

International Society for Serotonin Research



Formerly Serotonin Club

Welcome

Greetings Serotoninologists!

I am proud to serve as President of ISSR for 2024-2025, having just taken the reins from Trevor Sharp, who guided the Society through the challenges we faced during the extended pandemic. I am equally in debt to Anne Andrews who was president before Trevor, as she held us together through all of the uncertainty in the early parts of the pandemic that led us to delay but ultimately hold our conference in Cancún last year. I also want to call out how important the contributions of Noelle Anastasio (Secretary) and Lyn Daws (Treasurer) are to the functioning of ISSR, thank you all so much!

We have a lot planned for this coming year and I hope that many of you will participate and spread the word to your colleagues, trainees, mentors, and friends of serotonin.

The pandemic led to a pause in ISSR activities, but we had a triumphant return at our 2023 ISSR meeting in Cancún, Mexico where we learned about so many new developments in the serotonin field. Since then, serotonin research has been picking up momentum in many ways. The importance of serotonergic drugs in traditional and evolving antidepressant treatments has captured the world's attention. New tools allow us to

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detect serotonin rapidly and with molecular and anatomical precision. The importance of serotonin in physiology and health throughout the body is becoming increasingly clear. For all these reasons, engagement in the ISSR will continue to be an important forum for sharing our ideas and accelerating research in our field. The ISSR remains a strong voice for research related to serotonin and all the systems it interacts with in animals and humans, and across the developmental spectrum.

I want to extend a special invitation to early-stage scientists. Please come to our meetings and join our organization. I first attended "Serotonin Club" events nearly 30 years ago and discovered a wonderful, nurturing group that helped me to develop my career in countless ways. When I attended the 1997 10th anniversary meeting, many new receptors had been cloned and we were thrilled with the rapid progress in identifying the diversity and complexity of serotonin's roles in health and disease. Since then, I have attended our meetings all over the world and have developed lasting friendships and scientific partnerships that have stimulated my research and enriched my trainees' educations. I hope that the next generation will be as fortunate and will carry the torch forward!

Here are some announcements and upcoming activities of the Society:

We are hosting a **Webinar on September 10, 2024**, A Prelude to the Serotonin Symphony in Vienna. We will have six presentations over two hours by Staci Bilbo, John Cryan, Evan Deneris, Kate Nautiyal, Derya Sargin, and Vidita Vaidya. These six speakers represent the international nature of our organization, as there will be speakers from six countries on three continents!

[Webinar registration link](#): more info will be posted on the [ISSR website](#). Please register by September 6th to receive the link to the webinar.

If you're planning to be in Chicago for the Society for Neuroscience meeting, join us for the **annual ISSR Mixer on October 6, 2024** from 6-9 PM. We will be at Highline Pizza Bar, a popular venue from past years. You will be able to catch up with old pals, make new friends, and share your enthusiasm for all things Serotonin! Follow this link for more information [ISSR 2024 mixer](#)

Start planning for **ISSR 2025: A Serotonin Symphony in Vienna!** The meeting will be July 7-11 at the Medical University of Vienna.

The 2025 Irvin H. Page Lecture will be delivered by Susan Dymecki, MD, PhD.

The 2025 Maurice Rapport Lecture will be presented by Alan Frazer, PhD.

The 2025 Paul Vanhoutte Lecture will be delivered by Anne Andrews, PhD.

We selected 27 symposia, which includes a wide range of exciting new presentations on serotonin research from many different perspectives.

We are continuing to plan the program, and tentatively there will be two poster sessions, additional oral presentation sessions for young investigators, and a wide range of interesting activities during lunches that will highlight the rich cultural and scientific history of our host city, Vienna.

There will be a celebratory Farewell Banquet at the Cupola Hall of Kunsthistorisches Museum.

Once again, we will have a Travel Award program.

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We are currently applying for grants to help fund what we hope will be the largest group of supported young investigators in our history. This program will include presentations by the awardees, a mentoring program, and seeks to invite a diverse group that will become the next generation of serotonin research leaders.

So please join in with ISSR, renew your membership if it's due (check with Lyn Daws if unsure, daws@uthscsa.edu), and plan to converge on Vienna in July 2025!

John Neumaier
ISSR President

Important Dates

September 6: Deadline for registration for the Webinar

September 10: Webinar

September 20: Deadline for registration for Mixer

October 6: Mixer

Mid-October: Early bird registration for ISSR 2025 opens (early bird registration will be discounted!) and hotel reservations will open

Mid-January: Deadline for oral presentation abstracts; Early bird registration rates end and regular registration rates for ISSR 2025 start

Mid-February: Final day for poster abstracts

Mid-April: Late breaking poster abstracts; Regular registration rates close and late registration rates start (will be more costly)

Current members receive discounted ISSR 2025 registration fees.

Call for Nominations

- **VP-North America**
- **Councilor-North America (1), Rest of World (2)**
- **Associate Councilor-North America (1), Rest of World (2)**

We are currently accepting nominations to serve in the position of Vice President-North America as well as Councilor for North America (one open), Councilor for Rest of World (two open), Associate Councilor for North America (one open) and Associate Councilor for Rest of World (two open). Each of these positions serve 4-year terms and are elected by the membership of the region they will represent. Terms will start January 1, 2025. Typically, Councilors are mid-career to senior investigators. Associate Councilors are typically new investigators with less than 10 years experience after obtaining their advanced degree.

If nominating someone, please provide confirmation that the member is willing to serve. Self-nominations are welcome. The nominee must be a current member of the ISSR.

Nominations may be sent to serotoninclub1987@gmail.com

Deadline for nominations is October 1, 2024.



Why visit the Serotonin Symphony in Vienna?

Vienna is renowned for its unparalleled musical and cultural offerings, from the Golden Hall of the Musikverein to the famous Fine Arts Museum ("Kunsthistorisches Museum") and the Vienna State Opera: these buildings still remind Vienna's visitors that it was once the capital of the sunken Austro-Hungarian Empire.

Once home to musical giants like Haydn, Mozart, Beethoven, and Brahms, and later Mahler or Schoenberg, Vienna was the birthplace of the classical symphony as we know it. The places where these composers lived, worked, and created their masterpieces are sprinkled throughout the city, and many of the sites are still accessible. A UNESCO World Heritage Site, Vienna is home to numerous castles and palaces, where cultural treasures await discovery at every turn. Known for centuries for its love and culture of enjoyment, coffeehouses, and taverns, you can simply relax in a Viennese café and soak up the splendor of the golden imperial age.



The Wiener Medizinische Schule, or Vienna Medical School, was a leading center for medical education and research during the 18th and 19th centuries. Renowned for its innovative approach all over the world, it played a crucial role in advancing modern medicine, particularly in the fields of pathology, anatomy, and physiology. Prominent figures like Joseph Škoda and Karl Rokitansky were instrumental in developing diagnostic methods and systematic autopsy techniques that revolutionized medical practice. The school also emphasized empirical observation and clinical training, setting new standards for medical education worldwide. Its influence extended far beyond Austria, shaping medical thought and practice throughout Europe and beyond.

Nowadays, Vienna is home to about 190,000 students in 23 universities and is one of Europe's leading international research centers. The city is also home to many inventions and technical innovations: Vienna lager beer was invented in 1839 by Austrian master brewer Anton Dreher at his Schwechater brewery, making Schwechater beer the first original lager beer in the world. Vienna is the only capital in the world that harbors vineyards within its boundaries. The wine producers have been granted the right to sell not only their produces but also some small eats, making the then invented "Heurigen" (taverns) the so-called second living room of the Viennese population.

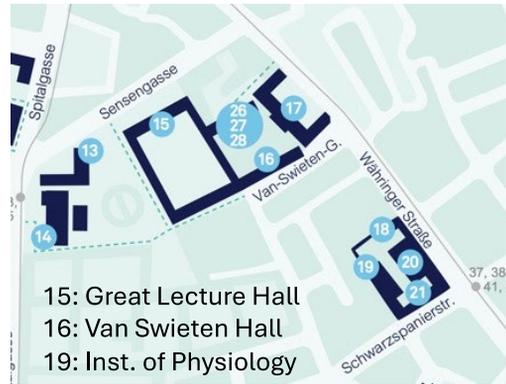
Vienna is home to the 65-meter-high Giant Ferris Wheel, the oldest operating Ferris wheel in the world. A ride on it gives you a great view of Vienna, the "Prater", one of the city's largest parks, the Danube River, and the banks and beaches of the "Old" and "New Danube", where you can enjoy summer swimming in natural waters.

Vienna has an excellent and easy-to-use public transportation system which is perfectly suited for exploring the city. Clean, efficient, and highly innovative, Vienna is voted "The World's Most Livable City" year after year.



Given the vibrant cultural heritage, it is not surprising why the Vienna Serotonin conference has been coined "A Serotonin Symphony in Vienna". We aim to give you – apart from the latest and timeliest research on the very topic serotonin – some scientific and historical insights into Vienna during the conference.

The conference will be organized at the Medical University of Vienna – in three different locations (see map): The Great lecture hall of the University Clinic of Dentistry (15; up to 240 participants), the Festival Hall "Van Swieten Hall" (16; 160-250 participants) and the Great lecture hall of the Institute of Physiology (19; up to 150 participants). The three lecture rooms are within five minutes walking distance of each other. The spaces that we have reserved offer a great deal of



flexibility in how they are configured for different sessions (plenary, parallel sessions, poster sessions, vendor exhibits). Stay tuned for updates on the "lunch break tours", which will be available Tuesday through Friday.



2025 ISSR Honorary Lectures

The ISSR has three special lectures, named for pioneers in serotonin research, presented at each biennial meeting. The honorees, chosen by the ISSR Council, exemplify contributions to the field of serotonin for each of the lectureships. Details for each lectureship and prior recipients can be found at <https://www.serotoninclub.org/lectures>.

Irvine Page Plenary Lecture: Traditionally this lecture involves an in-depth presentation of the research of the honored presenter and is the plenary scientific lecture of the meeting.

Susan M Dymecki, MD PhD

George Fabyan Professor of Genetics

"Diversity and Unity – the Brain Serotonergic Neuronal System"

Dymecki received her BSE and MSE from the University of Pennsylvania and her MD and PhD from the Johns Hopkins University School of Medicine. After doctoral study, Dymecki began independent work as a Helen Hay Whitney Fellow and John Merck Scholar at the Carnegie Institution of Washington, where she developed genetic approaches to

study the deployment and function of cell populations across development, particularly in the mammalian nervous system. Dymecki joined the Department of Genetics at Harvard Medical School in 1998 and is the George Fabyan Professor of Genetics.

Her lab continues to pioneer transgenic tools to subtype neurons and elucidate their origin, function, and connectivity, focusing on the serotonergic neuronal system in the brain. Dymecki's lab has identified specialized subtypes of such neurons together with their network architecture and controlling roles in specific behaviors and physiology, findings that provide new ways to conceptualize aspects of affective disorders, sleep apnea, opioid-induced respiratory depression, and sudden infant death syndrome. Her honors include the HMS Morgan-Zinsser Teaching Faculty Fellowship Award, the Faculty Leadership Award for outstanding service leading the PhD Programs in Biological and Biomedical Sciences at HMS, the A. Clifford Barger Award for Excellence in Mentoring, and Dymecki is a councilor to the International Society for Serotonin Research, is an alumna scholar and advisor to the Rita Allen Foundation and is a member of the American Academy of Arts and Sciences.



2025 ISSR Honorary Lectures

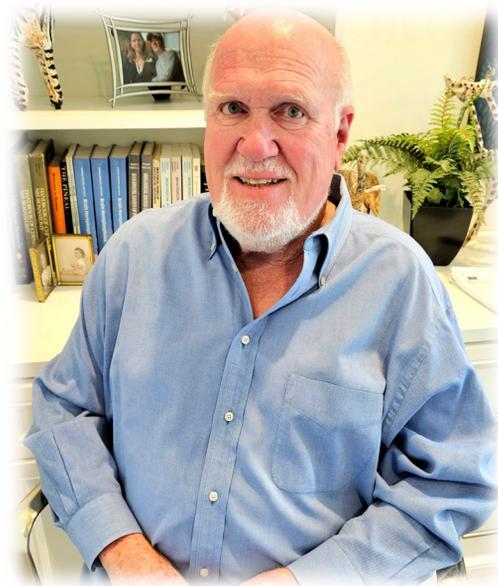
Maurice Rapport Plenary Lecture: The Rapport lecture provides an opportunity for historical reflection of the field of serotonin.

Alan Frazer, PhD

"Serotonin- You've Come a Long Way"

Dr. Frazer received a Ph.D. in pharmacology from the University of Pennsylvania and remained on as faculty there, both in the departments of Psychiatry and Pharmacology, and as a Career Scientist in the Department of Veterans Affairs. He joined the University of Texas Health Science Center at San Antonio (UTHSCSA) as Chair of the Department of Pharmacology in 1993 and continued his association with the Department of Veterans Affairs in San Antonio. He stepped down as

Chair in 2021 and retains adjunct appointments in both pharmacology at UTHSCSA and in the psychiatry department at Penn.



His primary research interest has been the mechanism of action of antidepressant drugs. He was among the first to study pharmacologic effects that antidepressants produced in rats when given over a clinically relevant time, i.e., weeks rather than one day, and found that long-term administration of antidepressants produced effects in brain that were quite different from their acute effects. His data provided one of the initial demonstrations of drug-induced plasticity, with such plasticity remaining a very important topic today. In addition to his work with antidepressants, Dr. Frazer made important contributions to our understanding of affinity states of serotonin receptors, particularly 5-HT_{1A} receptors. As radioligand binding methodology became prominent in the late 70s/early 80s, much research focused on subtypes of serotonin receptors. The agonist radioligand, 3H-8-OH-DPAT, was being used to label 5-HT_{1A} receptors and data using it were being interpreted as showing subtypes of the 5-HT_{1A} receptor. Dr. Frazer demonstrated that as an agonist radioligand, 3H-8-OH-DPAT bound to both high and low affinity states of the 5-HT_{1A} receptor. If one prevented its binding to the high affinity state, then he showed that drugs only bound to the 5-HT_{1A} receptor in a manner consistent with there being no subtypes of it. These important studies clarified the pitfalls of radioligand binding methodology and contributed to a better understanding of serotonin receptors and their subtypes. He has made substantive service contributions to the field of neuropsychopharmacology, being the Editor-in-Chief for the International Journal of Neuropsychopharmacology, the official journal of the CINP; being both Secretary and President of the American College of Neuropsychopharmacology (ACNP); and being a member of the Scientific Council of the Brain and Behavior Research Foundation (formerly NARSAD), probably the most philanthropic organization for psychiatric research in the world.

2025 ISSR Honorary Lectures

Paul Vanhoutte Distinguished Lectureship: This lecture provides a state-of-the-art lecture on recent advances in serotonin biology and receptor pharmacology.

Anne Milasincic Andrews, PhD

“Monitoring Serotonin Signaling: A Journey in Time and Space”

Dr. Andrews is Professor of Psychiatry & Biobehavioral Sciences and Chemistry & Biochemistry at the University of California, Los Angeles. She is a member of the Semel Institute for Neuroscience & Human Behavior, the Hatos Center for Neuropharmacology, and the California NanoSystems Institute. Andrews received her B.S. from the Pennsylvania State University and Ph.D. in Chemistry from the American University as a U.S. Department of Education Fellow. She was a pre-doctoral, postdoctoral, and senior staff fellow at the National Institute of Mental Health.



Dr. Andrews is an elected Fellow of the American College of Neuropsychopharmacology and the American Institute for Medical and Biological Engineering and past President of the International Society for Serotonin Research. She received an NIH Director's Transformative Research Award, a California Neurotechnologies Research Award, and an IUPAC Distinguished Women in Chemistry Award, among others. Her groundbreaking advances led the BRAIN Initiative technology development and measurements of chemical signaling.

At UCLA, Andrews advances basic and translational research at the nexus of neuroscience and nanoscience. Her interdisciplinary team of chemists, neuroscientists, and engineers seeks to understand how neurotransmitters like serotonin encode emotionally salient information related to anxiety, mood, and stress responsiveness. Electronic field-effect transistors (FETs), electrochemical sensors, and machine learning are used to investigate neurotransmission at high resolution in animal models and patient populations. Andrews also develops wearable sensors for stress (cortisol) and other biomarkers to advance personalized predictive medicine and improve health and wellness.

2024 ISSR Webinar



*A Prelude to the
Serotonin Symphony in Vienna*

**A Webinar from the
International Society for Serotonin Research**

September 10, 2024
8AM PDT, 11AM EDT, 4PM BST, 5PM CET, 8:30PM IST

*Novel Insights into Serotonin in
Brain Function from*

Staci Bilbo Evan Deneris Derya Sargin
John Cryan Kate Nautiyal Vidita Vaidya

Register here (at no cost) for
Zoom link and more information:
<https://submit.jotform.com/241785734851163>



Questions? Email: serotoninclub1987@gmail.com

The ISSR will deliver its second webinar this September hosted by President John Neumaier and Councilors Kate Nautiyal and Mariano Soiza-Reilly. If you are not yet registered, there's still time! [Webinar registration](#)

Staci Bilbo

Microglial-Serotonin Interactions in the Developing Brain: Implications for Long-Term Behavior

John Cryan

The Microbiota-Gut-Brain Axis: A Serotonin Perspective

Evan Deneris

Serotonin Axon Growth, Maintenance, and Regrowth

Kate Nautiyal

Does the Trip matter? Non-hallucinogenic Serotonin Receptors are Required for the Behavioral and Neural Response to Psilocybin in Mice

Derya Sargin

Serotonergic Pathways Dysregulated by Developmental Stress

Vidita Vaidya

Serotonin : Boosting Neuronal Power Plants

Please register by September 6th to receive the link to the webinar.

2024 ISSR Neuroscience Mixer



International Society for Serotonin Research
12th Annual Mixer at
Society for Neuroscience 2024

WHEN: Sunday, October 6th, 6-9pm

WHERE: Highline Pizza Bar
Barcade Room
169 W Kinzie St, Chicago



ENTRY: \$20 includes 2 drinks and appetizers



Register by Sept 20, space is limited!

<https://www.jotform.com/242244973728162>

This event is sponsored by the
ISSR and supported with a gift
from San Diego Instruments



Email serotoninclub1987@gmail.com with any questions.
Welcoming ISSR members and non-members (even if they study dopamine)



Please join us this October at Neuroscience 2024 for great food, drinks and collegial "mixing". We welcome ISSR members and nonmembers alike-so bring a few of your friends and colleagues! The cost is \$20 per person (payable by PayPal or Venmo) and includes appetizers and two drink tickets. We must give special thanks to **SAN DIEGO INSTRUMENTS** for sponsoring this event. Their continuing support of our society is essential for our ability to grow and to hold events such as these. Register here: [ISSR 2024 mixer](#)

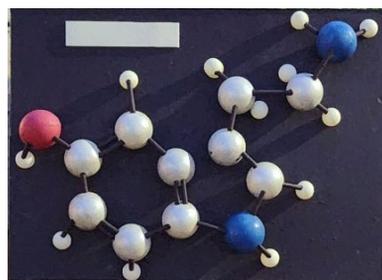
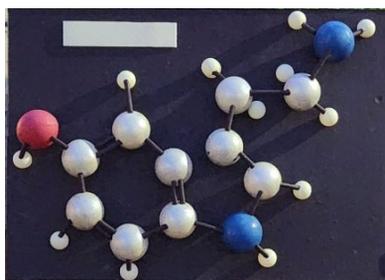
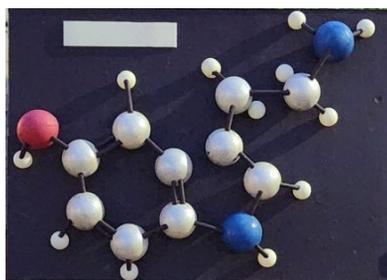
Please register by September 20th to reserve your spot.

“Serotonin on the Mexican Caribbean”

Marriott Cancún Resort and Spa, Cancún, Mexico

April 23-27, 2023

The 20th International Society for Serotonin Research meeting was held April 23-27, 2023 at the Marriott Cancún Resort and Spa in Cancún, Mexico. The meeting included 13 symposia: 7 single session plenary symposia and 6 symposia scheduled in parallel sessions. One Young Investigator Trainee (e.g., graduate student or postdoctoral fellow) was added as a fourth speaker to each symposium. In addition, we had three oral sessions comprised of selections from submitted abstracts, and an evening poster session. The honorary Irvine Page plenary lecture was given by **Professor Lynette C. Daws** (University of Texas Health Science Center- San Antonio), the honorary Maurice Rapport plenary lecture was given by **Professor Kjell Fuxe** (Karolinska Institutet), and the honorary Paul Vanhoutte Distinguished lecture was given by **Professor René Hen** (Columbia University).



"Serotonin on the Mexican Caribbean"



Fun at the ISSR 2023 Neuroscience Mixer

We hosted a wonderfully successful event at the Churchkey Craft Beer Bar in Washington D. C. Here, more than 50 serotoninologists were treated to good eats, drinks and abundant banter. It was great to reconnect with others following our successful meeting in Cancún! We must give special thanks to **SAN DIEGO INSTRUMENTS** for sponsoring this event.



International Society for Serotonin Research
11th Annual Mixer
at
Society for Neuroscience, 2023

When: Monday, Nov 13th 2023, 6-8 pm
Where: CHURCHKEY Craft Beer Bar
1337 14th Street NW, Washington, DC



ISSR Membership Information

Anyone with a research or clinical interest in Serotonin may become a member of our Society. **Current dues cycle is January 2024 through December 2025.** Please note that discounted biennial meeting registration fees, which are significant for current members, will apply only to those who are up-to-date in dues payments. Membership renewals are on a 2-year cycle (see [rates](#) and [payment instructions](#) below). Members will be notified by email when membership is up for renewal and payment is due. Your dues payments provide the support needed to maintain viability of the ISSR. Thank you for your support!!

Benefits of ISSR Membership:

- Networking opportunities to form collaborations with other serotonin researchers
- Opportunities for professional development and leadership in the Society
- Opportunities to submit proposals and chair symposium at our international biennial meetings
- Discounted registration feeds to attend our international biennial meetings
- Information about and invitations to ISSR-sponsored events, e.g., FENS socials, SfN mixers
- Delivery of our Society newsletters directly to your email

Membership Categories:

- Regular (faculty or equivalent) \$150 USD
- Trainee (student or postdoc) \$75 USD

We require email confirmation of student or post-doc status.

- Retired (former member) \$75 USD
- All costs are for a 2-year membership

Payment can be made at our ISSR website (<https://www.serotoninclub.org/join>).

In some cases, we are able to accept bank wire Transfers for dues, please contact Lyn Daws (daws@uthscsa.edu) to make arrangements. Alternatively, you may send a check or money order payable to the "International Society for Serotonin Research" to Lyn at the address below.

Lynette C. Daws, Ph.D.
Department of Cellular and Integrative Physiology, MC7756
University of Texas Health Science Center at San Antonio
7703 Floyd Curl Drive
San Antonio, TX, 78229-3900

