavioral and neural responses to gustatory and olfactory stimuli in humans, and how these responses change when the stimuli are attended to, experienced together, or ingested. To measure these responses, I use a combination of psychophysics, physiology, neuroimaging, connectivity and neuromodulation techniques. I use these techniques to understand the principles underlying normal chemosensory neural processing and perception, and to improve the understanding of the development and recovery from obesity and anosmia. I recently received funding to study the effects of vagus nerve stimulation on neural responses to food.

Acknowledgements: I would like to thank Paul Smeets, and Larry Marks, and especially Dana Small for supporting my nomination for this prestigious award. The latter two have been my mentors for the past 13 years and a constant source of knowledge, support and motivation. I would also like to thank the many informal mentors that have contributed, including researchers at The John B. Pierce Laboratory, Yale University, Utrecht University, the communities of AChemS, ECRO, GCCR and WIOS, Bilkent University, and Mersin University. I would like to particularly thank the Medical School at Mersin University and TÜBITAK for the fellowship and start-up grant that supported the creation of my own laboratory and research program over the past year.

I would also like to acknowledge that I have had the privilege and benefit of receiving a free or paid-for education, continuous health-care coverage, the positive bias from being white, and family that supported me financially. These factors were all necessary to keep me on the convoluted path that I followed as a woman in science struggling with family care and mental health. From my cohort of graduate students in the Association for Chemoreception Sciences, nearly all women have left academia. The challenges that diverse individuals encounter -particularly those at the intersection of multiple diversities - drive even the best out of science and this leaves our society and field at a disadvantage for scientific progress. Prestigious award such as the IFF Award for Research in the Psychophysics of Human Taste and Smell are tremendously important to offset some of the challenges that diverse scientists encounter and helps create equity. Thank you for this appreciation of my work. I would like to express the hope that I will have been the least diverse candidate to receive this kind of appreciation in years to come.

Christina Zelano

AChemS Young Investigator Award Recipient

Research Focus: My lab combines intracranial EEG, direct electrical stimulation, functional neuroimaging and psychophysics techniques to study the human olfactory system. We collaborate with several neurosurgeons to obtain electrophysiological recordings directly from human piriform cortex in patients who are undergoing surgery for epilepsy. With these recordings, we are able to study local field potential oscillations in the human olfactory system. We are interested in elucidating the functional and anatomical properties of human olfactory cortical areas, particularly those that have not been well-described, including the amygdala subnuclei that receive direct input from the olfactory bulb. We recently found that electrical stimulation of these olfactory amygdala subregions disrupts nasal breathing, suggesting a potential role in sniffing modulations. We are also interested in olfactory attentional mechanisms, and recently showed that the phase of delta oscillations shifts just prior to sniffing in anticipation of odor, suggesting low frequency phase shift as a neural signature of olfactory attentional states. Our current and future work includes examination of the spectrotemporal properties of odor-induced local field potential oscillations in piriform cortex, and to identify distinct functions of distinct frequency bands including beta and gamma.

Acknowledgements: I am extremely grateful for the support of the AChemS community, and for the good company of chemosensory researchers every year at AChemS. AChemS is always a highlight of the year. I am also extremely grateful to the NIDCD and Susan Sullivan, for their continued support of my work, which would not be possible without them. I have been lucky to have two extremely talented and supportive advisors, Noam Sobel and Jay Gottfried. Last but not least, none of this work would have been possible without the talented, small group of people who make up my lab: Guangyu Zhou, Greg Lane, Torben Noto and Qiaohan Yang.

AChemS
Association for Chemoreception Sciences

2020 Polak Young Investigator Award Recipients

Maria E. De Obaldia
Rockefeller University

Jessleen Kanwal
California Institute of Technology

Hillary C. Schiff
Stony Brook University

Douglas A. Storace
Florida State University

Evelina Thunell
Karolinska Institutet

MENTORING/NETWORKING COMMITTEE REPORT

Valentina Parma, PhD *Chair*

The Mentoring/Networking Committee continues its mission of putting AChemS members in communication with each other. The mentoring activities are mostly focused towards supporting the younger generations of chemosensory scientists, whereas the networking activities are an opportunity for the whole membership to connect.

In light of the discussions started during the virtual ISOT 2020 meeting and the need to work within the constraints of a virtual world for the time being, the Committee has organized the Career Networking Seminar Series as a virtual monthly event in which the society's members and the public can meet and discuss hot topics in chemosensory science. Thanks to the sponsorship by Firmenich, junior presenters (from graduate students to young faculty) are matched with a senior member and are asked to propose a tandem talk in which two areas of chemosensory research - not obviously linked – are addressed in parallel. This is a networking opportunity for the junior speaker – who is now in contact with a senior member who they were not quite acquainted with before the talk – as well as a networking opportunity for the whole community, who has a monthly check-in with fellow AChemS members and beyond – as the seminars are open to both members and non-members. And remember to apply for this competitive opportunity, or suggest junior members if you cannot directly benefit from it yourself.

The committee is also focusing on mentoring, with the goal of fostering mentorship relationships that go beyond the time usually spent in person at the conference. This year we ask mentors and mentees to interact in several different ways throughout the year, starting at the AChemS conference. Trusted mentors, new mentors and mentees of all walks of chemosensory life: we look forward to matching you.

Moreover, the committee is organizing, in an effort lead by Dr. Shaina Short in conjunction with the Diversity Committee, a Career Networking Social for AChemS 2021. Stay tuned for upcoming information and bring your (virtual) enthusiasm!.

Last but not least, if you have any idea that could enrich the experience of AChemS members with respect to mentoring and networking (i.e., activities that you have enjoyed when proposed by other societies, insightful activities shared over Twitter, random ideas you had at 3AM,…) we want to hear from you. Please write to info@achems.org with subject "Suggestions for Mentoring/Networking Committee.

CLINICAL RELATIONS COMMITTEE

Thomas Hummel, PhD *Chair*
Sanne Boesveldt, PhD
Antje Welge-Luessen, MD

During 2020 many of the chemosensory community focused on COVID 19 and associated change of smell and taste. These symptoms are now globally recognized by health authorities. Members of AChemS joined international efforts to better understand chemosensory loss, for example in the Global Consortium of Chemosensory Research, and it can be expected that this will eventually aid in the development of better therapies in this area of clinical research. It seems that the corona-pandemic has brought the chemosensory community in its many different facets (including health professionals and patient support groups/patient organizations like Abscent or 5thSense) closer together. The past months showed to the public that smell and taste are important and that chemosensory research provides an important contribution to the management and understanding of this disease. At this year's ACHEMS conference developments of the various aspects of therapy of olfactory loss will be highlighted in a specific symposium with contributions by Caroline Huart, Brussels, Vijay Ramakrishnan, Ausora, CO, Andrew Lane, Baltimore, MD, and Moustafa Bensafi, Lyon.

INDUSTRIAL LIAISON COMMITTEE REPORT

Robin Dando, PhD, *Chair*
Stuart Firestein, PhD
Max Fletcher, PhD
John Hayes, PhD
Beverly Tepper, PhD

It goes without saying that the ongoing uncertainty regarding the pandemic, the move to virtual, and the shorter turn-around from last meeting has made our job a little harder to predict in the past year, however we are still eagerly anticipating a vibrant meeting, and heck, by now we all know how to work a Zoom! This year the industry symposium will be on the sensory properties of fat, where we will hear about aspects from their receptors, through perception, and on to the properties of fats when actually in foods.

We're again grateful to PepsiCo R&D, which will be providing support for the upcoming meeting at the Diamond level, and we'd like to welcome onboard a new sponsor for 2021, Campbell's, who will be supporting at the Silver level. In addition, further support is provided for our awards by International Flavors and Fragrances, and by Ajinomoto, as well as for our Young Investigator seminar series by Firmenich. We want to thank you all, we really couldn't provide the programming without your support, and we're excited to (spiritually at least) spend a week in Florida this April.

HISTORY COMMITTEE REPORT

Charlotte Mistretta, PhD *Chair*
Robert Bradley, PhD
David Hill, PhD
Claire Murphy, PhD
Steven St. John, PhD

The History Committee has not been active during the past year to bring forward events and posters for the AChemS virtual meeting in April 2021. We look forward to our next on-sight meeting and we continue our review of Committee objectives and planning for our principal goal to "present the history of AChemS and the history of chemosensory sciences to the membership in active formats at annual AChemS meetings".

AWARDS COMMITTEE REPORT

Nirupa Chaudhari, PhD *President-Elect and Committee Chair*

This year's Awards Committee includes Ivan de Araujo, Jessica Brann, Leslie Kay, Kathrin Ohla, Danielle Reed, Dana Small, Marco Tizzano, Leslie Vosshal and Dan Wesson, with AChemS President-Elect, Nirupa Chaudhari, serving as Chair. This year, we were fortunate to have multiple excellent candidates nominated for each award. From among these, the committee selected the following awardees for our more senior awards:

The **Max Mozell Award for Outstanding Achievement in the Chemical Senses**: Patricia M. Di Lorenzo, PhD, Professor of Psychology, Binghamton University.

The **IFF AWARD for Research in the Psychophysics of Human Taste and Smell**: Kathrin Ohla, PhD, Helmut Schmidt University of the Federal Armed Forces in Hamburg and University of Münster.

The **AJINOMOTO AWARD for Young Investigators in Gustation or Oral Chemosensation**: Paule Joseph, PhD, MS, FNP-BC, RN, Lasker Scholar Tenure Track Clinical Investigator, NIH – Natl Inst Nursing Research.

The **ACHEMS YOUNG INVESTIGATOR AWARD for Research in Olfaction or Nasal Chemosensation**: Valentina Parma, PhD, Research Assistant Professor, Temple University.

The above four awardees will be recognized on Day 1 of our 2021 Virtual AChemS meeting during the Awards Ceremony (10:30am on Mon April 19th), and then will share an overview of their research during the Awards Symposium at 5:00pm on Fri, April 23rd.

During the Awards Ceremony on April 19th we will also honor the 2020 winners of the Don Tucker Memorial Award, Kara Fulton and Mary Schreck, the winner of the AChemS Award for Undergraduate Research, Audrey Brown, both for posters presented during ISOT 2020. At this year's virtual AChemS, there will be new posters and platform presentations by graduate and undergraduate students. We encourage all AChemS members to support our junior researchers by viewing their posters and attending their talks.

IN MEMORIAM - *Jennifer Bourne, age 43*

We mourn the loss of Jennifer (Jen) Bourne, who passed away in Aurora, Colorado on March 12, 2021. Jen, who grew up in the Denver area, first became involved in research with studies in the taste system with Jack Kinnamon as an undergraduate at the University of Denver. Jen went on to receive a Ph.D. in Neuroscience in 2004 from Yale University, working with Vincent Pieribone, where she was an active and beloved member of the Yale neuroscience community. She was then a post-doctoral fellow with Kristen Harris at the Medical College of Georgia and then at the University of Texas, Austin. During her training with Drs. Pieribone and Harris, she focused her studies on the ultrastructure of synapses in different brain regions, addressing long-standing questions such as the structural correlates of long-term potentiation in the hippocampus. In 2012, Jen returned to the chemical senses field by joining Nathan Schoppa's lab at the University of Colorado Anschutz Medical Campus (CU Anschutz) in Aurora, where she became a Research Assistant Professor and then also, later, Manager of the Electron Microscopy Facility at CU Anschutz. She recently had also been working closely on problems related to myelination with Wendy Macklin at CU Anschutz.

Jen's studies with Dr. Schoppa contributed significantly to the understanding of how olfactory information is processed in the olfactory bulb. For example, one question driving her studies was what underlies the differential responses to odors of mitral cells and tufted cells. Her ultrastructural studies showed that the greater responsiveness of tufted cells did not reflect a greater number of synaptic connections from sensory neurons but more subtle mechanisms such as differences in gap junction connections. Her reconstructions of tufted cell synapses in bulbar glomeruli also provided excellent evidence that the dominant "extrasynaptic" form of signaling from tufted cells onto mitral cells reflected the unusual geometric arrangement of mitral and tufted cell dendrites and glial processes. Throughout her career, including her time at CU Anschutz, Jen was admired for her extremely careful scientific work and also for her innovations in ultrastructural methodologies. She helped develop experimental protocols involving brain slice physiology, serial section electron microscopy, and 3-D reconstructions that are now widely used by experimenters in a variety of fields. Jen was also prolific in her studies, having authored at least 17 research papers and receiving NIH F31 and R03 grants during her career.

In addition to her own scientific productivity, Jen was a consummate colleague and collaborator. Her perceptive eye and keen intellect quickly gained the respect of anyone from the most senior scientist to the most junior while her kind and generous spirit ensured she kept that respect. She could help improve your science by focusing your questions and then letting you know with a raised eyebrow when you weren't quite there yet. Indeed, one of her rare gifts was the ability to fundamentally critique your ideas while making you feel confident enough to generate new and better ones. In particular, she put this ability to good use in mentoring more junior colleagues to develop the tools and self-assurance they needed to navigate their careers. One has to speak to only a few of her past trainees to understand the immense positive impact she had on their development.

As a person, Jen was a loyal and supportive friend, known for her quick wit and infectious laugh, who could enliven any discussion and fill any room. Jen enriched the lives of those who knew her with her remarkable ability to forge deep, lasting friendships and to bring together people who would otherwise not have met. Beyond her scientific talents and vibrant personality, Jen was an avid traveler and an animal lover devoted to her cats. She was also an accomplished pianist as well as a violinist with the Aurora Symphony Orchestra.

Jen is survived by her older brother John Russell Bourne of Denver and her parents Don and Arletta Bourne of Aurora, Colorado.

If anyone wishes to make a donation in Jen's honor, her family requests donations in her name be made to the Denver Dumb Friends League or the Aurora Symphony Orchestra

To donate to the Denver Dumb Friends League please visit:
https://secure2.convio.net/ddfl/site/Donation2?df_id=12302&mfc_pref=T&12302.donation=form1

To donate to the Aurora Symphony Orchestra please visit:
https://www.coloradogives.org/index.php?section=organizations&action=newDonation&fwID=36771

IN MEMORIAM - *Prof. Dr. Bernd Lindemann, age 86*

Prof. Dr. Bernd Lindemann passed away on March 25, 2021 at the age of 86. Prof. Dr. Lindemann was Professor Emeritus of Physiology at the Universität des Saarlandes in Homburg, Germany. He had a long-standing interest in epithelial Na+ channels, particularly in kidney, bladder and skin. In the late 1980s, he turned his attention and expertise to chemosensory systems, where he made a number of important contributions to our understanding of the physiological mechanisms of both odor and taste transduction. Bernd was a very kind, considerate person who was known for the serious and thoughtful approach he brought to his scientific research. We offer our sincere condolences to his family and to his many friends and colleagues in the AChemS community.