


William C. Beckerson, Ph.D. – Curriculum Vitae


Contact Information:

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Research:

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 WCBeckerson/

Socials:

 @WCBeckerson

 @WilliaMycete

 @aBitofBiology

Languages: (CEFR)

 English - C2
Native

 Spanish - A2.1
Elementary

 Dutch - A1.1
Elementary

[What is CEFR?](#)



WilliamCBeckersonPhD.com

EDUCATION

Doctor of Philosophy in Biology ■ 08/2015-08/2020

Program on Disease Evolution
University of Louisville - ♡ Louisville, Kentucky, USA

Master of Science in Biology ■ 08/2015-05/2017

Program on Disease Evolution
University of Louisville - ♡ Louisville, Kentucky, USA

Bachelor of Science in Biology / Minor: Business Management ■ 08/2009-12/2013

Department of Biology
Georgetown College - ♡ Georgetown, Kentucky, USA

RESEARCH EXPERIENCE

Postdoctoral Research:

ERC: Marie Skłodowska-Curie Action Postdoctoral Fellowship Awardee ([link](#))
Universiteit Utrecht - ♡ Utrecht, NL ■ 08/2023-07/2025

PI: Sander van den Heuvel
Research project title: Characterizing the neuronal effects of *Ophiocordyceps* secreted proteins using *C. elegans*.

NSF: Postdoctoral Research Fellowship in Biology Awardee ([link](#))
University of Central Florida - ♡ Florida, USA ■ 08/2021-07/2023

PI: Charissa de Bekker
Research project title: Linking parasite genomes, environmental ques, and host phenomes in *Ophiocordyceps*.

Dissertation Research:

Ruhr-Universität Bochum - ♡ Bochum, DE ■ 08/2018-07/2019

Collaborator: Dominik Begerow
Research project title: Implementation of CRISPR Cas9 in *Microbotryum lychnidis-dioicae*.

AdF: Chateaubriand Fellowship Awardee ([link](#))
Université Paris-Sud - ♡ Orsay, FR ■ 05/2016-08/2016

Collaborator: Tatiana Giraud
Research project title: Comparative genomics of species-specific effectors in the *Microbotryum* genus.

University of Louisville - ♡ Kentucky, USA ■ 08/2015-08/2020

PI: Michael Perlin
Research project title: Molecular analysis of secreted proteins in the *Microbotryum* genus.

Pedagogical Research:

University of Louisville - ♡ Kentucky, USA ■ 09/2017-07/2021

PI: Deborah Yoder-Himes
Research project title: Analyzing the impact of active learning on different student of different social personalities.

PUBLICATIONS

I preferentially support the publication of research findings in societal journals who value open access. As such, I have published the majority of my research in journals from the Animal Behavior Society (*Animal Behaviour*), the American Society for Microbiology (*mBio*), and the National Science Teaching Association (*Journal of College Science Teaching*). These journals are known for their rigorous review processes led by field-specific experts, their emphasis research quality, and for reaching a broad scientific audience.

Peer Reviewed Research Articles:

- Beckerson WC, Anderson JO, Kulkarni S, Perpich JD, Yoder-Himes D. (2024). It's About Time: Exploring the dose-dependent effects of active learning on students of different social personalities in an upper-level biology course. *Journal of College Science Teaching*. <https://doi.org/10.1080/0047231X.2024.2316378>
- Will I, Beckerson WC, de Bekker C. (2023). Using machine learning to predict protein-protein interactions between a zombie ant fungus and its carpenter ant host. *Scientific Reports* 13, 13821. <https://doi.org/10.1038/s41598-023-40764-8>
- Beckerson WC, Krider C, Mohammad UA, de Bekker C. (2023). 28 Minutes Later: Investigating the role of aflatoxin-like compounds in *Ophiocordyceps* parasite manipulation of zombie ants. *Animal Behaviour* 203, 225-240. <https://doi.org/10.1016/j.anbehav.2023.06.011>
- De Bekker C, Beckerson WC, Carolyn Elya. (2021). Mechanisms Behind the Madness: How do zombie-making fungal entomopathogens affect host behavior to increase transmission? *mBio* 12(5), e01872-21. <https://doi.org/10.1128/mBio.01872-21>
- Beckerson WC, Anderson JO, Perpich JD, Yoder-Himes D. (2020). An Introvert's Perspective: Analyzing the impact of active learning on social personalities in an upper-level biology course. *Journal of College Science Teaching* 49(3), 47-57. https://doi.org/10.2505/4/jcst20_049_03_47
- Beckerson WC, de la Vega RCR, Hartmann FE, Duhamel M, Giraud T, Perlin MH. (2019). Cause and Effectors: Whole genome comparisons reveal shared but rapidly evolving effector sets among host-specific plant-castrating fungi. *mBio* 10:e02391-19. <https://doi.org/10.1128/mBio.02391-19>
- Kuppireddy VS, Uversky VN, Toh SS, Tsai M-C, Beckerson WC, Cahill CC, Carman B, Perlin MH. (2017). Identification and initial characterization of effectors of an anther smut fungus and the potential host target proteins. *International Journal of Molecular Science* 18, 2489. <https://doi.org/10.3390/ijms18112489>

Peer Reviewed Teaching Lessons:

- Beckerson WC. (2024). Zombie Ants VR: Using virtual reality to teach about coevolution and extended phenotypes. *CourseSource*. - **In Preparation**
- Beckerson WC. (2024). Replicating Darwin's Theory: Teaching evolution with microbiology by means of replica plating. *CourseSource*. - **In Review**
- Beckerson WC. (2022). Small Organisms with Big Consequences: Understanding the microbial world around us. *CourseSource*. <https://doi.org/10.24918/cs.2022.27>

Textbooks:

- Beckerson WC, Laraba I, Torres-Cruz TJ, Steinkraus D, Hajek A. (2024). *Mechanisms of Host Manipulation and Mimicry in Fungi*. In: Haelewaters D. (ed.) *Biodiversity and Evolution of Fungal Parasites and Pathogens*. Amsterdam, Netherlands: Elsevier. (ISBN: 978032885324) – **Preprint** <https://doi.org/10.22541/au.172124619.90197485/v1>
- Savchenko K, Beckerson WC, Aime C. (2024). *Economically Important Plant Parasites: Rusts and smuts*. In: Haelewaters D. (ed.) *Biodiversity and Evolution of Fungal Parasites and Pathogens*. Amsterdam, Netherlands: Elsevier. (ISBN: 978032885324) – **Preprint**
- Perlin MH, Beckerson WC, Gopinath A, Cobbs G. (2019). *Molecular and Cellular Genetics: Laboratory Studies*. San Diego, California United States: Cognella Academic Publishing. **2nd Edition**. ISBN: 9781793514943
- Perlin MH, Beckerson WC, Gopinath A, Cobbs G. (2018). *Molecular and Cellular Genetics: Laboratory Studies*. San Diego, California United States: Cognella Academic Publishing. **1st Edition**. ISBN: 9781516528288

FUNDING

Extramural Funding and Fellowships (\$147,605 & €203,464):

HORIZON Marie Skłodowska-Curie Actions Postdoctoral Fellowship - ♡NL Grant agreement ID: I01108298 (DOI: I0.3030/I01108298)	(€203,464)	📅08/2022
NSF Postdoctoral Research Fellowship in Biology - ♡USA Award number: 2109435	(\$138,000)	📅06/2021
GSA Fungal Genetics Conference Travel Award - ♡USA	(\$250)	📅03/2019
DAAD Short Term Research Grant - ♡DE	(\$4,075)	📅11/2018
Chateaubriand STEM Fellowship - ♡FR	(\$5,280)	📅05/2016

Intramural Funding: Utrecht University (€9,982):

Public Engagement Seed Fund - ♡NL	(€9,982)	📅07/2024
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Intramural Funding: University of Central Florida (\$55,000):

Preeminent Postdoctoral Program - ♡USA Co-written with: Dr. Charissa de Bekker	(\$55,000)	📅08/2020
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Intramural Funding: University of Louisville (\$3,236):

Biology 1970's Cohort Fund Grant - ♡USA	(\$200)	📅06/2019
Graduate Student Council Travel Grant - ♡USA	(\$350)	📅01/2019
Graduate Network of Arts and Science Travel Grant - ♡USA	(\$250)	📅01/2019
Graduate Student Council Travel Grant - ♡USA	(\$350)	📅05/2018
Arts & Science Research & Creative Activities Grant - ♡USA	(\$500)	📅04/2018
Biology Graduate Student Association Travel Grant - ♡USA	(\$175)	📅02/2018
Joint Arts & Science Research & Creative Activities Grant - ♡USA Co-written with: Venkata S. Kuppireddy	(\$1,311)	📅04/2016
Graduate Network of Arts and Sciences Research Fund - ♡USA	(\$100)	📅01/2016

Significant Contributions and Other Grants (\$313,369):

NSF Gordon Research Seminar Standard Grant - ♡USA Co-written with: Andrew Swafford & Anna Selmecki Award number: 2424381	(\$16,480)	📅04/2024
NSF Track I International Research Experience for Students - ♡USA Co-written with: (PI) Dr. Michael H. Perlin Award number: I824851	(\$296,889)	📅08/2018

TEACHING

Teaching Qualifications:

Universiteit Utrecht Teaching Qualification Program - ♡Utrecht University, NL	📅02/2024-10/2024
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The "Basis Kwalificatie Onderwijs, or "BKO", is a mark of quality used by all Dutch universities. It functions as a reliable frame of reference with respect to one's didactic skills. The BKO track consists of modules that allow lecturers to assess and develop all facets of teaching. At the end of the track, the participant is awarded a BKO certificate and is qualified for all Dutch universities. Official certification will be available at: ([link](#))

Preparing Tomorrow's Faculty Program - ♡University of Central Florida, USA

Participants in the Preparing Tomorrow's Faculty (PTF) course meet weekly and engage in a learning community facilitated by Faculty Center staff. By the end of the semester, the participant assembles a teaching portfolio. The course includes the following modules: Student learning and motivation, Integrated course design, Teaching pedagogies, Assessment and feedback, Course climate, Career development. Official certification can be found at: (link)	📅08/2021-12/2021
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Teaching Experience:

Invited Group Lecturer for Developmental Biology - ♡Wageningen University, NL	📅05/2024
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EZO30306: Developmental Biology of Animals

I sections	I20 min	I6 students	One class	Spring 2024
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MSCA Postdoctoral Research Fellow - ♡Universiteit Utrecht, NL

B-MEBIFB19: Fungal Biology	📅08/2023-07/2025
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I section	I05 min/class	I3 students	Twice/week	Autumn 2024
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MBLS-I07: Functional Biology

2 sections	I20 min/class	5 & 5 students	Once/month	Spring 2024
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B-MEBIFB19: Fungal Biology

I section	I05 min/class	I3 students	Twice/week	Autumn 2023
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NSF Postdoctoral Research Fellow - ♡ University of Central Florida, USA

🏠08/2021-07/2023

Concurrent teaching for the duration of a PRFB fellowship is prohibited as outlined on pg. 15 of the administrative guide for the Postdoctoral Research Fellowships in Biology program: ([link](#))

Adjunct Faculty of Record - ♡ Georgetown College, USA

🏠08/2019-04/2020

BIO 100: Introductory Biology for Non-Majors (100% Remote Learning)				
I section	75 min/class	24 students	Four/week	Summer 2020
BIO 111: Introductory Biology for Majors				
I section	75 min/class	24 students	Twice/week	Autumn 2019
BIOL 111: Introductory Biology Lab				
I section	110 min/class	24 students	Once/week	Autumn 2019

Invited Group Lecturer for Biotechnology Methods - ♡ University of Louisville, USA

🏠08/2018-12/2018

BIOL 416: Biotechnology Methods				
2 sections	240 min/class	4 & 5 students	Twice/week	Autumn 2018

Teaching Innovation Learning Lab in Microbiology - ♡ University of Louisville, USA

🏠08/2017-12/2019

BIO 357: General Microbiology				
I section	75 min/class	64 students	Eight/Semester	Autumn 2019
BIO 357: General Microbiology				
I section	75 min/class	49 students	Four/Semester	Autumn 2018
BIO 357: General Microbiology				
I section	75 min/class	43 students	Four/Semester	Spring 2018
BIO 357: General Microbiology				
I section	75 min/class	65 students	Four/Semester	Autumn 2017

Graduate Teaching Assistant - ♡ University of Louisville, USA

🏠08/2015-04/2020

BIOL 331: Genetics and Molecular Biology				
2 sections	110 min/class	20 & 20 students	Twice/week	Spring 2020
BIOL 331: Genetics and Molecular Biology				
2 sections	110 min/class	20 & 22 students	Twice/week	Autumn 2019
BIOL 331: Genetics and Molecular Biology				
2 sections	110 min/class	20 & 22 students	Twice/week	Spring 2019
BIOL 331: Genetics and Molecular Biology				
I section	110 min/class	19 students	Twice/week	Autumn 2018
BIOL 104: introduction to Biological Systems				
2 sections	110 min/class	14 students	Three/week	Summer 2018
BIOL 331: Genetics and Molecular Biology				
2 sections	110 min/class	20 & 21 students	Twice/week	Spring 2018
BIOL 331: Genetics and Molecular Biology				
I section	110 min/class	8 students	Twice/week	Autumn 2017
BIOL 258: Microbiology				
2 sections	90 min/class	15 & 6 students	Four Days/week	Summer 2017
BIOL 331: Genetics and Molecular Biology				
2 sections	110 min/class	17 & 21 students	Twice/week	Spring 2017
BIOL 331: Genetics and Molecular Biology				
I section	110 min/class	16 students	Twice/week	Autumn 2016
BIOL 244: Principles of Biology				
2 sections	110 min/class	27 & 28 students	Twice/week	Spring 2016
BIOL 104: Introduction to Biological Systems				
3 sections	110 min/class	33, 33, 33 students	Once/week	Autumn 2015

STUDENTS MENTORED

I have supervised a diverse group of students including 6 master's students and 11 undergraduates, 10 of whom identified as female, 6 as male, and 1 as transgender male, 11 of whom described themselves as Caucasian, 5 as black, and 1 as middle eastern, and 11 who were born in the USA, 4 in the Netherlands, 1 in Germany, and 1 in Spain. For the master's students, I acted as a collaborator for 3 of them and as the daily supervisor for the other 3. As their daily supervisor, I was responsible for guiding the students through the completion of their theses. With regards to the undergraduate students, I was the supervisor for all 11 on a variety of research projects.

Virtual Reality Videogame Project: Zombie Ants VR

-Storyboard Developer/Voice Acting Coach-

Website: <https://www.williambeckersonphd.com/copy-of-research>

Steam download: https://store.steampowered.com/app/2416150/Zombie_Ants_VR/

Zombie Ants VR is a short (5-10 minute) educational experience that takes the player through the life cycle of *Ophiocordyceps*, a fungus that drives creatures (in this case ants) to change their behavior in order to propagate the fungus then ultimately kills them. This fungus was a large inspiration for the video game series Last of Us and is often affectionately referred to as the "Zombie Fungus".



Community Science Initiative: the Zombie Fungus Foray









-Creator-

Website: <https://wbeckerson.wixsite.com/thezombiefungusforay>

iNaturalist: <https://www.inaturalist.org/projects/the-zombie-fungus-foray>





K-12 Classroom Outreach:

-  10/2022 Amsterdam International Community School - 📍 Amsterdam, NL
-  10/2021 Wharton High School: National Honor Society - 📍 Tampa, FL, USA
-  10/2021 Freedom High School: Environmental Science Periods I-7 - 📍 Tampa, FL, USA
-  10/2021 Wharton High School: SPLASH Club, and Biology Sections I-6 - 📍 Tampa, FL, USA
-  2/2021 Mica Mountain High School: Sections III & VI - 📍 Tucson, AR, USA
-  10/2020 Jackson Heights Middle School: Ecology - 📍 Oviedo, FL, USA
-  10/2020 Oviedo High School: Sophomore Biology Sections 2, 3, 6, & 7 - 📍 Oviedo, FL, USA
-  10/2020 Oviedo High School: AP Biology Sections I & II - 📍 Oviedo, FL, USA






iNaturalist Curator:

-  8/2020-current Website curator for the *Ophiocordyceps unilateralis* species complex
-  8/2020 The Zombie Fungus Foray Project Creator






Seminole County Parks Partnership:

-  10/2021 Chuluota Wilderness Area Guided Hike for Zombie Ants - 📍 Geneva, Florida, USA
-  7/2021 Eco Camp: Grossology Week Guide to Zombie Ants - 📍 Geneva, Florida, USA
-  6/2021 Eco Camp: Biology Bootcamp Guide to Zombie Ants - 📍 Geneva, Florida, USA





Orlando Science Center Partnership:

-  2/2022 Otronicon: 3-day Alpha testing of ZombieAntVR with kids - 📍 Orlando, Florida, USA
-  10/2021 Pumpkins and Protons Halloween Party Exhibit - 📍 Orlando, Florida, USA
-  10/2019 Spooky Science Week Exhibit: Real-life Zombie Ants! - 📍 Orlando, Florida, USA




stemCONNECT Partnership:

-  10/2021 Spooky Themed Month Virtual Presentation - 📍 Orlando, Florida, USA
Real-life Zombies and Where to Find Them
-  4/2021 EARTH DAY Virtual Presentation - 📍 Orlando, Florida, USA
Real-life Zombies and Where to Find Them




TikTok:

-  6/2021-2022 @TheZombieFungusForay ([link](#))


Other Outreach:


Pint of Science Festival - 📍 Utrecht, NL  05/2024

A Fungus and its Zombie Ant: A very real example of zombie-making parasites ([link](#))


Interview with a student from Russelberg Highschool - 📍 Tessenderlo, BE  04/2024

What is *Ophiocordyceps*, how does it infect ants, and is it similar to the *Cordyceps* in "The Last of Us"

Adaptation of our work for Science Journal for Kids and Teens ([link](#)) - 📍 Texas, USA  11/2023

Museum of Natural Sciences: International Microorganism Day - 📍 Brussels, BE  10/2023

In collaboration with the Young Belgian Society for Microbiology

Guest on Val 202's Frekvenca X show about "The Last of Us" ([link](#)) - 📍 SI  03/2023

Guest on NPR's The Colin McEnroe Show: "The Last of Us" (link) - ♡ Connecticut, USA	📅02/2023
Correspondent for Inverse: Science behind "The Last of Us" (link) - ♡ New York, USA	📅01/2023
Correspondent for Newsweek: Science behind "The Last of Us" (link) - ♡ New York, USA	📅01/2023
Orlando MegaCon Presenter (link) - ♡ Florida, USA	📅05/2022
Examining the Science Behind Zombie Movies	
Orlando Taste of Science - Science Festival, Scientists Inc. (link) - ♡ Florida, USA	📅04/2022
Real-life Zombies and Where to Find Them	
 TikTok: @aBitofBiology (link)	📅12/2021-082022
Orlando MegaCon Panelist - ♡ Florida, USA	📅08/2021
The Last Damn Zombie Science Panel You'll Ever Need!	
Interview a Biologist - ♡ Vermont, USA	📅10/2021
with Stacey Grimaldo Garcia of Middlebury College	
Skype a Scientist Live: Orlando - ♡ Florida, USA	📅02/2021
Spooky Science: Real Life Zombies and Where to Find Them (link)	
Beer with a Scientist: Monnik Beer Company - ♡ Kentucky, USA	📅03/2020
Our Friends the Fungi: The many types of fungi and the history of how we've used them	
Skype a Scientist	📅04/2019-10/2021
10/2020 Creekside Middle School: Sixth Grade Class – Bentonville, Arizona, USA	
5/2019 Marie Curie Institute: Fourth and Fifth Grade Class – Amsterdam, New York, USA	
5/2019 Corry Area High School: Ninth Grade Class – Corry, Pennsylvania, USA	
4/2019 Newark Central: Second Grade Class – Newark, New York, USA	
4/2019 E.K. Powe Elementary School: First Grade Class – Durham, North Carolina, USA	
4/2019 Annunciation Catholic School: Seventh Grade Class – Denver, Colorado, USA	
Guest Speaker at University of Louisville: Meet the Professor - ♡ Kentucky, USA	📅04/2019
Science Information Literacy & Oral Communication	
Guest Speaker at Lexington Christian Academy High School - ♡ Kentucky, USA	📅12/2018
The history of genetic modification of our food	
Guest Speaker at Lexington Christian Academy High School - ♡ Kentucky, USA	📅02/2016
What is a GMO?	
ExBEERiment: Socialize with Science at Louisville Science Center - ♡ Kentucky, USA	📅09/2016
The science of brewing beer	

CONFERENCE PRESENTATIONS

Conference Chair:

Gordon Research Seminar: Cellular Molecular Fungal Biology - ♡ New Hampshire, USA	📅07/2022-06/2024
Chair with co-chair Andrew Swafford	

Oral Presentations:

Gordon Research Conference: Cellular Molecular Fungal Biology - ♡ New Hampshire, USA	📅06/2024
CEREBRALfungi: Characterizing the neuronal effects of behavioral-modifying protein from the zombie fungi, <i>Ophiocordyceps</i> , using <i>C. elegans</i>	
8 th Conference on Physiology of Yeasts and Filamentous Fungi - ♡ Cork, IR	📅06/2023
Using Yeast to heterologously study the behavior-modifying effects of recalcitrant zombie fungi biomolecules	
Gordon Research Seminar: Cellular Molecular Fungal Biology - ♡ New Hampshire, USA	📅06/2022
28 Minutes Later: Analyzing the role of aflatoxin-like effectors in the behavioral manipulation of Zombie Ants	
Animal Behavior Society Online Conference - ♡ Online	📅08/2021
28 Minutes Later: The role of secreted effectors in the behavioral manipulation of zombie ants	
Ruhr-Universität Bochum <i>Microbotryum</i> Symposium - ♡ Bochum, DE	📅07/2019
An Unorthodox CRISPR Approach for an Unorthodox Fungus	
Asilomar Fungal Genetics Conference: Smut Convergence - ♡ California, USA	📅03/2019
Cause and Effectors: Secretome comparison of members from the anther-smut pathogen species complex, <i>Microbotryum violaceum</i>	
Gordon Research Seminar Cellular Molecular Fungal Biology - ♡ New Hampshire, USA	📅06/2018
The First Cut is the Deepest: Implementing CRISPR Cas9 as a transformation system for site specific gene disruptions in the fungal pathogen species complex <i>Microbotryum violaceum</i>	

Kentucky Academy of Science Conference - ♡ Kentucky, USA	📅 11/2016
Identifying unique small-secreted proteins in divergent species of the fungal pathogen complex <i>Microbotryum violaceum</i>	
Ruhr-Universität Bochum <i>Microbotryum</i> Symposium - ♡ Bochum, DE	📅 06/2016
Analyzing the role of protein-protein interactions in host/pathogen co-evolution	
Poster Presentations:	
European Worm Meeting - ♡ Utrecht, NL	📅 07/2024
Zombie Worms: Using <i>C. elegans</i> to characterize the behavior-modifying effects of an <i>Ophiocordyceps</i> zombie fungus protein	
Gordon Research Conference: Cellular Molecular Fungal Biology - ♡ New Hampshire, USA	📅 06/2024
CEREBRALfungi: Characterizing the neuronal effects of behavioral-modifying protein from the zombie fungi, <i>Ophiocordyceps</i> , using <i>C. elegans</i>	
European Conference on Fungal Genetics - ♡ Innsbruck, AT	📅 03/2023
28 Minutes Later: A proof of concept for testing behavior-manipulating compounds from zombie-making fungi	
Gordon Research Conference Cellular Molecular Fungal Biology - ♡ New Hampshire, USA	📅 06/2022
28 Minutes Later: Analyzing the role of aflatoxin-like effectors in the behavioral manipulation of Zombie Ants	
National Association of Biology Teachers: Professional Conference - ♡ Gorgia, USA	📅 11/2021
It's About Time: Exploring the dose-dependent effects of active learning on student social personality in an upper-level biology course	
National Association of Biology Teachers: Professional Conference - ♡ Gorgia, USA	📅 11/2021
The Zombie Fungus Foray: Community science outreach using iNaturalist to discover Zombie Ants	
National Association of Biology Teachers: Professional Conference - ♡ Illinois, USA	📅 11/2019
An Introvert's Perspective: Analyzing the impact of active learning on multiple levels of class social personalities in an upper-level biology course	
Asilomar Fungal Genetics Conference - ♡ California, USA	📅 03/2019
Cause and Effectors: Secretome comparison of members from the anther-smut pathogen species complex, <i>Microbotryum violaceum</i>	
Gordon Research Conference Cellular Molecular Fungal Biology - ♡ New Hampshire, USA	📅 06/2018
The First Cut is the Deepest: Implementing CRISPR Cas9 as a transformation system for site specific gene disruptions in the fungal pathogen species complex <i>Microbotryum violaceum</i>	

PROFESSIONAL PRESENTATIONS

Universiteit Utrecht Faculty Pedagogical Journal Club - ♡ Utrecht, NL	📅 02/2024
The dose-dependent effect of group-based active learning on students with different social personalities.	
Arkansas State University Queretaro STEM Week Invited Speaker - ♡ Queretaro, MX	📅 02/2023
Real-life Zombies and Where to Find Them: How fungi manipulate animal behavior!	
Utrecht U. Molecular Life Sciences Honors Program Invited Speaker - ♡ Utrecht, NL	📅 10/2022
Observations from the Crypt: The science behind zombie ants and their fungal parasites	
University of Oxford Invited Speaker - ♡ Oxford, UK	📅 09/2022
28 Minutes Later: The role of secreted effectors in the behavioral manipulation of zombie ants	
University of Louisville Invited Speaker Series - ♡ Kentucky, USA	📅 09/2020
Comparative secretomics and functional analysis of effectors utilized by the <i>Microbotryum</i> genus of anther-smut fungal pathogens, and their role in host-specificity	
University of Central Florida Invited Speaker Series - ♡ Florida, USA	📅 09/2020
Comparative secretomics and functional analysis of effectors utilized by the <i>Microbotryum</i> genus of anther-smut fungal pathogens, and their role in host-specificity	
Georgetown College Invited Speaker Seminar - ♡ Kentucky, USA	📅 11/2019
Cause and Effectors: How rapidly evolving effectors lead to host-specificity between <i>Microbotryum</i> and Caryophyllaceae	
Belknap Academic Building Anniversary Event - ♡ Kentucky, USA	📅 08/2019
An Introvert's Perspective: Analyzing the impact of active learning on multiple levels of class social personalities in an upper-level biology course	
Ruhr-Universität Bochum Invited Speaker - ♡ Bochum, DE	📅 06/2019
The History and Future of CRISPR Cas9	
Ruhr-Universität Bochum Invited Speaker - ♡ Bochum, DE	📅 06/2018
The First Cut is the Deepest: CRISPR Cas9 and how to get started	
Georgetown College Invited Speaker Seminar - ♡ Kentucky, USA	📅 10/2016
Here and Back Again: A GCPALS tale	
Université du Paris Sud Chateaubriand Fellowship Invited Speaker - ♡ Orsay, FR	📅 05/2016
Identification of Small-Secreted Proteins in the <i>Microbotryum</i> genus	

PROFESSIONAL DEVELOPMENT & SERVICE

Training/Workshops/Conferences:

Teaching and Learning Inspiration Days Conference - ♡ Utrecht, NL 📅 01/2024-02/2024

Feb 1st Using open educational resources

Jan 30th AR/VR: Experience the future of learning

Jan 30th Evidence-informed educational change

Jan 29th Education with societal partners in practice

Parametric Modeling for 3D Printing w/ Fusion – Basics Workshop - ♡ Utrecht, NL 📅 01/2024

Fused Deposition Modeling for 3D Printing – Basics Workshop - ♡ Utrecht, NL 📅 12/2023

2023 Royal Dutch Association for Microbiology Mycology Conference - ♡ Utrecht, NL 📅 11/2023

Public Engagement Academy for Postdocs - ♡ Utrecht, NL 📅 11/2023-11/2024

Founding member of an academy to teach and facilitate outreach by postdoctoral scholars including the following modules:

Aug 6th Dialogue training

May 14th Media training Popular science writing

Apr 2nd Engaging children

Feb 20th Public communication skills

Jan 9th Impact measurements

Wetenschnapps: Public Engagement - recognition and rewards in practice - ♡ Utrecht, NL 📅 11/2023

Universiteit Utrecht Professional Media Communication Training - ♡ Utrecht, NL 📅 11/2023

2022 Royal Dutch Association for Microbiology Mycology Conference - ♡ Utrecht, NL 📅 11/2022

NSF Improving Undergraduate STEM Education Program - ♡ Florida, USA 📅 03/2022-05/2022

Mar-May The Inclusive STEM Teaching Project

Collaborative Institutional Training Initiative - ♡ Florida, USA 📅 01/2021-03/2021

Mar 3rd Human Subjects Research – Group 2

Feb 24th Social/Behavioral Research Investigators and Key Personnel

Feb 10th Communicating Research Findings

Jan 13th Conflict of Interest

NIH Grant Writing Virtual Conference - ♡ Florida, USA 📅 05/2020

Training with Remote Teaching Options for COVID-19 - ♡ Kentucky, USA 📅 02/2020

Research Academy RUHR: Open Access Science Workshop - ♡ Bochum, DE 📅 08/2019

Faculty Search Committee: Diversity Training - ♡ Kentucky, USA 📅 02/2019

Professional Societies/Organizations:

Animal Behavior Society 📅 08/2021-current

American Society for Microbiology 📅 08/2021-2023

National Science Teaching Association 📅 11/2019-2023

National Association of Biology Teachers 📅 11/2019-2023

2021-2022 Justices, Equity, Diversity, and Inclusion Committee

2019-2020 Community Science Committee

Genetics Society of America 📅 03/2018-current

2022 Science Communication Virtual Networking Moderator for the 31st FGC

Kentucky Academy of Science 📅 11/2014-7/2020

University Services:

Selective Life Sciences Extra Curricular Track selection committee - ♡ Utrecht, NL 📅 11/2023-1/2024

2022 University of Louisville Biology Alumni Advice Panel - ♡ Kentucky, USA 📅 11/2022

2021 University of Louisville Biology Alumni Advice Panel - ♡ Kentucky, USA 📅 08/2021

Chair of the University of Central Florida Invited Speaker Series - ♡ Florida, USA 📅 08/2021-04/2022

Diversity, Equity, and Inclusion: Classroom Isolation Subcommittee - ♡ Florida, USA 📅 02/2021

Biology Undergraduate Student Association: Graduate Student Panel - ♡ Kentucky, USA 📅 10/2019

Biology Faculty Search Committee: Graduate Student Representative - ♡ Kentucky, USA 📅 02/2019

Student Grievance & Discipline Committee - ♡ Kentucky, USA 📅 08/2016-4/2017

2016-2017 Natural Science Division Representative

Graduate Network of Arts & Sciences - ♡ Kentucky, USA 📅 08/2016-4/2018

2017-2018 Vice President

2017 Natural Science Rep. for Grant Review Committee

2016-2018 Department of Biology Representative

Biology Graduate Student Association - ♡ University of Louisville, USA

📅 08/2015-7/2020

2019-2020	President
2018-2019	Graduate Student Rep.
2016-2017	Social Chair
2016 & 2020	Webmaster
2016-2020	Member

Community Services:

Florida Undergraduate Research Conference Abstract Reviewer - ♡ Florida, USA	📅 06/2021
UCF Student Scholar Symposium for Undergraduate Research Judge - ♡ Florida, USA	📅 03/2021
DuPont Manual Regional Science Fair Judge - ♡ Kentucky, USA	📅 06/2019
DuPont Manual Regional Science Fair Judge - ♡ Kentucky, USA	📅 06/2018
Louisville Regional Science & Engineering Fair Judge - ♡ Kentucky, USA	📅 03/2018

Peer Review Services:

Genome Biology and Evolution	1 primary research article	📅 2024
Molecular Ecology	2 primary research articles	📅 2022-2023
CourseSource	3 primary research articles	📅 2020-2024
	1 conference publication	
Society for Molecular Plant-Microbe Interactions	1 primary research article	📅 2020

HONORS & AWARDS

European Worm Meeting 2024 – 2 nd Place for Outstanding Poster (link) - ♡ Utrecht, NL	📅 03/2023
UU News: MSCA Fellowships for five Utrecht researchers (link) - ♡ Utrecht, NL	📅 03/2023
UCF Today: Stories of Impact + Innovation (link) - ♡ Florida, USA	📅 02/2021
Graduate Dean's Citation (link) - ♡ Kentucky, USA	📅 12/2020
Graduate Student Publication Award - ♡ Kentucky, USA	📅 04/2020
Graduate School of Arts and Sciences Student Spotlight (link) - ♡ Kentucky, USA	📅 03/2020
Introductory Biology Lab Development Award - ♡ Kentucky, USA	📅 07/2019
Graduate Student Research Presentation Award - ♡ Kentucky, USA	📅 04/2019
Biology Department Service Award - ♡ Kentucky, USA	📅 04/2019
College of Arts and Science Student Profile (link) - ♡ Kentucky, USA	📅 02/2016

REFERENCES

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