


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


Contact Information:

 Havenstraat 79b,
1211 KH Hilversum,
NL

 +31 06 20562582

 w.c.beckerson@uu.nl

Research:

 0000-0001-7132-7578

 WCBeckerson/

Socials:

 @WCBeckerson

 @WilliamMycete

 @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
University of Louisville -  Louisville, Kentucky, USA

Master of Science in Biology  08/2015-05/2017
University of Louisville -  Louisville, Kentucky, USA

Bachelor of Science in Biology / Minor: Business Management  08/2009-12/2013
Georgetown College -  Georgetown, Kentucky, USA

RESEARCH EXPERIENCE

Postdoctoral Research:

ERC: [Marie Skłodowska-Curie Action Postdoctoral Fellowship Awardee](#)

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](#)

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](#)

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 social personalities.

PUBLICATIONS

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 aflatrem-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. - **In Press**
ISBN: 978032885324
- 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. - **In Press**
ISBN: 978032885324
- 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 (€203,464) 📅08/2022

Grant agreement ID: I01108298 (DOI: I0.3030/I01108298)

NSF Postdoctoral Research Fellowship in Biology - ♀USA (\$138,000) 📅06/2021

Award number: 2109435

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: University of Central Florida (\$55,000):

Preeminent Postdoctoral Program - ♀USA (\$55,000) 📅08/2020

Co-written with: Dr. Charissa de Bekker

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 (\$1,311) 📅04/2016

Co-written with: Venkata S. Kuppireddy

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 (\$16,480) 📅04/2024

Co-written with: Andrew Swafford & Anna Selmecki Award number: 242438I

NSF Track I International Research Experience for Students - ♀USA (\$296,889) 📅08/2018

Co-written with: (PI) Dr. Michael H. Perlin Award number: I82485I

TEACHING EXPERIENCE

Teaching Qualifications:

In addition to my experience as an instructor, I have also received formal pedagogical training in the United States of America and the European Union.

Universiteit Utrecht Teaching Qualification Program (UTQ) - ♀Utrecht University, NL 📅02/2024-10/2024

Official certification will be available at: <https://www.williambeckersonphd.com/copy-of-research>

Formal training to teach at the university level in the Netherlands covering the following modules:

The impact of online learning and AI on teaching methodologies, Evidence-informed course design, Formulating learning objectives, Reflective teaching practices, and Peer-review strategies

Preparing Tomorrow's Faculty Program - ♀University of Central Florida, USA 📅08/2021-12/2021

Official certification can be found at: <https://www.williambeckersonphd.com/copy-of-research>

A course on teaching at the university level for UCF Graduate Students and postdocs including the following modules:

Student learning and motivation, Integrated course design, Teaching pedagogies, Assessment and feedback, Course climate, Career development

Teaching Experience:

MSCA Postdoctoral Research Fellow - ♡ Universiteit Utrecht, NL 08/2023-07/2025

Invited Group Lecturer for Developmental Biology - ♡ Wageningen University, NL 08/2018-12/2018

EZO30306: Developmental Biology of Animals

1 sections 120 min 16 students One class Spring 2024

MBLS-107: Functional Biology

2 sections 120 min/class 5 & 5 students Once/month Spring 2024

B-MEBIFB19: Fungal Biology

1 section 105 min/class 13 students Twice/week Autumn 2023

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:

<https://www.nsf.gov/pubs/2021/nsf21081/nsf21081.pdf>

Adjunct Faculty of Record - ♡ Georgetown College, USA

08/2019-04/2020

BIO 100: Introductory Biology for Non-Majors (100% Remote Learning)

1 section 75 min/class 24 students Four/week Summer 2020

BIO 111: Introductory Biology for Majors

1 section 75 min/class 24 students Twice/week Autumn 2019

BIOL 111: Introductory Biology Lab

1 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

1 section 75 min/class 64 students Eight/Semester Autumn 2019

BIO 357: General Microbiology

1 section 75 min/class 49 students Four/Semester Autumn 2018

BIO 357: General Microbiology

1 section 75 min/class 43 students Four/Semester Spring 2018

BIO 357: General Microbiology

1 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

1 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

1 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

1 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 related to their university curriculum.

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:

8th 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 aflatrem-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 *Microbotryum* 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, *Microbotryum violaceum*

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 *Microbotryum violaceum*

Kentucky Academy of Science Conference - ♀ Kentucky, USA 📅11/2016
Identifying unique small-secreted proteins in divergent species of the fungal pathogen complex *Microbotryum violaceum*

Ruhr-Universität Bochum *Microbotryum* Symposium - ♀ Bochum, DE 📅06/2016
Analyzing the role of protein-protein interactions in host/pathogen co-evolution

Poster Presentations:

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 aflatrem-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
Jan 29 th	Education with societal partners in practice
Jan 30 th	AR/VR: Experience the future of learning
	Evidence-informed educational change
Feb 1 st	Using open educational resources
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
 “Fungal anarchy – do fungi obey the rules of the game?”

Public Engagement Academy for Postdocs - ♡ Utrecht, NL 📅 11/2023-07/2024
 Founding member of an academy to teach and facilitate outreach by postdoctoral scholars including the following modules:

Jan 9 th	Impact measurements
2024	Public communication skills
2024	Engaging children
2024	Media training Popular science writing,
2024	Dialogue training

Wetenschapps: 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
 “We Will Meet Again: Fungi and the world around them”

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

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

2021	Human Subjects Research – Group 2
	Social/Behavioral Research Investigators and Key Personnel
2021	Communicating Research Findings
2021	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 📅 08/2021-2023
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
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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

UU News: MSCA Fellowships for five Universiteit Utrecht researchers - ♡ Utrecht, NL	📅03/2023
https://www.uu.nl/en/news/marie-skłodowska-curie-actions-fellowships-for-five-utrecht-university-researchers	
UCF Today: Stories of Impact + Innovation - ♡ Florida, USA	📅02/2021
https://www.ucf.edu/news/ucf-doctoral-scholar-named-national-science-foundation-biology-fellow/	
Graduate Dean's Citation - ♡ Kentucky, USA	📅12/2020
Graduate Student Publication Award - ♡ Kentucky, USA	📅04/2020
Graduate School of Arts and Sciences Student Spotlight - ♡ Kentucky, USA	📅03/2020
https://louisville.edu/graduate/student-spotlight/student-spotlight-february-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 - ♡ Kentucky, USA	📅02/2016
https://louisville.edu/artsandsciences/academics/graduate-education/student-profiles/beckerson	

OUTREACH

hyperlinks imbedded in the logos

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://wcbeckerson.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 <https://www.tiktok.com/@thezombiefungusforay?lang=en>

Other Outreach:

- Pint of Science Festival - 📍 Utrecht, NL** 📅 05/2024
 A Fungus and its Zombie Ant: A very real example of zombie-making parasites
<https://pintofscience.nl>
- 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 publications for Science Journal for Kids and Teens - 📍 Texas, USA** 📅 11/2023
<https://www.sciencejournalforkids.org/articles/how-do-some-fungi-turn-insects-into-zombies/>
- 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” - 📍 SI** 📅 03/2023
<https://val202.rtvslo.si/podkast/frekvenca-x/31057643/1749+I558>
- Guest on NPR’s The Colin McEnroe Show about “The Last of Us” - 📍 Connecticut, USA** 📅 02/2023
<https://www.ctpublic.org/show/the-colin-mcenroe-show/2023-02-06/the-fungus-among-us>
- Correspondent for Inverse on the science behind “The Last of Us” - 📍 New York, USA** 📅 01/2023
<https://www.inverse.com/science/last-of-us-hbo-zombie-science>
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- Orlando MegaCon Presenter - 📍 Florida, USA** 📅 05/2022
 Examining the Science Behind Zombie Movies
- Orlando Taste of Science - Science Festival, Scientists Inc. - 📍 Florida, USA** 📅 04/2022
 Real-life Zombies and Where to Find Them
-  **TikTok:** 📅 12/2021-082022
 @aBitofBiology <https://www.tiktok.com/@abitofbiology>
- 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	
https://www.youtube.com/watch?v=7WGJZG4DjjQ	
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	Creskide 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 (AKA the Sea Crew) – 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	

REFERENCES

Dr. Sander van den Heuvel	Universiteit Utrecht, NL/PI	s.j.l.vandenheuvel@uu.nl
Dr. Charissa de Bekker	University of Central Florida, USA/ PI	A.m.debekker@uu.nl
Dr. Michael Perlin	University of Louisville, USA/ PI	Michael.perlin@louisville.edu
Dr. Tatiana Giraud	Université Paris-Sud, FR/ Collaborator	Tatiana.giraud@u-psud.fr
Dr. Dominik Begerow	Ruhr-Universität Bochum, DE/ Collaborator	Dominik.begrow@rub.de
Dr. Scott Gold	USDA Georgia, USA/ Committee Member	Scott.gold@ARS.USDA.Gov