



AMERICAN
ARACHNOLOGICAL SOCIETY

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2023 American Arachnological Society meeting, Ithaca, New York



The annual meeting of the American Arachnology Society will be held on the Cornell University campus in Ithaca, New York from 25 – 29 June 2023. Everyone is welcome! Ithaca is in the gorgeous ‘gorges’ Finger Lakes region of Upstate New York in a scenic rural area with waterfalls and moderate summer temperatures. Meeting hosts are Drs. Linda Rayor of Cornell University and Matthias Foellmer of Adelphi University.

Deadlines to remember:

Abstracts due – 5 June.

Registration – Early bird rates until 5 June; Late Registration until 17 June.

Schedule:

Sunday, 25 June – Late afternoon reception, Optional parasite workshop, Executive Committee Meeting.

Monday, 26 June through Wednesday, 28 June – Oral and Poster Presentations.

Symposia, Wednesday, 28 June – evening banquet (included in registration fee).

Thursday, 29 June – Optional waterfall and hiking tour with lunch.

Keynote Speakers:

Dr. Daiqin Li (National University of Singapore),

Dr. Hannah Wood (Smithsonian - National Museum of Natural History)

Mystery keynote speaker...

Five Symposia:

1. Ecology of arachnid parasites and parasitoids
2. Sensory Ecology
3. Behavior and Machine Learning
4. Evolutionary Trends in the Arachnid Tree of Life
5. Chronobiology

Optional Premeeting Workshop:

Parasites & Parasitoids in Arachnids by Nick Keiser for 2.5 hrs on Sunday afternoon, 25 June.

Space limited to first 30 participants who register.

Housing:

In new dormitories next to a diverse dining hall. Dormitories are a 10 to 15-minute wooded walk across or around a small lake to a staircase to the lecture hall. There are buses from the dorms onto campus and into town. Two hotels with shuttles to campus are in downtown Ithaca.

Meeting Website: <https://www.americanarachnology.org/aas-meetings/aas-meeting-2023/>

Registration Form: bit.ly/aas2023atcornell

Abstract Submission: https://cornell.ca1.qualtrics.com/jfe/form/SV_0DFxqaLJfR09sCW

Contact: aas2023@americanarachnology.org

2023 International Congress of Arachnology Presentation Winners

The 22nd International Congress of Arachnology was held from 5 – 11 March 2023 in Montevideo, Uruguay. The meeting hosts congratulate the student competitors in the oral and poster presentation competition. All students attending the ICA gave outstanding presentations. All regular oral and poster presentations by student researchers were evaluated, although symposia oral presenters were not included in the competition.

In the Taxonomy, Systematic, and Biogeography Category:

The 1st place winner for oral presentations was Benjamin C. Klementz for his presentation, “Mistaken synapomorphy: the evolutionary developmental origins of the patella.”

The 2nd place winner for oral presentations was Nicolás Hazzi for his presentation, “Chasing the wanderer: phylogenomics reveals incomplete convergent morphological evolution associated to habitat shifts in tropical wandering spiders (Araneae, Ctenidae).”

The 1st place winner for poster presentations was Pietro Tardelli Canedo for his poster, “Phylogenetic revision of the Opiliones family Neopilionidae with an UCE phylogeny.”

The 2nd place winner for poster presentations was Damián Hagopían for his poster, “Two new species of *Sarinda* Peckham & Peckham, 1892 with an update on *Sarindini* diversity in Uruguay (Araneae: Salticidae).”

In the Behavior, Ecology, and Morphology Category:

The 1st place winner for oral presentations was Júlia Andrade de Sá for her presentation, “Sicariidae do estado da Bahia (Araneae; Arachnida) com foco no gênero *Loxocles*.”

The 2nd place winner for oral presentations was Nathalia Ximenes for her presentation, “Are chemical defenses and coloration correlated in Gonyleptidae?”

The 1st place winner for poster presentations was Anna Luiza Oliveira Martins for her poster, “Behavioural manipulation of the spider *Leucauge argyra* (Tetragnathidae) induced by the Darwin wasp *Hymenoepimecis pinheirensis* (Ichneumonidae).”

The 2nd place winner for poster presentations was Hiroyuki Nakamura for his poster, “Protein composition of minor ampullate silk makes its properties different from those of major ampullate silk in Araneidae spiders.”

Why become a student member of the AAS?

The cost of education and just living expenses right now are high. So why should you invest your hard-earned money to become a student member of the American Arachnology Society? Especially when you can easily access the journal online? Here is why membership is a good, inexpensive investment in your future:

- AAS invests heavily in supporting graduate and undergraduate students through grants to travel to meetings and to perform research. While you aren’t guaranteed financial support for your research, by becoming a student member of the society you participate in the lottery for future support.
- As a member, you also become an active and engaged participant in a thriving and supportive community of scholars focused on your specialty in arachnids. Find out what is happening and participate. With membership, you become linked to a network of peers and more senior scientists who can share their expertise with you. You can help shape the direction of the society by voting and participating in committees. The society wants to hear from students.
- Attendance at American Arachnology Society meetings are less expensive when you are a member. The discount for members is greater than the cost of the student membership. Every young professional should plan to attend meetings in their field to see what others are working on and to connect with the diversity of other arachnologists. The annual meeting provides valuable settings, both formal and casual, to share your ideas, get feedback on your work, and meet other scientists with whom you might collaborate.
- The cost of an annual student membership in AAS is approximately the cost of 10 lattes. You can afford it and the benefits far outweigh that caffeine buzz.

Student membership is only \$31.20 USD. Now that you are convinced that you should join, you can do so by visiting: <https://www.americanarachnology.org/society/membership/> Remember to also create a membership profile (instructions on that same web page). If you are from a United Nations designated developing nation and cannot afford the cost of membership but wish to become a member, sponsored memberships are available (see that same web page – all the information is there).

All you Need to Know About Spiders



A new book is available about spiders titled *All You Need to Know About Spiders* by Wolfgang Nentwig, Jutta Ansorg, Angelo Bolzern, Holger Frick, Anne-Sarah Ganske, Ambros Hänggi, Christian Kropf, and Anna Stäubli. This text presents basic information about some of our favorite animals and answers questions the general public has about their biology. This richly illustrated text is a great introduction to Araneae for the general public. Sales of the book support the upkeep and maintenance of the World Spider Catalog! This text is available from any online bookseller for \$28 USD or \$7 - \$14 for the e-book edition.

Auto correct tool for spider species

If you write papers that include the scientific names of spiders, you may find the following resource developed by Nate Venarske useful. Nate has developed a spellcheck dictionary for over 2,200 arachnid family, genus, and specific epithets that can be added to Microsoft Word. This tool will remove the red squiggly lines under scientific names and help you catch typos. The tool can be downloaded from <https://www.patreon.com/posts/73349436> Nate welcomes use of this tool and does not require credit or attribution.

Once it is downloaded, it's easy to set up: Open Word → File → Options → Proofing → Custom Dictionaries → click CUSTOM.dic then click New → navigate to downloads and click NASPIDERS.dic → click Yes on the ominous popup box → click OK for Proofing and then OK for Options. If you have Word documents open, you may have to close and reopen them before it starts working.

Nate said that if there is sufficient interest, he will continue to update this resource (adding terminology, names of prominent spider people, and species he missed). Contact Nate directly at natae.venarske@yahoo.com

Justin Schmidt remembrance



Justin Schmidt, author of *Sting of the Wild* and renowned expert in venoms and their effects died February 18, 2023. Justin suffered from Parkinson's Disease.

Justin created the Schmidt sting pain index and was famous for testing the resulting pain of stings of just about every stinging arthropod imaginable. He also studied honey bee biology and served as a research director of the Southwest Biological Institute. His research focused on the chemical and behavioral defenses of ants, wasps, and arachnids. Justin also had the unique honor of sharing a 2015 Ig Nobel Prize in Physiology and Entomology for the development of the Schmidt sting pain index! He received lots of press throughout his life and was an enthusiastic advocate for insects and arachnids.

Justin was also a kind and generous soul. He attended several arachnology meetings and always had a good word and smile for all those he met. In lieu of flowers or cards, please consider supporting The Center for Biological Diversity, <https://www.biologicaldiversity.org/> in Justin's honor. There are diverse ways to support besides donating money. You may also join Tucson Mountains Association <https://www.tucsonmountainsassoc.org/>.

Herb Levi's lab, 1987



During a recent visit to Gainesville, Florida, *American Arachnology* editor (Paula Cushing) visited with colleagues, Jon Reiskind, G.B. Edwards, Mark Stowe, and Ken Prestwich. While enjoying a warm evening in Jon's lovely back yard in Gainesville, he showed Paula the following lab photo from 1987. This photo includes some of the many students who received mentorship and training from Herb Levi. Back row: Fred Coyle, Brent Opell, Sarah Karikó, Jackie Palmer, Herb Levi, Alan Brady, Bill Shear, Jon Coddington, Leticia Aviles; Front row: Bill Eberhard, Mark Stowe, Jon Reiskind, Wayne Maddison.

Interview with Jerry Rovner



Jerry Rovner at AAS meeting, 2014.

My childhood hobby was collecting insects. But when I was 14, a huge jumping spider happened to catch my eye. It was the cover art of a paperback edition of John Crompton's, *The Life of the Spider*. (See it by Googling "life spider Crompton image".) I bought it, read it, and was hooked. Rainer Foelix recently told me that his interest in spiders also began with Crompton's book. Clearly, those who write about science for public consumption play a valuable role, as some of their young readers may then choose a particular career in science.

Serendipity played another role in my life. As a teenager living in Baltimore, I was able to attend meetings of the Natural History Society of Maryland, where I was amazed to find that a room in their headquarters

contained Martin Muma's spider collection. It had served in part as the basis for his book *Common Spiders of Maryland*, which was available for purchase in the building. That book, along with Kaston's *How to Know the Spiders*, enabled me to identify most of the specimens I collected.

After earning my undergraduate degree in zoology at the University of Maryland, I stayed on there for my doctoral degree, specializing in animal behavior. My advisor's research area was acoustic communication in fish. No problem for me. His event recorders and sound spectrograph were available for my use to analyze visual and acoustic communication in wolf spiders. Data collection was done in a lab that I set up in my apartment, where I could work in a quiet environment. My research expanded to include experiments which demonstrated that the onset of courtship behavior does not depend on prior sperm induction, resulting in my first publication, which appeared in *Science*.

I was awarded a 1-year NSF postdoctoral fellowship; and, based on a recommendation from Willis Gertsch during my visit to the AMNH, I spent my postdoc with Rudolf Braun at Johannes Gutenberg University of Mainz. Fortunately, I had studied German in high school. Although English was spoken by everyone at the university, my ability to speak German often served outside the university, especially when my car broke down on the Autobahn (twice!) and when being interrogated by East German border guards at Checkpoint Charlie when I drove into East Berlin to visit Wolfgang Crome at the Humboldt Museum.

Braun provided lab space for my research; and I was able to copy publications from his collection of literature published in European journals. He suggested that I visit the nearby Gonsenheimer Forest, where I decided to conduct a field study using marked male *Linyphia triangularis*. After that, I used palpless males in a lab study of copulatory behavior.

Hired by the Zoology Department at Ohio University in Athens to teach introductory biology and animal behavior, I subsequently was able to offer a course in spider biology. This was made possible by Rainer Foelix's book as a text for lecture material and Kaston's *How to Know the Spiders* for the lab.

During a sabbatical, I had the opportunity to revisit Germany, this time as a guest researcher in the laboratory of Friedrich Barth. He wanted me to investigate courtship behavior in his sensory physiology lab animal *Cupiennius salei*. It turned out that this spider was able to use vibratory communication over long distances through living plants.

In my years at Ohio University my research interests depended on whatever questions popped into my head, rather than my focusing long-term on any one major topic. Subjects included various aspects of maternal behavior, chemical communication, vision, prey capture, copulatory behavior, and flooding survival.

An annual highlight for me was attending the AAS meeting, which I did for 36 consecutive years. We owe a great debt of gratitude to the handful of founders of our society, who made these gatherings possible. Attending some of the CIDA/ISA meetings also provided me with wonderful experiences.

In 1994, I suffered a heart attack while undergoing surgical treatment for a blocked coronary artery. I decided to end my research work (publish *and* perish?) and to take advantage of an early retirement program offered by the university, which involved my having only a one-third teaching load.

How to fill my arachnology void? Serendipity: In 2000, Ken Prestwich, our founding webmaster, asked me to serve as the answer person for the society. This has kept me involved in teaching about arachnology, as many of the inquiries go well beyond the typical “What spider is this?” question.

Sycamore bark as a substrate in live spider settings

By Bruce Cutler, Dept. Ecology & Evolutionary Biology, Univ. Kansas, Lawrence KS, 66045 USA;
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The American Sycamore (*Platanus occidentalis* L.) is a large deciduous tree of the eastern United States. It is characterized by its distinctive fruits, leaves and deciduous peeling bark, Figs. 1 & 2. The bark readily detaches as the tree and its branches increase in girth, and bark may be found surrounding the base of the tree at all seasons, Fig. 3.



Fig. 1. Small street-side sycamore in winter. Lawrence, Kansas.



Fig. 2. Dried leaf of sycamore; coin is 32 mm diameter.



Fig. 3. Base of tree in Fig. 1 showing detached bark ~6cm long with oak leaves. During the warmer growth seasons, pieces up to 25 cm and larger may be found.

The bark is very thin, but is very rigid, brittle and very light weight. It is slightly rough in texture, and the color varies from brown to light greenish gray. Thus, it lends itself to providing both vertical and horizontal substrate fixtures for invertebrates and small vertebrates. I have used it for arboreal theraphosids, *Avicularia avicularia* (L.) and terrestrial spiders, Fig 4. An advantage in vertical usage is that with its very light weight, if it tips over it will not damage specimens. It probably would be useful for genera such as *Drapetisca* (Linyphiidae), the western bark inhabiting amaurobioids, and amblypygids.

Best times to scavenge for bark are after storms or periods of strong winds, there is no need to peel the bark off living trees. If desired, bark may be decontaminated of microfauna (mites, nematodes, etc.) by heating in a microwave oven, or a regular oven. Since the bark is brittle, collect more than is needed as breaking it



Fig. 4. Terrestrial setup in small jar, penultimate *Rabidosa punctulata* (Hentz) Lycosidae on side of bark.

to shape will result in many non-suitable pieces. Because of the natural curvature of the bark, it can be used to create hideouts. For those concerned with displaying critters, the bark has a perfectly “natural” aesthetic appeal.

There are other species and hybrids that have similar properties. *Platanus* spp. are often planted as boulevard trees and ornamentals far outside of their normal range. Cruising side streets and public parks may provide access to detached bark from trees outside of the natural range of species.

The genus *Oecobius* Lucas (Araneae: Oecobiidae) in northwestern Mexico

In *American Arachnology* number 89, we reported on the student research grant recipients. The newsletter editor apologizes for omitting the report of one awardee of the Vincent Roth Fund (VRF) for Systematics Research, Joel Jair Alcántar Valenzuela. Joel is an undergraduate student at Instituto Tecnológico de los Mochis (ITLM) and received funding in support of his project “The genus *Oecobius* Lucas, 1846 (Araneae: Oecobiidae) in northwestern Mexico.” His research report follows:

The present work details the taxonomic status of the genus *Oecobius* Lucas, 1846 in Northwestern Mexico. This genus is the most diverse of the family Oecobiidae, comprising 90 species distributed worldwide. Some species can live in urban environments (for example, in houses or buildings), but more species inhabit wilderness areas (for example, under rocks, wooden bark, between small crevices, and so on). In Mexico, the most exhaustive work was made by Shear (1970), who described several new species, and provided ecological and distributional data. Since then, there was only one publication made by a Mexican researcher who described an additional species from Baja California Peninsula (Jiménez, 2005). Therefore, our plan was to survey the species in Northwestern Mexico. The collection of specimens was made in several localities of Sinaloa and Sonora, and funding from VRF was used mainly for expeditions. Furthermore, we examined specimens of Baja California Peninsula held in the Collection of Arachnids (CARCIB) in Centro de Investigaciones Biológicas del Noroeste S.C. (CIBNOR), Mexico. Until now, we have found: *O. concinnus* Simon, 1893, *O. hoffmannae* Jiménez & Llinas, 2005, *O. isolatoides* Shear, 1970, *O. maculatus* Simon, 1870, *O. navus* Blackwall, 1859, *O. putus* O. Pickard-Cambridge, 1876 and four putative new species from Baja California Sur, Sinaloa, and Sonora. Our following steps include the descriptions of the new species, and the complementary description of *O. isolatoides*. Furthermore, we will acquire the habitus and genitalia images in the following months. We expect to finish the project at the end of the year and complete one manuscript in collaboration con María Luisa Jiménez and David Chamé (CIBNOR).



María, Joel, and David.



Oecobius.