

## EDUCATION

- 2014 – 2019 **Duke University**  
**PhD Ecology**  
**Dissertation:** *Forecasted Afrotropical community responses to climate change diverge from Neotropical predictions with consequences for biodiversity conservation and carbon storage*  
**Awards:** National Science Foundation Graduate Research Fellowship 2014-19; President's Fellowship 2014 - 18; Marie Sklodowska-Curie Actions Seal of Excellence 2019
- 2009 – 2013 **University of California, Davis**  
**AB Evolutionary Anthropology, *summa cum laude***  
**AB Biological Psychology, *cum laude***  
**Thesis:** *A Bayesian joint model of growth and survival for assessing the consequences of differential maternal investment in *Macaca mulatta**  
**Awards:** Departmental Citations for Excellence 2013, Phi Kappa Phi 2013; International Order of Odd Fellows Award 2009; Masonic Masters and Brethren Award 2009; Phil Bocks Community Service Award 2009; Northstar at Tahoe Environmental Stewardship Award 2009; Tahoe Mountain Resorts Award 2009

## PROFESSIONAL POSITIONS

- 2020 → **Postdoctoral Research Scientist**  
Konstanz, Germany  
Laikipia, Kenya  
Gamboa, Panama  
Max Planck Institute of Animal Behavior  
Department for the Ecology of Animal Societies  
University of Konstanz  
Centre for the Advanced Study of Collective Behaviour  
Landscape-Scale Dispersal Ecology
- 2019 – 2020 **Postdoctoral Research Scientist**  
Leipzig, Germany  
German Centre for Integrative Biodiversity Research (iDiv) Halle-Jena-Leipzig  
Department for the Study of Macroecology and Society  
Community Responses to Landscape Diversity and Change
- 2014 – 2019 **NSF/Neil Williams Presidential Graduate Research Fellow**  
N. Carolina, USA  
Libreville, Gabon  
Brazzaville, ROC  
Duke University  
Nicholas School for the Environment  
University Program in Ecology  
Afrotropical Forest Community Responses to Climate Change (NSF GRF-1106401)
- 2013 – 2014 **Field Project Manager**  
Kakamega, Kenya  
Columbia University in the City of New York  
Department of Ecology, Evolution, and Environmental Biology (E3B)  
Life History and Ecology of *C. mitis stuhlmanni* (NSF BCS-1028471)
- 2011 – 2013 **Staff Research Associate**  
California, USA  
Harvard University; University of California, Davis  
Maternal Effects on Offspring Outcomes (NSF BCS-0921978)  
Long-term Effects of Chronic Intranasal Oxytocin (NICHD 1R01HD071998-01A1)  
The Neurobiology of Social Bonding (NICHD 5R01HD053555-04)

**PUBLICATIONS**

\* denotes current or past student co-author

- 2024  
10.1002/ece3.11329 Disturbance Sensitivity Shapes Patterns of Tree Species Distribution in Afrotropical Lowland Rainforests More Than Climate or Soil;  
*Núñez CL, Clark JS, Poulsen JR;*  
**Ecology and Evolution**  
Pre-print filed at BioRxiv: 10.1101/823203
- 2022  
10.3389/fevo.2021.742626 Distinct Community-Wide Responses to Forecasted Climate Change in Afrotropical Forests;  
*Núñez CL, Poulsen JR, White LJT, Medjibe V, Clark JS;*  
**Frontiers in Ecology and Evolution**  
Pre-print filed at BioRxiv: 10.1101/823724
- 2022  
10.7554/eLife.73695 Ecological and social pressures interfere with homeostatic sleep regulation in the wild;  
\**JC Loftus, R Harel, Núñez CL, MC Crofoot;*  
**eLife**  
Pre-print filed at BioRxiv: 10.1101/2021.09.26.461870
- 2022  
10.3389/fevo.2022.801850 Life in 2.5D: animal movement in the trees;  
*Harel R, Alavi S, Ashbury A, Aurisano J, Berger-Wolf T, Davis G, Hirsch BT, Kalbitzer U, Kays R, Mclean K, Núñez CL, Vining A, Worsøe Havmøller R, Walton Z, Crofoot, MC;*  
**Frontiers in Ecology and Evolution**
- 2021  
10.1073/pnas.2106130118 Is there tree senescence? The fecundity evidence;  
*Qiu T, Aavena Acuna M, Andrus R, Ascoli D, Bergeron Y, Beretti R, Bogdziewicz M, Boivin T, Bonal R, Caignard T, Calama R, Camarero JJ, Clark C, Courbaud B, Delzon S, Donoso Calderon S, Farfan-Rios W, Gehring CA, Gilbert GS, Greenberg CH, Guo Q, Hille Ris Lambers J, Hoshizaki K, Ibanez I, Journé V, Kilner C, Kobe R, Koenig WD, Kunstler G, LaMontagne JM, Ledwon M, Lutz JA, Motta R, Myers JA, Nagel TA, Núñez CL, Pearse IS, Piechnik, Poulson J, Poulton-Kamakura R, Redmond MD, Reid CD, Rodman KC, Scher CL, Van Marle HS, Seget B, Sharma S, Silman M, Swenson JJ, Swift M, Uriarte M, Vacchiano G, Veblen TT, Whipple AV, Whitham TG, Wion AP, Wright J, Zhu K, Zimmerman JK, Zywiec M, Clark JS;*  
**Proceedings of the National Academy of Sciences (PNAS)**
- 2021  
10.1038/s41559-021-01486-0 Ecological factors influence balancing selection on leaf chemical profiles of a wildflower;  
*Carley LN, Mojica JP, Chen C, Lin Y, Prasad KVS, Chan E, Hsu C, Keith R, Núñez CL, Olson-Manning CF, Rushworth CA, Wagner MR, Wang J, Yeh P, Reichelt M, Ghattas K, Gershenson J, Lee C, Mitchell-Olds T;*  
**Nature Ecology & Evolution**
- 2021  
10.1111/icad.12470 Recovery of dung beetle biodiversity and traits in a regenerating rainforest: a case study from Costa Rica's Osa Peninsula;  
*Whitworth A, Beirne C, Flatt E, \*Froese G, Núñez CL, Forsyth A;*  
**Insect Conservation and Diversity**
- 2021  
10.3389/fevo.2021.789264 Long distance seed dispersal by forest elephants;  
*Poulsen JR, Beirne C, Rundel C, \*Baldino M, \*Kim S, \*Knorr J, \*Minich T, \*Jin L, Núñez CL, Xiao S, Mbamy W, Obiang GN, Masseloux J, Nkoghe T, Ebanega MO, Clark CJ, Fay MJ, Morkel P, Okouyi J, White LJT, Wright JP;*  
**Frontiers Ecology And Evolution**

- 2021  
10.1038/s41467-020-20836-3  
Continent-wide tree fecundity driven by indirect climate effects;  
*Clark JS, Andrus R, Aubry-Kientz M, Bergeron Y, Bogdziewicz M, Bragg DC, Brockway D, Cleavitt NL, Cohen S, Courbaud B, Daley R, Das AJ, Dietze M, Fahey TJ, Fer I, Franklin JF, Gehring CA, Gilbert GS, Greenberg CH, Guo Q, HilleRisLambers J, Ibanez I, Johnstone J, Kilner C, Knops J, Koenig WD, Kunstler G, LaMontagne JM, Legg KL, Luongo J, Lutz JA, Macias D, McIntire EJB, Messaoud Y, Moore CM, Moran E, Myers JA, Myers OB, Núñez CL, Parmenter R, Pearse S, Pearson S, Poulton-Kamakura R, Ready E, Redmond M, Reid CD, Rodman KC, Scher CL, Schlesinger WH, Schwantes AM, Shanahan E, Sharma S, Steele MA, Stephenson NL, Sutton S, Swenson JJ, Swift M, Veblen TT, Whipple AV, Whitham TG, Wion AP, Zhu K, Zlotin R.;*  
**Nature Communications**
- 2020  
10.1111/geb.13150  
Old growth Afrotropical forests critical for maintaining forest carbon;  
*Poulsen JR, Medjibe VP, White LJT, Miao Z, Banack-Ngok L, Beirne C, Clark CJ, Cuni-Sanchez A, Doucet JL, Jeffery KL, Lee ME, Lewis SL, Mahli Y, Massard E, Moore S, Núñez CL, Reitsma J, Saatchi S;*  
**Global Ecology and Biogeography**
- 2019  
10.1002/ecs2.2965  
Stronger together: comparing and integrating camera trap, visual, and dung survey data for ecological inference in tropical forest mammal communities;  
*Núñez CL, \*Froese G, Beirne C, \*Meier A, Ossman M, \*Dipenthal J, \*McCarthy J, \*Kim S, Poulsen J;*  
**Ecosphere**
- 2019  
10.2981/wlb.00543  
Estimation Of Gut Passage Times Of Wild, Free Roaming Forest Elephants;  
*Beirne C, Núñez CL, Baldino M, \*Kim S, Knorr J, Masseloux J, \*Minich T, Poulsen JR, Rundel C, Wright JP, Jin K, Xiao A, Mbamy W, Obiang GN, Nkoghe T;*  
**Wildlife Biology**
- 2019  
10.1002/eap.1987  
Landscape - level validation of allometric relationships for carbon stock estimation reveals bias driven by soil type;  
*Beirne C, Miao Z, Núñez CL, Medjibe VP, Saatchi S, White L.J.T., and Poulsen J.R.;*  
**Ecological Applications**
- 2019  
10.1002/ecm.1381  
Food webs built on unreliable foundations: Masting and the movement, demographic storage, and diet breadth of consumers;  
*Clark JS, Núñez CL, Tomasek B;*  
**Ecological Monographs**
- 2018  
10.1093/aobpla/ply074  
Low-Intensity Logging and Hunting have Long-Term Effects on Seed Dispersal but not Fecundity in Afrotropical Forests;  
*Núñez CL, Clark JS, Poulsen JR, Clark C;*  
**Annals of Botany, Plants**
- 2018  
10.1111/cobi.13035  
Ecological consequences of forest elephant declines for Afrotropical forests;  
*Poulsen JR, Rosin C, Núñez CL, \*Meier A, Mills E, Koerner S, Blanchard E, Callejas J, Moore S, Sowers M.;*  
**Conservation Biology**
- 2015  
10.1002/ajp.22426  
Offspring of primiparous mothers do not experience greater mortality or poorer growth: Revisiting the conventional wisdom with archival records of Rhesus Macaques;  
*Núñez CL, Grote MN, Wechsler MS, Allen-Blevins C, and Hinde KJ.;*  
**American Journal of Primatology**

## Datasets

10.5061/ dryad.p5hqbzkqf	Ecological and social pressures interfere with homeostatic sleep regulation in the wild; <i>*Loftus JC, Harel R, Núñez CL, Crofoot MC;</i> <b>DRYAD</b>
10.5061/ dryad.7h44j0zsr	Ecological factors influence balancing selection on leaf chemical profiles of a wildflower; <i>Carley LN, ..., Núñez CL, et al.;</i> <b>DRYAD</b>
Accession: PRJNA659863 ID: 659863	Boechera stricta raw sequence reads of CFR; <i>Carley LN, ..., Núñez CL, et al.;</i> <b>NCBI</b>
Accession: PRJNA609209 ID: 609209	Boechera stricta long-read genome assembly; <i>Carley LN, ..., Núñez CL, et al.;</i> <b>NCBI</b>

## SELECTED AWARDS, FELLOWSHIPS, AND GRANTS

2022 CO-SLEEP; €2 900 000	<b>ERC Consolidator Grant</b> Collective Dynamics of Sleep in the Wild <i>as collaborator with M. Crofoot and R. Harel, et al.</i>
2021 M21-38; €47 270	<b>CASCB Medium Money Grant</b> Collective Responses to Forecasted Landscape-Scale Resource Variation <i>as PI</i>
2021 S21-12; €3 800	<b>CASCB Small Project Grant</b> FIELD: Facilitating Inclusion, Equity, & Latitudinal Diversity <i>as Co-PI with T. Montgomery &amp; E. Strauss</i>
2017 - 19 \$ 50 000	<b>Bass Connections in Energy and Environment</b> Mega-Gardeners of Tropical Forest: Modelling Seed Dispersal by Forest Elephants <i>as collaborator with J. Poulsen, A. Gelfand, J. Wright, et al.</i>
2017 - 19 WW-190ER-17; \$ 4 839	<b>Early Career Grant</b> National Geographic Society <i>as collaborator with A. Meier, J. Okouyi, and S. Bourgeois</i>
2014 - 18 \$ 77 000 + overhead	<b>Neil Williams Presidential Fellowship</b> Duke University <i>as PI</i>
2014 - 19 NSF GRF-1106401; \$ 96 000 + overhead	<b>Graduate Research Fellowship</b> National Science Foundation <i>as PI</i>

**SELECTED COMMUNITY OUTREACH AND ACADEMIC SERVICE**

Community Outreach

Academic Service

2021 **Presenter**  
Surviving the Apocalypse with Open  
Data Science  
University of Konstanz

2021 **Presenter**  
STEAM center expansion proposal  
Kidzone Museum

2019 **Presenter**  
Graduate Panel on Mentorship  
Duke University Biology

2018 **Organizer**  
Environmental Law Panel on Cli-  
mate Policy  
Duke Conservation Society

2018 **Organizer**  
Discussion Forum with Bronwyn  
Llewellyn, USAID Environment Of-  
ficer  
Duke Conservation Society

2018 **Organizer**  
Discussion Forum with Greg Andeck  
of Audubon  
Duke Conservation Society

2017 **Organizer**  
Oosting Endowed Event on Ecologi-  
cal Implications of Disease  
Duke University Program in Ecology

2016 **Organizer**  
Discussion Forum with Andy Read  
from Vaquitas  
Duke University Program in Ecology

2016 **Organizer**  
Virunga and panel discussion  
Duke Conservation Society

2016 **Presenter**  
Ask a scientist exhibit  
NC. Central Regional Science and  
Engineering Fair

2022 **Co-Creator**  
fieldperspectives.org  
Facilitating Inclusion, Equity, & Latitudinal  
Diversity

2021 **Elected Representative**  
Max Planck Society  
Max Planck Institute of Animal Behavior

2021 **Organizer**  
Open Data Science Series  
Max Planck Institute of Animal Behavior

2014 - 19 **PhD Chair**  
University Program in Ecology Executive  
Council  
Duke University

2015 - 19 **PhD Chair**  
Duke Conservation Society  
Duke University

2017 - 18 **Recruitment Chair**  
University Program in Ecology  
Duke University

2017 - 18 **Co-Director**  
Ecological Perspectives on Disease and Health  
University Program in Ecology / Triangle  
Center for Evolutionary Medicine  
Duke University

2017 - 18 **Henry J. Oosting Endowed Lecture PhD  
Chair**  
University Program in Ecology  
Duke University

2016 - 17 **Elected Representative**  
Graduate and Professional Student Council  
University Program in Ecology  
Duke University

## TEACHING AND MENTORING

### Thesis Supervision

2022 BS	<b>N. Stockmayer</b> University of Konstanz / Max Planck Institute <i>"How does the flower density within different regions of a balsa tree (Ochroma pyramidale) affect the rate and timing of kinkajou (Potos flavus) visits to those regions?"</i>
2023 BS	<b>L. Dempel</b> University of Konstanz / Max Planck Institute <i>"Context-dependent leadership and collective behavior during morning departure in Papio anubis"</i>
2021 MS	<b>A. Govaerts</b> University of Konstanz / Max Planck Institute <i>"Many Blind Eyes: Non-Specific Col- lective Vigilance But Effective Dilu- tion of Nocturnal Predation Risk In Papio anubis"</i>
2024 MS	<b>R. Pallagatti</b> University of Konstanz / Max Planck Institute <i>"Environmental Determinants of Sleep in Acryllium vulturinum"</i>
2021 PhD	<b>C. Monteza</b> University of California Davis / Max Planck Institute <i>"Direct Vs. Legacy Anthropogenic Effects in Neotropical Forest Mam- mal Communities"</i>

### Teaching

ENV 710	<b>Applied Data Analysis for Environmental Science</b>
BIO 362	<b>Evolutionary Ecology</b>
ANT 50	<b>Life History Evolution</b>

### Formal Mentoring

2017-19 HS	<b>J. Miklaucic</b>
2017-19 MEM	<b>A. Xiao</b>
2017-19 MEM	<b>K. Jin</b>
2017-19 MEM	<b>M. Baldino</b>
2017-19 MEM	<b>J. Knorr</b>
2016-19 MEM	<b>T. Minich</b>
2016-18 MEM	<b>M. Ossman</b>
2016-18 MEM	<b>J. Dipenthal</b>
2016-18 MEM	<b>J. McCarthy</b>

