

ELISE PAIETTA



Duke University, Durham, NC | Email: elise.paietta@duke.edu

EDUCATION

University of Notre Dame

Major: Biological Sciences

GPA: 3.56

Study abroad experience at the University of Western Australia Fall 2018

2016-2020

Duke University

Biology PhD Candidate in the lab of Dr. Anne Yoder

GPA: 4.0

2020-present

RESEARCH EXPERIENCE

Independent Undergraduate Research,

Lab of Lynn K. Hartzler, PhD., Wright State University, Dayton, OH

Paietta, E. N., & Hartzler, L. K. (2017). Impact of a CO₂ Gradient on the Behavior of the Red Crayfish, *Procambarus clarkii*. .

http://corescholar.libraries.wright.edu/bio_student/1

Summer 2017

Instructor-guided Research Project,

University of Notre Dame Department of Biological Sciences

Characterization of the rd407 mutant in *Drosophila melanogaster*

Fall 2017

Independent Undergraduate Research,

Lab of Elizabeth A. Archie, PhD, University of Notre Dame

Effect of Parasite Burden on the Survival of Yellow Baboons (*Papio cynocephalus*)

Fall 2017-Spring 2019

Instructor-guided Research Project,

Lab of Labib Rouhana, PhD, Wright State University, Dayton, OH

Involvement of Sexual Brain Genes in *Schmidtea mediterranea* Reproductive Organ Development

Summer 2018

Independent Undergraduate Research as part of the Research Experience for Undergraduates, National Science Foundation (NSF-REU)

Lab of Elizabeth A. Archie, PhD, University of Notre Dame

The Relationship Between Senescence and Parasitism in Yellow Baboons (*Papio cynocephalus*)

Summer 2019

Independent Undergraduate Research,

Lab of Elizabeth A. Archie, PhD, University of Notre Dame

The Drivers and Consequences of Human Encounters in the Amboseli Baboons

Fall 2019-Fall 2021

Independent Graduate Research,

Lab of Anne D. Yoder, PhD, Duke University

Optimization of zoonotic and zoonotic viral metagenomic approaches in lemurs

Fall 2020-present

PUBLICATIONS

Paietta, E. N., Weibel, C. J., Mututua, R., Warutere, J., Siodi, L., Gesquiere, L. R., Jansen, D. A.,

Obanda, V., Alberts, S. C., & Archie, E. A. (2022). Troubled waters: Water availability drives human-baboon

encounters in a protected, semi-arid landscape. *Biological Conservation*. <https://doi.org/10.1016/j.biocon.2022.109740>

Paietta, E.N., Kraberger, S., Custer, J.M., Vargas, K.L., Van Doorslaer, K., Yoder, A.D., & Varsani, A. (2022). Identification of diverse

papillomaviruses in captive black-and-white ruffed lemurs (*Varecia variegata*). *Archives of Virology*. 168(1):13. doi: 10.1007/s00705-022-05679-1

Paietta E.N., Kraberger S., Custer J.M., Vargas K.L., Espy C., Ehmke E., Yoder A.D., Varsani A. (2023). Characterization of Diverse Anelloviruses,

Cressnaviruses, and Bacteriophages in the Human Oral DNA Virome from North Carolina (USA). *Viruses*. 15(9):1821.

<https://doi.org/10.3390/v15091821>

Paietta E.N., Kraberger S., Regney, M., Custer J.M., Vargas K.L., Espy C., Ehmke E., Yoder A.D., Varsani A. (2023). Interspecies papillomavirus type

infection in closely related lemur species, *Varecia variegata* and *Varecia rubra*. (2023). In-prep for *Viruses* Special Issue: Animal Papillomaviruses.

Vargas, K., Kraberger S., Custer J.M., Culver M., Paietta E.N., & Varsani A. (2023). Identification of novel polyomavirus in wild Sonoran Desert

rodents of the family Heteromyidae. *Archives of Virology*. 168(253):2023. doi: 10.1007/s00705-023-05877-5

Guevara E.E., Grebe N.M. Lawler R.R., Crowley A., Lo S., Paietta E.N., Huebner J.L., Kraus V.B., & Drea C.M. (2023). Comparative physiological

senescence in lemurs. *Submitted to Journal of Comparative Physiology B*.

POSTER PRESENTATIONS

1. Paietta E., Jansen D., & Archie E. *Effect of Parasite Burden on the Survival of Yellow Baboons (Papio cynocephalus)*. College of Science Joint Annual Meeting (COS-JAM),

- University of Notre Dame Spring 2018 & Spring 2019
2. Paietta E., Weibel C., Jansen D., & Archie E. *The Relationship Between Senescence and Parasitism in Yellow Baboons (Papio cynocephalus)*.
NSF-REU Research Symposium, University of Notre Dame
Awarded "Best Poster Presentation" of the symposium Summer 2019
 3. Paietta E., Weibel C., Jansen D., & Archie E. *The Relationship Between Senescence and Parasitism in Yellow Baboons (Papio cynocephalus)*.
Fall Undergraduate Research Fair, University of Notre Dame Fall 2019
 4. Paietta, E. N., Weibel, C. J., Mututua, R., Warutere, J., Siodi, L., Gesquiere, L. R., Jansen, D. A., Obanda, V., Alberts, S. C., & Archie, E. A. *Water availability drives human-baboon encounters: Identifying the patterns, drivers, and parasite-related consequences of human encounters for savannah baboons*. Research Frontiers in Animal Behavior and Parasitism Conference (May 20-21, 2021).
[Water availability drives human-baboon encounters - YouTube](#) Spring 2021
 5. Paietta, E. N., Weibel, C. J., Mututua, R., Warutere, J., Siodi, L., Gesquiere, L. R., Jansen, D. A., Obanda, V., Alberts, S. C., & Archie, E. A. *Identifying the patterns, drivers, and consequences of human encounters for savannah baboons*. Animal Behavior Society Conference (August 5, 2021). Summer 2021
 6. Paietta, E.N., Kraberger, S., Custer, J.M., Vargas, K.L., Van Doorslaer, K., Yoder, A.D., & Varsani, A. *Identifying viral diversity and transmission in humans and lemurs using metagenomics*. Chapman Conference on Climate and Health in Africa (June 13, 2023). Summer 2023
 7. Paietta, E.N., Kraberger, S., Custer, J.M., Vargas, K.L., Van Doorslaer, K., Yoder, A.D., & Varsani, A. *Identifying viral diversity and transmission in humans and lemurs using metagenomics*. Symposium on Emerging Infectious Diseases, Duke University (October 24, 2023). Fall 2023

ORAL PRESENTATIONS

1. Paietta E., Jansen D., & Archie E. *The Relationship Between Senescence and Parasitism in Yellow Baboons (Papio cynocephalus)*.
NSF-REU Research Symposium, University of Notre Dame Summer 2019
2. Paietta, E. *Identifying diverse viruses using metagenomics*.
Club EvMed, Duke University Fall 2022
3. Paietta, E. *Identifying novel, diverse viruses using metagenomics*.
Biology Flash Talks, Duke University (Sept 29, 2023) Fall 2023
4. Paietta, E. *Identifying novel, diverse viruses in lemurs using metagenomics*.
American Society of Microbiology – NC Branch, Special Topics Session 1A, Duke University (Nov 4, 2023) Fall 2023
5. Paietta, E. *Identifying novel, diverse viruses using metagenomics: From the Duke Lemur Center to Madagascar*. Duke Center for Virology (January 22, 2024) Spring 2024

IN THE MEDIA

1. **The Virus Hunters, Duke Today.** [The Virus Hunters | Duke Today](#)

FUNDING RECEIVED

NSF-REU fellowship (Summer 2019)
 Duke Biology Grant-in-Aid (Spring 2021, \$1000)
 Triangle Center of Evolutionary Medicine (TriCEM) Graduate Student Award (Summer 2021-Summer 2022, \$7500)
 Duke Lemur Center Director's Fund Grant (Fall 2021-Fall 2022, \$2800)
 Sigma Xi Grant-in-Aid of Research (Spring 2022, \$750)
 Duke University-Wide Collaboration Grant on Climate Change (Spring 2022, \$5000)
 Duke University Center for International and Global Studies (DUCIGS) travel grant (Spring 2022, \$1250)
 Duke Biology Grant-in-Aid (Spring 2022, \$1000)
 International Primatological Society (IPS) Conservation Grant (Summer 2022, \$1450)
 Holohil Grant Program Spring Quarter Winner (9 lemur GPS collars, equivalent to \$2500)
 Duke University Global Student Research Fund (Spring 2023, \$1500)
 Duke University Dissertation Travel Award: International (Summer 2023, \$5000)
 Duke Biology Grant-in-Aid (Spring 2023, \$1000)
 American Society of Virology Conference Travel Grant (Summer 2023, \$500)
 AGU Chapman Conference on Climate and Health in Africa Travel Award (Summer 2023, \$2000)
 Duke University Conference Travel Award (Summer 2023, \$520)
 Duke Microbiome Center Core Voucher Program (Fall 2023, \$9333)
 Duke Global Research Award (Spring 2023, \$3000)

TEACHING EXPERIENCE/OUTREACH

- Guest lectures on "Zoonosis and the Origins of SARS-CoV-2" and Teaching Assistant for Duke University undergraduate course "Climate, Coffee, Coronavirus" (Fall 2021, additional guest lecture Fall 2023)
- Teaching Assistant for Introduction to Molecular Biology running my own 16-student lab section (Spring 2022)
- Teaching Assistant for Behavioral Ecology running discussion section and Ecology of a Changing Planet (Spring 2023)
- Member of Biology Club & Uplift at the University of Notre Dame providing encouragement and
 - information to underclassmen about undergraduate research and the Biology major (2019-2020)
- Planning and hosting Outreach Event to get grade school/high school students excited about Ecology & Evolution as part of the NSF-REU program (Summer 2019)
- Notre Dame Career Series talk to undergraduates about the graduate school application process and beginning graduate school at Duke (September 2020)
- Femmes Capstone Event with WiSE (Women in Science and Engineering at Duke) leading a pandemic response team activity for K-6 female students & Femmes Capstone Event lemur biome activity (March 2021, March 2023)
- Durham Boys and Girls Club science experiment presentations with WiSE (Fall 2021-present)
- 4th grade class lecture on Animal Research and Lemurs (May 27th, 2021)

- SciREN (Scientific Research and Education Network) Educator Liaison and Presenter working to disseminate lesson plans made by researchers to educators in the Triangle area for grades K-12 (Spring 2021-present)
- Education Docent for open houses at the Duke Lemur Center interacting with the public about lemur conservation (Summer 2021-2023)
- Darwin Day Roadshow developing and presenting lectures on evolutionary topics for grades K-8 (February 2022)
- Lemurpalooza, engaging with the public about lemurs at the Duke Lemur Center (May 21, 2022)
- Created and taught 4-day Introduction to Coding in R workshop to Duke University Nicholas School of the Environment undergraduate and graduate students (June-July 2022)
- ASCEND speaker to introduce first-gen Duke undergraduates to research opportunities at Duke (July 25, 2022)
- ComSciCon science communication and writing workshop

RELEVANT COURSES COMPLETED

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| ○ Primate Behavior & Ecology | ○ Introduction to Biocomputing |
| ○ Classical & Molecular Genetics | ○ Infectious Disease Ecology & Epidemiology |
| ○ Principles of Microbiology | ○ One Health: Philosophy & Practice |
| ○ Medical and Veterinary Parasitology | ○ Tropical Ecology |
| ○ Conservation Biology | ○ Genomics of Non-Model Organisms |
| ○ Animal Function & Structure | ○ Pandemics & Evolution |
| ○ Global Climate Change & Biodiversity | |
| ○ Biostatistics | |

PROGRAMMING LANGUAGE EXPERIENCE

- R
- SQL