

Nico M. Franz, Ph.D.

CURRICULUM VITAE

Updated: *January, 2014*

Personal Information

Position	Associate Professor & Curator of Insects
Address	School of Life Sciences, PO Box 874501, Arizona State University, Tempe, AZ 85287-4501, U.S.A.
Phone	Office: (480) 965-2036; Laboratory: (480) 965-2850; Collection: (480) 965-2850
Fax	(480) 965-6899
E-Mail	nico.franz@asu.edu
Lab website	http://taxonbytes.org/
Collection	http://taxonbytes.org/asuhic/
SCAN portal	http://symbiota1.acis.ufl.edu/scan/portal/collections/misc/collprofiles.php?collid=1
WoNA	http://symbiota1.acis.ufl.edu/scan/portal/checklists/checklist.php?cl=1&emode=1

Research Interests

Insect systematics, evolution, and historical biogeography, with particular emphasis on weevils (Coleoptera: Curculionidea: Curculionidae) in the Neotropical region; theory and practice of systematics; biodiversity informatics, specifically logic-based representations of, and reasoning over, taxonomic data; insect collection stewardship; collections-centered and virtual outreach.

Education

2005.	Ph.D., Cornell University, in Systematic Entomology.
1999.	M.Sc., University of Costa Rica, in Biology.
1996.	Prediploma, University of Hamburg, in Biology.
Languages	English, German, Spanish (fluent); French, Latin, Vietnamese (proficient).

Employment

- Associate Professor, School of Life Sciences, Arizona State University. [2011–present]
- Curator, Frank F. Hasbrouck Insect Collection (ASUHIC), School of Life Sciences, Arizona State University. [2011–present]
- Adjunct Professor, Department of Biology, UPR Mayagüez. [2011–present]
- Director of the Invertebrate Collection, Department of Biology, UPR Mayagüez. [2008–2011]
- Curator of Entomology, Department of Biology, UPR Mayagüez. [2006–2008]
- Assistant Professor, Department of Biology, UPR Mayagüez. [2006–2011]

- Postdoctoral Research Fellow, National Center for Ecological Analysis & Synthesis, University of California at Santa Barbara. [December 2003–December 2005]
- Graduate Research Fellow, Smithsonian Tropical Research Institute (STRI), Panama. [1999]

External Research Support

- NSF – Advances in Biological Informatics Program [2013–2014]
Collaborative Research: ABI: Innovation: The Global Names Architecture, an infrastructure for unifying taxonomic databases and services for managers of biological information. PI Nico Franz (original award to PI David Patterson); \$285,090.
- NSF – Biodiversity: Discovery and Analysis Program [2013–2015]
ARTS: Systematics of the darkling beetle genus *Eleodes*: integrating morphology, DNA, and biodiversity informatics to resolve a taxonomically impeded genus. PI Aaron Smith; co-PIs Nico Franz & Quentin Wheeler; \$458,104.
- Virginia M. Ullman Foundation [2012–2017]
Creation of the Arizona Biocollections and Biodiversity Informatics Center at Arizona State University (facilitated through Ullman Professor James Collins). PI Nico Franz; co-PIs Melody Basham & David Patterson; \$250,000 (expected; \$65,000 allocated for year 1).
- NSF – Emerging Frontiers Program [2012–2015]
Digitization TCN: Collaborative Research: Southwest Collections of Arthropods Network (SCAN): a model for collections digitization to promote taxonomic and ecological research. PI Nico Franz; co-PIs Aaron Smith & Quentin Wheeler; \$284,613.
- USDA-ARS – Specific Cooperative Agreement [2011–2013]
Systematic Research Support for Economically Important Insects. PI Nico Franz; \$55,000.
- NSF – CAREER Program [2011–2016]
Systematics of eustyline and geonemine weevils: Connecting and contrasting Caribbean and Neotropical mainland radiations. PI Nico Franz; \$639,747.
- Howard Hughes Medical Institute – Undergraduate Science Program [2008–2012]
ROLE-MODEL: Research Oriented Laboratory Enhancements by MOdule DEvelopment for Laboratories. PI Nanette Diffoot; co-PI Nico Franz (1 of 6) responsible for zoology component; total award: \$1,400,000.
- NSF – Biological Research Collections Program [2008–2011]
DBI-0749434: A new infrastructure for invertebrate biodiversity research in Puerto Rico. PI Nico Franz; co-PIs Carlos Santos & Nikolaos Schizas; \$318,292.
- NSF – Systematic Biology and Biodiversity Inventories Cluster [2007–2009]
DEB-0641231: Towards a systematic and evolutionary synthesis of the Neotropical *Exopthalmus* genus complex (Coleoptera: Curculionidae: Entiminae). PI Nico Franz; \$174,755.
- NSF – Doctoral Dissertation Improvement Grant [2002–2003]
DEB-0206093: Phylogeny and evolution of host associations and fighting behavior in Neotropical derelomine weevils (Coleoptera: Curculionidae). PI Bryan Danforth; \$9800.

External Support for Students

- NSF – AIAiMa Program [2007–2008]
Summer Research: Jennifer López & Diana Ruíz; \$2000.
- NSF – PR-LSAMP Program [2006–2008, 2010]
Undergraduate Research: Christopher Molini, Jean Carlos Cruz, and Freddie Irizarry; \$4000.

Internal Research Support

- ASU – SoLS RTI Initiative: Elucidating Weevil-Endosymbiont Associations and Diversity across Different Ecological and Evolutionary Scales. PI Guanyang Zhang; co-PIs Nico Franz & Hinsby Cadillo-Quiroz; \$7500. [2013–2014]
- ASU – SoLS RTI Initiative: Conceptual and Infrastructural Requirements for a Taxonomy Clearing House; PI Nico Franz; \$10,850. [2013–2014]
- ASU – Smithsonian Partnership [2012–2014]
An Extensible Strategy to Integrate Biodiversity Data Repositories and Evolving Research and Outreach Goals at STRI. PI Nico Franz; co-PIs Edward Gilbert & David Patterson; \$256,500.
- UPRM Arts & Sciences Technology Fund [2009]
A New Cyberinfrastructure for Organismal Collections at UPRM. PI Nico Franz; \$15,765.
- UPRM Arts & Sciences Travel Funds, Congreso SOCOLEN XXXVI, Medellín; \$1200. [2009]
- UPRM Arts & Sciences Travel Funds, Annual ESA Meeting, Indianapolis; \$1200. [2006]
- UPRM R & D Center Seed Money Grant, "Pollination of *Zamia*"; \$5000. [2006]
- UPRM Arts & Sciences Seed Money Grant, "Phytophaga of Maricao"; \$5000. [2006]
- Cornell University, Palmer Finishing Fellowship for Graduate Students; \$10,200. [2003]
- Cornell University, Graduate Student Transportation Grant; \$500. [2001]
- Cornell University, Rawlins Endowment Award; \$1200. [2000]
- Cornell University, Grace H. Griswold Fund; \$500. [2000]
- Cornell University, Sage Fellowship for Incoming Graduate Students; \$11,800. [1999–2000]

Academic Awards and Fellowships

- Coleopterists Society – Jean Theodore Lacordaire Prize [2007]
Best Published Paper Based Upon a Doctoral Dissertation (Franz, 2006).
- Andrew W. Mellon Foundation Postdoctoral Training Fellowship [2004–2005]
Research in Information Technology (SEEK Project) at the National Center for Ecological Analysis & Synthesis, University of California at Santa Barbara; \$82,000.
- NSF – Travel Grant, ESA Competition, XXII ICE Travel Grant; \$2300. [2004]
- German National Merit Fund, Doctoral Student Scholarship; \$4500. [1999–2000]
- Smithsonian Institution, STRI Short-Term Research Fellowship; \$3000. [1999]
- Organization for Tropical Studies (OTS), Research Fellowship, La Selva; \$1200. [1998]
- University of Costa Rica, Best Grade Point Average in the Basic Sciences. [1997]
- German National Merit Fund, Graduate Student Fellowship; \$18,000. [1996–1998]
- German Academic Exchange, Integrated Foreign Studies Scholarship; \$5000. [1996–1997]

Peer-Reviewed Publications (* = student author)

39. Franz, N.M., M. Chen,* S. Yu,* S. Bowers & B. Ludäscher. 2014. Taxonomic names, concepts, and reasoning: the *Andropogon* use case. Semantic Web Journal – Special Issue on Semantics for Biodiversity. (in preparation)
38. Gries, C., N.M. Franz & E.E. Gilbert. 2014. Symbiota – A virtual platform for creating voucher-based biodiversity information communities. Biodiversity Data Journal. (in preparation)
37. Franz, N.M., C.W. O'Brien, S.D. Shirota,* M.T. Shillingburg* & E.E. Gilbert. 2014. Assembling a virtual Weevils of North America checklist with Symbiota – preliminary insights. Proceedings of the 12th Biennial Conference of Science and Management on the Colorado Plateau. (in press)
36. Chen, M.,* S. Yu,* N. Franz, S. Bowers & B. Ludäscher. 2014. Euler/X: a toolkit for logic-based taxonomy integration. In Proceeding of WFLP 2013 – 22nd International Workshop on Functional and (Constraint) Logic Programming. Lecture Notes in Computer Science. (in press, 8 pp.)
35. Patterson, D.J., W. Egloff, D. Agosti, D. Eades, N. Franz, G. Hagedorn & D. Remsen. 2014. Scientific names of organisms: attribution, rights and licensing. BMC Research Notes. (in press)
34. Franz, N.M. 2014. Anatomy of a cladistic analysis. Cladistics 30. (in press, 28 pp.) DOI: 10.1111/cla.12042
33. Franz, N.M. & J. Cardona-Duque.* 2013. Description of two new species and phylogenetic reassessment of *Perellesschus* Wibmer & O'Brien, 1986 (Coleoptera: Curculionidae), with a complete taxonomic concept history of *Perellesschus* sec. Franz & Cardona-Duque, 2013. Systematics and Biodiversity 11: 209-236.
32. Franz, N.M. & A.M. Goldstein. 2013. Phenotype ontologies: are homology relations central enough? A reply to Deans *et al.* Trends in Ecology & Evolution 28: 131-132.
31. Cardona-Duque, J.* & N.M. Franz. 2012. Description and phylogeny of *Azotoctla*, a new Neotropical genus of Acalyptini (Coleoptera: Curculionidae: Curculioninae) associated with the staminodes of Cyclanthaceae. Zoological Journal of the Linnean Society 166: 559-623.
30. Girón, J.C.* & N.M. Franz. 2012. Phylogenetic assessment of the Caribbean weevil genus *Lachnopus* Schoenherr (Coleoptera: Curculionidae: Entiminae). Invertebrate Systematics 26: 67-82.
29. Franz, N.M. 2012. Phylogenetic reassessment of the *Exophthalmus* genus complex (Curculionidae: Entiminae: Eustylini, Geonemini). Zoological Journal of the Linnean Society 164: 510-557.
28. Franz, N.M. 2011. *Melathra huyenae*, a new genus and new species of entimine weevil from southwestern Hispaniola (Coleoptera: Curculionidae: Entiminae). Coleopterists Bulletin 65: 352-362.
27. Girón, J.C.* & N.M. Franz. 2010. Revision, phylogeny, and historical biogeography of the genus *Apodrosus* Marshall, 1922 (Coleoptera: Curculionidae: Entiminae). Insect Systematics & Evolution 41: 339-414.
26. Franz, N.M. & D. Thau. 2010. Biological taxonomy and ontology development: scope and limitations. Biodiversity Informatics 7: 45-66.
25. Franz, N.M. 2010. Revision and phylogeny of the genus *Apotomoderes* Dejean (Coleoptera: Curculionidae: Entiminae). ZooKeys 49: 33-75.
24. Franz, N.M. & M.S. Engel. 2010. Can higher-level phylogenies of weevils explain their evolutionary success? A critical review. Systematic Entomology 35: 596-606.
23. Franz, N.M. 2010. Redescriptions of critical type species in the Eustylini Lacordaire (Coleoptera: Curculionidae: Entiminae). Journal of Natural History 44: 41-80.
22. Martínez, N.J.*, N.M. Franz & J.A. Acosta. 2009. Structure of the scarab beetle fauna (Coleoptera: Scarabaeoidea) in forest remnants of western Puerto Rico. Entomotropica 24: 1-9.

21. Franz, N.M. & S.Z. Yusseff Vanegas.* 2009. The University of Puerto Rico at Mayagüez insect collection – then and now. Entomological News 120: 401-408.
20. Franz, N.M., C.W. O'Brien & D. Ruiz Nuñez.* 2009. New records of weevils (Coleoptera: Curculionoidea) from Mona Island, Puerto Rico. Solenodon 8: 82-98.
19. Martínez, N.J.*, J.A. Acosta & N.M. Franz. 2009. Structure of the beetle fauna (Insecta: Coleoptera) in forest remnants localized on the Campus of the University of Puerto Rico at Mayagüez. Journal of Agriculture of the University of Puerto Rico 93: 83-100.
18. Franz, N.M. & R.K. Peet. 2009. Towards a language for mapping relationships among taxonomic concepts. Systematics and Biodiversity 7: 5-20.
17. Franz, N.M. & J.C. Girón.* 2009. *Scelianoma elydimorpha*, a new genus and new species of entimine weevil from southwestern Puerto Rico (Coleoptera: Curculionidae: Entiminae). Neotropical Entomology 38: 219-230.
16. Genaro, J.A. & N.M. Franz. 2008. The bees of Greater Puerto Rico (Hymenoptera: Apoidea: Anthophila). Insecta Mundi 0040: 1-24.
15. Franz, N.M. & P.E. Skelley. 2008. *Pharaxonotha portophylla* (Coleoptera: Erotylidae), new species and pollinator of *Zamia* (Zamiaceae) in Puerto Rico. Caribbean Journal of Science 44: 321-333.
14. Franz, N.M. 2008. Revision, phylogeny, and natural history of *Cotithene* Voss (Coleoptera: Curculionidae). Zootaxa 1782: 1-33.
13. Franz, N.M. 2007. Reproductive trade-offs in a specialized plant/pollinator system involving *Asplundia uncinata* Harling (Cyclanthaceae) and a derelomine flower weevil (Coleoptera: Curculionidae). Plant Systematics and Evolution 269: 183-201.
12. Franz, N.M. 2007. Pollination of *Anthurium* by derelomine flower weevils (Coleoptera: Curculionidae). International Journal of Tropical Biology 55: 269-277.
11. Franz, N.M. 2006. Towards a phylogenetic system of derelomine flower weevils (Coleoptera: Curculionidae). Systematic Entomology 31: 220-287.
10. Franz, N.M. & R.M. Valente. 2005. Evolutionary trends in derelomine flower weevils: from associations to homology. Invertebrate Systematics 19: 499-530.
9. Franz, N.M. 2005. On the lack of good scientific reasons for the growing phylogeny/ classification gap. Cladistics 21: 495-500.
8. Franz, N.M. 2005. Outline of an explanatory account of cladistic practice. Biology & Philosophy 20: 489-515.
7. Franz, N.M. 2004. Analyzing the history of the derelomine flower weevil-*Carludovica* association (Coleoptera: Curculionidae; Cyclanthaceae). Biological Journal of the Linnean Society 81: 483-517.
6. Franz, N.M. & W.T. Wcislo. 2003. Foraging behavior in two species of *Ectatomma* (Formicidae: Ponerinae): individual learning of orientation and timing. Journal of Insect Behavior 16: 381-410.
5. Franz, N.M. 2003. Systematics of *Cyclanthura*, a new genus of Derelomini (Coleoptera: Curculionidae). Insect Systematics & Evolution 34: 153-198.
4. Franz, N.M. 2003. Mating behaviour of *Staminodeus vectoris* (Coleoptera: Curculionidae), and the value of systematics in behavioural studies. Journal of Natural History 37: 1727-1750.
3. Franz, N.M. & C.W. O'Brien. 2001. *Ganglionus*, a new genus of Derelomini (Coleoptera: Curculionidae) associated with *Carludovica* (Cyclanthaceae). Annals of the Entomological Society of America 74: 835-850.

2. **Franz, N.M.** & C.W. O'Brien. 2001. Revision and phylogeny of *Perelleschus* (Coleoptera: Curculionidae), with notes on its association with *Carludovica* (Cyclanthaceae). Transactions of the American Entomological Society 127: 255-287.

1. **Franz, N.M.** 2001. Description and phylogeny of *Staminodeus*, a new genus of Derelomini (Coleoptera: Curculionidae) associated with Cyclanthaceae. Coleopterists Bulletin 55: 411-432.

Manuscripts in Review or in Preparation (* = student author)

1. Mazo-Vargas, A.*, M.F. Cafaro & **N.M. Franz**. Phylogenetics and diversification of Caribbean eustyline and geonemine weevils (Coleoptera: Curculionidae: Entiminae): untangling the effects of host plants and biogeography. Biological Journal of the Linnean Society. (resubmission pending)

2. Mazo-Vargas, A.* & **N.M. Franz**. Preliminary insights into the phylogeography of the citrus root weevil *Diaprepes abbreviatus* (Linnaeus) (Coleoptera: Curculionidae) in the Caribbean region based on mitochondrial DNA sequences. (in preparation)

3. J. Cardona-Duque & **N.M. Franz**. 2013. A new species of the eugnomine genus *Udeus* Champion, 1902 (Curculionidae: Curculioninae) from Colombia. Coleopterists Bulletin. (in preparation)

Contributed Chapters

3. Caldara, R., **N.M. Franz** & R.G. Oberprieler. 2014. Curculioninae Latreille, 1802; pp. 305-344. In Anderson, R.S. & R. Oberprieler (editors): Handbook of Zoology. Coleoptera, Volume 3. Walter de Gruyter, Berlin.

2. **Franz, N.M.** 2009. Letter to Linnaeus; pp. 63-74. In Knapp, S. & Q.D. Wheeler (editors): Letters to Linnaeus. Commemorative Volume of the 250th Anniversary of the 10th Edition of the Systema Naturae. Linnean Society of London, London.

1. **Franz, N.M.**, R.K. Peet & A.S. Weakley. 2008. On the use of taxonomic concepts in support of biodiversity research and taxonomy; pp. 63-86. In Wheeler, Q.D. (editor): The New Taxonomy. Systematics Association Special Volume Series 74. Taylor & Francis, Boca Raton, FL.

Published Reviews

5. **Franz, N.M.** 2010. Review of "G.B. Curry & C.J. Humphries. 2007. Biodiversity Databases: Techniques, Politics, and Applications." The Systematist 31: 16-19.

4. **Franz, N.M.** 2008. Review of "D.E. Bright & P. Bouchard. 2008. Weevils of Canada and Alaska, Volume 2. Coleoptera, Curculionidae, Entiminae." Coleopterists Bulletin 62: 524-525.

3. **Franz, N.M.** 2007. Review of "J.-W. Wägele. 2005. Foundations of Phylogenetic Systematics." Cladistics 23: 634-636.

2. **Franz, N.M.** 2005. Review of "A. Sforzi & L. Bartolozzi. 2004. Brentidae of the World (Coleoptera: Curculionoidea)." Insecta Mundi 19: 1-2.

1. Solomon, S.A. & **N.M. Franz**. 2004. Review of "G. Kuschel. 2003. Nemonychidae, Belidae, Brentidae (Insecta: Coleoptera: Curculionoidea). Fauna of New Zealand 45." Coleopterists Bulletin 58: 27-28.

Other Publications

4. **Franz, N.M.** (Editor) & co-authors. 2012–present. Weevils of North America (WoNA). <http://symbiot1.acis.ufl.edu/scan/portal/checklists/checklist.php?cl=1>

3. **Franz, N.M.** & D. Thau. 2010. Biological taxonomy and ontology development: scope and limitations. Nature Precedings. <http://precedings.nature.com/documents/4593/version/1>
2. **Franz, N.M.**, J. Cardona-Duque, J.C. Girón Duque & A. Mazo-Vargas. 2010. SPDN Weevil Workshop Images. <http://www.ipmimages.org/collections/viewcollection.cfm?id=69682>
1. **Franz, N.M.**, editor. 2002-2008. CURCULIO, International Newsletter for Curculionoidea Research, Vol. 44-56. http://www.coleopsoc.org/default.asp?Action=Show_Resources&ID=Curculio

Academic Service

- Lead Organizer and Instructor, The Weevil Course, Southwest Research Station, Portal, AZ. [2014]
- Research Associate, Smithsonian Tropical Research Institute, Balboa, Ancón, Republic of Panamá [2013–present]
- Committee Member, Interdisciplinary Graduate Degree Program (Ph.D.) in Evolutionary Biology, School of Life Sciences, Arizona State University. [2013–present]
- Leader, Natural History Collections Committee, School of Life Sciences, Arizona State University. [2013–present]
- Subject Editor for Coleoptera, Annals of the Entomological Society of America. [2012–2013]
- Lead Organizer and Instructor, The Weevil Course, Southwest Research Station, Portal, AZ. [2012]
- Member, Natural History Collections Committee, School of Life Sciences, Arizona State University. [2011–2013]
- Voting Member, Faculty of Genomics, Evolution, and Bioinformatics, School of Life Sciences, Arizona State University. [2011–present]
- Associate Director for Revisions and Monography, International Institute for Species Exploration, Arizona State University. [2011–present]
- Participant, 1st Annual Summit Meeting – Phenotype Ontology Research Coordination Network; National Evolutionary Synthesis Center, Durham, NC. [2011]
- Workshop Instructor, USDA Southern Plant Diagnostic Network Weevil Workshop, University of Georgia, Athens, GA. [2010]
- Panel Member, National Science Foundation BIO/DBI programs (three times). [2009–present]
- President, Informatics Committee, UPR Mayagüez, Department of Biology, PR. [2009–2011]
- Editorial Committee, Solenodon – Antillean Journal of Zoological Taxonomy. [2009–present]
- Editor for Zootaxa, Subject Area Coleoptera: Curculionoidea. [2009–2012]
- Councilor, Coleopterists Society. [2009–2010]
- Committee Member, Organizing Committee of the 2011 ESA-SEB Meeting, PR. [2009–2010]
- Core Participant, Research Coordination Network – CollectionsWeb. [2008–2011]
- Invited Participant, Research Coordination Network – CollectionsWeb Workshop I; Michigan State University, East Lansing, MI. [2008]
- Symposium Organizer, Section A Symposium "New Minds for Weevil Systematics", ESA Annual Meeting, San Diego, CA. [2007]
- Committee Member, Computer Committee & Toro Negro Field Station Committee, UPR Mayagüez, Department of Biology, PR. [2006–2009]

- Judge and Moderator, Section A/SEB Student Competition, ESA Annual Meeting. [2006–present]
- Ad hoc Reviewer, NSF Evolutionary Ecology & Revisionary Systematics programs. [2006–present]
- Course Instructor, SEEK Postdoctoral Workshop in Biodiversity Informatics, University of New Mexico, NM. [2006]
- Assistant Coordinator, Phytophaga Symposium, XXII ICE, Brisbane, Australia. [2004]
- Editor, CURCULIO – International Newsletter for Curculionoidea Research. [2001–2009]
http://www.coleopsoc.org/default.asp?Action=Show_Resources&ID=Curculio
- Manuscript Reviewer – Acta Biotheoretica, Biological Journal of the Linnean Society, Biology & Philosophy, Boletín del Museo de Entomología de la Universidad del Valle, Canadian Entomologist, Caribbean Journal of Science, Cladistics, Coleopterists Bulletin, Entomapeiron-Paleoentomology, Florida Entomologist, Insecta Mundi, Invertebrate Systematics, Israel Journal of Entomology, Journal of Agriculture of the University of Puerto Rico, Journal of Science and Technology Education Research, Journal of Tropical Ecology, Molecular Phylogenetics & Evolution, PLoS ONE, Proceedings of the Entomological Society of Washington, Revista Brasileira de Entomologia, Revista de Biología Tropical, Revista de la Sociedad Entomológica Argentina, Solenodon, Systematic Biology, Systematic Entomology, Zoologia Neocaledonica, Zoological Journal of the Linnean Society, Zootaxa. [2001–present]
- Course Instructor, Coleoptera Parataxonomists Course, INBio, Costa Rica. [2001]
- Seminar Coordinator, Jugatae Entomology Seminar Series, Cornell University, NY. [2001]
- Society Member, Coleopterists Society, Entomological Society of America, Society of Systematic Biologists, Willi Hennig Society. [1999–present]

Current Teaching (Arizona State University)

BIO 386	General Entomology	Fall 2012, Fall 2013, Fall 2014
BIO 492	Honors Directed Study	Spring 2013 onwards
BIO 493	Honors Thesis	Spring 2012 onwards
BIO 494	Fundamentals of Tropical Biology	Summer 2014
BIO 494	Tropical Research	Summer 2014
BIO 495	Undergraduate Research	Spring 2012 onwards
BIO 499	Individualized Instruction	Spring 2012 onwards
BIO 591	Seminar (Current Topics in Systematics)	Fall 2013 onwards

Past Teaching

1. UPR Mayagüez (2006-2011)

BIOL 4901/2	Special Problems in Zoology	Every semester since Fall 2006
BIOL 4446	Introduction to Entomology	Spring 2007, Spring 2008, Spring 2010
BIOL 4925	Undergraduate Seminar	Spring 2006
BIOL 6015	Insect Morphology	Fall 2010
BIOL 6990	Graduate Seminar	Fall 2007

BIOL 6992	Phylogenetic Systematics Lab	Fall 2008
BIOL 6993	Biological Nomenclature	Spring 2007
BIOL 6994	Biological Systematics	Fall 2007, Spring 2010
CIBI 3032	Biological Science for Non-Majors	Spring 2006 (two sections)
ZOOL 6058	Insect Taxonomy	Fall 2006, Spring 2009

2. Cornell University (Teaching Assistant)

Insect Biology (ENTOM 212), Insect Morphology (ENTOM 322), Insect Behavior (ENTOM 325), Larval Insect Biology (ENTOM 333), Historical Biogeography (ENTOM 453)

Current Graduate Student Advisees (Arizona State University)

1. Andrew Jansen	Systematics of entimine weevils	M.Sc. chair, 2012–2014
2. Salvatore Anzaldo	Systematics of conoderine weevils	Ph.D. chair, 2013–present
3. Andrew Johnston	Systematics of darkling beetles	Ph.D. chair, 2013–present
4. Nick Waters	Phylogeny and ecology of snails	Ph.D. committee, 2013–present
5. Mingmin Chen (UC Davis)	Reasoning over taxonomic change	Ph.D. committee, 2012–present

Past Graduate Student Advisees (UPR Mayagüez)

1. Neis Martínez	Western Puerto Rican Coleoptera	M.Sc. committee, 2006–07
2. Jennifer Girón	Systematics of entimine weevils	M.Sc. chair, 2007–10
3. Juliana Cardona	Systematics of acalyptine weevils	M.Sc. chair, 2008–11
4. Anyimilehidi Mazo	Phylogenetics of entimine weevils	M.Sc. chair, 2008–11
5. Ricardo Colón	Ecology of Elfin Woods warbler	M.Sc. committee, 2008–11
6. Laura Vásquez	Systematics of rove beetles	M.Sc. chair, 2009–2012
7. Augusto Montoya	Systematics of hover flies	M.Sc. chair, 2010–2012
8. Andrés Vélez	Systematics of cockroaches	M.Sc. chair, 2010–2012

Conference Presentations and Invited Talks (* = poster)

- * Franz, N.M. C.W. O'Brien, S. Shirota & M. Shillingburg. 2013. "WoNA - Weevils of North America: a virtual, specimen-based platform using Symbiota." ESA Annual Meeting, Austin, TX.
- * Girón, J. & N.M. Franz. 2013. A review of distributional data on Colombian entimine weevils (Coleoptera: Curculionidae: Entiminae)." ESA Annual Meeting, Austin, TX.
- Jansen, M.A. & N.M. Franz. 2013. "A phylogenetic revision of *Minyomerus* Horn, 1876, and *Piscatopus* Sleeper, 1960 (Coleoptera: Curculionidae: Entiminae: Tanymecini)." ESA Annual Meeting, Austin, TX.
- G. Zhang & N.M. Franz. 2013. "New phylogenetic insights into the evolution of West Indian entimine weevils (Coleoptera: Curculionidae) with an emphasis on Cuban lineages." ESA Annual Meeting, Austin, TX.

- Franz, N.M., M. Chen, S. Yu, S. Bowers & B. Ludäscher. 2013. "A toolkit for reconciling multiple taxonomic perspectives: Euler/X and the *Perelleschus* use case." TDWG Annual Meeting, Florence, Italy.
- Franz, N.M., J. Lee & C. Zhang. 2013. "Using Answer Set Programming to simulate the interplay of taxonomic and nomenclatural change." TDWG Annual Meeting, Florence, Italy.
- Franz, N.M., D.J. Patterson, S. Kumar & E.E. Gilbert. 2013. "Concepts and tools needed to increase bottom-up taxonomic expert participation in a Global Names-based infrastructure." TDWG Annual Meeting, Florence, Italy.
- Franz, N.M., C. Gries, T. Nash III & E.E. Gilbert. 2013. "Crowd sourcing and community management capabilities available within Symbiota data portals." TDWG Annual Meeting, Florence, Italy.
- Franz, N.M., E.E. Gilbert, N.S. Cobb & P.J. Morris. 2013. "SCAN – leveraging Filtered Push technology to enhance remote taxonomic identifications." TDWG Annual Meeting, Florence, Italy.
- Franz, N.M., M. Shillingburg & S. Shirota. 2013. "Using SCAN to construct an arthropod checklist – preliminary insights from the Weevils of North America projects." 12th Biennial Conference of Science and Management on the Colorado Plateau, Flagstaff, AZ.
- Jansen, M.A. & N.M. Franz. 2013. A phylogenetic revision of *Minyomerus* Horn, 1876, and *Piscatopus* Sleeper, 1960 (Coleoptera: Curculionidae). 12th Biennial Conference of Science and Management on the Colorado Plateau, Flagstaff, AZ.
- Franz, N.M. 2013. "Constructing a Coleoptera Anatomy Ontology – how and why." Third International Tenebrionoidea Symposium, Tempe, AZ.
- Franz, N.M., M. Chen, S. Yu & B. Ludäscher. 2012. "Reconciling succeeding taxonomic classifications." ESA Annual Meeting, Knoxville, TN.
- * Franz, N.M. 2012. An mx-based revision of the Caribbean weevil genus *Artipus* Sahlberg (Coleoptera: Curculionidae: Entiminae)." ESA Annual Meeting, Knoxville, TN.
- * Montoya, A.L. & N.M. Franz. 2012. "Phylogenetic analysis and taxonomic revision of the Neotropical genus *Argentinomyia* Lynch Arribálzaga, 1891 (Diptera: Syrphidae: Syrphinae): preliminary results." ESA Annual Meeting, Knoxville, TN.
- * Vázquez-Vélez, L.M. & N.M. Franz. 2012. "Distributional patterns for species groups of *Pselaphomorphus* Motschulsky (Staphylinidae: Pselaphinae, Jubini), in Central and South America." ESA Annual Meeting, Knoxville, TN.
- Franz, N.M., N.S. Cobb, P.L. Heinrich, E.E. Gilbert & P.J. Morris. 2012. "Emergence of the Southwest Collections of Arthropods Network based on the Symbiota software platform and Filtered Push technology for remote specimen identifications." ECN Annual Meeting, Knoxville, TN.
- Lee, S., Franz, N.M., Varelas, S. 2012. "The Hasbrouck Insect Collection at Arizona State University – past, present and future." International Lepidopterists' Conference, Denver, CO.
- Franz, N.M. 2012. "Anatomy of a cladistic analysis." WHS 31st Annual Meeting, Riverside, CA.
- Franz, N.M., M. Chen, S. Yu & B. Ludäscher. 2012. "Ontology-aided mapping of taxonomic concepts." WHS 31st Annual Meeting, Riverside, CA.
- Stromberg, J., H. Bateman, E. Makings, N. Franz, H. Rowe, S. Beute, A. Suchy, D. Wolkis, B. Scott & R. Puydt. 2012. "Inventory and monitoring of the Salt River in Phoenix." CAP-LTER 14th Annual All Scientists Meeting & Poster Symposium, SkySong, Scottsdale, AZ.
- Franz, N.M. A.D. Smith & J. Hulcr. 2011. "Developing a beetle anatomy ontology based on the HAO model – lessons for inter-ordinal ontology integration." ESA Symposium – Illuminating the Phenome: the Future of Morphology in Entomology. ESA Annual Meeting, Reno, NV.
- Franz, N.M. 2011. "Phylogenetic and ontology-related obstacles to identifying higher-level insect groups." ESA Symposium – Web-Based Digital Insect Identification: Our Progress, Challenges, and Opportunities. ESA Annual Meeting, Reno, NV.

- * Cardona-Duque, J., L. Gómez-Murrillo & N.M. Franz. 2011. "Phylogenetic reassessment of *Cyclanthura*, a Neotropical genus of Acalyptini associated with arum and cyclanth inflorescences (Coleoptera: Curculionidae: Curculioninae)." ESA Annual Meeting, Reno, NV.
- Girón, J.C. & N.M. Franz. 2011. "*Lachnopus curvipes* Fabricius 1787 and its radiation in the Caribbean region (Coleoptera: Curculionidae: Entiminae)." ESA Annual Meeting, Reno, NV.
- * López Mejía, N.M. Franz, J.M. Thaxton & S.L. Whitmire. 2011. "Correlation between parasitoid wasp diversity and vegetation diversity and structure in a degraded dry forest in Puerto Rico." ESA Annual Meeting, Reno, NV.
- * Montoya, A.L. & N.M. Franz. 2011. "Modelling the distribution of *Ornidia obesa* Fabricius, 1775 (Diptera: Syrphidae) in the Neotropical region." ESA Annual Meeting, Reno, NV.
- * Vélez-Bravo, A.H. & N.M. Franz. 2011. "Revision and phylogeny of neotropical velvet cockroaches (Dictyoptera: Blattellidae: Nyctiborinae)." ESA Annual Meeting, Reno, NV.
- Franz, N.M. 2010. "Phylogenetic studies in the weevil tribe Eustylini Lacordaire (Coleoptera: Curculionidae: Entiminae)." ESA Annual Meeting, San Diego, CA.
- * Genaro, J.A. & N.M. Franz. 2010. "An updated catalogue of the bees of Cuba (Hymenoptera: Apoidea: Anthophila)." ESA Annual Meeting, San Diego, CA.
- * Girón, J.C. & N.M. Franz. 2010. "Preliminary insights into the phylogeny of the genus *Lachnopus* Schoenherr 1840 (Coleoptera: Curculionidae: Entiminae)." ESA Annual Meeting, San Diego, CA.
- * Montoya, A.L. & N.M. Franz. 2010. "The flower flies (Diptera: Syrphidae) of Puerto Rico." ESA Annual Meeting, San Diego, CA.
- Franz, N.M. 2010. Invited talk: "Revisionary taxonomy in the age of computer ontologies." Symposium on Biodiversity, Taxonomy and Systematics in the 21st Century, Universidad Nacional Autónoma de México, Mexico.
- Franz, N.M. & D. Thau. 2010. "Biological taxonomy and ontology development: scope and limitations." iEvoBioConference 2010, Portland, OR.
- * Franz, N.M. & C.W. O'Brien. 2009. "New records of weevils (Coleoptera: Curculionoidea) from Mona Island, Puerto Rico, with special consideration of *Apotomoderes* Dejean." ESA Annual Meeting, Indianapolis, IN.
- Cardona-Duque, J. & N.M. Franz. 2009. "Description and phylogeny of a new Neotropical genus of Acalyptini associated with cyclanth inflorescences (Coleoptera: Curculionidae: Curculioninae)." ESA Annual Meeting, Indianapolis, IN.
- Girón, J.C. & N.M. Franz. 2009. "Revision and phylogeny of the Caribbean weevil genus *Apodrosus* Marshall (Coleoptera: Curculionidae: Entiminae)." ESA Annual Meeting, Indianapolis, IN.
- Mazo Vargas, A. & N.M. Franz. 2009. "Molecular insights into the phylogeny of Caribbean entimine weevils (Coleoptera: Curculionidae: Entiminae)." ESA Annual Meeting, Indianapolis, IN.
- * Mazo Vargas, A. & N.M. Franz. 2009. "Phylogeography of the citrus root weevil, *Diaprepes abbreviatus* (Coleoptera: Curculionidae: Entiminae), in Puerto Rico and surrounding islands." ESA Annual Meeting, Indianapolis, IN.
- * Mazo Vargas, A. & N.M. Franz. 2009. "Filogenia del complejo de género *Exophthalmus* Schoenherr (Coleoptera: Curculionidae: Entiminae) en el Caribe." 36th Congress SOCOLEN, Medellín, Colombia.
- Girón, J.C. & N.M. Franz. 2009. "Historia taxonómica de la subfamilia Entiminae (Coleoptera: Curculionidae): un vistazo a los caracteres." 36th Congress SOCOLEN, Medellín, Colombia.
- * Cardona-Duque, J. & N.M. Franz. 2009. "Hacia la descripción y filogenia de un nuevo género de Acalyptini (Coleoptera: Curculionidae)." 36th Congress SOCOLEN, Medellín, Colombia.

- Franz, N.M., J.C. Girón & A. Mazo Vargas. 2009. "Avances en la sistemática de la tribu Eustylini (Coleoptera: Curculionidae: Entiminae)." 36th Congress SOCOLEN, Medellín, Colombia.
- Franz, N.M. 2009. "Interacciones reproductivas entre *Asplundia uncinata* Harling (Cyclanthaceae) y su picudo polinizador (Curculionidae)." 36th Congress SOCOLEN, Medellín, Colombia.
- Franz, N.M., J.C. Girón & A. Mazo Vargas. 2009. "Advances in the systematics of Caribbean entimine weevils." Simposio Flora Fauna Caribe, Humacao, PR.
- * Mazo Vargas, A., M.J. Cafaro & N.M. Franz. 2009. "Phylogeny of the *Exophthalmus* genus complex (Coleoptera: Curculionidae: Entiminae) from the Caribbean." Simposio Flora Fauna Caribe, Humacao, PR.
- Franz, N.M. 2008. "Reassessment of critical type species in the Eustylini (Entiminae) and update on the Caribbean *Exophthalmus* project." ESA Annual Meeting, Reno, NV.
- * Girón, J.C. & N.M. Franz. 2008. "Towards a revision of the genus *Apodrosus* Marshall (Coleoptera: Curculionidae: Entiminae)." ESA Annual Meeting, Reno, NV.
- * Cardona, J., N.M. Franz & D. Tuberquia. 2008. "New reports of acalyptine flower weevils (Coleoptera: Curculionidae) from the northern region of the Central Colombian Andes." ESA Annual Meeting, Reno, NV.
- * Franz, N.M. & J.A. Genaro. 2008. "The bees of Puerto Rico with notes on the Antillean fauna (Hymenoptera: Apoidea: Anthophila)." ESA Annual Meeting, Reno, NV.
- Franz, N.M. 2008. "Lessons taken from the CollectionsWeb Workshop I (small collections)." ECN Annual Meeting, Reno, NV.
- * Franz, N.M., J.C. Girón & A. Mazo. 2008. "Towards a systematic and evolutionary synthesis of the Neotropical *Exophthalmus* genus complex." RIG/CAA Awardee Meeting, NSF, Arlington, VA.
- Ruiz, D., J. Cardona & N.M. Franz. 2008. "Inventario de coleópteros de Isla Mona, Puerto Rico." AlaCiMa Simposio Verano, Río Piedras, PR.
- Girón, J.C. & N.M. Franz. 2008. "Estado del conocimiento de la subfamilia Entiminae (Curculionidae) en Puerto Rico." 35th Congress SOCOLEN, Santiago de Cali, Colombia.
- Franz, N.M. 2008. Invited talk: "Sistemática e historia natural de los gorgojos Neotropicales; y Entomología en la UPRM." Escuela de Biología, UASD, Dominican Republic.
- Franz, N.M. 2007. "Reproductive trade-offs in a specialized cyclanth weevil pollination system (Coleoptera: Curculionidae)." ESA Symposium – New Minds for Weevil Systematics. ESA Annual Meeting, San Diego, CA.
- * Franz, N.M. & P.E. Skelley. 2007. "A new species of *Pharaxonotha* (Coleoptera: Erotylidae) pollinating two species of *Zamia* in Puerto Rico." ESA Annual Meeting, San Diego, CA.
- * Girón, J.C. & N.M. Franz. 2007. "A morphological review and key to the Entiminae (Coleoptera: Curculionidae) housed at the Museum of Entomology, Universidad del Valle, Colombia." ESA Annual Meeting, San Diego, CA.
- Franz, N.M. 2007. "University of Puerto Rico at Mayagüez Insect Collection – then and now." ECN Annual Meeting, San Diego, CA.
- López, J. & N.M. Franz. 2007. "Diversidad de insectos atraídos por lámparas de mercurio y luz ultravioleta en Bosques Estatales de Guánica, Susúa y Maricao." AlaCiMa Simposio Verano, Río Piedras, PR.
- Franz, N.M. & C.W. O'Brien. 2007. "Hacia un inventario de los escarabajos herbívoros de Maricao." Simposio Flora Fauna Caribe, Humacao, PR.
- Franz, N.M., X. Liu, R.K. Peet & L. Downey. 2006. "Using ConceptMapper to trace the evolution of taxonomic perspectives." ESA Annual Meeting, Indianapolis, IN.

- * Franz, N.M. & C.W. O'Brien. 2006. "An inventory of weevils inhabiting the State Forest of Maricao, Puerto Rico (Coleoptera: Curculionoidea)." ESA Annual Meeting, Indianapolis, IN.
- Liu, X., R.K. Peet, N.M. Franz & L. Downey. 2006. "ConceptMapper: a tool to link concept relationships across taxonomic classifications." 5th IC Ecological Informatics, Santa Barbara, CA.
- Peet, R.K., A. Weakley, N.M. Franz & X. Liu. 2006. "The transition to taxon concepts in a world of legacy data." TDWG Annual Meeting, Saint Louis, MO.
- Franz, N.M. 2006. Invited talk: "Evolution of pollination and seed predation in Neotropical derelomine flower weevils." UPR-RP Biology Seminar, Río Piedras, PR.
- Franz, N.M. 2005. Invited talk: "Long-term taxonomic resolvability in the Primate Life-History Databank." Wenner-Gren Foundation, New York, NY.
- Franz, N.M. 2005. Invited talk: "The SEEK project: new concepts and tools to support biodiversity research and taxonomy." New Taxonomy Conference, Cardiff, United Kingdom.
- Franz, N.M. 2004. "The SEEK project: new concepts and tools to support meta-analyses and taxonomy." NCEAS EcoLunch Series, Santa Barbara, CA.
- Franz, N.M. 2004. "Towards a phylogenetic system of New World derelomine flower weevils." ESA Annual Meeting, Salt Lake City, UT.
- Franz, N.M. & R.K. Peet. 2004. "Towards a language for indicating relationships among taxonomic concepts." TDWG Annual Meeting, Christchurch, New Zealand.
- Franz, N.M. & R.M. Valente. 2004. "Evolutionary trends in derelomine flower weevils: from associations to homology." XXII IC Entomology, Brisbane, Australia.
- Franz, N. M. 2004. Invited talk: "Evolution of derelomine flower weevils." Entomologists' Meeting, Santa Barbara, CA.
- Franz, N.M. 2004. "Systematics of derelomine flower weevils." Jugatae Entomology Seminar, Cornell University, Ithaca, NY.
- Franz, N.M. 2003. "Reference." WHS 22nd Annual Meeting, New York, NY.
- Franz, N.M. 2003. "Pushing the limits of homology." Graduate Student Symposium, Cornell University, Ithaca, NY.
- Franz, N.M. 2002. Invited talk: "Natural history of derelomine flower weevils systematized." Coleopterists Society, Annual Meeting, Fort Lauderdale, FL.
- Franz, N.M. 2002. Invited talk: "Biología reproductiva de Cyclanthaceae y de los Curculionidae asociados." Central University of Venezuela, Maracay, Venezuela.
- Franz, N.M. 2001. "Weevils as pollinating seed predators: evolution of the derelomine-*Carludovica* association." ESA Annual Meeting, San Diego, CA.
- Franz, N.M. 2001. "Empiricism, realism, and descent with modification." WSH 20th Annual Meeting, Corvallis, OR.
- Franz, N.M. & C.W. O'Brien. 2000. "Evolution of derelomine flower weevils (Coleoptera: Curculionidae) in association with palms and cyclanths." XXI ICE Entomology, Iguassu Falls, Brazil.
- * Franz, N.M. & W.T. Weislo. 2000. "Foraging success and individual learning of orientation and timing in *Ectatomma ruidum* (Formicidae: Ponerinae)." XXI ICE Entomology, Iguassu Falls, Brazil.
- Franz, N.M. 2000. "Where to go when? Foraging success and individual learning in *Ectatomma ruidum* (Formicidae: Ponerinae)." Graduate Student Symposium, Cornell University, Ithaca, NY.
- Franz, N.M. 1999. "Pollination in Cyclanthaceae." STRI Seminar, Barro Colorado, Panama.
- Franz, N.M. 1999. "How to study coevolution? Weevils as pollinating seed predators of Cyclanthaceae." STRI Tupper Symposium, Barro Colorado, Panama.
- Franz, N.M. 1997. "Caracterización de algunos plaguicidas de origen natural en el mercado Costarricense." VIII Congress IPM, Guatemala City, Guatemala.

- Franz, N.M. 1997. "Biología reproductiva de algunas ciclantáceas y de los picudos asociados." IV Congress of Entomology, San José, Costa Rica.

Field and Museum Work

1. Field Work

Brazil (2000); Costa Rica (1996–2003; > 12 months total); Colombia (2009); Cuba (2012); Dominica (2009); Dominican Republic (2008); Germany (1993–1996); Jamaica (2008); Mexico (2011); Mona Island (PR; 2008); Panama (1998, 1999, 2012, 2013; 4 months); Puerto Rico (2006–present); Spain (2000); Saint Thomas (2006); United States (1999–present): AZ, CA, FL, MD, NC, NJ, NM, NV, NY, OR, PA, SC); Venezuela (2002); Vieques Island (PR; 2007, 2009).

2. Collections Visited

A.J. Cook Arthropod Research Collection, Michigan State University (MI); American Museum of Natural History (NY); Bohart Museum, University of California at Davis (CA); California Academy of Sciences (CA); Canadian Museum of Nature (Canada); Centro Oriental de Ecosistemas y Biodiversidad, Santiago de Cuba (Cuba); Charles W. O'Brien Collection (AZ); Cornell University Insect Collection (NY); Entomology Research Museum, University of California at Riverside (CA); Field Museum of Natural History (IL); Florida State Collection of Arthropods (FL); Frank M. Hasbrouck Insect Collection (AZ); Instituto Nacional de Biodiversidad (Costa Rica); Julio A. Micheli Collection (PR); Museu de Zoologia da Universidade de São Paulo (Brazil); Museo de Insectos, Universidad de Costa Rica (Costa Rica); Museo del Instituto de Zoología Agrícola (Venezuela); Museo Nacional de Costa Rica (Costa Rica); Museo Nacional de Historia Natural (Dominican Republic); Museum of Comparative Zoology, Harvard University (MA); Northern Arizona University Insect Collection (AZ); Queensland Museum (Australia); Santa Barbara Museum of Natural History (CA); Smithsonian Tropical Research Institute (Panama); Snow Entomological Museum (KS); Universidad de Antioquia (Colombia); Universidad Autónoma de Santo Domingo (Dominican Republic); Universidade Federal do Paraná (Brazil); Universidad Nacional Autónoma de México (Mexico); University of Arizona Insect Collection (AZ); University of the West Indies at Mona (Jamaica); University of Georgia Collection (GA); United States National Museum of Natural History (DC); Zoologisches Institut und Zoologisches Museum, Universität von Hamburg (Germany).