

CURRICULUM VITAE

LINDA SUSAN RAYOR

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<http://blogs.cornell.edu/Rayor>
<https://blogs.cornell.edu/naturalistoutreach>

Visiting Fellow, Australian National University, Canberra, ACT, Australia, 2009 – 2014

PRIMARY EFFORTS:

Teaching exceptional courses emphasizing arachnid biodiversity, science outreach, & social animal behavior.

Research on the behavioral & physiological costs & benefits of group-living in social spiders.

Science Outreach programs & videos for K-12 students, and helping develop programs that train college students and community volunteers how to do quality STEM outreach.

EDUCATIONAL BACKGROUND:

Degrees:

1987. Ph.D. (Systematics & Ecology, specialty Behavioral Ecology) U. of Kansas- Lawrence.
Advisor: Kenneth B. Armitage. Dissertation title: Social dynamics of the Gunnison's prairie dog, with a comparison of the behavior of prairie dog and Columbian and thirteen-lined ground squirrel young.

1978. B.A. (Molecular Biology, Graduation with Distinction). University of Colorado - Boulder.

ACADEMIC POSITIONS HELD:

2007 – current. Senior Lecturer/ Senior Research Associate (50:50), Department of Entomology, Cornell University

2010 – 2014. Adjunct or Visiting Assistant Professor, Research School of Biology, Australian National University.

2005-2007. Senior Research Associate. Department of Entomology, Cornell University.

2001 - 2005. Assistant Professor. Department of Entomology, Cornell University.

1994 - 2000. Instructor. Department of Entomology, Cornell University.

2002, 2004, 2008. Visiting Scholar. School of Botany & Zoology, Australian National Univ.

1996 - 1997. Assistant Professor. Dept. Biology, Hobart & William Smith Colleges, Geneva.

1993. Instructor, Dept. Biology, Ithaca College

1990 - 1992. Postdoctoral Research Associate. Department of Entomology, Univ. of Arizona

1990 – 1992. Academic Director/ Instructor. CIEE/ Monteverde Institute, Monteverde, Costa Rica

1987 - 1989. Postdoctoral Research Assistant. Dept. Biological Sciences, Univ. of Cincinnati.

OTHER PROFESSIONAL DEVELOPMENT:

2014. CALS Effective Interactions in Organizations, 1 day.

AWARDS AND HONORS:

2016. **Distinguished Achievement Award in Teaching from the Entomology Society of America, Eastern Branch.** Award for outstanding teaching and science outreach, one of six contenders for the ESA national teaching award.
2015. **Animal Behavior Society, Penny Bernstein Distinguished Teaching Award.** Teaching award from national and international professional society.
- 2011-current. **Alice Cook House Fellow.** Faculty fellow involved with students & house
2008. **Distinguished Achievement Award in Teaching from the Entomology Society of America, Eastern Branch.** Award for outstanding teaching and outreach, one of 6 contenders for National Award in 2009.
2007. **Innovative Teacher Award, Cornell University, College of Agriculture & Life Sciences.** Award for an individual who has used creative new initiatives to develop an innovative, sustainable teaching program.
2006. **Animal Behavior Society's Distinguished Teaching Award,** finalist.
2005. **Kaplan Family Distinguished Faculty Fellowship in Service-Learning.** Award in recognition for faculty who are having a significant impact on Cornell undergraduate and graduate education by involving their students in challenging service-learning programs.
2002. **Faculty Appreciation Award,** nominee from the Pan-Hellenic Greek System at Cornell University.

TEACHING EXPERIENCE:

CORNELL UNIVERSITY:

Social Animal Behavior: Arthropods to Apes. [Entom 3755, 3 cr.] 24 students. Spring 2018, 2020.
A synthetic comparison of the ecology, evolution, and behavior of social animals from insects to primates.

Spider Biology [Entom 2150, 2 credits]. Taught 21 times. Fall 1994 – 2006, 2008-2011, 2013-14, 2016, 2018.

Enrollment: Average = 35 students, Range = 27 to 82 students.

An introduction to the diversity, behavior, ecology, physiology, and natural history of spiders and other arachnids. Largest arachnology class in the country.

www.blackboard.cornell.edu [Entom 2150/ 3150].

Spider Biology [Entom 3150, 3 credits]. Taught 10 times. Fall 2005-2006, 2008-2011, 2013-2014, 2016, 2018.

Enrollment: Average = 22 students, Range = 17 to 26 students.

An entomology major's course that includes a lab and discussion section;

Naturalist Outreach Practicum. [Entom 3350, 4 credits]. Fall 2005 – 2018.

Enrollment: Average = 20 students, Range = 12 to 25 students. An interdisciplinary experiential course on how to do effective scientific outreach in environmental biology. The course teaches students to communicate science with passion and clarity.

Students in the **Naturalist Outreach Program** provide biology presentations to K-12 classes and community groups. <http://blogs.cornell.edu/naturalistoutreach>.

Insect Behavior [Entom 3250/ NBB 3250, 3 credits]. Spring 2001, 2003, 2005, 2007, 2012,

2015. Enrollment: Average = 27 students, Range = 17 to 37. An introduction to the diversity of insect behavior through lectures, student presentations.

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Spider Biology: Life on a Silken Thread. Cornell Adult University. Summer 2005, 2007, 2013. Enrollment: 4 and 12 students. Age range: 19 to 74, Cornell alumni. One week intensive course in arachnid biology, behavior, and ecology. Instruction in spider identification. Along with lectures, diurnal and nocturnal field trips, extensive hands on laboratories with live and preserved material, videos.

Special Topics Seminar - The Evolution of Parental Care [Entom 497/ NBB 420]. Co-taught with Paul Sherman, NBB. Spring 1993. Enrollment: 14. A critical review of Tim Clutton-Brock's book on parental care in animals.

TEACHING AT OTHER INSTITUTIONS:

Hobart & William Smith Colleges:

Zoology [Biol 120] for majors. Spring 1996, 1997.

Enrollment: Average 22, Range 20– 25. Lecture, intense laboratory.

Conservation Biology [Biol 101] for non-majors. Spring 1996, 1997.

Enrollment: Average 25, Range 24– 26. Lecture, laboratory, discussion.

Ithaca College:

Principles of Biology [Biol 122]. Spring 1993. Three laboratory sections.

Ecology of the Rainforest: Tropical Biology and Conservation Program:

Academic Director and Instructor through the Council on International Educational Exchange (CIEE) and the Monteverde Institute, Costa Rica. Summer 1990, 1991, 1992. Experiential 2-mo field course in Costa Rica on tropical ecology & conservation.

Pima Community College, Tucson, AZ:

Introductory Biology [Biol 102], 1991-1992. Enrollment: ~22 - 25 per class. Non-majors course with lecture & laboratory on organismal diversity, physiology, ecology.

University of Kansas:

Graduate Teaching, 1979 - 1985:

Human Anatomy [Biol 301, 302]: 1979 - 1981, 1985. Dissection and observation laboratories with human cadavers. Assistant Instructor.

Biology of Organisms laboratory [Biol 409]: 1983 - 1984. Plant & Animal anatomy and physiology. Teaching Assistant.

Introductory Biology [Biol 104] 1982. Laboratory course. Teaching Assistant.

SCIENTIFIC OUTREACH PROGRAM:

Naturalist Outreach Program – For 20 years, my informal science outreach program has enhanced science curricula in Central NY schools and increased engagement in science, while simultaneously inspiring a generation of engaged scientists with enthusiasm for scientific outreach as a form of civic engagement. My service-learning program engages Cornell students in the community and provides them with the tools to continue to do STEM teaching through their careers. For 15 years, my Naturalist Outreach course has trained 342 Cornell students how to do effective science outreach and community leadership. <http://blogs.cornell.edu/naturalistoutreach>

My outreach program sends Cornell University undergraduate and graduate students into classrooms and community groups in 7 counties to give free presentations about nature and environmental science. The presentations are lively with a strong hands-on component and an emphasis on how the children can become scientists. Three major target audiences benefit from this outreach effort: Cornell students,

second grade through high school students, and regional teachers. Presentations reach audiences from 8 to 80 years old. **Since 1998, I and my 3342 students have spoken to 2767 groups and reached ~114,300 people** (classroom presentations= 61, 735 people; large outreach events= 52580 people).

Recent surveys of former participants indicate that over 41% have continued outreach in some form and many have entered careers in non-traditional science education. The outreach, training, and ethos of the Naturalist Outreach Program have a multiplying effect well beyond Central NY.

OTHER TEACHING AND OUTREACH ACTIVITIES:

'Improving Undergraduate Education Through Science Outreach', I hosted an NSF-funded 2.5 Day professional development workshop for faculty and college educators from around the USA on how to organize a course in how to do effective scientific outreach, develop an outreach program, and provide guidance on how to host a large community science outreach event. The workshop was instructed by science outreach experts from Cornell University's Naturalist Outreach Program, the Sciencenter, Museum of the Earth, and Cornell Plantations in Ithaca, NY. 10 – 12 October 2015, 25 participants from other universities. [<http://blogs.cornell.edu/outreachworkshop>]

Naturalist Outreach STEM Video Series 2010-2019. With Smith-Lever and NSF funds, I have been producing short scientifically accurate videos that illuminate powerful concepts about nature and biodiversity that are beautiful and engaging. The 36 videos star Naturalist Outreach students. They are produced in collaboration with Carol Jennings and her video production students at Ithaca College at Park Productions. The videos have been entered in Environmental Film Festivals and won awards. [<http://www.youtube.com/naturalistoutreach>]

Insectapalooza 2004 – 2019. Coordinator or Co-coordinator – 2004, 2011, 2012, 2013, 2014. A 1-day Insect Fair highlighting arthropod diversity and research on insects in the Department of Entomology. Insectapalooza has attracted between 1,200 – 3,300 people each year, and continues to grow. Each year, I host one of the highlights of the event, the exceptionally diverse **Arthropod Zoo** with almost 80 different species of live tarantulas, other spiders, insects, and other arthropods. Insectapalooza hosts over 30 different displays or events. Students in my Outreach course are involved to learn how to organize large community outreach events and provide critical evaluations of the event.

Arachnophilia 2019. Exhibit showing at Cornell University's Mann Library Gallery from 24 October 2019 – January 2020 on spider biology, my social spider research, and preparing spiders for the Australian Museum's 'Spiders: From Fear to Fascination' exhibit. Exhibit includes macrophotography, life-like dried spiders, and webs.

Arthropod Museum – 2008 – current. In 2008, I initiated the development of a new Arthropod Museum through the progressive conversion of a teaching lab into a multi-use teaching, outreach, and professional quality museum discovery room. As Chair of the Committee, I have been the active force behind the purchase of professional display cases and creation of dynamic exhibits. Museum displays have been financed by alumni donations, CALS, and the Entomology Department.

Online 'Cybertower' video entitled 'A Romance with Spiders by Linda S. Rayor' - My 1-hour video introduces the biology and behavior of spiders through lecture, videos of live spiders, and still images. [<http://cybertower.cornell.edu> – Study Room]

TEACHING IMPROVEMENT, SCIENCE OUTREACH, & EXTENSION GRANTS:

2017. Specimen collection, content & curation: 'Spiders: Life & Death' touring exhibition. Process and preserve spiders in life-like postures for a traveling exhibit on

spiders that will be touring Canada and the USA. Australia Museum \$17,821

Science consultant for 'Spiders: Alive and Deadly!' exhibit. Adapt the original Australian exhibit to improve science content, storyline, and give the exhibit more of a North American orientation. Australia Museum \$7500.

2016. Finger Lakes Partnership for Regional Invasive Species Management (FL-PRISM). Improving Invasive Species Awareness through Science-based Educational Videos. \$5,000. [Funded, but Cornell University deny due to intellectual property issues]

USDA Smith-Lever - Improving STEM education through videos and science outreach training. Submitted \$90,000. Not funded.

2015. NSF, Directorate for Education And Human Resources. 'Naturalist Outreach Program: Teaching scientific outreach and spreading the ethos of scientific engagement beyond the university.'

Funded. \$220,000, NSF 1240006, 1/2015 – 6/2016. PI – L. Rayor. Collaborators: M. Kortenaar, Sciencenter; R. Ross, PRI; C. Jennings, Ithaca College; B. Lewenstein, Cornell.

2012. NSF, Noyce. Preparing science teachers for inclusive, back-to-nature education. PI – C. Gilbert, L. Rayor, T. Park, Funded \$295,565. [Due to the closing of Education the PI attempted to return the funds, which after a new proposal were redirected to the 2015 Naturalist Outreach funding.]

Organize the 1st Excellence in STEM Teaching by Undergraduates Award and Banquet, 2013.

2013. USDA Smith-Lever – Engaging 4-H students in environmental science and entomology. \$66,000. PI: L. Rayor. Collaborators: Nancy Schaff, Susan Hoskins, Carol Jennings. Funded.

2010. USDA Smith-Lever - Engaging 4-H Students in Science-Inquiry Based Environmental Science and Entomology. \$75,000. PI: L. Rayor, Collaborators: C. Charmichael, B. Schirmer, J. Scott, P. Treadwell.

2008. Cornell University, **Public Service Center**, Faculty Fellows in Service Grant. 'Insectapalooza: Developing a culture of participation'. PI: L. Rayor & J. Scott. \$2000

2005 – 2007. Cornell University, **Public Service Center**, Faculty Fellows in Service Grant. Support for Naturalist Outreach Practicum/ Naturalist Outreach Speakers Bureau development. \$8,000.

RESEARCH GRANTS:

2003. Women's International Science Collaboration, AAAS/ NSF. Social dynamics in an atypical social spider (*Delena cancerides*: Sparassidae). \$5000.

President's Council of Cornell Women, Affinito-Stewart Grant. Social evolution and geographic variation in behavior of an atypical social spider. \$10,000.

1998 - 2002. National Science Foundation, DEB - 97 27547 - Effects of Prey Species and Prey Scarcity on Predatory Wasps. Co-PI with Dr. Nancy Stamp, SUNY-Binghamton. \$80,000. NSF - Research Experience for Undergraduates, \$10,000

1987-1990. National Science Foundation, BSR-8615060. Spatial position and fitness in colonial spiders: Balancing predation risk and foraging success. Co-PI/ Post-Doctoral Assistant with Dr. G.W.Uetz, University of Cincinnati. Mexico. \$154,000

REFEREED PUBLICATIONS: * Undergraduates who have done *research with me*

2017. Jones*, C. & **L.S. Rayor**, 2017. Retreat availability and social influences on retreat sharing in group-living huntsman spiders, *Delena lapidicola* and *Delena cancerides* (Araneae: Sparassidae). *Journal of Arachnology* 45(03): 271-276.

2014: Yip, E.C. & **L.S. Rayor**. 2014. Maternal care and subsocial behavior in spiders. *Biological Reviews*. 89: 427–449. (doi: 10.1111/brv.12060)

2013: Agnarsson, I. & **L.S. Rayor**, 2013. Molecular phylogeny reveals the evolutionary patterns of sociality in Australian endemic Deleninae huntsman spiders (Sparassidae). *Molecular Phylogenetics and Evolution*. 69: 895–905.

Yip, E.C. & **L.S. Rayor**. 2013. The influence of siblings on body condition in a social spider: Is prey sharing cooperation or competition? *Animal Behaviour*. 85:1161-1168

[*Animal Behaviour highlighted paper of the month 'In Focus: Family Values.' by Ed. Michelle Scott. June 2013]

2012: Yip, E.C., D.M. Rowell, & **L.S. Rayor**. 2012. Behavioural and molecular evidence for selective immigration and group regulation in the social huntsman spider, *Delena cancerides* (Araneae: Sparassidae). *Biological Journal of the Linnean Society*. 106: 749–762.

Hoogland, J., J. Cully, **L.S. Rayor**, & J. Fitzgerald. 2012. Conflicting research on the demography, ecology, and social behavior of Gunnison's prairie dogs (*Cynomys gunnisoni*). *Journal of Mammalogy*: 93(4):1075-1085. 2012

2011: Auletta*, A. & **L.S. Rayor**. 2011. Preferential prey sharing among kin not found in the social huntsman spider, *Delena cancerides* (Sparassidae). *J. Arachnology* 39: 258-262.

Yip, E.C. & **L.S. Rayor**. 2011. Do social spiders cooperate in predator defense and foraging without a web? *Behavioral Ecology & Sociobiology* 65: 1935-1947. DOI 10.1007/s00265-011-1203-5

2009: Yip, E.C., S. Clarke*, **L.S. Rayor**. 2009. Aliens among us: Nestmate recognition in the social huntsman spider, *Delena cancerides*. *Insectes Sociaux* 56:223–231 (DOI10.1007/s00040-009-0015-3)

2008: Walsh*, R.E., & **L.S. Rayor**. 2008. Kin discrimination in the amblypygid, *Damon diadema*. *Journal of Arachnology* 36:336 – 343.

2007: **Rayor, L.S.**, L.J. Mooney*, & J.A. Renwick. 2007. The effects of cardenolides in *Pieris napi* caterpillars on the predatory behavior of *Polistes dominulus* wasps. *Journal of Chemical Ecology*. 33: 1177- 1185. DOI 10.1007/s10886-007-9283-4

Rayor, L.S.. 2007. Family Ties: Unexpected social behavior in an improbable arachnid, the whip spiders. *Natural History Magazine*. 116: 38-44.

2006: **Rayor, L.S.** & Taylor, L*. 2006. Social behavior in amblypygids, and a reassessment of arachnid social patterns. *Journal of Arachnology* 34: 399-421.

2004: **Rayor, L.S.** 2004. Effects of monarch larval host plant chemistry and body size on *Polistes*

wasp predation. Pp. 39- 46. In: Oberhauser, K.S. & Solensky, M.J. (eds), The Monarch Butterfly: Biology and Conservation. Cornell University Press, Ithaca NY.

- 2002: Rayor, L.S.** & S. Munson*. 2002. Larval feeding experience influences adult generalist predators to accept chemically defended prey. *Entomologia Experimentalis et Applicata* 104: 193-201.
- 2000:** Eigenbrode, S.D., **L. Rayor**, J. Chow*, & P. Latty*. 2000. Effects of waxbloom variation in *Brassica oleracea* on foraging by a vespid wasp. *Entomologia Experimentalis et Applicata* 97:161-166.
- Rayor, L.S.** & G.W. Uetz. 2000. Age-related sequential web-building as an adaptive spacing strategy in the colonial spider *Metepeira incrassata* (Araneidae). *Animal Behaviour* 59:1251-1259.
- 1999:** Losey, J.E, **L.S. Rayor**, & M.E. Carter. 1999. Transgenic pollen harms monarch larvae. *Nature*. 399:214.
- 1996: Rayor, L.S.** 1996. Attack strategies of predatory wasps (Hymenoptera: Pompilidae, Sphecidae) on colonial web-building spiders (Araneidae: *Metepeira incrassata*). *Journal of the Kansas Entomological Society* 69:67-75
- 1993: Rayor, L.S.** & G.W. Uetz, 1993. Ontogenetic shifts within the selfish herd: predation risk and foraging tradeoffs change with age in colonial web-building spiders. *Oecologia* 95:1-8.
- 1991: Rayor, L.S.** & K.B. Armitage, 1991. Social behavior and space-use of young ground-dwelling squirrel species with different levels of sociality. *Ethology, Ecology & Evolution* 3:185-205.
- 1990: Rayor, L.S.** & G.W. Uetz, 1990. Trade-offs in foraging success and predation risk with spatial position in colonial spiders. *Behavioral Ecology & Sociobiology* 27:77-85.
- 1988: Rayor, L.S.** 1988. Social organization and space-use in the Gunnison's prairie dog (*Cynomys gunnisoni*). *Behavioral Ecology & Sociobiology* 22:69-78.
- 1987: Rayor, L.S.**, A.K. Brody, & C. Gilbert, 1987. Hibernation in Gunnison's prairie dog. *Journal of Mammalogy* 68:147-150.
- 1985: Rayor, L.S.** 1985. The effect of habitat quality on growth, age of first reproduction and dispersal in Gunnison's prairie dog (*Cynomys gunnisoni*). *Canadian Journal of Zoology* 63:2835-2840.
- Gilbert, C. & **L.S. Rayor**, 1985. Predatory behavior of spitting spiders (Araneae: Scytodidae) and the evolution of prey wrapping. *Journal of Arachnology* 13:231-241.
- Rayor, L.S.** 1985. Dynamics of a plague outbreak in Gunnison's prairie dog. *Journal of Mammalogy* 66:194-196.
- 1983:** Gilbert, C. & **L.S. Rayor**, 1983. First record of mantisfly (Neuroptera: Mantispidae) parasitizing a spitting spider (Scytodidae). *J. Kansas Entomological Society* 56:578-580.
- 1978: Rayor, L.S.** & D. Chiszar, 1978. Comparability of dominance indices in captive pigtail macaques (*Macaca nemestrina*). *Bull. Psychonomic Society* 12:468-470.

RESEARCH PAPERS IN PREPARATION:

Cardillo, M. & **LS. Rayor**. High energy eggs and low metabolism provide the physiological basis for sociality in huntsman spiders. [Letter to editor prior to formal submission; Current Biology]

Rayor, L.S., E.C Yip, D.M. Rowell. Retreat availability constrains sociality in the social huntsman spider, *Delena cancerides*. (Submit Animal Behaviour, in prep)

Hurst, J. & **LS. Rayor**, 2019. Effects of changes in sexual size dimorphism at maturity on running speed in the cursorial huntsman spider, *Delena cancerides* (Sparassidae). (Functional Ecology,)

Rayor, L.S, M. Cardillo, C. LaRow, E. Murray, A. Zimmerman* & C. Gilbert. Depressed metabolic rate as an adaptation for group living in social carnivores. (Nature)

LaRow, C. & L.S. Rayor. Response to food limitation in social and solitary huntsman spiders: Applications of the depressed metabolic rate hypothesis. (J. Comp. Physiology)

Rayor, L.S., C. Gilbert, D. Yeates, & J. Rodriguez, 2017. Egg Sac Parasitoids (Chloropidae: Diptera; Mantispidae: Neuroptera) and predators (Pompilidae: Hymenoptera) on Australasian Huntsman Spiders (Sparassidae): Impacts on Spider Populations Over Time. Revising for submission to another journal.

NON-REFEREED PUBLICATIONS:

Articles:

Rayor, L.S. 2018. Huntsman spider biology: life-history, reproduction, and husbandry. Terrestrial Invertebrate Taxon Advisory Group's (TITAG) Invertebrates in Education and Conservation (IECC) 2018 Conference Proceedings. <http://titag.org/2018/2018papers/rayorhuntsman.pdf>
<http://titag.org/2018/iecc2018papers.html>

Rayor, L.S. 2016. Hidden housemates: Australia's huge and hairy huntsman spiders. The Conversation. <https://theconversation.com/hidden-housemates-australias-huge-and-huntsman-spiders-55017>. Viewed 538,199 times between April 2016 – April 2019.

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Rayor, L.S. 2011. Beneficial spiders in the garden. Fine Gardening Magazine 137:78.

Rayor, L.S. 2007. Naturalist outreach practicum: inspiring a new generation of civically engaged biological outreach leaders. In: P. Horrigan (ed), Extending our reach: Voices of Service Learning at Cornell. Faculty Fellows in Service, Cornell University Pp. 49-53.

Hamm, R.L. & **L.S. Rayor**. 2007. Insectapalooza: practical suggestions for pulling off a large entomology outreach event. American Entomologist, 53:12-14.

Rayor, L.S & C. Gilbert. 2007. Common Spiders of New York. New York State Conservationist. 61:15-18. [Special pullout widely distributed by the NYS Department of Environmental Conservation (DEC)]

Book Review:

2012: Rayor, L.S. 2012. Book Review: Spider Behaviour: Flexibility and Versatility. Edited by Marie E. Herberstein. Cambridge: Cambridge University Press (2011). Pp. xii+391. \$55.00 paperback. *Animal Behaviour* 84: 289-290.
<http://dx.doi.org/10.1016/j.anbehav.2012.04.004>

TEACHING AND OUTREACH WEBSITES:

Naturalist Outreach Program – <http://blogs.cornell.edu/naturalistoutreach>

The website allows online request for presentations, introduces speakers, and provides materials for use with the presentations or videos, such as worksheets, educational games, and resource guides to the presentations.

Facebook - <https://www.facebook.com/naturalistoutreach>

Dr. Linda Rayor's Naturalist Outreach STEM video series:

YouTube 'naturalistoutreach' channel (<http://www.youtube.com/naturalistoutreach>).

Supported by two USDA Smith-Lever grants (2010, 2013) and NSF-DOE (2015).
Starring Cornell University's, Naturalist Outreach students. 36 videos
Videos **viewed over a million times (1.94 million times, 4,300 subscribers)**

In reverse chronological order of production and Cornell student who starred in video:

Plant Defenses: How Plants Avoid Being Eaten – In final sound production
Hannah Fuller, Doga Tekin
https://drive.google.com/file/d/1o2B3zcBMykbhJXknVCc_JRAP-qAmkJBw/view

Hydrilla Hazard: Biology, Impacts, and Management of An Invasive Plant
<https://youtu.be/syyl039vAZA>

Beaks: Bird Feeding Adaptations (Short) Sarah MacLean
<https://youtu.be/i1BCehbUsTQ>

Aquatic Insects in Food Webs Lindsay Glasner & Hope Batchellor
<https://youtu.be/h0ir6RBUuJA>

Snakes! Behavior, Feeding, & Diversity (Short) Morgan Shelton
<https://youtu.be/OCY8ESYNVXI>

Snakes! Behavior, Feeding, & Diversity Morgan Shelton
<https://youtu.be/UzV2GHsMBQw>

Arthropod Predators: Nature's Defenders (Short) Ben Lee & Cameron Jones
<https://youtu.be/oOdH9S3CFnc>

Insect Phylogeny: Understanding Evolutionary Relationships Kyle DeMarr
<https://youtu.be/F-iz30aKtqg>

Eight-legged Diversity: Spiders and Their Kin Linda S. Rayor

https://youtu.be/_kHSPzYhE1c

Insect Evolution

<https://youtu.be/yqF9hYn5MnA>

Kyle DeMarr

Animal Architecture

<https://youtu.be/7Sc2sOIXhOc>

Sarah Gonzalez

Arthropod Predators

<https://youtu.be/CgMo-DWc8xU>

Cameron Jones & Ben Lee

Why I love birding!

<https://youtu.be/AqQN9GR2tRM>

Ben Barkley

Pollination: Trading Food for Fertilization

<https://youtu.be/LiczM-w3V-U>

Mia Park

- 3rd place winner at the Animal Behavior Society film competition, Anchorage.

Pollination: Trading Fertilization for Food in 3 min

<https://youtu.be/Lu7AjOvznh8>

Mia Park

- One of five finalists for the Entomology Society of America 'Youtube your entomology' competition.

Winter Adaptations

<https://youtu.be/NK058-HUK24>

Sarah Armour

Winter Adaptations in 3 min

<https://youtu.be/vfcrxLk6QSs>

Amphibians: Diversity and Behavior

<http://youtu.be/U2gz2ke8kik>

Brian Worthington & Audrey Bowe

Aquatic Insects

<http://youtu.be/-qSNXRxJWTc>

Hope Batchellor & Lindsay Glasner

Bird Migration

<http://youtu.be/CwIT9pv4khw>

Kathryn Grabenstein

Carnivorous plants

<http://youtu.be/-iHIKhKCg6E>

Evan Barrientos

Insect Sounds: Nature's Orchestra

<http://youtu.be/FEHbY-ZkzVo>

Susan Villarreal & Mariah Slone

Bird Feeding Adaptations: How Beaks are Adapted to What Birds Eat Sarah McLean

<http://youtu.be/IFZ8NMBDCJw>

3rd place winner at Animal Behavior Society Film Festival competition 2014.

2nd place winner in the Student Instructional/ Educational video category at the 2014 Broadcast Educational Association Annual Festival of Media Arts for the Ithaca College student editors (Zach Briggs, Dan Doran, David Lillienstein, and Dan Masciari) working for Park Media Lab.

Viewed 73,100 times

Beavers, Wetlands, and Keystone Species Vinny Nguyen & Gabriella DiGiovanni

<http://youtu.be/N2MemfwGFu4>

Biodiversity in the tropics
<http://youtu.be/gyAd65nxRu8>

Martin Zorrilla

Oh, Deer! White-tailed Deer Biology
<http://youtu.be/q4UjWTNeTdU>

Caitlin Etri & Gabriella Roman

White-tailed Deer Gone Wild!
<http://youtu.be/qcW9RXPm0Y>

Gabriella Roman & Caitlin Etri

INVITED PRESENTATIONS ON HOW TO DEVELOP SCIENCE OUTREACH SIMILAR TO THE NATURALIST OUTREACH PROGRAM:

2018. Keynote speaker, Invertebrates in Education and Conservation Conference.

2017. National University of Singapore, Singapore. Improving Education Through Science Outreach.

Singapore National Parks, Singapore. Why is doing informal science outreach good for presenters?

2016. NSF – NOYCES meeting. Enhancing STEM Curricula and Engaging More Students To Go Into Teaching In Urban Environments Through Science Outreach. 1 hr presentation.

NSF – NOYCES meeting. Naturalist Outreach Program: Engaging future STEM teachers through science outreach and civic engagement. (poster).

2015. NSF-Sponsored Professional Development Workshop 'Improving Undergraduate Education Through Science Outreach'. Organizer and Speaker. 2.5 days.

SENCER (Science Education for New Civic Engagements and Responsibilities) Summer Institute, Worcester, MA. Naturalist Outreach Program: Improving Undergraduate Education Through Science Outreach and Civic Engagement. 1-hr oral presentation, and poster.

2015. Binghamton University, Binghamton, NY. Approaches for improving undergraduate education through science outreach programs.

2014. Pennsylvania State University, Entomology. Naturalist Outreach Program: Teaching scientific outreach and spreading the ethos of scientific engagement beyond the university.

University of Nebraska, Entomology. Naturalist Outreach Program: Teaching scientific outreach and spreading the ethos of scientific engagement beyond the university.

Australian National University, Australian National Centre for the Public Awareness of Science. Naturalist Outreach Program: Teaching scientific outreach and spreading the ethos of scientific engagement beyond the university. the

Terra Science & Education conference on Urban Education. Panelist on 'Motivation Toward STEM' and second panel on 'Early STEM Engagement', with two 20-min talks.

2013. Entomology Society of America – Austin, TX. Naturalist Outreach Program: Integrating science and outreach to train civically engaged leaders. Symposium Speaker.

2009. University of Minnesota & Bell Museum of Natural History on developing an outreach program similar to my Naturalist Outreach Speakers Bureau;

2005. Smithsonian Institute National Museum of Natural History, Washington DC. Train Insect Zoo docents in effective scientific outreach, spider biology;

INVITED RESEARCH SEMINARS – Total n = 63 since 1988

2019. Carnegie Science, Carnegie Mini-Symposium on Biological Interactions, Baltimore, MD. Costs and benefits of group-living in social huntsman spiders. 1 of 7 invited guest speakers.

University of California, Riverside. Social huntsman spiders. Graduate student invited speaker.

Hofstra University, NY. Physiological basis of sociality.

2017. National University of Singapore, Singapore.
University of Canterbury, New Zealand.

Entomology Society of America. Physiological and behavioral adaptations for group-living in prolonged subsocial huntsman spiders (Sparassidae) . With M. Cardillo, E. Murray, & C. Gilbert. Symposium on Behavioral and Physiological Correlates with Sociality.

2015. Universidade Federal de Uberlândia, Uberlandia, Brazil. Social spider behavioral ecology.
Plenary Speaker

Departamento de Ecologia da Universidade de São Paulo, São Paulo, Brazil. Costs and benefits of group-living in spiders.

Binghamton University, Binghamton, NY. Costs and Benefits of Group-Living in Spiders.

2014. Western Australia Museum, Perth, Australia. Adaptations for living with cannibals: Evolution of sociality in Australian huntsman spiders.

University of Sydney, Sydney, AU

Macquarie University, Sydney, AU

Melbourne Museum, Melbourne, AU

2012. Binghamton University, Evo-devo program

2010. University of Arizona, Tucson;
Arizona State University, Phoenix;
Cornell University, Entom.

2009. Ithaca College, Ithaca;
Univ. of Minnesota, Minneapolis;
Univ. Massachusetts, Amherst

2008. University of Western Australia, Perth, Australia;
Australian National University, Canberra, AU

2007. Susquehanna University, PA;
Washington DC Entomology Society, Washington DC.

2006. Western Australia Museum, Perth, Australia.

2005. Smithsonian Institution National Museum of Natural History.

2004. Brock University, Canada;
Australian National University, Canberra, ACT;

Cornell University, Ithaca, NY.
Neurobiology & Behavior; Cornell University,
NYS Agricultural Experiment Station;

2002. Australian National University, Canberra, ACT, AU;
Univ. of Melbourne, Melbourne, VIC, AU

**RECENT RESEARCH PRESENTATIONS AT SCIENTIFIC MEETINGS –
Total n = 68 since 1980:**

2019. Trait-mapping sociality and life-history adaptations in social and solitary huntsman spiders. With Jacob Gorneau, Corrie Moreau. Animal Behavior Society, Chicago.

2017. Retreat availability influences the social dynamics of the prolonged subsocial huntsman spiders. Entomology Society of America, Denver. Poster.

Generalist assassin bug *Platymeris biguttatus* (Reduviidae) targets nervous system escape circuitry of its cockroach prey and supports the “locomotor ganglia hypothesis” developed for specialist wasp predators. Presented by C. Gilbert, K. Lea, A. Dunn.

2016. How habitat and retreat limitation influence sociality in prolonged subsocial huntsman spiders. In Symposium on ‘Frontiers in Arachnid Sociality: Habitat Influences’ at International Congress of Arachnology, Denver.

The physiological basis for delayed development in social huntsman spiders: Impacts on sociality. Marissa Cardillo & L.S. Rayor, poster. International Congress of Arachnology, Denver.

2015. Social biology and habitat preferences of a group-living rock-dwelling huntsman spider, *Delena lapidicola* (Sparassidae: Deleninae). Animal Behavior Society, Alaska.

Testing the parameters of sociality: The influence of kinship and age-sex class on rock sharing in a new social huntsman spider. Cameron Jones & L.S. Rayor, oral. Animal Behavior Society, Alaska

Physiological bases of developmental differences between social and solitary spiders. Marissa Cardillo & L.S. Rayor, oral. Animal Behavior Society, Alaska

2014. Evolution of sociality in the prolonged subsocial huntsman spiders of Australia. SINNERS (Social Insects of the NE Region) conference, Cornell University.

2014. Evolution of sociality in the prolonged subsocial huntsman spiders of Australia. SINNERS (Social Insects of the NE Region) conference, Cornell University.

2014. Evolution of sociality in the prolonged subsocial huntsman spiders. International Society for Behavioral Ecology, NY, invited speaker in symposium on Subsocial Arthropods.

Colony inheritance and fights to the death among sisters in a prolonged subsocial spider. International Society for Behavioral Ecology, NY. With Mari West.

2013. Social evolution in the huntsman spiders. International Congress of Arachnology, Taiwan

What's sex got to do with it? Running speed, allometry, sexual development, and performance in huntsman spiders. Jacob Hurst* (CPRS) and L.S. Rayor. International Congress of Arachnology, Taiwan.

Depressed metabolic rates in social spiders? A test with social and solitary spiders from Sparassidae and Eresidae. Marissa Cardillo* and L. S. Rayor. International Congress of Arachnology, Taiwan.

Linda Rayor's Naturalist Outreach Program: Integrating science and outreach to train civically engaged leaders. Entomological Society of America, Austin, TX.

2011. What changes with evolution of sociality? A comparative study in social & solitary huntsman spiders. Animal Behavior Society, Indiana University. Poster.

2010. Costs of group-living in social and solitary huntsman spiders: a comparison of mother-offspring dynamics, prey capture, development, and metabolism in Australian huntsman spiders. 18th International Congress of Arachnology, Poland.

2008. Adaptations for living with cannibals: a comparison of mother-offspring dynamics, prey sharing, and metabolism in social and solitary Australian huntsman spiders. International Society for Behavioral Ecology, Cornell. (with A.F. Zimmerman*)

2007. Costs and benefits of group-living in social and solitary huntsman spiders. Entomology Society of America, San Diego. Rayor, L.S. & A.F. Zimmerman*

Social behavior in amblypygids, and a reassessment of social patterns in the non-spider arachnids. In Symposium: Parental Care and Sociality in the Lesser Arachnids. 17th International Congress of Arachnology, Brazil. Rayor, L.S. (with R.E. Walsh*, L. A. Taylor*, A. Auletta*, J. DeNicola*. Symposium organized by L. Rayor)

Costs of group-living in social and solitary huntsman spiders: a comparison of mother - offspring dynamics, prey capture, development, and metabolism in Australian huntsman spiders. 17th International Congress of Arachnology, Brazil. w/ Zimmerman*

Size specific resting metabolic rates and colony demographics set threshold prey requirements of colonies and populations of social huntsman spiders, *Delena cancerides*. 17th Inter. Congress of Arachnology, Brazil.

Gilbert, C., L.S. Rayor, A.F. Zimmerman*, & E.C. Yip – poster

Colony identity in a social spider? Does *Delena cancerides* (Sparassidae) use chemical cues to distinguish kin from non-kin? 17th International Congress of Arachnology, Brazil. M. A. Avery* & L.S. Rayor – poster.

2005. Relationships between nest site ecology and colony demographics in the social huntsman spider, *Delena cancerides*. American Arachnology Society.

Aliens among us: Colony identity in a social huntsman spider, *Delena cancerides*. American Arachnology Society. (With Eric Yip, Shannon Clarke)

What changes with sociality? A comparison of mother-offspring dynamics, prey capture, cannibalism, and dispersal in social and solitary huntsman spiders. Animal Behavior Society.

2004. Living among cannibals: Costs and benefits of group living in an unusual social huntsman

- spider. Animal Behavior Society, Mexico. (With R. Walsh*, L. Cahoon*, A. Pfeffer*, D. Rowell)
- Ménage a Trois and More: Consequences of Sociality on Courtship and Mating Patterns in An Unusual Huntsman Spider. Animal Behavior Society, Mexico. (With R. Walsh*, L. Cahoon*, N. Smith*)
- Living among cannibals: Costs and benefits of group living in an unusual social huntsman spider. International Congress on Arachnology, Belgium. (With R. Walsh*, L. Cahoon*, A. Pfeffer*, D. Rowell)
- Social behavior, aggregation, and kin recognition in the amblypygid *Damon diadema* International Congress on Arachnology, Belgium. (With Rachel Walsh*, Pete Otovic*)
- Influencing the next generation of arachnologists: Spider Outreach Program – Eight-legged Ambassadors for Science Education. Inter. Congress on Arachnology, Belgium.
- 2003.** Social dynamics in an atypical social spider, *Delena cancerides* (Sparassidae). American Arachnology. (With A. Pfeffer*, R. Walsh*, D. Rowell)
- The Role of the Whip in Social, Predatory, and Investigative Behavior in an Amblypygid (*Damon diadema*: Phrynichidae). American Arachnology Society. (Poster with R. Walsh*, P. Otovic*)

RECENT INVITED OUTREACH PRESENTATIONS SINCE 2000 (excluding guest lectures or research presentations) – Total n = 64 since 2000:

- 2018.** Professors and Pints, Washington DC. 50 Shades of Arachnids: A Romance with Spiders.
- 2017.** Singapore National Parks. 50 Shades of Arachnids: A Romance with Spiders.
- 2016.** Dryden Community. 50 Shades of Arachnids: A Romance with Spiders.
- 2015.** Continuing Education Seminar Series, Cornell Univ. 50 Shades of Arachnids: A Romance with Spiders.
Science Café, Rockville, MD. 50 Shades of Arachnids: A Romance with Spiders.
Cornell Alumni Club, Denver, CO. 50 Shades of Arachnids: A Romance with Spiders.
- 2014.** Gundabooka National Park, Bourke, NSW, Australia. Spiders & Australian huntsman spiders. Australian National University. Spider biology.
Cornell Adult University, Spider walks (2x)
- 2013.** Cornell University Wind Symphony. Introduce spiders and web construction associated with original musical composition 'Cosmosis' about the first spider in space.
NYS Fair – 2x
CAU Lab tours and spider walk
- 2012.** Science Cabaret, Ithaca
SUNY, Orange County
STARR – 4-H State Teen Action Reps Retreat, NYS Fairgrounds;
NYS Fair
Practices that sustain us: multi-faith Thanksgiving Festival
- 2011.** STARR – 4-H State Teen Action Reps Retreat, NYS Fairgrounds;
Take a Child to Work, Cornell University;
4-H Youth Building NYS Fair, Fairgrounds.
Cornell Wellness Program, Destination Walk touring my lab
Alice Cook House, Monster Bug Wars

- 2010.** 2010 NYSACCE 4-HE/ New York State 4-H Conference, Hamilton, NY;
Master Naturalist Class, Arnot Forest, NY;
4-H Career Explorations, Cornell University;
Career Days, Ithaca High School
- 2009.** Café Scientific, Minneapolis, MN;
Cornell Institute of Biology Teachers.
- 2008.** Questacon Science & Technology Centre, Canberra, Australia;
Mount Majura Nature Talks in Canberra;
Tompkins County Area Development annual meeting, Ithaca;
Alumni Reunion Speaker, Cornell University;
Ulysses Public Library;
Guild of National Scientific Illustrators' Conference
- 2007.** NY State Legislature Education Committee hearing about outreach programs at Cornell.
Master Gardeners Conference, NY;
Entomology Society of America – Invited Symposium on outreach;
1st Year and Transfer Students and Parents Weekend;
CALs Cornell Presidential Research Scholars
- 2006.** SUNY-Geneseo, Geneseo, NY. Keynote speaker to celebrate the opening of a new science building;
Trustees Council, Cornell University, Ithaca;
Questacon Science Centre, Canberra, Australia;
Faculty Fellow in Service Symposium, Cornell University;
Kendall Retirement Center, Ithaca;
Life Long Learning, Ithaca;
Fingerlakes Land Trust;
Cornell Adult University, Ithaca.
- 2005.** Cornell Alumni Speaker, New Hampshire & Rhode Island;
Museum of the Earth, Ithaca;
Meet a Scientist, Dryden H.S.
- 2004.** Cornell Plantation Lecture Series;
International Congress on Arachnology, Belgium;
Cornell Scientific Inquiry Program, Cornell University.
- 2003.** Faculty-Fellows-in-Service Symposium on Service-Learning, Cornell University;
Dryden High School, Meet a Scientist;
Trumansburg Elementary School, speak to PTO;
Cornell Alumni Federation Speaker Series Syracuse.
- 2002.** Master Gardeners National Conference, Keynote Speaker. The beneficial allure of spiders in the garden;
Cornell Institute of Biology Teachers
- 2001.** Cornell Alumni Cortland Women's Club;
Cornell Alumni Federation Speaker Series, Cornell Alumni in NYS and CALs Alumni Forum on Campus;
Cornell Institute for Biology Teachers - Elementary Workshop.
- 2000.** Cornell Alumni Federation Speaker Series - Alabama, Kentucky, Washington, and Alaska;

Cornell Institute for Biology Teachers - Elementary Workshop;
Cornell Institute for Biology Teachers - Keynote speaker for 'Fall Return to Campus' with teachers and H.S. students.

GUEST LECTURES IN FORMAL COURSES:

- 2018.** Science Communication Workshop. [Comm 5660]
- 2017.** Animal Behavior. On social spiders. University of Christchurch, New Zealand.
- 2016.** Science Communication Workshop. [Comm 5660]
- 2015.** Alien Empire, Cornell University
Biology Scholars Program, A career in Biology, Cornell University
Biology Open House
- 2014.** Insect Biology, Cornell University
Introductory Field Biology [NTRES 2100]
Alien Empire, Cornell University
Invertebrate Zoology, Australian National University
- 2013.** Science Communication Workshop Comm 5660.
Graduate Core Course in Entomology [Gilbert, Entom 7670]
- 2012.** Alien Empire (2x), Graduate Core Course in Entomology [Ping, Entom 7670]
- 2012.** Alien Empire (2x), Graduate Core Course in Entomology [Ping, Entom 7670]
- 2011.** Graduate Core Course in Entomology [Soderlund, Entom 7670]
- 2010.** Science Communication Workshop. Comm 5660;
Alien Empire (2X) – Cornell
- 2009.** Science Communication Workshop. Comm 5660;
Graduate Core Course in Entomology [Thayler, Entom 7670];
Alien Empire – Ithaca College.
- 2008.** Graduate Core Course in Entomology. [Entom 7670]
- 2007.** My career path in science. BioGD 400;
Graduate Core Course in Entomology. [Entom 7670]
- 2005.** Herbivores & Plants [Entom 452]. Effects of sequestration on insect predators.
- 2003.** Mind and Memory [English/ Theatre/ Soc.Humanities 301] Creativity in research.
Herbivores & Plants [Entom 452]. Effects of sequestration on insect predators.
- 2002.** Austr. Nat. Univ., Behavioural Ecology. 2 lectures - Sexual cannibalism, Sociality in invertebrates.
The future is here sooner than you think [Southard, BioGD 400]. My career path in sci.
- 2001.** Entomology 767. Graduate Core Course in Entomology. [Entom 767]
Introduction to Nontraditional Companion and Laboratory Animals.Veterinary School
[VTMed 633] Lecture on tarantula biology, maintenance, and medical care.

Science writing for mass media. [Comm 352] Interviewed about spider research.

Biology of the Neotropics [BioEE 405] Lecture on Pollination ecology & seed dispersal.

GRADUATE STUDENT COMMITTEES:

2013 - 2015. **Marissa Cardillo**. Master's degree. Major advisor.

2005 – 2012. **Eric Chun-Nam Yip**, Entomology, Ph.D. candidate. Major advisor.
Topic: Immigration and dispersal in a social spider, *Delena cancerides*.
NSF-GRFP, Fulbright.

2011 – 2016. **Kristen Hook**, Neurobiology & Behavior, Ph.D. candidate. Minor advisor

SUMMARY OF UNDERGRADUATE RESEARCH & TEACHING ASSISTANTS TRAINED:

N = 52 undergraduate research assistants since 1992

N = 14 undergraduate Honors Theses directed since 1995

N = 42 undergraduate teaching assistants since 1994

N = 24 undergraduate advisees since 1994

Summary of Undergraduate Honors Theses Directed, Student Awards, Current Career:

Joseph Giulian (2017 – 2020) – Personality differences and running speed in spiders.

Cameron Jones (2014 – 2015) - Contrasts in aggregation patterns in social huntsman spiders
(*Delena lapidicola* and *D. cancerides*)
PhD, Graduate school, University of California - Davis

Mari West (2011 – 2014) – Colony inheritance and fights to the death among sisters in a prolonged subsocial spider
Present research at International Society for Behavioral Ecology, 2014
Publishable paper from her research. Graduate school, Univ. Calif – Riverside.

Jacob Hurst (2010 – 2013) – Running speed in huntsman spiders.
Sophomore CPRS.
Present oral and poster at the International Congress of Arachnology in Taiwan, 2013.
Should be two publishable papers from his thesis.

Marissa Cardillo (2011 – 2013) – Metabolic rate in social and solitary Eresid and Sparassid spiders.
Paul Schreur Memorial Award for Research Excellence,
Noyce Undergraduate Teachers Award.
Master's degree, Cornell University. M.D. Columbia University. Pediatrics.
One publishable paper from thesis.
Present oral presentation at the Inter. Congress of Arachnology Taiwan. Where she won 1st prize for student oral presentations.

Carolyn LaRow (2010 – 2011) – Metabolic rate and food limitation in huntsman spiders.
Hughes scholar.
Current job: Environ (environmental assessment)
Publication in preparation.

- Anthony Auletta** (2006 – 2011) – Prey sharing in social spiders: Kin recognition and sharing patterns.
Paul Schreur Memorial Award for Research Excellence.
Master Degree, Western Carolina State.
Ph.D – University of Minnesota. Research on spiders.
Auletta, A. & L.S. Rayor. 2011. Preferential prey sharing among kin not found in the social huntsman spider, *Delena cancerides* (Sparassidae). J. Arachnology 39: 258-262.
One more publication in active preparation.
- Mike Avery** (2005 – 2007) – Investigations into colony identity in a social spider: Does *Delena cancerides* utilize chemical cues to distinguish between kin and non-kin?
Honors, Hughes Scholar
Attend American Arachnology meetings, Baltimore.
Ph.D., Pennsylvania State University. Research on spiders. Vet Degree.
- Ariel Zimmerman** (2004 – 2007) - Assessing the costs of group living: Comparing metabolic physiology and growth in social and solitary spiders.
Honors. 25 Most Outstanding Seniors.
NSF – GRFP (prior to starting graduate school from undergrad project)
Masters degree, University Florida,
Teach HS science. Currently on staff of 'Science Friday'.
- Rachel Walsh** (2002 – 2005) - Social Dynamics in a Whip Spider (Order Amblypygi, Family Phrynichidae: *Damon diadema*) and an Unusual Huntsman Spider (Sparassidae: *Delena cancerides*).
Honors,
NSF – GRFP (prior to starting graduate school)
Ph.D. student, UC-Berkeley,
Walsh*, R.E., & L.S. Rayor. 2008. Kin discrimination in the amblypygid, *Damon diadema*). Journal of Arachnology 36:336 – 343.
- Lisa Taylor** (1999 – 2000) Social behavior, aggregation, and mother-offspring interactions in two species of captive tailless whip scorpions (Order Amblypygi: *Phrynus marginemaculata* and *Damon diadema*).
High Honors.
NSF- GRFP
Ph.D., Arizona State University, spiders.
Postdoc on spiders at the University of Pittsburg.
Faculty, University of Florida
Rayor, L.S. & Taylor, L*. 2006. Social behavior in amblypygids, and a reassessment of arachnid social patterns. Journal of Arachnology 34: 399- 421.
- Monica Lee** (1998 - 2000) - Response of wasp larvae in to novel prey.
NSF-REU student,
Physician.
- Steve Munson** (1998 – 2000) - Induction of wasp adults and larvae to chemically defended prey.
Honors.
Lawyer.
Rayor, L.S. & S. Munson*. 2002. Larval feeding experience influences adult generalist predators to accept chemically defended prey. Entomologia Experimentalis et Applicata 104: 193-201.
- Katrin Campbell** (1995 – 1997) - The effects of cardiac glycoside concentration in monarch caterpillars on the predatory behavior of *Polistes dominulus* wasps.
Physician

Larissa Mooney - The effects of cardenolides on *Pieris napi* caterpillars on *Polistes dominulus* wasp predatory behavior.
 Psychiatrist.
 Rayor, L.S., L.J. Mooney*, & J.A. Renwick. 2007. The effects of cardenolides in *Pieris napi* caterpillars on the predatory behavior of *Polistes dominulus* wasps. *Journal of Chemical Ecology*. 33: 1177- 1185.

COLLEGE AND DEPARTMENTAL COMMITTEES:

- 2019. Public Outreach Committee, Chair**
- 2014 - 2018.** CALS Committee in Support of Teaching and Learning (CSTL)
 Griswold Committee, Entomology
Public Outreach Committee, Chair
 Insectapalooza, committee
 Co-Nominator/Organizer, AD White Professor-at-Large, Dr. David Hillis, U. TX
- 2014.** CALS Faculty Senate
- 2013.** **Insectapalooza, Co-coordinator.**
 Extension and Outreach Committee
Public Outreach Committee, Chair
 Griswold Committee, Entomology
- 2012.** **Insectapalooza, Co-coordinator.**
 Extension and Outreach Committee
- 2011.** **Insectapalooza, Coordinator.**
 Extension and Outreach Committee
 Entomology Library Space Use Committee, member.
- 2007- 2012. Development of Athropod Museum, Committee Head.**
- 2007 – 2013. Public Service Center Scholars Program (PSCS), Advisory Board**
 Extension and Outreach Committee – including Insectapalooza
 Entomology, Curriculum and Teaching Committee
- 2004-2005. CALS, College Curriculum Committee
- 2003-2005. Entomology Outreach Committee, Chair**
- 2000-2009. Entomology Curriculum and Teaching
- 1992 - 2009. Host multiple Griswold and Jugatae Departmental Speakers annually.

PROFESSIONAL AFFILIATIONS WITH MAJOR CONTRIBUTIONS TO THE SCIENTIFIC SOCIETIES:

American Arachnological Society – Organizer of ‘Social Spider Symposium’ at AAS meetings, Denver. 2006: **Marketing Committee**, *Spiders of North America: An Identification Manual*, 2004-7.

Animal Behavior Society - Public Affairs Committee Chair 1996 – 2000.

Entomological Society of America

International Society for Behavioral Ecology - Co-organizer, ISBE meetings, Aug 2008.

International Society of Arachnology - Ordinary Member, Executive Committee 2007 – 2013, Elected. **Organized Symposium** at 17th International Congress of Arachnology, Brazil – Parental Care and Sociality in the Lesser Arachnids. Student oral presentation judge – 2010.

Program Organizer, International Congress of Arachnology 2016, Denver Organized Symposium at 20th International Congress of Arachnology, Denver – Frontiers in Arachnid Sociality: Habitat Influences.

International Union for the Study of Social Insects

Sigma Xi

OTHER PROFESSIONAL SERVICE SINCE 2000:

- 2017. J. Arachnology, BARD Israel, Behavioral Ecology and Sociobiology.
- 2015. J. Natural History, Ecology, Animal Behavior, Book consultant: Spiders , Review Book Chapter in Comparative Social Evolution, Ed. D. Rubenstein, P. Abbott.
- 2014.. Ad hoc review: J. Arachnology (2x), Animal Behavior,
- 2012. Behavioral Ecology & Sociobiology, Insect Read Alouds, J. Tropical Ecology

- 2011. PloS One, PNAS
- 2010. NSF, Journal of Arachnology (2x). Ethology (2x), Functional Ecology, Book scientific consultant: Prereview Scholastic's Back Yard Safari – Spiders.
- 2009. Ad hoc review: Animal Behavior, Journal of Arachnology
- 2008. Ad hoc review: Animal Behavior, Journal of Animal Ecology, Journal of Arachnology Revista Brasileira de Zoologia, Insectes Sociaux
- 2007. Ad Hoc Review: NSF, Advances in Animal Behavior
- 2006. Manuscript Review: Animal Behavior, Insectes Sociaux, Ecology Book scientific consultant: Common Spiders of North America, Cornell Univ. Press. Student Oral Presentation judge, American Arachnology Society
- 2005. Ad Hoc Review: NSF, United States-Israel Binational Science Foundation Manuscript Review: Animal Behavior (2)
- 2004. Invited participant, NSF workshop on 'Creating a consensus metadata standard for animal behavior'. Student paper judge, 16th International Congress of Arachnology, Gent, Belgium. Book scientific consultant: Prereview of book on arthropod predators, Chicago Univ. Manuscript Review: J. Arachnology, Ecological Research, Animal Behavior, Behavioral Ecology & Sociobiology
- 2003. Manuscript Review: Animal Behaviour, Journal of Arachnology, Biological Review, Naturwissenschaften; Ad Hoc Reviewer: NSF (2)
- 2002. Manuscript Review: Animal Behaviour; Ad Hoc Reviewer: NSF
- 2001. Manuscript Review: Canadian Journal of Zoology. Ad Hoc Reviewer: NSF (2) Student paper judge, American Arachnological Society Manuscript Review: Behavioral Ecology & Sociobiology, Northeastern Naturalist. Ad Hoc Reviewer: NSF (4) Book scientific consultant: Prereview of spider text book for Johns Hopkins University 'Arachnology--The study of spiders and their relatives' by Deborah Roan Smith
- 1999. Manuscript Review: Ecology, Ethology, J. Arachnology (2) Ad Hoc Reviewer: NSF, National Geographic Society Book scientific consultant: M. Nelson-Hoy, 'Jumper'. Childrens book about jumping spiders.
- 1998. Manuscript Review: Animal Behaviour, Behavioral Ecology & Sociobiology (2),

Behavioral Ecology, Behaviour, J. Arachnology (2), Canadian J. Zoology
Book scientific consultant: A. Mason, 1999. The Nature of Spiders: Consummate Killers.
Sierra Club.

Ad Hoc Reviewer: National Geographic Society

- 1997. Manuscript Review: Animal Behaviour (2), Ethology, J. Arachnology, J. Mammalogy
- 1996. Ad Hoc Reviewer: National Science Foundation, National Geographic Society
Manuscript review: Insect Behavior, American Midland Naturalist
- 1995. Animal Behavior Society, Judge Founders Poster competition, moderator session.

- 1994. Organize and publicize Department of Entomology 'Bugs for Lunch' seminar series.
Ad Hoc Reviewer: National Science Foundation (2)
Manuscript Review: Ecology
- 1993. Organize and publicize Department of Entomology 'Bugs for Lunch' seminar series.
- 1992. Ad Hoc Reviewer: Organization for Tropical Studies.
Manuscript Review: American Naturalist, Insectes Sociaux.

MAJOR MEDIA COVERAGE OR INTERVIEWS FOCUSING ON DR. RAYOR SINCE 2014:

2019. Sharing, Spreading and Supporting Science Is 'Civic Activism,' Professor Says. Cornell Daily Sun, 25 March 2019, by Deanna Gonzalez
<https://cornellsun.com/2019/03/25/sharing-spreading-and-supporting-science-is-civic-activism-professor-says/>

2018. What She Said Innovation Cafe - Women In Science & Technology Interview. 'Social Spiders with Dr Linda Rayor - What She Said Interview'. <https://soundcloud.com/whatshesaidtalk/social-spiders-with-dr-linda-rayor-what-she-said-interview?in=whatshesaidtalk/sets/tech-tuesdays-women-in-science>.

This is love podcast about spiders. <https://thisislovepodcast.com/introducing-this-is-love>

2016. Hidden housemates: Australia's huge and hairy huntsman spiders. The Conversation.
<https://theconversation.com/hidden-housemates-australias-huge-and-hairy-huntsman-spiders-55017>.

2016. CORNELL CLOSE-UPS | Cornell Ecologist Linda Rayor Discovers Passion Studying Spiders.
By Jeanette Si, 24 February 2016
<http://cornellsun.com/2016/02/24/cornell-ecologist-linda-rayor-discovers-passion-studying-spiders/>

2015. Cornell University, Continuing Education Summer Lecture Series. 50 Shades of Arachnids.
<https://www.cornell.edu/video/linda-rayor-romance-with-spiders>

2014: Canberra Times – Two articles and photos in the front section of the major newspaper in the capitol of Australia on sequential days. 12th and 13th March 2014. Articles on my research on huntsman spiders in Australia. 'Spiders' paradise in our backyard' and 'In the society of huntsman, the mild mannered spider.'

<http://www.canberratimes.com.au/act-news/spiders-paradise-in-our-backyard-20140311-34kjn.html>
<http://www.canberratimes.com.au/act-news/in-the-society-of-huntsman-the-mildmannered-spider-20140312-34msd.html>
<http://www.canberratimes.com.au/photogallery/act-news/biologist-linda-raynor-in-the-field-at-mount-ainslie-20140311-34kdw.html>

A Giant Spiders' Communal and Cannibalistic Lifestyle – by Andrew Revkin, NYT & Pace Univ.
<http://youtu.be/qB2esLJ58Ko?list=UUdeDjsgVdGBoqEuT2d70YbQ> 1.1 million views

Ithaca Fingerlake's Pet Corner. **Spiders: Eight-legged Pets?**

http://www.ithaca.com/family_and_health/spiders-eight-legged-pets/article_69a31b24-f182-11e3-b06d-001a4bcf887a.html

Tarantulas: Can These Large, Hairy Spiders Actually Be Good Pets? By Linda Lombardi, Vetstreet
<http://www.vetstreet.com/our-pet-experts/tarantulas-can-these-large-hairy-spiders-actually-be-good-pets>. October 2014

Insectapalooza 2014 & Creepy Crawlers Invade Cornell University – Alexa Salvo, Ithaca College
<http://youtu.be/SF3VzkPpT2o>
<http://www.buzzsawmag.org/2014/11/13/creepy-crawlers-invade-cornell-university/>

Insectapalooza 2014 – Cornell Daily Sun Multimedia
<http://youtu.be/PM-yvxUzs2w>

2013. **National Geographic Wild** – World’s Weirdest Animal Body Parts and World’s Weirdest Farms, Pilots. 4 March 2013.

Cornell Chronicle - For social spiders, preying together aids younger siblings.
<http://www.cornell.edu/video/preying-together-older-siblings-aid-younger-social-spiders>
<http://www.news.cornell.edu/stories/2013/05/social-spiders-preying-together-aids-younger-siblings>

Huffington Post. Spider Sex lives, 14 May 2013.
<http://live.huffingtonpost.com/r/segment/a-cicada-invasion-and/518d2bf602a760508c0000c9>

WBEN Buffalo Radio. Poisonous spiders in Western NYS, 24 May 2013.

2012. **Discovery Science Channel** – Monster Bug Wars season 2. Seven 1 hour episodes.

iSeeChange Project funded by NPR radio interview on black widows and climate change. <http://soundcloud.com/juliakumari/iseechange-halloween-special-a>

2011. **Discovery Science Channel** – filmed Monster Bug Wars, 6 1-hr episodes. On-camera.

Newspaper: Ithaca Journal/ Democrat and Chronicle, 29 March, page 3. Television show puts spotlight on professor's passion - bugs

Radio: ABC (Australian Broadcast Corp) in Sydney interview on unusual numbers of spiders in homes this year.

1360 WMNY in Pittsburgh, 10 April, 15min interview on Monster Bug Wars.

Radio 2UE Sydney, Australia, 14 June, 10 min interview on huntsman spiders

Science cabaret Ithaca on WICB, 1 May. My research

http://sciencecabaret.podomatic.com/player/web/2011-05-03T14_03_39-07_0

Web: BBC Nature <http://www.bbc.co.uk/nature/13710734> Article about Yip and Rayor research on social spiders.

Trigla TV. 30 minute interview about spiders, entomology, Monster Bug Wars

2010. **Discovery Science Channel** – Monster Bug Wars – The initial show in 2009 received such high ratings, that Discovery has requested the production of 6 more episodes. I have been one of two scientific experts discussing the behavior of predatory arthropods on camera. Filmed in 2010 and 2011.

Ask Dr. Science – Biology radio show, Arizona State University.

2009. **Discovery Channel** – Monster Bug Wars – I was one of two scientific experts discussing the behavior of predatory arthropods on camera.

Discovery Channel – Nature's Deadliest: Africa (1 & 2) and South America – Scientific Expert on camera.

Scientific American online – Why are spiders coming in with produce in groceries?

March. Interview. <http://www.sciam.com/article.cfm?id=dangerous-spiders-grocery-produce>

2008. **Discovery Channel** – Nature's Deadliest: Australia – Scientific Expert on Sydney Funnel Web spiders on camera.

Australian Broadcast Corporation Radio – Tasmania, Canberra – Radio interviews on my Australian huntsman spider research

Canberra Times, Australia – Newspaper article on my research on spiders

Pangea's World of the Weird – 1-hour radio interview on spider biology & behavior.

Country Life radio show – radio interview on spiders in gardens

2007. **CBS Sunday Morning**. Interview on spiders on camera.

Science Friday – NPR (interview and web) – Interview on radio on amblypygids

As it happens – Canadian Broadcast Corporation – Radio Interview on amblypygids

Science Update – AAAS – Interview on radio on amblypygids

National Geographic News. Photo in the News: Young Whip Spiders Stay in Touch.

<http://news.nationalgeographic.com/news/2007/03/070314-spiders-social.html>

Live Science – 'Creepy: Spiders Love to Snuggle'

http://www.livescience.com/animals/070319_sweet_spiders.html

BBC Wildlife Magazine. July 2007. Amblypygid

Yes Magazine, Der Spiegel, Iran Daily - article

Communique of Cornell. Spring 2007. Arachnofriendly. Article about my research.

Plantations Magazine. Summer 2007. Spider biology, interview.

Real Simple magazine. October issue.

Associated Press. 'Spiders can make great pets year-round' by Linda Lombardi. 1 Oct

2006. **BBC Wildlife Magazine**. Study Arachnids. Interview with Dr. Linda Rayor. by Dan Eatherley. August 2006, page 57. [One of world's best wildlife and natural history magazines.]

Cornell Chronicle -- Faculty Facets -- Cornell's spider woman spins web of science outreach that stretches far beyond the classroom. 2 Feb 2006. By Susan Lang

IMAX Monarch movie

2005. WCNY, News Hour. Interviewed on public television about 'Insectapalooza' – 2nd annual Entomology Open House that I coordinated last year.

2002. Cornell Chronicle, May 2003. CU students serve as envoys from world of spiders to area schoolchildren. By Blaine Friedlander.

2000. Cornell Chronicle, July 2000. Spiders fight for real estate. by Blaine Friedlander

Associated stories: <http://unisci.com/stories/20002/0602004.htm>

<http://www.newswise.com/articles/2000/6/EARLYWEB.CNS.html>

Interview on ABCNews.com about spiders in Lee Dye Science column.

<http://abcnews.go.com/sections/science/DyeHard/dyehard000615.html>

Science Update produced by AAAS about spiders, radio 11 July 2000.

Discovery Health Channel, 'Things that go bump' Interview about arachnophobia. 24 Oct 2000.

OTHER PROFESSIONAL EXPERIENCE:

Faculty Study Leader, Cornell Adult University Family Educational Tours – Lead natural history tours to Belize & Guatemala (2019), Tucson (2018), Brazilian Pantanal (2013), Alaska (2011), Galapagos & Ecuadorian Highlands (2011), Tanzania (2006, 2007), Panama (2008), Wyoming (2003). Provide three educational lectures, plus impromptu discussions in the field. Tour size ~15 to 50 participants, 8 to 75 years old.

Live Animal Manager and Consultant, Australian Museum's international spider exhibit 'Spiders: From Fear to Fascination'. Install and deinstall exhibit, design live animal displays, organize live arachnids at the **Royal Ontario Museum** and **Montreal Science Centre** (2018 – 2019)

Lead tours to Peruvian Amazon, Explorations, Inc. 2010, 2012.

Tour manager/ Biologist on American Museum of Natural History educational family tour to the Galapagos and the Ecuadorian Amazon for High Country Passage, 1993.

Biologist on 5 educational ecotours to the Peruvian Amazon for International Journeys & Latitudes, 1993-4.

Study Leader/ Biologist on educational ecotours to Costa Rica for High Country Passage, Ecotour Expeditions, 1991-1992, 1995. Tours for Smithsonian Institution, Amer. Museum of Natural History

Technician, Colorado Psychiatric Hospital for I.C. Kaufmann. Recorded behavioral changes in mother-infant interactions in captive pigtail and bonnet macaques. 1977.

UNDERGRADUATE ADVISEES:

2014.	CALS	Ann Dunn Phoebe Koenig Kacie Hargett	Anna Gabard-Durum Geon Ho (Dan) Kim
2016.	CALS	Ann Dunn Kacie Hargett Fiona McNeill Rachel Wallace Charlie Stone	
2017.	CALS	Kacie Hargett Fiona McNeill	Charlie Stone Joe Giulian
2018.	CALS	Joe Giulian Charlie Stone	Jennifer Peaslee Ben Burgunder
2003 – 2004	CALS	Melissa Davila Morris Nathaniel Smith Ariel Zimmermann	Gabriel Villar 2002 – 2003 CALS Gabriel Villar
	ARTS	Rachel Walsh Crystal Junge Neil Mukhopadhyay	ARTS RachelWalsh Carolann Hass Crystal Junge Michelle Quensell Neil Mukhopadhyay Christine Sun
2004-2005.	CALS	Ariel Zimmerman Gabriel Villar Nate Smith Kristen Wood Christopher Delaney Jacquelyn Casfasso Christine Marschilok Sara Santana	ARTS Rachel Walsh Neil Mukhopadhyay Crystal Junge
2005-2006.	CALS	Ariel Zimmerman Gabriel Villar	
2009.	CALS	Diane Wang John Cho Carolyn LaRow Anna Gabard-Duram Zhang Yang	
2010.	CALS	John Cho Carolyn LaRow Zhang Yang	
	Arts	Claire Greenbaum	
2011.	CALS	Daniel Kim Anna Gabard-Duram Tate Lavitt	
	Arts	Claire Greenbaum	

Engineering Natalie Hathaway

Public Service Scholar Angelique Edwards

2012.

CALS Daniel Kim
Anna Gabard-Duram
Tate Lavitt

Arts Claire Greenbaum

2013.

CALS Daniel Kim
Anna Gabard-Duram
Tate Lavitt

Public Service Center Scholar Martin Zorilla