Thomas C. Giarla, Ph.D.

Department of Biology, Siena College 515 Loudon Road, Loudonville, NY 12211

tgiarla@siena.edu | www.tomgiarla.com | Google Scholar Page

EDUCATION AND EMPLOYMENT

EDUCATION

Ph.D., University of Minnesota (Ecology, Evolution, and Behavior) - Minneapolis, MN

| 2007 | B.A., magna cum laude, Washington University (Biology) – St. Louis, MO |
|--------------|--|
| | PROFESSIONAL APPOINTMENTS |
| 2021-Present | Associate Professor, Siena College – Loudonville, NY |
| 2021-Present | Research Associate, American Museum of Natural History – New York, NY |
| 2015-2021 | Assistant Professor, Siena College – Loudonville, NY |
| 2013-2015 | Postdoctoral Fellow, Louisiana State University – Baton Rouge, LA |
| 2013 | Visiting Instructor, St. Olaf College – Northfield, MN |

RESEARCH

PEER-REVIEWED PUBLICATIONS

| 2021 | Esselstyn JA, AS Achmadi, H Handika, MT Swanson, TC GIARLA , & KC Rowe. Fourteen new, endemic species of shrew (genus Crocidura) from Sulawesi reveal a spectacular island radiation. Bulletin of the American Museum of Natural History 454: 1–108. [DOI] |
|------|---|
| 2021 | Voss RS, TC GIARLA, & SA Jansa. A revision of the didelphid marsupial genus <i>Marmosa</i> part 4. Species of the Alstoni Group (subgenus <i>Micoureus</i>). <i>American Museum Novitates</i> 3983: 1–31. [DOI] |
| 2021 | Kirchman JJ, NR McInerney, TC GIARLA, SL Olson, B Slikas, & RC Fleischer. Phylogeny based on ultra- conserved elements clarifies the evolution of rails and allies (Ralloidea) and is the basis for a revised classification. <i>Ornithology</i> [DOI] |
| 2021 | GIARLA TC, TC Demos, A Monadjem, R Hutterer, D Dalton, ML Mamba, EA Roff ¹ , FM Mosher ¹ , V Mikeš, CP Kofron, & JC Kerbis Peterhans. Integrative taxonomy and phylogeography of <i>Colomys</i> and <i>Nilopegamys</i> (Rodentia: Murinae), semi-aquatic mice of Africa, with descriptions of two new species. <i>Zoological Journal of the Linnean Society</i> 192: 206–235. [DOI] |
| 2021 | Voss RS & TC GIARLA. A Revision of the didelphid marsupial genus <i>Marmosa</i> Part 3. A new species from western Amazonia, with redescriptions of <i>M. perplexa</i> Anthony, 1922, and <i>M. germana</i> Thomas, 1904. <i>American Museum Novitates</i> 3969: 1–28. [DOI] |
| 2020 | Voss RS & TC GIARLA. Case 3831–Marmosa isthmica Goldman 1912 (Mammalia, Didelphimorphia, Didelphidae): Proposal to conserve current usage by suppressing its senior synonym, Marmosa regina Thomas, 1898. Bulletin of Zoological Nomenclature 77: 131–134. [DOI] |
| 2020 | GIARLA TC & RS Voss. On the Identity of Victoria's Mouse Opossum, <i>Marmosa regina</i> , Thomas, 1898. American Museum Novitates 3960: 1–16. [DOI] |
| 2020 | Voss RS, TC GIARLA, JF Díaz-Nieto, & SA Jansa. A revision of the didelphid marsupial genus <i>Marmosa</i> part 2: Species of the Rapposa Group (subgenus <i>Micoureus</i>). <i>Bulletin of the American Museum of Natural History</i> 439: 1–62. [DOI] |

¹ Siena College undergraduate student.

_

2013

| 2020 | Voss RS & TC GIARLA. A Revision of <i>Philander</i> (Marsupialia: Didelphidae), Part 2: Phylogenetic relationships and morphological diagnosis of <i>P. nigratus</i> Thomas, 1923. <i>American Museum Novitates</i> 3955: 1–16. [DOI] |
|-------|---|
| 2020² | Lopatto D et al. (including TC GIARLA). Facilitating growth through frustration: Using genomics research in a course-based undergraduate research experience. <i>Journal of Microbiology & Biology Education</i> 21: 21.1.6. [DOI] |
| 2020 | GIARLA TC & RS Voss. DNA Sequence data from the holotype of <i>Marmosa elegans coquimbensis</i> Tate, 1931 (Mammalia: Didelphidae) resolve its disputed relationships. <i>American Museum Novitates</i> 3946 1–8. [DOI] |
| 2019 | Esselstyn JA, AS Achmadi, H Handika, TC GIARLA, & KC Rowe. A new climbing shrew from Sulawesi highlights the tangled taxonomy of an endemic radiation. <i>Journal of Mammalogy</i> 100: 1713–1725. [DOI] |
| 2018 | GIARLA TC, SP Maher, AS Achmadi, MK Moore ³ , MT Swanson, KC Rowe, & JA Esselstyn. Isolation by marine barriers and climate explain areas of endemism in an island rodent. <i>Journal of Biogeography</i> 45: 2053–2066. [DOI] |
| 2018 | Hutterer R, DS Balete, TC GIARLA , LR Heaney, & JA Esselstyn. A new genus and species of shrew (Mammalia: Soricidae) from Palawan, Philippines. <i>Journal of Mammalogy</i> 99: 518–536. [DOI] |
| 2018 | Eldridge RA, AS Achmadi, TC GIARLA , KC Rowe, & JA Esselstyn. Geographic isolation and elevational gradients promote lineage diversification in an endemic shrew on Sulawesi, Indonesia. <i>Molecular Phylogenetics and Evolution</i> 118: 306–317. [DOI] |
| 20174 | Leung W, CD Shaffer, EJ Chen, TJ Quisenberry, K Ko, JM Braverman, TC GIARLA, SCR Elgin. Retrotransposons are the major contributors to the expansion of the <i>Drosophila ananassae</i> Muller F element. <i>G3: Genes, Genomes, Genetics</i> 7: 2439-2460. [DOI] |
| 2016 | Demos TC, AS Achmadi, TC GIARLA, H Handika, Maharadatunkamsi, KC Rowe, & JA Esselstyn. Local endemism and within-island diversification of shrews illustrate the importance of speciation in building Sundaland mammal diversity. <i>Molecular Ecology</i> 25: 5158–5173. [DOI] |
| 2015 | GIARLA TC & JA Esselstyn. The challenges of resolving a rapid, recent radiation: Empirical and simulated phylogenomics of Philippine shrews. <i>Systematic Biology</i> 64: 727–740. [DOI] |
| 2015 | GIARLA TC & SA Jansa. The impact of Quaternary climate oscillations on divergence times and historical population sizes in <i>Thylamys</i> opossums from the Andes. <i>Molecular Ecology</i> 24: 2495–2506. [DOI] |
| 2015 | Stanley WT, R Hutterer, TC GIARLA , & JA Esselstyn. Phylogeny, phylogeography, and geographic variation in the <i>Crocidura monax</i> (Soricidae) species complex from the montane islands of Tanzania, with descriptions of three new species. <i>Zoological Journal of the Linnean Society</i> 174: 185–215. [DOI] |
| 20155 | Leung W et al. (including TC GIARLA). <i>Drosophila</i> Muller F elements maintain a distinct set of genomic properties over 40 million years of evolution. <i>G3: Genes, Genomes, Genetics</i> 5: 719–740. [DOI] |
| 2014 | GIARLA TC, & SA Jansa. The role of physical geography and habitat type in shaping the biogeographical history of a recent radiation of Neotropical marsupials (<i>Thylamys</i> : Didelphidae). <i>Journal of Biogeography</i> 41: 1547–1558. [DOI] |
| 2014 | GIARLA TC, RS Voss, & SA Jansa. Hidden diversity in the Andes: Comparison of species delimitation methods in montane marsupials. <i>Molecular Phylogenetics and Evolution</i> 70: 137-151. [DOI] |
| 2010 | GIARLA TC, RS Voss, & SA Jansa. Species limits and phylogenetic relationships in the didelphid marsupial genus <i>Thylamys</i> based on mitochondrial DNA sequences and morphology. <i>Bulletin of the American Museum of Natural History</i> No. 346: 1–67. [DOI] |

 ² This paper from the Genomics Education Partnership has 103 co-authors.
 ³ Louisiana State University undergraduate student.
 ⁴ This paper from the Genomics Education Partnership has 276 co-authors. I was a member of the eight-person writing committee.
 ⁵ This paper from the Genomics Education Partnership has 1,015 co-authors.

| 2009 | Jansa SA, TC GIARLA, & B Lim. The phylogenetic position of the rodent genus <i>Typhlomys</i> and the |
|------|--|
| | geographic origin of Muroidea. <i>Journal of Mammalogy</i> 90: 1083–1094. [DOI] |

BOOK CHAPTERS

2017 **GIARLA TC** Family Platacanthomyidae. *Handbook of the Mammals of the World* (Vol. 7, Rodents: Part II). DE Wilson, TE Lacher, & RA Mittermeier (Eds.). Barcelona: Lynx.

RESEARCH GRANTS AND AWARDS

Funded

| Committee on Teaching & Faculty Development Grant (\$800), Siena College Doctoral Dissertation Improvement Grant (\$15,000), Division of Environmental Biology, NSF Dayton Research Award (\$600), Bell Museum of Natural History Travel Award (\$300), U. Minnesota Council of Graduate Students Travel Award (\$1,000), EEB Dept., U. Minnesota Thesis Research Grant (\$4,773), U. Minnesota Graduate School Graduate Research Award (\$1,221), Society of Systematic Biologists Dayton Research Award (\$1,500), Bell Museum of Natural History Student Research Award (\$1,500), American Society of Mammalogists | |
|--|--|
| Not Funded | |
| Major Research Instrumentation (\$292,044; Co-PI), Office of Advanced Cyberinfrastructure, NSF Inclusive Excellence Grant (\$1,000,000; PI), Howard Hughes Medical Institute | |
| FELLOWSHIPS AND HONORS | |
| Siena College Award for Excellence, Siena College Committee on Teaching & Faculty Development Summer Fellowship, Siena College Committee on Teaching & Faculty Development Summer Fellowship, Siena College Doctoral Dissertation Fellowship, U. Minnesota President's Student Leadership and Service Award, U. Minnesota Elmer Birney Student Honorarium, American Society of Mammalogists Elmer Birney Summer Research Fellowship, U. Minnesota Graduate School Fellowship, U. Minnesota | |
| Invited Presentations | |
| California State University, Northridge: Biology Colloquium (Sept. 28 th) University of Virginia: Ecology and Evolutionary Biology Seminar Series (Oct. 24 th) Rensselaer Polytechnic Institute: Biology Department Seminar Series (Feb. 21 st) SUNY Albany: Ecology and Evolutionary Biology Seminar Series (March 25 th) | |
| CONFERENCE PRESENTATIONS | |
| GIARLA TC, JC Kerbis Peterhans, & TC Demos. Phylogeography and taxonomy of the semi-aquatic African murine genera <i>Colomys</i> and <i>Nilopegamys</i> . American Soc. of Mammal. Conference: Washington DC, June 28–July 2. | |
| GIARLA TC, SP Maher, AS Achmadi, MK Moore, MT Swanson, KC Rowe, & JA Esselstyn. Isolation by marine barriers and climate explain areas of endemism in an island rodent. American Soc. of Mammal. Conference: Manhattan, KS, June 25–29. | |
| | |

| 2018 | Mosher FM ⁶ , EA Roff ⁶ , TC Demos, JC Kerbis Peterhans, TC GIARLA . Phylogeography of the African Wading Rat, <i>Colomys goslingi</i> . American Soc. of Mammal. Conference: Manhattan, KS, June 25–29. <i>Poster Presentation</i> . |
|------|---|
| 2016 | GIARLA TC, R Hutterer, JC Kerbis Peterhans, & JA Esselstyn. Thousands of loci and hundreds of species: Phylogenomics of the white-toothed shrews. American Soc. of Mammal. Conference: Minneapolis, MN, June 24–28. |
| 2016 | Small KA ⁶ , R Hutterer, JC Kerbis Peterhans, JA Esselstyn, & TC GIARLA . Comparing tree building approaches for a phylogenomic dataset with over 200 species. American Soc. of Mammal. Conference: Minneapolis, MN, June 24–28. <i>Poster Presentation</i> . |
| 2016 | Moolick KE ⁶ , JA Esselstyn, & TC GIARLA . Utility of whole mitochondrial genomes for species-level phylogenetics of <i>Maxomys</i> spiny rats. American Soc. of Mammal. Conference: Minneapolis, MN, June 24–28. <i>Poster Presentation</i> . |
| 2015 | GIARLA TC & JA Esselstyn. The challenges of resolving a rapid, recent radiation: Empirical and simulated phylogenomics of Philippine shrews. American Soc. of Mammal. Conference: Jacksonville, FL, June 12–16. |
| 2014 | GIARLA TC & JA Esselstyn. Phylogenomics and biogeography of a rapid radiation of crocidurine shrews across the Philippines. Evolution Conference: Raleigh, NC, June 20–24. |
| 2013 | GIARLA TC & SA Jansa. Multilocus phylogeography and phylogenetics of <i>Thylamys</i> mouse opossums: The impact of Pleistocene glacial cycles on Andean taxa. Evolution Conference: Snowbird, UT, June 21–25. |
| 2013 | GIARLA TC & SA Jansa. Multilocus phylogeography and phylogenetics of <i>Thylamys</i> mouse opossums: The impact of Pleistocene glacial cycles on Andean taxa. American Soc. of Mammal. Conference: Philadelphia, PA, June 14–18. |
| 2012 | GIARLA TC Hidden diversity in the Andes: Phylogeography of cryptic speciation in montane marsupials. Evolution Conference: Ottawa, ON, Canada, July 6–12. |
| 2012 | GIARLA TC Hidden diversity in the Andes: Phylogeography of cryptic speciation in montane marsupials. American Soc. of Mammal. Conference: Reno, NV, June 22–26. |
| 2010 | GIARLA TC , RS Voss, & SA Jansa. Systematics of the marsupial genus <i>Thylamys</i> : Examining biogeographic patterns in the open habitats of central and southern South America. Evolution Conference: Portland, OR, June 25–29. |
| 2010 | GIARLA TC, RS Voss, & SA Jansa. Systematics of the marsupial genus <i>Thylamys</i> : Examining biogeographic patterns in the open habitats of central and southern South America. American Soc. of Mammal. Conference: Laramie, WY, June 11–15. |
| 2009 | GIARLA TC, RS Voss, & SA Jansa. Systematics and historical biogeography of <i>Thylamys</i> (Didelphimorphia: Didelphidae). 10th International Mammalogical Congress: Mendoza, Argentina, August 9–14. |

TEACHING AND MENTORSHIP EXPERIENCE

TEACHING EXPERIENCE

Siena College

- Biology of the Vertebrates (Spring 2016, 2017, 2018, 2019, 2020)
- Community Development Capstone I and II (Fall 2019, Spring 2020)
- Ecology (Fall 2015, 2016, 2017, 2018, 2019, 2020; Spring 2021)
- General Biology I (Fall 2016)

,

⁶ Siena College undergraduate student.

- Genomics and Bioinformatics (Spring 2017, 2019, 2021)
- Honors Thesis I and II (Spring 2019)
- Research and Writing Skills for Biologists (Spring 2018)

St. Olaf College

• Evolution and Diversity (Visiting Instructor, Spring 2013)

RESEARCH MENTORING

Siena College

| 2020–2021 Kyra Griffin ⁷ , Eman Khan, Aiyana MacIntyre (3 students) | |
|--|------------------|
| 2019–2020 Kyra Griffin, Parneet Kaur, Eman Khan, Sean Kusche, Aiyana MacIntyre, Skyler Opromo | ılla, Liliana |
| Sanchez Adames ⁸ , Greg Sileo (8 students) | |
| 2018–2019 Elizabeth Allegretti, Mathew Dolinar, Francesca Gallo, Carissa Huber, Emily Marticello, S | |
| Margot Pavlik, Karla Perez, Emily Roff ⁹ , Gregory Sileo, Alexandria Sullivan, Ryan Weis, | Dakota |
| Wilkinson (13 students total; 7 co-advised with Rachel Sterne-Marr) | |
| 2018 (Summer) Emily Roff ¹⁰ | |
| 2017–2018 Francesca Gallo, Hannah Gregg, Nimra Komal, Samerna Masih, Frank Mosher, Jennifer P | 'ark, Emily Roff |
| (7 students) | |
| 2016–2017 Daniel Biljanoski, Naisla Defran, Chantalle Durr, Ashley Herkert, Nathan Natale, Kylie Sr | mall, Maria |
| Valdez, Erica Weldin (8 students total; 4 co-advised with Rachel Sterne-Marr) | |
| 2015–2016 Daniel Biljanoski Kelly Moolick, Kylie Small (3 students) | |
| | |
| Louisiana State University | |
| 2014–2015 Meagan Moore, Chris Reglen, Chelsea Wallace (3 students) | |
| 2014–2015 Wicagan Woote, Chris Region, Cheisea Wanace (5 students) | |
| University of Minnesota | |
| Chirosomy of Hamilesom | |
| 2008–2013 Courtney Comar, Tracy Smelter, Tim Sosa, Jordan Tysdale (4 students) | |

SERVICE

INSTITUTIONAL SERVICE AT SIENA COLLEGE

| Member, Middle States Reaccreditation Self Study Steering Committee |
|---|
| Member, Associate Director of Institutional Effectiveness Search Committee |
| Director, HHMI Inclusive Excellence Grant Working Group |
| Member, Associate Director of Institutional Effectiveness Search Committee |
| Member, Sociology Teaching Assistant Professor Search Committee |
| Member, Biology Department Seminar Committee |
| Advisor, Biology Club |
| DAC Representative, President's Advisory Committee on Diversity and Inclusion (PACDI) |
| Discussion Leader, School of Science Diversity and Inclusion Workshop |
| School of Science Representative, Student Learning Assessment Committee (SLAC) |
| Assessment Coordinator, Biology Department |
| Member, Animal Physiologist Tenure-Track Search Committee |
| |

⁷ CURCA Winter Scholar

⁸ Academic Community Engagement (ACE) and Bonner Program capstone student

⁹ Honors thesis student

¹⁰ CURCA Summer Scholar

| 2017 | Member, Microbiology Visiting Professor Search Committee |
|-----------|--|
| 2016–2020 | Member, Diversity Action Committee (DAC) |

PROFESSIONAL SERVICE

| 2021–Present 2016–Present | Associate Editor, Journal of Mammalian Evolution Member, Genomics Education Partnership |
|------------------------------|--|
| 2016—Hesent 2016 | Review Panel Member, National Science Foundation |
| 2016—Present | Member, Human Diversity Committee, American Society of Mammalogists |
| 2015–Present | Member, Grants-in-Aid Committee, American Society of Mammalogists |
| 2015–Fresent 2016–2017 | |
| 2010–2017 | Member, Program Committee, American Society of Mammalogists |

COMMUNITY OUTREACH AND VOLUNTEER WORK

| 2014-2015 | High School Research Mentor, EnvironMentors Program, LSU |
|-----------|--|
| 2014-2015 | Outreach Volunteer, LSU Museum of Natural Science |
| 2009-2011 | President, Teaching S.M.A.R.T., U. Minnesota |
| 2008-2012 | Coordinator and Volunteer, Teaching S.M.A.R.T., U. Minnesota |
| 2008-2012 | Guest Instructor, Bell Museum of Natural History |

REVIEWER: JOURNAL ARTICLES AND BOOK CHAPTERS

A list of all verified peer reviews is available on my <u>Publons Reviewer Page</u>

- Biological Journal of the Linnean Society
- Ecography
- Heredity
- Journal of Biogeography
- Journal of Mammalogy
- Journal of Mammalian Evolution
- Journal of Fish Biology
- Journal of Zoological Systematics and Evolutionary Research
- Mammal Review

- Molecular Phylogenetics and Evolution
- New World Marsupials (two chapters)
- Organisms, Diversity, and Evolution
- PeerJ
- Systematic Biology
- Zoologica Scripta
- Zoological Journal of the Linnean Society
- Zoologischer Anzeiger
- Zootaxa

PROFESSIONAL MEMBERSHIPS

- American Society of Mammalogists
- Genomics Education Partnership (GEP)
- Research Associate at the American Museum of Natural History