



Smithsonian

# NHRE NEWS

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Volume 9

The Newsletter of the NSF REU Site: Natural History Research Experiences  
from the Summer Internship Program

Welcome to the NSF REU-Site Natural History  
Research Experiences' annual newsletter.

## Directors' Corner

Greetings NHRE Family,

The NHRE program has seen some major changes happening in the last year or so. As you may already know, Liz and Gene have “retired” as program directors after the summer of 2021, and have gone on to bigger and better (?) things. They are both heading their respective departments, Liz as Chair of Mineral Sciences, and Gene as Chair of Paleobiology.

So, after more than a decade, we have new program directors! That would be us, Ioan (pronounced yo-AHN) Lascu and Vanessa González. Ioan (he/him) is a Research Geologist and Curator of Minerals in the Department of Mineral Sciences. Vanessa (she/they) is a Computational Genomics Scientist and the Genomics Lead for the Informatics and Data Science Center. We are fortunate to have Virginia valiantly continuing as Intern Coordinator and Claire managing our travel and finances for the time being.

This past summer we held our first in-person program since 2019! We had 15 intern participants, working on various topics spanning the earth, biological, and anthropologic sciences. They studied shrews, assassin flies, butchered pigs, magnetofossils, feathers, mollusks, forams, and many other fascinating topics. Two of the interns were international students traveling from Colombia and The Philippines! Interns worked on posters, honed their outreach skills, participated in workshops, got tired of pizza every other week, went fossil hunting, explored DC, and generally had a fun time. The NHRE symposium was a success, and the participants are now experts in talking to museum visitors. Congratulations, 2022 cohort!

We look forward to being a part of NHRE for years to come and we thank all who are contributing to this newsletter. Keep the updates and good news coming.



**Top left to right:** Gianna Greger, Olivia Gadson, Muna Ali, India Thomas, Sundre Winslow, Johanna Sullivan, Meliah Dubus, Jaden Smith, Ashley Ray, Kenna Stone. **Front: left to right:** Mary Grace Catapang, Maya Elliott, Mariana Quintero, Rosseirya De La Rosa, Daniel Galvet.

## NHRE Class of 2010

Submitted by Gregory Stull

I am currently a Research Associate in the Botany department at NMNH, working with Jun Wen on several projects, as well as with Scott Wing on a project in Paleobiology. My current postdoc (with the Kunming Institute of Botany, in China) has been mostly remote, and so I physically have been working at NMNH a good bit. This NSF grant I submitted would support my salary to work in Botany at NMNH as a Research Botanist for the next four years. We'll see what happens with that, but either way likely will be working with Jun Wen in Botany in the coming years as a postdoc or Research Botanist.

## Alumni update 2010

*In April 2022 [Matthew Nielsen](#) published a new article in [NEWSSCIENTIST](#) *Butterfly survival reduced by warmer and longer autumns.**

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## NHRE Class of 2012

Submitted by Tyler Imfeld

Lordy, I can barely believe that my time in the NHRE program was a decade ago. How is that possible?!? I hope that you've been keeping well and that things at the Smithsonian are good. I can't remember the last time I sent you updates for the NHRE newsletter, but it has been quite a whirlwind of a year for me.

I'm starting my third year as an Assistant Professor in the Biology Department at Regis University in Denver. I'm totally in love with my work here, where I'm teaching courses ranging from introductory biology to advanced ecological modeling and everything in between. I'm also collaborating with two biology majors on a museum-based research project that has us working in the ornithology collection at the Denver Museum of Nature and Science every week. We're investigating whether sex-biased specimen sampling can have downstream effects on the answers to primary research questions in ecology and evolution. It has been a richly rewarding and fun experience for all three of us so far! In addition to that work, I just had a manuscript published in the *Journal of Evolutionary Biology* that also relied on museum collections for a sizeable chunk of the study. Here's a link to the early view: <https://doi.org/10.1111/jeb.14084>. I presented another forthcoming manuscript this summer at the American Ornithological Society and BirdsCaribbean meeting in San Juan, Puerto Rico, which was my first in-person conference since 2019.

Outside of work, I've been keeping plenty busy too! My partner and I traveled to Australia in July after postponing our trip for two years due to COVID and border closures. It was worth the wait though; it felt like we were living in a nature documentary for the two weeks we spent between Sydney and Cairns! We spotted 200 bird species, kangaroos and pademelons, crocodiles, platypus, and more diversity on the Great Barrier Reef than we could mentally process.

More exciting than our trip to Australia is the forthcoming arrival of our firstborn kiddo, who's due mid-November. We're nearly done "nesting" around the house in preparation, and we're now just excitedly waiting until we get to meet this little one right before the winter holidays.



Submitted by Akela Kuwahara

This past year was full of new adventures for me. I was awarded a Fulbright Scholar Award to teach as a visiting professor at Ilia State University, in the country of Georgia.

I taught a genomics class to Master's and PhD students in the Biology Department. It was my first time designing and teaching a semester-long curriculum and my first time living in a foreign country. I loved it! It was so rewarding to mentor the students, and I made great connections. There is a huge biodiversity barcoding project at the university to identify and catalogue the flora and fauna in the Caucasus mountains of Georgia, and it brought up so many memories of my summer project with NHRE studying the biodiversity of coral reefs.



Georgia is an incredibly beautiful, safe, and welcoming country, I feel so lucky to have experienced life there! The attached photo is of a backpacking trip in the Caucasus mountains. I am now returning to my home base in San Francisco and am deciding what to do next!



## Alumni update 2012

**Sarah Gaffney**

**#PhDone!** Minus some paperwork I am now Dr. Gaffney! I'm so grateful to all of my friends and family who helped me survive these last 6 years and supported me.

**Gillian Maris Jones**

### Archipelagos of Aftermaths: Survivance, Imperialism and Climate Change in New Orleans, Puerto Rico, and Hawai'i

A doctoral candidacy presentation by **Gillian Maris Jones**



NOVEMBER 2021

Funded by the Social Science Research Council International Dissertation Research Fellowship

PROPOSAL DEFENSE

## Alumni update 2013

In May 2021 **Jana Burke** gave birth to a beautiful baby girl named Phoebe



**Katie Keil** published two papers:

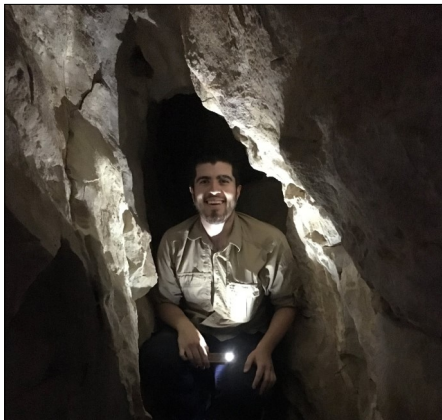
Keil, K. E., Klinger, T., Keister, J. E., & McLaskey, A. K. 2021. *Comparative sensitivities of zooplankton to ocean acidification conditions in experimental and natural settings*. *Frontiers in Marine Science*, 8, 613778.

Keil, K. E., Feifel, K. M., & Russell, N. B. 2021. *Understanding and Advancing Natural Resource Management in the Context of Changing Ocean Conditions*. *Coastal Management*, 49(5), 458-486.

I am still working as an environmental scientist for an environmental consulting group in Seattle and joining research cruises for the Washington Ocean Acidification Center (WOAC) when I can. In personal news, I am getting married to my fiancé in May 2023.

## NHRE Class of 2014

Submitted by Allan Cabrero



I am still currently working on my PhD at UC Berkeley, however I plan to finish by the end of this year! In other news, I was awarded the prestigious NSF PRFB (Postdoctoral fellowship) to work with Torsten!

I will be returning to the Smithsonian early next year around March/April to start my postdoc and continue my research on African bee flies!

I am really excited to return to the Smithsonian, I've missed it dearly! Talk about coming full circle!

## Alumni update 2015

That's a wrap! It's been a long 6 years, but I am officially **Lindsey Schwartz PhD!** Endless thanks to the friends and family who have supported me on this journey .



**Sierra Kaufman** is studying for a PhD in Earth, Environmental, and Planetary Sciences at Brown University. She was selected in 2017 as part of the fourth cohort of students in the [Lighting the pathway to Faculty Careers for Natives in STEM](#).

**Wilson Guillory** and **Isabella Muratore** from the 2015 cohort became engaged as of a few weeks ago!

Isabella finished her PhD at Boston University last year and is now doing a postdoc on army ants at NJIT. Wilson is still plugging away at his PhD.

## Alumni update 2017

On a recent visit to NMNH **Caroline Abbott** commented on how the NHRE program was a pivotal moment in her science career. The program led to her undergrad honors thesis and to meeting her current PhD advisor.

**2017 NHRE intern Myria Perez** accepted a SI job, and is now working as a FossilLab Preparator/Educator at the National Museum of Natural History.

## NHRE Class of 2018

Submitted by Becca Goughnour



I moved to Olympia, WA to work with the Washington Geological Survey as a geologic mapper. It's technically a temporary position, but we'll see if I can talk them in to letting me stay a little longer.

Here are a few pics of my first 2 weeks in WA: (1) on top of Mt St Helens, (2) cool cobble channel fill on top of a silty fossil rich Miocene deposit (3) a lahar topped with fluvial sediments rich with 3,500 year old Mt St Helens pumice!





## NHRE Class of 2019

In collaboration with UC Davis Population Biology Student Diversity Committee **Regina Fairbanks** worked on putting the third **Evolution and Ecology Preview Program** together. It was held in August 2022 and the focus was on going over the nuts and bolts of applying to and thriving in graduate school in evolution, ecology, and adjacent field. One of their main goals was to improve access and transparency of graduate school programs with the purpose of increasing diversity within these fields.

It was a virtual three-week program starting at the beginning of August. The participants had access to weekly information and Q&A sessions which were led by current graduate students. In addition, there was community building and networking opportunities offered with other participants and UC Davis faculty as well as mentors that provided a more personalized experience with follow ups after the program ended.

“More information is provided on their [website](#).”

### **Footnote from Regina:**



Here is a picture of the display drawer that Marissa Sandoval and I put together for the Bohart Museum here at UC Davis.

I was lucky to room with Marissa at GW during the 2019 summer of NHRE.

Submitted by Paul Machabee

I am excited to announce that the research I was involved with during the NHRE program was just [published earlier this year in the journal Geosciences](#) which was super exciting for me!

I've spent most of the past year out in New Hampshire, where I was serving with the Lakes Region Conservation Corps. While maintaining hiking trails, scuba diving for invasive milfoil and avoiding haircuts wasn't quite the exposure to a career in professional geology I was looking for, I picked up a lot of useful skills and experience and met some amazing people out there.



Looking forward to a month from now when I'll be setting out on an extended hiking adventure with some of those same folks! Living and working with such a fun and passionate group of rising conservation professionals reminded me a lot of the wonderful experience I had as part of the NHRE class of 2019.

## Alumni update 2019

Claire Boschert published a paper with Torsten Dikow on their summer research project. You can download the article from <https://africaninvertebrates.pensoft.net/article/76309/>

## NHRE Class of 2022 Field Trip to Warrior's Rest in Calvert County,, Maryland to hunt Fossils.



## 2022 Museum Outreach Day



Upper left:: India Thomas. Upper right: Daniel Galvet. Lower Left: Johanna Sullivan. Lower right: Mariana Quintero.



## NHRE Publications

- Anzaldo, S. S., J. Dombroskie; and J. W. Brown. 2014. Morphological Variation, Taxonomic Distribution, and Phylogenetic Significance of Cornuti in Tortricinae (Lepidoptera: Tortricidae). *Proceedings of the Entomological Society of Washington* 116(1):1-31.
- Blaimer, B. B; M. W. Lloyd; W. X. Guillory; and S. G. Brady. 2016. Sequence Capture and Phylogenetic Utility of Genomic Ultraconserved Elements Obtained from Pinned Insect Specimens. *Plos One* 11(8).
- Boschert, C; and Dikow; T. 2022. Taxonomic revision of the mydas-fly genera *Eremohaplomydas* Bequaert, 1959, *Haplomydas* Bezzi, 1924, and *Lachnocorynus* Hesse, 1969 (Insecta: Diptera: Mydidae). *African Invertebrates* 63(1): 19–75. doi:10.3897/AfrInvertebr.63.76309.
- Castillo, S; and Dikow; T. 2017. Taxonomic revision of *Plyomydas* Wilcox & Papavero, 1971 with the description of two new species and its transfer to Mydinae (Insecta: Diptera: Mydidae). *Revista Brasileira de Entomologia* i61(2): 192-202.
- Davis, F. A; Cottrell E; Birner; S.K. Warren; J.M. and O. G. Lopez. 2017. Revisiting the electron microprobe method of spinel-olivine-orthopyroxene oxybarometry applied to spinel peridotites. *American Mineralogist* 102(1-2):421-435.
- DeRycke, E; 2020. A new cryptic species of fringed-toed lizards from southwestern Arizona with a revised taxonomy of the *Uma notata* species complex (Squamata: Phrynosomatidae). *Zootaxa*.
- Eubanks, D; 2020. ND2 as an additional generic marker to improve identification of diving ducks involved in bird strikes. *Human-Wildlife Interactions*.
- Guillory, W; 2016. Sequence capture and phylogenetics utility of genomic ultraconserved elements obtained from pinned insect specimens. *PLOS One* e0161531. 11(8).
- Gutierrez, E. E; Maldonado J.E; Radosavljevic A; Molinari J; Patterson B.D; Martinez, J.M; Rutter A.R; M. T. R. Hawkins, Garcia F.J; and Helgen K.M. 2015. The Taxonomic Status of *Mazama bricenii* and the Significance of the Tachira Depression for Mammalian Endemism in the Cordillera de Merida, Venezuela. *PLoS ONE* 10(6).
- He, K., N. Woodman, S. Boaglio, M. Roberts, S. Supekar, and J. E. Maldonado. 2015. Molecular Phylogeny Supports Repeated Adaptation to Burrowing within Small-Eared Shrews Genus of *Cryptotis* (Eulipotyphla, Soricidae). *Plos One* 10(10).
- Herron, S. 2020. Nuclear and Chloroplast Sequence Resolve the Enigmatic Origins of the Concord Grape. *Frontiers in Plant Science*. 11:263
- Keil, D. 2013. Redescription of *Alatina alata* (Reynaud, 1830) (Cnidaria: Cubozoa) from Bonaire, Dutch Caribbean. **Zootaxa**.
- Lewis, C., B. Bentlage, A. Yanagihara, W. Gillan, J. Van Blerk, D. P. Keil, A. E. Bely, and A. G. Collins. 2013. Redescription of *Alatina alata* (Reynaud, 1830) (Cnidaria: Cubozoa) from Bonaire, Dutch Caribbean. *Zootaxa* 3737(4):473-487.

- Lopez, O. 2017. Revisiting the electron microscope method of spinel-olivine-orthopyroxene oxbarometry applied to spinel peridotites. *American Mineralogist*.
- Machabee, P. 2022. Suosaari EP, Oehlert AM, Lascu I, DechoAW, Piggot AM, Palma A, Machabee P, Reid RP, 2022, Environmental and Biological Controls on Sedimentary Bottom Types in the Puquios of the Salar de Llamara, Northern Chile, *Geosciences* 12(6), 247.
- Markee, A., and T. Dikow. 2018. Taxonomic revision of the assassin-fly genus *Microphontes* Londt, 1994 (Insecta, Diptera, Asilidae). *African Invertebrates* 59(2):195-237.
- Miller, J. H., A. K. Behrensmeyer, A. Du, S. K. Lyons, D. Patterson, A. Toth, A. Villasenor, E. Kanga, and D. Reed. 2014. Ecological fidelity of functional traits based on species presence-absence in a modern mammalian bone assemblage (Amboseli, Kenya). *Paleobiology* 40(4):560-583.
- Monsalve, S., J. J. Dombroskie, W. H. Y. Lam, J. Rota, and J. W. Brown. 2011. Variation in the Female Frenulum in Tortricidae (Lepidoptera). Part 3. Tortricinae. *Proceedings of the Entomological Society of Washington* 113(3):335-370.
- Nielsen, M., and M. Buffington. 2011. Redescription of *Stentorceps* Quinlan, 1984 (Hymenoptera: Figitidae), with a description of five new species. *African Entomology* 19(3):597-613.
- Pott, L. 2020. Population-level assessment of atlas occipitalization in artificially modified crania from pre-Hispanic Peru. *PLOS One*. 15(9).
- Pratt, A. 2019. Octopods of deep reefs off Curacao, southern Caribbean including description of one newly discovered species. *Bulletin of Marine Science*.
- Ravin, I. S., and S. W. Lingafelter. 2015. Review of the genus *Urgleptes* Dillon (1956) of Hispaniola (Coleoptera, Cerambycidae, Acanthocinini): descriptions of five new species and one new synonymy. *ZooKeys* (532):55-85.
- Romero, A. N., M. Herlin, M. Finnilä, M. Korkalainen, H. Håkansson, M. Viluksela, and S. B. Sholts. 2017. Skeletal and dental effects on rats following in utero/lactational exposure to the non-dioxin-like polychlorinated biphenyl PCB 180. *PLOS ONE* 12(9):e0185241.
- Rutter, A. 2015. The Taxonomic Status of *Mazama bricenii* and the Significance of the Táchira Depression for Mammalian Endemism in the Cordillera de Mérida, Venezuela. *PLOS One*.10(6).
- Scher, Mason A., Barclay, Richard S., Baczynski, Allison A., Smith, Bryton A., Sappington, James, Bennett, Lily A., Chakraborty, Suvankar, Wilson, Jonathan P., Megonigal, J. P., and Wing, Scott L. 2022. "The effect of CO2 concentration on carbon isotope discrimination during photosynthesis in *Ginkgo biloba*: implications for reconstructing atmospheric CO2 levels in the geologic past." *Geochimica et Cosmochimica Acta*, 337 82–94. <https://doi.org/10.1016/j.gca.2022.09.033>.
- Supekar, S. 2015. Molecular Phylogeny Supports Repeated Adaptation to Burrowing within Small-Eared Shrews Genus of *Cryptotis* (Eulipotyphla, Soricidae) *PLOS One*. 10(10)
- Stull, G. W., W. A. DiMichele, H. J. Falcon-Lang, W. J. Nelson, and S. Elrick. 2012. Palaeoecology of *Macroneuropteris scheuchzeri*, and its implications for resolving the paradox of 'xeromorphic' plants in Pennsylvanian wetlands. *Palaeogeography Palaeoclimatology Palaeoecology* 331:162-176.
- Stull, G. W., C. C. Labandeira, W. A. Dimichele, and D. S. Chaney. 2013. The "Seeds" on *Padgettia readi* Are Insect Galls: Reassignment of the Plant to *Odontopteris*, the Gall to *Ovofoligallites* N. Gen., and the Evolutionary Implications Thereof. *Journal of Paleontology* 87(2):217-231.



- Tóth, A., S. K. Lyons, and A. K. Behrensmeyer. 2014. A Century of Change in Kenya's Mammal Communities: Increased Richness and Decreased Uniqueness in Six Protected Areas. *PLoS ONE* 9(4).
- Tóth, A., S. K. Lyons, and A. K. Behrensmeyer. 2014. Mammals of Kenya's protected areas from 1888 to 2013. *Ecological Archives*:E095-E150.
- Tóth, A., S. K. Lyons, and A. K. Behrensmeyer. 2014. Ecological fidelity of functional traits based on species presence-absence in a modern mammalian bone assemblage (Amboseli, Kenya)
- Chesser, T. Vaseghi, V. 2018. Molecular systematics of swifts of the genus *Chaetura* (Aves: Apodiformes: Apodidae) Pgs: 162-171.
- Wilken, A. 2019. See how they ran: morphological and functional aspects of skeletons from ancient Egyptian shrew mummies (Eulipotyphla: Soricidae: Crocidurinae) *Journal of Mammology*. Vol.100, Issue 4, (Sep 2019), pgs 1199-1210.
- Wilken, A. 2019. Comparative functional skeletal morphology among three genera of shrews: implications for the evolution of locomotor behavior in the Soricinae (Eulipotyphla: Soricidae) *Journal of Mammology* Vol.100, Issue 6, (Jun 2020), pgs 1750-1764.
- Woodman, N., and S. A. Gaffney. 2014. Can They Dig It? Functional Morphology and Semifossoriality Among Small-Eared Shrews, Genus *Cryptotis* (Mammalia, Soricidae). *Journal of Morphology* 275(7):745-759.
- Woodman, N. and F. A. Stabile. 2015. Functional Skeletal Morphology and Its Implications for Locomotory Behavior Among Three Genera of Myosoricine Shrews (Mammalia: Eulipotyphla: Soricidae). *Journal of Morphology* 276(5):550-563.
- Woodman, N., and F. A. Stabile. 2015. Variation in the myosoricine hand skeleton and its implications for locomotory behavior (Eulipotyphla: Soricidae). *Journal of Mammalogy* 96(1):159-171.

#### **NHRE Presentations: 2010-2016.**

- Richards, R; Bell, J. 2010. Observations on “Dolobbo bim” (Bark Paintings) in Arnhem Land 1948 Annual Meeting of the Society for American Archaeology. (Poster presentation).
- Brendel, C; Perez Baez, G. 2014. The influence of Spanish loanwords on Juchitan Zapotec. National Conference on Undergraduate Research. (Poster presentation).
- Brendel, C; Perez Baez, G. 2014. The influence of Spanish loanwords on Juchitan Zapotec. 2014 Annual Meeting for the Society for Applied Anthropology. (Poster Presentation).
- Brendel, C; Perez Baez, G. 2015. The influence of Spanish loanwords on Juchitan Zapotec. Annual Meeting of the American Association of Geographers. (Oral presentation).
- Jagani, S; Rick, T. Anthropogenic change in the Chesapeake Bay: Archaeology and Historical Ecology of the Eastern Oyster (*Crassostrea virginica*) Annual Meeting of the Society for American Archaeology (Poster presentation).
- Jagani, Sheel; Rick, T; Hofman, C. 2011. Ancient Oyster Fisheries of the Chesapeake Bay: Methods and Implications. Annual Meeting of the Society for American Archaeology (Poster presentation).
- Moshkvin, I; Kaeppler, A. Methods for fiber identification of Hawaiian barkcloth. 16th Annual Meeting of the Society for American Archaeology (Poster presentation).

- Moshkvin, I; Kaeppler, A. Methods for fiber identification of Hawaiian barkcloth. American Anthropological Association Annual Meeting. (Poster presentation).
- Rowsey, D; Helgen, K. 2012. Species boundaries of brushtail possums. Annual Meeting of the Gilbert Ichthyological Society (Oral presentation).
- Toth, A.B; Behrensmeyer, A.K; Lyons, S.K. 2012. Increased diversity and decreased uniqueness in Kenyan mammal communities over the past century. Ecological Society of America Annual Meeting (Oral presentation).
- Toth, A.B; Behrensmeyer, A.K; Lyons, S.K. 2012. Increased diversity and decreased uniqueness in Kenyan mammal communities over the past century. Annual Meeting of the American Society of Mammalogists
- Toth, A.B; Behrensmeyer, A.K; Lyons, S.K. 2012. Increased diversity and decreased uniqueness in Kenyan mammal communities over the past century. 10th North American Paleontologist Convention. (Poster presentation).
- Deczynski, A; Chamorro, M. L; Konstantinov, A. S. 2011. Morphology of the head and associated structures in New World Cryptocephalini (Coleoptera: Chrysomelidae: Cryptocephalinae). Entomological Society of America Annual Meeting (Poster presentation).
- Corrigan, C. M; Cohen, B. A; Hodges, K; Lunning, N. G; Bullock, E. S. 2012. 3.9 Billion Years Ago and the Asteroid Belt: Impact Melts in Ordinary Chondrites. 43rd Lunar and Planetary Science Conference (Poster presentation).
- Lavine, R. J; Wagner, P. J; Erwin, D. H. 2011. A phylogenetic dissection of the gastropod subfamily Knightitinae across the Permian-Triassic boundary. Geological Society of America Annual Meeting (Oral presentation).
- Lavine, R. J; Wagner, P. J; Erwin, D. H. 2011. A phylogenetic dissection of the gastropod subfamily Knightitinae across the Permian-Triassic boundary. Council on undergraduate Research Conference (Oral presentation).
- Kuwahara, A; Meyer, C; Collins, A. 2013. Assessing Autonomous Reef Monitoring Structures (ARMS) as Biodiversity Monitors. Society for Integrative and Comparative Biology Annual Meeting (Oral presentation).
- Lopez, O; Cottrell, E; Warren, J. 2012. Upper mantle oxygen fugacity in ridge and subduction zone settings recorded by spinel peridotite. Fall Meeting of the American Geophysical Union (Poster presentation).
- Lopez, O; Cottrell, E; Warren, J. 2013. Upper mantle oxygen fugacity in ridge and subduction zone settings recorded by spinel peridotite. Fall Meeting of the American Geophysical Union (Poster presentation).
- Lopez, O; Cottrell, E. Warren, J. 2013. Upper mantle oxygen fugacity in ridge and subduction zone settings recorded by spinel peridotite. Goldschmidt Geochemical Conference (Oral presentation)
- Goots, A; Bruwelheide, K; Owsley, D. 2013. Post-traumatic bone loss in Civil War soldiers. Meeting of the American Association of Physical Anthropologist (Poster presentation).
- Goots, A; Bruwelheide, K; Owsley, D. 2016. Post-traumatic bone loss in Civil War soldiers. Meeting of the American Association of Physical Anthropologist (Poster presentation).



- Rowsey, D M; Helgen, K. M. 2013. Species boundaries of brushtail possums in the Queensland wet tropics. Annual Meeting of the American Society of Mammologists (Poster presentation).
- Imfeld, T. S; Chaput, D; Santelli, C. M. 2013. The effect of nutrients on the growth and manganese oxidation of fungi and bacteria. Ecological Society of America Annual Meeting (Poster presentation).
- Atta, C J; LaFlamme, M; Sessa, J. A; Tweedt; S. Erwin, D. H. 2012. Taphonomic biases influencing exceptionally preserved *Naraoia* from the Burgess Shale. Geological Society of America Annual Meeting (Poster presentation).
- Burke, J; Behrensmeyer, A. K; Badgley, C; Barry, J; Lyons, S K. 2014. Assessing the impact of time-averaging on a Miocene vertebrate fauna from northern Pakistan. North American Paleontological Convention (Poster presentation).
- Ramirez, G; Andrews, B; Dennen, R. 2013. Transport and sedimentation in unconfined experimental dilute pyroclastic density currents. Fall Meeting of the American Geophysical Union (Poster presentation).
- Ramirez, G; 2013. Transport and sedimentation in unconfined experimental dilute pyroclastic density currents. Council on Undergraduate Research Conference of Research Experiences for undergraduate students Scholarship. (Poster presentation)
- Mittal, T; Macpherson, G. 2013. Dust enrichment of molecular clouds through young stellar jets. Ecological Society of America Annual Meeting. (Poster presentation)
- Mittal, T; Macpherson, G. 2013. Dust enrichment of molecular clouds through young stellar jets. 98th Meeting of Ecological Society of America (Poster presentation).
- Jones, L; Hunt D, 2014 Dental modifications in North American Woodlands Period populations. Botany 2014 (Poster presentation).
- Bricker, C; Owsley, D; Bruwelheide, K. 2014. Identification and taphonomic analysis of iron coffin burials from southeast Virginia. PASSHE Undergrad Research Conference in Science, Technology, Engineering, and Mathematics. (Poster presentation).
- Galezo, A; Collins, A. 2016 Morphometrics of the dolphin genus *Lagenorhynchus*: deciphering a contested phylogeny. Southeast & Mid-Atlantic Marine Mammal Symposium (Poster presentation).
- Stabile, F; Woodman, N. 2014. Functional limb morphology of African myosoricine shrews (Mammalia, Soricidae). Society for Integrative and Comparative Biology Annual Meeting (Poster presentation).
- Stabile, F; Woodman, N. 2015. Functional limb morphology of African myosoricine shrews (Mammalia Soricidae). USGS Patuxent Wildlife Research Station Science Strategy Planning Meeting.
- Stabile, F; Woodman, N. 2016. Functional limb morphology of African myosoricine shrews (Mammalia Soricidae). Annual Meeting of the American Society of Mammalogists. (Oral presentation).
- Keil, K; Osborn, K. 2014. Associations between hyperiid amphipods and gelatinous zooplankton. Society for Integrative and Comparative Biology Annual Meeting (Poster presentation).
- Lavin, Luke; Bell, Joshua. 2012. Exploring the Collections and Relations of A.C. Haddon At the Smithsonian. American Anthropological Association Annual Meeting (Oral presentation).
- Gil, J; Watson, W. 2013. Improving the learning experience of museum visitors: Examining different types of experience in the Genome: Unlocking Life's Code exhibit. Ocean Sciences Meeting (Poster presentation).

- Gil, J; Watson, W. 2014. Improving the learning experience of museum visitors: Examining different types of experience in the Genome: Unlocking Life's Code exhibit. 37th Senior Technical Meeting. University of Puerto Rico, Rio Piedras (Poster presentation).
- Kandlikar, G; Freund, F; Johnson, G; Taylor, W; Zimmer, E. 2014. Chloroplast DNA reveals uniparental plastid inheritance from *Isoetes engelmannii* in two allotetraploid speciation events. Botany 2014 (Poster presentation).
- Zimmer, E; Johnson, G. Nagi, S. Wollaeger, H; Figlar, R. 2014. Genetic variability in *Magnolia acuminata* (L.) populations in the United States. Botany 2014 (Poster presentation).
- LaVine, R J; 2014. Ecological gradient structure in the Mississippian Lodgepole Formation, southwest Montana. Geological Society of America (Poster presentation).
- Post, A; 2014. Experimental Evolution of Divergence with Gene Flow: Testing for Local Adaptation in Yeast. Society for the Study of Evolution (Poster presentation).
- Imfeld, T; Chaput, D; Santelli, C. 2013. The effect of nutrients on the growth and manganese oxidation of fungi and bacteria. 98th Meeting of Ecological Society of America (Poster presentation).
- Rutter, A; Maldonado, J; Helgen, K; Gutiérrez, E. 2014. Neotropical Deer: Morphometrics and Taxonomy of the *Mazama americana* Species Complex (Mammalia: Cervidae). American Society of Mammalogists 94th Annual Meeting (Poster presentation).
- Boas, C; 2014. Phylogenetics within Bellerophon: breaking down a classic wastebasket taxon. GSA Annual Meeting (Poster presentation).
- Mazur, C; Erwin, D. 2014. Ecosystem engineering during the Early Cambrian. Sigma Xi International Research Conference. (Poster presentation).
- Cooper, G; Bell, J. 2014. Fixing Things: The Politics and Techniques of Cell Phone Repair. 2014 Annual Meeting for the Society For Applied Anthropology (Poster presentation).
- Hill, K. N; Bullock E. S; Corrigan, C.M; McCoy, T. J. 2014. Unscrambling the History of Enstatite Chondrites. 45th Lunar & Planetary Science Conference (Poster presentation).
- Keil, K; 2013. Associations between hyperiid amphipods and gelatinous zooplankton. Society of Integrative & Comparative Biology (Poster presentation).
- Keil, K; 2014. Associations between hyperiid amphipods and gelatinous zooplankton. Society of Integrative & Comparative Biology (Poster presentation).
- Jackson, C M; Cottrell, E; Kelley, K A. 2010. Mineral-melt partitioning of V and Sc at arcs: implications for mantle wedge oxygen fugacity. Fall Meeting of the American Geophysical Union (Poster presentation).
- Verghese, S; Corrigan, C. 2016. Geochemical characterization of potential impact melt clasts from lunar meteorite PCA 02007. 47th Lunar and Planetary Science Conference. (Poster presentation)
- Wall, K; Davis, F A; Cottrell, E. 2014. Oxygen fugacity recorded by xenoliths from Pacific oceanic islands. Geological Society of America (Poster presentation).
- Wall, K; Davis, F A; Cottrell, E. 2014. Oxygen fugacity recorded by xenoliths from Pacific oceanic islands. Fall Meeting of the American Geophysical Union (Poster presentation).



- Cohen, C; Dikow, T. 2014. Taxonomic revision of the robber-fly genus *Leptopteromyia* Williston, 1907. Annual Meeting of the Entomological Society of America (Oral presentation).
- Cabrero, Alan; Dikow, T. 2014. Taxonomic revision of the robber-fly genus *Acronyches* (Diptera: Asilidae). Annual Meeting of the Entomological Society of America (Oral presentation).
- Snider, A; Knowlton, N; Al-Rshaidat, M; Leray, M. 2014. Barcoding and metabarcoding the cryptofauna of the northern Red Sea. Western Society of Naturalists (Poster presentation).
- Snider, A; Knowlton, N; Al-Rshaidat, M; Leray, M. 2014. Barcoding and metabarcoding the cryptofauna of the northern Red Sea. Central Michigan University 2nd Annual Honors Exhibition (Oral presentation)
- Snider, A; Knowlton, N; Al-Rshaidat, M; Leray, M. 2012. Barcoding and metabarcoding the cryptofauna of the northern Red Sea. Southern Regional Honors Conference (Poster presentation).
- Lyons, S K; Toth, A; Behrensmeyer, A K. 2012. Changes in mammal community structure in Kenya over the last 100 years. Annual Meeting of the American Society of Mammalogists (Oral presentation).
- Toth, A; Behrensmeyer, A K; Miller, J; Lyons, S K. 2013. Species richness, community dynamics, and time-averaging in recent Kenyan ecosystems. 10th North American Paleontological Convention (Oral presentation).
- Marshall, B; Andrews, B J; Fauria, K. 2015. What's all the talc about? Entrainment in dilute pyroclastic density currents. American Geophysical Union Fall Meeting (Poster presentation).
- Miller, H; Rogers, J D. 2015. Using agent-based modeling to examine the effects of social connectivity on resilience. Annual Meeting of the American Association of Geographers (Poster presentation).
- Ehlinger, S. Q; Wendler, J. E; Wendler, I; Huber, B.T; Macleod, K. 2010. Influence of early diagenesis on foraminiferal shell chemistry and isotope signatures: Results from the Tanzania Drilling Project. Annual Meeting of the Geological Society of America (Poster presentation).
- Rodriguez-Russo, C. A; Huber, B. T; Macleod, K. G. 2010. Subtropical Turonian stable isotope ratios from "glassy" foraminifera : No evidence for greenhouse ice sheets. Annual Meeting of the Geological Society of America (Poster presentation).
- Huber, B. T; Macleod, K. G; Bryant, R. M; and Dickie, M. 2014. Oxygen isotope paleotemperatures across the Cretaceous Super greenhouse at southern high latitudes (Naturaliste and Agulhas Plateau). Annual Meeting of the Geological Society of America (Oral presentation).
- Cottrell, E; Davis, F; Birner S K; Warren, J M; Wall, K. 2014. Oxybarometry of peridotites from various tectonic settings. Annual Meeting of the Geological Society of America (Oral presentation).
- Birner, S.K; Warren, J.M; Cottrell, E; Lopez, O.G; Davis, F.A.; Falloon, T.J. 2014. Oxygen Fugacity Variations Among Tonga Trench Forearc Peridotites. Goldschmidt Geochemical Conference (Oral presentation).
- Birner, S.K; Warren, J.M; Cottrell, E; Lopez, O.G; Davis, F.A; Falloon, T.J. 2013. Variations in Oxygen Fugacity among Forearc Peridotites from the Tonga Trench. Fall Meeting of the American Geophysical Union (Oral presentation).
- Herron, S; Wen, J; Zimmer, E. 2015. Nuclear and Chloroplast Sequences Resolve the Concord Grape Mystery. Botany 2015 (Poster presentation).
- Rosenfeld, C; Kenyon, J; Santelli, C. 2014. Environmental selenium transformations: Distinguishing abiotic

and biotic factors influencing Se redox transformations. Fall Meeting of the American Geophysical Union (Oral presentation).

Kenyon, J; Rosenfeld, C; Santelli, C. 2015. Investigating the effects of Se on fungal growth and biomineral production. Goldschmidt Conference (Poster presentation).

Fernandez, A; Hunt, D. 2015. Sex determination from the human sacrum: A re-assessment. Annual Meeting of the American Association of Physical Anthropologists (Poster presentation).

Lu, S; Chesser, R. T. 2015. Patterns of genetic variation in the Australian Grey Fantail complex: *Rhipidura albiscapa* and *Rhipidura phasiana*. Evolution 2015 (Poster presentation).

Kralick, A E; Tocheri, M. W. 2014. A 3D quantitative comparative analysis of wrist morphology among western and eastern gorillas. Annual Meeting of the American Association of Physical Anthropologists (Poster presentation).

Tiller, J; D; Owsley, D. W; Bruwelheide, K; Rouse, S; Stephen L; Hurlbert, D. E. 2015. Basketmakers revealed: Physical, CT, and 3D analyses of mummified human remains from the southwest. American Association of Physical Anthropologists (Poster presentation).

Tiller, J; 2015. Basketmakers Revealed. American Association of Physical Anthropologist (Poster presentation).

Romero, A; Sholts, S; Hakansson, H; Vilukela, M. 2016. Craniofacial and dental effects shown in rats following in utero/lactational exposure to 2,2',3,4,4',5,5'-heptachlorobiphenyl (PCB-180). Annual Meeting of the American Association of Physical Anthropologists (Poster presentation).

Schwartz, L.C; Gonzalez VL; Goetz F.E; Maslakova S.A; Wirshing H.H; Norenburg, J.L. 2016. Carcinonemertidae: ribbon worms in search of their family history. SICB Annual Meeting 2016 (Poster presentation).

Cunningham, A; Hunt, D R; Coolidge, R H. 2016. Biocultural evidence through taphonomic observations in the Karluk Salmon Cannery Chinese of Kodiak Island, Alaska. Annual Meeting of the American Association of Physical Anthropologists (Poster presentation).

Galezo, A; Volmer, N; Collins, A. 2016. Morphometrics of the dolphin genus *Lagenorhynchus*: deciphering a contested phylogeny. Southeast & Mid-Atlantic Marine Mammal Symposium (Poster presentation).

Kaufman, S.V; Corrigan, C.C; McCoy, T.J; Bullock, E.S. 2016. Mineral Associations in Enstatite Chondrites: Possible Insights into Minerals on Mercury. 47th Lunar and Planetary Science Conference (Poster presentation).

Obenda, J; Pobiner, B; Potts, R. 2016. The effect of context on visitor responses to the question "What does it mean to be human?". Annual Meeting of the American Association of Physical Anthropologists (Poster presentation).

Said, M; Birner, S; Cottrell, E. 2015. Oxygen Fugacity of Abyssal Peridotites Along the Gakkel Ridge. Fall Meeting of the American Geophysical Union (Poster presentation).

Plaza-Torres, S; Wagner, P J; Darroch, S. A. F. 2015. A phylogenetic analysis of the brachiopod genus *Leptaena*. Geological Society of America Annual Meeting (Poster presentation).

Winters, N P; Kula, R. R. 2015. Tall grass, small wasps: Measuring the biodiversity of braconid wasps (Hymenoptera: Ichneumonoidea) in two warm season grasslands.. Entomology 2015 (Oral presentation).

Rondinelli, M; Droege, S; Kula, A. A R; Smith, D; R; Kula, R. R. 2015. Is pan trapping an effective method for estimating hymenopteran diversity in grasslands?. Entomology 2015 (Poster presentation).

Said, M; Birner, S. K; Cottrell, E. 2015. Oxygen fugacity of abyssal peridotites along the Gakkle Ridge. Fall Meeting of the American Geophysical Union (Poster presentation).

Sorman, M; Fraass, A; Huber, B; Acha, B; Wiggins, J. W. 2016. Morphometric and stratophenetic study of the Rotalipora lineage (planktic foraminifera) during the middle and late Cenomanian. Geological Society of America Annual Meeting (Poster presentation).

### **NHRE Presentation: 2016-2020**

Dafoe, A. C; Hunt, D. R. 2017. The Accuracy of Nutrient Foramen Versus Midshaft Measurements of the Tibia for Sex Determination. Annual Meeting of the American Academy of Forensic Sciences (Oral presentation).

Woolard, K; Pobiner, B. 2017. Cautionary tales in the use of captive carnivore tooth mark data. Society for American Archaeology (Oral presentation).

Aoki, N; Mushegian, N; Katija, K; Osborn, K. 2017. Kinematic description of locomotion in tomopterid polychaetes. Meeting of the Association for the Sciences of Limnology and Oceanography (ASLO) (Oral presentation).

Abbott, C. P; Sues, Hans-Dieter; Lockwood, R. 2017. The Dimetrodon dilemma: reassessing posture in sphenacodonts. Geological Society of American Annual Meeting (Poster presentation).

Brook, Z; Barclay, R. S; Wing, S. L. 2017. Cell size in Ginkgo and the paleo-CO2 proxy. Geological Society of America Annual Meeting (Poster presentation).

Wood, H.M; Flynn, B.I. 2018. You Are How You Eat: Chelicerae Orientation and the Diversification of Spiders (Arachnida: Araneae). Society for Integrative and Comparative Biology (Poster presentation).

Benavidez, B. M; Hunt, D. 2018. What teeth can tell you: oral health in two Paleo-Indian populations. American Association of Physical Anthropologists Annual Meeting (Poster presentation).

Carreon, S; Austin, R; Sholts, S. 2018. Dental Caries Analysis of the Channel Islands. Society for American Archaeology (Poster presentation).

O'Brien, E; Edwards, R. D; Radosavljevic, A; Funk, V. 2018. Patterns of plant endemism and diversity in the Guiana Shield. Botany 2018 (Poster presentation).

Scher, M; Barclay, R. S; Wing, S. L. 2018. The effect of CO2 concentration on carbon isotope discrimination in Ginkgo. American Geophysical Union Fall Meeting (Poster presentation).

Richards, JC; Vecchione, M. 2019. The Diversity and Distribution of Cephalopods in the Charlie-Gibbs Fracture Zone. Society for Integrative and Comparative Biology Annual Meeting (Poster presentation).

Florez, D; Andrews, B. J. 2017. Entrainment and runout of Martian pyroclastic density currents. Lunar and Planetary Science Conference (Poster presentation).

Sosa, E. S; Lunning, N. G; McCoy, T. J; Bullock, E. S; Corrigan, C. M; Gardner-Vandy, K. G. 2017. Constraining the petrogenesis of the paired achondrites GRA 06128/9 through partial melting of an oxidized chondrite. Lunar and Planetary Science Conference (Poster presentation).

Sosa, E S; Lunning, N. G; McCoy, T. J; Bullock, E. S; Corrigan, C. M; Gardner-Vandy, K. G. 2017. Constraining the petrogenesis of the paired achondrites GRA 06128/9 through partial melting of an oxidized chondrite. Council on Undergraduate Research REU Symposium (Poster presentation).

Woolard, K; Pobiner, B. 2017. Cautionary tales in the use of captive carnivore tooth mark data. Society for American Archaeology (Oral presentation).

Abbott, C P; Sues, Hans-Dieter; Lockwood, R. 2017. The Dimetrodon dilemma: reassessing posture in



- sphenacodonts. Geological Society of American Annual Meeting (Poster presentation).
- Brook, Z; Barclay, R. S; Wing, S. L. 2017. Cell size in Gingko and the paleo-CO2 proxy. Geological Society of America Annual Meeting (Poster presentation).
- Carreon, S; Austin, R; Sholts, S. 2018. Dental Caries Analysis of the Channel Islands. Society for American Archaeology (Poster presentation).
- O'Brien, E; Edwards, R. D; Radosavljevic, A; Funk, V. 2018. Patterns of plant endemism and diversity in the Guiana Shield. Botany 2018 (Poster presentation).
- Scher, M; Barclay, R. S; Wing, S. L. 2018. The effect of CO2 concentration on carbon isotope discrimination in Ginkgo. American Geophysical Union Fall Meeting (Poster presentation).
- Richards, J.C; Vecchione, M. 2019. The Diversity and Distribution of Cephalopods in the Charlie-Gibbs Fracture Zone. Society for Integrative and Comparative Biology Annual Meeting (Poster presentation).
- McKabe, K; Billeck, B. 2019. To bead or not to bead: compositional variation of white glass beads is the question. Comparative Biology Annual Meeting, Society of American Archaeology. (Poster presentation).
- Errico, G; Hunt, D. 2019. Closing the gap: examining sex differences in oral health. American Association of Physical Anthropologists 88th Annual Meeting. (Poster presentation).
- Espinoza, A; Hunt, D. 2019. Expression of sexual dimorphism among the German, Irish, and Italian ancestry groups in the Huntington Collection. American Academy of Forensic Sciences Annual Meeting.(Poster presentation).
- Ranft, H; Schuettpelz, E. 2019. It takes one to tango: examining the prevalence of asexual reproduction in the fern genus *Pteris*. Botany 2019.(Poster presentation).
- Boschert, C; Dikow, T. 2019. Describing new mydas-fly species from the Namib Desert. (Entomological Society of America Annual Meeting. Poster presentation).
- Markee, A; Dikow, T. 2018. Taxonomic revision of the assassin-fly genus *Microphontes* Londt, 1994. Entomological Society of America Annual Meeting. (Poster presentation).
- Sandoval, M; Santos, B; Brady, S. 2019 A parasitoid puzzle: phylogenetic relationships of Labeninae wasps (Ichneumonidae) .Entomological Society of America Annual Meeting. Poster presentation).
- Sandoval, M; Santos, B; Brady, S. 2019 A parasitoid puzzle: phylogenetic relationships of Labeninae wasps (Ichneumonidae). Conference for Undergraduate Research. (Poster presentation).
- Arlington, A; Osborn, K. 2018. Swimming mechanics of gossamer worms. Western Society of Naturalists Annual Meeting. (Poster presentation).
- Acquadro, J; Macpherson, G; Corrigan, C. 2019. Evidence for impacted-induced shock melting in carbonaceous chondrites. Lunar and Planetary Science Conference. (Poster presentation).
- Goughnour, B; Huber, B. 2018. Foraminiferal paleoecology and paleotemperature estimates for the Cenomanian (100-94 Ma) at high southern latitudes. Geological Society of American Annual Meeting. (Poster presentation).
- McComb, S; Huber, B. 2019 Analysis of Low and High Latitude Planktonic Foraminiferal Distributions Across the Late Maastrichtian Deccan Volcanism Event. Geological Society of America Annual Meeting. (Poster presentation).
- Perez, M. B; Behrensmeyer, A. K. 2018 Taphonomy of England's Blue Lias ichthyosaurs. Society for Vertebrate Paleontology Annual Meeting. (Poster presentation).

- Samuels-Fair, M; Hunt, G. 2019. Sexual selection and sexual dimorphism trends in cytheroid ostracodes from the U.S. Coastal Plain. Geological Society of America Annual Meeting. (Poster presentation).
- Sorman, M; Fraas, A; Huber, H. 2016. Morphometric study of the *Rotalipora* lineage (planktic foraminifera) during the middle and late Cenomanian. Geological Society of America Annual Meeting. (Poster presentation).
- Ocampo, I; Jackson, C; Cottrell, E. 2018 Nitrogen solubility in magma oceans. Meeting of the American Geophysical Union. (Poster Presentation).
- McKeegan, R; Holycross, M; Cottrell, E. 2018. Probing the Earth's deep oxygen cycle with vanadium: the temperature dependence of partitioning.. Geological Society of America Annual Meeting. (Poster presentation).
- Curry, D; C; Lasco, I. 2018. Uncovering the origin of magnetism in early Proterozoic rocks from Lake Superior. American Geophysical Union Fall Meeting. (Poster presentation).
- Boyette, J; Schott, R; Bell, R. 2020. Evolution of Non-visual Opsin Genes Across the Frog Tree of Life. Evolution. (Poster presentation).
- Becker, M; McGowan, M. 2020. Global Phylogeography of Delphinine Dolphins Using Mitogenomics. Ocean Sciences Meeting . (Poster presentation).
- Wilken, A; Woodman, N. 2019. Functional morphology of the forelimb of North American shrews.. Annual Meeting of the American Society of Mammalogists. (Poster presentation).
- Huie, J; Prates, I; De Queiroz K. 2019. Morphological and ecological diversity in mainland *Draconura* clade anoles.. Evolution 2019. (Poster presentation).
- Jaynes, K; Bell, R. 2018. Deciphering evolutionary ancestry in African tree frogs: genus *Leptopelis*. American Society of Ichthyologists and Herpetologists Annual Meeting. (Poster presentation).
- Pott, L; Austin, M; Eller, A; Sholts, S. 2020. Population-level assessment of cranial modification and atlanto-occipital fusion across Peru. American Association of Physical Anthropologists Annual Meeting. (Poster presentation).
- Sadhir, S; Eller, A. 2020.. Skin Pigmentation Variability in Baboons: Implications for Vitamin D Deficiency. American Association of Physical Anthropologists Annual Meeting. Poster presentation).
- Sadhir, S; Eller, A. 2020.. Skin Pigmentation Variability in Baboons: Implications for Vitamin D Deficiency. North-eastern Evolutionary Primatology Meeting. Poster presentation).
- Sadhir, S; Eller, A. 2020.. Skin Pigmentation Variability in Baboons: Implications for Vitamin D Deficiency. Fall Frontiers in Undergraduate Research Exhibition. Poster presentation).
- Robles, K; Lin, Chan; Osborn, K. 2020. Visualizing deep-sea eye adaptations using micro-CT 3D reconstructions. Society for Integrative and Comparative Biology Annual Meeting. (Poster presentation).
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