



NEWSLETTER

International Society of Chemical Ecology

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— Important Dates —

- ◇ **30 April 2025**
Deadline for the Travel Awards applications has been extended
- ◇ **30 May 2025**
Deadline for abstract submission to the 2025 ISCE meeting in Christchurch, NZ
- ◇ **15 May 2025**
Last day to submit ballots for the 2025 ISCE Officer Election
- ◇ **18-22 August 2025**
ISCE Annual Meeting, Christchurch, NZ

2025-2026 ISCE Elections

All members are invited to vote in the 2025-2026 ISCE Elections. This year, the membership will vote to select a vice-president and four councilors. The **vice-president** serves one year in this position and serves as president in the following year. **Councilors** serve a three-year term and act in an advisory capacity to the Executive Committee. For additional information, please consult [the ISCE bylaws](#). Please [log in to your ISCE account](#), once you log in click this link [election ballot](#) to vote.



ISCE - APACE 2025 AOTEAROA



ISCE-APACE 2025 Joint Conference of the International Society of Chemical Ecology and the Asia-Pacific Association of Chemical Ecologists

The ISCE-APACE 2025 Joint Conference will be held in Christchurch, New Zealand, at the iconic Christchurch Town Hall from **August 18-22, 2025**. This prestigious quadrennial event, jointly organized by ISCE and APACE, will bring together students, researchers, and professionals from around the world to explore the dynamic field of chemical ecology. Set against the backdrop of Christchurch, the vibrant "Garden City," attendees will have the opportunity to engage in stimulating discussions and presentations covering a broad array of chemical ecology topics. Abstract Submission is now open and available on the conference website (<https://ISCE-APACE2025.nz>). For important details, including a list of symposia, registration fees, visa information, invitation letter, accommodation options, and key dates, please visit the conference website. Please spread the word and join us for this enriching experience in the beautiful and pristine landscape of Aotearoa New Zealand. We look forward to your participation in this exciting scientific gathering!

Best regards,

Kye Chung



2025 ISCE Officer Elections

All members are invited to vote in the 2025 ISCE Elections. This year, the membership will vote to select a vice president and four councilors. The **vice-president** serves one year in this position and then serves as president in the following year. The **Councilors** serve a three-year term and act in an advisory capacity to the Executive Committee. For additional information, please consult the ISCE bylaws, available online at the society website.

The online ballot is available for all paid members. Please [log in](#) to your ISCE account. Once you log in click the link below to vote:

<https://chemecol.org/login/>

After reviewing the biographies below, please vote for your candidates: **ONE (1)** for Vice President and **FOUR (4)** candidates for Councilors. Please submit this information via the electronic ballot. **Voting will close at midnight (EDT) on May 15, 2025.**

Candidate for Vice President



Andrea Clavijo-McCormick

I am a dedicated scientist, educator, and public servant, committed to bridging the gap between scientists and the public. I am passionate about translating scientific research to different audiences, ensuring that it drives real-world applications and addresses the needs of end-users. My expertise lies in the Chemical Ecology of Invasive Species, particularly in understanding the chemical communication between native and introduced species, the biochemical responses of invasive plants to novel environments, and the applications of chemical ecology for biological control.

My scientific journey began in Colombia, where I developed

pheromone-based management strategies against the invasive Guatemalan potato moth. This work, a collaboration between the Colombian Corporation for Agricultural Sciences (CORPOICA) and the Swedish University of Agricultural Sciences (SLU), formed the basis of my MSc thesis, supervised by Alba Marina Cotes Prado and Peter Witzgall. This experience sparked my curiosity about how chemical interactions shape ecological relationships, leading me to apply for a doctoral position at the Max Planck Institute for Chemical Ecology in Germany. There, I earned my PhD in 2014, under the supervision of Sybille Unsicker and Jonathan Gershenson from the Biochemistry Department in collaboration with Andreas Reinecke and Bill Hanson from the Department of Evolutionary Neuroethology. My research focused on the direct and indirect defences of poplar trees against the spongy moth, *Lymantria dispar*. After completing my PhD, I explored the sensory and behavioural differences among three subspecies of *L. dispar* at ETH Zurich as a post-doctoral fellow under Consuelo De Moraes and Mark Mescher.

In 2016, I relocated to New Zealand to join Massey University, where I held the position of Lecturer and later Senior Lecturer until 2021. I then transitioned to the Ministry for Primary Industries (MPI), where I have taken on various roles supporting pest management, surveillance, incursion investigations, and pre-border risk assessments. In my current role as Plant Risk Manager, I contribute to evidence-based decision-making within New Zealand's biosecurity system. My research accomplishments include numerous peer-reviewed publications and prestigious awards such as a Max Planck Doctoral Fellowship, a Marie Curie Fellowship, and a Marsden Grant from the Royal Society of New Zealand – Te Apārangi.

I am an active member of the Latin American Society of Chemical Ecology (ALAEQ), the Asia-Pacific Association of Chemical Ecologists (APACE), and the International Society of Chemical Ecology (ISCE). I have served as a councillor for both APACE and ISCE, contributing to conferences and initiatives for these societies. This year, I am honoured to be part of the Local Organising Committee for the joint ISCE-APACE meeting in New Zealand, where I co-lead the Scientific Committee alongside Jerry Zhu.

As a Latin American researcher with European training and current work in Oceania, I have established strong ties to the three Chemical Ecology Societies and built a broad network of colleagues and collaborators. My aspiration is to further strengthen the connections between these societies, increase participation from underrepresented countries and regions, and support the next generation of chemical ecologists. I am deeply committed to encouraging young scientists to engage with these societies, exploring opportunities to expand and develop our field globally.

Candidates for Councilors

(in alphabetic order)

Clare Casteel



Dr. Casteel is an Associate Professor at Cornell University, specializing in plant-insect and plant-microbe interactions. Her research integrates chemical ecology and molecular biology to understand the mechanisms driving these interactions and to develop sustainable pest control strategies. Dr. Casteel's academic career began at the University of Missouri, where she conducted undergraduate research on the defensive properties of glandular-haired alfalfa against *Empoasca fabae*. She pursued her master's degree at the University of California, investigating the impact of the Mi-1.2 plant resistance gene on the psyllid, *Bactericera cockerelli*. After her MS, she went on to pursue a PhD at the University of Illinois at Urbana-Champaign, under the mentorship of Dr. May Berenbaum and Dr. Evan DeLucia. Her PhD focused on understanding the effects of global climate change on plant chemistry and biotic interactions in agroecosystems. She further expanded her expertise in genetics and biochemistry through postdoctoral studies at the Boyce Thompson Institute for Plant Research, with Dr. Georg Jander, where she initiated a new project on virus-vector-plant interactions. This research became the foundation of her first permanent position as an assistant professor at the University of California, Davis. Currently, as an associate professor at Cornell University, Dr. Casteel's research program focuses on two areas: 1) understanding the function beneficial soil microbes in the soil and their impact on crop resilience to hemipteran insects, & 2) deciphering the role of plant individual viral proteins and their plant targets in facilitating insect transmission of plant viruses and changes in plant chemistry.

Her work has been continuously funded since 2014 by agencies such as the National Science Foundation, the USDA National Institute for Food and Agriculture, and the Department of Defense, with current research funding totaling \$2.9 million. She has published 59 articles in high-impact journals such as *Nature Plants*, *Nature Communications*, *Plant Physiology*, *Plant Cell*, and *PNAS*, and has delivered 60 invited presentations at national and international conferences. Dr. Casteel has received several prestigious awards, including the Neish Young Investigator Award from the Phytochemical Society of North America, the NSF Early Career and Mid-Career Awards in the Plant Genome Research Program, and, most recently, a Faculty Fellow appointment at the Cornell Atkinson Center for Sustainability. Beyond her research, she is committed to advancing equity and inclusion in academia, serving as one of Cornell's representatives in the National Equity in Graduate Education Consortium.

Mary Veronica Clancy



Mary Veronica Clancy is an experienced chemical ecologist and is associated with the Fundamental and Applied Research in Chemical Ecology group at the University of Neuchâtel in Switzerland. Her research primarily focuses on volatile terpenoids that are stored and emitted by plants, exploring how constitutive differences in these compounds can influence how plants interact with their environment. Her path to chemical ecology began with an interest in natural product chemistry (MSc in pharmacognosy, The School of Pharmacy University College London, England), eventually leading her to pursue a PhD. During her doctoral studies at the Technical University of Munich, Germany, she conducted research at the Helmholtz Zentrum Munich into the chemical diversity of both volatile and non-volatile compounds in tansy, and how variation in these compounds influence associated insect metacommunity dynamics. Currently, Mary is working as a postdoctoral researcher at the FARCE lab in Switzerland, where she investigated the chemistry of a naturally occurring wild relative of cultivated cotton in Mexico, exploring how constitutive chemical differences impact its interactions with herbivores, the local insect community, and abiotic stressors. Additionally, she is developing a formulation for the application of entomopathogenic nematodes as a biocontrol agent of the fall armyworm through the utilisation of natural products. Mary has organised a symposium on herbivory-induced plant volatiles in crop protection at the International Society of Chemical Ecology annual meeting in 2023, and also acted as symposium chair (chemical ecology in agriculture). That year she also was awarded a highly competitive travel award to attend the meeting in Bengaluru, India.

Patricia Fernandez



Prof. Patricia is a PhD in Biological Sciences from the University of Buenos Aires, specialized in insect behavior. In 2004 she did a postdoc at the Free University of Berlin with Dr. Monika Hilker and Dr. Torsten Meiners, where she learned techniques for collecting and analyzing volatiles from plants and insects. Later, she did a postdoc with Dr. Brian Smith at Arizona State University, where she was trained in imaging techniques to register neural activity in insects. She also completed a solid formation in chemical ecology visiting different laborato-

ries around the world among others, the Max Planck Institute in Jena, Germany, with Dr. Jonathan Gershenzon, the University of Wisconsin, with Dr. Rick Lindroth and USDA Gainesville, USA, with Dr. Peter Teal. In 2009 she moved to Buenos Aires, Argentina where she is actually professor at the Faculty of Agronomy of the University of Buenos Aires and senior researcher of CONICET (National Scientific and Technical Research Council). Actually she is leader of the Laboratory of Chemical Ecology at that Faculty. Her specialty is the chemical ecology of the interaction between plants and insects and how this can be modified by external factors, including the presence of microorganisms.

Markus Knaden is a Project Group Leader in the Department of Evolutionary Neuroethology at the Max Planck Institute for Chemical Ecology in Jena, Germany and Guest Professor at the Nanjing University, China. He is interested in insect behavior and neuroethology. He earned his PhD in Zoology in 2002 in the lab of Rüdiger Wehner. His research focuses on olfactory-based navigation in the Tunisian desert ant *Cataglyphis fortis* and – more generally – on how insects like ants, moths, and flies use chemical signals to guide behavior. Recently he has turned his interest towards the impact of air pollution on insect behavior. Oxidant pollutants, like e.g. ozone or nitric oxides, easily break down carbon-carbon double bonds in insect pheromones. Knaden's work shows that these pollutions have the potential to inhibit sexual communications in insects, and might be involved in the insect decline.



Subhash Rajpurohit grew up in the Thar Desert and loved the rain and the mountains. So, the Himalayas became my first study site. I started my scientific career studying drought tolerance in insects and later spent time exploring chemical and physical properties of insect cuticle and its genetic regulators. I am broadly trained in ecological and evolutionary physiology. After finishing my doctoral work at Parkash Lab at the Bioscience Department (now Genetics) of Maharshi Dayanand University, Rohtak, I held postdoctoral appointments at the University of Nevada (Gibbs Lab) and the University of Pennsylvania (Schmidt Lab), USA. While working at the University of Pennsylvania, Philadelphia, USA, I decided to return to India on the prestigious Ramanujan Fellowship from DST-SERB, Government of India. I liked Stepwell so much that I



decided to settle down here in Ahmedabad and set up the first lab integrating 'ecology, evolution, and physiology' in Western India (in 2017). I am interested in understanding the fundamental questions around spatiotemporal variations, metabolic ecology, and rapid adaptation in natural populations of a range of insects (fruit flies, mosquitos, and bees). These queries aim to understand 'Organismal responses to climate change' and their broader impacts on the ecosystem. I describe my research approach as 'Macrophysiology to molecules'. I am concerned about the declining numbers of insects and their overall impacts on the ecosystem. I hope someday insects will return to our lives and this planet will become more colorful and sustainable. I teach evolutionary biology and thermal physiology at the School of Arts and Sciences, Ahmedabad University.

Islam S. Sobhy is currently a Lecturer at Cardiff University, UK. Since January 2023, Islam has been a Lecturer at Cardiff University, UK, where he leads the Insect-Plant-Microbe Interactions (IPMI) Research Group. In November 2022, Islam joined the School of Biosciences at Cardiff University to work with Prof.



Colin Berry where he conducted research on mosquito feeding behavior using novel sugar feeding systems. He established his lab after his lectureship. In 2018, he joined the chemical ecology group, led by Prof. Toby Bruce, at Keele University, UK. He worked with collaborators from icipe (Kenya) on developing a new phase of 'push-pull' companion planting for tackling the devastating fall armyworm in Sub-Saharan Africa. In 2016, he joined KU Leuven, Belgium to work with Prof. Bart Lievens and Prof. Hans Jacquemyn as a postdoctoral fellow where his expertise in plant-insect interactions has expanded to include microbes. He demonstrated that nectar-inhabiting yeasts produce specific microbial volatiles that robustly mediate the foraging behavior of flower-visiting insects. In 2013, he joined the Plant-Insect Interactions (PII) group, led by Prof. Ivan Galis, at Okayama University, Japan after awarding the Japan Society for the Promotion of Science (JSPS) Postdoctoral Fellowship. He extended his work to include more staple crops such as rice and sorghum where he investigated the inducible defense traits of both cereal crops against lepidopterous herbivores. He then awarded a Rothamsted International Fellowship (RIF) to continue his research line on plant defense inducers, as a postdoctoral fellow, with Prof. John Pickett and Dr. Mike Birkett at Rothamsted Research, UK. He investigated how the plant elicitor cis-jasmone (CJ) elicits potato defense against aphid by modulating the emission of volatile defense chemistry. After a MSc in Entomology (Biological Control) at Suez Canal University (Egypt), he awarded a fellowship to conduct his PhD under the supervision of Prof.

Ted Turlings at Neuchâtel University, Switzerland. In his PhD, he managed to increase the attractiveness of maize plants to parasitoids with the application of chemical plant elicitors. In addition to chemical ecology, he has strong experience in entomology, biological control, induced plant defence and crop protection. Since 2010, he has authored over 37 peer-reviewed publications in high-ranking journals, including Current Biology, Journal of Experimental Botany, Plant Cell & Environment, Philosophical Transactions B, Frontiers in Plant Science, Functional Ecology, Frontiers in Ecology and Evolution, The Plant Journal, Animal Behaviour, Oikos, Pest Management Science and Journal of Chemical Ecology.

Islam supports the scientific community by serving as an associate editor, guest editor, and a reviewer for many journals in the field such as the Frontiers, Physiological Entomology, Plant-Arthropod Interactions Journal and Journal of Chemical Ecology. He was also a member of the organization team of ISCE 25th annual meeting which was held in 2009 at Neuchâtel University. He believes that exploiting the science and knowledge of chemical ecology can drive the development of innovative, environmentally sustainable strategies for the control of insect pests as key constraints to food security, particularly in the developing countries.

Don't forget: members may vote for four (4) councilors.

Deadline: May 15, 2025



Society News:

Changes in Bylaws

Executive Committee is proposing adding the Webmaster as the seventh member of the EC. This change requires voting of membership at the Annual meeting in ISCE APACE 2025 in Christchurch, NZ. A letter to all members with the details regarding the bylaw changes will be sent prior the Annual meeting.



ISCE Award winners 2024-2025

The 2025 winners are **Eran Pichersky** (ISCE Silver Medal) and **Sibao Wang** (Silverstein-Simeone Award). The winner of the 2025 Early Career Award is **Nathan Derstine**. The introduction of winners selected in 2025 will be published in the next issue.

Congratulations to all ISCE Award winners!



ISCE Family Fund Travel Grant

The ISCE wishes to promote the participation of young chemical ecologists in our meetings, in this case through the partial support of members who struggle between **early parenting and career development**. To do this, we created the ISCE Family Fund Travel Grant. For each annual meeting, we offer three awards of USD \$500 specifically allocated to offset childcare costs. Funds can be used to help cover additional travel expenses for an accompanying caregiver, or to cover expenses for local childcare in the vicinity of the meeting location.

For eligibility, check the ISCE website > <https://chemecol.org/awards/call-for-travel-awards/>

ISCE Student Travel Award

Travel awards are granted annually to support the attendance of students and postdoctoral researchers at the ISCE meeting. These awards provide partial support toward the travel costs, and a one-year ISCE membership. Award winners will be notified before the meeting registration deadline. These awards are sponsored in part by generous donations from Bedoukian Research, Inc., and Tofwerk AG. In recent years, the ISCE has awarded about 20 travel awards annually.

For eligibility, check the ISCE website > <https://chemecol.org/awards/call-for-travel-awards/>



Notice:

The deadlines for the Travel Awards applications has been extended till the **30 April 2025**



Most downloaded articles from Nov. 2024 — Feb. 2025:

Dickman, C.R., Fardell, L.L. & Hills, N. **Odour-mediated Interactions Between an Apex Reptilian Predator and its Mammalian Prey.** *J Chem Ecol* **48**, 401–415 (2022). <https://doi.org/10.1007/s10886-022-01350-w>

Original paper

Beran, F., Jiménez-Alemán, G.H., Lin, My. *et al.* **The Aggregation Pheromone of *Phyllotreta striolata* (Coleoptera: Chrysomelidae) Revisited.** *J Chem Ecol* **42**, 748–755 (2016). <https://doi.org/10.1007/s10886-016-0743-6>

Original paper

Orubuloye, O.Y., Mbewe, N.J., Tchouassi, D.P. *et al.* **An Overview of Tsetse Fly Repellents: Identification and Applications.** *J Chem Ecol* **50**, 581–592 (2024). <https://doi.org/10.1007/s10886-024-01527-5>

Review paper



International Society of Chemical Ecology

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