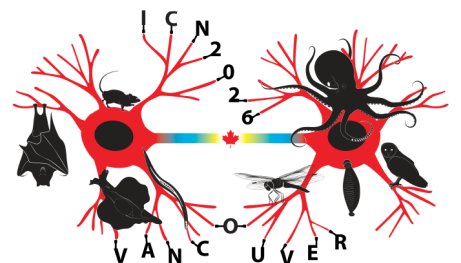


16th INTERNATIONAL CONGRESS OF NEUROETHOLOGY

26.07.2026 - 31.07.2026
VANCOUVER, CANADA



CONFERENCE
PROGRAM



CONTENTS

Sponsors.....	3
ICN2026 Organizing Committees.....	4
Welcome Messages.....	5
Code of Conduct.....	8
General Information.....	10
Oral and Poster Presentation Guidelines.....	13
Venue Maps.....	14
Campus Map & Accessibility.....	15

Program

Conference Schedule.....	16
Sunday, July 26.....	17
Monday, July 27.....	18
Tuesday, July 28.....	22
Wednesday, July 29.....	28
Thursday, July 30.....	33
Friday, July 31.....	38
Poster Session I.....	43
Poster Session II.....	47
Poster Session III.....	51

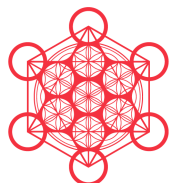
ICN 2026 logo: Sylvia Heredia

Gold Sponsors



THE UNIVERSITY OF BRITISH COLUMBIA

Faculty of Science



THE
KAVLI
FOUNDATION



The Company of
Biologists

THORLABS

Silver Sponsors



Djavad Mowafaghian
CENTRE FOR BRAIN HEALTH



Promotional Sponsor



ICN2026 ORGANIZING COMMITTEES

Local Organizing Committee

Doug Altshuler (Chair)
Sweta Agrawal
Manu Madhav
Ben Matthews
John Sakata
Kiran Soma
Sara Woolley

The University of British Columbia, Canada
The University of British Columbia, Canada
The University of British Columbia, Canada
The University of British Columbia, Canada
McGill University, Canada
The University of British Columbia, Canada
McGill University, Canada

Program Committee

Michael Dickinson (Co-Chair)
Marie Dacke (Co-Chair)
Gonzalo Budelli
Coen Elemans
Susana Lima
Poramate Manoonpong

California Institute of Technology, USA
Lund University, Sweden
Universidad de la República Uruguay, Uruguay
University of Southern Denmark, Denmark
Champalimaud Centre for the Unknown, Portugal
Vidyasirimedhi Institute of Science and Technology, Thailand, &
University of Southern Denmark, Denmark
Shiv Nadar University, India
Yale University, USA

Tanvi Deora
Elena Gracheva

Social Media Team

Jerome Beetz
Pauline Fleischmann
Olga Dyakova
Carlos Aguilar
Brendan Lan

Wuerzburg University, Germany
University of Oldenburg, Germany
Queen Mary University of London, UK
University of Goettingen, Germany
Cornell University, USA

Early-Career Representatives

Claire Rusch
Alex Winsor

Champalimaud Centre for the Unknown, Portugal
University of Massachusetts Amherst, USA

Local volunteer committee

Ayeshma Adikari (student), The University of British Columbia, Canada
Francisca Bermedo-Garcia (postdoctoral fellow), The University of British Columbia, Canada
Skylar Fang (student), The University of British Columbia, Canada
George Gao (student), The University of British Columbia, Canada
Stephen Huang (student), The University of British Columbia, Canada
Zirui Huang (student), The University of British Columbia, Canada
Wenjie Li (student), The University of British Columbia, Canada
Afsoon Mombeini (student), The University of British Columbia, Canada
Tara Nouhi (student), The University of British Columbia, Canada
Auguste de Pennart (student), The University of British Columbia, Canada
Jérôme Plumier (student), The University of British Columbia, Canada
Audrey Siu (student), The University of British Columbia, Canada
Zeyu (Bella) Yang (student), The University of British Columbia, Canada

Welcome from the President of the International Society for Neuroethology

Welcome to the 2026 International Congress for Neuroethology at the stunning University of British Columbia campus in Vancouver. At this meeting, you'll not only hear the latest scientific discoveries in neuroethology but also have the opportunity to connect with colleagues who may become life-long collaborators and friends. I hope you enjoy the International Congress for Neuroethology in Vancouver—where science, creativity, and community come together in a spectacular setting!



Your President,
Cindy Moss, Johns Hopkins University, USA

Welcome from the Local Organizing Committee

We are delighted to welcome you to the city of Vancouver and the campus of the University of British Columbia. It has been our pleasure to organize the congress in close collaboration with the society's Executive Committee, the congress' Program Committee, and the staff at UBC Conferences. Please reach out to any of us if you have questions or suggestions during the congress. We will be keeping notes to share with our colleagues who will be hosting ICN in Taipei in 2028.

Vancouver is often considered a dining destination. There are a number of restaurants and pubs on campus, including several located within The Nest, which is the building for most of the conference activities. Some other places you might enjoy include Koerner's Pub (1758 West Mall), Brown's Crafthouse and Kinton Ramen (both at 6111 University Blvd), and Rain or Shine ice cream (6001 University Blvd.).

Vancouver restaurants tend to book up so you may consider reserving in advance. A great restaurant that is located within walking distance of The Nest is Wildlight Kitchen and Bar (5380 University Blvd). Further afield, here are some of our favourites:

Ah and Chi (3388 Main St)
AnnaLena (1809 W 1st Ave)
Ask for Luigi (305 Alexander St)
Banana Leaf (3005 W Broadway)
Bao Bei (163 Keefer St)
Belgard Kitchen (55 Dunlevy Ave)
Blue Water Café (1095 Hamilton St)
Chambar (568 Beatty St)
Chez Celine (4298 Fraser St)
East is East (3035 W Broadway)
Eat Bar & Patio HaraHeri (888 Nelson St)

Hi-Nippon (2274 W 4th Ave)
Kingyo Izakaya (871 Denman St)
Kissa Tanto (263 E Pender St)
L'Abattoir (17 Carrall St)
Maenam (1938 W 4th Ave)
Published on Main (3593 Main St)
Raisu (2340 W 4th Ave)
Salmon n' Bannock (128 W Broadway)
Savio Volpe (615 Kingsway)
St. Lawrence (269 Powell St)

Another great feature of our town is local craft beer. Here are some of our favourite beer and wine rooms:

33 Acres (15 W 8th Ave)
August (1614 W 3rd Ave)
Brassneck (2148 Main St)
La Fabrique St. George (7 E 7th Ave)
Main Street (261 E 7th Ave)
Storm (310 Commercial Dr)
Strange Fellows (1345 Clark Dr)
Superflux (505 Clark Dr)



Your LOC Chair,

Doug Altshuler

Welcome from the Program Committee

On behalf of the entire Scientific Program Committee, we would like to welcome you to the 2016 International Congress of Neuroethology.

We have organized ICN 2026 in a slightly new format, designed to spark ideas, foster collaborations, celebrate the research diversity of our field, and provide our talented students and post-docs with more opportunities and to present their work. To begin the meeting in a more celebratory mode, we have moved the announcements of awards and new fellows to the opening ceremony.

We have recruited an exceptional line-up of speakers for the keynote and awards lectures, complemented by 16 invited symposia and 20 participant symposia. Altogether, we have created 128 oral presentation slots, including 8 highlighted talks, selected from the submitted abstracts, that will provide early career researchers with the opportunity to address the entire congress in the morning plenary sessions. By increasing the number of oral presentations, we have been able to create a more comfortable density for our 3 poster sessions, while still representing an exciting breadth of research topics.

Recognizing that our community has many interests and concerns not directly related to our research, we created a slot in the morning plenary sessions for addressing the topics of education, journalism, publishing, and the future of ICN. For the first time, we will have the chance to watch our fellow neuroethologists present their exciting new findings in the entertaining format of a Science Slam.

We hope you will enjoy these new changes while still appreciating the old traditions of our unique Congress.

Welcome to Vancouver!

Your Program Committee Co-chairs,

Michael Dickinson and Marie Dacke



CODE OF CONDUCT

Through our biennial congresses, the International Society for Neuroethology (ISN) fosters open exchange and critical evaluation of scientific ideas, facilitates development of new collaborations, and enables participants to find employment or recruit people to fill positions. To these ends, the ISN wants its meetings to be inclusive and for participants to feel safe and welcome. All participants at the International Congress of Neuroethology (ICN) should behave professionally, treating each other with respect and consideration. This includes thoughtful appreciation of each one's own professional status and position and an attempt to understand the status and position of others who may not share the same background or privilege. An open, inclusive environment is one where all participants emphasize supportive and empathetic behaviors. Participants must recognize that power and status affect how others receive words and actions and how others express themselves (or feel limited in their expression). It is not easy to flawlessly respect boundaries that may appear hidden or to understand how different backgrounds affect the perception of shared experiences, but respect and empathy for all should be the overriding principle.

The following behaviors are strictly prohibited whether expressed physically, verbally, or in writing:

Sexual harassment of any participant, including scientific attendees and their guests, vendors, support staff, service providers, and volunteers. Harassment includes but is not limited to unwelcome conduct of a sexual nature, including advances or propositions, requests for sexual favors, sexually explicit jokes, unnecessary touching, catcalling, and other conduct of a sexual nature. Participants must recognize that behavior that is acceptable to some people may not be acceptable to all, and that people in junior positions or from less privileged background may be reluctant to explicitly object to unwelcome behavior.

Discrimination of any kind, including but not limited to discrimination on the basis of race, ethnicity, culture, national origin, sexual orientation, gender identity and expression, social and economic class, educational level, immigration status, age, ability, marital or family status, political belief, or religion. Be aware that jokes or attempts to make light of status differences or physical appearance generally reinforce, rather than diminish, power differences. Words or actions that manipulate status or power to belittle, offend, or otherwise disenfranchise meeting attendees are unacceptable, as are inappropriate comments made in a joking manner.

Bullying, intimidation, and physical harm of any participant through behavior that frightens, threatens, or humiliates the recipient, including disruption of presentations as well as stalking or following. We recognize that scientific disagreements will sometimes arise and we in no way want to stifle scholarly and scientific discussion, but these discussions should be fair and respectful, focusing on the science rather than the individuals discussing it.

Retaliation for reporting inappropriate behavior, as well as bad faith reports of inappropriate behavior, are unacceptable and will be considered a violation of the code of conduct. Reports of violations of the code of conduct will be treated with strict confidentiality. Those experiencing or witnessing violations of the code of conduct can report them in person to any ISN officer or member of the ISN Community and Inclusivity Committee (easily identifiable by their pink conference name tags) or in writing by sending an email to any ISN officer or member of the ISN Community and Inclusivity Committee (whose email addresses are posted on the ICN website, www.neuroethology.org). If further anonymity is desired, reports can be sent from a newly-created, free Gmail account. All reports of misconduct will be investigated thoroughly, fairly, and as quickly as possible by the Community and Inclusivity Committee, who will provide all parties with a chance to explain themselves and will treat such matters with strict

confidentiality. ICN organizers and ISN officers reserve the right to enforce this code of conduct in any manner deemed appropriate. Anyone violating the code of conduct will be asked to stop engaging in inappropriate behavior and may be prohibited from presenting, expelled from the meeting without refund, prohibited from attending future meetings, and/or have their membership revoked. Actions that violate local laws may be reported to local law enforcement.

GENERAL INFORMATION

We look forward to hosting you at the University of British Columbia (UBC) Vancouver campus, which we respectfully acknowledge is situated within the traditional, ancestral and unceded territory of the xʷməθkʷəy̓əm (Musqueam).

The 2026 International Congress for Neuroethology will take place at the Nest (6133 University Blvd, Vancouver, BC V6T 1Z1), with accommodations available at the West Coast Suites, Gage Suites and Orchard Commons on the UBC campus for those who are traveling to the event.

Google Maps: [Here](#)

Downloadable PDF: [UBC Map](#)

CONFERENCE PROGRAM

The conference program is available online at [ICN 2026](#). We encourage you to view the schedule prior to arrival to familiarize yourself with the program.

REGISTRATION DESK INFORMATION

Registration will take place at the Walter H Gage Building (July 26, 1-3 pm), Jack Poole Alumni Centre (July 26, 5-8 pm) and the Nest, Great Hall Foyer (July 27-31). You may pick up your delegate badge and kit at the ICN Registration Desk. Please see the registration desk times online here: [Registration – ICN 2026](#)

CONFERENCE FOOD & BEVERAGE

There will be coffee breaks and throughout the meeting. If you had opted in for the conference banquet, this will take place at the Museum of Anthropology on the evening of July 31st. Any allergies mentioned in your registration have been taken into consideration, although there may still be a risk of cross contamination. If you have severe allergies, do let us know and carry appropriate medicines.

ACCESSIBILITY

The Nest is fully accessible with elevators, ramps, and Gender Neutral/Accessible washrooms on every floor.

DUPLICATION AND RECORDING

Unauthorized photography, audio taping, video recording, digital taping or any other form of duplication and dissemination is prohibited in the congress sessions.

NAME BADGES

For security reasons, delegates, speakers and exhibitors are required to wear their name badge to all sessions and social events. Entrance into sessions is restricted to registered delegates only.

PHOTO AND VIDEO RELEASE

Photos and videos may be taken during ICN 2026. These photos may be used in other publications, brochures, website, social media, mobile apps to promote ICN 2026. By virtue of your attendance, you agree to usage of your likeness in such media. If you have any questions or concerns about the Photo and Video Release, please contact registration@housing.ubc.ca.

ACCOMMODATION DETAILS

If you made accommodation arrangements through the conference block, below are the details:

Walter Gage Residence

5959 Student Union Boulevard

Vancouver BC
V6T 1K2 CANADA
Orchard Commons

6363 Agronomy Rd,
Vancouver, BC
V6T 1Z4

All rooms are designated non-smoking. No pets allowed (except service animals).

Check In: Your room will be ready for check in from 4 PM onward. Front Desk staff will greet you upon arrival, ask for your name, verify ID and provide you with a key to your room.

Check Out: Check out time is any time before 11 AM. Delegates checking out on a day when there is still programming until the evening, will be able to store their luggage at the Front Desk for the day while they participate in events.

Hotel Parking at Gage Residence: Temporary parking is available at time of check-in in front of the Walter Gage Residence at 5959 Student Union Boulevard. A front desk agent will direct you to the parkade. Parking is available at a daily rate of \$20.00 to \$25.00 plus tax per day.

OTHER UBC PARKING

For conference attendees staying off-campus, we recommend parking in the lot closest to the NEST, located at the North Parkade, 6115 Student Union Boulevard, Zone ID 5669 on the HONK mobile parking app. You may view all UBC parking lots online: <https://parking.ubc.ca/map>.

VANCOUVER PUBLIC TRANSIT

The main bus terminal on campus is located on Wesbrook Mall and only a short walk south from the Walter Gage Residence; the trolley terminal is located on the South side of War Memorial Gym. Buses run frequently to downtown Vancouver with connections to attractions in Vancouver. For further information, schedules and maps please visit www.translink.ca.

TAXI/UBER

The Vancouver International Airport is 15 km (9.5 miles) from the UBC Campus. Taxi fare out of the airport is charged by zone. UBC is in Zone 9 and charged at \$40 for a one-way trip. Zone fare information is found [online](#).

Uber and other ride-sharing apps fare will vary by availability and time of day. To reach your accommodation from the airport, enter your final destination address, if staying at Gage Suites: 5959 Student Union Boulevard or if staying at Orchard Commons: 6363 Agronomy Road.

CURRENCY EXCHANGE

Banks with currency exchange capabilities are located in the University Village Marketplace. Automated Teller Machines (ATM) dispensing Canadian funds are located in the main lobbies of Walter Gage Residence and at the NEST

INTERNET ACCESS

If you booked your accommodation at UBC, the hotel rooms are equipped with complimentary high-speed internet access in each suite. A complimentary UBC visitor network is available for use around Campus and in the Commons block. Guests must sign in with a valid email account to use the network. Wired internet is not available in the rooms.

FOOD SERVICES (other than Conference food)

There are many food venues located in The Nest, the University Village Marketplace, and other various outlets around campus. Please refer to the [Food, Amenities & Attractions at UBC](#) for

locations.

OTHER SERVICES

A post-office, pharmacy, mini-mart, travel agent and banks are located in the University Village, within a 10-minute walking distance from the Walter Gage Residence.

BUSINESS CENTRE

There is no designated Business Centre for the conference. However, there is a Staples at [2135 Allison Rd.](#) Tel 604-221-4780, which is conveniently located in the University Village.

CAMPUS ACTIVITIES

If you enjoy fitness and nature, UBC campus offers no shortage of walking paths and trails for running in [Pacific Spirit Regional Park](#) that surrounds the campus. Make time to visit the [UBC Botanical Garden](#) and add the Forest Canopy Walk. Finally, stop at the [UBC Rose Garden](#) at sunset for an unforgettable view overlooking the water and that perfect Instagram selfie. Or book a swim at the [UBC Aquatic Centre](#) located steps away from the NEST.

For some down time, follow the [UBC campus self-guided walking tour](#).

Finally, UBC has a number of additional campus highlights to explore:

Blue Whale

Walk past a blue whale skeleton on display in the [Beaty Biodiversity Museum](#).

UBC Museum of Anthropology

A display of art and culture, with a special emphasis on cultural communities of British Columbia.

UBC Bookstore

The [UBC Bookstore](#) sells more than just textbooks! Pay them a visit and shop for much more - including clothes and souvenirs. Use CON15 to receive a 15% discount on clothing & giftware. Please show your ICN badge at check out.

TOURISM LINKS

www.visit.ubc.ca, www.destinationvancouver.com, www.destinationbc.ca.

We sincerely look forward to welcoming you to the ICN Meeting in a few weeks!

Kind regards

The ICN Conference Secretariat

CONTACT INFORMATION:

ICN Conference Secretariat

Conferences and Accommodation at UBC

5961 Student Union Boulevard

Vancouver, BC

V6T 2C9 CANADA

Phone Number: 604-822-1050 (Mon - Fri 9am – 4pm)

ORAL AND POSTER PRESENTATION GUIDELINES

POSTERS

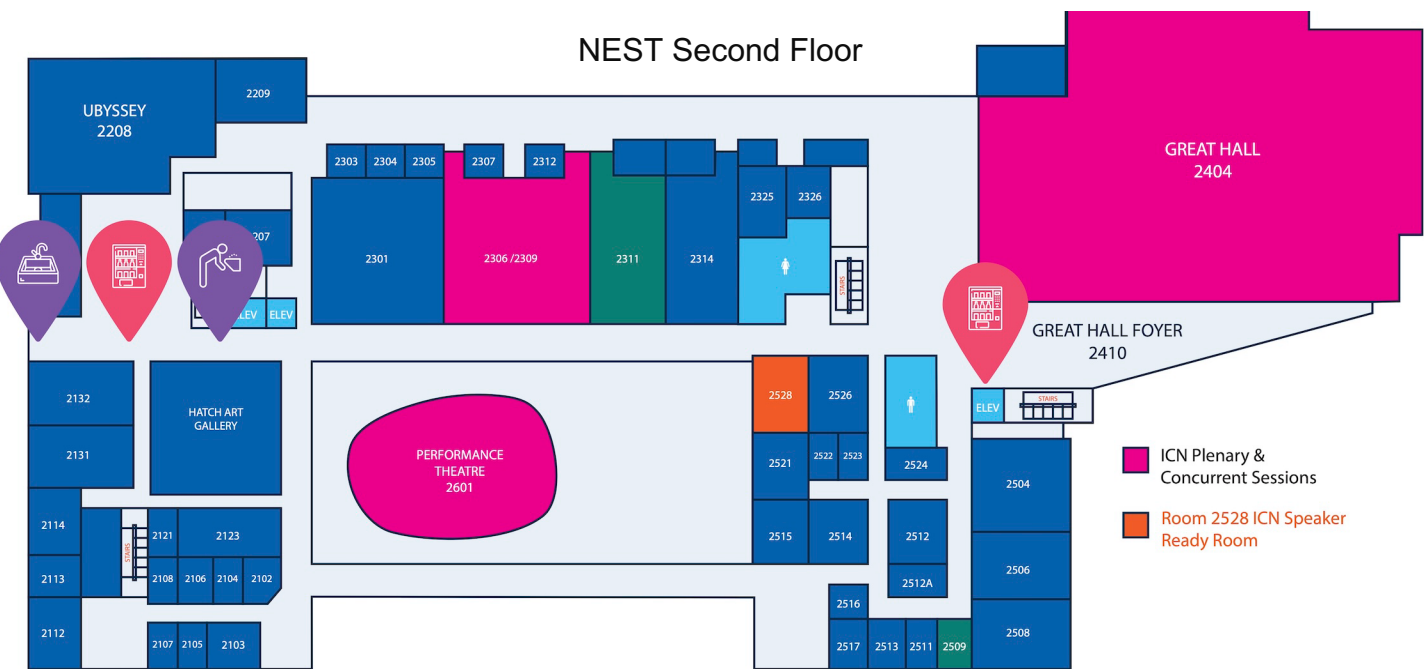
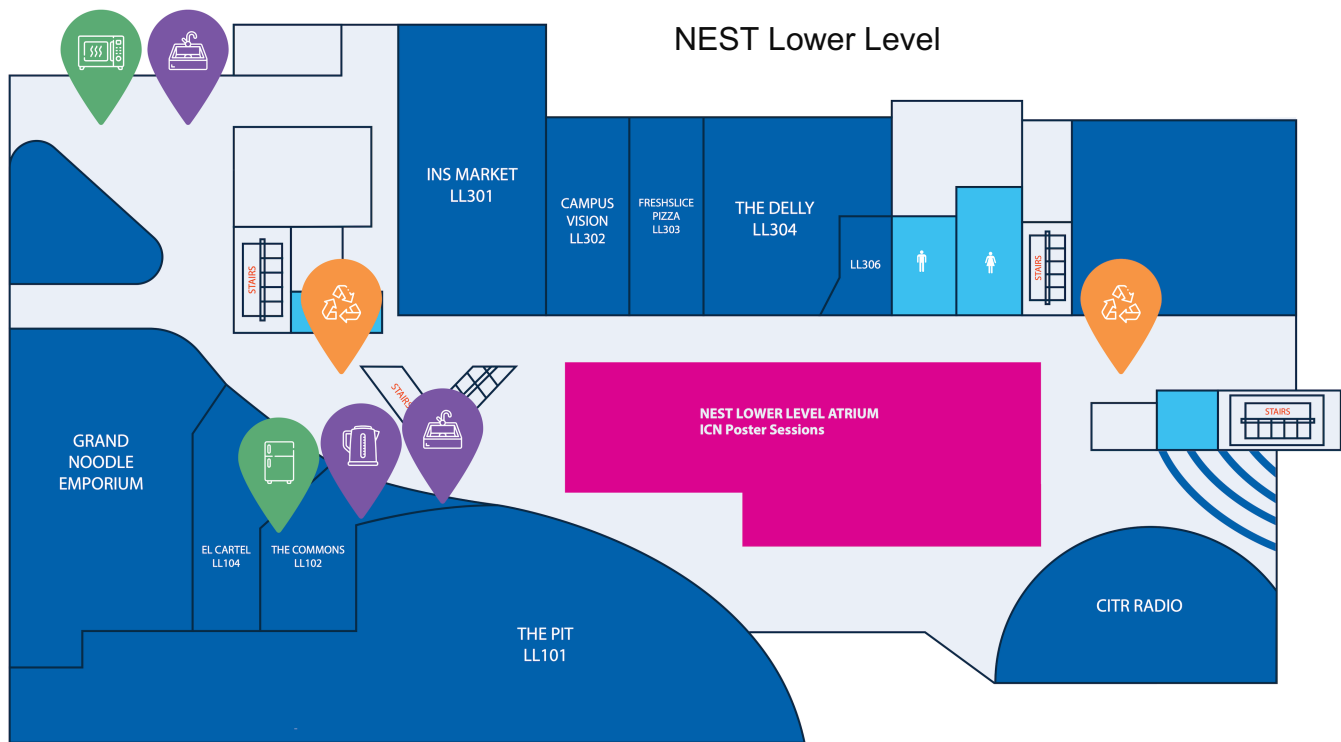
Poster presenter(s) are expected to attend in person during the scheduled poster presentation times to facilitate interaction.

- Poster Board Dimensions: Each poster board is 8 ft wide × 4 ft high (1.2 m high × 2.4 m wide) and can accommodate two posters per side.
- **Poster Size Limit:** Your poster must not exceed 3 ½ ft high × 3 ½ ft wide (1.1 m × 1.1 m). Push Pins will be provided
- As there are three poster sessions, posters should be put up between 8am and 9am in the morning, and taken down by 6pm in the evening. Any posters left on the boards will be recycled.

TECHNICAL AV PRESENTATION GUIDELINES FOR SPEAKERS

- Presentations must be pre-loaded and tested in the **Speaker-Ready Room: Nest room 2528**.
- Presentations can be loaded between 8-4:30pm Monday through Friday
- All presentation files must be submitted in **Microsoft PowerPoint (.ppt or .pptx)** format. PDF presentations may be used. Please test all your presentations before your presentation time.
- Presentation computers provided onsite will operate on **Windows OS with Microsoft Office**.
- Files should be on a thumb drive/ USB drive for easy transfer to the presentation computers
- Slides should be formatted in **16:9 widescreen resolution** (1920 × 1080 recommended).
- All embedded videos and audio files must be included in the same folder as the PowerPoint file and should be tested prior to upload.
- Preferred video format: **.mp4 (H.264 encoding)** or hyperlinked to the presentation.
- Custom fonts should be embedded within the presentation or converted to standard system fonts to avoid formatting issues.
- Presentations must be loaded onto the conference presentation desktop in the morning or **during the scheduled conference break immediately preceding the session**, unless otherwise directed by AV staff at the speaker ready room.
- To maintain session timing and minimize technical delays, presenters will not be permitted to connect personal laptops to the in-room AV system without prior approval from the conference team.
- Speakers should arrive in the session room at least **15–20 minutes prior** to the start of their session to check in with the session chair.
- Standard AV equipment will include:
 - Data projector and screen
 - Confidence monitor (where applicable)
 - Lectern microphone
 - Wireless lavalier or handheld microphone
 - Laser pointer and slide advancer
- Internet connectivity in session rooms is intended for basic access only. Live demonstrations, streaming, or web-based applications should not be relied upon unless specifically tested in advance.
- Final presentations should be clearly labeled using the following naming convention:
LastName_FirstName_SessionDate.pptx

VENUE MAPS



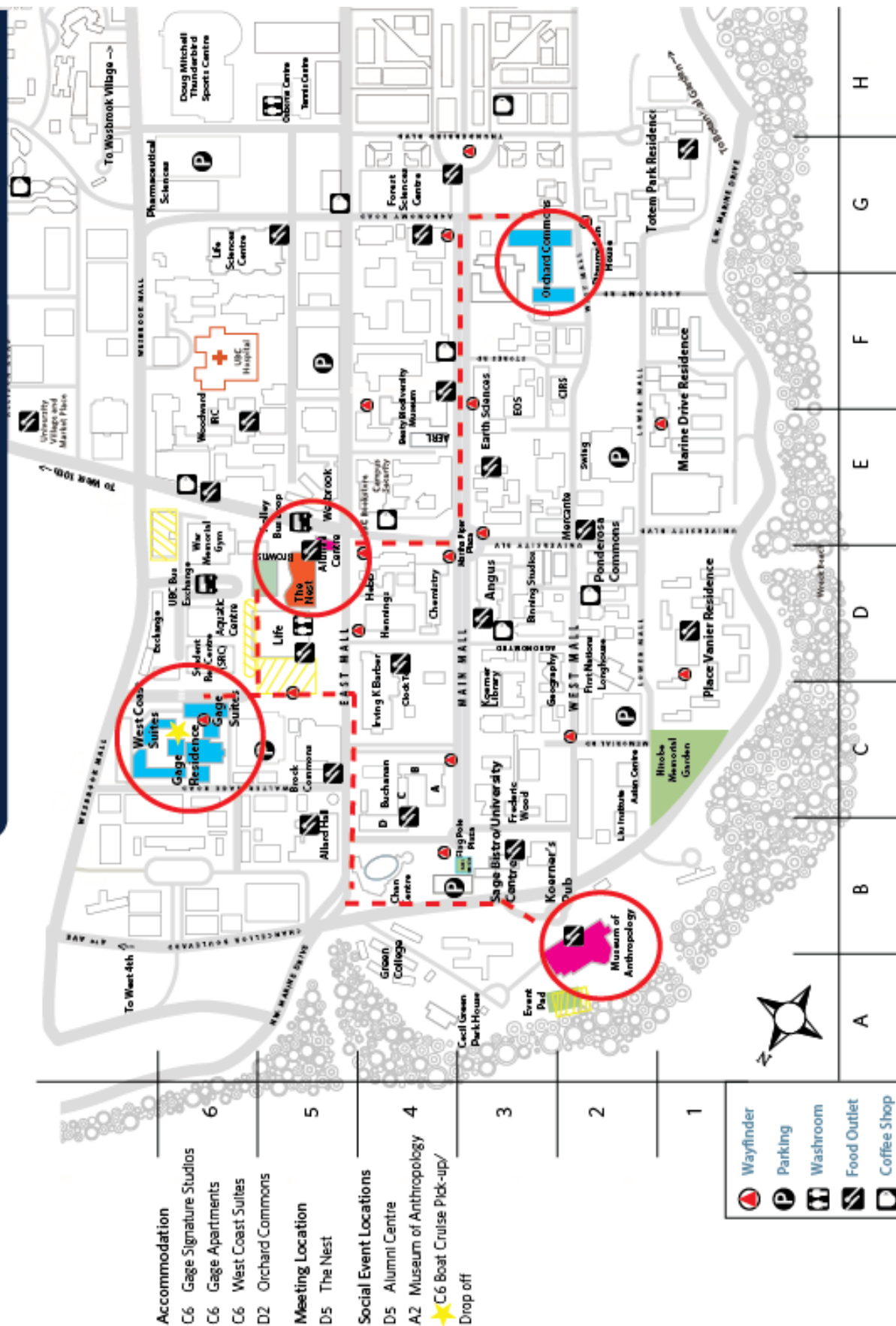
LEGEND



CAMPUS MAP & ACCESSIBILITY

Conferences & Accommodation
at The University of British Columbia | Vancouver

2026 International Congress for Neuroethology
July 26 - 31, 2026



CONFERENCE SCHEDULE OVERVIEW

	SUNDAY JULY 26	MONDAY JULY 27	TUESDAY JULY 28	WEDNESDAY JULY 29	THURSDAY JULY 30	FRIDAY JULY 31
8:00		Registration				
8:30		Location: Great Hall foyer				
9:00		Presidential Symposium	Plenary Talks			
9:30			Joe Parker	Lisa Fenk	Laura Quintana	Maude Baldwin
10:00			Highlighted Talks (x3)			
10:30		Coffee break				
11:00		Young Investigator Symposium	Invited Symposia			
11:30			(1-4)	(5-8)	(9-12)	(13-16)
12:00						
12:30		Lunch Break				
13:00	Registration Location: Walter H. Gage Building				ISN Council Meeting	
13:30				Community & Inclusivity		
14:00		Plenary Talks				
14:30		Huber Lecture: Catherine Dulac	Ajay Narendra	Heiligenburg lecture: Auke Ijspeert	Emily Standen	Michael Long
15:00		Quick Break				
15:30		Participant Talks				
16:00		Coffee Break				
16:30						
17:00		Poster sessions				Awards, ICN 2026
17:30	Reception & Opening Ceremony and Registration Location: Alumni Centre					
18:00		Icebreaker	Science Slam		Boat Cruise	Banquet
18:30						
19:00						
19:30						
20:00						
20:30						
21:00						
23:00						

BOAT CRUISE

Please note that the Boat Cruise on July 30 is a ticketed event and delegates will be emailed separately with a reminder. Delegates will be picked up outside the UBC Gage residence (see map on page 14) and dropped off at Spirit Cruises at 450 Denman Street. **Pick Up time: 4:30pm.** Buses will bring delegates back to UBC Gage Residence once the cruise concludes. Sunglasses, sunscreen, and comfortable clothing are recommended

PROGRAM

SUNDAY, JULY 26

13:00 - 15:00 Registration & Badge Pickup
Location: Gage Towers Reception Area

16:00 - 20:00 Registration & Badge Pickup
Location: Robert H. Lee Alumni Centre

17:00 – 20:00 RECEPTION AND OPENING CEREMONY

Location: Robert H. Lee Alumni Centre

17:00 – 18:00 Refreshments & Networking

18:00 – 19:00 Introductions, welcome addresses & announcements

19:00 – 20:00 Cultural program, Food, Drinks, and General Merriment

MONDAY, JULY 27

09:00 – 10:30 PRESIDENTIAL SYMPOSIUM

Chair: Cynthia Moss, President of ISN, Johns Hopkins University, USA

Location: Great Hall

9:00-9:10

ISN President's welcome and introduction to the symposium

Cynthia Moss, Johns Hopkins University, USA

9:10-9:35

Tribute to Ed Kravitz

“You have to care about your people”: teaching, mentoring, and inclusive excellence according to Ed

Alo Basu, College of the Holy Cross, USA

9:35-9:45

The joy of discovery: remembering Ed Kravitz

María de la Paz Fernández, Indiana University, USA

9:45-9:50

Tribute to Harvey Karten: the voyage of the night heron

Andrew Iwaniuk, University of Lethbridge, Canada

9:50-10:10

Harvey Karten and the mystery of the avian tectofugal system

Harald Luksch, Technical University of Munich, Germany

10:10-10:30

More foresight from Harvey Karten: pigeons use stereopsis when landing

Doug Wylie, University of Alberta, Canada

10:30 – 11:00

Coffee Break

11:00 – 12:20 YOUNG INVESTIGATOR SYMPOSIUM

Chair: Cynthia Moss, President of ISN, Johns Hopkins University, USA

Location: Great Hall

11:00 – 11:20

The ecology of electrostatics: pollination, parasitism, and predator-prey interactions

Sam England, Museum für Naturkunde - Leibniz Institute for Evolution and Biodiversity Science, Germany

11:20 – 11:40

Environmental transitions drive plasticity of the body, behaviour, and nervous system of the newt.

Andrew Matheson, Columbia University, USA

11:40 – 12:00

Neuroethology on an island: from spatial coding to ecology

Shaked Palgi, Weizmann institute of Science, Israel

12:00 – 12:20

Low frequency auditory stimuli provoke rapid ascent in free-flying *Aedes aegypti* mosquitoes

Mike Rauscher, Case Western Reserve University, USA

12:20-14:00

Lunch

14:00 – 14:45 PLENARY 1: HUBER LECTURE

Neurobiology of social and sickness behavior

Catherine Dulac, Harvard University, USA

Chair: Marie Dacke, Lund University, Sweden

Location: Great Hall

14:45-15:00

Stretch break

15:00 – 16:15 CONCURRENT PARTICIPANT TALKS

RHYTHMS & HOMEOSTATIC CONTROL

Location: Performance Theatre

Chair: Cheyenne McKinley, University of California Santa Barbara, USA

15:00 – 15:15

Time to Shine: Two clocks drive courtship in bioluminescent ostracods to occur in darkness

Cheyenne McKinley, University of California Santa Barbara, USA

15:15 – 15:30

Characterization of active sleep in cuttlefish *Sepia pharaonis*

Lai Junya, National Tsing Hua University, Taiwan

15:30 – 15:45

Through the looking glass: photoreceptive organs in transparent frogs?

Mila Maria Pamplona Barbosa, Stanford, USA

15:45 – 16:00

A signaling hub in the mosquito rectum coordinates host-seeking behavior and blood nutrient utilization

Laura Duvall, Columbia University, USA

16:00 – 16:15

CHEMOSENSORY-GUIDED BEHAVIOUR

Real-time mosquito biting behavior above and below human host skin

Joanna Konopka, Johns Hopkins University, USA

URBAN STRESSORS & ADAPTATION

Location: Great Hall South

Chair: Helena Norman, University of Glasgow, United Kingdom

15:00 – 15:15

Is all disruption created equal? Evaluating how sensory inputs affect sleep behaviour in fish

Helena Norman, University of Glasgow, United Kingdom

15:15 – 15:30

Human specialization and predator avoidance: tradeoffs for the Dengue mosquito

James Fifer, University of California San Diego, USA

15:30 – 15:45

Sense and scentability: A perceptual model indicates air pollution-induced shifts in honeybee floral-scent recognition

Jordanna Sprayberry, Stony Brook University, USA

15:45 – 16:00

Do behavioral and physiological hearing thresholds vary among urban and rural soundscapes?

Alejandro Velez, University of Tennessee, Knoxville, USA

16:00 – 16:15

The great frog hunt: how urban noise shapes host-seeking in a frog-biting mosquito

Richa Singh, Purdue University, USA

ACOUSTICS & SENSORY MECHANICS

Location: Room 2306/2309

Chair: Lucille Chapuis, La Trobe University, Australia

15:00 – 15:15

Visualising hearing in marine invertebrates: sound-driven motion of the statocyst

Lucille Chapuis, La Trobe University, Australia

15:15 – 15:30

Seeking dances in darkness: vibro-acoustic communication of the dance signal in honeybees

Sajesh Vijayan, University of Western Ontario, Canada

15:30 – 15:45

Tiny but precise ears: sound source localization in a frog-biting mosquito

Ximena Bernal, Purdue University, USA

15:45 – 16:00

Dieldrin resistance mutations in Rdl enhance auditory function and drive urban adaptation of malaria mosquitoes

Marta Andrés, National Institute for Agricultural and Food Research & Technology, Spain

16:00 – 16:15

Tiger moth clicks are directional warning signals and optimally unveiled

John Ratcliffe, University of Toronto, Canada

SENSORY LEARNING & DECISION-MAKING

Location: Great Hall North

Chair: Nicole Bedford, University of Wyoming, USA

15:00 – 15:15

Torpor depth predicts hippocampal cell density and spatial memory in hibernating chipmunks

Nicole Bedford, University of Wyoming, USA

15:15 – 15:30

Olfactory gating of wavelength-dependent visual memory in *Aedes aegypti*

Grace Van Susteren, University of Washington, USA

15:30 – 15:45

The development of active vision strategies in bumblebees

Hei Loi Yip, Newcastle University, United Kingdom

15:45 – 16:00

Affective pain experience induces conditioned place avoidance in the cuttlefish *Sepia pharaonis*

Chia-Yi Li, National Tsing Hua University, Taiwan

16:00 – 16:15

Cue-guided decision-making in the echolocating bat

Magdiel Jaroszewski, Johns Hopkins University, USA

16:00 – 18:00 POSTER SESSION I AND NETWORKING BREAK

Coffee will be served in the Nest Lower Level Atrium

18:00 – 20:00 STUDENT/POSTDOC ICEBREAKER

Location: Great Hall

TUESDAY July 28

09:00 – 09:45 PLENARY 2

The evolution of symbiotic entrenchment

Joseph Parker, California Institute of Technology, USA

Chair: Marie Dacke, Lund University, Sweden

Location: Great Hall

09:45 – 10:30 HIGHLIGHTED TALKS

09:45 – 10:00

Substrate-bound societies: vibratory sensing and communication in tiny caterpillars

Emilie Mauduit, Carleton University, Canada

10:00 – 10:15

Using spatial orientation to assess blast-induced neurotrauma in an animal that uses shock waves as weapons

Alexandra Kingston, University of Tulsa, USA

10:15 – 10:30

Teaching neuroethology: Insights from a worldwide survey

Linnea van Griethuisen, Maastricht University, Netherlands

10:30 – 11:00

Coffee Break

11:00 – 12:30 CONCURRENT INVITED SYMPOSIA 1-4

Invited Symposium 1: Principles of sensory navigation across species & habitats

Chair: Claire Wyart, Paris Brain Institute, France

Location: Great Hall South

S1.1 11:00 – 11:20

Neural dynamics for working memory and evidence integration during olfactory navigation in *Drosophila*

Nick Kathman, Marshall University, USA

S1.2 11:20 – 11:40

Swimming in the dark: sensory navigation in blind cavefish

Sylvie Rétaux, Paris-Saclay Institute of Neuroscience, France

S1.3 11:40 – 12:00

Task representations and context-dependent navigation strategies

Gautam Reddy, Princeton University, USA

S1.4 12:00 – 12:15

Unraveling motor strategies during navigation

Claire Wyart, Paris Brain Institute, France

S1.5 12:15 – 12:30

Visual navigation in ants

Antoine Wystrach, University Paul Sabatier of Toulouse, France

Invited Symposium 2: Principles of communication in social groups: from behavior to neuron

Chair: Megan Freiler, University of Minnesota, USA

Location: Great Hall North

S2.1 11:00 – 11:20

Social context modulates hygienic behaviour in *Apis mellifera*

Grégory Lafon, National Research Institute for Agriculture, Food and Environment, France

S2.2 11:20 – 11:40

Neural circuits for social communication in bats

Angeles Salles, University of Illinois at Chicago, USA

S2.3 11:40 – 12:00

Social dynamics modulate call patterning in a South American treefrog

Mariana Rodriguez-Santiago, Colorado State University, USA

S2.4 12:00 – 12:15

Tracking the social lives of electric eels in their natural habitat

Patrick Weygoldt, University of Tübingen, Germany

S2.5 12:15 – 12:30

Neural mechanisms of alarm call production in wild free-living songbirds

Lorenzo Micolucci, Max Planck Institute for Biological Intelligence, Germany

Invited Symposium 3: Evolution of sleep: a comparative perspective to unravel the biological function of sleep?

Chair: Jerome Beetz, Wuerzburg University, Germany

Location: Room 2306/2309

S3.1 11:00 – 11:20

Genetic and evolutionary analysis of sleep and aging in cavefish

Alex Keene, Texas A&M University, USA

S3.2 11:20 – 11:40

Do not disturb: sleep and memory in honeybees

Hanna Zwaka, Leibniz Institute, Germany

S3.3 11:40 – 12:00

Sleep-dependent neural processes that support natural-like experiences

Azahara Oliva, Cornell University, USA

S3.4 12:00 – 12:15

Sleep, Dragons, CPGs

Lorenz A. Fenk, Max Planck Institute for Biological Intelligence, Germany

S3.5 12:15 – 12:30

Rapid iris movements during REM sleep in pigeons: a new window into the sleeping brain

Gianina Ungurean, Max Planck Institute for Biological Intelligence, Germany

Invited Symposium 4: Adaptive responses to changing internal and external environments: weathering the storm

Chairs: Joe Santin, University of Missouri-Columbia, USA & David Schulz, University of Missouri-Columbia, USA

Location: Performance Theatre

S4.1 11:00 – 11:20

Overcoming glutamate excitotoxicity during metabolic stress: the bird's-brain view

Lara Amaral-Silva, Wake Forest University, USA

S4.2 11:20 – 11:40

Seasonal differences in the physiology and modulation of the cardiac neuromuscular system in the American lobster

Daniel Powell, Bowdoin College, USA

S4.3 11:40 – 12:00

Filling in the gaps: the auditory midbrain supports flexible navigation behaviors in bats

Clarice Diebold, Washington University in St. Louis, USA

S4.4 12:00 – 12:15

Hibernation uncouples neural activity from oxygen consumption in the American bullfrog

Hafsa Yaseen, University of Missouri, USA

S4.5 12:15 – 12:30

Temperature compensation across neural and neuromuscular functions in *Cancer borealis*

Kathleen Jacquerie, Brandeis University, USA

12:30-14:00 Lunch

14:00 – 14:45 PLENARY 3

Tiny brains, true bearings: finding the way home in a big world

Ajay Narendra, Macquarie University, Australia

Chair: Tanvi Deodora, Shiv Nadar University, India

Location: Great Hall

14:45 – 15:00 Stretch Break

15:00 – 16:15 CONCURRENT PARTICIPANT TALKS

NEURAL MECHANISMS OF ACOUSTIC COMMUNICATION

Location: Great Hall North

Chair: Nicolas Mathevon, University of Saint-Etienne, France

15:00 – 15:15

Mapping the global architecture of birdsong in a neurally relevant acoustic space

Nicolas Mathevon, University of Saint-Etienne, France

15:15 – 15:30

Neurons on reassignment: reinforcement repurposes auditory circuits in chorus frogs

Anwesha Mukhopadhyay, University of Utah, USA

15:30 – 15:45

Larval-like brains in transparent adult fishes: flipping the script on brain-behavior complexity

Jonathan Perelmuter, Cornell University, USA

15:45 – 16:00

Harbor seals as mammalian models for vocal production learning

Andrea Ravignani, Sapienza University of Rome, Italy

16:00 – 16:15

Auditory resistance to noise damage in the FM-echolocating fruit bat, *Carollia perspicillata*

Grace Capshaw, Johns Hopkins University, USA

ARTHROPOD LOCOMOTION & MOTOR PROGRAMS

Location: Great Hall South

Chair: Natasha Mhatre, Western University, Canada

15:00 – 15:15

Traversing a tangled web: locomotion in black widow spiders

Natasha Mhatre, Western University, Canada

15:15 – 15:30

Prosthetic leg integration reorganizes walking coordination in crickets

Dai Owaki, Tohoku University, Japan

15:30 – 15:45

How the structure of the motor program is set by the frequency of locomotion

Leo Wood, Princeton Neuroscience Institute, USA

15:45 – 16:00

Adapting a comprehensive, spike-resolved motor program to changing body mass

Ben Doshna, Georgia Institute of Technology, USA

16:00 – 16:15

Watch your tongue: lateralized visuo-motor control guides hawkmoth proboscis probing

Lochlan Walsh, University of Konstanz, Germany

PHOTORECEPTORS & VISUAL ADAPTATION

Location: Room 2306/2309

Chair: Michael Bok, Lund University, Sweden

15:00 – 15:15

Vision in changing waters: adaptation to light environments in predatory zooplankton

Michael Bok, Lund University, Sweden

15:15 – 15:30

Comparative connectomics provides new insights into the rod pathway of vertebrate retinas

Silke Haverkamp, Max-Planck-Institute for Neurobiology of Behavior, Germany

15:30 – 15:45

Naturalistic image processing across bumblebee photoreceptors

Janka Kluge, Lund University, Sweden

15:45 – 16:00

Rethinking rods and cones: photoreceptor identity in deep-sea pearleyes

Camilla Kidmose, Charles University, Czech Republic

16:00 – 16:15

Vision in a single cell

Anders Garm, University of Copenhagen, Denmark

DEVELOPMENTAL PLASTICITY AND EVOLUTION

Location: Performance Theatre

Chair: Ben Sandkam, Cornell University, USA

15:00 – 15:15

Alternative androgen-signaling pathways underly mating behavior across five male morphs

Ben Sandkam, Cornell University, USA

15:15 – 15:30

Early life predation stress leads to long term changes in behavioral and neural trajectories

Abigail Trocinski, University of California, Davis, USA

15:30 – 15:45

Elucidation of the neural circuit regulating the initiation of ascidian metamorphosis

Manami Doi, Keio University, Japan

15:45 – 16:00

Evolution and integration of a novel cell type for target detection in housefly retinas

Michael Perry, University of California, San Diego, USA

16:00 – 16:15

Plasticity and evolution coordinate predictions and behavior through a sensorimotor hub

Martin Jarzyna, Washington University in St. Louis, USA

16:00 – 18:00 POSTER SESSION II AND NETWORKING BREAK

Coffee will be served in the Nest Lower Level Atrium

18:00 – 19:00 SCIENCE SLAM

Chairs: Michael Dickinson, California Institute of Technology, USA & Marie Dacke, Lund University, Sweden

Location: Great Hall

Failures that are not failures: the case of jump escape response in a grasshopper

Pranay Dasyam, University of Hyderabad, India

How being on the move helps bees learn any visual task

Vivek Nityananda, Newcastle University, United Kingdom

Hippocampal coding during real world navigation in bats flying on a remote island

Saikat, Ray, Weizmann Institute of Science, Israel

Why did the fly cross the gap? - A computational model of distance tuning in neural superposition compound eyes

Cora Sophia Gesine Hummert, University of Edinburgh, United Kingdom

The universal smile is person-specific

Inbal Ravreby, Cornell University, USA

WEDNESDAY July 29

09:00 – 09:45 **PLENARY 4**

Mechanisms of active vision in insects

Lisa Fenk, MPI for Biological Intelligence, Germany

Chair: Michael Dickinson, California Institute of Technology, USA

Location: Great Hall

09:45 – 10:30 **HIGHLIGHTED TALKS**

09:45 – 10:00

Visual detection of jumping spiders by *Drosophila* flies

Jessica Zung, Columbia University, USA

10:00-10:15

A 3D reconstruction of a *Portia* jumping spider wild hunt

Finn J. Petrie, Northwestern University, USA

10:15 – 10:30

Science and Storytelling

Hannah Thomsay, Science journalist, Canada

10:30 – 11:00

Coffee Break

11:00 – 12:30 **CONCURRENT INVITED SYMPOSIA 5-8**

Invited Symposium 5: The neural substrate of animal collective motion

Chair: Amir Ayali, Tel Aviv University, Israel

Location: Great Hall South

S5.1 11:00 – 11:20

Neurobiology of social action detection in schooling fish

Matthew Lovett-Barron, University of California San Diego, USA

S5.2 11:20 – 11:40

Neural organization of social identities and classes in a group of bats

Saikat Ray, Weizmann Institute of Science, Israel

S5.3 11:40 – 12:00

Mechanisms of social cue integration underlying the safety in numbers effect in flies

Clara Howcroft Ferreira, Northumbria University, United Kingdom

S5.4 12:00 – 12:15

Visual interactions in locust collective motion-related decision making

Amir Ayali, Tel Aviv University, Israel

S5.5 12:15 – 12:30

Synchronization and signal diversity in firefly swarms

Orit Peleg, University of Colorado Boulder, USA

Invited Symposium 6: Brains in the Wild A

Chairs: Nachum Ulanovsky, Weizmann Institute of Science, Israel

Location: Great Hall North

S6.1 11:00 – 11:20

Neuroethology of navigation in the wild: place cells and head-direction cells in bats navigating outdoors on a remote oceanic island

Nachum Ulanovsky, Weizmann Institute of Science, Israel

S6.2 11:20 – 11:40

Neural circuit mechanisms of rodent foraging and social group behavior in natural environments.

Antonio Fernandez-Ruiz, Cornell University, USA

S6.3 11:40 – 12:00

Neurophysiology in wild free-ranging songbirds in South Africa reveals the neural mechanisms of duet singing

Susanne Hoffmann, MPI Biological Intelligence, Germany

S6.4 12:00 – 12:15

Mice navigate complex and natural environments by using sparse sets of paths

Jakob Voigts, Janelia Research Campus, USA

S6.5 12:15 – 12:30

Sleep research goes wild: from sloths to penguins”.

Niels Rattenborg, MPI Biological Intelligence, Germany

Invited Symposium 7: The Evolutionary, Behavioral, and Neural Bases of Synchrony

Chairs: Lauren O'Connell, Stanford Univ., USA & Eduardo Fernandez Duque, Yale Univ., USA

Location: Room 2306/2309

S7.1 11:00 – 11:20

Social physiology: the metabolic roots of social bonding

Monia Masalha, The Hebrew University, Israel

S7.2 11:20 – 11:40

Neural synchrony and transcriptional concordance in relationships

Zoe Donaldson, University of Colorado Boulder, USA

S7.3 11:40 – 12:00

Synchronizing care: hormonal and transcriptomic convergence precedes flexible paternal behavior

Facundo Fernandez-Duque, University of Illinois, USA

S7.4 12:00 – 12:15

Neural mechanisms underlying family coordination in poison frogs

Billie Goolsby, Stanford University, USA

S7.5 12:15 – 12:30

Neuromolecular coordination of reproductive behavior in a highly social cichlid fish

Isaac Miller-Crews, Indiana University, USA

Invited Symposium 8: Neurosustainability: How Brain Science is Revolutionizing Environmental Design and Policy

Chairs: Tracy Larson, University of Virginia, USA & Jeff Riffel, University of Washington, USA

Location: Performance Theatre

S8.1 11:00 – 11:20

Can the study of coyote pair-bonding improve public perception and predator management?

Sara Freeman, Utah State University, USA

S8.2 11:20 – 11:40

Feedback between nest architecture and ant collective behavior

Noa Pinter-Wollman, University of California Los Angeles, USA

S8.3 11:40 – 12:00

A roadmap to integrate neurobiology in changing oceans into environmental science

Martin Tresguerres, University of California San Diego, USA

S8.4 12:00 – 12:15

Informing Coral Resilience through Neurobiology

Ruiqi Li, University of Southern California, USA

S8.5 12:15 – 12:30

Eyes that adapt: visual plasticity as a lifeline for reef fishes in a rapidly changing world

Fabio Cortesi, The University of Queensland, Australia

12:30-14:00 Lunch

13:15 – 14:00 COMMUNITY AND INCLUSIVITY SESSION

Hosted by the ISN Community and Inclusivity Committee

Location: Great Hall

14:00 – 14:45 PLENARY 5: HELIGENBURG LECTURE

Investigating feedforward and feedback control in animal locomotion using robots and neuromechanical simulations

Auke Ijspeert, EPFL, Switzerland

Chair: Poromate Manoonpong, University of Southern Denmark, Denmark

Location: Great Hall

14:45-15:00 Stretch Break

15:00 – 16:15 CONCURRENT PARTICIPANT TALKS

COMPUTATIONAL SENSORIMOTOR CONTROL

Location: Great Hall South

Chair: Anita Devineni, Emory University, USA

15:00 – 15:15

Behavioral strategies underlying foraging decisions in *Drosophila*

Anita Devineni, Emory University, USA

15:15 – 15:30

Experience-dependent sensory representations in the amphibian brain

Victoria Saltz, Columbia University, USA

15:30 – 15:45

Neural architecture of image generation in cuttlefish camouflage

Yuetong Chen, Peking University, China

15:45 – 16:00

Representing cuttlefish camouflage patterns

Erica Shook, Columbia University, USA

16:00 – 16:15

Emergent behaviors in an embodied whole-brain simulation of larval *Drosophila*

Jordan Watts, University of Edinburgh, United Kingdom

VISION-GUIDED BEHAVIOR & CAMOUFLAGE

Location: Room 2306/2309

Chair: Adam Blake, University of Washington, USA

15:00 – 15:15

Odors can shift mosquito color preference even in stimuli of equal brightness

Adam Blake, University of Washington, USA

15:15 – 15:30

From night stalkers to day walkers: diurnal foraging in a nocturnal predator, the Ogre-faced spider

Jay Stafstrom, Indiana University, USA

15:30 – 15:45

A distributed gain-control of cephalopod chromatophore via skin light-sensing

Yifan Wu, Peking University, China

15:45 – 16:00

Insight into harbor seals (*Phoca vitulina*) sensory processing using electroencephalography

Caroline Spratte, University of Rostock, Germany

16:00 – 16:15

Neural co-option of prey circuits enables a deceptive lure in *Ceratophrys* frogs

Duncan Leitch, UCLA, USA

MECHANO- & THERMOSENSATION

Location: Performance Theatre

Chair: Nicolas Gompel, University of Bonn, Germany

15:00 – 15:15

The TRP-channel *painless* mediates substrate stiffness sensing during *Drosophila* oviposition

Nicolas Gompel, University of Bonn, Germany

15:15 – 15:30

The molecular basis of thermosensation by soil-transmitted parasitic nematodes

Astra Bryant, University of Washington, USA

15:30 – 15:45

Understanding mosquito aging and stylet mechanosensation

Yoonji Kim, The Rockefeller University, USA

15:45 – 16:00

Neurobiological responses to thermal pressure in natural threespine stickleback populations

Matthew White, University of California, USA

16:00 – 16:15

Perception of aerodynamical looming stimuli

Paul Cl  men  on, CEA-Leti, France

EVOLUTION OF SENSORY & MOTOR SYSTEMS

Location: Great Hall North

Chair: Fiorella Ramirez Esquivel, Macquarie University, Australia

15:00 – 15:15

One and done or back for more: stinging strategies in bees and ants

Fiorella Ramirez Esquivel, Macquarie University, Australia

15:15 – 15:30

Rapid evolution of olfactory circuits underlying human host preference in *Aedes aegypti*

Lukas Weiss, Princeton University, USA

15:30 – 15:45

Electric signal polymorphism predicts dietary niche partitioning in a weakly electric fish

Jason Gallant, Michigan State University, USA

15:45 – 16:00

Eye movements evolved via sequential innovations preserved across true flies

Pavel Kviatko, Max Planck Institute for Biological Intelligence, Germany

16:00 – 16:15

New insights into the sensory niches of the Dodo and Solitaire

Sara Citron, University of Lethbridge, Canada

16:00 – 18:00 POSTER SESSION III AND NETWORKING BREAK

Coffee will be served in the Nest Lower Level Atrium

THURSDAY July 30

09:00 – 09:45 PLENARY 6

Neurosteroids regulating year-round aggression: insights from electric fish

Laura Quintana, Instituto de Investigaciones Biológicas Clemente Estable, Uruguay

Chair: Gonzalo Budelli, University of the Republic, Uruguay

Location: Great Hall

09:45 – 10:30 HIGHLIGHTED TALKS

09:45 – 10:00

Ultrafast signaling reflects social hierarchy in interacting mormyrid electric fish

Matasaburo Fukutomi, Hokkaido University, Japan

10:00 – 10:15

Functional organization of haltere projections and neck muscles in *Drosophila* flight

Payel Chatterjee, Princeton Neuroscience Institute, USA

10:15 – 10:30

AI and the future of scientific publishing

Charlotte E. Rutledge, Senior Editor, The Journal of Experimental Biology

10:30 – 11:00

Coffee Break

11:00 – 12:30 CONCURRENT INVITED SYMPOSIA 9-12

Invited Symposium 9: Peripheral circuits that shape descending commands to modulate motor programs

Chair: Brad Dickerson, Princeton University, USA & Simon Sponberg, Georgia Tech, USA

Location: Great Hall South

S9.1 11:00 – 11:20

Functional organization of haltere feedback for *Drosophila* flight control

Brad Dickerson Princeton University, USA

S9.2 11:20 – 11:40

Egocentrically organized lateral line inputs project to motor command neurons for spatially guided locomotion

Elias Lunsford Paris Brain Institute, France

S9.3 11:40 – 12:00

Multimodal motion detection in flying insects

Alex Yarger Imperial College London, UK

S9.4 12:00 – 12:15

Descending motor pathways for flexible walking in *Drosophila*

Chris Dallmann University of Würzburg, Germany

S9.5 12:15 – 12:30

Modulating a precisely timed, spiking motor program for flight

Simon Sponberg Georgia Tech, USA

Invited Symposium 10: Brains in the Wild B

Chair: Jan Benda, University of Tuebingen, Germany

Location: Great Hall North

S10.1 11:00 – 11:20

From branch to branch: visually guided navigation in early primates

Daniel Huber, Geneva University, Switzerland

S10.2 11:20 – 11:40

Collective sensing in electric fish

Federico Pedraja, Columbia University, USA

S10.3 11:40 – 12:00

From sensory perception to acoustic cognitive maps, studying bats in the real world

Yossi Yovel, School of Zoology, Tel-Aviv University, Israel

S10.4 12:00 – 12:15

Behavioural Observatory: cross-species comparison of continuous behavioral decision-making

Pranav Minasandra, Max Planck Institute of Animal Behaviour, Germany

S10.5 12:15 – 12:30

How weakly electric fish sense musical intervals

Lena Stöckl, University of Tübingen, Germany

Invited Symposium 11: The neuroethology of water stress: thirst, desiccation risk and water-seeking behavior

Chair: Deborah Gordon, Stanford University, USA

Location: Room 2306/2309

S11.1 11:00 – 11:20

Neurophysiological mechanisms of thirst suppression during hibernation

Elena Gracheva, Yale University, USA

S11.2 11:20 – 11:40

The role of learning in the satiation of thirst

Zachary Knight, University of California San Francisco, USA

S11.3 11:40 – 12:00

The cellular and molecular basis of mosquito humidity-guided behaviors

Willem Laursen, University of Washington, USA

S11.4 12:00 – 12:15

Body fluid perturbations in the rat and the comings/goings of phasic dopamine signals

Mitchell Roitman University of Illinois at Chicago, USA

S11.5 12:15 – 12:30

The role of dopamine in the resilience of collective behavior to water stress

Deborah Gordon, Stanford University, USA

Invited Symposium 12: The Neuroscience of Emotion

Chair: Vivek Nityananda, Newcastle University, UK & Luigi Baciadonna University of Cambridge, UK

Location: Performance Theatre

S12.1 11:00 – 11:20

Emotion-like states in (zebra)fish: cognitive appraisal, cognitive bias, and social contagion of fear.

Rui Oliveira, Gulbenkian Institute, Portugal

S12.2 11:20 – 11:40

Integrative evidence for a fear-like state in honey bees.

Catherine Macri, Sorbonne University, France

S12.3 11:40 – 12:00

Limbic circuits regulating cultural behaviours in songbirds.

Masashi Tanaka, Waseda University, Japan

S12.4 12:00 – 12:15

Chronic stress impacts decision-making and neuro-behavioural plasticity in crayfish.

Roman Coupeau, University of Caen, Normandy, France

S12.5 12:15 – 12:30

Context-driven behavior operates independent of physiological responses in *R. aegyptiacus*.

Zaria George, University of Illinois, USA

12:30 – 14:00 Lunch

12:30 – 14:00 ISN COUNCIL MEETING

Location: 2306/2309

14:00 – 14:45 PLENARY 7

Elongate swimming helps explain relationships between neurocontrol, body mechanics and the external environment.

Emily Standen, University of Ottawa, Canada

Chair: Michael Dickinson, California Institute of Technology, USA

14:45-15:00 Stretch Break

15:00 – 16:15 CONCURRENT PARTICIPANT TALKS

ACTIVE SENSING & SENSORIMOTOR GATING

Location: Great Hall North

Chair: Yuhan Chen, Center for Excellence in Brain Science and Intelligence Technology, Chinese Academy of Sciences, China

15:00 - 15:15

A brainstem efference copy hub mediates behavior-state-dependent sensory gating via two parallel subsystems

Yuhan Chen, Center for Excellence in Brain Science and Intelligence Technology, Chinese Academy of Sciences, China

15:15 - 15:30

Drowning in their own wake: insights into lateral line function in self-generated flow

James Liao, University of Florida, USA

15:30 - 15:45

Neural control of respiration in *Drosophila*

John Tuthill, University of Washington, USA

15:45 - 16:00

Neural computations and behavioral strategies for active sensing and whole-body movement

Chris Rodgers, Emory University, USA

16:00 - 16:15

Tracking octopus arm movements at single-sucker resolution

Xitong Liang, Peking University, China

INSECT COMPASS SYSTEMS

Location: Room 2306/2309

Chair: Pauline N. Fleischmann, Carl von Ossietzky Universität Oldenburg, Germany

15:00 - 15:15

Neuroethological evidence for particle-based magnetoreception in *Cataglyphis* ants

Pauline N. Fleischmann, Carl von Ossietzky Universität Oldenburg, Germany

15:15 - 15:30

Navigation by vector addition in the brains of bees

Rickesh Patel, Lund University, Sweden

15:30 - 15:45

Australian Bogong moths employ a light-dependent geomagnetic compass for nocturnal long-distance migration

Hui Chen, Lund University, Sweden

15:45 - 16:00

A bee's g-force: Gravity processing in the compass network of honeybees

Jerome Beetz, Würzburg University, Germany

16:00 - 16:15

Flies use gyroscopes to increase the precision of their internal compass

Michael Dickinson, California Institute of Technology, USA

CHEMOSENSORY ENCODING

Location: Performance Theatre

Chair: Andrea Adden, The Francis Crick Institute, United Kingdom

15:00 - 15:15

Smelling blood: Evolution of olfactory receptors in a blood-feeding fly

Andrea Adden, The Francis Crick Institute, United Kingdom

15:15 - 15:30

Antennal lobe coding of olfactory cues in the bogong moths

Linnea Rosberg, Lund University, Sweden

15:30 - 15:45

Neuronal basis of behavioural repellence in mosquito larvae.

Iman Muktar, Durham University, United Kingdom

15:45 - 16:00

Decoding neurogenetics of olfactory specialization in blind cavefish

Maryline, Blin, CNRS-Université Paris-Saclay, France

16:00 - 16:15

A molecular and cellular mechanism for bitter taste in mosquitoes

Leisl Brewster, University of British Columbia, Canada

SOCIAL DISPLAYS & COLLECTIVE BEHAVIOR

Location: Great Hall South

Chair: Christopher Jernigan, Wake Forest University, USA

15:00 - 15:15

Impact of social isolation on the neural responses of a wasp with identity recognition

Christopher Jernigan, Wake Forest University, USA

15:15 - 15:30

The neural basis of social learning in a schooling fish

Geoff Meyerhof, University of California San Diego, USA

15:30 - 15:45

Neural and behavioral basis of individual-level social recognition in fire ants

Mengyu Fan, Peking University, China

15:45 - 16:00

Audio-visual timing underlies sex differences in the perception of social displays

Pawel Rek, Adam Mickiewicz University, Poland

16:00 - 16:15

Temporal structure and its nonlinear mechanism in the choruses of male treefrogs

Ikkyu Aihara, University of Tsukuba, Japan

18:00 – 21:00 BOAT CRUISE

FRIDAY July 31

09:00 – 09:45 PLENARY 8

Evolution of the taste system in vertebrates

Maude Baldwin, Max Planck Institute for Biological Intelligence, Germany

Chair: Coen PH Elemans, University of Southern Denmark, Denmark

Location: Great Hall

09:45 – 10:30 HIGHLIGHTED TALKS

09:45 – 10:00

Mechanisms of adaptation to extreme cold temperature in the snow fly *Chionea alexandriana*

Marco Gallio, Northwestern University, USA

10:00 – 10:15

Asleep on the move: motor control during sleep in swimming birds

Andrea Ferretti, Max Planck Institute for Biological Intelligence, Germany

10:15 – 10:30

The future of ISN: where are we heading?

Eric Warrant, past president, Lund University, Sweden

10:30 – 11:00

Coffee Break

11:00 – 12:30 CONCURRENT INVITED SYMPOSIA 13-16

Invited Symposium 13: Neural basis of Acoustic Communication across Vertebrates

Chairs: Susanne Babl, Free University Berlin, Germany & Luciana López-Jury, Max Planck Institute for Brain Research, Germany

Location: Great Hall South

S13.1 11:00 – 11:20

Neural circuits for the production of different mouse vocalization types

David Zheng, Cornell University, USA

S13.2 11:20 – 11:40

Low-dimensional dynamics underlying neural coding of rhythmic vocal behavior in songbirds

Ana Amador, University of Buenos Aires, Argentina

S13.3 11:40 – 12:00

Fishes – antiquity and ubiquity of vocal mechanisms

Andrew Bass, Cornell University, USA

S13.4 12:00 – 12:15

Rules underlying vocal exchange across species

Logan S. James, McGill University, Canada

S13.5 12:15 – 12:30

Acoustic context modulates natural sound discrimination in the auditory cortex of vocal mammals

Luciana López-Jury, Max Planck Institute for Brain Research, Germany

Invited Symposium 14: Periphery is key: adaptations to natural scenes in the visual periphery of arthropods & vertebrates

Chairs: Anna Stöckl, Konstanz University, Germany & Gregor Belušič, University of Ljubljana, Slovenia

Location: Great Hall North

S14.1 11:00 – 11:20

The colorful lamina of butterflies

Kentaro Arikawa, Sokenkai, Japan

S14.2 11:20 – 11:40

Natural stimuli drive functional temporal diversity in the fly optic lobe

Marion Silies, Johannes Gutenberg University, Germany

S14.3 11:40 – 12:00

Neural adaptations to the statistical properties of natural vision

Maximilian Joesch, Institute of Science and Technology Austria

S14.4 12:00 – 12:15

Information processing beyond the retina of mantis shrimp

Amy Streets, Case Western Reserve University, USA

S14.5 12:15 – 12:30

Of sharks and mice: evolutionary origins of vertebrate visual circuits

George Kafetzis, University of Sussex, UK

Invited Symposium 15: Animal Architecture

Chairs: Andrew Gordus, Johns Hopkins University, USA & Patrick McGrath, Georgia Institute of Technology, USA

Location: Room 2306/2309

S15.1 11:00 – 11:20

Collective, coordinated construction in mound-building termites

Sanjay Sane, National Centre for Biological Sciences, India

S15.2 11:20 – 11:40

Toward a neuronal understanding of spider orb-weaving behavior

Gregory Artiushin, Johns Hopkins University, USA

S15.3 11:40 – 12:00

From sand to species: how courtship construction drives diversification in cichlids

Emily Keaton, Georgia Institute of Technology, USA

S15.4 12:00 – 12:15

Is nest building in birds a cultural behaviour?

Lauren Guille, University of Alberta, Canada

S15.5 12:15 – 12:30

How do mice know how to build a nest?

Caleb Weinreb, Harvard Medical School, USA

Invited Symposium 16: Orientation across modalities

Chair: James Foster, University of Konstanz, Germany

Location: Performance Theatre

S16.1 11:00 – 11:20

Mapping polarised sky views to the behaviour of oriented animals under clouds and trees.

Evrripides Gkaniyas, Lund University, Sweden

S16.2 11:20 – 11:40

Exploration dynamics enable path integration in predictive electrosensory learning

Avner Wallach, Israel Institute of Technology, Israel

S16.3 11:40 – 12:00

Two forms, one function: connectomes of head-direction circuits

Griffin Badalamente, Lund University, Sweden

S16.4 12:00 – 12:15

Behavioral and neural correlates of magnetic sensing in poison frogs

Alayna Mackiewicz, University of Washington, USA

S16.5 12:15 – 12:30

Honeybees at high noon keep their celestial compass accurate

James Foster, University of Konstanz, Germany

12:30 – 14:00 Lunch

14:00 – 14:45 PLENARY 9

Neural circuits for interactive communication

Michael Long, NYU Grossman School of Medicine, USA

Chair: Elena Gracheva, Yale University, USA

Location: Great Hall

14:45 – 15:00 Stretch Break

15:00 – 16:15 CONCURRENT PARTICIPANT TALKS

VERTEBRATE MOTOR CONTROL

Location: Great Hall South

Chair: Cristian Gutierrez Ibanez, University of Alberta, Canada

15:00 – 15:15

Neural correlates of seed dehusking in songbirds

Cristian Gutierrez Ibanez, University of Alberta, Canada

15:15 – 15:30

Neuromuscular organization and the geometry of facial motor control

Helen Hou, Cold Spring Harbor Laboratory, USA

15:30 – 15:45

Dual control of feeding and singing in the songbird motor system

Abigail Grassler, Emory University, USA

15:45 – 16:00

Silent preparation precedes song in birds without introductory notes

Raghav Rajan, Indian Institute of Science Education and Research, India

16:00 – 16:15

Complex Social Vocalizations are integrated into the bat wingbeat cycle during flight

Simon Bauerle, University of Tübingen, Germany

3D NAVIGATION & SPATIAL COGNITION

Location: Great Hall North

Chair: Ash Parker, Humboldt Universität zu Berlin, Germany

15:00 – 15:15

Experience-dependent hippocampal plasticity in African elephants: a multi-scale approach

Ash Parker, Humboldt Universität zu Berlin, Germany

15:15 – 15:30

How three-dimensional position and head-directions are encoded in the goldfish brain?

Ronen Segev, Ben-Gurion University of the Negev, Israel

15:30 – 15:45

Navigation in a three-dimensional marine landscape by wild mantis shrimp

Martha M. M. Daniel, Macquarie University, Australia

15:45 – 16:00

Predictive coding of moving objects in the bat hippocampus

Aditya Krishna, Johns Hopkins University, USA

16:00 – 16:15

A comparison of rodent decision-making under diverse robotic pseudo-predator strategies

Chris Angeloni, Northwestern University, USA

CHEMOSENSORY-GUIDED BEHAVIOR

Location: Performance Theatre

Chair: Shunsuke Shigaki, National Institute of Informatics, Japan

15:00 – 15:15

Adaptive behavioral modulation mechanism for pheromone source localization with antennal loss in adult male silkworm, *Bombyx mori*

Shunsuke Shigaki, National Institute of Informatics, Japan

15:15 – 15:30

Characterization of neural mechanisms underlying coral larval recruitment

Maitri Rangarajan-Paul, University of California San Diego, USA

15:30 – 15:45

Neural Mechanisms of chemosensory-guided settlement and feeding in reef-building corals

Claudia Tatiana Galindo-Martínez, University of California San Diego, USA

15:45 – 16:00

Olfaction in pelagic southern bluefin tuna: Impacts of hydrodynamic flow on sensitivity

Shaun Collin, La Trobe University, Australia

16:00 – 16:15

Summarizing questions and discussions

MODULATION OF SOCIAL BEHAVIOR

Location: Room 2306/2309

Chair: Scott Juntti, University of Maryland, USA

15:00 – 15:15

Female-specific parental care in a cichlid fish is enforced by pheromones and androgens

Scott Juntti, University of Maryland, USA

15:15 – 15:30

Social facilitation of feeding in the clonal raider ant

Yukina Chiba, The Rockefeller University, USA

15:30 – 15:45

Parasites target neuroplasticity to reprogram social wasps

Floria Mora-Kepfer Uy, University of Rochester, USA

15:45 – 16:00

Bumblebees alter their attentional scope under a simulated predator attack

Luigi Baciadonna, University of Turin, Italy

16:00 – 16:15

Conserved and sex-variable circuits modulating aggression in *Drosophila*

Catherine Schretter, Southern Methodist University, USA

16:00 – 16:30

Coffee Break

16:45 – 18:00 ISN BUSINESS MEETING

Location: Great Hall

18:00 – 23:00 BANQUET

POSTER SESSION I – Monday July 27

Note: The poster board numbers (1 – 260) will remain the same throughout the entire meeting. Your board number is the number after the dot, so PS1.57 is poster board 57. You are welcome to hang up your poster at 9am or later on Monday July 27, and must be removed by 9am Tuesday July 28

Motor systems, sensorimotor integration and behavior (Part 1)		
PS1.1	Dasyam, Pranay	Failures that are not failures: the case of jump escape response in a grasshopper
PS1.2	Huetteroth, Wolf	Why would flies play on a carousel?
PS1.3	He, Zichen	Neural mechanisms of visually driven action selection in larval zebrafish
PS1.4	Mujres, Florian	Evolution and biomechanics of flight diversity across diptera
PS1.5	Procenko, Olga	A state-dependent neural circuit resolves approach–avoidance conflicts
PS1.6	Wang, Ruoxi	Behavioral responses to body rotation in flies using micron-scaled linear oscillation
PS1.7	Freiler, Megan	Redesigning locomotion: remodeling of proprioceptors after injury in the medicinal leech
PS1.8	Liadi-Azeez, Basirat	Optomotor responses of honey bee castes and worker groups are affected by pesticides
PS1.9	Tyssowski, Kelsey	The evolution of the neural basis of dexterity in deer mice
PS1.10	Dietz, Alexander	Wild or cultivated? – differences in flower handling efficiency of insect pollinators
PS1.11	Strosche, Alicia	When danger strikes: midbrain circuits for defensive behavior execution
PS1.12	Owaki, Dai	Multimodal VR system probes sensorimotor integration in locomotion–navigation coupling
PS1.13	Calderon Garcia, Juan Sebastián	Interplay between syllable duration and pitch during whistle matching in wild nightingales
PS1.14	Löschner, Julia	A modular building-block model of marmoset vocalizations
PS1.15	Gomez Guzman, Carlos	Interplay of subcortical and cortical regions in the control of zebra finch call interactions
PS1.16	Tatarsky, Rose	Neurogenetics of behavioral resilience and susceptibility in fish in changing environments
PS1.17	Migliaro, Adriana	Environmental modulation of small-scale exploration in weakly electric fish
PS1.18	Ravreby, Inbal	The universal smile is person-specific
PS1.19	Nweke, Chinonso Peter	Distinct roles of giant interneurons in wind-elicited escape behavior
PS1.20	Cavani, Elena	Food-associated calls hold food identity information in marmoset monkeys
PS1.21	Rönnau, Silvia	Effects of neurotoxic pesticides on visuomotor control during gap crossing by bumblebees
PS1.22	Olesen, Sarah	An ethological assay using prey-capture and escape to investigate goal-switching in mice
PS1.23	Luthman, Jenna M	Reciprocally connected ascending and descending neurons contribute to flight performance.
PS1.24	Pollak, Daniel	A parametric guidance law model of hunting in mice
PS1.25	Steiger, Charlotte	Intrinsic resonance shapes acute but not acclimated neuronal temperature responses
Social behavior and neuromodulation (Part 1)		

PS1.26	Vacca, Natasha	Transcriptomics of neuro-reprogramming: parasites exploit plasticity in developing social wasps
PS1.27	Weed, Matthew	Age and nutrition shape courtship dynamics in female <i>Drosophila</i>
PS1.28	Liber, Marta	Genome-wide signatures of artificial selection for sociality in zebrafish
PS1.29	Jordan, Alex	Digital avatars reveal neural dynamics of social behaviour in wild cichlids
PS1.30	Kowalko, Johanna	Genetic and neural mechanisms underlying evolution of aggressive behaviors
PS1.31	Justen, Hannah	Using poison frog to explore how repeated early life experiences shape the nervous system
PS1.32	Cuestas Carrillo, Juan Fernando	Convergent neural expression during parental care in two neotropical frogs (Dendrobatidae and Leptodactylidae)
PS1.33	Ye, Dajia	Dopaminergic regulation of decision-making about water stress in Desert Harvester Ants
PS1.34	Valiño, Guillermo	Sex-specific hormonal control of breeding aggression in <i>Gymnotus omarorum</i>
PS1.35	Yang, Zeyu (Bella)	Measuring plasma dehydroepiandrosterone and similar steroids in the male song sparrow
PS1.36	Gray, Sofia	Measurement of brain and plasma steroids in a paternal fish via LC-MS/MS
PS1.37	Harpaz, Roy	Neural mechanisms of efficient collective behavior in zebrafish
PS1.38	Herberholz, Jens	Interactions between social isolation, serotonin, and behavior in different crayfish species
PS1.39	Wong, Claire	Do locusts retain lateralization individuality throughout gregarization?
PS1.40	Jaeger, Eliza	Neural and nutritional mechanisms regulating division of labor in ant alloparental care
PS1.41	Dan, Usan	Conserved mechanisms influence the transition to and evolutionary loss of parental care
PS1.42	Kong, Brandon	Care and cannibalism in <i>Eleutherodactylus coqui</i> : tough choices for frog parents
PS1.43	Bentz, Ehren	Neurogenomic impact and transcriptional synchrony within distinct social relationships in the zebra finch
PS1.44		Withdrawn
PS1.45	Plumier, Jérôme P.	Aggression and season shape circulating fatty acid profile of wild song sparrows
PS1.46	Doherty, Jeff	Mapping manipulation: spatial metabolomics of hairworm-infected cricket brains
PS1.47	Lopes, Lindsey	Mapping the clonal raider ant brain at synaptic resolution
PS1.48	Gopalakrishna Kamath, Vinayak	Behavioral evidence and neuronal correlates of the Franssen Effect in gray treefrogs
PS1.49	Guggenberger, Marie	Multimodal communication during snake mobbing in the Arabian Babbler: integrating visual displays and vocal signals
PS1.50	Zheng, Da-Jiang	Midbrain neurons regulate the production of courtship squeaks in female mice.
PS1.51	Willis, Katie	No tonotopic organization observed in the turtle hindbrain
PS1.52	Ahmadi, Amirmasoud	Spectral-temporal neuronal selectivity in the awake zebra finch auditory forebrain
PS1.53	Dasoju, Vivek	Tettigoniid VNC: evidence for self-contained thoracic song control
PS1.54	Doran, Eve	Spatial mapping of mating-related neurons in the malaria mosquito brain using HCR
PS1.55	Yoshida, Soshi	Complementary use of CF and FM components during prey localization in horseshoe bats
PS1.56	Virdi, Simran	Exploring the role of active antennal movements for sensing courtship songs in flies

PS1.57	Ohashi, Takuro	Neural representation of sound direction underlying phonotaxis in <i>Aedes aegypti</i>
PS1.58	Demange-Hamel, Léo	Neuronal entrainment to ecologically relevant rhythms in the auditory cortex of bats
PS1.59	Livancic, Lisa Marie	Linking natural alarm calling behavior to auditory activity in wild songbirds
PS1.60	Hariharan, Shivani	Frontal cortex modulates jamming avoidance in echolocating bats
PS1.61	de Witasse-Thezy, Aude	Network analysis of vocal exchanges in a wild rodent
PS1.62	Schöneich, Stefan	Does body size correlate with the dominant sound frequency of field cricket calling songs?
PS1.63	Christian, Marcelo	Impact of the insecticide flupyradifurone on the hearing system in locusts and crickets
Spatial orientation and navigation (Part 1)		
PS1.64	Green, Delbert	Tracking individual monarch butterfly movements and behaviors in the wild: advances with mSAIL
PS1.65	Schultheiss, Patrick	Fine-scale navigation: searching ants use multiple guidance mechanisms
PS1.66	Oring Raviv, Naama	Can goldfish learn to navigate a complex labyrinth environment?
PS1.67	Ray, Saikat	Hippocampal coding during real world navigation in bats flying on a remote island
PS1.68	Wyeth, Russell	Aquatic gastropod navigation: strategies, sensory afference, and neural-specific gene expression
PS1.69	Kaneko, Rie	Sensory-guided action planning in echolocating bats during free-flight navigation
PS1.70	Miñano, Sofía	A large-scale field dataset for studying navigation in the Fiddler Crab
PS1.71	Douglas, Marissa	Turtle ants reshape nest networks in response to interspecific competition
PS1.72	Jägers, Peter	Caching in a shell-dwelling cichlid
PS1.73	Vielma, Sofia	Quantifying polarization-driven flight behaviour in <i>Culex pipiens</i>
PS1.74	Cléménçon, Paul	Insect-inspired olfactory navigation using an analog-constrained ring attractor and CMUT sensors
PS1.75	Farber, Eli	Neuroethology of multi-species neural coding in the hippocampus of flying bats
Evolution and development		
PS1.76	Dacher, Matthieu	Diet controls through JH the duration of reproduction ontogenesis in adult male moths
PS1.77	Behrman, Emily	To court or not to court: the genetic basis of neural circuit evolution for <i>Drosophila</i> mate preferences
PS1.78		
PS1.79	Crowe-Riddell, Jenna	The evolution of two sensory worlds in snakes
PS1.80	Choy, Stefan	Identifying the genetic underpinnings of stress response in blind Mexican cavefish
PS1.81	Pinzon-Rodriguez, Atticus	Towards the anatomical blueprint of the insect brain
PS1.82	Schunter, Celia	Shifts in neurotransmission, synaptic plasticity, and stress-response pathways shape the evolution of cheating in cleaning mutualisms
PS1.83	Chung, Wen-Sung	Inside the octopus brain: linking neural plasticity to sex-specific behaviours
PS1.84	Guo, Tang Tang	Parent–offspring conflict and sibling competition in the big brown bat
PS1.85	Zhu, Lucinda	Neurodevelopment without sensory neurons
PS1.86		withdrawn

PS1.87	Hathaway, Stephanie	Save the nurse, save the hive: Insights in the role of mrjp1 as protective genes in the honey bee brain
PS1.88	Castonguay, Simon	3D EM reconstructions reveal diverse cell types, structural plasticity, and identification of an olfactory glomerulus in the rhinophore ganglion of a nudibranch mollusc
PS1.89	dos Anjos, Vitor L	Conserved olfactory neuron cell types and rapidly evolving receptors across the mosquito antenna
PS1.90	Edussooriyage Dona, Janani	Estimating the sensory abilities of the extinct Great Auk (<i>Pinguinus impennis</i>)
PS1.91	Hoops, Daniel	Predicting brain anatomy from cranial endocasts in snakes
PS1.92	Tobiansky, Daniel	Comparative characterization of markers brain injury in woodpeckers and songbirds
Mechano- & thermoreception		
PS1.93	Deora, Tanvi	Pilifers provide proprioceptive feedback about proboscis motion during feeding in hawkmoth, <i>Manduca sexta</i>
PS1.94	Wagner, Alizee	Predator-prey dynamics sculpt intricate mechanoreceptor array in a sea snake
PS1.95	Gebert, Jasmina	Tracking the invisible - hydrodynamic trail following in pinnipeds
PS1.96	Harris, Allison	Cold-induced spreading depolarization as a developmentally regulated neural protective mechanism
PS1.97	Gaede, Andrea	Variations in touch representation in the avian forebrain
PS1.98	de Pennart, Auguste	Touch-mediated egg-laying behaviour in <i>Aedes aegypti</i>
PS1.99	Eberl, Daniel	Contribution of dynein motors to active hearing

POSTER SESSION II – Tuesday July 28

Note: The poster board numbers (1 – 260) will remain the same throughout the entire meeting. Your board number is the number after the dot, so PS1.57 is poster board 57. You are welcome to hang your poster at 9am or later on Tuesday July 28, and must be removed by 9am Wednesday July 29.

Motor systems, sensorimotor integration and behavior (Part 2)		
PS2.1	Seymour, Mackenzie	Acclimation-induced changes in neuropeptide signaling stabilize neuronal circuit activity
PS2.2	Huang, Zijin	Haltere modulation of the visual system for rapid flight turns in <i>Drosophila melanogaster</i>
PS2.3	Pescaru, Maria	Perineuronal nets in vocal nucleus HVC regulate developmental song plasticity in finches
PS2.4	Katsura, Munehiro	The neural mechanisms underlying the evolution of flower-visiting behavior in <i>Drosophila</i>
PS2.5	Li, Kaijie	A semi-intact cephalopod preparation for large-scale neural recording of chromatophore control
PS2.6	Dacks, Andrew	Divergent co-transmission by a predictive motor circuit modulates auditory processing
PS2.7	Streets, Amy	Multiple mechanosensors coordinate <i>Drosophila</i> response to wind
PS2.8	Mandal, Shouvik	Evidence of a shared acoustic-respiratory relationship across birds from a deep learning framework
PS2.9	Zornik, Erik	Effects of environmental exposure to estradiol on <i>Xenopus laevis</i> vocal behaviors
PS2.10	Otter, Kate	Artificial light at night alters flight trajectories of insects in the field
PS2.11	Jenniches, Chloe	Characterizing a larval feeding paradigm in the sea urchin, <i>Lytechinus pictus</i>
PS2.12	Haggard, Myriah	Sensorimotor circuits for performance and refinement of stereotyped zebra finch flight
PS2.13	Zadel, Ana	Quantifying behaviour as a gateway to understanding the bumblebee brain and the neuroethological effects of pesticides
PS2.14	Sircar, Ranjini	Optical mapping of foot-substrate interactions and ground reaction forces in adult <i>Drosophila</i>
PS2.15	Gonsek, Andrea	Adaptive flight strategies for challenging light environments in a nocturnal hawkmoth
PS2.16	Montague, Tessa	The neural basis of cuttlefish camouflage and social behavior
PS2.17	Lee, Phillip	Organization of pretectal optic flow inputs to the zebra finch cerebellum
PS2.18	Grätsch, Swantje	Goal-directed behavior: nest building in a shell-dwelling cichlid <i>Lamprologus ocellatus</i>
PS2.19	Whitehead, Sam	Differences in temporal coding in dipteran flight muscle
PS2.20	Jacquerie, Kathleen	Cooperative robustness to warming in the stomatogastric system of the crab <i>Cancer borealis</i>
PS2.21	Rolley-Parnell, Persie	Manipulation of objects by ants
PS2.22	Zhang, Hongruo	Effective feeding by a neuromuscular system
Vision and photoreception (Part 1)		
PS2.23	Kinoshita, Michiyo	Morphological variations of Kenyon cells in the mushroom body of swallowtail butterflies
PS2.24	Kolyfetis, Georgios	Linking eye anatomy to navigation: a biologically accurate model of bees' polarization vision
PS2.25	Gray, Jack	Responses of a locust motion-sensitive neuron to object motion in the

		rear visual field
PS2.26	Marquardt, Madeline	Context-dependent loom responses in snapping shrimp
PS2.27	Olson, Erik	A locust neurovisual model processes complex stimuli via diverse interacting mechanisms
PS2.28	Manel, Anupama Nayak	A moth's point of view – form and function guide innate flower symmetry preference
PS2.29	Sung, Jenny Yi-Ting	The role of shiny plant signals and polarization in foraging swallowtail butterflies
PS2.30	Naughton, Lydia	Morphological and behavioral evidence for sensory feedback in dynamic color change
PS2.31	Eleftheriadis, Panagiotis	Neural circuit tuning to visual statistics in the larval zebrafish
PS2.32	Shah, Farhan Rafique	Linking temporal contrast in natural scenes to ON/OFF responses in hawkmoth vision
PS2.33	Malcorps, Matilde	Comparative analysis of polarization vision in mosquitoes
PS2.34	Mammen, Lorenz	A distinct state of arousal affects visual acuity in the paper wasp <i>Polistes fuscatus</i>
PS2.35	Konvickova, Zuzana	The effect of the whole-genome duplication on vision: opsin expression developmental series and single-nucleus transcriptomics in the common barbel (<i>Barbus barbus</i>)
PS2.36	Stöckl, Anna	The hawkmoth lamina: shared principles and interspecific variation in parallel processing
PS2.37	Forst, Julia Joanna	Strict photoreceptor mosaics in the retina of the night-migratory Eurasian blackcap
PS2.38	Bast, Annika Celine	Investigating stable contrast processing across visual pathways and <i>Drosophila</i> species
PS2.39	Rotov, Alexander	Oil droplet spectra in the migratory songbird retina: significance for magnetoreception
PS2.40	Winsor, Alex	Visual prey categorization in the jumping spider brain
PS2.41	Gutierrez, Daniel	Allometric scaling of visual resolution in compound eyes of bumblebees, <i>Bombus terrestris</i>
PS2.42	Lai, Alexander	An active vision behavior in mice that is modulated by environmental complexity in a naturalistic predator-prey task
PS2.43	Luksch, Harald	Behavioral consequences of genetical lesions of the tectofugal pathway in chicken
PS2.44	Kaufman, Vít	Glowing and seeing red in deep-sea dragonfish (Stomiiformes)
Auditory systems and acoustic signaling (Part 2)		
PS2.45	Gomes, Bruno	The impact of the GABA receptor on the mosquito <i>Anopheles coluzzii</i> hearing
PS2.46	Michimoto, Satoki	Preserved auditory function with aging in Japanese house bat: ABR and hair cell analysis
PS2.47	Hein, Niels	Nightingales categorize acoustic signals to tailor their vocal responses
PS2.48	Clarke, Alexa	Exploring vocal production learning circuitry: methods for a novel bat model
PS2.49	Babl, Susanne	Foraging behavior of frugivorous bats using multisensory information
PS2.50	Sehult, Shane	Sound localization and binaural auditory processing in juvenile big brown bats
PS2.51	Doimo, Alberto	RO-BAT and SonoRo: bio-inspired swarm robotics platforms for audio-driven navigation.
PS2.52	Küster, Frithjof	A multi-sensor approach for characterizing echolocating bat swarms
PS2.53	Christensen-Dalsgaard, Jakob	Sound and vibration sensitivity of two caecilian species <i>Ichthyophis javanicus</i> and <i>Typhlonectes natans</i> .
PS2.54	ter Hofstede, Hannah	Seasonality of signalling effort and antipredator behaviour in katydids
PS2.55	Binwal, Priya	Syllable repetition reveals links between distant phrases in Bengalese

		finch song
PS2.56	Moger, Aditya	Modelling active sensing collectives - can bats tracking consistency avoid jamming cost in groups?
PS2.57	Luo, Jinhong	Old-world roundleaf bats as a model for studying vocal frequency control of mammals
PS2.58	Beleyur, Thejasvi	Resolving the paradox of active sensing swarms
PS2.59	Cui, Zhongdan	A predictive neural code for vocalization rate in the auditory midbrain
PS2.60	Ye, Huan	Prevalent mismatch between behavioral and physiological audiograms across mammals
PS2.61	Lemazina, Alena	Characterization of courtship vocalizations in the naked mole-rat
PS2.62	Ding, Jianan	Bats dynamically shift harmonic energy to counter acoustic interference
PS2.63	Kadobianskyi, Mykola	Multimodal reference brain atlas of adult <i>Danionella</i> cerebrum
PS2.64	Henninger, Joerg	Brain-wide hierarchical and sexually dimorphic tuning for social vocalizations
Spatial orientation and navigation (Part 2)		
PS2.65	Koukoutselos, Konstantinos	A behavioural and electrophysiological framework for studying the neural basis of navigation in freely moving Fiddler Crabs
PS2.66	Seibel, Anna	Home among the gum trees: visual navigation in an arboreal jumping spider
PS2.67	Scheuring, Nicolas	Landmarks or panoramas? dissociable spatial memories in honeybees.
PS2.68	Schwarz, Sebastian	Ants on a slope can recover heading direction from mechanosensory cues
PS2.69	Tilly, Erwan	Foraging success influences foraging motivation in ants
PS2.70	Clémot, Bastien	Steady head - steady course: how dung beetles navigate uneven terrain
PS2.71	Benjamin, Grainger	Projectomic reconstruction of the central complex in the fiddler crab <i>Afruca tangeri</i>
PS2.72	Lochner, Stephan	Temporal difference learning for navigation in an insect mushroom body circuit
PS2.73	Leach, Max	Visually guided locomotion in the red flour beetle <i>Tribolium castaneum</i>
PS2.74	Rao, Dinesh	Bees vs spiderwebs: how background contrast affects obstacle detection in stingless bees
PS2.75	Sayin, Serkan	The behavioral mechanisms governing collective motion in swarming locusts
PS2.76	Kaushik, Pavan	What if the lab could go to the animal?
PS2.77	Havens, Hazel	Wayfinding as de-differencing: nondecompositional magnetic navigation
PS2.78	Delmore, Kira	Cholinergic receptors as candidate regulators of migratory behavior in Swainson's thrushes
PS2.79	Spencer D. Balay	A global screen for magnetically induced neuronal activity in the pigeon brain
Learning, memory and cognition		
PS2.80	Hendler, Ori	Archerfish exhibit spatiotemporal exploratory behavior
PS2.81	Nityananda, Vivek	Measuring judgment biases in wild bumblebees
PS2.82	Goldschmidt, Dennis	A closed-loop virtual reality approach to study context-dependent memory in <i>Drosophila</i>
PS2.83	Villar, Maria Eugenia	Dissecting aminergic contributions to visual discrimination learning in honey bees using a virtual reality paradigm.

PS2.84	Rathore, Shubham	Visual learning using optogenetics in freely walking <i>Drosophila</i>
PS2.85	McLane-Svoboda, Autumn	Associative learning enhances odor generalization in the locust antennal lobe
PS2.86	Kokan, Nikolas	Habituation appears to involve distinct interstimulus interval-sensitive processes
PS2.87	Rusconi Clerici, Emma	The spectrum of artificial light at night shapes the spatial geometry of hawkmoth flight
PS2.88	Somanathan, Hema	Colour preference and constancy in the giant Asian honey bee <i>Apis dorsata</i>
PS2.89	Ricciuti, Ana	Balancing opposing memories: circuit mechanisms of flexibility in <i>Drosophila</i>
PS2.90	Sorrentino, Marcos Rafael	Quantifying more sleep after learning in flies using DREAMS app
PS2.91	Freas, Cody	Scanning and active sampling behaviours emerge from conserved insect neural circuits
PS2.92	Desnous, Coraline	Electrophysiological exploration of time perception in an invertebrate: the common cuttlefish (<i>Sepia officinalis</i>)
PS2.93	Lenzi, Stephen	Neuromodulatory mechanisms of shelter discovery in mice
PS2.94	Amin, Amany	Artificial neuroevolution: illuminating resilient and robust behaviour
PS2.95	Wolff, Gabriella	Neuromodulation of olfactory learning in the whip-spider <i>Phrynos marginemaculatus</i>
PS2.96	Peters, Lauren S.	Considering learning as a categorical variable
Metabolism, biological rhythms and homeostasis		
PS2.97	Yedlin, Mackenzie	Conjugated control: redefining steroid hormone regulation in mosquito reproduction
PS2.98	Gracheva, Elena	Neurophysiological mechanisms of thirst suppression during hibernation
PS2.99	Masalha, Monia	Social physiology: human homeostasis is more efficient in social proximity
PS2.100	Marin, Inaky	Circadian microbial oscillations in <i>Carollia perspicillata</i>
PS2.101	Costalunga, Giacomo	Breeding nightingales trade rest for singing
PS2.102	Jiron, Griffin	Interaction between day length and food availability in driving degeneration of singing behavior
Education		
PS2.103	Rajasekaran, Rajarajeswari	A conceptual framework for virtual reality simulation in undergraduate nursing: enhancing early recognition of clinical deterioration
PS2.104	van Griethuijsen, Linnea	Teaching neuroethology using problem-based learning

POSTER SESSION III – Wednesday July 2

Note: The poster board numbers (1 – 260) will remain the same throughout the entire meeting. Your board number is the number after the dot, so PS1.57 is poster board 57. You are welcome to hang your poster at 9am or later on Wednesday July 29, and must be removed at the close of the poster session.

Motor systems, sensorimotor integration and behavior (Part 3)		
PS3.1	Bolin, Jacob	Snapping shrimp show evidence of altered behavior after exposure to shock waves
PS3.2	Giraldo, Ysabel	Neuroendocrine regulation and persistent effects of hypergravity exposure on geotaxis and activity in <i>Drosophila melanogaster</i>
PS3.3	Barlow, George	Neural recordings and camouflage behavior in the dwarf cuttlefish <i>Ascarosepion bandense</i>
PS3.4	Barkan, Charlotte	Neural mechanisms shape vocal divergence in <i>Xenopus</i>
PS3.5	Ando, Noriyasu	Neuromuscular control of the abdomen during the flight of hawkmoths
PS3.6	Yekani, Milad	A causal neuromechanical model of voice production in songbirds
PS3.7	Holtz, Sophie	Striosome-matrix dissociation during distinct vocal behaviours in bats
PS3.8	Abbasi, Parnian	Systematic evaluation of video acquisition parameters for mouse open-field phenotyping
PS3.9	Savoy, Andrew	Song-evoked and premotor activity in female zebra finch HVC
PS3.10	Yasui, Kotaro	Exploring adaptive locomotor intelligence by altering embodiment in centipedes
PS3.11	Ghosh, Debapriya	Representation of visual motion uncertainty in an insect neck connective
PS3.12	Mysuru Rajagopalachari, Neetash	Zebra finch vocal development beyond song
PS3.13	Pulver, Stefan	Adaptive winner-takes-all motor competition in dueling neural networks
PS3.14	Gutjahr, Ruth	MusBioMaus 2.0 - a full body biomechanical model of the mouse.
PS3.15	He, Congrong Ruby	The role of an RNA-binding protein in the <i>Caenorhabditis elegans</i> motor circuit for backward locomotion
PS3.16	Le Moel, Florent	Open-source tools for modelling the insect sensorimotor loop
PS3.17	Cury, Kevin M.	Neural circuits for visual predator recognition and evasion in <i>Drosophila</i>
PS3.18	Agarwal, Aditi	Neural representation of the tutor song in the songbird basal ganglia is modulated by the premotor area HVC
PS3.19	Tucker, William C.	Extensive glial plasticity in response to seasonal change in the adult avian brain
PS3.20	Adikari, Ayeshma	Neural responses to optic flow stimuli in the oculomotor cerebellum of zebra finches
PS3.21	Robie, Alice A	Functional analysis of the locomotor circuits in <i>Drosophila melanogaster</i>
PS3.22	Yoshikawa, Momiji	Locomotion mechanism of train millipedes in diverse environments: Laboratory experiment and mathematical modeling of wavy synchronization
PS3.23	Rodriguez Castro, Santiago	Ball pythons use cues analogous to visual features to intercept looming infrared targets
Social behavior and neuromodulation (Part 2)		
PS3.24	Hebert, Marie	Circulating and central sex steroid variations throughout nest building in a male songbird

PS3.25	Suppermpool, Anya	Exploring the neuronal populations driving mating in malaria mosquitoes through single-nuclei RNA sequencing.
PS3.26	Pareja Mejia, Daniela	Consistent personalities, surprising defenses: behavior across life stages and contexts in a tree frog
PS3.27	Bailly, Tiphaine	Non-nestmate discrimination in the clonal raider ant
PS3.28	Kamhi, Franne	Neuromodulation of temperature-dependent behaviors in <i>Aphaenogaster</i> ants
PS3.29	Trost, Lisa	Call-based neural activity in the song control system of non-singing female zebra finches
PS3.30	Tuckova, Klara	A rat model of addiction and withdrawal syndrome and the effect of D2/5-HT3 receptor modulation
PS3.31	Cardona, David	Mapping socially responsive neuronal ensembles at single-cell resolution in bumble bees
PS3.32	Campbell, Sarah	Functional labeling of brain regions implicated in <i>Danionella dracula</i> agonistic behavior
PS3.33	Jernigan, Christopher	Impact of social isolation on the neural responses of a wasp with identity recognition
PS3.34	Chen, Tzu-Li	Quantifying multidimensional personality and behavioral consistency in <i>Sepia pharaonis</i>
PS3.35	Chen, Yen-Chih	Mating-gated ovarian proteins regulate host-seeking in mosquito <i>Aedes aegypti</i>
PS3.36	Pouso, Paula	Environmental and neuroendocrine drivers of vocal behavior in a South American frog
PS3.37	Fang, Yi-Ting	Species differences in behavioral and neurotranscriptomic synchrony during tadpole fighting
PS3.38	Acosta, Melina	Effects of transdermal corticosterone on hormones and partner interactions in poison frogs
PS3.39	Lee, Jiwon	Comparing oxytocin and vasopressin receptor distribution in pregnant and non-pregnant bats
PS3.40	Norman, Helena	The effects of sleep disruption and temperature on shoaling cohesion in the Trinidadian guppy (<i>Paracheirodon axelrodi</i>)
PS3.41	Bell, Alison	Testing the social decision-making network hypothesis in sticklebacks with 'omics
PS3.42	Günzel, Yannick	A kaleidoscopic view of alloparental behavior in the clonal raider ant
PS3.43	Aonuma, Hitoshi	Serotonergic modulation of fight-or-flight decisions in the trap-jaw ant, <i>Odontomachus kuroiwae</i>
PS3.44	Hu, Fangyuan	Seasonal tissue-specific transcriptomes in seasonally singing canaries
Vision and photoreception (Part 2)		
PS3.45	Musilova, Zuzana	See you in the dark: molecular evolution of extreme visual systems in deep-sea fishes
PS3.46	Belusic, Gregor	The sensory blues of <i>Morpho</i> butterflies
PS3.47	McCauley, Andrew	Dim lights, big insights: luminance adaptation in nocturnal moths
PS3.48	Pfeiffer, Keram	Temperature-compensated tuning to motion in putative neurons of the central complex
PS3.49	Gurgis, Alexandra	Brains, eyes, and bioluminescence: comparative neuroanatomy in Ostracods
PS3.50	Morehouse, Nathan	Sensory drive selects for salience of courtship color and motion in <i>Habronattus</i> spiders
PS3.51	Buschbeck, Elke	Light matters: infrared wavelengths differently affect photoreceptor health in <i>Drosophila</i>
PS3.52	Seifert, Marvin	The functions of double cones and oil droplets in the avian retina.
PS3.53	Mishra, Aditi	What three-dimensional features are innately preferred across different insect pollinators?
PS3.54	Balart-García, Pau	Vision in the deep: single-cell view of retinal evolution in cichlids

PS3.55	Vorobyev, Misha	Polarisation vision in octopus – analogy with colour vision and ideal observer models
PS3.56	Mearns, Duncan	A neural circuit for stereopsis in the fly
PS3.57	Hummert, Cora Sophia Gesine	Why did the fly cross the gap? - A computational model of distance tuning in neural superposition compound eyes
PS3.58	Beau de Rochars, Tephnie	Population recordings from the lentiformis mesencephali of zebra finches to panoramic optic flow.
PS3.59	Notar, Julia	Negative phototaxis in juvenile sea stars (Class Asteroidea)
PS3.60	Briscoe, Adriana	Sex-linked gene traffic underlies sexually dimorphic UV color vision in <i>Heliconius</i> butterflies: an update
PS3.61	Porter, Megan	Evolutionary patterns of arthropod opsin evolution and color vision
PS3.62	Stafstrom, Jay	From night stalkers to day walkers: diurnal foraging in a nocturnal predator, the Ogre-faced spider
PS3.63	Demirkesenler, Deniz	Visual function and cell-type specificity during regeneration in the axolotl
PS3.64	Moubarak, Estelle	Insights into the structure and function of dinoflagellates ocelloid
PS3.65	Horenkamp, Simone	Visual behavior and functional regeneration in the central nervous system of the Axolotl
Olfaction, taste and chemical sensing		
PS3.66	Christie, Kevin	‘Virtual’ odor duration and wind speeds shape <i>Drosophila melanogaster</i> search behavior
PS3.67	McKay, Cailyn	Heat stress during pupal development affects olfaction in the armyworm moth
PS3.68	Mierow, Tanner	Snapping shrimp use distance and contact chemoreception to identify mutualistic gobies
PS3.69	Razzauti, Jacopo	Contact-mediated repellency defines Picaridin Action in <i>Aedes aegypti</i>
PS3.70	McLane-Svoboda, Summer	Detection of multiple PFAS in environmental samples using a neuron-based gas sensor
PS3.71	Fernandez Chiappe, Florencia	Neural basis of mosquito host-seeking
PS3.72	Kiessling, Lisa-Marie	Transforming sense of scent: morphological and behavioural adaptation in sea snake tongues
PS3.73	Lara, Agustin Eleazar	Parallel antennal lobe subsystems differentially process odor valence in honey bees
PS3.74	Rossi, Matteo	Ant aggregation pheromones: from social behavior to neural coding
PS3.75	Padilla, Grace	A trigeminal-hindbrain circuit initiates a persistent chemosensory state in zebrafish
PS3.76	Wang, Yifan	The sensory organization that drives mosquito host detection
PS3.77	Sekiwa, Ryoko	Adaptive odor source localization of the male silkworm, <i>Bombyx mori</i> , under a complex environment using a virtual reality system framework
PS3.78	Hearn, Jessica	Bed bug neuroanatomy: thinking outside the box-spring
PS3.79	Hill, Tyler	Localization of olfactory receptor co-expression in the <i>Ae. aegypti</i> antennae using HCR-FISH
PS3.80	Madrzyk, Max	Influence of life history on alarm responses in larval Dendrobatidae
PS3.81	Vidya, Elva	Investigating the role of microRNAs on behavioural shifts in <i>Aedes aegypti</i>
PS3.82	Haverkamp, Alexander	Loss of olfaction reduces caterpillar performance and increases susceptibility to a natural enemy
PS3.83	Subramaniam, Lauren	Tracking the plume: video analysis of odor preference in a human-preferring mosquito
PS3.84	Garcia, Sarah	Egg-laying behaviour and sensory ecology of a coastal rockpool mosquito (<i>Aedes togoi</i>)
PS3.85	Budelli, Gonzalo	Physiological bases of wound detection by the New World Screwworm

		fly
PS3.86	Smihula, Hayley	From foe to friend: Adapting rove beetle chemosensation for symbiosis with ants
	Electrosensory systems	
PS3.87	Wendt, Alexander	Efficient representations of fast dynamic stimuli in populations of ON- and OFF-cells
PS3.88	Kambara, Kei	Multiple electrosensory maps in the glass catfish hindbrain
PS3.89	Normandin, Yohan	Action potential energetics in high-frequency weakly electric fish
PS3.90	Mucha, Stefan	Catching sparks: habitat use and behavioural dynamics of African electric fish in Lake Nabugabo, Uganda
PS3.91	Miller-Crews, Isaac	Cellular transcriptomic evolution in the hindbrain of electric fishes (Gymnotiformes)
PS3.92	Kos, Abigail	Structure-function relationship of the pacemaker network in weakly electric fish
PS3.93	Marsat, Gary	Dynamic social interactions constrain spatial coding in the electrosensory system
PS3.94	Louis, Matthieu	Electric field detection and electrotaxis in the <i>Drosophila</i> larva
	Methods	
PS3.95	Razzauti, Jacopo	FERAL: a video-understanding system for direct video-to-behavior mapping
PS3.96	Iwaniuk, Andrew	Osteological correlates of hearing abilities in birds and their application to extinct species.
PS3.97	Navea, Fernando	Comparative effectiveness of iodine and phosphotungstic acid staining for micro-CT visualisation of the agamid brain
PS3.98	Stanley, Eva M	A method to collect and analyze 3D voluntary flight trajectories
PS3.99	Abdulazhanova, Dinora	An open-source three-dimensional digital brain atlas of a migratory bird, the Eurasian blackcap
PS3.100	Sharma, Varun	An open-hardware workflow for insect neuroethology
PS3.101	Marquez Legorreta, Emmanuel	Whole-brain gene expression and neuronal activity at cellular resolution in behaving zebrafish



Neuroethology: Behavior, Evolution and Neurobiology
Gordon Research Conference

August 8 - 13, 2027

[Apply Now](#)

GRC Education Requirements: Undergraduates or those who have not obtained a bachelor's degree in science/engineering (or acceptable equivalent) are not eligible to apply to attend Gordon Research Conferences or Seminars.

Chairs

David Schulz and Eva K Fischer

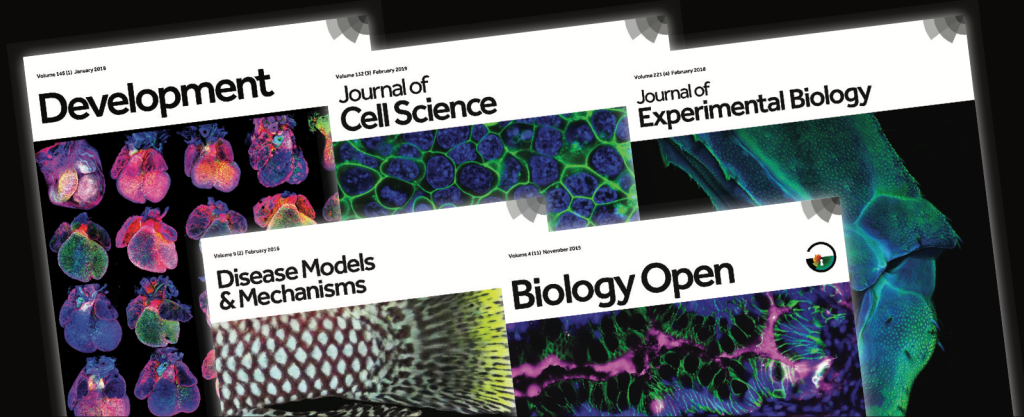
Vice Chairs

Scott Juntti and Jessica L. Fox

Jordan Hotel at Sunday River

27 Grand Circle
Newry, Maine, United States

How do The Company of Biologists' Read & Publish agreements benefit researchers?



Publish

- Uncapped, immediate and fee-free publishing of Open Access research articles for corresponding authors in our hybrid journals and our fully Open Access journals – Disease Models & Mechanisms and Biology Open
- Easy compliance with funders' Open Access mandates
- CC BY licence terms, authors retain copyright
- Higher visibility of articles
- No barriers to sharing and reuse

Read

- Unlimited access to new and archive content in our prestigious hybrid journals – Development, Journal of Cell Science and Journal of Experimental Biology

What do authors say?

"It was wonderful to discover that we could publish our paper Open Access for free. It's great to know that our research is immediately accessible to everyone worldwide who wishes to access it."

"As early-career researchers completing research that was not funded using a massive grant, we had no funds to cover publication fees. So being able to publish Open Access for free was a lifeline for me and my co-authors."

"To have our paper published Open Access free of charge was simply awesome, and it only took a few clicks to arrange."

biologists.com/read-publish/researchers