

FELIPE N. SOTO-ADAMES

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A. Academic Training

1987-1995 Ph.D. in Entomology, University of Illinois, Urbana-Champaign, Hugh M. Robertson, advisor
Thesis Title: A molecular phylogeny of the families and orders of Collembola (Arthropoda: Hexapoda) using the 18S rDNA gene

1983-1987 M.S. in Biology, University of Puerto Rico, Mayagüez, José A. Mari Mutt, advisor
Thesis Title: Revisión de la familia Actaletidae (Hexapoda: Collembola)

1979-1983 B.S. in Biology, University of Puerto Rico, Mayagüez

B. Professional Experience

2016-present Courtesy Faculty, Department of Entomology and Nematology, University of Florida, Gainesville

2016-present Curator of Entomology, Florida State Collection of Arthropods, Division of Plant Industry, Florida Department of Agriculture and Consumer Services.

2016 Visiting Assistant Professor, Department of Biology, University of Puerto Rico, Río Piedras

2015-2018 Research Faculty, Department of Biology, University of Puerto Rico, Río Piedras

2008-present Affiliate Faculty, Department of Entomology, University of Illinois, Urbana-Champaign

2007-2014 Insect Systematist and Curator of Entomology, University of Illinois at Urbana-Champaign, Illinois Natural History Survey

2005-2007 Research Associate, Department of Molecular Physiology and Biophysics, University of Vermont, Burlington

2002-2007 Research Assistant Professor, Department of Biology, University of Vermont, Burlington

1998-2001 Research Associate, Department of Biology, University of Vermont, Burlington

- 1997-1998 Postdoctoral Research Associate, Department of Ecology and Evolutionary Biology, University of Connecticut, Storrs
- 1995-1997 Postdoctoral Research Associate University of Illinois, Urbana-Champaign, IL
- 1988-1994 Teaching Assistant for Insect Systematics, Principles of Systematics, Insect Morphology, and Agricultural Entomology courses, Department of Entomology, University of Illinois, Urbana-Champaign, IL

C. Research Interests

- Arthropod classical morphological and molecular systematics
- Speciation and evolution of morphological adaptations in cave and littoral adapted micro-arthropods
- Arthropod biogeography
- Evolution of flight muscle proteins

D. Grants and Awards

- I-STEM High School Summer Research Experience (PI): Support to involve a Uni-High School student in active research during the 2013 summer. Total Cost= \$1,000.00
- Grinnell College (PI): Gift in support of the work on the new edition of the *Collembola of North America north of the Rio Grande*. Total Cost= \$5,461.28
- Wisconsin Department of Natural Resources (Co-PI): Biotic inventory of invertebrates at Horseshoe Bay Cave 1 March 2013 – 1 March 2014. Total Cost= \$2,918
- USDAFS (Co-PI): Southern Illinois cave ecosystems: bioinventories, microbial communities & management plans 1 Dec 2011 – 31 May 2016. Total Cost= \$20,000.
- Forest Preserve District of Will County (Co-PI): Braidwood Dunes and Savanna: Invertebrate Inventory. 1 June 2011- 1 March 2013. Total Cost= \$18,000.
- NSF 0956255 (Co-PI): *Automation of Natural History Collections and Bioinformatics: Rapid Optical Data Acquisition and Automated Computerization at INHS*. July 2010-June 2013. Total Cost= \$278,064.
- Illinois Endangered Species Protection Board (PI): *Status assessment survey for springtails (Collembola) in Illinois caves*. April 2009–March 2010. Total Cost= \$4,663
- NSF 0718417 (Co-PI): *Molecular phylogeny of flightin and the evolution of insect flight muscle*. September 2007-August 2010. Total Cost= \$676,009
- USDA HATCH (Co-PI): *Impact of beneficial microbes and insect-resistant transgenic corn on non-target soil micro-arthropods*. 2001-2004. Total Cost= \$59,972
- NSF Grant DEB-0075548 (PI): *Phylogeny of the genera of Entomobryidae (Collembola) based on nuclear DNA sequences and morphology: insights into the origin of Paronellidae*. 2000-2004. Total Cost= \$235,000
- NSF Minority Postdoctoral Fellowship: *Phylogeographic tracks in the Northeastern Caribbean*. 1999-2000.
- NSF Minority Postdoctoral Fellowship: *Genetic markers and speciation in the genus Lepidocyrtus*, 1997-1999.

- Dupont Award for Outstanding Teaching by a graduate student in the Department of Entomology: University of Illinois, Urbana-Champaign, 1995
- Third prize, Sigma Xi student paper competition: University of Illinois, Urbana-Champaign, 1995
- Herbert Holdsworth Ross Memorial Fund: Illinois Natural History Survey, Champaign, 1990 and 1994
- Sigma Xi Grants-in-aide: University of Illinois, Urbana-Champaign, June 1991
- Presidential Scholarship of the University of Puerto Rico to attend the University of Illinois, Urbana-Champaign, August 1987 to May 1990.

E. Refereed Publications

- Waldo, B, **F. Soto-Adames** and W. Crow. **2021**. Nematicide effects on Arthropods in Bermudagrass. *Florida Entomologist*, 103 (4): 458-464.
- Ospina, C.L., **F. Soto-Adames** & G. Gonzalez **2020**. Checklist and distribution of Collembola from Greater Puerto Rico. *Biodiversity Data Journal* 8: e52054
<https://doi.org/10.3897/BDJ.8.e52054>
- Bardjadze, S., R. Giordano & **F. Soto-Adames**. **2020**. Description of a new species of *Plutomurus* Yosii (Collembola: Tomoceridae) from Georgia, Caucasus and notes on the morphology of *Plutomurus birsteini* Djanashvili & Barjadze. *Zootaxa* 4790 (2): 375-286.
- Giordano, R. and 62 other authors **2020**. Soybean aphid biotype 1 genome: Insights into the invasive biology and adaptive evolution of a major agricultural pest. *Insect Biochemistry and Molecular Biology* 120: 1-24. <https://doi.org/10.1016/j.ibmb.2020.103334>
- Zhang, F, B. Bellini, and **F.N. Soto-Adames**. **2019**. New insights into the systematics of Entomobryoidea (Collembola: Entomobryomorpha): first instar chaetotaxy, homology and classification. *Zoological Systematics* 44(4): 249-278.
- Beuzelin, J.M., M.T. VanWeelden, **F.N. Soto-Adames**, H.S. Sandhu, R.W. Davidson, L. Baucum and S. Swanson. **2019** Effect of Sugarcane cultivar and foliar insecticide treatment on infestations of the invasive sugarcane thrips, *Fulmekiola serrata* (Thysanoptera: Thripidae), in Florida. *Journal of Economic Entomology*, <https://doi.org/10.1093/jee/toz188>
- Catanach, T.A., A.D. Sweet, N.D. Nguyen, R.M. Peery, A.H. Debevec, A. K. Thomer, A.C. Owings, B.M. Boyd, A.D. Katz, **F.N. Soto-Adames**, J.M. Allen. **2019**. Fully automated sequence alignment methods are comparable to, and much faster than, traditional methods in large data sets: an example with hepatitis B virus. *PeerJ*, DOI 10.7717/peerj.6142
- Barjadze, S., Z. Asanidze, A. Gavashelishvili, & **F. N. Soto-Adames**. **2019**. The hypogean invertebrate fauna of Georgia. *Zoology in the Middle East*, 65(1): 1-10.
- Barjadze, S., R. Jordana, E. Baquero, R. Giordano & **F.N. Soto-Adames**. **2018**. Two new species of *Plutomurus* Yosii (Collembola, Tomoceridae) from the Caucasus. *Zootaxa*, 4526(1): 29-40.
- Nguyen, M & **F.N. Soto-Adames**. **2018**. Annotated checklist of Afrotropical *Trogolaphysa* Mills, 1938 (Hexapoda: Collembola: Paronellidae) and description of a new species from Madagascar. *Zoosystema* 40(10):179-196.
- **Soto-Adames F.N. 2017 (2018)**. Legado de Juan A Torres al conocimiento entomológico en Puerto Rico. *Journal of Agriculture of the University of Puerto Rico*, 101: 12-23.
- Palacios-Vargas, J.G. & **F.N. Soto-Adames**. **2017**. On the genus *Paleonura* (Collembola: Neanuridae: Neanurinae) from the Americas and description of a new species from Puerto Rico. *Zootaxa*, 4318 (2): 388-394.

- Soto-Adames, F.N.** & E.W. Anderson. **2017** New species and new records of Entomobryoidea (Collembola: Entomobryomorpha) from Nevis, Lesser Antilles. *Florida Entomologist*.100(1): 32-41.
- Barjadze, S., E. Baquero, **F.N. Soto-Adames**, R. Giordano & R. Jordana. **2016**. Character systems and criteria for species diagnosis in *Plutomurus* (Collembola, Tomoceridae), with description of two new species from Georgian caves. *Zootaxa* 4126(1): 77-96
- Marcelino, J.A.P., R. Giordano, P.A. Borges, P.V. Garcia, **F.N. Soto-Adames**, A.O. Soares. **2016**. Distribution and genetic variability of Staphylinidae across a gradient of anthropogenically influenced insular landscapes. *Bulletin of Insectology* 69(1): 117-126
- Katz A.D., S.J. Taylor, **F.N. Soto-Adames**, A. Addison, G.B. Hoese, M.R. Sutton and T. Toulkeridis. **2016**. New records and new species of springtails (Collembola, Entomobryoidea) from lava tubes of the Galápagos Islands (Ecuador). *Subterranean Biology* 17:77-120. doi: 10.3897/subtbiol.17.7660
- Soto-Adames, F.N.** **2016**. Chaetotaxy of first-instar *Campylothorax sabanus* (Wray), and description of three new *Campylothorax* species from Hispaniola (Collembola, Paronellidae). *Journal of Natural History* 50: 1583-1612. DOI: 10.1080/00222933.2016.1145272
- Soto-Adames, F.N.** **2015**. The dorsal chaetotaxy of first instar *Trogolaphysa jataca*, with description twelve new species of Neotropical *Trogolaphysa* (Hexapoda: Collembola: Paronellidae). *Zootaxa* 4032 (1): 1-41. DOI: <http://dx.doi.org/10.11646/zootaxa.4032.1.1>
- Katz, A., R. Giordano & **F.N. Soto-Adames**. **2015**. Review of North American members of the genus *Entomobrya* (Collembola: Entomobryidae) east of the Mississippi River. *Zookeys* 525: 1-75. doi: 10.3897/zookeys.525.6020
- Sridharan S., A. Katz, **F.N. Soto-Adames** & G. Popescu. **2015**. Quantitative phase imaging of arthropod. *Journal of Biomedical Optic*, 20 (11): 111212-1–111212-6.
- Bernard, E. C, **F. N. Soto-Adames** & J.J. Wynne. **2015**. Collembola of Rapa Nui (Easter Island) with description of five endemic cave-restricted species. *Zootaxa* 3949 (2): 239–267. <http://dx.doi.org/10.11646/zootaxa.3949.2.6>
- Soto-Adames, F.N.** & B.C. Bellini. **2015**. Dorsal chaetotaxy of Neotropical species supports a basal position for the genus *Lepidonella* among scaled Paronellidae (Collembola. Entomobryoidea). *Florida Entomologist* 98(1): 330-341.
- Katz, A.D., R. Giordano & **F.N. Soto-Adames**. **2015**. Operational criteria for cryptic species delimitation when evidence is limited, as exemplified by North American *Entomobrya* (Collembola). *Zoological Journal of the Linnean Society, London*. 173(4): 818-841. DOI: 10.1111/zoj.12220.
- Joseph, S.V., C. Bettiga, C. Ramirez & **F.N. Soto-Adames**. **2015**. Evidence of *Protaphorura fimata* (Collembola: Poduromorpha: Onychiuridae) feeding on germinating lettuce in the Salinas Valley of California. *Journal of Economic Entomology*. DOI: 10.1093/jee/tou021
- Soto-Adames, F.N.**, R. Jordana and E. Baquero. **2014**. Comparative analysis of the dorsal chaetotaxy of *Troglopedetes*, *Trogolaphysa* and *Campylothorax* supports the synonymization of tribes Paronellini and Troglopedetini (Collembola: Paronellidae). *Journal of Insect Science*, 14(1): 278-293, DOI: 10.1093/jisesa/ieu140
- Wynne, J. Judson, Ernest C. Bernard, **Felipe N. Soto-Adames**, Stefano Taiti, Edward L. Mockford, Francis G. Howarth, Stefan Sommer, Mark Horrocks, Lazero Pakarati, and Victoria Pakarati-Hotus. **2014**. Disturbance Relicts in a Rapidly Changing World: The Rapa Nui (Easter Island) Factor. *Bioscience*, doi:10.1093/biosci/biu090

- Giordano,R., Weber, E.P., Darby B.J., **Soto-Adames F.N.**, and Drizo, A. **2014**. Invertebrates associated with a horizontal-flow, subsurface constructed wetland in a northern climate. *Environmental Entomology* 43(2): 283-290. DOI: <http://dx.doi.org/10.1603/EN13096>
- Soto-Adames F.N.**, P. Álvarez Ortiz and J.O. Vigoreaux. **2013**. An Evolutionary Analysis of Flightin Reveals a Conserved Motif Unique and Widespread in Pancrustacea. *Journal of Molecular Evolution* DOI 10.1007/s00239-013-9597-5
- Soto-Adames, F.N.** and S. J. Taylor. **2013**. New species and new records of springtails (Hexapoda: Collembola) from caves in the Salem Plateau of Illinois, USA. *Journal of Karst and Cave Studies*, 75(2): 146-175. DOI: 10.4311/2011LSC0257
- Major, K., D.J. Soucek, R. Giordano, M.J. Wetzel and **F. Soto-Adames**. **2013**. Most ecotoxicology laboratories use a strain of *Hyaella azteca* that has only a limited distribution in eastern North America. *Environmental Toxicology and Chemistry*, 32(11): 2637-2647. DOI: 10.1002/etc.2355
- Soto-Adames F.N.** and J.T. Taylor. **2013**. Chaetotaxy and character evolution in *Trogolaphysa* (Collembola, Entomobryoidea, Paronellidae), with descriptions of two new species from caves in Belize. *Zookeys* 323: 35-74.
- Soto-Adames, F.N.**, R. Giordano and K. Christiansen. **2013**. *Bellisotoma*, a new genus of Isotomidae from North America (Hexapoda, Collembola). *Zookeys*, 283: 7-13.
- Marcelino J, R. Giordano, **F. Soto-Adames**, P. Garcia, E. Weber, L. Silva, A. O. Soares. **2011**. Unobserved diversity in Darwin's appraisal of the Azores. Symposium 'Darwin's mistake and what we are doing to correct it'. *Açoreana*, supplement, 7:229-240.
- Soto-Adames, F.N.** and R. Giordano. **2011**. New species of springtails in the *Proisotoma* genus complex from Vermont and New York, USA with descriptive notes on *Ballistura alpa* Christiansen & Bellinger, 1980 (Hexapoda: Collembola: Isotomidae). *Zookeys*, 147:19-37.
- Soto-Adames, F.N.** and C. Guillén. **2011**. Two new species of the marine springtail genus *Spinactaletes* (Collembola: Actaletidae) from Costa Rica. *Bulletin of Marine Science*. 21: 463-483. DOI: 10.5343/bms.2010.1078
- Miller, M.S., G.P. Farman, J.M. Braddock, **F.N. Soto-Adames**, T.C. Irving, J.O. Vigoreaux, and D.W. Maughan. **2011**. Regulatory light chain phosphorylation and N-terminal extension increase cross-bridge binding and power output in *Drosophila* at *in vivo* myofilament lattice spacing. *Biophysics Journal*, 100: 1737-1746.
- Giordano, R. E, Weber, J. Waite, N. Bencivenga, P. H. Krogh and **F. Soto-Adames**. **2010**. Effect of high dose of three antibiotics on the reproduction of a parthenogenetic strain of *Folsomia candida* (Isotomidae: Collembola). *Environmental Entomology*, 39: 1170-1177.
- Soto-Adames, F.N.** **2010**. Review of the New World species of *Salina* (Collembola: Paronellidae) with bidentate mucro, including a key to all New World members of *Salina*. *Zootaxa*, 2333:26-20.
- Soto-Adames, F.N.** **2010**. Two new species and descriptive notes for five *Pseudosinella* species (Hexapoda: Collembola: Entomobryidae) from West Virginian (USA) Caves. *Zootaxa*, 2331: 1-34.
- Farman, G.P, M.S. Miller, M.C. Reedy, **F.N. Soto-Adames**, J.O. Vigoreaux, D.W. Maughan and T.C. Irving. **2009**. Phosphorylation and the N-terminal extension of the regulatory light chain help orient and align the myosin heads in *Drosophila melanogaster* flight muscle. *Journal of Structural Biology*, 168: 240-249.

- Soto-Adames F.N.**, J.A. Barra, K. Christiansen and R. Jordana. **2008**. Suprageneric Classification of the Entomobryomorph Collembola. *Annals of the Entomological Society of America*, 101(3): 501-513.
- Soto-Adames, F.N.** **2008**. Postembryonic development of the dorsal chaetotaxy of *Seira dowlingi* (Collembola, Entomobryidae); with an analysis of the diagnostic and phylogenetic significance of primary chaetotaxy in *Seira*. *Zootaxa* 1683: 1–31
- Ma, Y., J. Chen and **F. Soto-Adames**. 2006 (2007). A new species of *Dicranocentrus* (Collembola: Entomobryidae) from China. *Entomological News*, 117 (5): 485-490.
- Guillén, C., **F. Soto-Adames** and M. Springer. 2006. Diversidad y abundancia de colémbolos edáficos en un bosque primario, un bosque secundario y un cafetal en Costa Rica. *Agronomía Costarricense* 30:7-17.
- Guillén, C., **F. Soto-Adames** and M. Springer. 2006. Variables físicas, químicas y biológicas del suelo sobre las poblaciones de colémbolos en Costa Rica. *Agronomía Costarricense* 30:19-29.
- Richardson, B.A., M.J. Richardson and **F.N. Soto-Adames**. 2005. Separating the effects of forest type and elevation on the diversity of litter invertebrate communities in a humid tropical forest in Puerto Rico. *Journal of Animal Ecology*, 74:926-936.
- Carapelli, A., **F.N. Soto-Adames**, C. Simon, F. Frati, F. Nardi and R. Dallai. 2004. Secondary structure, high variability, and conserved motifs for domain III of the 12S rRNA in the superorder Arthropleona (Collembola; Hexapoda). *Insect Molecular Biology*, 13: 659-670
- Lampe, D.J., D. Witherspoon, **F.N. Soto-Adames**, and H. M. Robertson. 2003. Recent horizontal transfer of mellifera subfamily *mariner* transposon into insect lineages representing four different orders. *Molecular Biology and Evolution*, 20(4): 554-562.
- Soto-Adames, F.N.** 2002. Molecular Phylogeny of the Puerto Rican *Lepidocyrtus* and *Pseudosinella* (Hexapoda: Collembola: Entomobryidae), a validation of Yoshii's "color pattern species". *Molecular Phylogenetic and Evolution*, 25: 27-42.
- Soto-Adames, F. N.** 2002. Four new species and new records of springtails (Hexapoda: Collembola) from the US Virgin Islands and Puerto Rico, with notes on the chaetotaxy of *Metasinella* and *Seira*. *Caribbean Journal of Science*, 38:77-105.
- Robertson, H. M., **F. N. Soto-Adames**, K. K. O. Walden, R. M. P. Avancini, and D. J. Lampe. 2002. The mariner transposons of animals: horizontally jumping genes. In: *Horizontal Gene Transfer*. Ed. M. Syvanen. pp 173-185. Academic Press, San Diego.
- Soto-Adames, F. N.** 2000. Phylogeny of Neotropical *Lepidocyrtus* (Collembola: Entomobryidae): first assessment of patterns of speciation in Puerto Rico and phylogenetic relevance of some subgeneric diagnostic characters. *Systematic Entomology*, 25: 485-502.
- Soto-Adames, F. N.**, H.M. Robertson and S.H. Berlocher 1994. Phylogenetic utility of partial DNA sequences of *G6pdh* in hexapod systematics. *Annals of the Entomological Society of America*, 87: 723-736.
- Soto-Adames, F. N.** 1988. Nuevos dicirtómidos de Puerto Rico (Collembola: Dicyrtomidae). *Caribbean Journal of Science*, 24: 60-70.
- Soto-Adames, F. N.** 1988. Revisión de la familia Actaletidae Börner, 1902 (Insecta: Collembola). *Caribbean Journal of Science*, 24: 161-196
- Soto Adames, F. N.** 1987. A new species of *Actaletes* from México (Collembola: Actaletidae). *Pan-Pacific Entomologist*, 63: 52-55.
- Mari Mutt, J. A. and **F. N. Soto-Adames**. 1987. Molting, fecundity and longevity in *Willowsia jacobsoni* (Collembola: Entomobryidae). *Caribbean Journal of Science*, 23: 298-304.

Eb. Manuscript in Preparation (*undergraduate students)

- Soto-Adames, F.N.**, & E. Gregory. Three new species of *Lepidocyrtus* from Florida. To be submitted to *Insecta Mundi*
- Soto-Adames, F.N.**, K. Daly & J. Wynn. Two new species of cave *Trogolaphysa* from Belize. To be submitted to *Biodiversity*.
- *Dabek, E. & **F.N. Soto-Adames**. Three new species of *Bovicornia* (Collembola, Bourletiellidae) Botswana and South Africa. To be submitted to *European Journal of Taxonomy*.
- Soto-Adames, F.N.**, A. Katz, *A. Flores & R. Giordano. Morphological and Molecular evidence for two new species of *Dicranocentrus* in the *D. marias* group from Panama (Collembola: Entomobryidae). To be submitted to *Systematics and Biodiversity*
- Soto-Adames, F.N.** New species of *Trogolaphysa* (Collembola, Paronellidae) from Panama.

F. Reports, Pest Alerts and Circulars

- Soto-Adames F.N. 2020**. Pest Alert: *Thrips parvispinus* (Karny). Florida Department of Agriculture and Consumer Services, FDACS-P-01926. August 2020
- Soto-Adames F.N. 2020**. Pest Alert: *Megalurothrips usitatus* (Bagnall), Asian bean thrips. Florida Department of Agriculture and Consumer Services, FDACS-P-02137. March 2020
- Soto-Adames, F.N. 2017**. Pest Alert: *Fulmekiola serrata* (Kobus), sugarcane thrips. Florida Department of Agriculture and Consumer Services, FDACS-P-01605.
- Taylor, S.J., A.D. Yanahan, S.W. Heads, **F.N. Soto-Adames**, J.R. Wiker, D.R. Swanson, J.N. Zahniser, and C.S. Bundy. **2014**. A bioinventory of select terrestrial insects at Braidwood Dunes and Savanna Nature Preserve (Will County, Illinois). INHS Technical Report 2014(33): 1–254.
- Soto-Adames, F.N.** and S. J. Taylor. **2012**. Status assessment survey for springtails (Collembola) in caves of Illinois' Salem Plateau. INHS Reports, 407 (Winter 2012): 3.
- Soto-Adames, F.N.** and S. J. Taylor. **2010**. Status assessment survey for springtails (Collembola) in Illinois caves: the Salem Plateau. Prepared for the Illinois Endangered Species Protection Board.
- Soto-Adames, F.N. 2009**. A long-standing tradition in springtail systematics at INHS. INHS Reports, 399 (Spring 2009): 1, 8.

G. Invited Presentations

- Identification and Distribution of the Asian Bean Thrips (*Megalurothrips usitatus*) in Florida: March-August 2020. Workshop presented to a group of Florida green bean growers on 11 September 2020 (streaming via Zoom).
- Morphological and molecular variation in Collembola, a cautionary tale for evolutionary studies in soil micro-arthropods. Presented to the Department of Biology, University of Puerto Rico, Rio Piedras (streaming via Google.Meet) on 1 September 2020.
- Vicariance and Dispersal in Cave and Marine Littoral Springtails. Presented at McGuire Center for Lepidoptera and Biodiversity, October 2018.
- The Development of Agriculture in Puerto Rico: An Overview. Presented at the USDA-APHIS, October 2018.
- The Development of Natural History in Puerto Rico: An Overview. Presented at the USDA-APHIS, November 2017.

- Morphological and Molecular Variation in Collembola- A cautionary tale for evolutionary studies in soil microarthropods. Presented at McGuire Center for Lepidoptera and Biodiversity, September 2017.
- The Entomological Heritage of Juan A. Torres. Presented on 17 March 2016 at the Entomological Symposium Celebrating the “*Legacy of the International Institute of Tropical Forestry (IITF) 75th Anniversary*” Agriculture Experimental Station, Botanical Garden, San Juan, Puerto Rico.
- A bioinventory of select terrestrial insects at Braidwood Dunes and Savanna Nature Preserve (Will County, Illinois). Taylor, S.J., A.D. Yanahan, S.W. Heads, **F.N. Soto-Adames**, J.R. Wiker, D.R. Swanson, J.N. Zahniser, & C.S. Bundy. Presented on 23 October 2014 at the Forest Preserve District of Will County, Joliet, IL.
- Contribution to the development of a research program in Collembola (Insects) biodiversity. Presented at the University of Puerto Rico, Mayaguez. 5 September 2014.
- Patterns of geographic speciation in Collembola (Insects). Presented to the Department of Zoology and Ecology of the University of Navarra in Pamplona, Spain. 17 August 2012.
- Contribution of morphology and DNA sequences to biodiversity studies in Collembola— presented at the *Environmental Defense of Endangered Natural Azorean Habitats* seminar series, University of the Azores, Ponta Delgada, São Miguel, Portugal, 7 September 2010.
- Workshop on the identification and taxonomy of Azorean springtail biodiversity— presented as part of the *Environmental Defense of Endangered Natural Azorean Habitats* seminar series, University of the Azores, Ponta Delgada, São Miguel, Portugal, 7 September 2010.
- Morphology, DNA Sequences and Species Diversity in Springtails (insects)— presented to the Department of Biology, Murray State University, Murray, KY, 27 February 2009.
- Morphology, DNA Sequences and the Identification of Independently Evolving Lineages in Springtails— presented to the Department of Biology, St. Louis University, St. Louis, MO, 6 February 2009.
- Phylogenetic distribution and evolution of some small proteins of the insect flight muscle— Presented at Department of Entomology, University of Illinois, Urbana-Champaign, 20 October 2008.
- Contribution of Morphological and Molecular Data to the Identification of Independently Evolving Lineages in Collembola— presented at the Illinois Natural History Survey, Champaign, IL, 26 March 2007.
- Collembola as Bioindicators— presented to the Department of Plant and Soil Sciences, University of Vermont 17 March 2006.
- Patrones de Especiación Geográfica en Colémbolos (Insectos) de Puerto Rico: Contribución al desarrollo de un sistema para el estudio de especiación en microartrópodos del suelo*— presented to the Department of Biology, University of Puerto Rico, Mayaguez, 9 December 2005.
- Speciation in insular Collembola— presented to the Department of Biology, Sul Ross State University, Alpine, TX 24 March 2004.
- Speciation in the springtail genus *Lepidocyrtus* in Greater Puerto Rico— presented to the Department of Biology, Rochester Institute of Technology 12 February 2001.
- Patterns of speciation in the springtail genus *Lepidocyrtus* in Puerto Rico— presented to the Department of Biology, the University of Vermont 19 September 2000.

H. Presentations at Scientific Meetings

- First Look at the Diversity and Distribution of the Genus *Lepidocyrtus* (Collembola: Entomobryidae) in Florida. Presented at the Annual Meeting of the Center for Systematic Entomology, 3 April, 2021 (streaming via Zoom).
- Contribution of first instar chaetotaxy to our understanding of the phylogeny and classification in Entomobryoidea (Collembola). Presented at the Center for Systematic Entomology Symposium, 18 January 2020, Gainesville, FL
- Initial Assessment of the Springtails (Collembola) of the Kanapaha Botanical Garden. In collaboration with Emily Gregory. Presented at the Center for Systematic Entomology Symposium, 18 January 2020, Gainesville, FL
- An Overview of the Springtails (Collembola) of Florida, Including New Records and New Species. Presented at the Center for Systematic Entomology Symposium, 19 January 2019, Gainesville, FL
- Fulmekiola serrata* (sugarcane thrips) and *Anaphothrips sudanensis* (maize thrips), two pest Thysanoptera new to Continental USA. Presented at the Annual Meeting of the Florida Entomological Society, July 2017, San Juan Puerto Rico
- Soybean aphid (*Aphis glycines*) Genome Assembly Process and Status. Rosanna Giordano and **Felipe N. Soto-Adames**. Presented at the National Meeting of the Entomological Society of America and International Congress of Entomology, 25-30 September 2016, Orlando, Florida.
- Biodiversity of intertidal springtails across the Isthmus of Panama. Aron Katz, Rosanna Giordano and **Felipe N. Soto-Adames**. Presented at the National Meeting of the Entomological Society of America, 16-19 November 2014, Portland, Oregon.
- Subterranean springtail: A pest of lettuce in the Salinas Valley of California. Shimat V. Joseph, Christopher Bettiga and **Felipe N. Soto-Adames**. Presented at the National Meeting of the Entomological Society of America, 16-19 November 2014, Portland, Oregon.
- Genetic Diversity, color pattern and cryptic species delimitation in North American *Entomobrya* (Collembola). Aron Katz, Rosanna Giordano, **Felipe N. Soto-Adames**. Presented at the Annual meeting of the Entomological Society of America, 10-13 November 2013, Austin, Texas.
- Springtails in caves of the Salem Plateau (Monroe and Saint Clair counties, Illinois). Steven J. Taylor and **Felipe N. Soto-Adames**. Presented at the National Speleological Society Convention, 5-9 August 2013, Shippensburg, PA.
- DNA Sequences, Morphology and Species Delimitation in Puerto Rican *Salina*. **Felipe Soto-Adames**. Presented at the 13th International Colloquium on Apterygota, August 2012, Coimbra, Portugal.
- Color pattern and molecular variation provide evidence for cryptic species in North American *Entomobrya*. Aron Katz, Rosanna Giordano and **Felipe Soto-Adames**. Presented at the 13th International Colloquium on Apterygota, August 2012, Coimbra, Portugal
- Testing the monophyly of cave adapted lineages in North American *Pseudosinella* using morphology-based phylogenetic analysis of Nearctic Lepidocyrtini. **Felipe Soto-Adames**. Presented at the 13th International Colloquium on Apterygota, August 2012, Coimbra, Portugal
- Partitioning of biodiversity across anthropogenic impacted habitats in the archipelago of the Azores. Marcelino J. R. Giordano, **F. Soto-Adames**, P. Garcia, L. Silva, E. Weber, A.O. Soares AO. 2011— International Biodiversity Conference. Los Baños, Ecuador 29 July to 4 August.

- Management of the trade-off between anthropogenic impacts, economic revenues and ecological ecosystems' services. Marcelino J, R. Giordano, **F. Soto-Adames**, P. Garcia, R. Resendes, E. Weber, A.O. Soares. 2010— ICEMT2010, The First International Conference on Environmental Management & Technologies, 1-3 November 2010. Amman, Jordan.
- Bioindicator arthropod species as an ecological tool for the safeguard and magement of the Azorean ecosystems, quality and stability. Marcelino J, R. Giordano R, **F. Soto-Adames**, P. Garcia, R. Resendes, E. Weber, A. O. Soares. 2010—. The first International Conference on Environmental Pollution, Restoration, and Management (SETAC Asia/Pacific Joint Conference) Ho Chi Minh City, Vietnam. March 1-5, 2010. (Oral)
- Conservation genetics of Collembola bioindicator species in the Azorean archipelago. Marcelino J, R. Giordano R, **F. Soto-Adames**, P. Garcia, R. Resendes, E. Weber, A. O. Soares. 2009— V National Evolutionary Biology Meeting, December 21st, 2009, Lisbon.
- Molecular and biological characterization of bioindicator species for the determination of ecological instability spots in the archipelago of the Azores Marcelino J, R. Giordano R, **F. Soto-Adames**, P. Garcia, R. Resendes, E. Weber, A. O. Soares. 2009— VI National Forestry Meeting, 6-9 October 2009, Ponta Delgada, Portugal.
- Unobserved diversity in Darwin's appraisal of the Azores. Symposium 'Darwin's mistake and what we are doing to correct it'. Marcelino J, R. Giordano R, **F. Soto-Adames**, P. Garcia, R. Resendes, E. Weber, A. O. Soares. 2009— September 19- 22, 2009. Ponta Delgada, Azores. (Oral).
- Profiling bioindicator species as a strategy to assess the degree of anthropogenic disturbance in the Azorean archipelago. Marcelino J, R. Giordano R, **F. Soto-Adames**, P. Garcia, R. Resendes, E. Weber, A. O. Soares. 2009. World Conference on Ecological Restoration SERI 2009. August 23-27, 2009. Perth, Austrália. Pp. 102. Abstract. (Oral)
- Diagnosis of *Salina wolcottii* Folsom, *S. bidentata* (Handschin) and *S. thibaudi* n. sp., with an identification key to the *Salina* of the Americas. **F. N. Soto-Adames**— Presented at the 57th Annual Meeting of the Entomological Society of America, 13-16 December 2009, Indianapolis, IN.
- Molecular phyogeny of the genus *Aphis* (Homoptera: Aphididae) based on mitochondrial and nuclear EF-1a genes. D. Lagos, D. Voegtlin, R. Giordano and **F. N. Soto-Adames**— Presented at the 57th Annual Meeting of the Entomological Society of America, 13-16 December 2009, Indianapolis, IN.
- Springtails of the superfamily Entomobryoidea Womersley, 1934, sensu Soto-Adames et al 2008, in a Puerto Rican forest. C. Marcela Ospina-Sánchez and **F. N. Soto-Adames**— Presented at the 57th Annual Meeting of the Entomological Society of America, 13-16 December 2009, Indianapolis, IN.
- Genetic differentiation in clones of the parthenogenetic springtail *Folsomia candida*. R. Giordano, S. Johnston, J. Nardi, P. Krogh, and **F. N. Soto-Adames**— Presented at the 57th Annual Meeting of the Entomological Society of America, 13-16 December 2009, Indianapolis, IN.
- Diagnosis of *Salina wolcottii* Folsom, *S. bidentata* (Handschin) and *S. thibaudi* n. sp., with an identification key to the *Salina* of the Americas. **F. N. Soto-Adames**— Presented at the XII Colloquium of Apterygota, 1-3 September 2008, Curitiba, Brazil.
- Phylogenic and functional analysis of the myosin light chain amino terminal extensions. M.S. Miller, **F.N. Soto-Adames**, J.M. Braddock, Y. Wang, J. Robbins, J.O. Vigoreaux, D.W. Maughan— Presented at the Biophysical Society meeting in Long Beach CA, Feb 2-6, 2008.

- Genetic variation in Puerto Rican populations of the springtail *Salina tristani* (Collembola: Paronellidae), or is *Salina wolcottii* really extinct? **F.N. Soto-Adames**— Presented at the annual meeting of the Entomological Society of America, San Diego, CA, 11 December 2007
- Phylogenetic and functional analysis of the myosin light chain amino terminal extensions. M.S. Miller, **F.N. Soto-Adames**, J.M. Braddock, Y. Wang, J. Robbins, J.O. Vigoreaux, D.W. Maughan— Presented at the European Muscle Conference in Stockholm, Sweden, Sep 8-12, 2007.
- Evolutionary analysis of flightin reveals a putative myosin rod-binding domain. **F.N. Soto-Adames** and J.O. Vigoreaux. Presented at the annual meeting of the American Society of Cell Biology, San Diego, California, 2006
- Functional Consequences of Regulatory Light Chain Mutations in *Drosophila* Flight Muscle. M.S. Miller, G.P. Farman, **F.N. Soto-Adames**, J.M. Braddock, J.O. Vigoreaux, D.W. Maughan. Presented at the 50th Biophysical Society Annual Meeting at Salt Lake City, Utah, 2005
- Structural Consequences of Regulatory Light Chain Mutations in *Drosophila* Flight Muscle. M.S. Miller, G.P. Farman, **F.N. Soto-Adames**, M.C. Reedy, J.O. Vigoreaux, D.W. Maughan, and T.C. Irving. Presented at the 50th Biophysical Society Annual Meeting at Salt Lake City, Utah, 2005
- Diversity of Collembola (Hexapoda) associated with *Rizophora mangle* in mangrove forests of Puerto Rico. Belmarie Samalot and **Felipe N. Soto-Adames**. Presented at the 2005 meeting of the Entomological Society of America, Ft. Lauderdale, Florida.
- Evolution of flightin, a protein of the insect asynchronous flight muscles. Presented at the 2005 meeting of the Entomological Society of America, Ft. Lauderdale, Florida.
- Combined molecular and morphological analysis of entomobryoid families supports a polyphyletic origin for Paronellidae (Collembola). Presented at the 2004 meeting of the Entomological Society of America, Salt Lake City, Utah
- Preliminary observations on effects of Bt-corn on non-target soil Collembola. M. Brownbridge and **F. N. Soto-Adames**— presented at the 2003 Annual Meeting of the Society for Invertebrate Pathology, Burlington, VT
- Morphology, mtDNA, and speciation in Puerto Rican *Lepidocyrtus* (Hexapoda: Collembola)— presented at the 2002 Evolution Meetings at the University of Illinois, Urbana-Champaign
- Phylogeny of the families and orders of Collembola (Arthropoda: Hexapoda) based on sequences of 18S rRNA— presented in 1996 at the IX International Colloquium on Apterygota at Dublin, Ireland.
- Phylogeny of the families of Collembola (Arthropoda: Hexapoda) based on sequences of 18S rRNA— presented at the 1994 Annual Meeting of the Society of Systematic Biologists at Athens, GA.
- Assessment of usefulness of 12S and 18S for family-level phylogeny of Collembola— presented at the 1992 Annual Meeting of the Entomological Society of America at Baltimore, MD

J. Postdocs Trained

- Dr. José Marcelino, University of the Azores, in Portugal, spent three months during the spring of 2009 and summer of 2010 learning springtail morphology and taxonomy. Dr. Marcelino is working on a project aiming at identifying indicator species to inform the ecosystem

conservation efforts in the Azores islands. During his time in Illinois, Dr. Marcelino worked part of the time in my laboratory and part of the time in Dr. Rosanna Giordano's laboratory.

K. Graduate Students

- PhD** Committee member of UF Entomology and Nematology graduate student Cleveland Ivey (Dr. Hugh Smith, Advisor)
- PhD** Committee member of UF Entomology and Nematology graduate student Alexandros Dritsoulas (Dr. Larry Duncan, Advisor)
- MS.** Committee member of UF Entomology and Nematology graduate student Benjamin Waldo (Dr. Billy Crow, Advisor)
- Ph. D.** Thesis Co-Advisor: Marcela Ospina, Department of Biology, University of Puerto Rico, Rio Piedras, Marcela entered the Ph. D. program the fall of 2011. **Project:** Role of Microhabitats and Seasonal Variation on Collembola (Hexapoda: Entognatha) Populations in The Luquillo Experimental Forest: A Montane Environment. Thesis Completed May 2019
- Ph. D.** Thesis Advisor: Aron Katz, Department of Entomology, University of Illinois, Urbana-Champaign. **Project:** *The influence of vicariance and dispersal on the diversification and evolution of springtails (Collembola).* Thesis completed Summer 2018.
- MS.** Thesis Advisor: Aron Katz, Department of Entomology, University of Illinois, Urbana-Champaign. His thesis was an integrative molecular and comparative morphology review of the Eastern North American members of the genus *Entomobrya*. **Project:** *A contribution to species delimitation and taxonomy of North American Entomobrya (Collembola: Entomobryidae).* Thesis completed April 2013.
- MS.** Thesis Co-Advisor: Marcela Ospina, Department of Biology, University of Puerto Rico, Mayagüez. **Project:** Abundance and diversity of springtails associated with leaf litter in a secondary forest in Mayagüez, Puerto Rico. Thesis completed December 2010.
- MS.** Thesis Co-Advisor: Belmarie Samalot, Department of Biology, University of Puerto Rico, Mayagüez. **Project:** Diversity of Collembola (Hexapoda) associated with *Rhizophora mangle* in mangrove forests of Puerto Rico. Thesis completed May 2006.
- MS.** Thesis Committee Member: Stephanie Dold, Department of Entomology, University of Illinois, Urbana-Champaign.
- Ph. D.** Thesis Committee Member: Clark Danderson, Department of Plant Biology, University of Illinois, Urbana-Champaign.
- Ph. D.** Thesis Committee Member: Byron Barton, Department of Biology, University of Vermont.

L. Undergraduates

- Samantha Jeanneret, Research Project (**U of Florida**): Characterization of leaf-litter microarthropod communities in forest ecosystems of UF NATL. Spring 2022
- Minh Nguyen, **Research Project (U of Illinois)**: Genetic variation and connectivity in Azorean species of *Entomobrya* and *Heteromurus* (Hexapoda: Collembola). Spring 2015.
- Euna Gill, **Research Project (U of Illinois)**: Genetic variation and species delimitation in the ant commensal springtail *Entomobryoides dissimilis*. University of Illinois, Spring 2015.
- Elizabeth Dabek, **Research Project (U of Illinois)**: A survey of the Dicyrtomidae (Hexapoda: Collembola) of Illinois. University of Illinois Fall 2014

- Alejandra Flores, **Research Project (U of Illinois)**: Genetic variation and species identification in the springtail *Protaphorura fimata* species complex, a pest of spring lettuce in California. University of Illinois Fall 2014
- Sylvia Núñez, **Research Project (U of Illinois)**: Pattern of expression of muscle proteins flightin and paraflightin in the crayfish *Oronectes propinquus*. University of Illinois, Spring 2013- Summer 2014
- Alonso Ledesma, **Research Project (U of Vermont)**: Genetic variation in the lake-shore springtail *Scutisotoma champi* in Vermont lakes. University of Illinois, Summer 2014.
- Joshua R. A. Fisher: **Senior Research Project (U of Vermont)**: Phylogeography of *Tomocerus flavescens* (Insecta: Collembola) in Vermont. Summer-Fall 2001.

M. Training and Collaboration with International Researchers

Cesar Guillén, University of Costa Rica, San José, summers of 2001 and 2002. Mr. Guillén was an MS graduate student at the University of Costa Rica studying the correlation between springtail species diversity, coffee grown in the open, in the shade, and uncultivated secondary forest. Mr. Guillén spent two months in two years learning springtails systematics in my laboratory at the University of Vermont.

Enrique Baquero, University of Navarra, Navarra, Spain, Fall of 2005. Dr. Baquero spent 15 days in my laboratory at the University of Vermont learning DNA sequencing techniques as applied to Collembola

Gui Dong, University of Seoul, Seoul, South Korea, Summer 2012. Mr. Dong was an MS graduate student interested in learning techniques to study cave springtails. Mr. Dong participated in sampling trip to collect arthropods in caves in southern Illinois.

Bruno Zahchrisson- Dr. Zachrisson, Subdirector IDIAP (Instituto de Investigación Agropecuaria de Panamá), summer 2014. I visited Dr. Zachrisson in Panama during June 2014 to initiate a collaboration on a project aimed at developing springtails as indicators of soil fertility in rice agroecosystems.

Roniere Brito and Robson Sao Paulo, Universidade Estadual da Paraiba, Joao Pessoa, Fall 2014. Mr. Brito is a graduate student working on the diversity of springtails in iron caves in southern Brazil; Mr. Sao Paulo is a representative of the Vale mining company, owner of the caves in which the springtails being studied by Mr. Brito were collected. I am training Mr. Brito on the morphology and taxonomy of two important groups of cave springtails, the genera *Pseudosinella* and *Trogolaphysa*.

Douglas Zeppelini, Universidade Estadual da Paraiba, Joao Pessoa, Fall 2015. Collaborative study of the springtail biodiversity in iron caves in southern Brazil. This collaboration is sponsored by the Vale Mining Company.

Diego Gómez, Fulbright Research Scholar, Instituto de Biología Tropical, Puerto Iguazú, Misiones, Argentina, September to December 2017

Shalva Barjadze, Fulbright Research Scholar, Institute of Zoology, Ilia State University, Tblisi, Republic of Georgia. February to July 2018.

Luis Gonzalez, Universidad de los Andes, Bogotá Colombia. August 2018 to January 2019.

Marnelli Sotto-Alviola, University of Philippines at Los Banos, April- May 2019.

N. Courses Taught

- Spring 2016- General Biology, University of Puerto Rico, Rio Piedras.
- Spring/Fall 2008-2014 IB 514 Systematics Discussion Group, U of Illinois, Urbana-Champaign.

- Fall 2003 Graduate Special Topics: A pictorial key to the Collembola of a cornfield in Chittenden County, VT
- Fall 2002 Graduate Seminar: Introduction to Phylogenetic Analysis
- Spring 2002 Graduate and Upper Undergraduate Level Seminar: Scientific Integrity.
- Spring 2000 Graduate Seminar (Co-organizer): How to choose between molecular and morphology-based phylogenies when they are in conflict.
- Fall Semester 1994 Teaching Assistant for Graduate Course: Principles of Systematics
- Spring Semesters 1992, 94 Teaching Assistant for Undergraduate Course: Agricultural Entomology
- Fall Semesters 1989, 91, 93 Teaching Assistant for Graduate Course: Insect Systematics

O. Invited Lectures

- Fall 2015– Insect Systematics: Basal non-insect hexapods to Paleoptera, course taught by Jim Whitfield, University of Illinois, Urbana-Champaign
- Spring 2009— Molecular Phylogenetics: presented for the Insect Molecular Biology course taught by Hugh Robertson, University of Illinois, Urbana-Champaign
- Spring 2008— Biology of Springtails: presented for Honor’s Biology course taught by Dr. May Berenbaum, University of Illinois, Urbana-Champaign

P. Committee Service at the University of Illinois

- Member of the motor vehicle (2008-2013) and collections committees (2007-2014).
- Member of panel evaluating proposals for Ross Awards (2010-2012)
- Chair, search for the *Biodiversity Informatics* position (2010).
- Search committee member for *Landscape Geneticists* and *INHS Postdoctoral Fellowship* (2013).

Q. Other Professional Activities

Participated in the 2015 Faculty Summer Institute, a conference/workshop on technological advances at the service of teaching sponsored by the University of Illinois, Urbana-Champaign.

Co-organizer and moderator of the Symposium “Systematics and Ecology of Basal Hexapods, Applications and Future Needs” that took place during the 54th Annual Meeting of the Entomological Society of America at Indianapolis, Indiana, 2006.

Participated in the 2005 *Drosophila* Species Identification Workshop at the University of Arizona, Tucson, AZ

Participated in the 1994 *Workshop on Molecular Evolution* at Woods Hole, MA.

Invited Insect Taxonomist for the following Bioblitz: University of Connecticut, 2003; Lake Co, IL, 2008; Salt Lick Forest and Water Preserve, Monroe Co., IL, 2011.

I have reviewed articles on the taxonomy and ecology of Collembola for: *Journal of Cave and Karst Studies*; *Folia Entomológica Mexicana*; *Zoologica Scripta*; *Journal of the Kansas Entomological Society*; *Entomological News*; *European Journal of Soil Biology*; *Caribbean Journal of Science*; *Florida Entomologist*; *Annals of the Entomological Society of America*;

Environmental Entomology; Pedobiologia; Cladistics; Bijdragen tot de Dierkunde (Contributions to Zoology, Amsterdam); Pesquisa Agropecuária Brasileira; Polar Biology; Zootaxa; Zookeys; Southeastern Naturalist; Journal of Natural History; Journal of Insect Science; Zoología.