

CURRICULUM VITAE

EDWARD LEO STANLEY

Florida Museum of Natural History
Dickinson Hall, 1659 Museum Road
Gainesville, Florida, 32611.

Telephone: +1 (352) 273-1978 | e-mail: elstanley@flmnh.ufl.edu

Twitter: [@DrScanley](https://twitter.com/DrScanley) | Website: www.edwardstanley.org

Lab Website: www.floridamuseum.ufl.edu/digital-lab

EDUCATION

- 2009-2013 **Richard Gilder Graduate School**, American Museum of Natural History, NY
Ph.D. Comparative Biology. *Systematics and morphological diversification of the Cordylidae (Squamata)*
- 2007-2009 **Villanova University**, Villanova, PA
M.S. Biology. *Evolutionary relationships within the family Cordylidae (Squamata)*
- 2001-2005 **University of St Andrews**, St. Andrews, Scotland
B.Sc Hons. (2.1) Zoology

PROFESSIONAL PREPARATION AND APPOINTMENTS

Florida Museum, University of Florida, Gainesville, FL

2017–present **Associate Scientist** and **Director** of the Digital Imaging Division

2017–present **CT Specialist**, Nanoscale Research Facility

2015–2017 **Postdoctoral researcher**, Division of Herpetology

California Academy of Sciences, San Francisco, CA.

2015–present **Research Associate**, Section of Herpetology, Department on Vertebrate Zoology and Anthropology
2013–2015 **Postdoctoral researcher**, Section of Herpetology, Department on Vertebrate Zoology and Anthropology

American Museum of Natural History, New York, NY.

2013–present **Research Associate**, American Museum of Natural History, Dept. of Herpetology.

2009–2013 **Research Fellow**, Richard Gilder Graduate School, AMNH

PROFESSIONAL DUTIES

Developing, implementing and facilitating imaging technology at the Florida Museum. Training and supporting faculty, students and staff in 3D imaging techniques, including photogrammetry, Computed Tomography and light scanning. Developing and implementing digital data policies. Supervising graduate Students and Postdoctoral Researchers. Managing imaging laboratories.

RESEARCH INTERESTS

- New applications of Computed Tomography data for research and education
- 3D data production and dissemination techniques
- Evolution and phylogenetics of reptiles and amphibians
- Phenotypic adaptation and diversification of defensive structures

PUBLICATIONS

- Bourque, J. and **Stanley, E.L.**, A tegu-like lizard (Teiidae, Tupinambinae) from the Middle Miocene Climatic Optimum of the southeastern United States. *Journal of Paleontology*, *In review*
- Daza, J.D. , **Stanley, E.L.**, Heinicke, M.P., Leah, C., Doucet, D., Fenner, K., Smith, R.D. A., Peretti, A.M. and Bauer A.M. Fossil in amber identified as the oldest skink based on the presence of compound osteoderms. *Nature scientific reports*, *In review*
- Loupe V., Clavel, J., Le Verger, K., Goswami, A., Ferreira G.S., Kyriakouli C., **Stanley E.L.**, Bardua C., Emily Watt E., Boistel R., Pérez-Ben C., Fröbisch N. B., Vivien Bothe V., Daghfous G. and Fabre A. Complete metamorphosis in salamanders facilitates diversification of mandible shape and feeding innovation in terrestrial environments. *Proceedings of the National Academy of Sciences*. *In review*.
- Blackburn, D.C., Gray, J.A, Stanley, E.L., The only “lungless” frog has a glottis and lungs. *Current Biology*. *In press*.
75. Gignac, P.M., Aceves, V., Baker, S. Barnes, J.J., Bell, J., Boyer, D., Cunningham, D., De Carlo, F., Chase, M.F., Cohen, K.E., Colbert, M., De Cree, T., Daza, J.D., Dickinson, E., DeLeon, V., Dougan, L., Duffy F., Dunham, C., Early C.M., Edey, D.R., Echols, S., Eckley, S.A., Fenner, F., Franklin, K.P., Gila, B., Goetz F.E., Gray, J.A., Gleiber, D., Hall, A.S., Hanna, R., Hannula, M., Harris, W., Hill, J.J., Holliday, C.M., Hurdle, K., Jayarajan, A., Knaub, J.L., Krause, A.R., Leavey, A., Lessner, E.J., Lynch, L.M., Maga, M., Maisano, J., Marsh², K., Marsh, M., Martin-Silverstone, E., Misiaszek, J.P. Neander, A.I. O'Brien, H.D., Olson, S., Panigot, E., Motch-Perrine, S.M., Porri , T.J., Ramsey, A., Scheffele G., Smith, H.F., **Stanley, E.L.**, Stock, S.R., Terhune, C.E., Thomas, D.L., Linares Vargas, C.A. Veltri, M., Warnett, J.M., Watanabe, A., Waters, E.A., Wende, R., Wescott, D.J., Withnell, C.B., Whittaker, S., Wilbur, Z.E., Wilson, J., Wilson, M., Winchester, J., Yoakum, C.B., and Zobek, CM. 2024. The Role of Networks to Overcome Large-scale Challenges in Tomography: The Non-Clinical Tomography Users Research Network. *Tomography of Materials and Structures*, p.100031
doi.org/10.1016/j.tmater.2024.100031
74. Kolencik; S., **Stanley, E.L.**, Punnath, A., Grant, A., Doña, J., Johnson, K.P. and Allen. J. 2024. Parasite escape mechanisms drive morphological diversification in avian lice. *Proceedings of the Royal Society B*. doi.org/10.1098/rspb.2023.2665
73. Griffing, A.H., **Stanley, E.L.** and Paluh, D.J., 2024. The first report of preovipositional embryonic development in the legless gecko, *Lialis burtonis* (Gekkota: Pygopodidae). *The Anatomical Record*. doi.org/10.1002/ar.25434
72. Blackburn, D.C., Boyer, D.M., Gray, J.A., Winchester, J., Bates, J.M., Baumgart, S.L., Braker, E., Coldren, D., Conway, K.W., Davis Rabosky, A., de la Sancha, N., Dillman, C.B., Dunnum, J.L., Early, C.M., Frable, B.W., Gage, M.W., Hanken, J., Maisano, J.A., Marks, B.D., Maslenikov, K.P., McCormack, J.E., Nagesan, R.S., Pandelis, G.G., Prestridge, H.L., Rabosky, D.L., Randall, Z.S., Robbins, M.B., Scheinberg, L.A., Spencer, C.L., Summers, A.P., Tapanila, L., Thompson, C.W., Tornabene, L., Watkins-Colwell, G.J., Welton, L.J., the oVert Project Team and **Stanley, E.L.** 2024. Increasing the impact

of vertebrate scientific collections through 3D-imaging: the openVertebrate (oVert) Thematic Collections Network. *Bioscience*, <https://doi.org/10.1093/biosci/biad120>

71. Maliuk, A., Marghoub, A., Williams, C. J. A., **Stanley, E.L.**, Kéver, L., Vickaryous, M., Herrel, A., Evans, S. E., & Moazen, M. 2024. Comparative analysis of osteoderms across the lizard body. *The Anatomical Record*, 1–13. [DOI:10.1002/ar.25418](https://doi.org/10.1002/ar.25418)
70. Daza, J.D., Rock, A.A. and **Stanley, E.L.**, 2024. The palatal gland of dibamid lizards. *The Anatomical Record*, 307(1), pp.233-237. doi.org/10.1002/ar.25288
69. Kircher, B.K., **Stanley, E.L.** and Behringer, R.R., 2024. Anatomy of the female reproductive tract organs of the brown anole (*Anolis sagrei*). *The Anatomical Record*, 307(2), pp.395-413. [DOI:10.1002/ar.25293](https://doi.org/10.1002/ar.25293)
68. Bourque, J. R., **Stanley, E.L.**, and Hulbert Jr., R. C. 2023. A Late Miocene occurrence of the extinct salamander *Batrachosauroides* (Caudata, Batrachosauroididae) and other new caudate fossils from Florida and Georgia, USA. *Bulletin of the Florida Museum of Natural History* 60(4):235–255. doi.org/10.58782/flmnh.tzqg4599
67. Vallejo-Pareja, M.C., **Stanley, E.L.**, Bloch, J.I. and Blackburn, D.C., 2023. Fossil frogs (Eleutherodactylidae: Eleutherodactylus) from Florida suggest overwater dispersal from the Caribbean by the Late Oligocene. *Zoological Journal of the Linnean Society*, p.zlad130. <https://doi.org/10.1093/zoolinnea/zlad130>
66. Wolcott, K. A., **Stanley, E.L.**, Gutierrez, O. A., Wuchty, S., and Whitlock, B. A.. 2023. 3D pollination biology using micro-computed tomography and geometric morphometrics in *Theobroma cacao*. *Applications in Plant Sciences* 11(5): e11549. <https://doi.org/10.1002/aps3.11549>
65. Lobón-Rovira, J., Bauer, A.M., Vaz Pinto, P., Trape, J.F., Conradie, W., Kusamba, C., Júlio, T., Cael, G., **Stanley, E.L.**, Hughes, D.F. and Behangana, M., 2023. Integrative revision of the *Lygodactylus gutturalis* (Bocage, 1873) complex unveils extensive cryptic diversity and traces its evolutionary history. *Zoological Journal of the Linnean Society*, p.zlad123. <https://doi.org/10.1093/zoolinnea/zlad123>
64. Rodrigues, A., Johnson, A.J., Joseph, R.A., Li, Y. Keyhani, N.O., **Stanley, E.L.**, Weiss, B., Kaltenpoth, M., Smith M.E. and Hulcr, J. 2023. Fungal symbiont community and absence of detectable mycangia in invasive *Euplatypus* ambrosia beetles. *Symbiosis*. <https://doi.org/10.1007/s13199-023-00938-4>
63. Das, K., Rödel, M.O., **Stanley, E.L.**, Srikanthan, A.N., Shanker and K., Vijayakumar, S.P. 2023. Reed bamboos drive skull shape evolution in bush frogs of the Western Ghats, Peninsular India. *Ecology and Evolution* <https://doi.org/10.1002/ece3.10493>
62. Bates, M.F., Lobón-Rovira, J., **Stanley, E.L.**, Branch, W.R. and Vaz Pinto, P., 2023. A new species of green-eyed *Cordylus Laurenti*, 1768 from the west-central highlands of Angola, and the rediscovery of *Cordylus angolensis* (Bocage, 1895) (Squamata: Cordylidae), *Vertebrate Zoology*, 73 <https://doi.org/10.3897/vz.73.e95639>
61. Gray, J. A., Gignac, P. M., & **Stanley, E. L.** 2023. The first full body diffusible iodine-based contrast-enhanced computed tomography dataset and teaching materials for a member of the Testudines. *The Anatomical Record*, 1–14. <https://doi.org/10.1002/ar.25282>

60. Tharakan, S., Shepherd, N., Gower, D.J., **Stanley, E.L.**, Felice, R.N., Goswami, A. and Watanabe, A., 2023. High-density geometric morphometric analysis of intraspecific cranial integration in the barred grass snake (*Natrix helvetica*) and green anole (*Anolis carolinensis*). *Integrative Organismal Biology*, p.obad022.
59. Maden, M., Polvadore, T., Polanco, A., Barbazuk, W.B. and **Stanley, E.**, 2023. Osteoderms in a mammal the spiny mouse *Acomys* and the independent evolution of dermal armor. *iScience*.
58. Ramteke, D., Smith, S. Y., Kapgate, D. K., **Stanley, E. L.**, and Manchester, S. R., 2022. Angiosperm affinities of *Surangea* from the late Cretaceous Deccan Intertrappean Beds of central India. *Acta Palaeobotanica*, 62(2), pp.196-204.
57. Paulina-Carabaja A., Jiménez-Huidobro, P., Triviño, L., **Stanley, E.L.**, Zaher, H., and Daza, J.D., 2022 A look in to the neurocranium of living and extinct Lepidosauria in paleoneurology of Amniotes. in *New Directions in the Study of Fossil Endocasts*. Dozo, M.T., Paulina-Carabajal, P., Macrini, T.E., and Walsh S. ISBN: 9783031139826.
56. Essner R.L., Pereira, R.E.E., Singh, A.L., **Stanley, E.L.**, Moura M.O., Confetti, A.E. and Marcio R. Pie 2022. Semicircular canal size constrains vestibular function in miniaturized frogs. *Science Advances* 8,24.
55. Pinheiro, P.D., Blotto, B.L., Ron, S.R., **Stanley, E.L.**, Garcia, P.C., Haddad, C.F., Grant, T. and Faivovich, J., 2021. Prepollex diversity and evolution in Cophomantini (Anura: Hylidae: Hylinae). *Zoological Journal of the Linnean Society*.
54. Čerňanský, A., **Stanley, E.L.**, Daza, J.D., Bolet, A., Arias, J.S., Bauer, A.M., Vidal-García, M., Bevitt, J.J., Peretti, A.M., Aung, N.N. and Evans, S.E. 2022. A New Early Cretaceous lizard in Myanmar Amber with Exceptionally Preserved Integument. *Scientific Reports* 12, 1660
53. Paluh, D.J., Dillard, W.A., **Stanley, E.L.**, Fraser, G.J. and Blackburn, D.C., 2021. Re-evaluating the morphological evidence for the re-evolution of lost mandibular teeth in frogs. *Evolution*.
52. Bell, C. J., Daza, J. D., **Stanley, E. L.**, and Laver, R. J. 2021. Unveiling the elusive: X-rays bring scolecophidian snakes out of the dark. *The Anatomical Record*, 304(10):2110-2117
51. Laver, R.J., Daza, J.D., Ellis, R.J., **Stanley, E.L.** and Bauer, A.M., 2021. Underground Down Under: Skull anatomy of the southern blind snake *Anilius australis* Gray, 1845 (Typhlopidae: Serpentes: Squamata). *The Anatomical Record*. 304(10):2215-2242
50. Bolet, A., **Stanley, E. L.**, Daza, J. D., Salvador Arias, J., Čerňanský, A., Vidal-García, M., Bevitt, J. J., Peretti, A., Evans, S. E. 2021. "Unusual morphology in the mid-Cretaceous lizard *Oculudentavis*". *Current Biology*, 31, 1–12.
49. Paluh, D.J., Riddell, K., Early, C.M., Hantak, M.M., Jongsma, G.F., Keeffe, R.M., Silva, F.M., Nielsen, S.V., Vallejo-Pareja, M.C., **Stanley, E.L.** and Blackburn, D.C., 2021. Rampant tooth loss across 200 million years of frog evolution. *Elife*, 10, p.e66926.
48. Bardua, C., Fabre, A.C., Clavel, J., Bon, M., Das, K., **Stanley, E.L.**, Blackburn, D.C. and Goswami, A., 2021. Size, microhabitat, and loss of larval feeding drive cranial diversification in frogs. *Nature Communications*, 12(1), pp.1–13.

47. Goodman, C.M., Jongsma, G.F.M., Hill, J.E., **Stanley, E.L.**, Tuckett, Q.M., Blackburn, D.C. and Romagosa, C.M. 2021. A case of mistaken identity: genetic and anatomical evidence reveal the cryptic invasion of *Xenopus tropicalis* in central Florida. *Journal of Herpetology* 55.1 : 62-69.
46. Wagner, P., **Stanley, E.L.**, Daza, J.D., Bauer, A.M. 2021. A new agamid lizard in mid Cretaceous amber from northern Myanmar. *Cretaceous Research*
45. Feiner, N., Jackson, I.S.C., **Stanley, E.L.**, and Tobias Uller, T., 2021 Evolution of the locomotor skeleton in *Anolis* lizards reflects the interplay between ecological opportunity and phylogenetic inertia. *Nature Communications* **12**, 1525
44. Daza J.D., **Stanley, E.L.**, Bolet, A., Bauer, A.M., Salvatore Arisa, J.m Cernasky, A., Bevitt, J., Wagner, P., and Evans, S.E. 2020. Enigmatic amphibians in mid-Cretaceous amber were chameleon-like and had ballistic feeding. *Science*. 370(6517): 687–691.
43. Nielsen, S.V., Conradie W., Ceriaco, L.M.P., Bauer, A.M., Heinicke, M.P., **Stanley, E.L.** and Blackburn, D.C. 2020. A new species of Rain Frog (Brevicipitidae, *Breviceps*) endemic to Angola. *ZooKeys* 979: 133–160
42. Blackburn, D.C., Nielsen, S.V., Barej, M.F., Hirschfeld, J.D.M., Kouamé N.G., Lawson D., Loader, S., Ofori-Boateng, C., **Stanley, E.L.** and Rödel MO. 2020. Evolution of the African slippery frogs (Anura: *Conraua*), including the world’s largest living frog. *Zoologica Scripta*. 2020, 00: 1–13.
41. Heinicke M.P., Titus-McQuillan, J.E., Daza, J.D., Kull, E.M., **Stanley, E.L.** and Bauer, A.M. 2020. Phylogeny and evolution of unique skull morphologies in dietary specialist African shovel-snouted snakes (Lamprophiidae: *Prosymna*), *Biological Journal of the Linnean Society*, blaa076.
40. Fabre, A.C., C. Bardua, M. Bon, J. Clavel, R.N. Felice, J.W. Streicher, J. Bonnel, **Stanley, E.L.**, D.C. Blackburn and A. Goswami. 2020. Metamorphosis and the evolution of morphological diversity in salamanders. *Nature Ecology and Evolution*.
39. Bardua, C., Fabre, A.-C., Bon, M., Das, K., **Stanley, E.L.**, Blackburn, D. and Goswami, A. 2020, Evolutionary integration of the frog cranium. *Evolution*.
38. Paluh, D.P., **Stanley, E.L.** and Blackburn, D.C., 2020 Evolution of hyperossification expands skull diversity in frogs. *Proceedings of the National Academy of Sciences*. 2020 Apr 14;117(15):8554-8562.
37. Bates, M.F. and **Stanley, E.L.** 2020 A taxonomic revision of the south-eastern dragon lizards of the *Smaug warreni* (Boulenger) species complex in southern Africa, with the description of a new species (Squamata: Cordylidae). *PeerJ*, 8, p.e8526 <https://doi.org/10.7717/peerj.8526>
36. Singer, R. A., Moore, J. A., and **Stanley, E. L.** 2020. Novel life history strategy in a deep sea fish challenges assumptions about reproduction in extreme environments. *Scientific Reports*, 10(1), 1–7.
35. Blackburn, D.C., L. Roberts, M.C. Vallejo-Pareja, and **Stanley, E.L.**. 2019. First record of the anuran family Rhinophrynidae from the Oligocene of eastern North America. *Journal of Herpetology*. Vol. 53, No. 4, pp. 316–323.

34. Blackburn, D. C., Giribet, G., Soltis, D. E., and **Stanley, E. L.** 2019. Predicting the Impact of Describing New Species on Phylogenetic Patterns. *Integrative Organismal Biology*, 1(1), obz028.
33. Černanský A., **Stanley E.L.** 2019. The atlas– axis complex in Dibamidae (Reptilia: Squamata) and their potential relatives: The effect of a fossorial lifestyle on the morphology of this skeletal bridge. *Journal of Morphology*. 2019;1–21.
32. Marques, M., Ceríaco, L.M.P., **Stanley, E.L.**, Bandeira, S.A., Agarwal, I. and Bauer A.M., 2019. A new species of Girdled Lizard (Squamata: Cordylidae) from the Serra da Neve Inselberg, Namibe Province, southwestern Angola. *Zootaxa* 4668(4)
31. Evans B.J., Gansauge, M-T., **Stanley, E.L.**, Furman, B.L.S., Caroline M. S. Cauret, C.M.S., Ofori-Boateng, C., Gvoždík, V., Streicher, J.W., Greenbaum, E., Tinsley, R.C., Meyer, M. and Blackburn D.C. 2019. *Xenopus fraseri*: Mr. Fraser, where did your frog come from? *PLoS ONE* 14(9): e0220892.
30. Holovacs, N.T., Daza, J.D., Guerra, C., **Stanley, E.L.** and Montero, R., 2019. You can't run, but you can hide: the skeleton of the sand-swimmer lizard *Calyptommatus leiolepis* (Squamata: Gymnophthalmidae). *The Anatomical Record*.
29. Griffing, A. H., Sanger, T. J., Daza, J. D., Nielsen, S. V., Pinto, B. J., **Stanley, E. L.**, and Gamble, T. 2019. Embryonic development of a parthenogenetic vertebrate, the mourning gecko (*Lepidodactylus lugubris*). *Developmental Dynamics*, 248(11), 1070–1090.
28. Camaiti, M. , Villa, A. , Wencker, L. C., Bauer, A. M., **Stanley, E. L.** and Delfino, M. 2019. Descriptive osteology and patterns of limb loss of the European limbless skink *Ophiomorus punctatissimus* (Squamata, Scincidae). *Journal of Anatomy*
27. Blackburn D.C., Paluh, D.J., Krone, I., Roberts, E.M., **Stanley, E.L.** and Stevens, N.J. 2019. The Earliest Fossil of the African Clawed Frog (Genus *Xenopus*) from Sub-Saharan Africa," *Journal of Herpetology*, 53(2), 125–130.
26. Portillo F., **Stanley E.L.**, Branch W.R., Conradie W.R., Rödel M.O., Penner J., Barej M., Kusamba, C., Muninga W.M., Aristote M.M., Bauer A.M., Trape J.F., Nagy Z.T., Carlino P., Pauwels O.S.G., Menegon M., Ineich I., Burger M., Mazuch T., Jackson K., Hughes D.F., Behangana M and Greenbaum E. 2019. Evolutionary history of burrowing asps (Atractaspidinae) (Squamata: Lamprophiidae) with emphasis on fang evolution and prey selection *PLoS One* 14 (4)
25. Vijayakumar SP, Pyron, A., Dinesh KP, Torsekar, V., Srikanthan A., Swamy P., **Stanley E. L.**, Blackburn, D.C. and Shanker, K. 2019. A new ancient lineage of frog (Anura: Nyctibatrachidae: Astrobatrachinae subfam. nov.) endemic to the Western Ghats of Peninsular India. *PeerJ* 7:e6457
24. Daza J. D., Bauer A. M., **Stanley E. L.**, Bolet A., Dickson B., and Losos J. B. 2018. An Enigmatic Miniaturized and Attenuate Whole Lizard from the Mid-Cretaceous Amber of Myanmar. *Breviora* 563 (1), 1–18
23. Li, Y., Ruan, Y., Kasson, M.P., **Stanley E. L.**, Gillett, C.P.D.T., Johnson, A.J., Zhang, M., and Hulcr, J. 2018. Structure of the Ambrosia Beetle (Coleoptera: Curculionidae) *Mycangia* Revealed Through Micro-Computed Tomography. *Journal of Insect Science* 18 (5): 1–8

22. Ceriaco, L.M.P., Marques, M.P., Bandeira, S., Agarwal, I., **Stanley E. L.**, Bauer, A.M., Heinicke, M.P., Blackburn, D.C. 2018. A new earless species of *Poyntonophrynus* (Anura, Bufonidae) from the Serra da Neve Inselberg, Namibe Province, Angola. *ZooKeys* 780: 109–136
21. Xing, L., **Stanley E. L.**, Bai, M. and Blackburn, D.C. 2018. The earliest direct evidence of frogs in wet tropical forests from Cretaceous Burmese amber. *Scientific Reports* 8, Article number: 8770
20. Hill R.L., Martin, K.G., **Stanley, E.L.** and Mendelson, J.R. 2018. A taxonomic review of the genus *Hemiphractus* (Anura: Hemiphractidae) in Panama: Description of Two New Species, Resurrection of *Hemiphractus panamensis* (Stejneger, 1917), and Discussion of *Hemiphractus fasciatus* Peters. 1862 *Zootaxa* 4429 (3): 495–512
19. Li, Y., Ruan, Y., **Stanley E. L.**, Skelton, J. and Hulcr, J. 2018. Plasticity of mycangia in *Xylosandrus ambrosia* beetles. *Insect Science*. 00, 0–11.
18. Kim, B.G., Kim, Y.H., **Stanley E. L.**, Garrido-Martin, E.M. and Lee, Y.J., Oh, S.P. 2017. CXCL12-CXCR4 signaling plays an essential role in proper patterning of aortic arch and pulmonary arteries, *Cardiovascular Research*, cvx188,
17. Ribeiro, L. F., Blackburn, D. C., **Stanley E. L.**, Pie, M. R., and Bornschein, M. R. 2017. Two new species of the *Brachycephalus pernix* group (Anura: Brachycephalidae) from the state of Paraná, southern Brazil. *PeerJ*, 5, e3603.
16. Blackburn D.C., Paluh, D.J. and **Stanley, E.L.** 2017. *Phrynobatrachus krefftii* (Krefft's Puddle Frog). Anurophagy. *Herpetological Review* 48: 413–414.
15. Bateman, C., Yin-Tse Huang, Simmons, D.R., Kasson, M.T., **Stanley E. L.**, and Hulcr, J. 2017 Ambrosia beetle *Premnobius cavipennis* (Scolytinae: Ipini) carries highly divergent ascomycotan ambrosia fungus, *Afroraffaelea ambrosiae* gen. nov. sp. nov. (Ophiostomatales). *Fungal Ecology*, 25: 41–49
14. Bornschein, M.R., Ribeiro, L.F., Blackburn, D.C., **Stanley, E.L.** and Pie, M.R. 2016. A new species of *Brachycephalus* (Anura: Brachycephalidae) from Santa Catarina, southern Brazil. *PeerJ* 4, e2529
13. Blackburn, D.C., Boix C., Greenbaum, E., Fabrezi, M., Meirte, D., Plumptre, A.J. and **Stanley, E.L.** 2016. The distribution of the Bururi Long-fingered Frog (*Cardioglossa cyaneospila*, family Arthroleptidae), a poorly known Albertine Rift endemic. *Zootaxa* 4170: 355–364.
12. Ceriaco, L.M.P., de Sá, S.C., Bandeira, S., Valério, H., **Stanley E. L.**, Kuhn, A.L., Marques, M., Vindum, J.V., Blackburn D.C., and Bauer, A.M. 2016. Herpetological survey of Iona National Park and Namibe Regional Natural Park, with a Synoptic list of the Amphibians and Reptiles of Namibe Province, Southwestern Angola. *Proceedings of the California Academy of Sciences* 63 (2):
11. Daza, J.D., **Stanley E. L.**, Wagner, P., Bauer, A.M. and Grimaldi, D.A. 2016. Mid-Cretaceous amber fossils illuminate the past diversity of tropical lizards. *Science Advances* 2(3): 1–8

10. **Stanley E. L.**, Ceriaco, L.M.P., Bandeira, S. Valerio, H., Bates, M.F., and Branch, W.R. 2016. A review of *Cordylus machadoi* (Squamata: Cordylidae) in southwestern Angola, with the description of a new species from the Pro-Namib desert. *Zootaxa* 4061(3): 201–226
9. Evans BJ, Carter TF, Greenbaum E, Gvoždík V, Kelley, D.B., McLaughlin, P.J., Pauwels, O.S.G., Portik, D.M., **Stanley E. L.**, Tinsley, R.C., Tobias, M.L., and Blackburn, D.C. 2015. Genetics, Morphology, Advertisement Calls, and Historical Records Distinguish Six New Polyploid Species of African Clawed Frog (*Xenopus*, Pipidae) from West and Central Africa. *PLoS ONE* 10(12): e0142823.
8. **Stanley, E.L.**, and Bates, M.F. 2014. Here be Dragons: A phylogenetic and biogeographic study of the *Smaug warreni* species complex (Squamata: Cordylidae) in southern Africa. *Zoological Journal of the Linnean Society* 172: 892–909
7. de Sá R.O., Grant, T.A., Camargo, A., Heyer, W.R., Ponssa, M.L. and **Stanley E.L.** 2014. Systematics of the Neotropical Genus *Leptodactylus* Fitzinger, 1826 (Anura: Leptodactylidae): Phylogeny, the Relevance of Non-molecular Evidence, and Species Accounts. *South American Journal of Herpetology* 9:S1–100
6. **Stanley, E.L.** Cordylid systematics and evolution. 2014. *In* Girdled Lizards and their relatives. Natural history, captive care and breeding. Reissig, J. Edition Chimaira London p.249.
5. Mouton, P.F.N., Fleming, A. and **Stanley E. L.**, 2012 Synchronised versus asynchronised breeding in the lizard family Cordylidae: An evolutionary perspective. *Journal of Zoology* 288:191–198
4. Greenbaum, E.B., **Stanley E. L.**, Kusamba, C., Moninga W.M., Goldberg, S.R., and Bursey, C.R. 2012. A new species of *Cordylus* (Squamata: Cordylidae) from the Marungu Plateau of southeastern Democratic Republic of the Congo. *African Journal of Herpetology*. 61:14-39
3. Portik D, Wood P, Grismer J, **Stanley E.L.**, and Jackman T. 2012. Identification of 104 rapidly-evolving nuclear protein-coding markers for amplification across scaled reptiles using genomic resources. *Conservation Genetics Resources* 4: 1-10
2. **Stanley E. L.**, Bauer, A. M., Jackman, T. R., Mouton, P. L. N. and Branch, W. R. 2011. Between a rock and a hard polytomy: rapid radiation in the rupicolous girdled lizards (Cordylidae: Squamata). *Molecular Phylogenetics and Evolution* 58: 53-70
1. **Stanley E. L.**, Kendal, R. L., Kendal, J. R., Grounds S., and Laland K. N. 2008. The effects of group size, rate of turnover and disruption to demonstration on the stability of foraging traditions in fish. *Animal Behaviour* 75: 565-572

NOTES AND SHORT COMMUNICATIONS

- Morales, J. A., Parra-Gómez, A., Blackburn, D.C., **Stanley, E.L.**, and Correa, C. Discovering the Ecological Secrets of *Alsodes Cantillanensis* (Anura: Alsodidae): Dietary Knowledge through Computerized Microtomography. *Gayana* 2023, 87, 168-172.
- Blackburn, D.C., Hernández-Morales, C., Paluh, D.J., **Stanley, E.L.** 2021 Predation on a gymnophthalmid lizard by the Brazilian Dumpy Frog, *Stereocyclops incrassatus* (Microhylidae, Gastrophryinae. *Herpetology Notes*, volume 14: 847-849
- Paluh, D.J., **Stanley, E.L.** and Blackburn, D.C., 2019. First dietary record of *Gastrotheca guentheri* (Boulenger, 1882), the lone anuran with true mandibular teeth. *Herpetology Notes*, 12, pp.699-700.
- Claunch N., **Stanley E.L.** and Romagosa C.M. 2020 Natural History note: *Leiocephalus carinatus* (Northern Curly-Tailed Lizard) Extreme Fecal Impaction. *Herpetological Review* 51(1): p126.
- Blackburn, D.C., J. Brecko, J. **Stanley E.L.** and Meirte, D. 2017. Observations on the reproductive biology of *Laurentophryne parkeri* (Laurent, 1950) based on the holotype. *Herpetology Notes* 10: 681–683

PATENTS

- Scheiffle, G. and **Stanley, E.L.**, 2021. Methods and compositions for minimizing X-ray scattering artifact (US Patent No.11,183,314)

TEACHING AND TRAINING

- CT for Biologists: ZOO6927 / ZOO4926.** Lecturer, University of Florida, Gainesville, FL. Fall Semester 2018–2023. *Graduate and upper-level undergraduate course focusing on the fundamentals and practical applications of high-resolution x-ray Computed Tomography.*
- Parasite Biodiversity PCB4460.** Guest Lecturer, University of Florida, Gainesville, FL. 2024. *Taught classes on digital imaging techniques for parasite screening.*
- Herpetology: ZOO4926.** Guest lecturer, University of Florida, Gainesville, FL. 2017, 2018, 2022 and 2023. *Taught classes on squamate diversity.*
- Acquiring, analyzing, and disseminating CT data.** Workshop, the American Mammologists society meetings June 2021. Online. *Developed and ran a workshop that introduced attendees to specimen-based CT datasets and the software used to analyze them.*
- Museum Collections Management: ARH 6895.** Guest lecturer, University of Florida, Gainesville, FL. November 2020. *Taught one class on museum digitization methodologies.*
- Hard and Soft Tissue: Exploring the utility of contrast-enhanced CT scanning.** July 2017. Natural History and Morphology – Engines of Inspiration: Workshop, the Joint Meeting of Ichthyologists and herpetologists, Austen, Texas. *Developed and ran a workshop introducing attendees to specimen-based CT datasets and the software used to analyze them*

Careers in Science Internship. Mentor. California Academy of Sciences, San Francisco, CA. January–August 2015. *Training High-School and Undergraduate students in CT reconstruction techniques and anuran / squamate anatomy.*

Geographic Information Systems. Invited lecturer. Villanova University, Villanova PA. March 2013. *Designed and taught a two-day workshop on GIS theory and MaxEnt-based analyses*

Comparative Anatomy BIO3010. Adjunct lecturer. Baruch College, New York, NY August-December 2011. *Lectured and taught the lab-portion of a comparative anatomy class involving detailed dissections of dogfish and rabbits.*

CT Scanning: Seminar and Research Practicum. Lecturer. American Museum of Natural History, New York, NY. June-July 2011. *Designed and taught six-week workshop for the “research experience for undergraduates” program, teaching the fundamentals of X-ray, Computed Tomography, reconstruction and segmentation techniques and analysis of CT data.*

Evolution BIO4305. Teaching Assistant. Villanova University, Villanova PA. January–May 2008. *Taught and supervised molecular sequencing components and lead paper discussions.*

General Biology 1 BIO2015. Teaching Assistant. Villanova University, Villanova PA. September–December 2007. *Taught lab component, focusing on the chemistry of life, the cell, the gene, and mechanisms of evolution.*

MENTORING AND SUPERVISION

PhD Advisor:

- Kelsey Fenner. PhD. Biology. University of Florida. 2022–Present

PhD Committee member:

- Danielle Wasserman. PhD. Biology, Yeshiva University, 2015–Present
- Aditi Jayarajan. PhD. Biology. University of Florida. 2017–2023
- Ella Nicklin, PhD. Biology, University of Florida, 2019–Present
- Stephen Byrum. PhD, Biology, University of Florida, 2019–Present
- Katherine Wolcott. PhD. Biology, University of Miami, 2021–Present
- Aswaj Punnath: PhD. Entomology and Nematology. 2022–Present
- Dane Ungurait. PhD. Mechanical Engineering. 2022–Present
- Sarah Benevenuto. PhD. Horticultural Science. University of Florida, 2022–Present

External Evaluator

- Shivaun Punnath, PhD. Zoology, University of the Witwatersrand, 2014–2020
Msc. Zoology, University of the Witwatersrand, 2011–2015
- Wade Stanton-Jones, PhD. Zoology, University of the Witwatersrand, 2017–2023

FUNDING AND FELLOWSHIPS (PI/COPI GRANT TOTAL \$3,526,793)

National Science Foundation RCN #2226185 \$398,731, Collaborative Research: Cross-Cutting Improvements: Non-Clinical Tomography Users Research Network (NoCTURN). *Principal Investigator*, September 2022

National Science Foundation SBS#2206734, \$133,767. Collaborative Research: Adaptation or opportunity? Using mammal sucking lice to determine drivers of host-parasite associations. *Principal Investigator*, July 2022

National Science Foundation DMR#2017977, \$1,202,863. MRI: Acquisition of Nano-resolution Zeiss Xradia 620 Versa X-ray Computed Tomography with Phase Contrast and Lab Diffraction Contrast Tomography, *Co-Principal Investigator*, July 2020

National Science Foundation ICB#1929448, \$763,978. CSBR: Curating the Early Anthropocene Record of circum-Caribbean Animal Biodiversity in the Florida Museum of Natural History, *Co-Principal Investigator*, September 2019

National Science Foundation SBS #1924759, \$104,252. Collaborative Research: Repeated Adaptive Radiation in the Coevolutionary History of Birds and Feather Lice, *Principal Investigator*, September 2019.

University of Florida Technology Fee Grant, \$90,027. Expanding Capacity for 3D Data Analysis Expanding Capacity for 3D Data Analysis. *Co-Principal Investigator*, August 2019,

Florida Museum of Natural History seed grant, \$9,980. Developing a stable framework for the Florida Museum of Natural History's Digital collections, *Principal Investigator*, November 2018

National Science Foundation DBI #1701714, \$808,235. Digitization TCN: Collaborative Research: oVert: Open Exploration of Vertebrate Diversity in 3D, *Co-Principle Investigator*, September 2017

National Science Foundation DEB #1556559. \$884,855. Collaborative Research: Survey and Analysis of the Angolan Herpetofauna. *Senior personnel*, June 2016

National Science Foundation DEB #1210478. \$13,910. Doctoral Dissertation Improvement Grant: A synthetic analysis of evolutionary patterns in the Squamate family Cordylidae. *Co-Principle Investigator*, March 2012

Exploration Fund grant, the Explorers Club. \$1050 for the project "Phylogenetic relationships of the Cape cliff lizards." May 2011

Full-year Research Fellowship, Villanova University, Villanova, PA, Sept 2008 to May 2009. Awarded to a second-year Teaching Assistant on the basis of research proposal, academic record and research experience.

Summer Research Fellowship, Villanova University, Villanova, PA, June to July 2008. Financial assistance awarded for research carried over the summer.

HONORS AND AWARDS

Best Student paper. 11th conference, Herpetological Association of Africa. March 2013

Tracy Storer award, Joint meeting of Ichthyologists and Herpetologists, Providence, RI, July 2010. The Storer Awards of the American Society of Ichthyologists and Herpetologists recognize the best student poster presentation in herpetology and ichthyology.

Nesmith Dickinson Research Award, University of Richmond, Richmond, VA 2004. Awarded to a student majoring in biology at the University of Richmond to aid research projects during the recipient's senior year.

SELECTED PRESENTATIONS

Doors unlocked and open: Digitization, dissemination and democratization of Natural History collections from the open Vertebrate thematic collections network. Plenary lecture. ToScA. Glasgow, Scotland, August 2023

Scaled up defenses: Patterns and Drivers of dermal Armor in lizards. Invited symposium lecture. International Congress of Vertebrate Morphology. Cairnes, Australia. July 2023

Scaled up defenses: Patterns and Drivers of dermal Armor in lizards. Society for Experimental Biology Meetings. Invited symposium lecture. Montpellier, France. July 2022

How snakes lost their legs but won the race. National Association of Biology Teachers Annual meetings. Invited lecture. Atlanta, Georgia. November 2021

3D imaging and the future of Natural History collections. Invited Seminar. Everglades National Park seminar series. Virtual event. July 2020.

CT data and the digital revolution of Natural History Museum collections. Invited Departmental Seminar. February 2020. Auburn University, Auburn, Alabama.

The Inside Story: How Computed Tomography is revolutionizing Natural History Museums in the 21st Century. April 2017. Seminar, Universidad de los Andes, Bogota, Colombia.

Getting Under the Skin: How CT Technology is Unlocking the Full Potential of Natural History Museum Collections. Invited talk. November 2016. GE Science workshop, Pune, India.

Maximising the scientific and educational utility of natural history collections through computed tomography. Oral Presentation September 2016. ToScA (Tomography for Scientific Advancement). Bath, UK.

Building a 3D/4D interactive museum of life. Session co-chair. July 2016. Science Foo. Googleplex, Mountain View, California.

Phylogenetic and ecological diversity within the widespread melanistic species *Hemicordylus capensis*. Oral presentation. July 2016. Joint Meetings of Ichthyology and Herpetology. New Orleans, Louisiana.

Contrast-enhanced CT provides insight into Amphibian lingual Morphology. Oral presentation July 2016, International Congress of Vertebrate Morphology Meetings, Washington DC.

Arms and armor: The morphological radiation of girdled lizards. Invited seminar. October 2015. Ohio University Biology departmental seminar, Athens, Ohio.

Can we predict the effect of species discovery on macroevolutionary inferences? Oral presentation. August 2015. SSAR meetings, Lawrence, Kansas.

Phylogenetics and biogeography of the northern *Cordylus*. Oral presentation. November 2014. Herpetological Association of Africa. Gobabeb, Namibia.

Systematics and morphological diversification of the Cordylidae (Squamata). Departmental seminar 2014. California Academy of Sciences, San Francisco, USA.

Arms and armour: Osteodermal variation in African Girdled lizards*. Oral presentation. February 2013. 11th conference of the Herpetological Association of Africa, Pretoria, South Africa.

Evolutionary patterns of ecology and biogeography in the Cordylidae. August 2012. Invited symposium talk: Advances in the Biogeography of African Amphibians and Reptiles. World Congress of Herpetology. Vancouver, Canada.

SELECT PUBLIC ENGAGEMENT AND OUTREACH:

Bizarre Beasts: Spiny Mice. Youtube video series on strange adaptations in the animal kingdom.
<https://www.youtube.com/watch?v=xKI9yIqyFWs>

“Vertebrates anytime, anywhere”. Interview for the Reports of the National Center for Science Education. Volume 42 No. 3 June 22, 2022
<https://ncse.ngo/vertebrates-anytime-anywhere>

Science up close: Fantastic Fossils! Exhibit at the Florida Museum of Natural History, 2021–2022
<https://www.floridamuseum.ufl.edu/exhibits/fantastic-fossils/>

Under the skin: the Art of anatomy exhibit at the Bruce Museum, Greenwich CT. 2020–2021
<https://www.undertheskinexhibition.com/>

Rare, Beautiful & Fascinating: 100 Years @FloridaMuseum, Gainesville FL. 2017–2018
<https://www.floridamuseum.ufl.edu/100years/tuatara/>

Science today, featured video California Academy of Sciences 2014
<http://www.calacademy.org/explore-science/armored-lizards>

Howard Hughes Medical Institute: Image of the week 2014
<https://www.hhmi.org/biointeractive/your-armored-reptile>

“Skulls” temporary exhibit, California Academy of Sciences 2014
<http://www.calacademy.org/skulls-exhibit/>

The California Academy of Sciences’ Night Life program: Herpetology bench: 2013 – 2014
<http://www.calacademy.org/events/nightlife/>

“Picturing Science” temporary exhibit, American Museum of Natural History 2011 – present
<http://www.amnh.org/exhibitions/current-exhibitions/picturing-science>

“The critter people” New York Times article, 2011
http://www.nytimes.com/2011/07/24/education/edlife/edl-24naturalhistory-t.html?pagewanted=all&_r=0

FIELDWORK:

June 2017, Serra Martin Garcia, Dominican Republic.

September–October 2015, Cangandala National Park, Malanje province, Angola

May 2015, Desert National Wildlife Refuge, Nevada USA

August 2014, Desert National Wildlife Refuge, Nevada USA

November–December 2013, Iona National Park, Namibe province, Angola.

January–March 2011, Western Cape, South Africa. Lesotho.

October–November 2008, Swaziland. Limpopo, Mpumalanga, Gautang, South Africa.

July 2008 Western Cape, South Africa.

July 2004 Atlantic Rainforest, Brazil.

PROFESSIONAL SERVICE:

2013–2023: Associate Editor: African Journal of Herpetology.

2018–Present: Board Member, ToScA North America.

March 6th – 8th 2019: Local Host for ToScA conference 2019