



JMIH 2025

JOINT MEETING OF ICHTHYOLOGISTS AND HERPETOLOGISTS

9-13 July 2025 • Saint Paul, MN

CONFERENCE PROGRAM



AES



ASIH



HL



SSAR

JMIH Meeting Management and Planning Committee

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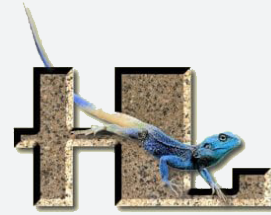
Organizing Societies



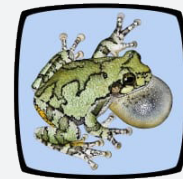
American Elasmobranch Society (AES)



American Society of Ichthyologists and Herpetologists (ASIH)



Herpetologists' League (HL)



Society for the Study of Amphibians and Reptiles (SSAR)



Joint Meeting of Ichthyologists and Herpetologists

CONFERENCE PROGRAM

Saint Paul RiverCentre

175 Kellogg Blvd
St Paul, MN 55102
651-265-4800
www.rivercentre.org

Future Meeting Dates

8-12 July 2026

Sheraton New Orleans Hotel
New Orleans, LA

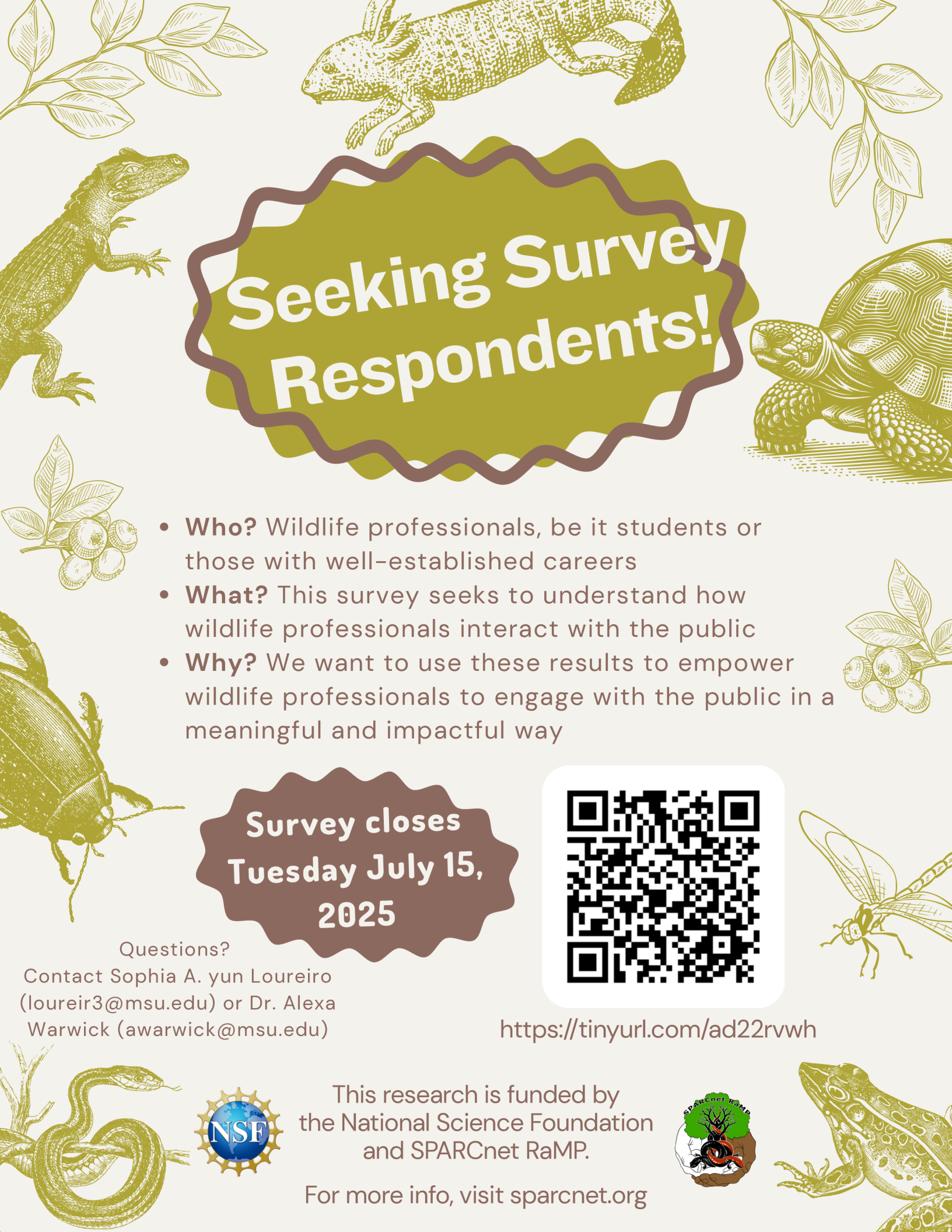
Joint Meeting of Ichthyologists and Herpetologists

950 Herndon Parkway
Suite 450
Herndon, Virginia 20170
Phone: 703-790-1745 • 800-955-1236
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Email: JMIH@BurkInc.com

Meetings Management
by Burk & Associates Meetings

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Seeking Survey Respondents!

- **Who?** Wildlife professionals, be it students or those with well-established careers
- **What?** This survey seeks to understand how wildlife professionals interact with the public
- **Why?** We want to use these results to empower wildlife professionals to engage with the public in a meaningful and impactful way

**Survey closes
Tuesday July 15,
2025**



Questions?

Contact Sophia A. yun Loureiro
(loueir3@msu.edu) or Dr. Alexa
Warwick (awarwick@msu.edu)

<https://tinyurl.com/ad22rvwh>



This research is funded by
the National Science Foundation
and SPARCnet RaMP.



For more info, visit sparcnet.org

General Meeting Information

All events take place in the Saint Paul RiverCentre, unless otherwise noted.

Final Program

JMIH does not assume responsibility for any inconsistencies or errors in the abstracts for contributed paper and poster presentations. We regret any possible omissions, changes and/or additions not reflected in this final program.

Speaker Upload Room

All presenters must visit **Meeting Room 1** at least one half day prior to their session time. It is highly recommended that you preview your presentation to guarantee that it will work properly. Each presentation will be loaded onto a master file for each session. You may use your own computer. However, your fifteen minute time slot does not include time for set up and testing. There will be students and audio visual personnel to assist you and to check you in during the following hours:

Wednesday 9 July	12:00 PM – 6:00 PM
Thursday 10 July	7:00 AM – 5:00 PM
Friday 11 July	7:00 AM – 5:00 PM
Saturday 12 July	7:00 AM – 5:00 PM
Sunday 13 July	7:00 AM – 2:00 PM

Speaker Practice Room

If you would like to practice your talk you can use **Meeting Room 2**. There is a sign up sheet via SignUpGenius on the Whova app.

Registration Desk

The JMIH Registration/Information area is located in the **Ballroom Concourse** and will be open the following hours:

Wednesday 9 July	2:00 PM – 5:00 PM
Thursday 10 July	7:30 AM – 4:00 PM
Friday 11 July	8:00 AM – 4:00 PM
Saturday 12 July	8:00 AM – 3:00 PM
Sunday 13 July	8:00 AM – 12:00 PM

AES Store

The AES Store is located in **Meeting Room 4** and will be open the following hours:

Thursday 10 July	9:00 AM – 4:00 PM
Friday 11 July	8:00 AM – 6:30 PM
Saturday 12 July	8:00 AM – 6:30 PM
Sunday 13 July	8:00 AM – 4:00 PM

Message and Job Announcements

A message and employment opportunity bulletin board will be located in the JMIH Registration/Information area. If you have a message for a colleague, please post it to the message board. The Employment Opportunity board is where attendees can post “Positions Wanted” and learn about “Positions Available.” Interested attendees may schedule interviews in the room set aside for that purpose. See a registration desk attendant for assistance.

Coffee Breaks

Coffee breaks will be located in the Exhibit and Poster Area, **Ballroom A-B**, Thursday – Saturday, and in the **Ballroom Concourse** on Sunday. Coffee break service is available each day of the meeting, during the following hours:

Thursday 10 July	10:00 AM – 10:30 AM 3:30 PM – 4:00 PM
Friday 11 July	10:00 AM – 10:30 AM
Saturday 12 July	10:00 AM – 10:30 AM
Sunday 13 July	10:00 AM – 10:30 AM

Lightning Talks

Lightning talks (five minutes in length, 10 slides maximum) provide a good forum for presenting preliminary research or for putting out a call for data, feedback, or collaboration.

JMIH Childcare

Complimentary childcare is available with childcare provider, Taming Toddlers, in **Meeting Room 7**. Pre-registration was required, but there may be space for drop-ins.

Quiet Room

Need to take a break? You can go to **Meeting Room 9**.



Floy Tag & Mfg., Inc.

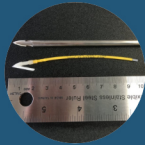
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sales@floytag.com

www.floytag.com

For Field Museum Amphibian & Reptile Collections inquiries, please email!

SAVE THE DATE

Joint Meeting of Ichthyologists and Herpetologists

Annual Meeting & Exhibition

8–12 July 2026 • New Orleans, LA

Join us at the Sheraton New Orleans Hotel for five days of education, networking, and professional development.



Meeting Highlights

All events take place in the Saint Paul RiverCentre, unless otherwise noted.

Wednesday 9 July

LGBTQIA+ Mixer & Social

7:30 PM – 9:30 PM, Offsite

Thursday 10 July

Plenary Session I

8:30 AM – 10:00 AM, Ballroom C-D

ASIH Awards. Keynote Address: It shouldn't work but it does: Lessons learned from unisexual salamanders. Speaker: Katherine Greenwald, Eastern Michigan University

Plenary Session II

4:00 PM – 5:35 PM, Ballroom C-D

SSAR Founders Fellows, PARC Awards, and HL Awards. Entering the dragon's underwater lair: Shedding light on anguilliform swimming. Speaker: Xavier Bonnet, Centre National de la Recherche Scientifique

ASIH Cashner Student & Mentor Social

5:00 PM – 6:00 PM, Meeting Room 3

SSAR & HL Student Social

6:00 PM – 7:00 PM, Meeting Room 5

Opening Reception

7:00 PM – 9:00 PM, Ballroom Concourse

JMIH welcomes you to Saint Paul, MN with a reception to say hi to old friends or make new ones. See you there!

Friday 11 July

Plenary Session III

8:30 AM – 10:00 AM, Ballroom C-D

How does NOAA work to recover an Endangered Elasmobranch?: The Fall and (hopeful) Rise of the "Great longimanus"...aka the Oceanic whitetip shark. Speaker: John Carlson, NOAA Fisheries Service-Southeast Fisheries Science Center

Lizard Confidential: Uncovering Evolution's Exceptions in Form, Function, and Family. Speaker: Robert Espinoza, California State University, Northridge

International Society for the History and Bibliography of Herpetology (ISHBH) Library Tour

1:00 PM – 2:30 PM, Offsite

Poster Session #1

4:00 PM – 6:00 PM, Ballroom A-B

ASIH Speed Networking

6:00 PM – 7:00 PM, Meeting Room 5

AES Student Social

7:00 PM – 10:00 PM, Offsite

SSAR DEI Alcohol-Free Game Night

8:00 PM – 10:00 PM, Meeting Room 6

Saturday 12 July

Know Better, Do Better: A workshop for those striving towards allyship

1:00 PM – 4:00 PM, Meeting Room 6

This workshop is for conference attendees that want to learn how to become better allies in their personal and professional lives. We will cover topics pertaining to understanding and interrupting bias, being an active bystander, promoting inclusivity, and being culturally responsive. This workshop will provide a strong background and terminology for folks unfamiliar with these topics while also diving into some tangible tools and resources you can use in your every day life. The workshop will be highly interactive and include a lot of discussions and case studies.

Poster Session #2

4:00 PM – 6:00 PM, Ballroom A-B

ASIH Grad Student Social

7:30 PM – 9:30 PM, Meeting Room 3

SSAR Live Auction

9:00 PM – 12:00 AM, Ballroom H

Sunday 13 July

ASIH Student Workshop

12:00 PM – 1:00 PM, Ballroom E

Know Better, Do Better: A workshop for those striving towards allyship

8:30 AM – 11:30 AM, Meeting Room 6

AES Banquet

6:00 PM – 12:00 AM, Ballroom C

Thank you to the following JMIH 2025 Sponsors



Join us on our official event app!

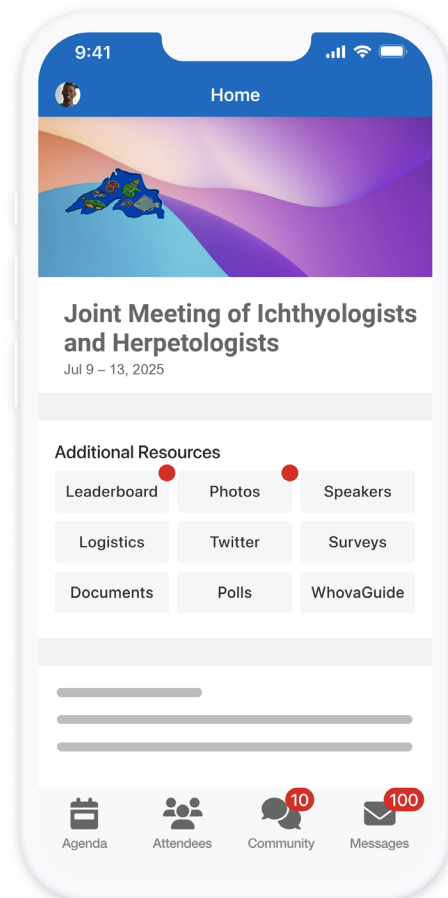
We're using [Whova](#) as our official event app. Download the app and join our event to:

- ➔ Personalize your agenda
- ➔ Receive event updates and notifications
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- ➔ Create and join meet-ups



Scan this code for the link or search "Whova - Event and Conference App" on the App Store or Google Play.

Event Invitation Code: JMIHstpaul25



2025 Exhibit Hall Floor Plan

Ballroom A-B



View the latest floorplan and company profiles on your phone or tablet.
Scan the QR Code or visit jmih2025.expofp.com.

Exhibit Hall Hours

Thursday 10 July
9:00 AM – 4:00 PM

Friday 11 July
9:00 AM – 6:00 PM

Saturday 12 July
9:00 AM – 6:00 PM

Coffee Breaks

Ballroom A-B

Thursday 10 July
10:00 AM – 10:30 AM
3:30 PM – 4:00 PM

Friday 11 July
10:00 AM – 10:30 AM

Saturday 12 July
10:00 AM – 10:30 AM

Ballroom Concourse

Sunday 13 July
10:00 AM – 10:30 AM

SSAR Silent Auction

Thursday 10 July
9:00 AM – 4:00 PM

Friday 11 July
9:00 AM – 6:00 PM

Saturday 12 July
9:00 AM – 6:00 PM

ASIH Book Auction Pick Up

Saturday 12 July
2:00 PM – 6:00 PM

Exhibitor Listing

Advanced Telemetry Systems

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Explore Advanced Telemetry Systems (ATS) for top-tier tracking solutions. From VHF transmitters and GPS systems to Receivers/Dataloggers and Antenna Systems, our innovative products meet global research needs.

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Jennifer Clausen Illustration

www.jacdrews.com

I am a scientific illustrator who specializes in providing custom concept figures as well as anatomical and ecological-themed illustrations. My illustrations support scientific research publications, reports, and presentations. I primarily focus on aquatic ecosystems and organisms.

Lotek

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Schedule-at-a-Glance

All events take place in the Saint Paul RiverCentre, unless otherwise noted.

Wednesday 9 July

MEETINGS

AES Executive Committee Meeting	9:00 AM – 12:00 PM	Meeting Room 5
SSAR Board of Directors Meeting	10:00 AM – 4:00 PM	Meeting Room 3
AES Board of Directors Meeting	2:00 PM – 5:00 PM	Meeting Room 5
HL Board of Trustees	2:00 PM – 6:00 PM	Meeting Room 6
I&H Publications Committee	2:00 PM – 5:00 PM	Ballroom E
Student Volunteer Orientation Meeting	4:30 PM – 5:00 PM	Ballroom Concourse
ASIH Board of Governors (BOG)	5:00 PM – 7:00 PM	Ballroom F
SSAR Travelogue	6:00 PM – 8:00 PM	Ballroom E

SOCIAL EVENTS

LGBTQIA+ Mixer & Social	7:30 PM – 9:30 PM	Offsite
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Thursday 10 July

MEETINGS

LRPC Meeting	7:30 AM – 8:30 AM	Meeting Room 3
International Society for the History and Bibliography of Herpetology (ISHBH) Business Lunch	12:00 PM – 1:00 PM	Offsite: McGovern's Pub

PLENARY SESSIONS

Plenary Session I	8:30 AM – 10:00 AM	Ballroom C-D
Plenary Session II	4:00 PM – 5:35 PM	Ballroom C-D

ORAL PRESENTATIONS

Session 1: ASIH Stoye - General Herpetology	10:30 AM – 11:30 AM	Ballroom E
Session 2: SSAR Siebert - Conservation, Evolution and Systematics	10:30 AM – 12:00 PM	Ballroom D
Session 3: AES Gruber I	10:30 AM – 11:45 AM	Ballroom C
Session 4: ASIH Stoye - General Ichthyology I	10:30 AM – 12:00 PM	Ballroom F
Session 5: HL Graduate Research Award	10:30 AM – 11:45 AM	Ballroom G
Session 6: ASIH Stoye - Ecology & Ethology I / Conservation	1:30 PM – 3:30 PM	Ballroom E
Session 7: SSAR Siebert - Ecology, Physiology and Morphology	1:30 PM – 3:15 PM	Ballroom D
Session 8: AES Gruber Award II	1:30 PM – 2:45 PM	Ballroom C
Session 9: ASIH Stoye General Ichthyology II	1:30 PM – 3:15 PM	Ballroom F
Session 10: HL Graduate Research Award	1:30 PM – 3:15 PM	Ballroom G

SOCIAL EVENTS

ASIH Cashner Student and Mentor Social	5:00 PM – 6:00 PM	Meeting Room 3
SSAR & HL Student Social	6:00 PM – 7:00 PM	Meeting Room 5
Opening Reception	7:00 PM – 9:00 PM	Ballroom Concourse

Schedule-at-a-Glance

All events take place in the Saint Paul RiverCentre, unless otherwise noted.

Friday 11 July

MEETINGS

ASIH Student Business Meeting	12:00 PM – 1:00 PM	Meeting Room 3
HL Business Meeting	6:00 PM – 8:00 PM	Ballroom E
Neotropical Ichthyological Association Business Meeting	7:00 PM – 8:00 PM	Ballroom G

PLENARY SESSION

Plenary Session III	8:30 AM – 10:00 AM	Ballroom C-D
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SYMPOSIA

Session 13: Symposium: Human-elasmobranch conflict (AES) – Part 1	10:30 AM – 12:00 PM	Ballroom C
Session 19: Symposium: Human-elasmobranch conflict (AES) – Part 2	1:30 PM – 3:45 PM	Ballroom C

ORAL PRESENTATIONS

Session 11: ASIH Stoye - Ecology & Ethology II	10:30 AM – 11:45 AM	Ballroom E
Session 12: ASIH Stoye - Genetics, Development, & Morphology I	10:30 AM – 12:00 PM	Ballroom D
Session 14: Biodiversity and Conservation	10:30 AM – 11:15 AM	Ballroom F
Session 15: Life History and Foraging Ecology	10:30 AM – 12:00 PM	Ballroom G
Session 16: Physiology I	10:30 AM – 12:00 PM	Ballroom H
Session 17: ASIH Stoye - Physiology & Physiological Ecology / NIA Best Student Paper Award	1:30 PM – 2:45 PM	Ballroom E
Session 18: ASIH Stoye - Genetics, Development, & Morphology II / NIA Best Student Paper Award	1:30 PM – 3:30 PM	Ballroom D
Session 20: Biogeography	1:30 PM – 3:30 PM	Ballroom F
Session 21: Habitat Ecology	1:30 PM – 3:15 PM	Ballroom G
Session 22: Behavior	1:30 PM – 3:30 PM	Ballroom H

POSTER PRESENTATIONS

Poster Session I	4:00 PM – 6:00 PM	Ballroom A-B
• ASIH Storer Herpetology • ASIH Storer Ichthyology • SSAR Hutchison Award • SSAR Rabb Undergraduate Poster Award • AES Carrier Award • AES Posters		

SOCIAL EVENTS

International Society for the History and Bibliography of Herpetology (ISHBH) Library Tour	1:00 PM – 2:30 PM	Offsite
ASIH Speed Networking	6:00 PM – 7:00 PM	Meeting Room 5
AES Student Social	7:00 PM – 10:00 PM	Offsite
SSAR DEI Alcohol-Free Game Night	8:00 PM – 10:00 PM	Meeting Room 6

Schedule-at-a-Glance

All events take place in the Saint Paul RiverCentre, unless otherwise noted.

Saturday 12 July

MEETINGS

AES Business Meeting	4:30 PM – 6:30 PM	Ballroom C
ASIH Business and Awards Meeting	5:30 PM – 7:30 PM	Ballroom E
SSAR Business Meeting	6:00 PM – 8:00 PM	Ballroom G

WORKSHOPS

HL Student Workshop	12:00 PM – 1:00 PM	Ballroom F
AES Student Workshop	12:00 PM – 1:30 PM	Ballroom C
Know Better, Do Better: A workshop for those striving towards allyship	1:00 PM – 4:00 PM	Meeting Room 6

SYMPOSIA

Session 23: Symposium: Science in 3D (ASIH) – Part 1	8:30 AM – 10:00 AM	Ballroom E
Session 28: Symposium: Science in 3D (ASIH) – Part 2	10:30 AM – 12:00 PM	Ballroom E
Session 29: Symposium: Stress and Welfare in Organisms throughout Lifetime (HL)	10:30 AM – 12:00 PM	Ballroom D
Session 34: Symposium: Science in 3D (ASIH) – Part 3	1:30 PM – 4:00 PM	Ballroom E

ORAL PRESENTATIONS

Session 24: Collections and History of Herpetology	9:00 AM – 9:45 AM	Ballroom D
Session 25: AES Physiology	8:30 AM – 9:30 AM	Ballroom C
Session 26: Mechanistic Evolution	8:30 AM – 10:00 AM	Ballroom F
Session 27: Conservation: methods	8:30 AM – 9:45 AM	Ballroom G
Session 30: AES Ecology I	10:30 AM – 11:30 AM	Ballroom C
Session 31: Molecular Evolution	10:30 AM – 11:30 AM	Ballroom F
Session 32: Panel Discussion: DEI in Ecology and Resource Management	10:30 AM – 12:00 PM	Ballroom G
Session 33: Conservation & Management	10:30 AM – 11:45 AM	Ballroom H
Session 35: Physiology II	1:30 PM – 4:00 PM	Ballroom D
Session 36: AES Ecology II	1:30 PM – 4:00 PM	Ballroom C
Session 37: Systematics	1:30 PM – 4:00 PM	Ballroom F
Session 38: Ecology & Climate Effects	1:30 PM – 3:45 PM	Ballroom G
Session 39: Genetics, Habitat and Environment	1:30 PM – 4:00 PM	Ballroom H

POSTER PRESENTATIONS

Poster Session II	4:00 PM – 6:00 PM	Ballroom A-B
• DEI, Education, Science • Conservation, Management, Ecology, Behavior • Evolution, Genetics, Biogeography • Herpetology • Ichthyology • Morphology, Biomechanics, Physiology, Disease • Systematics, Taxonomy		

SOCIAL EVENTS

ASIH Grad Student Social	7:30 PM – 9:30 PM	Meeting Room 3
SSAR Live Auction	9:00 PM – 12:00 AM	Ballroom H

Schedule-at-a-Glance

All events take place in the Saint Paul RiverCentre, unless otherwise noted.

Sunday 13 July

MEETINGS

ASIH IHCC Committee

TIME

1:30 PM – 2:30 PM

LOCATION

Meeting Room 3

WORKSHOPS

Know Better, Do Better: A workshop for those striving towards allyship

8:30 AM – 11:30 AM

Meeting Room 6

ASIH Student Workshop

12:00 PM – 1:00 PM

Ballroom E

Know Better, Do Better: A workshop for those striving towards allyship

1:30 PM – 4:30 PM

Meeting Room 6

SYMPOSIA

Session 40: Symposium: Artificial intelligence in ichthyology and herpetology (SSAR)

8:00 AM – 10:00 AM

Ballroom E

Session 45: Symposium: Thriving in a Changing World: Host-Pathogen Dynamics in Hyperdiverse Communities of Amphibians and Reptiles (SSAR) – Part 1

10:30 AM – 12:00 PM

Ballroom E

Session 50: Symposium: Thriving in a Changing World: Host-Pathogen Dynamics in Hyperdiverse Communities of Amphibians and Reptiles (SSAR) – Part 2

1:30 PM – 4:30 PM

Ballroom E

LIGHTNING TALKS

Session 43: Lightning Talks

8:00 AM – 9:15 AM

Ballroom F

ORAL PRESENTATIONS

Session 41: AES Morphology and Life History

8:00 AM – 9:30 AM

Ballroom D

Session 42: AES Ecology III

8:00 AM – 9:45 AM

Ballroom C

Session 43: Lightning Talks

8:00 AM – 9:15 AM

Ballroom F

Session 44: Techniques in Ecology and Evolution / Conservation & Management I

8:00 AM – 9:45 AM

Ballroom G

Session 46: Postcranial Morphology

10:30 AM – 12:30 PM

Ballroom D

Session 47: AES Conservation I

10:30 AM – 11:45 AM

Ballroom C

Session 48: Evolution

10:30 AM – 11:30 AM

Ballroom F

Session 49: Conservation & Management II / Conservation Ecology and Genetics I

10:30 AM – 11:45 AM

Ballroom G

Session 51: Cranial Morphology

1:30 PM – 3:30 PM

Ballroom D

Session 52: AES Conservation II

1:30 PM – 3:00 PM

Ballroom C

Session 53: Biomechanics / Taxonomy

1:30 PM – 3:45 PM

Ballroom F

Session 54: Conservation Ecology and Genetics II

1:30 PM – 3:30 PM

Ballroom G

SOCIAL EVENTS

AES Banquet

6:00 PM – 12:00 AM

Ballroom C

Thursday 10 July 2025

Thursday 10 July • Plenary Sessions

Note: Presenter is first author unless noted by an asterisk (*)

8:30 AM – 10:00 AM

Ballroom C-D

Plenary Session I

Moderator: *Kassandra Ford*

8:30 am *Kassandra Ford*

Welcome

8:40 am *Katherine Greenwald*

It shouldn't work but it does: Lessons learned from unisexual salamanders

9:40 am *Henry Bart*

ASIH Awards

4:00 PM – 5:35 PM

Ballroom C-D

Plenary Session II

Moderator: *Tiffany Doan*

4:00 pm *John Maerz*

SSAR Founders Fellows

4:20 pm *Stephen Mullin*

HL Awards

4:35 pm *Xavier Bonnet*

Entering the dragon's underwater lair: Shedding light on anguilliform swimming.

Thursday 10 July • Oral Presentations

Note: Presenter is first author unless noted by an asterisk (*)

10:30 AM – 11:30 AM

Ballroom E

Session 1: ASIH Stoye - General Herpetology

Moderator: *Jennifer Deitloff*

10:30 am *Waseem Ahmed, Muhammad Rais, Sumbul Gill*

1.1 | Phylogenetic Insights into Burrowing Frogs (*Sphaerotheca* spp.) Based on Nuclear and Mitochondrial DNA Analysis

10:45 am *Jackson Phillips, Molly Womack*

1.2 | Bubble-Guts: Re-Evolution of Air Breathing in a Lungless Tadpole.

11:00 am *Steven Downs, Calvin Schaefer, Guin Wogan*

1.3 | Ecological Correlates and Modularity in Colubriiform Skull Morphology

11:15 am *Abby Klahs, Christopher Beachy*

1.4 | Phenotypic Plasticity of Gill Morphology of Paedomorphic Salamander *Ambystoma mexicanum* in Contrasting Water Flow

10:30 AM – 12:00 PM

Ballroom D

Session 2: SSAR Siebert - Conservation, Evolution and Systematics

Moderator: *Molly Bletz*

10:30 am *Nicholas Van Gilder, Elizabeth Jockusch*

2.1 | Conservation genomics of the Hell Hollow Slender Salamander (*Batrachoseps diabolicus*).

10:45 am *Hannah Bradley, Lisa Barrow, Daniele Wiley*

2.2 | Snake Fungal Disease: How long has it been here?

11:00 am *Brett Butler, Oscar Flores Villela*

2.3 | Reconstructing the Evolutionary History of Banded Geckos (*Coleonyx*)

11:15 am *Eren Yigit, Ryan Schott*

2.4 | Convergent Visual Evolution and Patterns of Selection During Fossorial Adaptation in Caecilians and Squamates

Thursday 10 July 2025

11:30 am	<i>Lizzy Patton, Aaron Bauer, Todd Jackman, Stuart Nielsen</i>	2.5 Hidden in Plain Sight: Novel Mitochondrial Rearrangement and Deep Divergences in Widespread Southern African Agama
11:45 am	<i>Cristobal Torres Velasco, Antonio Yolocalli Cisneros Bernal, Luis Fernando Hidalgo Licona</i>	2.6 Geographic Variation in the Mexican Pygmy Rattlesnake <i>Crotalus ravus</i> (Squamata: Viperidae): Evidence from Morphology and Niche Modeling

10:30 AM – 11:45 AM

Ballroom C

Session 3: AES Gruber I

Moderator: Dean Grubbs

10:30 am	<i>Ashley Dawdy, Ralph Grubbs</i>	3.1 Ontogenetic Patterns of Cownose Ray (<i>Rhinoptera bonasus</i>) Movement Behavior and Habitat Use in Apalachicola Bay, FL
10:45 am	<i>Scott Goldberg, Daniel Coffey, Edward Hale, Matthew Oliver, Aaron Carlisle</i>	3.2 Niche partitioning of three skate species in the coastal ocean off of New Jersey, USA
11:00 am	<i>Jessica Dehn, Dean Grubbs</i>	3.3 Characterizing ontogenetic dietary shifts in young-of-year Atlantic sharpnose sharks (<i>Rhizoprionodon terraenovae</i>) in St. George Sound, FL
11:15 am	<i>Morgan Lattomus, Jim Gelsleichter, Nikki Dix, Eric Johnson</i>	3.4 The Presence and Movement of Mercury (Hg) in the Guana and Tolomato Rivers's Sharks and their Prey
11:30 am	<i>Andrew Lyons, Bryan Franks, Adam Fox</i>	3.5 Evidence of Primary Nursery Usage of the Lemon Shark on Georgia Barrier Islands

10:30 AM – 12:00 PM

Ballroom F

Session 4: ASIH Stoye - General Ichthyology I

Moderator: David Camak

10:30 am	<i>Tyler Muller, Lily Hughes</i>	4.1 Introgression Complicates Phylogenetic Relationships of Aphredoderus
10:45 am	<i>Daniel Sinopoli, Solomon David, Thomas Near, Daemin Kim, Rafet Ozturk, Yahya Terzi, Prosanta Chakrabarty</i>	4.2 Re-Evaluating Species Richness of an Ancient Fish Lineage (Lepisosteidae)
11:00 am	<i>Benjamin Allen, Jonathan Armbruster, Robert Jenkins</i>	4.3 Sucker for a Mystery: Description and Population Genetics of the Brassy Jumprock
11:15 am	<i>Hayden Roberts, Preston Bean, Katrina Keith, Kevin Conway, Gary Voelker, Henry Bart, Joshua Perkin</i>	4.4 Molecular Investigation of Llano River Carpsucker (<i>Carpionodes cf. carpio</i>) Reveals Insight into <i>Carpionodes</i> Taxonomic Uncertainty and Native Distribution.
11:30 am	<i>Noah Schley, Devin Bloom</i>	4.5 Does Life History Strategy Drive Morphological Evolution in Lampreys?
11:45 am	<i>Jacob Barrett, Thomas Dodson, Megan DiNicola, Belize Lane, Mitchell Magruder, Austin Davis, David Smith, Joshua Perkin</i>	4.6 Measuring and predicting fish passage in a restored but serially fragmented riverscape

10:30 AM – 11:45 AM

Ballroom E

Session 5: HL Graduate Research Award

Moderator: Christopher Howey

10:30 am	<i>Bryce Sweely, J Godley, Andrew Durso</i>	5.1 Vacancy or Eviction: How Do Nonnative Species Fit into a Community of Fishes, Reptiles, and Amphibians?
10:45 am	<i>Ricardo Gibert, Jaiden Callahan, Robert Espinoza</i>	5.2 Gecko Wars: Competitive Behavioral Displacement Among Co-occurring Invasive House Geckos (<i>Hemidactylus</i> spp.)
11:00 am	<i>Anna Velten, Andrew Durso</i>	5.3 Perching in Paradise: Habitat Selection of <i>Chamaeleo calyptratus</i> and <i>Anolis equestris</i> in Southwest Florida
11:15 am	<i>Nicole Stevens, Lee Fitzgerald</i>	5.4 Global Review on the Invasive Threats that Impact Native Lizard Species
11:30 am	<i>Eva Kerr, Jade Samples, John Maerz</i>	5.5 Simulating the Influence of Landscape Features on Gopher Frog (<i>Rana capito</i>) Metapopulations using an Individual-Based Model

1:30 PM – 3:30 PM

Ballroom C

Session 6: ASIH Stoye - Ecology & Ethology I / Conservation

Moderator: Malorie M. Hayes

1:30 pm	Arthur Jones, Andrew Pyryt, Jenna Laughinghouse, Toufiq Reza, Vincent Lovko, Ralph Turingan	6.1 A Regime Shift is Reflected in the Fish Community Structure of the Indian River Lagoon (IRL)
1:45 pm	Myzell Amaro, Andrew Durso, Terence Farrell, Anna Savage, Jenna Palmisano	6.2 Exploring the Distribution of an Invasive Lung Parasite in Florida
2:00 pm	Alexis Lundquist, Darren Johnson, Thea Cole	6.3 Adaptive Potential in a Warming Ocean: Exploring Local Adaptation of Thermal Sensitivity in a Coastal Fish.
2:15 pm	Brady Parlato, Michael Benard	6.4 Temperature Shapes Effects of Amphibians on a Forest Floor Community
2:30 pm	Owen Bachhuber, Max Roberts, Scott Boback, Emily Taylor	6.5 Decoding rattlesnake social behavior through next-generation camera technology and community science
2:45 pm	Lee Burrows, Thomas Jensen, Brian Todd	6.6 Effective Eradication of an Introduced Population of Common Watersnakes, <i>Nerodia sipedon</i> , in California
3:00 pm	Mason Ferrell, Mollie Cashner	6.7 Impacts of elevated conductivity on growth and behavior of the Blackside Dace (<i>Chrosomus cumberlandensis</i>)
3:15 pm	Brenden Orocu, Steven Peck, Robert Richardson, R Tuckfield, Mark Belk	6.8 Modeling the effects of climate change on the population dynamics of a long-lived fish

1:30 PM – 3:15 PM

Ballroom D

Session 7: SSAR Siebert - Ecology, Physiology and Morphology

Moderator: Matthew Heinicke

1:30 pm	E. Nicholson, Michael Ryan, Lee Fitzgerald	7.1 Calls of Introduced Frogs Attract a Threatened Native Species: Phonotactic Responses Between American Bullfrogs and Chiricahua Leopard Frogs
1:45 pm	Jessica Yates, Joshua King	7.2 Tropic Ties or Thermal Drift: Do Spectacled Caimans (<i>Alligatoridae</i> : <i>Caiman</i>) Keep Their Cool in Florida?
2:00 pm	Sudipta Kalita, Daniel Paluh	7.3 Functional morphology of the lower jaw in frogs
2:15 pm	Natasha Stepanova, Hayley Crowell, Daniel Rabosky, Alison Davis Rabosky	7.4 Backtalk: Clade-specific Determinants of the Number of Precloacal Vertebrae in Squamates
2:30 pm	Julia Laterza Barbosa, Martha Muñoz	7.5 Arboreality and the evolution of hydrothermal physiology in neotropical frogs
2:45 pm	Santoshi Mutyala, Sara McClelland	7.6 Biological Effects of Trace Organophosphates on Larval Amphibians
3:00 pm	Norman Hunter IV, Isabella Davis, Jennifer Terry, Stephen Mullin, Susannah French, Lorin Neuman-Lee	7.7 The effect of seasonality on the energetic state of two capital breeding snakes, <i>Thamnophis elegans</i> and <i>Thamnophis sirtalis</i>

1:30 PM – 2:45 PM

Ballroom C

Session 8: AES Gruber Award II

Moderator: Kady Lyons

1:30 pm	Sarah Worthington, Jim Gelsleichter	8.1 Evaluating the Use of Baited Remote Underwater Video in Assessing Shark and Fish Populations in a Low Visibility Estuarine System
1:45 pm	Annais Muschett-Bonilla, Dean Grubbs	8.2 Costs of Gestation in Matrotrophic Rays
2:00 pm	Jaelen Myers, Kevin Crook, Adam Barnett, Marcus Sheaves	8.3 Unique foraging behaviours among sympatric stingrays in a reef flat nursery
2:15 pm	Lindsay Mullins, John Cartwright, Kristine Evans, John Mareska, Philip Match, Jeffrey Plumlee, Eric Sparks, J. Marcus Drymon	8.4 Temporal Scale Impacts Outcomes of Bull Shark (<i>Carcharhinus leucas</i>) 'Nursery Area' Evaluation
2:30 pm	John Hlavín, Emily Yeager, Richard Coleman, Catherine Macdonald	8.5 Reconstructing the Diet of Tiger Sharks (<i>Galeocerdo cuvier</i>) in South Florida from DNA Metabarcoding

1:30 PM – 3:15 PM

Ballroom F

Session 9: ASIH Stoye General Ichthyology II

Moderator: Prosanta Chakrabarty

1:30 pm	Thomas Dodson, Jacob Barrett, Calvin Young, David Smith, Joshua Perkin	9.1 Assemblage change and the contribution of spatiotemporal variation at different scales in two Texas Rivers
1:45 pm	Sheila Rodriguez Machado, Diego Elías, Patricia Torres Pineda, Daniel Fromm, Prosanta Chakrabarty	9.2 Areas of Endemism in the Greater Antilles: The Fish Side of the Story
2:00 pm	Roberto Cucalón, Joel Corush, Windsor Aguirre, Mark Davis, Milton Tan	9.3 Revisiting the Phylogeography of the Rainbow Characin (<i>Rhoadsia</i> spp.) from Western Ecuador using Genomics
2:15 pm	Alex Maile, Matthew Davis	9.4 Diversity and evolution of lure types and their movement in anglerfishes (Lophioidei)
2:30 pm	Kevin Torgersen, Eric Haddad, James Albert	9.5 Shaping Diversity: Patterns of 3D Body Shape Evolution in Actinopterygian Fishes
2:45 pm	Alice Wang, Melanie Stiassny, Bruno Melo	9.6 Phylogeny, Biogeography, and Speciation in a New Genus of Alestid Fishes in West-Central Africa (Ostariophysi: Characiformes)
3:00 pm	Cesar Fuentes-Montejo, Diego Elías, Sean Keogh, Miquel González-Meler, Caleb McMahan	9.7 Fine-scale Distributional Patterns of Freshwater Fish Diversity in the Polochic-Cahabón Area of Endemism

1:30 PM – 3:15 PM

Ballroom G

Session 10: HL Graduate Research Award

Moderator: Julia Joos

1:30 pm	Ke'alani Sison, Matthew Lattanzio	10.1 Form, Function, and Flight: Urbanization Impacts on Trait Relationships in Ornate Tree Lizards
1:45 pm	Michael Kardos, Sarah Woodley	10.2 Unraveling the Source and Function of Biofluorescence in Lungless Salamanders (Family Plethodontidae)
2:00 pm	Brendan Enochs, Maggie Hantak	10.3 Harnessing Crowdsourced Images to Investigate the Relationship Between Color Polymorphism and Climate in Woodland Salamanders
2:15 pm	Jacob Kearns, Thomas Luhring	10.4 The Efficacy of Photo-Recognition as a Mark-Recapture Tool for Small Cryptic Species
2:30 pm	Jade Samples, Eva Kerr, Mia Cinello-Smith, Kristina Hefferle, Vanessa Terrell, Lora Smith, John Maerz	10.5 Evaluating Wetland Restoration Efforts for Amphibians across Georgia
2:45 pm	Nicholas Topping, Nicole Valenzuela	10.6 Vitamin D Regulation and Behavioral Preference in Painted Turtles: the Influence of Floating Vegetation
3:00 pm	Mrunali Raut, Vivek Cyriac, Amartya Sharma	10.7 Habitat features influence oviposition site selection in the Indian Goldenback frog <i>Indosylvirana indica</i> in the Western Ghats of India

Friday 11 July 2025

Friday 11 July • Plenary Sessions

Note: Presenter is first author unless noted by an asterisk (*)

8:30 AM – 10:00 AM

Ballroom C-D

Plenary Session III

Moderator: Matt Davis

8:30 am John Carlson

How does NOAA work to recover an Endangered Elasmobranch?: The Fall and (hopeful) Rise of the “Great longimanus”...aka the Oceanic whitetip shark

9:15 am Robert Espinoza

Lizard Confidential: Uncovering Evolution’s Exceptions in Form, Function, and Family

Friday 11 July • Symposia

Note: Presenter is first author unless noted by an asterisk (*)

10:30 AM – 12:00 PM

Ballroom C

Session 13: Symposium: Human-elasmobranch conflict (AES) – Part 1

Moderator: Marcus Drymon

10:30 am Marcus Drymon, Gary Jackson, Charlie Huveneers, Andrew Chin, Victoria Camilleri-Asch, Steve Kennelly, Daryl McPhee, Karina Ryan, Michael Usher, Amy Kirke, Jon Mitchell

13.1 | Shark depredation is not just an “us” problem

11:00 am Christopher G. Lowe

13.2 | Learning to live with white sharks - a necessity resulting from a California conservation success story

11:30 am Megan Winton, Ashleigh Novak, Victoria Migneco, Patrick Rex, Cynthia Wigren, Marianne Walsh, Kristen Smith, Gregory Skomal

13.3 | Helping JAWS Come Home: Combining Science, Technology, and Outreach to Raise Awareness and Facilitate Co-existence Between Humans and White Sharks

11:45 am Gregory Metzger, Tobey Curtis, Michael Fogg, Michael Frisk, Maria Manz, Brittney Scannell, Christopher Paparo, Bradley Peterson, Matthew Ajemian, Oliver Shipley

13.4 | Managing emerging human-shark conflicts in New York waters

1:30 PM – 3:45 PM

Ballroom C

Session 19: Symposium: Human-elasmobranch conflict (AES) – Part 2

Moderator: Grace Casselberry

1:30 pm Grace Casselberry, Lucas Griffin, Gregory Skomal, Olivia Dinkelacker, Evan Prasky, Ezra Markowitz, Andy Danylchuk

19.1 | Integrating field and social science to address shark depredation in recreational fisheries

1:45 pm Ralph Grubbs

19.2 | The history of human-Cownose Ray conflict in the Chesapeake Bay region.

2:00 pm Matthew Ajemian, Ariadna Rojas Corzo, Kimbrough Bassos-Hull

19.3 | Pelagic eagle rays (*Aetobatus* spp.) and humans: diverse conflicts in fisheries and marine recreation in tropical and subtropical seas

2:15 pm Ariadna Rojas Corzo, Breanna DeGroot, Kim Bassos-Hull, Liana Jones, Ashley Bobnar, Stephen Kajiura, Matthew Ajemian

19.4 | Interactions between elasmobranchs and on-bottom shellfish aquaculture in Florida

2:30 pm Laura Jones, Celia Buzby, Stephen Kajiura

19.5 | Effectiveness of a Magnetic Shark Deterrent

2:45 pm Hannah Aycock, Elizabeth Babcock

19.6 | Spatial Overlap of Sharks and Anglers: Implications for Shark Depredation in Florida's Charter-for-Hire Fisheries

3:00 pm Evan Prasky, Grace Casselberry, Ezra Markowitz, Lucas Griffin, Andrew Danylchuk

19.7 | Using Angler Experiences and Perceptions to Characterize Depredation in the Recreational Fishery Along the Northeast U.S. Continental Shelf

Friday 11 July 2025

3:15 pm *Danielle McAree, Amanda Jargowsky, Alena Anderson, Matthew Jargowsky, Angela Collins, Matthew Streich, Nicholas Haddad, Michael Sipos, J Drymon*

19.8 | Depredation on Descender Devices: A Gulf-Wide Investigation

3:30 pm *Jasmin Graham*

19.9 | Friends not Foes: Novel approaches to understanding and mitigating negative human-sawfish interactions

Friday 11 July • Oral Presentations

Note: Presenter is first author unless noted by an asterisk (*)

10:30 AM – 11:45 AM

Ballroom E

Session 11: ASIH Stoye - Ecology & Ethology II

Moderator: Arik Hartmann

10:30 am *Allison Palmer, Mollie Cashner*

11.1 | Fish Neighborhood Watch: The Response of Spawning Aggregations to Schreckstoff

10:45 am *Emmeleia Nix, Nicole Gaudenti, Savannah Weaver, Ian Axsom, Michael Westphal, Christopher Lortie, Emily Taylor, Brian Todd*

11.2 | Patterns of Home Range Size in Gambusia sila Lizards and the Influence of Naturally Occurring Drought and Habitat Variation

11:00 am *Jacquelyn Galvez, Joanna Chen, Sophia Paz Fogel, Christian Lizaso, Malia Magbual, Antonia Schwartz, Samantha Torres, Connie Zhang, Z. Jack Tseng*

11.3 | Influences of Damming on Morphological Variation Across Temporal and Spatial Axes in Steelhead Trout (*Oncorhynchus mykiss*)

11:15 am *Benton Fry, Kirk Winemiller*

11.4 | Do coexisting cryptic species of predatory peacock bass (*Cichliformes: Cichlidae*) partition their niche?

11:30 am *Hayley Crowell, Alison Davis Rabosky, Kinsey Brock*

11.5 | Cryptic Differences in Ultraviolet Reflectance of Wall Lizard (*Podarcis erhardii*) Throat Morphs Across Islands

10:30 AM – 12:00 PM

Ballroom D

Session 12: ASIH Stoye - Genetics, Development, & Morphology I

Moderator: Rachel Keefe

10:30 am *Nicole Rahman-Garnier, Allison Bronson*

12.1 | Comparative Olfactory Anatomy of Wild and Hatchery-Raised Rainbow Trout (*Oncorhynchus mykiss*)

10:45 am *Daniel Geldof, Prosanta Chakrabarty*

12.2 | The Hole Truth: Bizarre cranial morphology in a fish, *Bothragonus swanii*, and countering the survivability tradeoffs of heavy armor

11:00 am *Gretchen Hilt, Matthew Niemiller, Christopher Beachy, Kyle Piller*

12.3 | Subterranean surveillance: Using Environmental DNA (eDNA) to capture metazoan biodiversity in an understudied karst ecosystem

11:15 am *Jhael Ortega Paez, Santiago Ron, Kate Thomas, David Gower, Rayna Bell, Matthew Fujita, Jeffrey Streicher, Ryan Schott*

12.4 | Eyes wide open: Visual investment in “deaf” and/or “mute” frogs investigated through ecology and eye morphometry

11:30 am *Nikole Schneider, Christopher Anderson*

12.5 | Kinematics of multiple feeding strategies in the highly specialized chameleon

11:45 am *Zoë Müller, Matthew Fujita*

12.6 | Mutation accumulation in the nuclear genome of a parthenogenetic whiptail lizard, *Aspidoscelis tessellatus*

10:30 AM – 11:15 AM

Ballroom F

Session 14: Biodiversity and Conservation

Moderator: Casey Dillman

10:30 am *Madelynn Sinclair, Michelle Thompson, Thomas Anton, Sara Ruane*

14.1 | Resurveying Amphibians and Reptiles of Chicagoland Forest Preserves

10:45 am *Casey Dillman*

14.2 | A Century of Change: The Fishes of Catatonk Creek

11:00 am *Tricia Markle, Christopher Smith, Seth Stapleton*

14.3 | Turtles and Turnarounds: Effective Strategies to Mitigate Turtle Road Mortality

10:30 AM – 12:00 PM**Ballroom G****Session 15: Life History and Foraging Ecology***Moderator: Stephen Mullin*10:30 am *Bruce Stallsmith*15.1 | Most Species of *Etheostoma* (Percidae) Snubnose Darters Have Female Skew During the Spring Spawning Season. One Species Does Not.10:45 am *Kirk Winemiller*

15.2 | Why We Shouldn't Kill Old, Large, Long-Lived Fish

11:00 am *Maggie Keller, Christopher Beachy*

15.3 | Food Web Dynamics in the Midst of a Missing Salamander

11:15 am *Cynthia Carter, Stephen Mullin*

15.4 | Alethinophidian inclusivity: Semi-aquatic snakes embrace, but don't constrict, a diversity of prey guilds.

11:30 am *Oliver Ljustina, Michael Kaller*15.5 | Urbanization Increases Trophic Overlap in Persisting Watersnake Species (Genus: *Nerodia*) in Southern Florida11:45 am *Michael Burns, Shih-Na Liu, Peter Wainwright*

15.6 | Ecological Filtering Shapes Morphological Diversity Across Flow Regimes in Neotropical Characiforms

10:30 AM – 12:00 PM**Ballroom H****Session 16: Physiology I***Moderator: Allyson Fenwick*10:30 am *Jasmine Nasser, Christopher Beachy*16.1 | Thermal Preferences of the Southern Two-lined Salamander (*Eurycea cirrigera*) Across Its Latitudinal Gradient10:45 am *Dellen Roush, Genevieve Paulick, Athena Vakaleris, Alyssa Baxter, William Peterman, Meaghan Gade, Eric Gangloff*

16.2 | Characterizing Thermal Microhabitat Selection in a Widely Distributed Plethodontid Salamander

11:00 am *Etti Cooper, Madison McIntyre, Krystal Tolley, Graham Alexander, Christopher Anderson*

16.3 | Acclimation effects on thermal dependence of tongue projection performance in chameleons

11:15 am *Allyson Fenwick, Eli Maynard, Christopher Goodchild*16.4 | Mediterranean geckos (*Hemidactylus turcicus*) in Oklahoma have lower critical thermal limits than populations further south: where to measure next?11:30 am *Madison McIntyre, Etti Cooper, Graham Alexander, Krystal Tolley, Christopher Anderson*

16.5 | Acclimation Effects on Cutaneous Evaporative Water Loss in Chameleons Living in Dynamic Environments

11:45 am *Maxwell Carnes-Mason, Steven Beaupre*

16.6 | Temperature manipulation induces ecdysis in lab-held Rattlesnakes

1:30 PM – 2:45 PM**Ballroom E****Session 17: ASIH Stoye - Physiology & Physiological Ecology / NIA Best Student Paper Award***Moderator: Steven Hromada*1:30 pm *Jessica Powell, Caitlin Gabor*

17.1 | From tadpole to toad: the effects of environmental stressors on glucocorticoid response, growth, and activity in a tolerant Texas toad

1:45 pm *Cindy Scruggs, Julia Thulander, Joshua Hall*17.2 | The Long-term Effects of Incubation Temperature on Morphology and Performance of the Streamside Salamander (*Ambystoma barbouri*)2:00 pm *Desi Joseph, Samuel Wilson, Luberson Joseph, Guinevere Wogan*17.3 | Adaptive Response or Plasticity? Assessing Temperature Tolerance in a Widespread Introduced Gecko, *Hemidactylus turcicus*2:15 pm *Max Roberts, Owen Bachhuber, Scott Boback, Emily Taylor*17.4 | Investigating the Impacts of Weather Patterns on Behavioral Homeostasis in the Prairie Rattlesnake (*Crotalus viridis*)2:30 pm *Sage Babish, Robert del Carlo, Jessica Reimche, Kelly Robinson, Edmund Brodie Jr., Edmund Brodie III, Normand LeBlanc, Chris Feldman*17.5 | Assessing functional tradeoffs in toxin-resistant Sierra garter snakes (*Thamnophis couchii*)

1:30 PM – 3:30 PM**Ballroom D****Session 18: ASIH Stoye - Genetics, Development, & Morphology II / NIA Best Student Paper Award**

Moderator: Rene Martin

1:30 pm	<i>Caleb Krueger, Marc Girondot, Fredric Janzen</i>	18.1 The Macroevolutionary and Macroecological Drivers of Thermal Sex-Ratio Reaction Norm Variation
1:45 pm	<i>Taegan Perez, Matthew Penuvchev, Victoria Mortella, Rayna Bell, Belinda Chang, Ryan Schott</i>	18.2 The Role of Phylogeny and Ecology in Shaping Turtle Phototransduction Gene Evolution
2:00 pm	<i>Jack Dirck, Jeanne Robertson, Robert Espinoza</i>	18.3 Using Population Genomics to Reveal the Invasion Pathways of a Hitch-hiking Invasive Gecko
2:15 pm	<i>Meghan Larson, Matthew Davis, Leo Smith, Ed Wiley</i>	18.4 Glowing in the Abyss: Investigating the Genomics Associated with Bioluminescence in Deep-Sea Fishes
2:30 pm	<i>Emily Bierer, Brady Porter</i>	18.5 A comparative study of blue and green darter pigment
2:45 pm	<i>Kayla Dye, Kevin Conway, Andrew Fields, Christopher Hollenbeck, David Portnoy</i>	18.6 Conservation Genomics of the West Texas shiner, <i>Notropis megalops</i>
3:00 pm	<i>David Neu, Alexandre Godinho, Gregorio Kurchevski, Mark Belk</i>	18.7 Response of a hyper diverse fish fauna to construction of a dam: changes in richness, diversity, and abundance

1:30 PM – 3:30 PM**Ballroom F****Session 20: Biogeography**

Moderator: Todd Jackman

1:30 pm	<i>Dallin Kohler, Amaël Borzée</i>	20.1 Habitat preferences but not biogeographic barriers shape the distributions of amphibians in Northeast China
1:45 pm	<i>Tom Radomski, Kenneth Kozak</i>	20.2 Paleodrainages drive beta diversity in eastern Dusky Salamanders (genus <i>Desmognathus</i>).
2:00 pm	<i>Simon Scarpetta, Robert Fisher, Benjamin Karin, Jone Niukula, Ammon Corl, Todd Jackman, Jimmy McGuire</i>	20.3 Iguanas rafted more than 8,000 km from North America to Fiji
2:15 pm	<i>Michael Westphal, Joseph Belli, Richard Seymour, Logan Mikus, Deborah Woollett-Smith, Alice Whitelaw, Ngaio Richards, Cristhian Mace, Brian Berry, Max Westphal, Benjamin DeDominic, Gary Longo, Emme Nix, Mark Statham</i>	20.4 Testing Vicariance Hypotheses in Arid California: Isolation of the San Joaquin Desert population of Yellow-backed Spiny Lizards, <i>Sceloporus magister uniformis</i> .
2:30 pm	<i>Justin Bernstein, Christopher Austin, Tianqi Huang, Julio Soto-Centeno, Jackson Roberts, Jimmy McGuire, Jeffrey Frederick, Jeffrey Weinell, Rafe Brown, Sara Ruane</i>	20.5 Genomic Insights into Diversity, Dispersal, and Diversification through Islands: A Case Study Using Widespread Colubrid Snakes
2:45 pm	<i>Edward Myers, Michael Yuan, Bradford Hollingsworth</i>	20.6 Genomic Approaches to Understanding the Geographic Diversification of Coachwhips (<i>Masticophis</i>) Across the Baja California Peninsula
3:00 pm	<i>Gregory Mayer</i>	20.7 A Supposed Early Record of <i>Anolis porcatus</i> from Key West, Florida
3:15 pm	<i>Patricia Torres-Pineda, Thomas Morgan, Hernán López-Fernández</i>	20.8 It's complicated: phylogeographical relationships and species delimitation in a Caribbean radiation of fishes

1:30 PM – 3:15 PM**Ballroom G****Session 21: Habitat Ecology**

Moderator: Bob Brodman

1:30 pm	<i>Nathan Bendik, Dee Ann Chamberlain, Sarah Donelson</i>	21.1 Insights from Observations of the Rare Austin Blind Salamander (<i>Eurycea waterlooensis</i>) from Austin, Texas, USA.
1:45 pm	<i>Thomas Luhring, Krista Ward, Sam Skerlec, Justin Oettle, Clay Prater</i>	21.2 Return of the (<i>Lithobates</i>) <i>blairi</i> : previous drying and the presence of anuran larvae alter the elemental composition (ionomes) of wetlands.
2:00 pm	<i>Rizki Tohir, Mirza Kusriani, Ani Mardiasuti, Dede Rahman</i>	21.3 Will Climate Change Threaten Indonesia's Only Protected Amphibian? A Habitat Suitability Projection

Friday 11 July 2025

2:15 pm	<i>John Maerz, Jade Samples, Danielle Bradke, Cassandra Waldrop, Cheyana Bassham, James Martin, Jeffrey Hepinstall-Cymerman, Anthony Lagalante, Elizabeth McCarty</i>	21.4 Guild-Specific Effects of Imidacloprid Use on the Terrestrial Abundance of Plethodontid Salamanders
2:30 pm	<i>Chitra Basyal, Michael Dreslik</i>	21.5 Structure of Freshwater Turtle Assemblages in Highly Developed Ecosystem
2:45 pm	<i>Bob Brodman, Jennifer Hu, Emma Podhorsky</i>	21.6 Do Neotropical Frogs Respond to Lunar Illumination and Lunar Cycles?
3:00 pm	<i>Sydney Hermann, Jayme Waldron, Chad Landress, Anne Axel</i>	21.7 In-stream Large Woody Debris Management and the Effects on Riparian Salamander Populations

1:30 PM – 3:30 PM

Ballroom H

Session 22: Behavior

Moderator: Brad Carlson

1:30 pm	<i>Michael Benard, Brady Parlato</i>	22.1 Total Solar Eclipse Induces Nocturnal Behavior in Frogs
1:45 pm	<i>Robin Suyesh</i>	22.2 Revealing the Secret Lives of Indian Amphibians: Fresh Perspectives on their Behavior and Ecology.
2:00 pm	<i>Ann-Elizabeth Nash, Davinia Beneyto</i>	22.3 Do Male Personality Traits Drive Copulation Success?
2:15 pm	<i>Bradley Carlson, Beth Reinke, C. Kenneth Dodd, Jr.</i>	22.4 A Long-term Dataset Reveals Repeatable Differences in Behavior that Affect Growth but Not Survival in a Turtle
2:30 pm	<i>Kyndal Irwin, Ayden Wilroy, Colby Durocher, Caitlin Gabor, Timothy Bonner</i>	22.5 Cognitive and behavioral differences between Generalist and Specialist Poeciliids from varying habitat complexities in Texas
2:45 pm	<i>Matthew Lattanzio</i>	22.6 Ultraviolet under Ultraviolet? How Lighting Conditions Impact Dominance Behavior in Tree Lizards

Friday 11 July • Poster Presentations

4:00 PM – 6:00 PM • Ballroom A-B

Note: Presenter is first author unless noted by an asterisk (*)

ASIH Storer Herpetology

Emma Pollackov, Sara McClelland

Anna Hill, Jill Leonard

Ryan Miller, Maisie MacKnight, Jennifer Deitloff

Katie Van Hise, Jill Leonard

Darcy Beazley, Maggie Hantak, Brendan Enochs

Matthew McDonald, Bradford Hollingsworth, Edward Myers

Cassandra Purcell, Jenna Karp, Viannka Galarza, Allyson Fenwick

Patrycja Aksamit, Tom Anton, Madelynn Sinclair, Michelle Thompson, Sara Ruane

Colin Schuller, Itzel Sifuentes-Romero, Maura McGrail, Jeff Essner, Nicole Valenzuela

Carly Woodfin, Thane Wibbles, Matthew Wolak, Daniel Warner, Molly Caldwell

Abby Klahs

Alexandria Henson, David Blackburn, Kaitlin Tapondjou, Walter Paulin Tapondjou Nkonmeneck

V Tyson, Christopher Howey

Daniella Scanlon, Christopher Howey

Eva Greco, Robert Espinoza

Massimo Gulino, Jill Leonard

Ian Mahalek, Christopher Howey

Waseem Ahmed, Muzna Kashaf, Fanoos Haider, Muhammad Sehzad, Muhammad Rais

Abraham Bamba Kaya, Oscar Fokou, Lauren Scheinberg, Veronica Saenz Calderón, Allison Byrne, LeGrand Nono Gonwouo, C. Guilherme Becker, Rayna Bell

ASIH Storer Ichthyology

Allison Peck, Leo Smith, Matthew Davis

Angela Haggard, Prosanta Chakrabarty

P1.1 | Feeding Behavior and Gut Morphology of Tadpoles after Chronic Exposure to Micro- and Nano-plastics

P1.2 | Spottin' Sallies: Behavioral responses of Blue-spotted Salamanders (*Ambystoma laterale*) when presented with colored light stimuli.

P1.3 | Assessment of Density, Spatial Distribution and Movement Patterns of *Plethodon cinereus* (Eastern Red-backed Salamander) Using Spatial Capture-Recapture

P1.4 | Survival Under the Snow: Studying the Overwintering Habits of Blue-Spotted Salamanders (*Ambystoma laterale*) Using Telemetry in a Contained Outdoor Setting

P1.5 | Using Ecological Niche Modeling to Investigate the Distribution and Decline of Blanchard's Cricket Frog (*Acris blanchardi*)

P1.6 | Phylogeographic Patterns in the Baja Coachwhip (*Masticophis fuliginosus*) Inferred from Complete Mitochondrial Genome Sequences

P1.7 | Population Genetics of Mediterranean Geckos (*Hemidactylus turcicus*) Is Expedited Via A Liquid Handling Device for PCR

P1.8 | Developing a Barcode Library for the Herpetofauna of Will County, IL: Insight into Species Richness and Diversity in Urban Ecosystems

P1.9 | Development of Functional Genomic Tools for Turtles

P1.10 | Kidney Morphology of Red-Eared Sliders (*Trachemys scripta elegans*) after Temperature and Hormone Manipulation

P1.11 | Beyond the Branches: A Multidimensional Approach to Measuring Axolotl Gill Morphology

P1.12 | Morphological Variation and Potential New Species of *Trichobatrachus* (Hairy Frogs) in Central Africa

P1.13 | Metabolic Rates of Red-Backed Salamanders in Burned and Unburned Habitats

P1.14 | Thermophysiology of the Eastern Red-backed Salamander in Burned and Unburned Habitat

P1.15 | Have Island Fence Lizards Adjusted their Thermal Biology to Compensate for the Cooler Climates of the Northern Channel Islands?

P1.16 | Soil selection and burrowing behavior in blue spotted salamanders (*Ambystoma laterale*)

P1.17 | Effects of Prescribed Fire on Stream Habitats and Impact on Salamander Biodiversity

P1.18 | Vegetation and protected status influence occurrence of endemic frogs in the fragmented Himalayan foothills

P1.19 | Community-scale monitoring of *Batrachochytrium dendrobatidis* in the Dja Biosphere Reserve, Cameroon

P1.20 | Biogeography of Dragonfishes and their Allies (Stomiiformes)

P1.21 | A Review of the Family Bagridae (Otophysi: Siluriformes) and a Call to Collaborate

Friday 11 July 2025

Charlotte Barron, Kevin Tang

Patience Brennan, Lucas Kebow, Allison Bronson

Akila Abesinghe, Shobnom Ferdous, Courtney Weyand, Matthew Buehler, Hiranya Sudasinghe, Jörg Freyhof, Jonathan Armbruster

Madeline Denman, David Camak, Annalea Giamalva, John Lyons, Kyle Piller

Calvin Whitney, David Camak, Kyle R. Piller

Hayden Roberts, Preston Bean, Katrina Keith, Kevin Conway, Gary Voelker, Henry Bart, Joshua Perkin

Eric Coburn, Andrew Miller, Jason Macrander

Elizabeth Favor, Natalie Swearingen, Leo Smith, Matthew Davis

Aimee Hruska, Sarah Gibson

Spencer Ott, Sarah Gibson

Emilie Barenghien, Randal Singer

Sarah Adelson, Kassandra Ford

Madison Casey, Rene Martin

Spencer Trimpe, Rebecca Blanton

Austin Rejcek, Gregorio Kurchevski, David Neu, Leah O'Barr, Leah Stimpson, Alexandre Godinho, Mark Belk

Claudia Kern, Kevin Duclos, Terry Grande

Owen Howard, Windsor Aguirre

Benjamin Schuster, Kyle Piller

Daniel Akin, James Albert

SSAR Hutchison Award

Taylor Thomisee, Stephen Mullin

E. Nicholson, Lee Fitzgerald

Owen Bachhuber, Joy Turkstra, Arie Bigelow-Gee, Riley Coleman, Litzy Alonso Martinez, Max Roberts, Jasmine Nation, Emily Taylor

Jonathan Adamski, Alessandro Catenazzi

Emily Langer, John Holloway, Emily Gaydos, Emily Gray, Sarah Ebert, Casey Hitchens, Dane Conley, Joseph Hoyt, Stacey Wilkinson, Corinna Hazelrig, Nicole Nemeth, Mary Miller, Shane Welch, Jayme Waldron

Sarah Laurino, Thomas Anderson

Morgan Miedema, Jennifer Lamb

P1.22 | Phylogeny of Damselfishes (Pomacentridae)

P1.23 | Armored Fish Diversity of Cottonwood Canyon (Early Devonian, Beartooth Butte Formation)

P1.24 | Resolving Evolutionary Relationships in *Mystus* Catfish using RADSeq Genomic Analysis.

P1.25 | Phylogeographic Structure and Genetic Divergence of the Freshwater Drum (Sciaenidae: *Aplodinotus grunniens*)

P1.26 | Phylogeography of the Flathead Catfish (Ictaluridae: *Pylodictus olivaris*): Unraveling Genetic Diversity and Biogeographic Patterns

P1.27 | Genetic Distance Methods Uncover Widespread Introgression Between Llano River Carpsucker (*Carpoides cf. carpio*) and River Carpsucker (*C. carpio*) Across Texas

P1.28 | Finding Dory in the phylogenetic tree of Acanthuridae

P1.29 | Deception in the Depths: Evolution of Camouflage Strategies in Sharks (Selachii)

P1.30 | Novel Dentition in the Genus ⁺*Coccolepis* (Osteichthyes: Chondrostei: ⁺*Coccolepididae*) from the Jurassic of England

P1.31 | Advances in Early Mesozoic Paleichthyology in the American Southwest: New Discoveries of Ray-Finned Fishes from the Upper Triassic Dockum Group

P1.32 | The Effects of Turbidity on the Foraging and Feeding Behaviors of Freshwater Fishes in the Savannah River Basin

P1.33 | Close Entanglements: Behavioral Dynamics of Penpoint Gunnels (*Apodichthys flavidus*)

P1.34 | Increased Understanding of Invasive Carp Reproductive Ecology

P1.35 | Assessing the Genetic Outcomes of Long-Term Reintroduction, Translocation, and Augmentation of the Citico Darter (*Etheostoma sitikense*)

P1.36 | Dam effects: Evaluation of multiple functional traits across multiple fish species yields mixed results

P1.37 | Modularity and Evolution of the Weberian Apparatus in Cypriniform Fishes

P1.38 | Exploring the Impacts of Temperature-Induced Spinal Anomalies on Body Shape in *Astyanax mexicanus* (Teleostei: Characidae)

P1.39 | Examining swim bladder variation in Percina (Percidae) through the use of micro-computed tomography

P1.41 | Form and Function of Whale Catfishes (Family: Cetopsidae) Using CT Data

P1.42 | Amphibians on the MAP: Differences in Community Composition within Wetland Reserve Easements

P1.43 | Anthropogenic Introductions of Frogs Around the World

P1.44 | RattlEd: Improving perceptions of rattlesnakes in elementary classrooms

P1.45 | Elucidating the Role of Shed Skins in the Persistence of *Ophidiomyces ophiodiicola* in Soil

P1.46 | Environmental and individual-based drivers of Eastern Diamondback Rattlesnake behavior and shed cycles

P1.47 | Impacts of Invasive Species on Larval Amphibians and Aquatic Ecosystems

P1.49 | Potential for ecological significance of biofluorescence in the larval Gray Tree Frog complex

Friday 11 July 2025

Amanda Montgomery, Thomas Anderson

Rose Arnold, Michael Dreslik

Oscar Fokou, Abraham Bamba Kaya, Lauren Scheinberg, Sévilor Kekeunou, LeGrand Nono Gonwouo, Rayna Bell

Cole Ivie, Zoe Johnson, Greg Pauly, Lauren Chan

Kevin Chovanec, Ana Motta, Justin Tackney, Dennis O'Rourke, Rafe Brown

Hadley Copeland, John Maerz

Nikole Schneider, Nicholas Henschel, Raul Diaz Jr, Christopher Anderson

Max Roberts, Owen Bachhuber, Rayyan Ibrahim, Rheanna Dunton, Scott Boback, Emily Taylor

SSAR Rabb Undergraduate Poster Award

Vaidehee Durgude

Elliot Chinnock, Maggie Hantak

Mason Polencheck, Jessica Hua, Katherine McMahon

Hasti Shahbazi, Rayna Bell, Matthew Fujita, Kate Thomas, David Gower, Jeffrey Streicher, Ryan Schott

Leah Stimpson, Abigail Lamartine, Taylor Probst, Alison Whiting

James Afdahl

Mikayla-Anne Woodring, Kalasia Bradshaw, Sara McClelland

Kennedy Hunter, Taylor Probst, Alison Whiting

Phillip Cockrell, Leah Stimpson, Alison Whiting

Kane Petty, Travis Hagey

AES Carrier Award

Genevieve Sylvester, Stephen Kajiura

Jordan Waldron, Stephen Kajiura

Morgan Lattomus, Jim Gelsleichter, Nikki Dix, Eric Johnson

AES Posters

Reilly Boyt, Aneese Williams, Melissa Marquez, Chris Spear, Ingrid Hyrycena, P Buddhi Pathirana, Leena Joshi, Jasmin Graham, Lara Ferry, Lisa Whitenack

Maya Mahoney, Kenshu Shimada

Joshua Moyer, Gregory Watkins-Colwell

P1.50 | Synergistic Effects of Invasive Leaf Litter and Road Salt on Amphibian Community Dynamics

P1.52 | Gauging Population Health in Urbanized Landscapes: A Body Condition Comparison of Illinois' Remaining Spotted Turtle (*Clemmys guttata*) Populations

P1.53 | Amphibian Diversity in the Dja Faunal Reserve, Southern Cameroon: Insights from a Comprehensive Survey of Lowland Rainforest Habitats

P1.54 | Saurian stowaways: dispersal of the Common Side-blotched Lizard to the California Channel Islands

P1.55 | Phylogeny Mirrors Extinction Risk in the Golden Toad (*Incilius periglenes*) and its Closest Relatives

P1.57 | Subacute Effects of Imidacloprid Exposure on Larval Salamander Brains

P1.58 | Feats of supercontractile strength: Functional convergence of supercontracting muscle properties among hyoid musculature in chameleons

P1.59 | Resting Ventilation Patterns in Wild Prairie Rattlesnakes (*Crotalus viridis*)

P1.60 | "Nobody Needs to Tell the Forest to Do Its Work": Climate Agency and Human-Herpetofauna Care in Urban and Rural Ecuador

P1.61 | Fluctuating Asymmetry in Blanchard's Cricket Frog (*Acris blanchardi*): Indicators of Habitat Health and Water Quality

P1.62 | Land-Use Effects on the Skin Microbiome of the Common Mudpuppy (*Necturus maculosus*)

P1.63 | To See or Be Seen: Visual Modeling of Spectral Data From Frogs and Their Predators

P1.64 | I'm Just Like You: Do Sympatric Lizard Species Exhibit Convergent Morphology? (Genus *Sceloporus*)

P1.65 | Studying *Plethodon petraeus* breeding habits and egg development

P1.66 | Morphological Changes in *Xenopus laevis* Tadpoles' Guts When Exposed to Polyethylene Microplastics in Water

P1.67 | Cryptic Diversity in Austro-Papuan Tree Frogs

P1.68 | Taking Out the Taxonomic Trash: Refining Skink Classification in the Genus *Sphenomorphus*

P1.69 | Effects of Formalin Preservation on Gecko Toe Pads

P1.70 | Quantifying Swimming Kinematics and Behavior of Sharks Using Animal-borne Data Logger Cameras

P1.71 | Spatiotemporal abundance and behavior of whitespotted eagle rays in the Florida Keys

P1.72 | Preliminary Data of Per- and Polyfluoroalkyl Substances (PFAS) in Sharks of the Guana and Tolomato Rivers

P1.73 | The American Elasmobranch Society's Progress Towards Equity and Inclusion

P1.74 | Jaw curvatures in the shark order Lamniiformes and their evolutionary implications

P1.75 | Atypical Dentition of a Porbeagle Shark (*Lamna nasus*) Highlights Odontological Considerations

Friday 11 July 2025

<i>Kat Mowle, Jim Gelsleichter</i>	P1.76 Role of Progesterone in Regulating Vitellogenesis in the Bonnethead Shark (<i>Sphyrna tiburo</i>)
<i>Kathryn Miller, Kat Mowle, Maria Cartolano, Jacob Jerome, Catherine Macdonald</i>	P1.77 Assessment of Reproductive Characteristics of Blacknose Sharks (<i>Carcharhinus acronotus</i>) and Sandbar Sharks (<i>C. plumbeus</i>) near Miami, Florida
<i>Mandy Kasbarian, Dakota Jacks, Paige Waldren, Jim Gelsleichter</i>	P1.78 Evaluation of the Use of Fin Biopsies for Measuring Testosterone and Reproductive Activity in Male Atlantic Sharpnose Sharks (<i>Rhizoprionodon terraenovae</i>)
<i>Julia Crews, Erin Burge, Craig O'Connell, Shae Shandroff, Steven Sitzler, Timothy Lis</i>	P1.79 Evidence for a nursery for Shortfin Makos (<i>Isurus oxyrinchus</i>) in the western North Atlantic
<i>Jasmin Graham, Norah Mendoza</i>	P1.80 North Carolina Bull shark project
<i>Alexander Dolokov, Jessica Pate</i>	P1.81 Manta Ray Wingbeat Frequency Detection via Machine Learning-based Kinematic Analysis
<i>Lindsay Ross, Kim Bassos-Hull, Atlantine Boggio-Pasqua, Breanna DeGroot, Rachel Dreyer, Anna Knoche, Lisa Whitenack, Krystyn Wilkinsin</i>	P1.82 Bite-sized insights: Estimating shark size and species from bite marks on <i>Aetobatus narinari</i> and <i>Mobula hypostoma</i>
<i>Anabella Madrid, Jessica Pate</i>	P1.83 Comparison of Underwater and Aerial Photogrammetry for Measuring Manta Rays
<i>Maria Pierce, Emily Peele, Gregg Poulakis, Tonya Wiley, Kara Yopak</i>	P1.84 Using Advanced Bioimaging to Explore the Neuroanatomy of the Critically Endangered Smalltooth Sawfish, <i>Pristis pectinata</i>
<i>Kelsey Lowe, Gregory Henkes, Michael Frisk, Veronica Borracci, Christopher Lowe, Oliver Shipley</i>	P1.85 Does habitat preference predict stable isotope variation in the organic matrix of shark teeth?
<i>Emma Hughes, Lisa Kovalanchik, Devin Dumont, Bradley Wetherbee, Kady Lyons</i>	P1.86 Estuary Use by Juvenile Sharks: Temporal Shifts and Species Abundance in Georgia
<i>Ara McClanahan, Carol Price, Erin Burge</i>	P1.87 Site Fidelity, Seasonality, and Fish Associates of Sand Tigers, <i>Carcharias taurus</i> , in North Carolina
<i>Luke Taylor, Heiko Schoenfuss, Richard Blob, Matthew Julius</i>	P1.88 Sicydiinae species rely on the hydrological cycles and feeding behavior to maintain environment: evidence from algal composition of diet
<i>Megan Winton, Ashleigh Novak, Victoria Migneco, John Chisholm, Gregory Skomal</i>	P1.90 Dusky Sharks Actively Prey on Gray Seals
<i>Dakota Jacks, Jordyn Bharratsingh, Michelle Passerotti, John Carlson, Lisa Crawford, Jim Gelsleichter</i>	P1.91 Temporal and spatial differences in mercury exposure in Sandbar Sharks (<i>Carcharhinus plumbeus</i>) from the U.S. East Coast
<i>Karen McDaniel-Tolentino, Samantha Levell, Jasmin Graham</i>	P1.92 Exploring the incorporation and elimination of brevetoxins in tissues of Blacktip sharks (<i>Carcharhinus limbatus</i>) exposed to Florida Red Tide
<i>Jordan Zulli, Jessica Schieber, Drew Mertzlufft, Dayna Hunn, John Carlson, Daniel Fahy, David Kerstetter</i>	P1.93 Comparative Life-History Strategies of Two Sympatric Stingray Species
<i>Angelo Cantu, James Gelsleichter</i>	P1.94 Evaluating the use of the micronucleus assay for detecting genotoxicity effects in sharks and rays.
<i>Alexandra Draime, Christopher Malinowski, Alina Hussey, Wyatt Albert, Jennifer Wyffels, Matthew Smukall</i>	P1.95 Investigating the Potential Sublethal Physiological Impacts of the 'Spinning Fish Condition' for Coastal Sharks in the Lower Florida Keys
<i>Alina Hussey, Dean Grubbs, Wyatt Albert, Alexandra Draime, Matthew Smukall</i>	P1.96 Is the Spinning Fish Phenomenon Affecting Elasmobranch Catch Rates in the Lower Florida Keys?
<i>Eleanaor Dougherty, Meghann McDonald, Jade Samples, Eva Kerr, John Maerz</i>	P1.97 Survival Analysis of <i>Rhincodon typus</i> in Bahía de los Ángeles, Mexico

Saturday 12 July • Symposia

Note: Presenter is first author unless noted by an asterisk (*)

8:30 AM – 10:00 AM

Ballroom E

Session 23: Symposium: Science in 3D (ASIH) – Part 1

Moderator: Hannah Owens

8:30 am	Hannah Owens, Malorie Hayes	23.1 Introduction to the symposium
8:45 am	Malorie Hayes	23.2 Morphological Perspectives on Science in 3D
9:00 am	Rachel Keeffe, Patricia Brennan	23.3 New Perspectives in Anatomical Studies: What Snake Genitalia can Teach us about Multidimensionality
9:30 am	Edward Stanley, Kelsey Fenner, Arthur Porto	23.5 Comparing landmark-based geometric morphometric and Signed Distance Function approaches to quantify and explore axial skeleton variation in girdled lizards.

10:30 AM – 12:00 PM

Ballroom E

Session 28: Symposium: Science in 3D (ASIH) – Part 2

Moderator: Malorie M. Hayes

10:30 am	Jaimi Gray, Edward Stanley, David Blackburn	28.1 The Diffusion Diaries: using Diffusible Iodine-Based Contrast-Enhanced Computed Tomography for High-Throughput Imaging of 3D Anatomy of Natural History Specimens
10:45 am	Callie Crawford, Jaimi Gray, Paul Gignac, Akinobu Watanabe	28.2 NoCTURNal Ed-Kits: Science Education in X, Y, & Z
11:00 am	Allison Bronson, Ashe Kolden, John Reiss	28.3 Structural Changes in the Olfactory Organs of <i>Taricha granulosa</i> , the Rough-Skinned Newt, (Caudata: Salamandridae), between Aquatic and Terrestrial Phases
11:15 am	Travis Hagey	28.4 3D Imaging of Gecko Setae
11:30 am	Kara Yopak	28.5 Put Down the Scalpel: Application of 3D Bioimaging to Comparative Brain Morphology in Sharks and Their Relatives
11:45 am	Kassandra Ford, Patricia Hernandez	28.6 Fishes, CT-Scanning, and Morphology: Finding unique morphologies in understudied groups of fishes

10:30 AM – 12:00 PM

Ballroom D

Session 29: Symposium: Stress and Welfare in Organisms throughout Lifetime (HL)

Moderator: Megan Flanagan

10:30 am	Sydney Wayne, Mike Norris, Annabel Dawson, Anthony Gilbert, Daniel Warner	29.1 Brine & Brood: The Impact of Salinity on Egg Survival of an Invasive Lizard
10:45 am	Yolitz Saldivar Lemus, Saeid Panahi Hassan Barough, Caitlin Gabor	29.2 Effects of Prenatal and Postnatal BPA Exposure on Gene Expression in Poeciliidae
11:00 am	Mickey Parker, Andrew Williams, Lee Fitzgerald	29.3 Using Life History to Predict Outcomes of Conservation Translocations of Herpetofauna
11:15 am	Benjamin Haussmann, Tiffany Hegdahl, Travis Robbins	29.4 Heart rate, respiration rate, and developmental time: trends along the latitudinal thermal gradient reveal differential reliance on physiological plasticity
11:30 am	Mike Norris, Daniel Warner	29.5 Fitness consequences of natural incubation environments
11:45 am	Megan Flanagan, Thomas Luhring, Caitlin Gabor	29.6 Glucocorticoids and Coping in Lesser Sirens, <i>Siren intermedia</i> across Time, Space and Life Stage

Session 34: Symposium: Science in 3D (ASIH) – Part 3

Moderator: *Corinthia Black*

1:30 pm	<i>Corinthia Black, Milton Tan, Jonathan Armbruster</i>	34.1 Decoupling of the Two-Jaw System in North American Minnows (Leuciscidae)
1:45 pm	<i>Kory Evans</i>	34.2 Modularity promotes the evolution of complex biomechanical systems
2:00 pm	<i>Richard Hoover, Joseph Heras, Karly Cohen, Cassandra Donatelli, Kassi Price, Kassandra Ford</i>	34.3 3D Functional Morphology and Modularity of the Feeding Apparatus across Diets and Ontogeny (Stichaeidae)
2:15 pm	<i>Sarah Arnette, Luke Rose, Matt Friedman, Matthew Kolmann</i>	34.4 The Effect of Air-breathing Organs on Cranial Integration and Modularity in Anabantiform Fishes
2:30 pm	<i>Jonathan Huie, Karly Cohen</i>	34.5 Ecomorphology in 3D: developing faster tools to study evolutionary morphology
2:45 pm	<i>Hannah Owens</i>	34.6 Ecological Perspectives on Science in 3D
3:00 pm	<i>Edmund Basham, Gregory Jongsma, Timothy Keitt, Kelly Zamudio, David Cannatella, Douglas Jones</i>	34.7 Frogs in Space: Using Frog Call Triangulation to Map Distributions in Three Dimensions
3:15 pm	<i>Adam Quade, Guillaume Rieucan</i>	34.8 Laying the ground work towards advancing imaging sonar monitoring through volumetric measurements and automated species identification
3:30 pm	<i>Emmaline Sheahan, Hannah Owens, Robert Guralnick, Gavin Naylor</i>	34.9 Using 3D Ecological Niche Modelling to Predict Coelacanth (<i>Latimeria</i> spp.) Suitable Habitat
3:45 pm	<i>Hannah Owens, Malorie Hayes</i>	34.10 Wrap up of the symposium and discussion

Saturday 12 July • Oral Presentations

Note: Presenter is first author unless noted by an asterisk (*)

Session 24: Collections and History of Herpetology

Moderator: *Aaron Bauer*

9:00 am	<i>M Pugh</i>	24.1 Digging Up the Past: Modernization and Digitization of the University of Alabama Herpetological Collection
9:15 am	<i>Alexander McKelvy, Bella Gonzalez</i>	24.2 25 Years of North American Snake Phylogeography: Trends in Tissue Deposition and Use
9:30 am	<i>Aaron Bauer</i>	24.3 John Hutchison Garnier and his Contributions to the Herpetology of Ontario, Canada

Session 25: AES Physiology

Moderator: *Maria del Pilar Blanco Parra*

8:30 am	<i>Emma Smith, Gail Schwieterman</i>	25.1 The effects of concurrent hypoxia and high temperatures on little skate (<i>Leucoraja erinacea</i>) growth and development.
8:45 am	<i>Oliver Shipley, Jill Olin, John Whiteman, Seth Newsome</i>	25.2 Amino acid stable isotopes to study physiological status in elasmobranchs
9:00 am	<i>Kady Lyons, Ryan Freedman, Rebecca Prezgay, Luci Herrera-Lopez, Vanessa Van Deusen, Lance Adams, Tess Avery, Aaron Carlisle, Christopher Lowe, Varenka Lorenzi</i>	25.3 Development of a non-lethal liver biopsy method for use in toxicological studies
9:15 am	<i>Jhoselinne Osuna, Maria del Pilar Parra, Alberto Corona, Francisco Flores, Juan Carlos Jiménez, Carlos Alberto Torres</i>	25.4 Heavy Metals Content in White-Spotted Eagle Ray (<i>Aetobatus narinari</i>): Health Risk Assessment for Consumers in the Southern Gulf of Mexico

8:30 AM – 10:00 AM

Ballroom F

Session 26: Mechanistic Evolution

Moderator: M. Rockwell Parker

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| 8:30 am | <i>Brian Waldron, Maggie Hantak, Emily Watts, Josef Uyeda, Alan Lemmon, Emily Moriarty Lemmon, Robert Guralnick, David Blackburn, Shawn Kuchta</i> | 26.1 Loss of a Morph is Associated with Asymmetric Character Release in a Radiation of Woodland Salamanders |
| 8:45 am | <i>Tereza Jezkova, Keaka Farleigh</i> | 26.2 Understanding the Roles of Plasticity and Adaptation in a Horned Lizard that Occupies a Wide Range of Climatic Conditions |
| 9:00 am | <i>Joshua Gunn, Holly Rucker, M. Rockwell Parker</i> | 26.3 Female Mimicry in Garter Snakes Explained by Body Condition and Gene Expression |
| 9:15 am | <i>Richard Mayden</i> | 26.4 Benefits of Viewing Species as Individuals and the Importance of a Lineage Concept for Species |
| 9:30 am | <i>Joshua Rivera, Andre Carvalho, Matthew Fujita</i> | 26.5 Femoral Gland Gene Expression in Parthenogenetic and Sexually Reproducing Lizards of the Genus <i>Aspidoscelis</i> |
| 9:45 am | <i>Morgan Wactor</i> | 26.6 Evolutionary Outcomes of Hybridization between Two Smooth Greensnake (<i>Opheodrys vernalis</i>) Lineages |

8:30 AM – 9:45 AM

Ballroom G

Session 27: Conservation: methods

Moderator: Rob Denton

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| 8:30 am | <i>Jodi Rowley</i> | 27.1 FrogID: The Power of People in Frog Conservation |
| 8:45 am | <i>Sarah Ebert, John Holloway, Emily Gray, Carissa Adams, Casey Hitchens, McKenzie Merritt, Shane Welch, Jayme Waldron</i> | 27.2 AHDriFT Camera Traps Have Limited Utility for Monitoring a Cryptic Ambush Predator |
| 9:00 am | <i>Steven Hromada, Emily Bergman, Michael Westphal, Rory Telemeco</i> | 27.3 Automated Telemetry Expands Inference on Blunt-nosed Leopard Lizard (<i>Gambelia sila</i>) Reintroduction |
| 9:15 am | <i>Jennifer Lamb, Dayton Johnson, Jack Kosloske, Deanna Leigh</i> | 27.4 Trap or Snap: Comparing Two Methods for Detecting Species of Freshwater Turtles. |
| 9:45 am | <i>Nathan Dehaut, Meven Le Brishoual, Xavier Bonnet, Jonathan Jumeau</i> | 27.5 Using Computer-assisted Photo-Identification for Squamate population studies |

10:30 AM – 11:30 AM

Ballroom C

Session 30: AES Ecology I

Moderator: Anna Weber

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| 10:30 am | <i>Anna Weber, Eloise Cave, Nima Farchadi, Charles Bangley, Marcus Drymon, Bryan Frazier, Matt Smukall, Dean Grubbs, Neil Hammerschlag, Camrin Braun, Toby Daly-Engel</i> | 30.1 From simulations to sharks: A novel framework to account for local adaptation in species distribution models |
| 10:45 am | <i>Jake New, Jonathan Smart, Ross Dwyer, Kelli Latheam, Edwin Ling, Grace McNicholas, Barbara Wueringer</i> | 30.2 Sharks and Rays of the Gulf of Carpentaria: Establishing Long-Term Monitoring to Determine Elasmobranch Abundances and Environmental Influences. |
| 11:00 am | <i>Emma Jackson, Charles Cotton, Ralph Grubbs</i> | 30.3 Deepwater Horizon Oil Spill Impacts on Deep-Sea Elasmobranchs and Large Teleosts Revealed by A Multidirectional Community Analysis |
| 11:15 am | <i>Jessica Pate, Nick Farmer, Vicky Fong, Calusa Horn</i> | 30.4 Defining Manta Ray Nursery Habitat in Southeast Florida |

10:30 AM – 11:30 AM

Ballroom F

Session 31: Molecular Evolution

Moderator: Nicole Valenzuela

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|----------|--|---|
| 10:30 am | <i>Juan Carvajal-Castro, Zhifei Wang, Yong Yu, Juan Santos</i> | 31.1 Unraveling the molecular evolution of the thermosensitive TRPA1 ion channel in Neotropical frogs |
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Saturday 12 July 2025

10:45 am	<i>Lisa Barrow, Luis Amador, Chris McDaniels, Daniele Wiley, Celina Eberle, J. Tomasz Giermakowski, Gregory Jongsma, Noelle Mason, Moses Michelsohn, Maria Nava Martinez, Kadie Omlor, Sophia Rivera, Esteban Rosario Sanchez, Ariadna Torres López, Kathleen Webster</i>	31.2 Mapping Frog Genomic Diversity Across Eastern North America
11:00 am	<i>Randy Klabacka, Justin Havird, Geoffrey Hill, Damian Dowling, Joel Sharbrough, Robert Denton, Michael Itgen, Tonia Schwartz, Peter Baumann, Baylee Christensen, William Lund, Seun Onileowo, Syrus Miner, L Horne, Océane Da Cunha</i>	31.3 Mitonuclear Dynamics in Unisexual Lineages: Unifying Fins and Limbs without Fur and Feathers
11:15 am	<i>Nicole Valenzuela</i>	31.4 Novel 3D chromosome folding for amniotes revealed by de novo genome assemblies of <i>Apalone spinifera</i> and <i>Staurotypus triporcatus</i> turtles

10:30 AM – 12:00 PM

Ballroom G

Session 32: Panel Discussion: DEI in Ecology and Resource Management

Moderator: *M. Rockwell Parker*

10:30 am	<i>Lameace Hussain, Daniel Haro, Nia Morales</i>	32.1 Breaking the silence: Addressing harassment and discrimination in ecology, conservation, and natural resources
10:45 am	<i>Matt Cross, Cari Ritzenthaler</i>	32.2 Toledo Zoo's T.U.R.T.L.E. Program: Using Rare Turtles to Foster Inclusion and Diversity among High School Students Interested in Wildlife Conservation.
11:00 am		32.3 Discussion

10:30 AM – 11:45 AM

Ballroom H

Session 33: Conservation & Management

Moderator: *Stephen Bredin*

10:30 am	<i>Sarah Donelson, Nathan Bendik, Dee Ann Chamberlain, Radmon Rice, Matthew Westbrook</i>	33.1 Restoration of a spring-run channel expands endangered salamander habitat in Austin, Texas, USA
10:45 am	<i>Florian Laurence, Gégory Deso, Jérémie Demay, Olivier Scher, Xavier Bonnet</i>	33.2 My dear rival: male Montpellier snakes are peaceful during the mating season, implications for conservation
11:00 am	<i>Clément Guenier, Xavier Bonnet, Sébastien Caron, Laurence Affre, Nicolas Kaldonski, Jean-Marie Ballouard</i>	33.3 Movements and body condition of Hermann's tortoises, <i>Testudo hermanni</i> , in a fire-devastated landscape
11:15 am	<i>Autumn Straessle, Bruce Kingsbury</i>	33.4 Landscape Connectivity For a Population of Wood Turtles in Northern Michigan
11:30 am	<i>Nathan Bendik, Radmon Rice</i>	33.5 Automating Measurements of Salamander Size

1:30 PM – 4:00 PM

Ballroom D

Session 35: Physiology II

Moderator: *Alex Gunderson*

1:30 pm	<i>Christopher Howey, Victoria Lewis, Kerrigan Wilson</i>	35.1 Effects of Ambient Light at Night on Behavior and Physiology of Green Anoles
1:45 pm	<i>Annelise Blanchette, Kuan-Jui Su, Alanna Frick, Jordan Karubian, Alex Gunderson</i>	35.2 Brown anole lizards may be the most lead (Pb) tolerant vertebrate known to science
2:00 pm	<i>Sean Farmer, Robert Espinoza</i>	35.3 High rates of whole-body water loss may restrict suitable habitat for Common Garter Snakes (<i>Thamnophis sirtalis</i>) in Southern California
2:15 pm	<i>Etti Cooper, Christopher Anderson</i>	35.4 The scaling of metabolic rate through ontogeny in a viviparous chameleon (<i>Bradypodion ventrale</i>)
2:30 pm	<i>Gene Glover, Christopher Anderson</i>	35.5 The Role of Ecology in Digestion: Measuring Specific Dynamic Action in Miniaturized Chameleons

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2:45 pm	<i>Kannon Pearson, Natalie Meyer, Gary Bucciarelli, Samantha Westcott, Elizabeth Heath-Heckman, Heather Eisthen, Mike Westphal, Rebecca Tarvin</i>	35.6 An Investigation of Developmental Toxicity Patterns in Rough-skinned and California Newts (<i>Taricha granulosa</i> and <i>T. torosa</i>)
3:00 pm	<i>Natalie Haydt, Lori Neuman-Lee</i>	35.7 Characterizing Immune Metrics Associated with Dermatomycosis in Snakes
3:15 pm	<i>Felipe Floreste, Marina Zenga-Carrenho, Patrício Garcia-Neto, Braz Titon Jr., Stefanny Titon, Sandra Muxel, Fernando Gomes, Vania Assis</i>	35.8 Early Toad Gets the Worm: Overviewing the Early Stages of Inflammation in Amphibians
3:30 pm	<i>Dee Ann Chamberlain, Radmon Rice, Lisa O'Donnell</i>	35.9 Why Do the Salamanders Explode: Gas Bubble Trauma in Two Neotenic Salamanders, <i>Eurycea sosorum</i> and <i>Eurycea waterlooensis</i>
3:45 pm	<i>Celina Ceballos, Kelly Rein, Cathy Walsh</i>	35.10 Plasma Proteomics of Loggerhead (<i>Caretta caretta</i>) and Kemp's Ridley Sea Turtles (<i>Lepidochelys kempii</i>) Stranded During Red Tide to Identify Biomarkers

1:30 PM – 4:00 PM

Ballroom C

Session 36: AES Ecology II

Moderator: *Bradley Wetherbee*

1:30 pm	<i>Mary Bowers, Bryan Frazier, Stephen Kajiura</i>	36.1 Migratory Patterns of Female Blacktip Sharks, <i>Carcharhinus limbatus</i> , off the United States East Coast
1:45 pm	<i>Baylie Fadool, Matthew Smukall, Tristan Guttridge, Maurits van Zinnicq Bergmann, Rene Martin</i>	36.2 Nurse Shark (<i>Ginglymostoma cirratum</i>) Movement Patterns Throughout the Western North Atlantic Ocean
2:00 pm	<i>Lindsay Bomgardner, Paul Grammer, Angie Hoover, Anna Millender, Jeremy Higgs, Jill Hendon, Michael Andres</i>	36.3 Trends in Movement and Habitat Use of Lemon Sharks (<i>Negaprion brevirostris</i>) in Mississippi Coastal Waters
2:15 pm	<i>Wyatt Albert, Félice Dhellemmes, Kevin Feldheim, Tristan Guttridge, Matthew Smukall</i>	36.4 Timing and Ecological Drivers of Natal Homing in a Philopatric Shark
2:30 pm	<i>Maria Manz, Oliver Shipley, Jill Olin, Elizabeth Jahn, Michael Frisk</i>	36.5 Habitat Use and Feeding Behavior of the Sandbar Shark (<i>Carcharhinus plumbeus</i>) in the New York Bight
2:45 pm	<i>Ashley Wechsler, Michael Frisk, Ashley Nicoll, Robert Cerrato, Matthew Sclafani, Bradley Peterson, Keith Dunton, Oliver Shipley</i>	36.6 Habitat Use and Activity Patterns of Clearnose Skate (<i>Raja eglanteria</i>) in an Offshore Wind Development Area
3:00 pm	<i>Brad Wetherbee, Guy Harvey, Colby Kresge, Jeremy Vaudo, Mahmood Shivji</i>	36.7 Movements of Galapagos sharks (<i>Carcharhinus galapagensis</i>) in Eastern Tropical Pacific waters off Central and South America
3:15 pm	<i>Jack Elstner, Emily Spurgeon, Patrick Rex, Elizabeth Jahn, Zach Merson, Whitney Jones, Lauren Faulkner, Ryan Logan, Christopher Lowe, Brice Semmens</i>	36.8 Fine-scale movement and behavior of juvenile white sharks (<i>Carcharodon carcharias</i>) in a Southern California Nursery
3:30 pm	<i>Dylan Irion, Oliver Jewell, Alison Towner, Fahmi, G. Fischer, Enrico Gennari, Madison Stewart, John Tyminski, Alison Kock</i>	36.9 Transoceanic Dispersal and Connectivity of a White Shark (<i>Carcharodon carcharias</i>) between Southern Africa and Southeast Asia
3:45 pm	<i>Whitney Jones, Patrick Rex, Jack Elstner, Zach Merson, Chris Lowe, Kelly Boyle</i>	36.10 Juvenile white shark (<i>Carcharodon carcharias</i>) behavioral responses to sounds of beach goers within an aggregation site: an early look

1:30 PM – 4:00 PM

Ballroom F

Session 37: Systematics

Moderator: *Tom Munroe*

1:30 pm	<i>Sarah Gibson</i>	37.1 Evolutionary Relationships of the Order †Redfieldiiformes (Osteichthyes, Actinopterygii, †Palaeoniscimorpha)
1:45 pm	<i>Isaac Krone, Nikita Kliukin, Benjamin Karin, Nikolay Poyarkov, Jimmy McGuire</i>	37.2 Dug in deep time: Phylogenomics reveal the complex evolutionary history of the world's oldest burrowing lizards
2:00 pm	<i>Antonio Cisneros Bernal, Oscar Flores Villela, Uri García Vázquez, Diego García Morales</i>	37.3 Phylogenetic Relationships And Evolutionary History of the Burrowing Snake Genus <i>Conopsis</i> (Günther, 1858) (Squamata: Colubridae)

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2:15 pm	<i>Fernando Alda, Elizabeth Alter, Naoko Kurata, Prosanta Chakrabarty, Melanie Stiassny</i>	37.4 Navigating the Evolutionary Rapids of Congo River Cichlids: Deep Coalescence and Introgression-Shaped Speciation in Lamprologines
2:30 pm	<i>Marta Gomez-Buckley, Carmen Pedraza-Marrón, Diego Vaz, Christopher Goatley, Mark Erdmann, David Greenfield, Luke Tornabene</i>	37.5 Phylogenomic analysis of the dwarfgobies (Teleostei: Gobiidae: Eviota and Sueviota)
2:45 pm	<i>Matthew Davis, Leo Smith</i>	37.6 Wrestling with Halfbeaks: A Phylogenomic Perspective on the Evolutionary Relationships of Atherinomorpha (Ovalentaria)
3:00 pm	<i>Diego Elías, Kevin Swagel, Sheila Rodriguez-Machado, Prosanta Chakrabarty, Alfonso Gonzales-Díaz, Caleb McMahan</i>	37.7 Evolutionary History of the Genus Thorichthys (Heroini: Herichthyini): Insights into the Diversification of Northern Neotropical Riverine Cichlids
3:15 pm	<i>Matthew Girard</i>	37.8 Phylogenetic potential of historical DNA from museum specimens: Insights from threadfin fishes (Teleostei: Polynemidae)
3:30 pm	<i>Benjamin Frable, Dahiana Arcila</i>	37.9 Integration and Digitization of the University of Puerto Rico Mayagüez Fish Collection into the Scripps Marine Vertebrate Collection
3:45 pm	<i>Harutaka Hata, Sébastien Lavoué, Lauren Sallan</i>	37.10 Resurrection and redescription of nominal species previously regarded as synonyms of <i>Ilisha megaloptera</i> (Swainson, 1839) (Teleostei: Clupeiformes: Pristigasteridae)

1:30 PM – 3:45 PM

Ballroom G

Session 38: Ecology & Climate Effects

Moderator: Kristoffer Wild

1:30 pm	<i>Jill Leonard, Anna Hill, Katie VanHise</i>	38.1 Migratory timing of blue spotted salamanders (<i>Ambystoma laterale</i>) and their hybrid at Presque Isle Park in Marquette MI
1:45 pm	<i>Esteban Rosario-Sánchez, Lisa Barrow, Mariah King, Marin Romero, Rodrigo Corona</i>	38.2 Investigating the Effects of Invasive Species and Climate Change in the Populations of Freshwater Turtles in the Southwestern United States
2:00 pm	<i>George Brooks, Zachary Feiner, Ashley Trudeau, Olaf Jensen</i>	38.3 Gradually, then Suddenly: Transient Dynamics of Collapsing Fisheries in a Warming Climate
2:15 pm	<i>Caroline Goldstein, Isha Chauhan, Stephen Bredin, Lauren Essner, Vincent Farallo, William Hooker, Danielle Keerbs, Andrew Orkney, Priscila Rothier, William Ryerson, Kay Williams, Amy Yang, Christopher Sutherland, Brandon Hedrick</i>	38.4 A decade of red-backed salamanders in Ithaca, New York
2:30 pm	<i>David Marsh</i>	38.5 Elevation and Body Condition in Endemic Mountaintop Salamanders and their Widespread Relatives
2:45 pm	<i>Emmery Parker, Karen Kiemnec-Tyburczy, Sharyn Marks</i>	38.6 Life-history Variation in Larval Rough-skinned Newts (<i>Taricha granulosa</i>) in Northern Coastal California
3:00 pm	<i>Laura Tayon, Tom Anderson</i>	38.7 The Effect of Incubation Temperature on Ringed Salamander (<i>Ambystoma annulatum</i>) Survival and Fitness
3:15 pm	<i>Thomas Anderson, John Moore, Laura Tayon</i>	38.8 Warming Winter Temperatures Offsets Advanced Spring Phenology in Salamander Predator-Prey Interactions
3:30 pm	<i>Tyler Brock, Carlos Camp, Christopher Beachy</i>	38.10 This is new: the long larval period in the tiny salamander <i>Urspeleperes brucei</i>

1:30 PM – 4:00 PM

Ballroom H

Session 39: Genetics, Habitat and Environment

Moderator: Jeanine Refsnider

1:30 pm	<i>Nick Weber, Beverly Barnett, Andrew Fields, Steven Murawski, Walter Bubley, Raul Lara-Mendoza, David Portnoy</i>	39.1 Genomic Population Structure of Red Grouper, <i>Epinephelus morio</i> , in the U.S. Atlantic and Gulf of Mexico
1:45 pm	<i>Jeanine Refsnider, Paige Madden, Sarah Carter, Austin Hulbert, Henry Streby</i>	39.2 Contrasting Patterns of Inbreeding and Inbreeding Depression in Co-occurring Spotted Turtle and Eastern Box Turtle Populations

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2:00 pm	<i>Mark Jordan, Brianna Bassett, Elyse Mallinger, Daniel Guinto, Gregory Lipps Jr., Yu Man Lee, Matthew Cross</i>	39.3 Comparative Conservation Genetics in Blanding's Turtle (<i>Emydoidea blandingii</i>) and Spotted Turtle (<i>Clemmys guttata</i>)
2:15 pm	<i>Jon Hoffman, Christopher Raxworthy, Frank Burbrink</i>	39.4 A Chromosome-level Reference Genome of <i>Plestiodon fasciatus</i> and the State of Scincid Genomics
2:30 pm	<i>Isabella Wyatt, Gabrielle Johnson, Aimi Holmes, Laura Wentzel, Madelyn Albritton, Jamie Bolan, Sinlan Poo, Itzue Caviedes Solis</i>	39.5 Assessing the skin microbiome of <i>Anaxyrus fowleri</i> (Fowler's toad) across three urban green spaces: zoo, dog park and state park
2:45 pm	<i>Mirabai Moseley, Bruce Kingsbury</i>	39.6 Landscape Connectivity of Blanding's Turtle (<i>Emydoidea blandingii</i>) Habitat in Central Michigan
3:00 pm	<i>Kaleb Banks, Owen Edwards, Bo Zhang, Michael Reichert</i>	39.7 Spatially-nested Hierarchical Species Distribution Models Improve Estimates of Current and Future Distributions of a Cryptic Anuran at a Regional Scale
3:15 pm	<i>Meaghan Clark, Eric Hileman, Jennifer Moore, Lisa Faust, Randall Junge, Brendan Reid, Danielle Bradke, Gideon Bradburd, Sarah Fitzpatrick</i>	39.8 Fitness Consequences for Small, Isolated, and Threatened Rattlesnake Populations in Fragmented Landscapes
3:30 pm	<i>Madhushri M Mudke</i>	39.9 The habitat association, distribution and threat assessment to <i>Micrixalus kottigeharensis</i> , from the Western Ghats of India
3:45 pm	<i>Lok Poon, William Crampton</i>	39.10 A Sensory Ecology of Fear: Eye Size Predicts Moonlight Avoidance Responses in Neotropical Electric Fishes

Saturday 12 July • Poster Presentations

4:00 PM – 6:00 PM • Ballroom A-B

Note: Presenter is first author unless noted by an asterisk (*)

DEI, Education, Science

Sinlan Poo, Itzue Caviedes Solis, Umilaela Arifin

Chris Spear, Melissa Marquez, Reilly Boyt, Ingrid Hyrycena, Leena Joshi, Jasmin Graham, Lara Ferry, Lisa Whitenack

Lorin Neuman-Lee, Ace Kevin Amarga, Vania Assis, Kim Gray, Julia Joos, Daniela Pareja-Mejía, Sarah Woodley

Sara McClelland

Ken Naganawa

Eric Hilton, Bethany Smith, Lisa Lawrence, Vicki Fink, Bayleigh Albert, Miguel Montalvo, Sarah Huber

Henry Bart, Dustin Siegel

Conservation, Management, Ecology, Behavior

Anne Sabol, Steve Reichling, Sinlan Poo

Daisy Wong, Sydney Gutierrez, Katelyn Arrizon, Gabriella DeNonno, Lauren Chan

Tayci Sullivan

Gerardo Carfagno

Allison Mettenburg, Thomas Anderson

Jake Pruett, Jared Wood, Timothy Patton

Natalie Claunch, Matthew Legare, Alex Nicely, Jake Edwards, Frank Rivera-Milán, Parker Hall, Bryan Kluever, Christina Romagosa

Joseph Cannizzaro IV, Zander Perelman, Michael Dreslik

Matthew Klein, Eric Hileman, Lisa Faust

Claire Collier, Mike Sipos, Jordy Chen, Diane Sturgeon

Jessica Flores, Jazmine Gallardo, Samantha Leigh, Erin Paige-Tran, Ben Fable, Jonathan Williams, Chelsea Williams, Daniel Pondella, Dahiana Arcila, Aaron Celestian, William Ludt

Maxwell Geller, Robert Lamb

Clinton Moran

Michelle Thompson, Madelynn Sinclair, Thomas Anton, Sara Ruane

Gustavo Ruano Fajardo, Alessandro Catenazzi, Tamí Mott

P2.1 | The Global Women in Herpetology Project: The Journey So Far and What's Next

P2.2 | Building a Better JMIH: Recommendations from the Bio-LEAPS Advisory Board

P2.3 | Building community in herpetology

P2.4 | Nature Documentaries Real or Reel: A Novel Upper-level Biology Course About Nature, Evaluating Scientific Media, and Science Communication

P2.5 | Science Illustrations for the Research and Conservation of Herpetofauna and Ichthyofauna

P2.6 | Waves of Wonder: A Marine Science & Art Incubator

P2.7 | Where should ASIH be headed?

P2.8 | Using camera traps to monitor the progress of a reintroduced population of captive-bred Dusky Gopher frogs (*Lithobates sevosus*)

P2.9 | Population Connectivity Analysis of The Northern Red-legged Frog Informs Conservation Management

P2.10 | Effects of Urban Encroachment in Eastern Missouri on *Ambystoma annulatum* Distribution

P2.12 | Microhabitat Use and Isolation by Urban *Plethodon cinereus*

P2.13 | Hydroperiod-driven Recruitment Differences in an Amphibian Community

P2.14 | Trends in American alligator (*Alligator mississippiensis*) populations in southeastern Oklahoma

P2.15 | Assessment of removal methods for nonnative *Agama picticauda* in Florida, USA

P2.16 | Assessing the Effects of Successional Vegetation Management on Predation Rates in the Imperiled Eastern Massasauga (*Sistrurus catenatus*)

P2.17 | Reassessing Population Viability of an Isolated Eastern Massasauga Rattlesnake Population in Light of Inbreeding Concerns

P2.18 | Human Dimensions of Invasive Freshwater Fish Commodification

P2.19 | Microplastics in Southern California Fishes Across Time

P2.20 | Monitoring the Northern Expansion of Common Snook (*Centropomus undecimalis*): Assessing Nursery Habitats, Population Connectivity, and Genetic Structure.

P2.21 | Age, growth, diet and reproduction of African pompano

P2.22 | Calling Phenology of a Diverse Anuran Assemblage in Chicagoland Forest Preserves

P2.23 | Bromeligenous Amphibians in Suboptimal Habitats: A Case Study of *Phyllodytes gyrinaethes* and its Environmental Interactions

Freya Eppstein, Gregory Lipps, Abby Ditomassi

Joshua Roy, Marina Gerson

Emily Donahue, Isabella Davis, Natalie Haydt, Norman Hunter IV, Lorin Neuman-Lee

Madden Haag, Mitchell Riegler, Coleman Sheehy

Gianna Maida, Zeanna Graves, Anna Velten, Chase Wild, Emry Elrubaie, Kara Opheim, Jamie DeShazo, Haim Flores Cinnamon, Cassie Valenti Carpenter, Shannon Horvath, Katherine Luttrell, Laura Rogozinski, Alexis Akers, Rachel Rotz, Andrew Durso

Chase Wild, Laura Rogozinski, Anna Velten, Gianna Maida, Cassie Valenti Carpenter, Emry Elrubaie, Shannon Horvath, Kara Opheim, Jamie DeShazo, Haim Flores Cinnamon, Zeanna Graves, Katherine Luttrell, Andrew Durso

Emma Colaco, HoWan Chan, Kara Titus, Kory Evans

Isaiah Rothschild, Luke Tornabene

Mia Gomez, Matthew Ajemian, Jon Moore, Liberty Boyd

Kelsey Schneck, David Tallmon, Joshua Russell, Scott Vulstek

Erin Burge

Alex Byrne, Elizabeth Bastiaans

Lok Poon, William Crampton

Bridget Hudnall, Louise Mead

Carlota Faustino, Jensyn Scott, Grace Burkin, Cari-Ann Hickerson, Carl Anthony

Bryce Sweely, Victoria Hemingway, Gretchen Howe, Chad Lane, Andrew Durso

Erin Muths, Mary Kay Watry, Evan Bredeweg, Amanda Kissel

Evolution, Genetics, Biogeography

Elizabeth Kramer, Arianna Kuhn, Bryan Stuart, M. Marchán-Rivadeneira, Shawn Kuchta

Matthew Heinicke, Amanda Picelli, Ana Carolina de Sousa, Luis Ceríaco

Sadie Hale, Vicente Fernandez Lara, Jordan Kirk, Angelina Romero, Dallin Matthews, Reagan McKee, Randy Klabacka Roman Ferraro, Cindy Fajardo, Michael Burns, William Ludt

Sam Schenker, Graham Reynolds

Laurel Nave-Powers, Jennifer Gardner, Luke Tornabene

Kimber Boyles, Raquel Marchán-Rivadeneira, Isaac Overcast, Shawn Kuchta

P2.24 | Diet Analysis of Different Demographics of American Bullfrogs (*Lithobates catesbeianus*) in Killdeer Plains Wildlife Area

P2.25 | Sublethal Effects of Chronic Pyrethroid Insecticide Exposure on the Morphology of *Pseudacris regilla* (Pacific Tree Frog) Tadpoles

P2.26 | Bioaccumulation and sublethal effects of lead in diamond-backed watersnakes (*Nerodia rhombifer*)

P2.27 | Leveraging museum collections to assess ecology of *Rhineura floridana* (Amphisbaenia, Squamata)

P2.28 | Influence of Hydrology, Water Quality, and Prey Community on Aquatic Snake Capture Rates in Southwest Florida

P2.29 | Eating Local: Diet Selection of Banded Watersnakes in Southwest Florida

P2.30 | Investigating the Morphological and Trophic Diversity of Surgeonfish (Acanthuridae) in Japan

P2.31 | Studying the diet of Deep Reef Fishes Through Bulk Stable Isotope Analysis

P2.32 | Evaluating Fish Community Structure Along a Bermudian Seascape.

P2.33 | Shifts in migration pattern of Northwest Pacific salmon in response to a warming environment

P2.34 | Fish Biodiversity and Relative Abundance Assessed on a Hard Bottom Reef Off Cape Fear, North Carolina, using SharkCam Underwater Video

P2.35 | Social and Environmental Factors Influencing Egg Mass Aggregation in Wood Frog (*Lithobates sylvaticus*) oviposition.

P2.36 | Dynamic Moonlight Tracking and Evidence for an Endogenous Lunar Rhythm in an Electric Knifefish

P2.38 | Territoriality and Color Morph in a Michigan Population of the Eastern Red-backed Salamander, *Plethodon cinereus*.

P2.39 | Color Discernment in *Plethodon cinereus* using Dyed Prey: Implications for the Perception of Biofluorescence

P2.40 | Validation of Non-Lethal and Preserved Samples for Stable Isotope Analysis of Anurans and Fishes

P2.41 | Thirty years of monitoring reveals negative visitor effects on occupancy of amphibians in Rocky Mountain National Park

P2.43 | Filling the Gaps: Biogeography of the *Plethodon wehrlei* complex

P2.45 | A Molecular Timescale of Squamate Evolution in Sao Tome and Principe

P2.46 | Genetic and Morphological Comparison Between Introduced and Native Populations of *Aspidoscelis neomexicanus*

P2.47 | Biogeography and morphology: An examination of community body shape of cryptobenthic fishes in the Tropical Eastern Pacific

P2.48 | Phylogeographic Analysis of Mitochondrial Lineages of the Silver Cay Anole, *Anolis scriptus*, Across the Turks and Caicos Islands

P2.49 | The Biogeography of Alaskan Marine Fishes

P2.50 | The Curious Case of Hybridization between Red-backed and Northern Ravine Salamanders

Saturday 12 July 2025

Delson Hays, Dahiana Arcila, Ricardo Betancur-R

Godservice Eziefule, Brian Sidlauskas, Henry Bart

Itzel Sifuentes-Romero, Nicole Valenzuela

Nicholas Poidomani, Macy Bristol, Christian Graca, Alison Ritter, Windsor Aguirre

Andrew Fields, Kevin Conway, Elizabeth Dolan, Dominic Swift, Alison Monroe, Darca Holmes, Preston Bean, Joel Anderson, David Portnoy

Herpetology

Molly Womack, Carol Spencer, Michelle Koo, Vance Vredenburg, Rebecca Tarvin, Ann Chang, Joyce Gross, Rayna Bell, Emma Steigerwald, David Blackburn, David Cannatella, Alessandro Catenazzi, Kyle Summers, Jodi Rowley, Jimmy McGuire

Leana Cuzzocrea, Jennifer Deitloff

Brendan Enochs, Kaitlyn Kemer, Darcy Beazley, Caroline Lamermayer, Adelyn Hughes, Nicolina Valore, Emerson Amy, Cara Brensike, Elliot Chinnock, Maggie Hantak

Sydney Moran, Pedro Peloso

Aaron Kemp, Jasmyn Williams, Megan D'Souza, Anna Velten, Bryce Sweely, Andrew Durso

*Chris Feldman, Vicki Thill, Haley Moniz, Mike Teglas
Tyler Tobias*

Jasmyn Williams, Van Wallach, Andrew Durso

Tucker Cribb, Shane Welch, John Holloway, Emily Gray, Erin Buchholtz, Maya Fink, Jayme Waldron

Victoria Hemingway, Jordan Donini

Alexis Powell, Greg Sievert

Ichthyology

Joe Cutler, Ryan Thoni

Tina Wu, Todd Clardy, Madison Wilson, Teresa Porri, William Ludt

Prosanta Chakrabarty

Gus Bienenfeld, Maxwell Hampton, Jacqueline Webb

Jacqueline Webb

Morphology, Biomechanics, Physiology, Disease

John Abramyan

Michael Finkler, Catelyn Beachy

Juliana Luzete, Aaron Griffing, Tiana Kohlsdorf, Tony Gamble

P2.51 | Phylogenomics Sheds Light on the Storied Evolution of the Elusive Order Gadiformes (Cods, Grenadiers, and Kin)

P2.52 | Assessing Phylogenetic and Morphological Variation in *Labeobarbus* from Gabon

P2.53 | First Turtle Organoids - a Model for Ecology, Evolution, and Biomedicine

P2.54 | The Effectiveness of Short vs. Traditional Length DNA Fragments for Fish Detection from Aquatic eDNA Samples Using Nanopore Sequencing

P2.55 | TX-FISH-DNA: A Regionally-Focused DNA Barcode Interface to Enhance Identification and Monitoring of the Fishes of Texas

P2.56 | AmphibiaWeb: Connecting Amphibian Lovers to Data

P2.57 | Effects of Temperature on Color of *Plethodon cinereus* (Eastern Red-backed Salamander)

P2.58 | Leveraging Community Science Images to Document Color Variation in the Widespread Salamander, *Plethodon cinereus*

P2.59 | Ontogenetic Shifts in Eye Morphology of Terrestrial Salamanders with Biphasic Life Cycles

P2.60 | Scaling Snake Identification: How African Snake ID Groups Provide Critical Training Data for Computer Vision

P2.61 | Bite Me: Patterns of Widow Spider Venom Resistance in Lizards

P2.62 | Moving Towards a More Critical Herpetology: A Call for Reflexivity and New Approaches in the Field

P2.63 | HISS: A Lepidosis Data Book and Shiny App

P2.64 | Investigating the Effects of Urbanization and Habitat Fragmentation on the Spatial Ecology of the Eastern Diamondback Rattlesnake (*Crotalus adamanteus*)

P2.65 | Hematological Evaluation of a Population of Florida Box Turtles (*Terrapene carolina bauri*) in Southwestern Florida

P2.66 | A Highly Effective Method for Documenting Occurrences of Turtles in Rivers: Digiscoping

P2.67 | The Wilderness Project - Surveying Freshwater Fish Diversity in Africa's Great Rivers

P2.68 | CryptoVert: An Educational and Anatomical Resource for Studying Cryptobenthic Fishes and Body Size Evolution

P2.69 | Never the Same Waters Twice: Stories from the Field of Ichthyology

P2.70a | The Lateral Line System of Barbs (Cyprinidae, Smiliogastrinae): Organization of Superficial Neuromasts and Comparisons with Other Cypriniformes

P2.70b | On the Skin of Minnows: Are They Taste Buds, or What?

P2.71 | Molecular Composition of the Eggshell in Gekkota

P2.72 | Diel Temperature Fluctuations Influence Growth and Development Rates in Larval Wood Frogs (*Lithobates sylvaticus*).

P2.73 | Heterochrony of Sexual Development in Lizards: Evaluating the Synchronicity of Gonad and Genital Development in Geckos

Jess McQuigg, Michelle Boone, Chloe Dudonis, Brenna Hezel, Rachel Sirica

Ally Meadows, Jenna Palmisano, Alex Gilray, Keegan Valentine, Malorie Hayes

Stefanny Titon, Vania Assis, Stefania dos Reis, Patrício Garcia-Neto, Felipe Floreste, Regina Markus, Pedro Fernandes, Fernando Gomes

Lily McCarthy, Elizabeth Bastiaans

Jessica Castetter, Gabriela Bilbrey, Bethanie Majewski, Rob Denton

Gene Glover, Michael Curran, Christopher Anderson

Etti Cooper, Madison McIntyre, Krystal Tolley, Graham Alexander, Christopher Anderson

Emily Taylor, Michael Westphal, Alexander Yan

Samuel Krauss, Joshua Gunn, Lori Neuman-Lee, M. Rockwell Parker

Dustin Siegel, Hayleigh Locke, Kaden Johnston, Kenzie Pereira, Sara McClelland, Christopher Murray, Kevin Conway

Christopher Anderson, Lucas Crownover

Caleb Shoemaker, Juan Daza

Brian Whelan, Richard Hoover, Kassandra Ford

Marta Gomez-Buckley, Calder Atta, Raymond Buckley, Luke Tornabene

Todd Clardy, Jordyn Neal, Andrew Thompson, William Watson, Noelle Bowlin, Sherri Charter, William Ludt

Sarah Pascarella, Craig Albertson, Andrew Conith

Michael Ghedotti, Jordon Valdez, Rene Martin, John Sparks

Kathleen Cole, Ross Langston, David Johnson

Systematics, Taxonomy

Kilian McDonald-Boyer, Thornton Larson

Jason Castro, Gisele Cassundé, Pedro Peloso

Ana Motta, Kevin Chovanec

Ashley Jones, Hannah Hicks, Ramon Nagesan, Anthony DiMeglio, Hayley Crowell, Natasha Stepanova, Gregory Schneider, Dan Rabosky

Terry Grande, W. Leo Smith, Randy Singer, Mark Wilson

Emma Meyer, Marta Gomez-Buckley, Luke Tornabene

P2.74 | Investigating the Role of Aquatic Invertebrates in Amphibian Disease systems: Batrachochytrium dendrobatidis Reservoir and Alternative Host Dynamics.

P2.75 | Population genetic patterns present in Raillietiella orientalis across widespread snake hosts

P2.77 | Immune-Pineal-Ocular Axis in Amphibians: Modulation and Function of Local and Central Melatonin in Response to an Infectious Stimulus

P2.78 | Influence of Season and Temperature on Hydration State of Red-Backed Salamanders, Plethodon cinereus

P2.79 | Comparative Analysis of Locomotor Endurance in Sexual and Unisexual Ambystoma Salamanders

P2.80 | Lateralization of Righting Response in Arboreal Chameleons

P2.81 | The scaling of resting metabolic rate in African chameleon species

P2.82 | Intraspecific Variation in Thermal and Hydric Biology of the Yellow-backed Spiny Lizard (Sceloporus magister uniformis) Across Climatic Gradients

P2.83 | Demographic Assessment of Immunological Parameters in Male Red-Sided Garter Snakes and Potential Correlations with Overt Parasitism

P2.85 | Do skeletal elements associated with jaw musculature vary seasonally with jaw muscle hypertrophy/atrophy in Eurycea bislineata (Amphibia, Caudata, Plethodontidae)?

P2.86 | Diversification patterns and evolutionary drivers in the chameleon axial skeleton

P2.87 | Skeletal morphology of Tetracheilostoma carla (Leptotyphlopidae, Serpentes, Squamata), the world's smallest snake.

P2.88 | The Life and Death of Dentition: Tooth Replacement and Damage Across Diets (Stichaeidae)

P2.89 | A bizarre, fleshy pelvic disc in the Coral Goby Paragobiodon lacunicola (Kendall & Goldsborough, 1911)

P2.90 | The Eyes of Idiacanthus (Stomiiformes: Stomiidae)

P2.91 | Neurocranial Morphology Underlies Divergent Feeding Kinematics in Lake Malawi Cichlids

P2.92 | Putative Anatomy of Blinking of the Bioluminescent Organ in Ponyfishes (Leionathidae).

P2.93 | When does the Splitfin Flashlightfish, Anomalops katoptron, get its flash?

P2.95 | Clarifying localities and digitization efforts of the James F. Scudday Vertebrate Collection at Sul Ross State University in Alpine, TX.

P2.97 | Osteology of an unnamed Treefrog species (Anura: Hylidae: Boana) from the Amazon revealed by microCT data

P2.98 | On the Identity of Noblella bagrecito Using Archival DNA from a Paratype

P2.99 | 60,000 Snakes and Counting: Reflections of a Collections Assistant

P2.100 | Reevaluation of the zeiform family Parazenidae with an emphasis on the species composition and geographic distribution of Parazen

P2.101 | Cryptic Speciation in Coral Sea Dwarf gobies (Eviota lachdeberei Species Complex)

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Kehinde Ologbonjaye, Brian Sidlauskas, Ray Schmidt

P2.102 | Phylogenetics and Cryptic Speciation of Amphilius Catfishes (Siluriformes: Teleostei) in Gabon's Freshwaters

W. Smith, Zachary May, Matthew Davis

P2.103 | The Evolutionary Relationships of Deep-Sea Hatchetfishes (Stomiiformes: Sternoptychidae) from a Total Evidence Approach

Liam Aston, Alvaro Cortes, Katherine Maslenikov, Brian Sidlauskas, Jacob Egge, Luke Tornabene

P2.104 | Working backwards: Using a molecular phylogeny to find informative morphology in the freshwater sculpin (Cottidae, Cottus spp.)

Roseline Ewa, Brian Sidlauskas, Tobit Liyandja

P2.105 | Investigating Species Delimitation and Morphological Variation in Gabonese Labeo

Mark Wilson, William Bemis, Terry Grande, W Smith, Katie Smith

P2.106 | Fishes of the World, 6th Edition: new perspectives on old phylogenies

Faith Kelly, Kassandra Ford

P2.107 | The Fish ID Collective: Leveraging agency partnerships for biodiversity monitoring and collection growth

Terry Donaldson, David Burdick, Steven Lindfield, Bruce Mundy, Brent Tibbatts, Robert Myers

P2.108 | Looking Harder and Deeper: New Records of Fishes from the Mariana Islands

Lennard Jacobs, Benjamin Naumann, Hendrik Müller

P2.109 | Reproductive modes matter: Developmental Modularity in the Olfactory System of a South African Frog

Sunday 13 July • Symposium

Note: Presenter is first author unless noted by an asterisk (*)

8:00 AM – 10:00 AM

Ballroom E

Session 40: Symposium: Artificial intelligence in ichthyology and herpetology (SSAR)

Moderator: Peter Uetz

8:00 am	Henry Bart Jr, Yasin Bakış, Bahadır Altıntaş, Xiaojun Wang	40.1 Morphological Barcoding, a method of distinguishing groups of fishes using data extracted from fish specimen images with Machine Learning methods.
8:15 am	Yasin Bakış, Bahadır Altıntaş, Xiaojun Wang, Henry Bart	40.2 Artificial Intel to produce data descriptors for digitized collection images of fish specimens
8:30 am	Bahadır Altıntaş, Yasin Bakış, Xiaojun Wang, Henry Bart Jr	40.3 Automated Landmarking of body features of images of fish specimens from a Digitized Collection Using Machine Learning
8:45 am	Andrew Miller, Aiden Coffey, Eric Coburn, Hoan Ngo, Jason Macrander	40.4 Deep Learning for Sharks: AI-Powered Species Identification for Conservation
9:00 am	Alex Shepard, Alison Young	40.5 iNaturalist and AI: modeling observation data
9:15 am	Andrew Durso, Lukas Pícek, Marek Hruží, Rail Chamidullin, Isabelle Bolon, Rafael Ruiz de Castañeda	40.6 Computer Vision for Snake Species Identification: Lessons Learned over Seven Years and Half a Million Snake Images
9:30 am	Jonathan Goldenberg, Karen Bisschop, Robbert DeHaven, Bastiaan Star, Tobias Uller, Nathalie Feiner	40.7 Mapping Color Diversity in Lizards and Sharks
9:45 am	Peter Uetz, Ted Hooban, Spoorti Kalashetti	40.8 What does ChatGPT know about reptiles?

10:30 AM – 12:00 PM

Ballroom E

Session 45: Symposium: Thriving in a Changing World: Host-Pathogen Dynamics in Hyperdiverse Communities of Amphibians and Reptiles (SSAR). Part 1

Moderator:

10:30 am	Rayna Bell, Kevin Mulder, Alessandro Catenazzi, C. Guilherme Becker	45.1 Thriving in a Changing World: Diseases in Hyperdiverse Communities of Amphibians and Reptiles
10:45 am	David Rodriguez	45.2 Increasing capacity for pathogen surveillance in undersampled regions: an example from Ecuadorian amphibians
11:15 am	Gustavo Ruano Fajardo, Jéssica Galdino, María Chang, Alessandro Catenazzi	45.3 Amphibian Population Status Across an Altitudinal Gradient in Southwestern Guatemala: Insights from the San Marcos Transect
11:30 am	John Boyette, Kevin Mulder, Tamilie Carvalho, Daniel Medina, Renato Martins, Robert Ossiboff, Wes Neely, David Rodriguez, Carly Muletz-Wolz, Michael Campana, C. Becker	45.4 Bd linked to historic amphibian declines and extirpations in Brazil's hyperdiverse Atlantic Forest
11:45 am	Maria Diaz, Alessandro Catenazzi	45.5 Environmental Factors Influencing Bd Prevalence in a Terrestrial Frog Community of a Montane Forest in Peru

1:30 PM – 4:30 PM

Ballroom E

Session 50: Symposium: Thriving in a Changing World: Host-Pathogen Dynamics in Hyperdiverse Communities of Amphibians and Reptiles (SSAR). Part 2

Moderator: Rayna Bell

1:30 pm	Molly Bletz, Douglas Woodhams	50.1 Adaptive Microbiomes: Do Pathogens Reshape Amphibian Microbial Communities towards Defense or Dysbiosis?
2:00 pm	Shannon Buttner, Daniel Medina, Renato Martins, Ana Moraes da Silva, Wesley Neely, Célio Haddad, Graziella DiRenzo, Alessandro Catenazzi, Rayna Bell, C. Guilherme Becker	50.3 Precipitation Paradox: Drought Suppresses Amphibian Pathogen yet Intensifies Transmission and Disrupts Protective Skin Microbiome
2:15 pm	Randall Jimenez, Piper Thacher, Owen Osborne, Brian Gratwicke, Carly Mulet-Wolz	50.4 Understanding microbial community assembly in a salamander disease system using null models and networks
2:30 pm	Tiffany A Kosch	50.5 Genetic Strategies for Enhancing Amphibian Resilience in a Changing World
3:00 pm	Robert Ossiboff	50.7 Emerging Herpetofaunal Diseases at the Interface of Nature and Captivity
3:30 pm	Arik Hartmann, Kimberly Sash, E. Pierson Hill, Natalie Claunch, Max Maddox, Sarah McGrath-Blaser, Cory McKinstry, Robert Ossiboff, Ana Longo	50.9 Partitioning the influence of host specificity in amphibian communities threatened by multiple emerging infectious diseases
3:45 pm	Kevin Mulder, Robert Fleischer, Anna Savage	50.10 Quantifying Adaptation in Natural Populations of Leopard Frogs Declining from Chytridiomycosis
4:00 pm	Matthew Atkinson, Erin Brosnan, Brad Glorioso, Juliette Rodrigue, Robert Mendyk, J. Waddle, Anna Savage	50.11 Pathogen dynamics of an expanding Cuban treefrog (<i>Osteopilus septentrionalis</i>) invasion in New Orleans, Louisiana
4:15 pm	Iris Holmes, Andrew Durso, Zeanna Graves, Maria Rusch, Tory Hendry	50.12 Seasonal variation in load of the eukaryotic parasite Hepatozoon on water snakes, <i>Nerodia fasciata</i>

Sunday 13 July • Lightning Talks

Note: Presenter is first author unless noted by an asterisk (*)

8:00 AM – 9:15 AM

Ballroom F

Session 43: Lightning Talks

Moderator: Christopher Beachy

8:00 am	Parker Binns, Molly Russell, Shania Burkhead, Clay Prater, Thomas Luhring	43.1 Late to the Party: Effects of Varied Precipitation Timing on Amphibian Fitness and Ecosystem Recovery
8:05 am	Oksana Nekrasova, Mihails Pupins, Artūrs Škute, Yuri Buchchenko, Jean-Yves Georges	43.2 Analysis of potential ecological interactions between invasive fish and native snakes using GIS technologies
8:10 am	Lukas Heath, Kevin Feldheim, Andrew Wooley, Dylan Yakich, Tonya Wiley, Gregg Poulakis	43.3 Genetic Dispersal of Smalltooth Sawfish (<i>Pristis pectinata</i>): Aperiodic Nursery Switching and Potential Re-emergence in Florida Estuaries
8:15 am	Lilly Nguyen, Aaron Bauer, Edward Stanley, Juan Daza	43.4 Completing the puzzle: A mid-Cretaceous gecko in amber from Burma
8:20 am	Marthje Schüler	43.5 Seasonal Variation of Sharks and Large Predatory Fish in the Far Northern Islands of the Galapagos Marine Reserve
8:25 am	Tyler Tobias, Erin Buchholtz	43.6 Differential Land-use Legacy Influences on the Composition, Structure, and Microhabitat Use of Herpetofauna Community Assemblages
8:30 am	Vincent Farallo, Michael Howard, Caitlin Doughton, Ralph Saporito	43.7 The effect of alkaloid sequestration on the metabolic rates of dendrobatid frogs
8:35 am	Stephen Kajiura, Savannah Arvin	43.8 Size and sex segregation of aggregating blacktip sharks, <i>Carcharhinus limbatus</i>

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8:40 am	Anthony Sena, Phillip Barden, Gareth Russell, Sara Ruane	43.9 Resemblance Beyond Mimicry: Investigating Proximity-Based Color Pattern Similarity Among Coral Snakes and Their Lookalikes
8:45 am	Luke Tonsfeldt, Kenneth Kozak	43.10 Constructing a Phylogeny of Invasive American Bullfrogs in Minnesota
8:50 am	Ethan Livingston, Aaron Bauer	43.11 Examining Burrow Morphology Across Nine Lizard Families in Southern Africa
8:55 am	Tianqi Huang, Christopher Austin, Justin Bernstein, Stephen Richards, Jackson Roberts, Jeffrey Frederick, Sara Ruane	43.12 Diversity of Groundsnakes of the Genus <i>Stegonotus</i> in New Guinea
9:00 am	Mackenzie Horton, Ashley Johnson, Nigel Hussey, John Tyminski, Chris Fischer, Brett McBride, Robert Hueter, Bryan Franks	43.13 Site fidelity of white sharks (<i>Carcharodon carcharias</i>) in their overwintering residency region in the western North Atlantic
9:05 am	Sara Ruane	43.14 The Use of Single Specimens for Species Descriptions and General Considerations
9:10 am	Cordon Wade, Aaron Bauer	43.15 Systematics, Biogeography, and Morphology of the <i>Trachylepis variegata</i> (Peters, 1870) Group in Southern Africa

Sunday 13 July • Oral Presentations

Note: Presenter is first author unless noted by an asterisk (*)

8:00 AM – 9:30 AM

Ballroom D

Session 41: AES Morphology and Life History

Moderator: Kara Yopak

8:00 am	Haley Morman, Kara Yopak	41.1 Battle of the Sexes: Sexual Dimorphism in the Brain of the Smooth Butterfly Ray, <i>Gymnura micrura</i>
8:15 am	Marianne Porter, Genna Felder, Madisan Biordi, Isabella Fernandez, Aubrey Clark, Michelle Passerotti	41.2 How to build a fast fish: Shortfin mako vertebral mechanics
8:30 am	Jan Landsberg, Yasu Kiryu, Theresa Cody, Micah Bakenhaster, Noretta Perry, Patrick Wilson, Eric Fortman, Rebecca Hardman, Gregg Poulakis, Alisa Newton	41.3 Spinning Sawfish: Preliminary Histologic Findings in Smalltooth Sawfish (<i>Pristis pectinata</i>) from the Florida Keys Abnormal Fish Behavior Event
8:45 am	Lenny Vossgeaeter, Nathan Perisic, Max Kimble, Filippo Bocchi, Luca Asshauer, Tatiana Ivanova	41.4 The World's Largest Aggregation of Tiger Sharks (<i>Galeocerdo cuvier</i>): Population Structure, Residency, and Reproductive Status in Fuvahmulah, Maldives
9:00 am	Alena Anderson, John Carlson, Danielle McAree, Ashley Dawdy, J Drymon	41.5 Age, Growth, and Maturity of Blacknose Sharks, <i>Carcharhinus acronotus</i> , in the Northern Gulf of America
9:15 am	Joseph Barney, Bradley Wetherbee, Lillian Georgio, Angela Salado, Elijah Saddlemire, Deanna Gauthier	41.6 Quantifying Diet of Easmobranchs as Energy and Insights into their Feeding Ecology

8:00 AM – 9:45 AM

Ballroom C

Session 42: AES Ecology III

Moderator: Simon Dedman

8:00 am	Ryan McMullen, John Hlavin, Kylie Powers, Jessica Pate, Catherine Macdonald	42.1 Characterizing the Diet and Trophic Ecology of the Atlantic Guitarfish
8:15 am	Owe Fleischer, Bradley Wetherbee, Annsli Hilton, John Carlson	42.2 The Diet of Juvenile and Mature Lemon Sharks in the Southeast United States
8:30 am	Simon Dedman, Naomi Farabaugh, Natalie Klinard, Suchinta Arif, Mark Bond, Demian Chapman, Eric Clua, Alastair Harborne, Jeremy Kiszka, Michelle Heupel, Aaron Wirsing, Michael Heithaus	42.3 Sharks control coral reef ecosystems via top-down trophic cascades when there are enough sharks, otherwise bottom-up processes dominate.
8:45 am	Elizabeth Jahn, Oliver Shipley, Michael Frisk, Jill Olin	42.4 Energetic pathways of migratory sharks in the New York Bight using stable isotope and fatty acid analyses

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9:00 am	<i>Reilly Boyt, Alexandra McInturf, Maddie English, Claire Goodfellow, Lauren Meyer, Aaron Carlisle, Lisa Hillier, Dayv Lowry, Taylor Chapple</i>	42.5 Beyond Stomach Contents: A Multi-tracer Approach to Studying Salmon Shark (<i>Lamna ditropis</i>) Foraging Ecology in the Northeast Pacific
9:15 am	<i>Jens Hegg, Linh Truong, Gabe Gambleton, Mia Meighan, Tristan Keane, Patricia Charvet, Tommaso Giarrizzo</i>	42.6 Rostral teeth of Brazilian Sawfish Record Potentially Useful Life-History Information in their Morphology
9:30 am	<i>Cecilia Hampton, Ethan Canto, Luran Brewster, Kimbrough Bassos-Hull, T Mooney, Matthew Ajemian</i>	42.7 Behavior and unique ecological interactions of the whitespotted eagle ray revealed via a multi-sensor biologging tag

8:00 AM – 9:45 AM

Ballroom G

Session 44: Techniques in Ecology and Evolution / Conservation & Management I

Moderator: Chris Distel

8:00 am	<i>Keith Cox</i>	44.1 Expanding the Use of Bioelectrical Impedance Analysis (BIA) in Fish and Other Aquatic and Terrestrial Species
8:15 am	<i>Camden Oathout, Claire Gard, Tyler Steven Coleman, Kyle Piller</i>	44.2 Comparing active and passive methods of environmental DNA collection across a diel cycle in a coastal plains riverine habitat.
8:30 am	<i>Linnea Cooley, Flora Coden, Zack Gold, Nastassia Patin</i>	44.3 Optimizing Bioinformatics Workflows for Accurate Teleost Fish Species Detections with eDNA
8:45 am	<i>Christopher Zobek, Kevin Middleton, Casey Holliday</i>	44.4 Comparison of DiceCT Muscle Fascicle Tracing Results Between Avizo Xfiber and Goodfibes R Package
9:00 am	<i>Bella Gonzalez, Arik Hartmann, Faith Dunlap, Thien Nguyen, Coleman Sheehy III, Ana Longo</i>	44.5 Welcome to Miami: Reproductive Traits and Pathogen Potential of Introduced Caecilians, <i>Typhlonectes natans</i>
9:15 am	<i>Chris Distel, Michael Pena, Marion Mundy</i>	44.6 Impacts of Invasive Plant Presence on Food Choice in Watersnakes (<i>Nerodia</i>)
9:30 am	<i>Allison Litmer, Timothy Walsworth, Casey Pennock</i>	44.7 Quantifying the Effects of Mechanical Removal on Population Dynamics of Invasive Channel Catfish (<i>Ictalurus punctatus</i>)

10:30 AM – 12:30 PM

Ballroom D

Session 46: Postcranial Morphology

Moderator: David Blackburn

10:30 am	<i>David C. Blackburn</i>	46.1 The Evolution of An Extremely Long Finger in Male Squeaker Frogs (family Arthroleptidae)
10:45 am	<i>Elizabeth Glynne, Dean Adams</i>	46.2 Interspecific Allometry of Sexual Shape Dimorphism in Miniaturized & Non-Miniaturized Geckos
11:00 am	<i>Jemima Elsherbini, Alexis Alvey, Corinthia Black, Ling-Ling Menez, Milton Tan</i>	46.3 3D Morphometrics Reveals Dynamic Adaptive Evolution and its Relationship to Evolutionary Modularity and Integration in Catfishes of the Superfamily Doradoidea
11:15 am	<i>Molly Womack</i>	46.4 Putting frog skin on the map: worldwide sampling of frog skin texture
11:30 am	<i>Lynne Parenti, Daniel Lumbantobing</i>	46.5 Phylogenetic Distribution and Function of the Axillary Lymphoid Organ in Teleost Fishes
11:45 am	<i>Hernán López-Fernández, Melanie Stiassny, Maria Malabarba, Viviana Astudillo-Clavijo</i>	46.6 Towards a Morphological Framework for Fossil Placement and Total Evidence Dating of Cichlids (Ovalentaria: Cichliformes)
12:15 pm	<i>Rene Martin, Emily Carr, John Sparks</i>	46.7 First Evidence of Biofluorescence in Ponyfishes: A Product of Bioluminescent Excitation

10:30 AM – 11:45 AM

Ballroom C

Session 47: AES Conservation I

Moderator: Simon Dedman

10:30 am	Emily Kelly	47.1 Multiple Paternity in a Population of Southern Stingray, <i>Hypanus americanus</i> , at the National Aquarium
10:45 am	Jim Gelsleichter, Michael Hyatt, Linda Penfold, James Gillis, Alisha Newton, G. Fischer	47.2 A shark's guide to growing up: Using nonlethal methods to examine reproduction in female white sharks <i>Carcharodon carcharias</i> .
11:00 am	Ashleigh Novak, Patrick Rex, Victoria Migneco, Gregory Skomal, Megan Winton	47.3 Characterizing the Behavioral Response of White Sharks to Boat Traffic Using Drones to Understand a New Conservation Concern
11:15 am	Hannah Medd, Cassandra Scott	47.4 Building Florida's Shark Reporting and Response Network: No Sample Left Behind
11:30 am	Jens Hegg, Linh Truong, Gabe Gambleton, Mia Meighan, Tristan Keane, Patricia Charvet, Tommaso Giarrizzo	47.5 Rostral Teeth of Brazilian Sawfish Record Potential Movement and Habitat Association Information in their Chemistry.

10:30 AM – 11:30 AM

Ballroom F

Session 48: Evolution

Moderator: Christopher Martin

10:30 am	G. Cordero, Jose Bataller, Tibisay Escalona, Matthieu Lassalle, Emily Dustman, Chad Dolan, James Lamer, John Tucker, Fredric Janzen	48.1 Mutant Turtles: Fitness Effects of Embryonic Thermal Extremes
10:45 am	Peter Searle, Tanner Van Orden, Andrea Kokkonen, Ben Sandkam, Dennis Shiozawa, R Evans, Mark Belk, Swanne Gordon	48.2 Under Pressure: Adaptation of Opsin Proteins Shaped by Interacting Selective Factors
11:00 am	William Crampton, Leilani Pathak, Francesco Janzen, Joseph Waddell, Nathan Lovejoy	48.3 Evolution of Gill Morphology in Neotropical Electric Fishes: Adaptive Responses to Hypoxia and the Rise of Amazonian Floodplains
11:15 am	Christopher Martin	48.4 The Origins of Adaptive Radiation in Cyprinodon pupfishes: Adaptive introgression, Craniofacial morphology, Scale-biting performance, and Fitness landscapes

10:30 AM – 11:45 AM

Ballroom G

Session 49: Conservation & Management II / Conservation Ecology and Genetics I

Moderator: Nancy Karraker

10:30 am	Evin Carter, Bryce Wade, Trent Jett, Teresa Mathews, Lindsey Hayter, Jamie Herold, Greg Byrd, Christopher DeRolph, Kitty McCracken, Mark Peterson	49.1 Ecological connectivity and in-kind mitigation: A case study with four-toed salamanders in Tennessee
10:45 am	Nathan Bendik, Matthew Westbrook, Craig Fergus, Blake Sissel, Grant Connette	49.2 Aquatic Salamander Presence Correlates with Groundwater Influence and Stormwater Infrastructure in Austin, Texas.
11:00 am	Dean Hendrickson, Arturo Contreras Arquieta, Cristino Villareal Wislar, Gerardo Ruiz Smith, Elan Iľňaky Laredo Alcalá, Héctor Arocha Garza, Sara Isabel Valenzuela Ceballos, Ana Sofía Pérez, Susana Moncada	49.3 An update on conservation-related developments in Cuatrociénegas, an important desert biodiversity hotspot for both fishes and herps
11:15 am	David Camak, Kyle Piller	49.4 Population Genomics of <i>Ictalurus furcatus</i> and <i>Ictalurus punctatus</i> in an Environmentally Stressed Lake
11:30 am	Nancy Karraker, Rachel Loehman	49.5 Evaluating Slash Piles as Habitat for Threatened Sacramento Mountain Salamanders (<i>Aneides hardii</i>)

1:30 PM – 3:30 PM

Ballroom D

Session 51: Cranial Morphology

Moderator: Patricia Hernandez

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|---------|--|---|
| 1:30 pm | <i>Lindsey DeHaan, Matthew Kolmann, Matt Friedman</i> | 51.1 Ecological and Morphological Diversification of Spiney Eels Across the Paleotropics (Mastacembelus) |
| 1:45 pm | <i>Daniel Paluh</i> | 51.2 Two Microhylid Lineages Re-evolved Tadpole Keratinized Mouthparts in Violation of Dollo's Law of Irreversibility |
| 2:00 pm | <i>Alpha Baldé, Cellou Baldé, Jordan Benjamin, Nick Brandehoff, Jason Folt, Kayla Hinnen, Lise-Bethy Mavoungou, Kylie Miles, Martin Millimouno, John Racy, Ollie Safford, Cara Smith, Adam Summers, Ange-Ghislain Zassi-Boulou, Kate Jackson</i> | 51.3 Venom-delivery system and anatomy of African snakes visualized using DiceCT/ Système venimeuse et anatomie des serpents africains visualisés avec DiceCT |
| 2:15 pm | <i>Emily Collins, Aaron Bauer, Raul Diaz Jr, Alexandra Herrera-Martínez, Esteban Lavilla, Edward Stanley, Monte Thies, Juan Daza</i> | 51.4 A new twist in the evolution of chameleons uncovers an extremely specialized optic morphology |
| 2:30 pm | <i>Lauren Houstoun, Helen Plylar, Alan Savitzky</i> | 51.5 Morphological Comparison of the Limaxivore Contia (Serpentes: Dipsadinae) to Related Taxa Carphophis and Diadophis |
| 2:45 pm | <i>Kassi Price, Richard Hoover, Kassandra Ford</i> | 51.6 Long Face, Weak Jaws? Biomechanical Analysis of Jaw Performance in Mormyridae |
| 3:00 pm | <i>Allyson Evans, Rose Peterson, Nathan Lujan, Guillermo Orti, Patricia Hernandez</i> | 51.7 Species-depauperate gonorynchiforms rival much more speciose clades in cranial diversification |
| 3:15 pm | <i>Shannon Kuznar, James Albert</i> | 51.8 Little River, Big Telencephalon: Correlations of Major Brain Region Sizes with Ecological Traits in Gymnotiformes |

1:30 PM – 3:00 PM

Ballroom C

Session 52: AES Conservation II

Moderator: David Shiffman

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|---------|---|--|
| 1:30 pm | <i>David Shiffman</i> | 52.1 How to use social media to communicate shark science and conservation, and why you should. |
| 1:45 pm | <i>Sonja Fordham</i> | 52.2 Bans on Shark Retention and Finning: Policy Considerations for Scientists |
| 2:00 pm | <i>Taylor Chapple, David Cade, Jeremy Goldbogen, Nick Massett, Nicholas Payne, Alexandra McInturf</i> | 52.3 Behavioral response of megafauna to boat collision measured via animal-borne camera and IMU |
| 2:15 pm | <i>Nicole Phillips, Yaliana Chichaco Rodriguez, Annmarie Fearing, Juan Camilo Cubillos-M., Alejandra Mendoza Pfennig, John Carlson, Demian Chapman, Sara Ulibarri, Fabián Alejandro Velarde García, Adrian Feldman, Helio Quintero, Peter Kyne, Cindy Gonzalez, P. Dias, Ryan Lehman, Bryan Huerta Beltrán, Sarah Toepfer, Matthieu Leray</i> | 52.4 Searching for the elusive Largetooth Sawfish <i>Pristis pristis</i> in the Eastern Pacific Ocean |
| 2:30 pm | <i>Dominic Swift, Eric Anderson, Christopher Hollenbeck, Kevin Feldheim, Ralph Grubbs, Gregg Poulakis, John Carlson, Tonya Wiley, Adam Brame, Andrea Kroetz, Gavin Naylor, David Portnoy</i> | 52.5 Assessing the Recovery of the Smalltooth Sawfish (<i>Pristis pectinata</i>): A Genomic Approach |
| 2:45 pm | <i>Jeremy Vaudo, Pelayo Salinas de Leon, Ryan Logan, Jenifer Suarez-Moncada, Bradley Wetherbee, Mahmood Shivji</i> | 52.6 Sharks in the parks: Use of MPAs by silky sharks, <i>Carcharhinus falciformis</i> , in the Eastern Tropical Pacific |

1:30 PM – 3:45 PM

Ballroom F

Session 53: Biomechanics / Taxonomy

Moderator: Brian Sidlauskas

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|---------|---|--|
| 1:30 pm | <i>Yu Zeng, Christopher Anderson, Stephen Deban</i> | 53.1 Ballistic rapt by tongues in salamanders and chameleons |
| 1:45 pm | <i>Michael Curran, Christopher Anderson</i> | 53.2 Does a chameleon of arboreality conform to typical arboreal chameleon locomotor patterns? |

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2:00 pm	<i>Peter Uetz, Esteban Lavilla, Robert Powell, Glenn Shea, Wolfgang Böhme, Indraneil Das</i>	53.3 What's in a name? Etymologies for all reptiles!
2:15 pm	<i>Christopher Scharpf</i>	53.4 Maylandia or Metriacrima (Cichlidae): Which Name Should Be Used?
2:30 pm	<i>Cristhian Conde-Saldaña, Bruno Melo, George Mattox, Osvaldo Oyakawa, Kevin Torgersen, James Albert, Katherine Bemis, Lynne Parenti, Mônica Toledo-Piza, Claudio Oliveira</i>	53.5 Elucidating Diversity in the Geographically Widespread Genus <i>Hoplerhrynus</i> (Characiformes, Erythrinidae) via Integrative Taxonomy
2:45 pm	<i>Maxwell Bernt, Melanie Stiassny</i>	53.6 A Taxonomic Revision of the African Auchenoglanid Catfishes (Siluriformes), combining Genomic and Morphological Data
3:00 pm	<i>Brian Sidlauskas, Bruno Melo, José Birindelli, Michael Burns, Benjamin Frable, Kendra Hoekzema, Casey Dillman, Mark Sabaj, Claudio Oliveira</i>	53.7 Molecular phylogenetics, a new classification, and a new genus of the Neotropical fish family Anostomidae (Teleostei: Characiformes)
3:15 pm	<i>Thomas Munroe, Sergey Bogorodsky, Tilman Alpermann</i>	53.8 Two New Tongue Soles (Pleuronectodei: Cynoglossidae: Cynoglossus) Endemic to the Red Sea, with Comments on Co-occurring Species of Cynoglossus
3:30 pm	<i>James Albert, Roberto Reis</i>	53.9 Introducing a new book: Ecology and Evolution of Amazonian Fishes

1:30 PM – 3:30 PM

Ballroom G

Session 54: Conservation Ecology and Genetics II

Moderator: Rob Denton

1:30 pm	<i>Benjamin Stegenga, Houston Chandler, Christopher Jenkins</i>	54.1 Long-term Occupancy Monitoring of Eastern Indigo Snakes (<i>Drymarchon couperi</i>) in Southeastern Georgia
1:45 pm	<i>Emily Gray, Sarah Ebert, Carissa Adams, Casey Hitchens, Stacey Wilkinson, Mary Cate Miller, Will Wilkinson, John Holloway, Shane Welch, Jayme Waldron</i>	54.2 The Last of Us: Annual Survival of Mature Female Eastern Diamondback Rattlesnakes (<i>Crotalus adamanteus</i>) on a Coastal Sea Island
2:00 pm	<i>Robert Denton, Matthew Holding, Audrey Owens</i>	54.3 Developing a genetic management plan for the threatened Chiricahua Leopard Frog using genome-wide SNP data
2:15 pm	<i>Anjana Parandhaman, Regina Spranger, Anthony Clemento, Chad Mitcham, Christine Fox, John Carlos Garza, Eric Palkovacs</i>	54.4 Evaluating Genetic Rescue for the Santa Cruz Long Toed Salamander, <i>Ambystoma macrodactylum croceum</i>
2:30 pm	<i>Katherine Greenwald, Taylor Wilson, Shoujie Zeng, Sydney Stanton, Robert Denton, Heather Holmes</i>	54.5 Variation in Skin Secretions of Sexual and Unisexual <i>Ambystoma</i> Salamanders
2:45 pm	<i>Brian Todd, Melissa Riley, Mickey Agha</i>	54.6 Limits to Salinity Tolerance and a Surprising Stronghold for a Declining Freshwater Turtle
3:00 pm	<i>Julia Joos, Cara McElroy, Bryan Windmiller, Emilie Wilder, James Welch, John Berkholtz, Matthew Kamm</i>	54.7 Investigating high predation rates in wood turtles with wildlife cameras and realistic turtle models
3:15 pm	<i>Matt Cross, Megan Seymour</i>	54.8 Repatriating Copperbelly Watersnakes (<i>Nerodia erythrogaster neglecta</i>) into wetlands of Michigan and Ohio.

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