

# PRASHANT P. SHARMA

UNIVERSITY OF WISCONSIN-MADISON ·  
DEPARTMENT OF INTEGRATIVE BIOLOGY ·  
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## EDUCATION

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- Ph.D. Harvard University, Organismic and Evolutionary Biology May 2012  
Thesis dissertation: “Systematics, evolution, and development in Opiliones”
- A.B. Harvard University, Biology, *Summa cum laude* June 2006

## APPOINTMENTS

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- 2016-present Cellular and Molecular Biology graduate program trainer, University of Wisconsin-Madison
- 2016-present Assistant Professor, University of Wisconsin-Madison, Department of Entomology (zero-time faculty)
- 2015-present Assistant Professor, University of Wisconsin-Madison, Department of Integrative Biology
- 2015-present J.F. Crow Institute for the Study of Evolution faculty member, University of Wisconsin-Madison
- 2012-2015 National Science Foundation Postdoctoral Fellow, American Museum of Natural History, Division of Invertebrate Zoology
- 2007-2012 Post-graduate (PhD) student, Harvard University, Department of Organismic and Evolutionary Biology
- 2003-2006 Undergraduate research assistant, Harvard University, Department of Organismic and Evolutionary Biology

## TEACHING EXPERIENCE

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### INSTRUCTOR

- 2021 Zoology 300: Invertebrate Biology and Evolution (UW-Madison)
- 2020 Introductory Biology 152 (UW-Madison)
- 2020 Zoology 957: The Evolution of Phylogenetic Methods
- 2019 Introductory Biology 152 (UW-Madison)
- 2019 Zoology 300: Invertebrate Biology and Evolution (UW-Madison)
- 2019 Zoology 301: Invertebrate Biology and Evolution Lab (UW-Madison)
- 2018 Introductory Biology 152 (UW-Madison)
- 2018 Zoology 300: Invertebrate Biology and Evolution (UW-Madison)
- 2018 Zoology 301: Invertebrate Biology and Evolution Lab (UW-Madison)
- 2017 Zoology 957: Topics in the Evolutionary Developmental Biology of Animals (UW-Madison; graduate level)
- 2017 Zoology 400: Topics in the Evolutionary Developmental Biology of Animals (UW-Madison; undergraduate level)

- 2017 Taxonomy of Opiliones (Israeli Taxonomy Initiative, Hebrew University of Jerusalem, Israel)
- 2017 Zoology 300: Invertebrate Biology and Evolution (UW-Madison)
- 2017 Zoology 301: Invertebrate Biology and Evolution Lab (UW-Madison)
- 2016 Introductory Biology 152 (UW-Madison)

#### TEACHING ASSISTANT

- 2012 OEB 141: Biogeography (Harvard University)
- 2011 OEB 275r: Phylogeography and Geographic Variation in the Era of Genomics (Harvard University)
- 2010 OEB 141: Biogeography (Harvard University)
- 2009 SLS 12: Understanding Darwinism (Harvard University)

### GRANTS, FELLOWSHIPS AND HONORS

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#### GRANTS

##### **Total research funds raised at UW-Madison: \$2,794,677**

- 2021-2024 U.S.-Egypt Science and Technology Joint Fund, Cycle 20 (\$162,935)
- 2020-2024 National Science Foundation-Binational Science Foundation (NSF-BSF), Division of Integrative and Organismal Systems (NSF IOS-2016141; \$1,798,568 [UW-Madison: \$1,476,836])
- 2020-2023 Binational Science Foundation (BSF-2019216; \$240,000 [UW-Madison: \$118,100])
- 2020-2022 Supplement to National Science Foundation Faculty Early Career Development Program, Division of Integrative and Organismal Systems (NSF IOS-1552610; \$79,979)
- 2019-2021 Fall Research Competition, Wisconsin Alumni Research Foundation, University of Wisconsin-Madison, for pilot study on transgenic tools in spiders (\$78,407)
- 2019 Company of Biologists for symposium “Growth, morphogenesis, and developmental genetics” at the 21<sup>st</sup> International Congress of Arachnology (£3,000)
- 2018-2019 National Geographic Society grant for exploratory fieldwork in Israel (NGS-271R-18; \$24,167)
- 2016-2022 National Science Foundation Faculty Early Career Development Program, Division of Integrative and Organismal Systems (NSF IOS-1552610; \$850,000)
- 2012-2015 National Science Foundation Postdoctoral Research Fellowship in Biology, Competitive Area 2 (Intersections of Biology and Mathematical and Physical Sciences) for work on computational biogeography (NSF IOS-1202751; \$189,000)

#### FELLOWSHIPS

- 2013 National Geographic Society grant for exploratory fieldwork in the Philippines
- 2011 Research exchange grant, Evo-Devo-Eco Network (EDEN), for work on developmental techniques in arachnids (NSF IOS-0955517)
- 2011 Student grant for attending the 3<sup>rd</sup> Latin-American Congress of Arachnology
- 2011 Deakin-Royce Fellowship for study in Australia, Australian Studies Committee, Harvard University
- 2010 Marie Stopes Travel Award, Willi Hennig Society
- 2009 Putnam Expedition Grant, Museum of Comparative Zoology, Harvard University
- 2008 Marie Stopes Travel Award, Willi Hennig Society

- 2008 Putnam Expedition Grant, Museum of Comparative Zoology, Harvard University  
 2008 National Science Foundation Graduate Research Fellowship, honorable mention  
 2006 Exploration Fund Award, Explorers Club  
 2006 Goelet Award Fund, Harvard University  
 2006 Deutscher Akademischer Austausch Dienst Hochschulsommerkurs program for language study in Germany

#### HONORS AND AWARDS

- 2021 Nominated to Full Membership in Sigma Xi (accepted)  
 2019 Plenary speaker at the 3<sup>rd</sup> Pan-American Society of Evolutionary Developmental Biology conference, Miami [2 August 2019]  
 2019 Plenary speaker at the 21<sup>st</sup> International Congress of Arachnology, Christchurch, New Zealand [February 15, 2019]  
 2014 Plenary speaker at the 4<sup>th</sup> Congreso Latinoamericano de Aracnología, Morelia, México (given in Spanish) [July 21, 2014]  
 2013 Invited speaker at the 9<sup>th</sup> Annual University of Michigan Early Career Scientists Symposium [March 16, 2013]  
 2012 Harvard University Certificate of Teaching Excellence [Fall 2011 semester]  
 2012 2<sup>nd</sup> place prize for student presentation, Division of Phylogenetic and Comparative Biology, Annual Meeting of the Society for Integrative and Comparative Biology  
 2010 Harvard University Certificate of Teaching Excellence [Spring 2010 semester]  
 2010 2<sup>nd</sup> place prize for student presentation, 18<sup>th</sup> International Congress of Arachnology  
 2010 Willi Hennig Award (1<sup>st</sup> place student presentation), Willi Hennig Society  
 2008 Lars Brundin Award (2<sup>nd</sup> place student presentation), Willi Hennig Society  
 2006 Phi Beta Kappa, Alpha Iota chapter [inducted June 2006]

#### PUBLICATIONS

†Undergraduate co-author.

#### IN PREPARATION

104. Aharon, S., Ballesteros, J.A., Gainett, G., **Sharma, P.P.**, Hawlena, D., Gavish-Regev, E. (*in preparation*) In the land of the blind: Exceptional subterranean speciation of cryptic troglobitic spiders of the genus *Tegenaria* (Araneae: Agelenidae) in Israel.  
 103. Ontano, A.Z., Steiner, H.G., **Sharma P.P.** (*in preparation*) How many long branch orders occur in Chelicerata? Opposing effects of Palpigradi and Opilioacariformes on phylogenetic stability.  
 102. Bartel, C., Dunlop, J.A., **Sharma, P.P.**, Selden, P.A., Tarasov, P.E., Ren, D. (*in preparation*) Four new Laniatorean harvestmen (Arachnida: Opiliones) from mid-Cretaceous Burmese amber.

#### IN REVIEW

101. Ballesteros, J.A., Santibáñez-López, C.E., Baker, C.M., Benavides, L.R., Cunha, T.J., Gainett, G., Ontano, A.Z., Setton, E.V.W., Arango, C.P., Gavish-Regev, E., Harvey, M.S., Wheeler, W.C., Hormiga, G., Giribet, G., **Sharma, P.P.** (submitted) Comprehensive species sampling and sophisticated algorithmic approaches refute the monophyly of Arachnida.  
 100. Santibáñez-López, C.E., Aharon, S., Baker, C.M., Ballesteros, J.A., Gainett, G., González-Santillán, E., Harvey, M.S., Hassan, M.K., Monod, L., Ojanguren-Affilastro, A., Raven, R.J., Pinto-

da-Rocha, R., Zvik, Y., Gavish-Regev, E., **Sharma P.P.** (in revision) Phylogenomics of scorpions reveal contemporaneous diversification of scorpion mammalian predators and mammal-specific sodium channel toxins.

PEER-REVIEWED

99. **Sharma, P.P.** (2021, *in press*) Duplication and evolution of Hox clusters in Chelicerata (Arthropoda). In: Ferrier, D.E.K., Hall, B.K. (editors). *Hox modules in Evolution and Development*. Boca Raton, FL: CRC Press, Taylor Francis Group.

98. Gainett, G., González, V.L., Ballesteros, J.A., Setton, E.V.W., Baker, C.M., †Barolo Gargiulo, L., Santibáñez-López, C.E., Coddington, J.A., **Sharma, P.P.** (2021, in press) The genome of a daddy-long-legs (Opiliones) illuminates the evolution of arachnid appendages and chelicerate genome architecture. *Proceedings of the Royal Society B*.

97. Cotoras, D.D., de S. Castanheira, P., **Sharma, P.P.** (2021) A cheliceral axial duplication in the long-jawed orb-weaving spider *Tetragnatha versicolor* (Araneae: Tetragnathidae). *Development Genes and Evolution*. (doi: 10.1007/s00427-021-00678-9)

96. Baudouin Gonzalez, L., Schoenauer, A., Harper, A., Blakeley, G., Seiter, M., Arif, S., Sumner-Rooney, L., Russell, S., **Sharma, P.P.**, McGregor, A.P. (2021) The evolution of Sox gene repertoires and regulation of segmentation in arachnids. *Molecular Biology and Evolution*. (doi: 10.1093/molbev/msab088)

95. Ontano, A.Z., Gainett, G., Aharon, S., Ballesteros, J.A., Benavides, L.R., †Corbett, K.F., Gavish-Regev, E., Harvey, M.S., Monsma, S., Santibáñez-López, C.E., Setton, E.V.W., †Zehms, J.T., Zeh, J.A., Zeh, D.W., **Sharma, P.P.** (2021) Taxonomic sampling and rare genomic changes overcome long-branch attraction in the phylogenetic placement of pseudoscorpions. *Molecular Biology and Evolution* 38:2446-2467.

94. Setton, E.V.W., **Sharma, P.P.** (2021) A conserved role for *arrow* in the posterior segmentation of Arthropoda. *Developmental Biology* 475:91-105.

93. \*Ballesteros, J.A., \*Setton, E.V.W., \*Santibáñez-López, C.E., Arango, C.P., Brenneis, G., Brix, S., Cano-Sánchez, E., †Corbett, K.F., †Dandouch, M., Dilly, G.F., Eleaume, M.P., Gainett, G., Gallut, C., †McAtee, S., †McIntyre, L., Moran, A.L., †Moran, R., López-González, P.J., Scholtz, G., Williamson, C., Woods, H., †Zehms, J.T., Wheeler, W.C., **Sharma, P.P.** (2021) Phylogenomic resolution of sea spider diversification through integration of multiple data classes. *Molecular Biology and Evolution* 38:686-701. (\*equal author contribution) [Featured in Science]

92. Giribet, G., Baker, C.M., **Sharma, P.P.** (2021) A revised phylogeny of the New Caledonian endemic genus *Troglosiro* (Opiliones: Cyphophthalmi: Troglosironidae) with the description of four new species. *Invertebrate Systematics* 35:59-89.

91. Bartel, C., Dunlop, J.A., **Sharma, P.P.**, Selden, P.A., Ren, D., Shi, C. (2021) Laniatorid harvestmen (Arachnida: Opiliones) from Late Cretaceous Burmese amber. *Cretaceous Research* 119:104703.

90. Dehnert, G.K., Freitas, M., **Sharma, P.P.**, Barry, T., Karasov, W.H. (2021) Impacts of subchronic exposure to a commercial 2,4-D herbicide on developmental stages of multiple freshwater fish species. *Chemosphere* 263:127638.

89. Gainett, G., Ballesteros, J.A., Kanzler, C.R., †Zehms, J.M., †Zern, J.M., Aharon, S., Gavish-Regev, E., **Sharma, P.P.** (2020) Systemic paralogy and function of retinal determination network homologs in arachnids. *BMC Genomics* 21:811.
88. Gainett, G., Willemart, R.H., Giribet, G., **Sharma, P.P.** (2020) Convergent evolution of sexually dimorphic glands in an amphi-Pacific harvestmen family. *Invertebrate Systematics* 34:871-892.
87. Brenneis, G., Arango, C.P., **Sharma, P.P.**, Schwentner, M. (2020) The more the merrier: unparalleled sympatric species richness in a sea spider genus (Pycnogonida, Callipallenidae, Meridionale) from Tasmanian waters. *Invertebrate Systematics* 34:837-870. **[Cover article]**
86. Gainett, G., **Sharma, P.P.** (2020) Genomic resources and toolkits for developmental study of whip spiders (Amblypygi) provide insights into arachnid genome evolution and antenniform leg patterning. *EvoDevo* 11:18.
85. †Schmidt, S.M., Clouse, R.M., **Sharma, P.P.** (2020) A new *Miopsalis* from Mindanao supports a biogeographic umbilicus between Borneo and the southern Philippines (Arachnida: Opiliones: Cyphophthalmi: Stylocellidae). *Zootaxa* 4779:379–390.
84. Cano-Sánchez, E., **Sharma, P.P.**, López-González, P.J. (2020) Postembryonic development of *Nymphon australe* Hodgson, 1902 (Pycnogonida, Nymphonidae) from Antarctica. *Polar Biology* 43: 207–223.
83. Santibáñez-López, C.E., Ojanguren-Affilastro, A.A., **Sharma, P.P.** (2020) Another one bites the dust: Taxonomic sampling of a key genus in phylogenomic datasets reveals more nonmonophyletic groups in traditional scorpion classification. *Invertebrate Systematics* 34:133–143.
82. Nolan, E.D., Santibáñez-López, C.E., **Sharma P.P.** (2020) Developmental gene expression as a phylogenetic data class: Support for the monophyly of Arachnoplumonata. *Development Genes and Evolution* 230: 137–153. **[Cover article]**
81. Ballesteros, J.A., Santibáñez-López, C.E., Kovác, L., Gavish-Regev, E., **Sharma, P.P.** (2019) Ordered phylogenomic subsampling enables diagnosis of systematic errors in the placement of the enigmatic, long branch arachnid order Palpigradi. *Proceedings of the Royal Society B* 286: 20192426.
80. Santibáñez-López, C.E., Graham, M.R., **Sharma, P.P.**, Ortiz, E., Possani, L.D. (2019) Comparative transcriptomic analysis reveals evolutionary conservation and selective pressures in hadrurid scorpion toxins. *Toxins* 11:637. **[Cover article]**
79. Aharon, S., Ballesteros, J.A., †Crawford, A.R., †Friske, K., Gainett, G., Langford, B., Gavish-Regev, E., **Sharma, P.P.** (2019) The anatomy of an unstable node: a Levantine relict precipitates phylogenomic dissolution of higher-level relationships of the armoured harvestmen (Arachnida: Opiliones: Laniatores). *Invertebrate Systematics* 33:697–717. **[Cover article]**
78. Setton, E.V.W., Hendrixson, B.E., **Sharma, P.P.** (2019) Embryogenesis in a Colorado population of *Aphonopelma hentzi* (Girard, 1854). *Journal of Arachnology* 47:209–216. **[Cover article]**
77. Santibáñez-López, C.E., González-Santillán, E., Monod, L., **Sharma, P.P.** (2019) Phylogenomics facilitates stable scorpion systematics: Reassessing the relationships of Vaejovidae and a new high-level classification of Scorpiones (Arachnida). *Molecular Phylogenetics and Evolution* 135:22–30.

76. Gainett, G., **Sharma, P.P.**, Fernandes, N., Pinto-da-Rocha, R., Giribet, G., Willemart, R.H. (2019) Evolution of a sensory cluster on the legs of Opiliones (Arachnida) informs multi-level phylogenetic relationships. *Zoological Journal of the Linnean Society* 187:143–165.
75. Ballesteros, J.A., **Sharma, P.P.** (2019) A critical appraisal of the placement of Xiphosura (Chelicerata) with account of known sources of phylogenetic error. *Systematic Biology* 68:896–917. **[Cover article] [Featured in *National Geographic*]**
74. **Sharma, P.P.** (2019) Integrating morphology and phylogenomics supports a terrestrial origin of insect flight. *Proceedings of the National Academy of Sciences of the USA* 116: 2796–2798.
73. †Schmidt, S.M., Buenavente, P.A.C., Blatchley, D.D., Diesmos, A.C., Diesmos, M.L., General, D.E.M., Mohagan, A.B., Mohagan, D.J., Clouse, R.M., **Sharma, P.P.** (2019) A new species of Tithaeidae (Arachnida: Opiliones: Laniatores) from Mindanao reveals contemporaneous colonization of the Philippines by Sunda Shelf opiliofauna. *Invertebrate Systematics* 33: 237–251.
72. Santibáñez-López, C.E., Kriebel, R., Ballesteros, J.A., Rush, N., Witter, Z., Williams, J., Janies, D., **Sharma, P.P.** (2018) Integration of phylogenomics and molecular modeling reveals lineage-specific diversification of toxins in scorpions. *PeerJ* 6: e5902.
71. Zhang, C., Zhang F., **Sharma, P.P.** (2018) Two new species of *Petrobunus* Sharma, Giribet, 2011 from China (Opiliones: Laniatores: Petrobunidae). *Zootaxa* 4524: 51–64.
70. †March, L.M., †Smaby, R.M., †Setton, E.V.W., **Sharma, P.P.** (2018) The evolution of selector gene function: Expression dynamics and regulatory interactions of tiptop/teashirt across Arthropoda. *Evolution and Development* 20: 219–232.
69. Sharma, P.P. (2018) Chelicerates. *Current Biology* 28: R761–R783.
68. †Oberski, J.T., **Sharma, P.P.**, †Jay, K.R., †Coblens, M.J., †Lemon, K.A., †Johnson, J.E., Boyer, S.L. (2018) A dated molecular phylogeny of mite harvestmen (Arachnida: Opiliones: Cyphophthalmi) elucidates ancient diversification dynamics in the Australian Wet Tropics. *Molecular Phylogenetics and Evolution* 127: 813–822.
67. Leite, D.J., Baudouin-Gonzalez, L., Iwasaki-Yokozawa, S., Lozano-Fernandez, J., Turetzek, N., Akiyama-Oda, Y., Pisani, D., Oda, H., **Sharma, P.P.**, McGregor, A.P. (2018) Homeobox gene duplication and divergence in arachnids. *Molecular Biology and Evolution* 35: 2240–2253.
66. Gainett G., **Sharma P.P.**, Giribet, G., Willemart, R.H. (2018) The sensory equipment of a sandokanid: the extreme case of tarsal reduction in a harvestman (Arachnida, Opiliones). *Journal of Morphology* 279: 1206–1223.
65. Di, Z., Edgecombe, G.D., **Sharma, P.P.** (2018) Homeosis in a scorpion supports a telopodal origin of pectines and book lungs. *BMC Evolutionary Biology* 18: 73.
64. Santibáñez-López, C.E., Ontano, A.Z., Harvey, M.S., **Sharma, P.P.** (2018) Transcriptomic analysis of pseudoscorpion venom reveals a unique cocktail dominated by enzymes and protease inhibitors. *Toxins* 10: 207.
63. †Setton, E.V.W., **Sharma, P.P.** (2018) Cooption of an appendage patterning gene cassette in the head segmentation of arachnids. *Proceedings of the National Academy of Sciences of the USA* 115: E3491–E3500.

62. Gainett, G., **Sharma, P.P.**, Giribet, G., Willemart, R.H. (2018) Putative adhesive setae on the walking legs of the Australian harvestman *Metibalonius* sp. (Arachnida: Opiliones: Podoctidae). *Journal of Arachnology* 46: 62–68.
61. **Sharma, P.P.**, Baker, C.M., Cosgrove, J.G., †Johnson, J.E., †Oberski, J.T., Raven, R.J., Harvey, M.S., Boyer, S.L., Giribet, G. (2018) A revised dated phylogeny of scorpions: Phylogenomic support for ancient divergence of the temperate Gondwanan family Bothriuridae. *Molecular Phylogenetics and Evolution* 122: 37–45.
60. Garb, J.E., **Sharma, P.P.**, Ayoub, N.A. (2018) Recent progress and prospects for advancing arachnid genomics. *Current Opinions in Insect Science* 25: 51–57.
59. Lewis, S.H., Quarles, K.A., Yang, Y., Tanguy, M., Frézal, L., Smith, S., **Sharma, P.P.**, Cordaux, R., Gilbert, C., Giraud, I., Collins, D.H., Zamore, P.D., Miska, E.A., Sarkies, P., Jiggins, F.M. (2018) Panarthropod evolutionary analysis identifies somatic piRNAs as an ancestral TE defence module. *Nature Ecology and Evolution* 2: 174–181.
58. Daniels, S.R., Dreyer, M., **Sharma, P.P.** (2017) Contrasting the population genetic structure of two velvet worm taxa (Onychophora: Peripatopsidae: *Peripatopsis*) in forest fragments along the southeastern Cape, South Africa. *Invertebrate Systematics* 31: 781–796.
57. **Sharma, P.P.** (2017) Chelicerates and the conquest of land: A view of arachnid origins through an evodevo spyglass. *Integrative and Comparative Biology* 57:510-522.
56. \*Schwager, E.E., \***Sharma, P.P.**, \*Clarke, T., \*Leite, D.J., \*Wierschin, T., Pechmann M., Akiyama-Oda, Y., Esposito, L., Arensburger, P., Bechsgaard, J., Bilde, T., Buffry, A., Chao, H., Dinh, H., Doddapaneni, H., Dugan, S., Eibner C., Extavour, C.G., Funch, P., Garb, J., Gonzalez, V.L., Griffiths-Jones, S., Han, Y., Hayashi, C., Hilbrant, M., Hughes, D.S.T., Janssen, R., Lee, S.L., Maeso, I., Murali, S.C., Muzny, D.M., da Fonseca, R.N., Qu, J., Ronshaugen, M., Schomburg, C., Schönauer, A., Stollewerk, A., Torres-Oliva, M., Turetzek, N., Vanthournout, B., Werren, J., Wolff, C., Worley, K.C., Gibbs, R.A., Coddington, J., Oda, H., Stanke, M., Ayoub, N.A., Damen, W.G.M., Prpic, N.-M., Flot, J.-F., Posnien, N., Richards, S., McGregor, A.P. (2017) The house spider genome reveals a whole genome duplication during arachnid evolution. *BMC Biology* 15:62. (\*equal author contribution)
55. †Setton, E.V.W., †March, L.E., †Nolan, E.D., Jones, T.E., Cho, H., Wheeler, W.C., Extavour, C.G., **Sharma, P.P.** (2017) Expression and function of *spineless* orthologs correlate with distal deutocerebral appendage morphology in Arthropoda. *Developmental Biology* 430: 224–236.
54. Clouse, R.M., Branstetter, M.G., Buenaente, P.A.C., Crowley, L.M., Czekanski-Moir, J., General, D.E.M., Giribet, G., Harvey, M.S., Janies, D.A., Mohagan, A.B., **Sharma, P.P.**, Wheeler, W.C. (2017) First molecular phylogeny of two arachnid orders (Schizomida and Uropygi) supports a tropical Pangean origin and mid-Cretaceous diversification. *Journal of Biogeography* 44: 2660–2672. [Cover article]
53. **Sharma P.P.**, Oberski, J.T., †Santiago, M.A., Ricardo Kriebel, †Savana M. Lipps, Buenaente, P.A.C., Diesmos, A.C., Janda, M., Boyer, S.L., Clouse, R.M., Wheeler, W.C. (2017) There is no evidence that Podoctidae carry eggs of their own species: Reply to Machado and Wolff (2017). *Molecular Phylogenetics and Evolution* 129: 349–353.

52. Santibañez-López, C.E., Kriebel, R., **Sharma, P.P.** (2017) *eadem figura manet*: Measuring morphological convergence in diplocentrid scorpions (Arachnida: Scorpiones: Diplocentridae) under a multilocus phylogenetic framework. *Invertebrate Systematics* 31: 233–248. [Cover article]
51. Fernández, R., **Sharma, P.P.**, Tourinho, A.L.M., Giribet, G. (2017) The Opiliones Tree of Life: shedding light on harvestmen relationships through transcriptomics. *Proceedings of the Royal Society of London B: Biological Sciences* 284: 20162340.
50. **Sharma P.P.**, †Santiago, M.A., Kriebel, R. †Lipps, S.M., Buenavente, P.A.C., Diesmos, A.C., Janda, M., Boyer, S.L., Clouse, R.M., Wheeler, W.C. (2017) A multilocus phylogeny of Podoctidae (Arachnida, Opiliones, Laniatores) reveals the disutility of subfamily nomenclature in armored harvestman systematics. *Molecular Phylogenetics and Evolution* 106: 164–173.
49. Iyer, H., Issigonis, M., **Sharma, P.P.**, Extavour, C.G., Newmark, P.A. (2016) A novel pre-meiotic function for *boule* in the planarian *Schmidtea mediterranea*. *Proceedings of the National Academy of Sciences of the USA* 113: E3509–E3518.
48. †Jay, K.R., Popkin-Hall, Z.R., †Coblens, M.J., †Oberski, J.T., **Sharma, P.P.**, Boyer, S.L. (2016) New species of *Austropurcellia*, cryptic short-range endemic mite harvestmen (Arachnida, Opiliones, Cyphophthalmi) from Australia's Wet Tropics biodiversity hotspot. *Zookeys* 586: 37-53.
47. **Sharma, P.P.**, Clouse, R.M., Wheeler, W.C. (2016) Hennig's semaphoront concept and the use of ontogenetic stages in phylogenetic reconstruction. *Cladistics* 33: 93-108.
46. Daniels, S.R., Kunaka, C., Klaus, S., **Sharma, P.P.** (2016) Spectacular cryptic diversity in a widespread ancient panarthropod (Onychophora: Peripatopsidae: *Opisthobatus cinctipes*) reveals the intricacies of delineating species boundaries. *Cladistics* 32: 506-537. [Cover article]
45. Giribet, G., Boyer, S.L., Baker, C.M., Fernández, R., **Sharma P.P.**, de Bivort, B.L., Daniels, S.R., Harvey, M.S., Neethling, J.A., Griswold, C.E. (2016) A molecular phylogeny of the temperate Gondwanan family Pettalidae (Arachnida, Opiliones, Cyphophthalmi) and the limits of taxonomic sampling. *Zoological Journal of the Linnean Society* 178: 523–545.
44. Pérez-González, A., **Sharma, P.P.**, Proud, D.N. (2016). Morphological tricks and blessed genitalia: rectifying the familial placement of *Fijicolana tuberculata* (Opiliones: Laniatores: Zalmoxidae). *Zootaxa* 4061: 253–260.
43. Clouse, R.M., **Sharma, P.P.**, †Stuart, J.C., Davis, L.R., Giribet, G., Sarah, S.L., Wheeler, W.C. (2016) Phylogeography of the harvestman *Metasiro* (Arthropoda, Arachnida, Opiliones) reveals a potential solution to the Pangean paradox. *Organisms, Diversity and Evolution* 16: 167–184.
42. **Sharma, P.P.**, †Santiago, M.A., González-Santillán, E., Monod, L., Wheeler, W.C. (2015) Evidence of duplicated Hox genes in the most recent common ancestor of extant scorpions. *Evolution and Development* 17: 347–355.
41. Clouse, R.M., Janda, M., Blanchard, B., **Sharma, P.**, Hoffman, B.D., Andersen, A.N., Czekanski-Moir, J.E., Krushelnycky, P., Rabeling, C., Wilson, E.O., Economo, E.P., Sarnat, E.M., General, D.M., Alpert, G.D., Wheeler, W.C. (2015) Molecular phylogeny of Indo-Pacific carpenter ants (Hymenoptera: Formicidae: *Camponotus*) reveals waves of dispersal and colonization from diverse source areas. *Cladistics* 31: 424–437. [Cover article]



40. Schwager, E.E., Schönauer, A., Leite, D.J., **Sharma, P.P.**, McGregor, A.P. (2015) Chelicerata. In: Wanninger, A. (editor) *Evolutionary Developmental Biology of Invertebrates, Vol. 3: Ecdysozoa I: Non-Tetraconata*. Heidelberg: Springer.
39. **Sharma, P.P.**, Tarazona, O.A., Lopez, D.H., Schwager, E.E., Cohn, M.J., Wheeler, W.C., Extavour, C.G. (2015) A conserved genetic mechanism specifies deutocerebral appendage identity in insects and arachnids. *Proceedings of the Royal Society of London B: Biological Sciences* 282: 20150698.
38. **Sharma, P.P.**, Fernández, R., Esposito, L., González-Santillán, E., Monod, L. (2015). Phylogenomic resolution of scorpions reveals multilevel discordance with morphological phylogenetic signal. *Proceedings of the Royal Society of London B: Biological Sciences* 282: 20142953.
37. Giribet, G., **Sharma, P.P.** (2015) Evolutionary biology of harvestmen (Arachnida, Opiliones). *Annual Reviews of Entomology* 60: 157–175.
36. **Sharma, P.P.**, Kaluziak, S.T., Pérez-Porro, A.R., González, V.L., Hormiga, G., Wheeler, W.C., Giribet, G. (2014) Phylogenomic interrogation of Arachnida reveals systemic conflicts in phylogenetic signal. *Molecular Biology and Evolution* 31:2963–2984.
35. **Sharma, P.P.**, Wheeler, W.C. (2014) Cross-bracing uncalibrated nodes in molecular dating improves congruence of fossil and molecular age estimates. *Frontiers in Zoology* 11:57.
34. **Sharma, P.P.**, Schwager, E.E., Extavour, C.G., Wheeler, W.C. (2014) Hox gene duplications correlate with posterior heteronomy in scorpions. *Proceedings of the Royal Society of London B: Biological Sciences* 281:20140661.
33. **Sharma, P.P.**, Giribet, G. (2014) A revised, dated phylogeny of the arachnid order Opiliones. *Frontiers in Genetics* 5: 255.
32. Fernández, R., Vahtera, V., Laumer, C.E., Libro, S., Kaluziak, S.T., **Sharma, P.P.**, Pérez-Porro, A.R., Edgecombe, G.D., Giribet, G. (2014) Evaluating topological conflict in centipede phylogeny using transcriptomic data sets. *Molecular Biology and Evolution* 31: 1500–1513.
31. \*Garwood, R., \***Sharma, P.P.**, Dunlop, J.A., Giribet, G. (2014) A Paleozoic Stem Group to Mite Harvestmen Revealed through Integration of Phylogenetics and Development. *Current Biology* 24: 1017–1023. (\*equal author contribution) **[Featured in National Geographic]**
30. Bieler, R., Mikkelsen, P.M., Collins, T.M., Glover, E.A., González, V.L., Graf, D.L., Harper, E.M., Healy, J., Kawauchi, G.Y., **Sharma, P.P.**, Staubach, S., Strong, E.E., Taylor, J.D., Temkin, I., Zardus, J.D., Clark, S., Guzmán, A., McIntyre, E., Sharp, P., Giribet, G. (2014) Investigating the Bivalve Tree of Life—an exemplar-based approach combining molecular and novel morphological characters. *Invertebrate Systematics* 28: 32–115. **[Cover article]**
29. **Sharma, P.P.**, Gupta, T., Schwager, E.E., Wheeler, W.C., Extavour, C.G. (2014) Subdivision of arthropod *cap-n-collar* expression domains is restricted to Mandibulata. *EvoDevo* 5: 3.
28. †Gainett, G., **Sharma, P.P.**, Pinto-da-Rocha, R., Giribet, G., Willemart, R.H. (2014) Walk it off: Predictive power of appendicular characters toward inference of higher-level relationships in Laniatores (Arachnida: Opiliones). *Cladistics* 30: 120–138. **[Cover article]**

27. Riesgo, A., Novo, M., **Sharma, P.P.**, †Peterson, M., Maldonado, M., Giribet, G. (2014) Inferring the ancestral sexuality and reproductive condition in sponges (Porifera). *Zoologica Scripta* 43: 101–117.
26. **Sharma, P.P.**, Zardus, J.D., Boyle, E.E., González, V.L., Jennings, R.M., McIntyre, E., Wheeler, W.C., Etter, R.J., Giribet, G. (2013) Into the deep: A phylogenetic approach to the bivalve subclass Protobranchia. *Molecular Phylogenetics and Evolution* 69: 188–204.
25. Clouse, R.M., **Sharma, P.P.**, Giribet, G., Wheeler, W.C. (2013) Elongation factor-1 $\alpha$ , a putative single-copy nuclear gene, has divergent sets of paralogs in an arachnid. *Molecular Phylogenetics and Evolution* 68: 471–481.
24. **Sharma, P.P.**, Wheeler, W.C. (2013) Revenant clades in historical biogeography: the geology of New Zealand predisposes endemic clades to root age shifts. *Journal of Biogeography* 40: 1609–1618.
23. **Sharma, P.P.**, Schwager, E.E., Giribet, G., Jockusch, E.L., Extavour, C.G. (2013) *Distal-less* and *dachshund* pattern both plesiomorphic and apomorphic structures in chelicerates: RNA interference in the harvestman *Phalangium opilio* (Opiliones). *Evolution and Development* 15: 228–242. [Cover article]
22. Riesgo, A., Andrade, S.C.S., **Sharma, P.P.**, Novo, M., Pérez-Porro, A.R., Vahtera, V., González, V.L., Kawauchi, G.Y., Giribet, G. (2012) Comparative description of ten transcriptomes of newly sequenced invertebrates and efficiency estimation of genomic sampling in non-model taxa. *Frontiers in Zoology* 9: 33.
21. **Sharma, P.P.**, Schwager, E.E., Extavour, C.G., Giribet, G. (2012) Evolution of the chelicera: a *dachshund* domain is retained in the deutocerebral appendage of Opiliones (Arthropoda, Chelicerata). *Evolution and Development* 14: 522–533. [Recommended by Faculty of 1000]
20. **Sharma, P.P.**, Schwager, E.E., Extavour, C.G., Giribet, G. (2012) Hox gene expression in the harvestman *Phalangium opilio* reveals divergent patterning of the chelicerate opisthosoma. *Evolution and Development* 14: 450–463.
19. **Sharma, P.P.**, González, V.L., Kawauchi, G.Y., Andrade, S.C.S., Guzmán, A., Collins, T.M., Glover, E.A., Harper, E.M., Healy, J.M., Mikkelsen, P.M., Taylor, J.D., Bieler, R., Giribet, G. (2012) Phylogenetic analysis of four protein-encoding genes largely corroborates the traditional classification of Bivalvia (Mollusca). *Molecular Phylogenetics and Evolution* 65: 64–74.
18. **Sharma, P.P.**, Giribet, G. (2012) Out of the Neotropics: Late Cretaceous colonization of Australasia by American arthropods. *Proceedings of the Royal Society of London B: Biological Sciences* 279: 3501–3509. [Featured in the *Harvard Gazette*] [Highlighted in *Nature*]
17. **Sharma, P.P.**, Buenavente, P.A.C., Clouse, R.M., Diesmos, A.C., Giribet, G. (2012) Forgotten gods: Zalmoxidae of the Philippines and Borneo (Opiliones: Laniatores). *Zootaxa* 3280: 29–55.
16. **Sharma, P.P.** (2012) New Australasian Zalmoxidae (Opiliones: Laniatores) and a new case of male polymorphism in Opiliones. *Zootaxa* 3236: 1–35.
15. Kawauchi, G.Y., **Sharma, P.P.**, Giribet, G. (2012) Sipunculan phylogeny based on six genes, with a new classification and the descriptions of two new families. *Zoologica Scripta* 41: 186–210.

14. Giribet, G., **Sharma, P.P.**, Benavides, L.R., Boyer, S.L., Clouse, R.M., de Bivort, B.L., Kawauchi, G.Y., Murienne, J., Schwendinger, P.J. (2012) Evolutionary and biogeographic history of the harvestman suborder Cyphophthalmi (Arachnida, Opiliones) – an ancient and global group of arachnids. *Biological Journal of the Linnean Society* 105: 92–130.
13. **Sharma, P.P.**, Prieto, C.E., Giribet, G. (2011) A new family of Laniatores (Arachnida: Opiliones) from the Afrotropics. *Invertebrate Systematics* 25: 143–154.
12. **Sharma, P.P.**, Giribet, G. (2011) The evolutionary and biogeographic history of the armoured harvestmen—Laniatores phylogeny based on ten molecular markers, with the description of two new families of Opiliones (Arachnida). *Invertebrate Systematics* 25: 106–142. **[Cover article]**
11. **Sharma, P.P.**, Vahtera, V., Kawauchi, G., Giribet, G. (2011) Running wILD: The case for exploring mixed parameter sets in sensitivity analysis. *Cladistics* 27: 538–549.
10. **Sharma, P.P.**, Kury, A.B., Giribet G. (2011) The Zalmoxidae (Arachnida: Opiliones: Laniatores) of the Paleotropics: a catalogue of Southeast Asian and Indo-Pacific species. *Zootaxa* 2972: 37–58.
9. Giribet, G., Vogt, L., González, A.P., **Sharma, P.**, Kury, A.B. (2010) A multilocus approach to harvestmen (Arachnida: Opiliones) phylogeny with emphasis on biogeography and the systematics of Laniatores. *Cladistics* 26: 408–437.
8. **Sharma, P.**, Giribet, G. (2009) Sandokanid phylogeny based on eight molecular markers—The evolution of a southeast Asian endemic family of Laniatores (Arachnida, Opiliones). *Molecular Phylogenetics and Evolution* 52: 432–447.
7. **Sharma, P.**, Giribet, G. (2009) A relict in New Caledonia: phylogenetic relationships of the family Troglósironidae (Opiliones: Cyphophthalmi). *Cladistics* 25: 279–294.
6. **Sharma, P.**, Karunarathna, I., Giribet, G. (2009) On the endemic Sri Lankan genus *Pettalus* (Opiliones, Cyphophthalmi, Pettalidae) with the description of a new species and a discussion on the magnitude of its diversity. *The Journal of Arachnology* 37: 60–67.
5. **Sharma, P.P.**, Giribet, G. (2009) The family Troglósironidae (Opiliones: Cyphophthalmi) of New Caledonia. In: Zoologia Neocaledonica 6, Systematics and Biodiversity in New Caledonia. *Mémoires du Muséum National d'Histoire Naturelle* 196: 83–123.
4. Giribet, G., **Sharma, P.P.**, Bastawade, D. (2007) A new genus and species of Cyphophthalmi (Arachnida, Opiliones) from the north-eastern states of India. *Zoological Journal of the Linnean Society* 151: 663–670.
3. Boyer, S.L., Clouse, R.M., Benavides, L.R., **Sharma, P.**, Schwendinger, P.J., Karunarathna, I., Giribet, G. (2007) Biogeography of the world: a case study of globally distributed arachnids. *Journal of Biogeography* 34: 2070–2085.
2. **Sharma, P.**, Giribet, G. (2006) A new *Pettalus* species (Opiliones, Cyphophthalmi, Pettalidae) from Sri Lanka with a discussion on the evolution of eyes in Cyphophthalmi. *The Journal of Arachnology* 34: 331–341.
1. **Sharma, P.**, Giribet, G. (2005) A new *Troglósiro* species (Opiliones, Cyphophthalmi, Troglósironidae) from New Caledonia. *Zootaxa* 1053: 47–60.

## PRESENTATIONS

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### INVITED LECTURES

- 2021 Entomology Seminar Series, Department of Entomology, University of Wisconsin-Madison, WI [February 2021]
- 2020 VI Latin American Congress of Arachnology, virtual symposium: *Evolutionary Developmental Biology (Evo-Devo) in Arachnida* [December 2020]
- 2020 I Meeting of the Society for Systematics, Biogeography, and Evolution, virtual symposium: *Diversity and phenotypic evolution* [July 2020]
- 2019 Department of Genetics retreat, University of Wisconsin-Madison, WI [September 2019]
- 2019 Biology Seminar Series, University of Alabama, Tuscaloosa, AL [August 2019]
- 2019 3<sup>rd</sup> Pan-American Society of Evolutionary Developmental Biology meeting, University of Miami, FL (plenary speaker) [August 2019]
- 2019 Biology Seminar Series, Lawrence University, Appleton, WI [May 2019]
- 2019 21<sup>st</sup> International Congress of Arachnology, Christchurch, New Zealand (keynote address) [February 2019]
- 2017 EEOB Department Seminar, Ohio State University, Columbus, OH [September 2017]
- 2017 Biology Seminar Series, Western Australian Museum, Perth, Australia [August 2017]
- 2017 Biology Seminar Series, Department of Ecology, Evolution and Behavior, Hebrew University of Jerusalem, Israel [June 2017]
- 2017 Annual Meeting of the Society of Integrative and Comparative Biology, New Orleans, Louisiana, symposium participant (“The Evolution of Arthropod Body Plans”) [January 2017]
- 2016 Genetics Seminar Series, Department of Genetics, University of Wisconsin-Madison, WI [December 2016]
- 2016 qBio Seminar Series, Systems Biology Cluster, University of Wisconsin-Madison, WI [November 2016]
- 2016 Wisconsin Ecology 20th Annual Fall Symposium, University of Wisconsin-Madison, WI [October 2016]
- 2016 Evolution Seminar Series, J.F. Crow Institute, University of Wisconsin-Madison, WI [April 2016]
- 2016 Entomology Seminar Series, Department of Entomology, University of Wisconsin-Madison, WI [April 2016]
- 2015 Biology Colloquium, University of Wisconsin-Madison, WI [November 2015]
- 2015 Fourth Tuesday scientists group, Madison, WI [September 2015]
- 2015 OEB 141: Biogeography, Harvard University [March 2015]
- 2015 Bioinformatics and Genomics Departmental Seminar Series, University of North Carolina-Charlotte [February 6, 2015]
- 2014 MCZ Lunch Seminar Series, Harvard University [November 2014]
- 2014 Biology Seminar Series, George Washington University [October 2014]
- 2014 4<sup>th</sup> Congreso Latinoamericano de Aracnología, Morelia, México (keynote address, given in Spanish) [July 21, 2014]
- 2014 University of Santo Tomas, Manila, Philippines [May 2014]
- 2014 Biology Colloquium, University of Wisconsin-Madison, WI [March 2014]
- 2014 AMNH Comparative Biology Seminar, New York, NY [February 2014]
- 2013 Gilder Graduate School, American Museum of Natural History, New York, NY [December 2013]
- 2013 9<sup>th</sup> Annual University of Michigan Early Career Scientists Symposium, Ann Arbor, MI [March 2013]

- 2013 First International SpiderWeb meeting for the annotation of the *Parasteatoda* genome, Oxford Brookes University, UK [February, 2013]
- 2012 Biology Colloquium, University of Massachusetts at Lowell, MA [October 2012]
- 2012 AMNH Comparative Biology Seminar, New York, NY [October 2012]
- 2012 OEB 141: Biogeography, Harvard University [February 2012]
- 2011 3<sup>rd</sup> Latin-American Congress of Arachnology, Armenia, Colombia [December 2011]
- 2010 Marine Lab, University of Guam [September 2010]
- 2010 Palawan State University, Puerto Princesa, Philippines [August 2010]
- 2010 OEB 141: Biogeography, Harvard University [February 2010]
- 2010 VI Meeting of the Southern Connection Congress, Argentina [February 2010]

#### CONFERENCE PRESENTATIONS

- 2021 Annual Meeting of the American Arachnological Society, virtual (one talk)
- 2020 Annual Meeting of the Society of Integrative and Comparative Biology, Austin, Texas (one talk)
- 2019 21<sup>st</sup> International Congress of Arachnology, Christchurch, New Zealand (keynote address, one contributed talk, one poster)
- 2018 Annual Meeting of the Society of Integrative and Comparative Biology, San Francisco, California (one talk)
- 2016 20<sup>th</sup> International Congress of Arachnology, Golden, CO, USA (one talk)
- 2016 Annual Meeting of the Society of Integrative and Comparative Biology, Portland, Oregon (one talk)
- 2015 Annual Meeting of the Society of Integrative and Comparative Biology, West Palm Beach, Florida (one talk)
- 2014 4<sup>th</sup> Congreso Latinoamericano de Aracnología, Morelia, México (one talk)
- 2013 World Congress of Malacology 2013, Ponta Delgada, Azores, Portugal (one talk)
- 2013 19<sup>th</sup> International Congress of Arachnology, Kenting, Taiwan (three talks)
- 2013 Annual Meeting of the Society of Integrative and Comparative Biology, San Francisco, California (one talk)
- 2012 Annual Meeting of the American Arachnological Society, Green Bay, Wisconsin (one talk)
- 2012 Annual Meeting of the Society of Integrative and Comparative Biology, Charleston, South Carolina (one talk, one poster)
- 2011 3<sup>rd</sup> Latin-American Congress of Arachnology, Armenia, Colombia (three talks)
- 2010 18<sup>th</sup> International Congress of Arachnology, Siedlce, Poland (two talks)
- 2010 XXIX Meeting of the Willi Hennig Society, Honolulu, Hawaii (two talks)
- 2008 XXVII Meeting of the Willi Hennig Society, Tucumán, Argentina (one talk)
- 2007 17<sup>th</sup> International Congress of Arachnology, São Pedro, Brazil (one talk)

#### MENTORSHIP AND ADVISING

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##### POSTDOCTORAL FELLOWS

- 2020-present Caitlin M. Baker
- 2017-present Luciano Palmieri (honorary fellow)
- 2017-present Jesus A. Ballesteros Chávez
- 2016-2018 Carlos Eduardo Santibañez-López (currently: Assistant Professor, Western Connecticut State University)

##### GRADUATE STUDENTS

2018-present Emily V.W. Setton (Zoology Ph.D. program, UW-Madison)  
 2017-present Guilherme Gainett (Zoology Ph.D. program, UW-Madison)  
 2016-present Andrew Z. Ontano (Zoology Ph.D. program, UW-Madison)  
 2016-2017 Holly Cho, M.A. (Cellular and Molecular Biology training program, Masters student, UW-Madison)

#### *GRADUATE COMMITTEES*

2020-present Jo Jo Sardina (Genetics Ph.D. program, Currie laboratory, UW-Madison)  
 2020-present Roberto Carrera Martínez (Zoology Ph.D. program, Schoville laboratory, UW-Madison)  
 2020-present Charlotte R. Kanzler (Cell and Molecular Biology Ph.D. program, Newmark laboratory, UW-Madison)  
 2019-2020 Aaron Kufner (Geosciences Masters program, Peters laboratory, UW-Madison)  
 2017-present Nancy Lo Man Hung (Biology Ph.D. program, Departamento de Genética e Biologia Evolutiva, Universidade de São Paulo)  
 2017-present José Cruz-Arzon (Zoology Ph.D. program, Blair laboratory, UW-Madison)  
 2017-present Umair Khan (Cell and Molecular Biology Ph.D. program, Newmark laboratory, UW-Madison)  
 2017-present W. Grant Morton (Botany Ph.D. program, Cameron laboratory, UW-Madison)  
 2017-present Yi-Ming Weng (Entomology Ph.D. program, Schoville laboratory, UW-Madison)  
 2016-2020 Stefan Kaluziak, Ph.D. (Biology Ph.D. program, Vollmer laboratory, Northeastern University)

#### *UNDERGRADUATE AND POST-BACCALAUREATE STUDENTS*

2021-present Pola Blaszczyk (undergraduate, UW-Madison)  
 2021-present Benjamin Klementz (undergraduate, UW-Madison)  
 2021 Alison Gregorian (undergraduate, UW-Madison)  
 2021-present Hugh Steiner (undergraduate, UW-Madison)  
 2020-present James Guskov (undergraduate, UW-Madison)  
 2020 Yaseen Najeeb (undergraduate, UW-Madison)  
 2019 Maanasa Devabhaktuni (undergraduate, UW-Madison)  
 2019-2020 Simon Rosenblum (undergraduate, UW-Madison)  
 2019-2020 Kevin Corbett (undergraduate, UW-Madison)  
 2019-2020 Leonardo Barolo Gargiulo (undergraduate, UW-Madison)  
 2019-present Jakob Zehms (undergraduate, UW-Madison)  
 2019 John MacGregor Zern (undergraduate, UW-Madison)  
 2018-2019 Mahad Siad (undergraduate, UW-Madison)  
 2018 Josephine Hall (undergraduate, UW-Madison)  
 2018 Paula Thuo (undergraduate, UW-Madison)  
 2017-2018 Keyton Friske (undergraduate, UW-Madison)  
 2017-2018 Audrey Crawford (undergraduate, UW-Madison)  
 2017 Calvin So (undergraduate, UW-Madison)  
 2017-2019 Rachel Smaby (undergraduate, UW-Madison)  
 2016-2018 Logan March (undergraduate, UW-Madison)  
 2016-2018 Stephanie Schmidt (undergraduate, UW-Madison)  
 2016-2017 Erik Nolan (undergraduate thesis writer, Biology major, UW-Madison)  
 2016-2017 Jill T. Oberski (post-baccalaureate, Macalester College)  
 2016 A. Kenji Shoemaker (post-baccalaureate, Macalester College)  
 2016 Alejandra Torres Diaz (undergraduate, UW-Madison)

2016	Savana M. Lipps (undergraduate, UW-Madison)
2015-2018	Emily V.W. Setton (undergraduate, UW-Madison)
2014-2015	Marc A. Santiago (post-baccalaureate, Susquehanna University)
2013	Kevaughn Gordon (undergraduate, City University of New York)
2012	Guillermo Gainett (undergraduate, Universidade de São Paulo)
2010-2012	Alexander Kim (undergraduate, Harvard University)

#### INTRODUCTORY BIOLOGY RESEARCH MENTORING

2020	Yaseen Najeeb (undergraduate, UW-Madison)
2019	Simon Rosenblum (undergraduate, UW-Madison)
2019	Kevin F. Corbett (undergraduate, UW-Madison)
2019	John MacGregor Zern (undergraduate, UW-Madison)
2018	Josephine Hall (undergraduate, UW-Madison)
2017	Rachel Smaby (Biology 152 independent research program, UW-Madison)
2016	Logan March (Biology 152 independent research program, UW-Madison)
2016	Stephanie Schmidt (Biology 152 independent research program, UW-Madison)
2016	Alejandra Torres-Diaz (Biology 152 independent research program, UW-Madison)

#### OUTREACH

2021	Guest instructor for the AP Summer Institute for high school AP Biology teachers. Activities: BLAST lab and sequence data in the classroom.
2020	Annual Darwin Day event, UW-Madison. Activities: Arthropods booth.
2019	Panelist, “Grad School 101”, BioScience Summer Research Program
2019	Lab visit to CentroHispano (6 <sup>th</sup> -8 <sup>th</sup> grade science students), Madison, WI. Activities: Live arthropod show-and tell.
2019	Annual Darwin Day event, UW-Madison. Activities: Arthropods booth.
2019	Host to visit from AP Biology class of Reedsburg High School, Wisconsin.
2018	Annual Darwin Day event, UW-Madison. Activities: Arthropods booth.
2017	Annual Darwin Day event, UW-Madison. Activities: Arthropods booth.
2016	Student sponsor for the Pre-college Enrichment Opportunity Program for Learning Excellence (PEOPLE). Student: Danielle Differt.
2010	Lecture/tour on arthropods and phylogenetics to Harvard Museum of Natural History Volunteers program

#### FIELDWORK

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2021	National grasslands range, Colorado (USA)
2020	Cypress Creek, Austin, Texas
2019	Arthur Pass, South Island (New Zealand)
2018	Sde Boker, Golan Heights (Israel)
2018	National grasslands range, Colorado (USA)
2017	Stirling Range, Walpole, and Pemberton (Australia)
2017	Golan Heights, Sde Boker (Israel)
2016	Channel Islands, California (USA)
2015	Queensland (Australia)
2014	Queensland (Australia)
2014	Panay and Luzon (Philippines)
2014	Khammouane (Laos)
2013	Kenting (Taiwan)

2011	Northern Territory and Queensland (Australia)
2010	Koror and Babeldaob (Palau)
2010	Chuuk, Pohnpei, and Yap (Federated States of Micronesia)
2010	Palawan and Luzon (Philippines)
2010	Florida, Georgia, and South Carolina (USA)
2008	Efate and Erromango (Vanuatu)
2008	Viti Levu, Vanua Levu, and Taveuni (Fiji)
2007	Le Grande Terre and Île des Pins (New Caledonia)

## PROFESSIONAL SERVICE

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### REFEREE SERVICE

*AMNH Publication Series* (2015-present); *Annals of the Entomological Society of America* (2013-present); *Austral Entomology* (2021-present); *BioMed Research International* (2013-present); *Canadian Entomologists* (2020-present) *Cladistics* (2010-present); *Cretaceous Research* (2016-present); *Current Biology* (2020-present); *Developmental Biology* (2019-present); *eLife* (2017-present); *Evolutionary Ecology* (2015-present); *Frontiers in Ecology and Evolution* (2014-present); *Frontiers in Zoology* (2013-present); *G3: Genes Genomes Genetics* (2020-present); *Genes* (2020-present); *Geobiology* (2018-present); *GigaScience* (2020-present); *Invertebrate Reproduction and Development* (2015-present); *Integrative and Comparative Biology* (2017-present); *Invertebrate Systematics* (2009-present); *Journal of Arachnology* (2015-present); *Journal of Biogeography* (2012-present); *Journal of Insect Behavior* (2011-present); *Journal of Medical Entomology* (2020-present); *Journal of Molluscan Studies* (2013-present); *Lethaia* (2014-present); *Molecular Ecology* (2014-present); *Molecular Phylogenetics and Evolution* (2011-present); *Naturwissenschaften* (2014-present); *PLoS ONE* (2019-present); *Proceedings of the National Academy of Sciences of the USA* (2012-present); *Proceedings of the Royal Society B: Biological Sciences* (2015-present); *Systematic Biology* (2020-present); *Systematics and Biodiversity* (2017-present); *Zookeys* (2012-present); *Zoologica Scripta* (2016-present); *Zoological Journal of the Linnean Society* (2014-present); *Zoological Studies* (2014-present); *Zoologische Anzeiger* (2019-present); *Zootaxa* (2011-present)

### EDITORIAL SERVICE

Associate Editor, *Invertebrate Systematics* (2015-present)  
 Associate Editor, *Cladistics* (2015-2017)

### LANGUAGE EDITING SERVICE

*Zootaxa* (2011-present)

### PANEL AND GRANT PROPOSAL REVIEW SERVICE

Ad hoc reviewer, Biotechnology and Biological Sciences Research Council (2021-present)  
 Ad hoc reviewer, Deutsche Forschungsgemeinschaft (2021-present)  
 UW-Madison College of Agriculture and Life Sciences Hatch program, 11 November 2019  
 National Science Foundation Integrative and Organismal Systems (Evolution of Developmental Mechanisms panel), 8-10 March 2017  
 National Science Foundation Doctoral Dissertation Improvement Grant (Systematics and Biodiversity Science Cluster), 10-12 December 2014  
 Ad hoc reviewer, National Science Foundation, Division of Environmental Biology, 2014-present

### SOCIETY MEMBERSHIPS

*Curriculum vitae*



American Arachnological Society; International Society for Arachnology (lifetime); International Society of Invertebrate Morphology; Pan-American Society for Evolutionary Developmental Biology; Society of Integrative and Comparative Biology

#### *SERVICE TO ACADEMIC SOCIETIES*

Annual Meeting of the American Arachnological Society, June 2021, virtual (session chair)  
Annual Meeting of the Society of Integrative and Comparative Biology, January 2021, virtual (judge, student poster presentations)  
Annual Meeting of the Society of Integrative and Comparative Biology, January 2020, Austin, TX (session chair; judge, student oral and poster presentations)  
3<sup>rd</sup> Pan-American Society of Evolutionary Developmental Biology conference, August 2019, University of Miami, Miami, FL (judge, student poster presentations)  
Education and Professional Training Officer, Pan-American Society of Evolutionary Developmental Biology, August 2019-August 2021  
Secretary, Division of Evolutionary Developmental Biology (DEDB), Society of Integrative, Comparative Biology, January 2019-January 2021  
Secretary-Elect, Division of Evolutionary Developmental Biology (DEDB), Society of Integrative, Comparative Biology, January 2018 to January 2019  
Annual Meeting of the Society of Integrative and Comparative Biology, January 2017, New Orleans, LA (session chair; judge, student poster presentations)  
Annual Meeting of the Society of Integrative and Comparative Biology, January 2017, New Orleans, LA (judge, student poster presentations)  
Annual Meeting of the Society of Integrative and Comparative Biology, January 2016, Portland, OR (session chair)  
Annual Meeting of the Society of Integrative and Comparative Biology, January 2015, West Palm Beach, FL (session chair; judge, student oral presentations)  
American Arachnological Society, June 2012, Green Bay, WI (judge, student oral presentations)  
Annual Meeting of the Society of Integrative and Comparative Biology, January 2013, San Francisco, CA (session chair; judge, student oral presentations)  
International Congress of Arachnology, June 2013, Kenting, Taiwan (session chair; symposium organizer)  
World Congress of Malacology 2013, July 2013, Ponta Delgada, Azores, Portugal (judge, student poster presentations)

#### *ORGANIZING COMMITTEES*

21<sup>st</sup> International Congress of Arachnology, symposium organizer, “Growth, morphogenesis, and developmental genetics”, 10-15 February 2019, Christchurch, New Zealand  
20<sup>th</sup> International Congress of Arachnology, symposium organizer, “Scorpion biology in the 21<sup>st</sup> century”, 2-9 July 2016, Golden, CO  
19<sup>th</sup> International Congress of Arachnology, symposium organizer, “The biology of harvestmen”, 23-28 June 2013, Kenting National Park, Taiwan  
2<sup>nd</sup> International Congress on Invertebrate Morphology, 20-23 June 2011, Harvard University

#### *PROFESSIONAL DEVELOPMENT*

2019                      Workshop: Education and teaching in evolutionary developmental biology. 1 August 2019, 3<sup>rd</sup> Pan-American Society for Evolutionary Developmental Biology conference, University of Miami.

2015

Workshop: *How to become a more productive author*. 8 May 2015, Richard Gilder  
Graduate School, American Museum of Natural History (with Sara Ruane)