



International Society for Neuroethology

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THIS ISSUE FEATURES

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The Prez Sez
Eric Warrant
President of the ISN



Hello everyone!

Sadly, this is my last Prez Sez column – my tenth and final before handing over the reigns as President of the ISN to my friend and colleague **Karen Mesce**! This was a presidency that no one had expected, least of all me. Little did I know when the presidency of our society was handed to me at our Brisbane Congress in 2018 that only 18 months later the world would descend into chaos with the spread of a frightening and deadly new virus.

In fact, when it began in early 2020, we were beginning the countdown to our 14th International Congress to be held in Lisbon in July. By early March, the COVID-19 virus had spread from China and was already causing havoc in many parts of the world. Some countries were already closing their borders. At that point, my research group and I were at my house in Australia doing fieldwork on our migratory Bogong moths – and we were becoming nervous about becoming trapped there. Nervousness was even spreading within the ISN. What, for instance, would happen to our congress??

One cool morning, I awoke early, wrapped myself in a blanket, and crept outside onto our veranda to participate in a multi-country zoom call to discuss our next moves. Inside the house, well protected from my annoying voice, everyone else was still asleep after a hard night of experiments. With the sun just beginning to peak over the horizon, and after a fight with our bad internet, my screen burst to life with the faces of **Karen Mesce**, **Mark Bee**, **Catharine Rankin** and **Gabby Wolff** from our Executive Committee, together with **Uwe Homberg** and **Cindy Moss** from the Program Committee and **Rui Oliveira** from the Local Organising Committee in Lisbon. We then discussed something I could never have predicted just a month earlier – whether or not to make the unprecedented move of postponing our Congress for another year, or even two. The early medical signs were already indicating that we were in this pandemic for the long run. Luckily, despite my initial hesitancy, we decided on two years ...

But almost two years later, at the beginning of this year, it wasn't actually clear that we could hold our Congress after all – COVID-19 was still raging in many parts of the world and a new variant (omicron) was causing havoc. So we left the decision to go ahead (or not) as late as possible. And as you all know, despite a fear of impending disaster, we decided to press on. So here we are today, over two years after postponement, and the countdown to our Congress is now well under way! With just under two months to go before we meet in Lisbon, all those present in that cold early morning veranda meeting two years ago – and many others besides – are furiously involved in getting the program together, the finances organised and the infrastructure fixed in Lisbon. And I am immensely pleased to say that these preparations are going swimmingly! What is overwhelmingly clear is that you all desperately wanted to meet in person – finally!

As I write, almost 400 abstracts have been submitted, 12 extremely interesting participant symposia have been organized, 12 outstanding thematic symposia are in place, a fabulous suite of invited Plenary and Presidential Symposium speakers have been installed and of course rooms full of fantastic posters are soon to materialise!

And this year we will have the privilege of listening to the four outstanding recipients of our Young Investigator Awards - **Jay Stafstrom** (Cornell University), **Grace Capshaw** (Johns Hopkins University), **Mercedes Bengochea** (Paris Brain Institute) and **Alexandra Yarger** (Imperial College London). All this, together with the wonderful setting of the Gulbenkian Foundation facilities in Lisbon, organised by **Rui** and his team, promises one of our best congresses yet. This despite the sadness, tragedy, loss and frustration of the COVID-19 pandemic. It really is a testament to the human spirit! And a testament to the joys of neuroethology that we all share.

Despite the miseries of isolation and lockdown experienced by so many of us over the last couple of years, a number of really wonderful things have happened within the society during my presidency. For a start, we had a couple of excellent online events, one of which was an online symposium (that attracted over 150 participants!) with our 2020 Young Investigator Award winners: **Jerome Beetz** and **Pauline Fleischmann**, both from the University of Würzburg, **Angie Salles**, from Johns Hopkins University and **Rickesh Patel** from the University of Maryland (now University of Lund). The other was a highly successful online symposium in August 2020 on the topic of insect navigation, organized by **Paul Graham**, **Barbara Webb** and **Andrew Philippides**.

Another major highlight has been the formation of our Inclusion and Diversity (IDC) Committee, chaired by **Ana Silva** (with members **Lauren O'Connell**, **Heather Eisthen**, **Amir Ayali**, **Vivek Nityananda**, **Ayelén Nally** and **Lukas Weiss**). As part of their work they have introduced two major new awards – the Diversity Award to “support neuroethological scientists disadvantaged due to gender, ethnicity, disability, class, or other characteristics, and help them overcome the barriers they face” and the Mosaic Prize to “identify and acknowledge individuals in the neuroethology community for their contribution and commitment to improving practices and making the science and research environment more inclusive”. The Mosaic Prize is a commissioned piece of art on the theme of diversity, and will be awarded for the first time at the Lisbon congress. It gives me enormous pleasure to announce that this year's winner is Professor **Jose Luis Pena**, a man who has an extraordinary record in promoting inclusion and diversity within the neuroethological community. To quote the IDC: “Jose Luis is an excellent candidate for the 2022 Mosaic Prize, who combines a fruitful long career as neuroethologist with an also long commitment with diversity and inclusion issues. As a member of the LGBTQIA+ community, José Luis Peña has become a role model in

championing inclusion.” My heartiest congratulations Jose!

And finally, it gives me great pleasure to announce that we have elected a new ISN Fellow – Professor **Arthur Popper** of the University of Maryland. Arthur’s groundbreaking work in the field of bioacoustics, and his tremendous impact as both scientist and mentor, make him a worthy recipient of our most prestigious honour. Congratulations!

In response to the extraordinary times we have recently lived through, I as your president, together with the members of the Executive Committee and Council, sought and received your permission to persist in our posts for a further two years to ride us through the pandemic. I wish to personally thank all of you for placing your trust in us. But finally the time has come to change the guard. As I said at the start of my column, it is now my privilege to hand over the mantle of duty to **Karen Mesce**, after possibly the longest presidency in the society’s history! I promise you, Karen will be a truly outstanding president!

It has been an immense honour to be your president. My sincerest thanks for placing your faith in me back in 2016. I end this, my final Prez Sez column, with one of my favourite poems – a tribute to my many friends who work on the sensory systems and navigational abilities of bats, and a fitting celebration of the natural wonders that we are all so privileged to study. *The Flying-Fox Dreaming*, by well-known Australian poet Les A. Murray (from the collection *Ethnic Radio*, 1977).

My warmest regards, and I look forward to meeting you all in Lisbon!

Now that the west
is lighting in under leaves
and Hookfoot the eagle
has gone from over the forest
there is no sound except the
tree-foxes, unwrapping from rest:

finger-winged night workers
who will soon beat up in tens
and thousands out of this daylong head-down city;
in the offing of scents above earth, they will cast for grown
and native fruit, and home in down-country for miles
on the ripe tree beacons.

Upside down all their days
Antipodean,
night wardrobes their singleness for them. Each bat, alone,
puts off crowding and chatter, once above the perches
he becomes the unfolded, far-speeding, upward-sidestepping,

nightowl-outflying one.

Here, one, his fur ballast
dropped among weeds in its tightening parchment, also
disproves a bush story: they don’t excrete through the mouth
to satisfy gravity. All down the valley of fig
and flying-fox men, the lights now of towns are beginning
to gleam. They will burn late. It goes on being appropriate,
even the dead one becoming a clenched oval stone
*now clear of all twig-arrest, free of clambering dinners,
free at last of dawns’ dazzling comedowns. Windrowing east
over the farms, adroit
at wingshrink turns
he is topping the nectar time, and the pollen harvest,
going on out continually over horizons.*

-Les A. Murray

Eric Warrant
President, ISN



ISN AWARD WINNERS

Each year the ISN awards honors and prizes to members of our community who have made significant contributions to the field of neuroethology. Travel and research awards are also granted to early career scientists who show serious promise. Here is this year’s excellent roster of winners!

Fellow of the International Society for Neuroethology



Arthur N. Popper
University of Maryland

When agencies need to know if their pile driving or sonar testing will affect aquatic vertebrates, they ask Arthur Popper. We have him to thank for the brakes applied to noise generation in the oceans. Arthur’s research has extended from studies of underwater hearing to the effects of anthropogenic noise on aquatic life.

Arthur got his start in science at CUNY and the American Museum of Natural History, where he did his doctoral research on fish hearing in the 1960s. The work had twin threads of behavior and anatomy that have characterized his research ever since. Arthur discovered the varied, fan-like distribution of sensory hair cells over the teleost endorgans that convey directional sensitivity. The work also revealed amazing diversity among teleosts and their relatives. He has worked on auditory endorgans in

everything aquatic, from lampreys, coral reef fishes, cichlids, blind cave fish, bowfins, and many more. The work has yielded 222 original papers in peer-reviewed journals so far, and Arthur has also edited more than 50 books, and achieved an H-index of 86.

Arthur's focus on a comparative approach to the inner ear of fishes has provided outstanding training to many distinguished neuroethologists. Arthur is an exceptional mentor. His former trainees include Sheryl Coombs (Bowling Green), Catherine A. McCormick (just retired from Oberlin), Bernd Sokolowski (University of South Florida), David Mann (Univ Tampa), Zhongmin Lu (Miami), Dennis Higgs (Univ Windsor), and Allison Coffin (Washington State).

Arthur has always been generous with his time. He has edited more than 50 books in the *Springer Handbook of Auditory Research* and in retirement edits the science and technology magazine, *Acoustics Today*. Arthur has been tireless in his support of comparative audition. For ISN, he served as secretary from 1998-2001, and as chair of Long Range Planning Committee from 2001-2007. He has also organized many other meetings including the Fisheries Hydroacoustics Working Group, and meetings on The Effects of Noise on Aquatic Life.

-Catherine Carr

The Mosaic (Inclusion and Diversity) Prize



José Luis Peña
Albert Einstein College of Medicine

José Luis has worked actively since the 80s in different groups which foster inclusion, from early work with HIV positive LGBTQ Uruguayans, in multiple actions and committees supporting Latin American LGBTQ, as well as in groups assisting isolated LGBTQ elderly people in the USA. As an LGBTQ person, José Luis has faced personal challenges both in his personal and scientific life. His courageous and public testimonies of these experiences have certainly paved the way for other LGBTQ persons to envisage their lives and perspectives under a different, encouraging light. His own experience, and the way it has affected his life choices, has inspired him to promote equal opportunities for different people. His experience in this context encompasses different realities by Uruguay and U.S.A. so that his views, actions and proposals to render science more inclusive involves different horizons and cultures. Not casually, therefore, José Luis is currently a member of the Board of Directors of the ALBA network, for

promoting diversity and equity in Brain Sciences; within this network, he is particularly active in the Gender and Sexual Diversity Working Group and in the Imposter Syndrome Task Force. He is also a member of the Einstein Senate Committee for Diversity and Inclusion. José is an illuminating example of someone who takes proactive measures to promote inclusion, diversity, and equity. - **Martin Giurfa**

Capranica Neuroethology Prize



Gily Ginosar

Gily studies how the brain perceives and represents 3D space using freely flying bats. She is currently graduating with her Ph.D. from the department of Brain Sciences at the Weizmann Institute of Science in Israel, under the supervision of Prof. Nachum Ulanovsky. Prior to that, she studied for her M.Sc. in the Ulanovsky lab, and received a double major B.Sc. in physics and cognitive sciences from the Hebrew University in Jerusalem.

Konishi Neuroethology Research Awards



Eva Fischer

Eva K Fischer is an Assistant Professor in the Department of Evolution, Ecology, and Behavior at the University of Illinois Urbana-Champaign. Research in the Fischer Lab asks how brains and behavior can be both strikingly flexible and remarkably robust, and how these phenomena simultaneously give rise to widespread similarities and prodigious diversity in animal behavior. The lab uses integrative approaches to address these questions across hierarchical levels of biological organization (from genes, to networks, to neural circuits, to physiology, to behavior) and timescales (from immediate, to developmental, to evolutionary). Currently the lab primarily takes advantage of the remarkable interspecific diversity in behavior, morphology, and life histories across anuran amphibians. Beyond research, the lab is passionate about teaching, mentoring, and community engagement.



Fabio Cortesi

Born and raised in the Swiss alps and taking several detours along the way, I have been a member of the Sensory Neurobiology Group at the University of Queensland in Australia for the past six years. My research focuses on sensory system function and evolution with special interest in the way marine fishes see their world. To understand how vision and colour are contributing to the formation of single species and whole communities, I am using a variety of methods including high-throughput molecular approaches, transgenesis experiments, neurophysiological assessments, and behavioural experimentation. Outside of research, I do enjoy going for the occasional surf and exploring the beautiful nature that we have at our doorstep in Brisbane.

As these spiders are nocturnal, they have evolved an impressive array of sensory systems to help detect prey in a dimly lit environment. My ultimate goal is to better understand the form and function of deinopid sensory systems using comparative and neuroethological approaches.



Alexandra Yarger

My research at Imperial College London focuses on sensory systems responsible for capturing the complex stimuli involved in fine control of flight behaviors in insects. I use electrophysiological, ethological, and computational approaches to study the encoding mechanisms of specialized wing mechanosensors in the context of flight control. I am also interested in the diversity and evolution of flight and mechanosensation and how interactions between morphology and behavior have contributed to the co-evolution of body, brain, and behavior.

Young Investigator Awards



Mercedes Bengochea

My name is Mercedes Bengochea, I did my master studies and PhD at the University of Buenos Aires, Argentina. My research project was focused on investigating how the nervous system of crabs is organized to combine complex information in relatively few and identifiable steps of integration and how such information can be stored. For my postdoc, my interest shifted to address questions of individuality in a neuroethological context. For that, I joined the Bassem Hassan lab at the Paris Brain Institute (ICM) to study the neurobiological bases of variability and behavioural individuality in the framework of numerical cognition. I ask if *Drosophila melanogaster* possesses numerical abilities and if this can be studied at the level of intrinsic individual biases on numerosity based decision-making. My research established fruit flies as a new model system to study the neurobiological basis of numerical ability in insects.



Grace Capshaw

Grace Capshaw earned her PhD in the laboratory of Dr. Catherine Carr at the University of Maryland, College Park where she studied non-tympanic mechanisms for hearing and vibration detection in salamanders. She has since begun research as a postdoctoral fellow at Johns Hopkins University in the labs of Drs. Cynthia Moss and Amanda Lauer. Her current focus is a comparative study of cochlear and brainstem auditory anatomy and physiology in bats.

Developing Neuroethology Awards



Jay Stafstrom

I'm a postdoctoral researcher in the Hoy Lab at Cornell University. I study the sensory ecology of predatory behavior in net-casting spiders. This family of spiders (Deinopidae) actively ensnare their prey with a net they hold in their front legs.



Manal Shakeel

I am Manal, a PhD student with Dr. Axel Brockmann at the National Centre for Biological Sciences, Bangalore, India. I am broadly interested in understanding the mechanisms of foraging. For my PhD, I am studying local search in flies and honey bee dance. Local search in flies was first described by Vincent Dethier in the 1950s who studied the behavior in blowflies and called it a 'dance' akin to the honey bee waggle dance. I am studying motivational dynamics of search initiation in flies and honey bees post-feeding, and the time window for the motivation to dance

in honey bee foragers after successful foraging. Such a comparative approach will help us understand how similar the two behaviors are, with the hope to eventually understand the neural mechanisms underlying search and dance. I am also a theatre artist. I am currently working on a play about being a woman in science. I am thrilled to have received the award and am looking forward to meeting fellow neuroethologists at ICN 2022.



Sajesh Vijayan

I am a PhD student at IISER Thiruvananthapuram working under the supervision of Prof. Hema Somanathan. My research explores the collective and visual behaviour of the Asian giant honey bee *Apis dorsata*.



Alejandro Cámara

My name is Alejandro Cámara and I am a biologist from the University of Buenos Aires, Argentina. I am currently finishing my PhD at the Instituto de Fisiología, Biología Molecular y Neurociencias (IFIBYNE) in the University of Buenos Aires. During my PhD I developed a method for extracellular single unit recordings on behaving semiterrestrial crabs to further understand the role of lobula giant neurons in the crab's escape response. I enjoy technical challenges and working with unconventional models.



Ayelén Nally

Ayelén Nally is doing her PhD at University of Buenos Aires, Argentina. She is focusing on physiology and sensory plasticity of leaf cutting ants, *Acromyrmex ambiguus* from the Lower Delta del Paraná region in Argentina.

Diversity Awards



Giovanna Velázquez

I am Mexican and currently doing my PhD training at the behavioral genetics laboratory, at the Leloir Institute, in Buenos Aires, Argentina, under the supervision of

Dr. Fernanda Ceriani. My project focuses on the relationship between basal metabolism and the circadian clock, and how this relationship is affected by age, employing *Drosophila melanogaster* as a model organism.



Federico Reyes

I am conducting a PhD in biology in the Universidad de la República in Montevideo, Uruguay. My research is focused on the hormonal regulation of aggression in a native species of annual killifish with an intense sexual selection. These fish have a particular and extreme life cycle living in temporary ponds that dry out during summer. They reproduce continuously in only a single season! This brings the opportunity to address complex hormone-behavior relationships in the light of clear environmental and ecological pressures. In particular, I am interested in understanding the role of glucocorticoids and androgens in regulating male-male aggression across the season.

I consider myself an inclusive person and promoter of gender equality, sexual diversity and LGTB+ rights. I have participated in different workshops related to non-hegemonic masculinities and gender based violence within my University and other organizations. As a teacher of biology of behavior, sexual selection and evolution, I am interested in communicating updated biological knowledge to the local community with a gender perspective, striving to erase old-fashioned biological justifications of social based inequities.

Heiligenberg Student Travel Awards

Billie Goolsby

Stanford University

Research topic: In sync for Infants: Behavioral and Hormonal Signatures of Care in Biparental Poison Frogs

Stefan Mucha

Humboldt University Berlin

Research topic: A Spark in the Dark: Uncovering Natural Behavioral Patterns of Mormyrid Weakly Electric Fish

Amit Rana

Ben Gurion University of Negev

Research topic: Suppression of host nocifensive behavior by parasitoid wasp venom

Mariana Marquez Machorro

McGill University

Research topic: Serotonergic modulation of population coding (weakly electric fish)

Guillermo Valino

Universidad de la República de Uruguay

Research topic: Sex steroids regulating year-long aggression: the role of neurosteroids across sex and seasons (weakly electric fish)

Agnish Prusty

NCBS Bangalore

Research topic: Neck sensorimotor apparatus underlying gaze-stabilization in hawkmoths

Jessica Briggs

University of New Hampshire

Research topic: The effects of multi-modal noise on conspecific call perception in the field cricket, *Teleogryllus commodus*

Giacomo Costalunga

Max Planck Institute for Biological Intelligence

Research topic: Song duels adhere to context-dependent rules in nightingales

Alena Lemazina

Max Planck Institute for Ornithology

Research topic: The neural basis of spectral prosody in avian vocal duets

19 pandemic. With over 400 registrations so far, this ICN is shaping up to be as stimulating and diverse as we've come to expect from past meetings. Here are some of the highlights you can look forward to, but to find the full schedule, social events, travel and other information, visit neuroethology2020.com.

Those who can't join us in Lisbon can register for virtual access to the Presidential and Young Investigator Symposia.

Plenary Lectures

Ana Amador

University of Buenos Aires

An integrative view of birdsong production: biomechanics and neural dynamics

Eugenia Chiappe

Chapalimaud Centre for the Unknown

Motor context orchestrates visual control of locomotion in *Drosophila*

Elena Gracheva

Yale University

Molecular adaptations to the unique life style in mammalian hibernators

Elissa Hallem

UCLA

Host-seeking behaviors of skin-penetrating nematodes

Michiyo Kinoshita

SOKENDAI

Visual world of flower foraging swallowtail butterflies

Nathan Morehouse

University of Cincinnati

The evolution of color vision in jumping spiders

Jenny Read

Newcastle University

Stereoscopic vision in the praying mantis

Carlos Ribeiro

Chapalimaud Centre for the Unknown

The gourmet fly: how needs turn into "wants"



LOOKING FORWARD TO THE 2022 ICN



24-29 JULY | LISBON | PORTUGAL

Anticipation for the 2022 ICN in Lisbon, Portugal, is high after the original date was postponed due to the COVID-

Hideaki Takeuchi

Okayama University

Exploring the neural geography of the social brain using medaka fish

Founder's Lectures**José Luis Peña - Walter Heiligenberg Lecture**

Albert Einstein College of Medicine

The biased owl: How the brain selects which information to rely on

Paul Katz - Franz Huber Lecture

University of Massachusetts Amherst

Form, function, and phylogeny of neural circuits underlying behavior in nudibranchs

Presidential Symposium**Doug Altshuler**

University of British Columbia

Optic flow circuits and the visual guidance of avian flight

Eleanor Caves

University of Exeter

Vision and signaling behavior in cleaner shrimp-client fish mutualisms

Lars Chittka

Queen Mary University of London

The mind of the bee

Hopi Hoekstra

Harvard University

How behaviours evolve

Christine Merlin

Texas A&M University

Monarchs, migration and magnetoreception: from behavior to molecules

Stefan Schuster

University of Bayreuth

High-speed decision making in hunting archerfish

Invited Symposia**The neural basis of collective behavior**

Organizer: **Amir Ayali** (*School of Zoology, Tel Aviv University*)

Mechanisms of echo-acoustically guided navigation in birds and mammals

Organizers: **Susanne Hoffmann** (*Max Planck Institute for Biological Intelligence (in Foundation), Germany*); **Julio Hechavarría** (*Goethe-University Frankfurt am Main, Germany*)

Sensory integration

Organizer: **Lidia Szczupak** (*Instituto de Fisiología Biología Molecular y Neurociencias, UBA-CONICET Buenos Aires, Argentina*)

The evolution of sound localization circuits in land vertebrates

Organizers: **Catherine Carr** (*University of Maryland, USA*), **Jakob Christensen-Dalsgaard** (*University of Southern Denmark*); Introduction: **Christine Köppl** (*University of Oldenburg, Germany*)

Memorial symposium in honor of Barrie Frost and Jack Pettigrew, leaders in the field of neuroethology

Organizer: **Hermann Wagner** (*University of Aachen, Germany*)

Overlooked for decades? Motoneuron involvement in rhythm generation

Organizers: **Erik Zornik** (*Reed College, USA*) and **Boris Chagnaud** (*University of Graz, Austria*)

New tools to study behaviour in the field: insights from insect navigation

Organizers: **Michael Mangan** (*Univ. of Sheffield, UK*); **Antoine Wystrach**, (*CNRS, France*)

Redefining the boundaries of pheromone action: pheromones as neuromodulators of learning and memory

Organizers: **Martin Giurfa** (*Toulouse, France*), **Patrizia d'Etterre** (*Villetaneuse, Paris, France*)

Making biorobots behave: connecting engineering and animal behavior

Organizers: **Barry Trimmer** (*Biology Department, Tufts University*); **John Long** (*Cognitive Science, Vassar College*)

Insights into the fine tuning of social behavior: the brain as a source of steroid hormones

Organizer: **Laura Quintana** (*Instituto de Investigaciones Biológicas Clemente Estable, Uruguay*)

Neuroethology of 3D spatial navigation

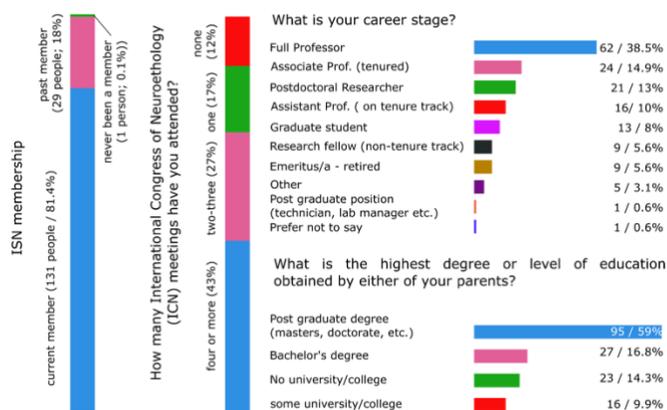
Organizer: **Michael Yartsev** (*University of California Berkeley*)

Selective attention and state-dependency in invertebrates

Organizer: **Vivek Nityananda** (*Newcastle University*)

INCLUSION AND DIVERSITY COMMITTEE SURVEY

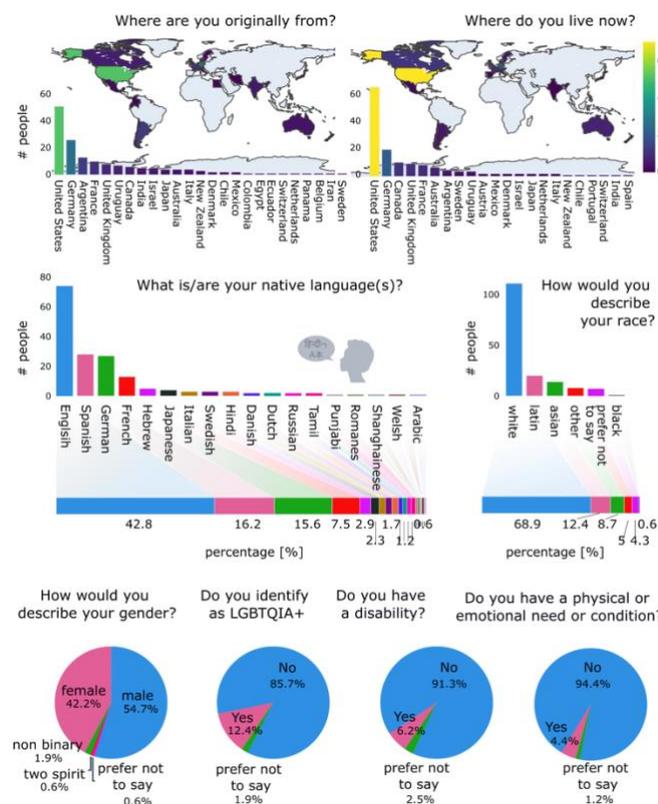
More than half of the respondents of our recent survey think that the attendees of the International Congresses of Neuroethology were diverse, while one third found them to be homogeneous. How do these opinions compare to the numbers?



A major goal of the International Society for Neuroethology (ISN) is to ensure our society is an inclusive community where diverse neuroethologists can thrive. To be able to support and celebrate diverse scientists we need to get a good sense of the demographic composition of our community. The Inclusion and Diversity Committee (IDC) of the ISN therefore launched a survey among the society's members, aiming to gain some insights into who we are as a society, and what will be necessary for us to grow and improve. Survey invitations were sent to all current ISN members as well as those who had been members in the preceding five years; the survey was open from 13 September to 31 October, 2021. The data were fully anonymized and will be made available on the ISN website. Here we present an

overview of the data and how it could help direct our programming and initiatives towards supporting groups that are underrepresented in our scientific community.

About one third of the current membership (131) plus some past members responded to our survey. The majority of respondents indicated that they had attended at least one International Congress of Neuroethology (ICN). About 70% said they were in more established research positions (60% full professors, associate professors and emeritus/a, and 10% tenure track faculty) with postdocs and students being in the minority. This survey data is consistent with demographic data from the ISN membership. One important task at hand will be identifying whether there are particular reasons or obstacles preventing younger researchers from joining the ISN and to create targeted initiatives to engage this particular demographic. Similarly, the number of respondents indicating that neither of their parents went to college/university (14%) shows that first-generation scientists are forming a clear minority in the ISN, when compared to almost 80% of people growing up with parents with a Bachelor's degree or higher.



In terms of geography, 25 countries of origin were represented, with at least one country per inhabited continent. On a very positive note, the three most highly represented countries, USA, Germany and Argentina, are located on three different continents. However, more effort has to be made to address and include other regions

in the world, primarily Africa and parts of Asia, that remain underrepresented in the current membership. The survey respondents speak a diversity of different native languages – 18 – and 11% of respondents are natively bilingual. More than 40% listed English as their sole or one of their native languages, by far constituting the largest group, with Spanish and German the next most commonly-spoken languages (both approximately 16 %).

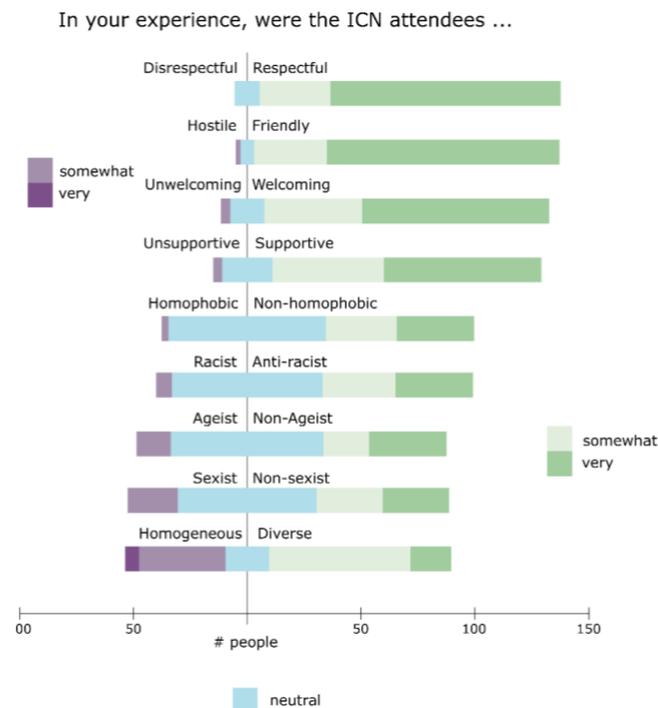
Although our membership is relatively diverse in terms of native countries and languages, almost 70% of the members identified as white. Some respondents commented however that they would have selected multiple options, which was unfortunately not possible in our survey (e.g. latin and white). One major concern is the underrepresentation of people identifying as Black, Asian and Latin, which will have to be addressed by the society in future initiatives. Unfortunately, we were not able to compare our results to those of similar surveys from other societies because few data are publicly available and the questions asked and number of response options given for each question are quite divergent¹.

Since almost half of the survey respondents are currently working in the US, we used survey data from the National Science Foundation (NSF) as benchmark. Respondents describing their gender as female are somewhat underrepresented at 42%, which is slightly less than the number of female scientists employed in the Life Sciences in the US (48%; NSF data from 2019) and the number of doctorates (more than 50%), Master’s and Bachelor’s degrees (more than 60%) in the biological sciences obtained by women in the US². In contrast, the survey showed a relatively large LGBTQIA+ population (12.4%), more than the number of people identifying as such among adults globally (11% according to the LBTQ+ Pride 2021 Global survey³, data from the NSF on this question is missing). The ISN would benefit from celebrating this diversity by actively working to retain these members, as studies indicate lower retention rates in science for LGBTQIA+ identifying people⁴. Only 6.2% of survey respondents indicate having a disability, which is lower than the number of people with disabilities in the general US population (13%) and also lower than the number of life scientists with disabilities employed in the US (8%)². Across scientific fields, the number of people with disabilities is lower than in the general population, underlining a need for science in general (including our society) to develop strategies to be more hospitable for this particular group.

A proposed initiative that found large support (40%) among the survey respondents was the possibility of child support at the meetings. Many people who generally support the idea also commented that they do not have

children themselves, and unfortunately our survey did not distinguish between those who support the idea and those who would actually use such a service.

In addition to understanding who we are as a society, the survey also addressed peoples’ perception of this scientific community. Of the people attending at least one ICN, a vast majority found the other attendees to be somewhat/very respectful, friendly, welcoming and supportive. A large proportion (approx. 40-50%) of respondents remained neutral when asked if they found ICN attendees homophobic/non-homophobic, racist/anti-racist, ageist/non-ageist and sexist/non-sexist. Future surveys will have to evaluate whether these opinions are due to a lack of experience involving these topics, whether these people did not find themselves affected or because of other reasons. More than 40% of respondents considered themselves part of a group historically excluded from science, with gender identity, sexual orientation, race, long and expensive travel, low science funding and language barriers being listed as obstacles. As a scientific society we must strive to identify and remove these barriers to make neuroethology more accessible.



Are we diverse or homogeneous as a Society? We believe that the results of this survey are a good starting point to identify initiatives to increase diversity and reach our goal of creating an inclusive community. Opinions of survey respondents were divided about whether the ICN attendees were perceived as homogeneous (31%) or

diverse (53%). This result by itself informs us that the question of what a diverse society is and what this means to different people can be quite divergent and is definitely something worth talking about. We therefore would like to invite all members of the society to join the first Diversity and Inclusion lunch session at the Congress in Lisbon on July 26th from 1 to 2pm.

-The Inclusion and Diversity Committee of the ISN

References

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3. <https://www.ipsos.com/en/lgbt-pride-2021-global-survey-points-generation-gap-around-gender-identity-and-sexual-attraction>
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EARLY CAREER EVENTS AT THE 2022 ICN

Early Career Representative, **Claire Rusch** shares some of the social and career development opportunities for students and postdocs at the 2022 ICN.

I am truly looking forward to our conference this July! It will be my first in person conference since the "before (COVID) times" and I am quite excited to meet or reconnect with members of our community. Currently my main audience is a 3-month-old baby and although very cute, he does not provide the best conversation. So, you can imagine how much I'm looking forward to this conference. I am especially looking forward to meeting and engaging with our early-career community at all the events that we, your ECRs, have planned for you.

First, we will have a social gathering/ice breaker at the end of the first full day of the meeting, i.e., on Monday. We want the early career scientists to feel welcome at the ICN and to have the opportunity to meet with other members of our community in a relaxed environment. So, this event is limited to graduate students and postdoctoral researchers. We will have free food, beverages, and fun activities. Local early career scientists will show you their

favorite venue in Lisbon and facilitate interaction. Saumya and I will work with them to plan a pack of fun activities to get to know people, the ICN, Lisbon, and maybe learn a few Portuguese words that could be useful during your stay! The local students and your ECRs will then serve as resources for other student attendees during the congress.

Second, for those of you who registered to the conference already, you know we are also planning an early career panel on Monday, from 1 to 2 pm. This career panel will offer attendees the opportunity to hear from established scientists from different backgrounds about their career paths, the challenges they faced and how they dealt with them, and what to expect when working in the neuroethology community as professors. Participants will be encouraged to submit questions, either beforehand, via anonymous applications and/or directly to the panelist during the event. Please send us an email (claire.rusch@gmail.com; saumyag@uw.edu) if there is any topic you would like to discuss but did not include in the questions asked during registration! We do not have a list of the panelists to share yet but be assured that we will do our best to have it representative of the diversity of our community, both in terms of background and career stage. We will also take notes of the conversation so that we can share it with all our EC scientists that could not attend the conference. You will find these notes in the next newsletter.

Finally, we think the conference is a great place to get to know your mentor/mentee (if they are around) from the ISN Mentorship Program. If you are unsure about how to meet with them, would like us to help with any part of the conversation, or anything else, please get in touch with us. If you do not have a mentor but would love to find one for the conference, let us know and we will make it happen! And if you are looking for a long-term mentor, please sign up for our Mentorship Program at the Society website (<https://www.neuroethology.org/>). You must log in to "My Account".

Please follow our conference hashtag #icn2022Lisbon to get updates and announcements about the upcoming conference. Looking forward to seeing you in Lisbon!



HOW TO MAKE THE MOST OF A CONFERENCE AS AN EARLY-CAREER RESEARCHER

Going to a scientific conference for the first time can be a daunting experience. Even after a couple meetings, new scientists often feel like they're not making the most of the available opportunities. Early Career Representative, **Saumya Gupta** shares some tips so you can network like a pro!

The 2022 conference season is upon us, and as we gear up to register for conferences, book flights, make hotel reservations, and prepare our presentations, it is also important to start thinking about how you can maximize your conference experience. We know that conferences are the best place to meet like-minded people, connect with the greater scientific community, establish potential collaborations, get new ideas, and learn about recent scientific advancements in our fields. At the same time, the pressure of putting yourself out there for multiple days at a time and attending multiple social events can easily get overwhelming. This is especially true for early-career researchers (ECRs) who might not know many people at the conference, and yet whose careers are most likely to be influenced by professional relationships they can develop. So, the big question for ECRs is how can we make the most of the conference without feeling too overwhelmed or burnt out? Here, we share some tips that will help you make your conference experience productive and meaningful.

Be Prepared. Attending a conference is a huge investment of time, money, and energy. If you want to make the most of this investment, it is crucial that you are well-prepared for it. This entails not only preparing for your presentation, but also taking the time to organize and make a game plan for networking. Below are some ideas for what you can do ahead of time. You don't have to follow every tip provided here to have a productive time; do whatever you are most comfortable with.

- Review the conference schedule ahead of time: The schedule and abstract book for most conferences are released weeks ahead of the event. Take advantage of this and make some time before you travel to go through the list of presentations, workshops, and scheduled activities. This exercise will mentally prepare you better for the upcoming events and give you an idea of the activities and talks you might be interested in attending. A good way to organize is to mark the sessions that you are interested in attending and create a tentative schedule.

- Create a list of people you want to meet: One of the significant advantages of going through the conference schedule ahead of time is that it will give you a chance to learn who will be in attendance. If you have a specific networking goal in mind, for example, if you want to find a potential collaborator on a project or a potential postdoc advisor, go through the list of attendees and make a list of people you want to meet. Depending on your goal, it will be useful to also prepare some tailored questions for the meeting. Having some talking points can help to reduce initial awkwardness and make conversations flow a lot smoother.
- Contact people ahead of time: You can also email attendees you are particularly excited about meeting and introduce yourself before the conference. Tell them that you are also attending and are looking forward to having a conversation with them in person. Most people will recognize and appreciate this extra effort when you eventually meet them in person.
- Use social media to gain visibility: Follow the conference #hashtag on Twitter to connect with people. For ICN 2022, please follow #icn2022Lisbon. If you are presenting, tweet about the title of your presentation along with a catchy description to generate interest for your presentation. You can also start interacting with other attendees and even make some friends before you are at the venue. Even if you prefer to be a bystander on social media, you can still get some helpful insights about people who will be in attendance.

Ask your advisor or mentor for introductions. If you are a student or postdoc and your advisor/mentor is attending the same conference, you are at a distinct advantage. You might not know many people in attendance, but likely, your advisor/mentor will. You can avoid the initial awkwardness of approaching people simply by asking your advisor/mentor to introduce you to people in their network.

Have an elevator pitch ready. A well-known saying goes, "You never get a second chance to make a first impression". This is especially true for a conference setting or a networking event where everybody meets a ton of new people. In such cases, the worst thing you can do is ramble about your research. Instead, plan on making a solid first impression by giving a short (30-60s), punchy summary of your research. If you can hook the listener, you are almost always guaranteed to get follow-up

questions. But beware that crafting this elevator pitch is not always easy, and it might take some time and practice to get it right. There are some excellent resources online that you can use to craft your own pitch.

Participate in interactive sessions. For many people, unstructured social events are not the most ideal method of networking. If you feel that it is the case with you, then you can benefit from attending more structured events, such as workshops and small group discussions. They can allow you to engage with community members in a meaningful setting without having to plunge into uncomfortable conversations.

Pause, relax, and recharge often. Taking care of your well-being is one of the most important aspects of having a productive conference experience. A common mistake first-time conference-goers often make is thinking they must attend every single session and social hour. This can't be further from the truth. It is easy to spread yourself too thin and ignore your own needs in the frenzy of attending all the exciting sessions, social events, and other planned activities. This generally leads to one feeling too emotionally and mentally drained to stay engaged during the entire duration of the meeting. To avoid this, you must take breaks and step away from the crowd when you start feeling overwhelmed. One great way of ensuring that you are taking breaks is to mark some empty slots while planning your schedule. It is completely okay to miss some sessions/activities to maintain your sanity. Some people find it relaxing to retreat to a quiet place for a few minutes to recharge, while others have to step out of the venue and clear their heads before resuming. Do whatever helps you to get refreshed and ready for action.

Follow up after the conference. Make sure you maintain any new connections you've made after the conference. Follow up with people you've met by sending them a quick email. For instance, if you talk about one of your papers with a colleague, follow up by sending it to them. It could also be a short email about how you were happy to meet them and hope to see them soon. This extra effort can turn your one-time interesting conversations into true professional relationships.

We hope that these tips help you in having a fun and productive next conference!

NEWLY LAUNCHED JOURNAL WITH A GATEWAY RESERVED FOR NEUROETHOLOGY

Stephanie White, Ricky Patel, Angie Salles and Jerome Beetz are on the editorial board of a newly launched online journal (<https://molecularpsychology.org/>). This journal has a section ("gateway") reserved for "Ethology and Neuroethology" and they currently plan to have a kick off of a special issue on the "Foundations of Neuroethology". [Click here for more information.](#)

The idea of the gateway is to promote Neuroethology and to spread its philosophy.

One of the greatest benefits that the journal provides is a symbiosis between preprint server and journal. Thus, any article submitted is openly accessible upon submission (e.g., with a DOI that may be especially helpful for young investigators needing to publish quickly to meet a degree or grant-proposal deadline). While deposited online, the peer-review occurs in parallel. The peer-review process is also highly transparent in the hope of assuring fairness and a constructive reviewing process. Please check out this new journal!

POSTER PRO-TIPS

If you're looking to print your poster after arriving in Lisbon, local organizer, **Rui Oliveira** recommends the following printer:

Digiset

<https://www.digiset.pt>

Phone: +351 210 102 931

Email: loja@digiset.pt

If your poster is ready early, I highly recommend printing on **Spoonflower's** "performance piqué" fabric. The print quality is high on this fabric, it costs less than printing a paper poster in most cases, and it doesn't wrinkle so you can fold it up in your backpack or suitcase without getting those creases you often see on fabric posters. Say goodbye to poster tubes! Details can be found here: <https://www.spoonflower.com/presentation-posters>

Gabriella Wolff
Secretary, ISN

