

Danny Haelewaters

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I. EDUCATION

- 2012-2018 PhD in Organismic and Evolutionary Biology, Harvard University, Faculty of Arts and Sciences, Cambridge, Massachusetts, USA
Research advisor – Donald H. Pfister
- 2007-Feb 2011 Master of Science in biology, Ghent University, Faculty of Sciences, Ghent, Belgium
Research advisors – Annemieke Verbeken, André De Kesel
- 2006-2009 Bachelor in Biology, Ghent University, Faculty of Sciences, Ghent, Belgium
Research advisor – Annemieke Verbeken
- 2001-2004 Bachelor in Veterinary Sciences, University of Antwerp, Antwerp, Belgium

II. PROFESSIONAL EXPERIENCE (international experiences **in bold**)

- Oct 2023-present Research Foundation–Flanders Senior Postdoctoral Fellow, Ghent University, Department of Biology, Research Group Mycology, Ghent, Belgium
- Oct 2022-Sep 2023 **Postdoctoral Associate in Fungal Systematics, University of Colorado Boulder, Department of Ecology and Evolutionary Biology, Boulder, Colorado, USA**
Research advisor – C. Alisha Quandt
- Sep 2022-present Visiting Professor, Ghent University, Department of Biology, Ghent, Belgium
- Sep 2022-present **Associate Researcher, Universidad Autónoma de Chiriquí, Facultad de Ciencias Naturales y Exactas, Centro de Investigaciones Micológicas (CIMi), David, Panama**
- Sep 2021-present **Research scientist, Biology Centre of the Czech Academy of Sciences, Institute of Entomology, České Budějovice, Czech Republic**
- Nov 2020-Sep 2022 Research Foundation–Flanders Junior Postdoctoral Fellow, Ghent University, Department of Biology, Research Group Mycology, Ghent, Belgium
- Apr 2019-present **Researcher, University of South Bohemia, Faculty of Science, Department of Zoology, České Budějovice, Czech Republic**
- Nov 2018-Nov 2020 **Postdoctoral Research Assistant, Purdue University, Department of Botany and Plant Pathology, West Lafayette, Indiana, USA**
Research advisor – M. Catherine Aime

Aug 2018- **Postdoctoral Researcher, University of South Bohemia, Faculty of Science,**
 Mar 2019 **Department of Zoology, České Budějovice, Czech Republic**
Research advisor – Oldřich Nedvěd

2017-2018 **Principal Investigator, Boston Harbor Islands All-Taxa Biodiversity**
Inventory of Fungi, National Park Service, Boston Harbor Now, Boston,
Massachusetts, USA

Summer 2017 **Short-Term Research Fellow, Smithsonian Tropical Research Institute,**
Gamboa, Panama

Spring 2009 **Intern, Netherlands Forensic Institute, Den Haag, The Netherlands**
Research advisors – Irene Kuiper, Annemieke Verbeken

III. EXTERNAL FUNDING

Agency	Biodiversa+ and Technology Agency of the Czech Republic (TAČR)
Title	FunDive – Monitoring and mapping fungal diversity for nature conservation
Duration	Three years (2024–2026)
Amount	€ 3,688,837 (share to Haelewaters: € 28,680)
Role	Project Partner (PI Jacob Heilmann-Clausen, University of Copenhagen)
Agency	Research Foundation – Flanders
Title	FunBat – Tritrophic interactions among FUNgi, flies, and BATs: systematics, taxonomy, and community ecology
Duration	Three years (2023–2026)
Amount	€238,268 (including 1.0 FTE stipend for Haelewaters)
Role	PI
Agency	Norwegian Taxonomy Initiative
Title	iNoLa – Inventory of the Norwegian species of thallus-forming Laboulbeniales associated with beetles, with particular focus on the superfamily Staphylinoidea
Duration	Four years (2023–2026)
Amount	€330,000 (share to Haelewaters: €88,000)
Role	Project Partner (PI Vladimir Gusarov, University of Oslo)
Agency	US National Science Foundation—Poorly Sampled and Unknown Taxa
Title	PurSUiT: Species diversity and evolution of parasitic microfungi
Duration	Three years (2021–2024)
Amount	\$1,499,207 (share to Haelewaters: \$25,000)
Role	Co-PI (PI M. Catherine Aime, Purdue University)
Agency	Czech Science Foundation
Title	Do entomopathogenic fungi drive arthropod diversity gradients via host negative density dependence?
Duration	Three years (2021–2023)
Amount	€376,814 (share to Haelewaters: €11,864)
Role	20% researcher (PI Tom Fayle, Biology Centre, Czech Academy of Sciences)
Agency	US National Science Foundation—Poorly Sampled and Unknown Taxa
Title	In PurSUiT of a phylogenetic, genomic, and functional framework for the environmentally diverse and poorly characterized fungal class, Leotiomycetes
Duration	Four years (2020–2024)

Amount	\$945,605 (share to Haelewaters: \$213,819)
Role	Co-PI (PI C. Alisha Quandt, Colorado State University)
Agency	Research Foundation – Flanders
Title	Laboulbeniales hyperparasitic fungi of bat flies: host specificity and patterns of speciation
Duration	Two years (2020–2022)
Amount	€128,000 (including 1.0 FTE stipend for Haelewaters)
Role	PI

IV. FELLOWSHIPS, AWARDS, and GRANTS

2023	European Union’s Horizon 2020 project INTERACT, grant no. 871120 (€4,000)
2022-2024	Postdoctoral Fellowship Podpory Perspektivních Lidských Zdrojů (PPLZ) programme, Czech Academy of Sciences (offer declined)
2022	Forest Fungal Ecology Postdoctoral Research Award, Mycological Society of America (\$2,500)
2020	Purdue University Libraries Open Access Publishing Fund award (\$1,870)
2020	Systematics Research Fund grant, Linnean Society of London and Systematics Association (£1,323)
2020	Leopold III Fund grant no. LF/JVG/vm/20.15 (€1,250)
2019	Purdue University Postdoc Travel Grant (\$500)
2019	Senior Research Grant, Indiana Academy of Science (\$3,000)
2019	Winona Welch Award for Botanical Biodiversity Research, Indiana Academy of Science (\$2,461)
2019	SYNTHESYS+ award no. BE-TAF-151, European Union (€1,879)
2018	Royal T. Moore Conference Travel Award, Harvard University Department of Organismic and Evolutionary Biology (\$1,000)
2018	Harvard Open-Access Publishing Equity Fund award (\$2,474)
2018	Forest Fungal Ecology Postdoctoral Research Award, Mycological Society of America (\$1,250)
2018	Harry Morton Fitzpatrick Mentor Student Travel Award, Mycological Society of America (\$1,000)
2017	Robert W. Lichtwardt Student Research Award, Mycological Society of America (\$1,000)
2017	Les Mehrhoff Botanical Research Fund, New England Botanical Club (\$2,034)
2017	Graduate Fellowship, Friends of the Farlow (\$4,000)
2016	Conference Travel Grant, David Rockefeller Center for Latin American Studies (\$300)
2016	Short-Term Research Fellowship, Smithsonian Tropical Research Institute (\$2,000)
2016	Graduate Research Fellowship, Mycological Society of America (\$2,000)
2015-2017	Research Travel Grants, David Rockefeller Center for Latin American Studies (\$6,700)
2015-2016	Simmons Awards, Harvard Center for Biological Imaging (\$2,070)
2015	PhD Scholarship, Georgia Entomological Society (\$500)
2015	Graduate Student Research Fellowship, Torrey Botanical Society (\$1,000)
2015	Richard P. Korf Mentor Student Travel Award, Mycological Society of America (\$500)
2015	Graduate Student Council Conference Grant, Harvard University (\$750)
2014	Bayard Long Award for Botanical Research, Philadelphia Botanical Club (\$1,000)
2014	Fernald Fund Award, Harvard University Herbaria (\$5,000)

2013-2014	Theodore Roosevelt Memorial Fund Research Award, American Museum of Natural History, New York (\$2,500)
2012-2013	Collection Study Grant, American Museum of Natural History, New York (\$1,354)
2012-2018	Graduate Student Fellowship, Harvard University Graduate School of Arts and Sciences (\$73,290/year)
2012-2013	Honorary Award, Belgian American Educational Foundation
2012	Fernand Lazard Foundation Fellowship (€10,000)
2011-2012	Uyttenboogaart-Eliassen Foundation award (€500)

V. PEER-REVIEWED ARTICLES [^{*}mentee author, [#]co-first author]

Peer-reviewed papers (since 2012): 115 published, 4 in press, 4 in review

Citations: 3,169 (Web of Science, 23 January 2024)

H-index: 25 (WoS)

Small selection shown here:

Haelewaters D, Quandt CA, Bartrop L, Cazabonne J, Crockatt ME, Cunha SP, De Lange R, Dominici L, Douglas B, Drechsler-Santos ER, Heilmann-Clausen J, Irga PJ, Jakob S, Lofgren L, Martin TE, Muchane MN, Stallman JK, Verbeken A, Walker AK, Gonçalves SC. The power of citizen science to advance fungal conservation. *Conservation letters* (in review).

*de Groot MD, *Christou M, *Pan JY, Adriaens T, Maes D, Martinou AF, Roy HE, Verbeken A, **Haelewaters D**. 2024. Beetlehangers.org: harmonizing host–parasite records of *Harmonia axyridis* and *Hesperomyces harmoniae*. *Arthropod-Plant Interactions* (in press).

Haelewaters D, Matthews TJ, Wayman JP, Cazabonne J, *Heyman F, Quandt CA, Martin TE. 2024. Biological knowledge shortfalls impede conservation efforts in poorly studied taxa—A case study of Laboulbeniomyces. *Journal of Biogeography* 51(1): 29-39.

*Van Caenegem W, *Blondelle A, *Dumolein I, *Santamaria B, Dick CW, Hiller T, Liu J, Quandt CA, Villarreal Saucedo RV, Verbeken A, **Haelewaters D**. 2023. Five new species of *Gloeandromyces* (Fungi, Laboulbeniales) from tropical American bat flies (Diptera, Streblidae), revealed by morphology and phylogenetic reconstruction. *Mycologia* 115(5): 714-737.

Haelewaters D, *Lubbers M, De Kesel A. 2022. The haustorium as a driving force for speciation in thallus-forming Laboulbeniomyces. *IMA Fungus* 13: 1.

Haelewaters D, Hofmann TA, Romero-Olivares AL. 2021. Ten simple rules for Global North researchers to stop perpetuating helicopter research in the Global South. *PLoS Computational Biology* 17(8): e1009277.

Perreau M, **Haelewaters D**, Tafforeau P. 2021. A parasitic coevolution since the Miocene revealed by propagation phase-contrast synchrotron X-ray microtomography and the study of natural history collections. *Scientific Reports* 11(1): 2672.

Haelewaters D, Blackwell M, Pfister DH. 2021. Laboulbeniomyces: Intimate fungal associates of arthropods. *Annual Review of Entomology* 66: 257-276.

VI. PROFESSIONAL SERVICE, INCLUDING EDITORIAL ACTIVITIES

Peer reviewer

Acta Mycologica, Agriculture, Agronomy, Annales Botanici Fennici, Applied Entomology and Zoology, Aquatic Insects, Asian Journal of Biology, Biharean Biologist, Biodiversity Data Journal (4×), Biological Invasions (5×), Biological Journal of the Linnean Society (2×), Biotechnology Journal International, BMC Ecology and Evolution, Botanica Serbica, Diversity, Ecological Entomology, Ecology and Evolution, Encyclopedia, Entomologische Berichten, Environmental Microbiology, European Journal of Entomology, Forests, Fungal Biology (4×), Fungal Diversity (2×), Fungal Ecology, Fungal Systematics and Evolution (2×), Genome Biology and Evolution, Heliyon, Horticulturae, Insects (6×), International Journal of

Biological Macromolecules, Journal of Animal Diversity, Journal of Bat Research & Conservation, Journal of Fungi (4×), Journal of Hymenoptera Research (2×), Journal of Insect Science, Journal of Invertebrate Pathology, Microbial Ecology, Mycologia (4×), MycoKeys (4×), Mycological Progress (4×), Mycotaxon (5×), NeoBiota, Nova Hedwigia (2×), Parasite (2×), Pathogens, Phytopathology, Phytotaxa, Plants, PLoS One (3×), PLoS Pathogens (2×), Redia, Scientific Reports, Sydowia (2×), Trends in Parasitology (2×), Water, Willdenowia

Editorial positions

2023-2024 Special Issue Editor, *Arthropod-Plant Interactions* (Special Issue: Ladybirds and Their Biotic Interactions)
2021-present Editorial Board member, Senior Editor (2023 onwards), *Mycological Progress*
2020-present Associate Editor, *IMA Fungus*
2020-present Member of Board of Editors, *Neotropical Naturalist*
2020-present Subject Editor, *Biodiversity Data Journal*
2020-2022 Topic Editor, *Frontiers in Conservation Science* and *Frontiers in Fungal Biology*
2020 Guest Editor, *Mycologia* 112(6) (Special Issue: Animal-Associated Fungi)
2019-present Subject Editor, *MycoKeys*
2019-2024 Editorial Board member, *Sydowia*
2018-2021 Special Issue Editor, *Northeastern Naturalist* 25(Special Issue 9) (Boston Harbor Islands National Recreation Area: Overview of Recent Research)
2018-2019 Editor, *IOBC-WPRS Bulletin* volumes 137, 145

Grant review panels

2023-2024 Botany and Zoology panel (P506), Czech Science Foundation, Czech Republic
2023 Living Earth panel (CE02), French National Research Agency, France
2022 Ecology and evolution panel, National Research, Development and Innovation Office, Hungary

University service

2023 Reviewer for PhD dissertation of František Sklenář, Faculty of Science, Charles University, Czech Republic
2023 Evaluator for thesis students Ada Coudenys, Aurélie Van Engeland, Department of Biology, Ghent University
2023 Voting member, Examination Board for the PhD of Hua Wu, Faculty of Bioscience Engineering, Ghent University
2022 Accessioning of permanent slide collection of microfungi at Herbarium Universitatis Gandavensis, Department of Biology, Ghent University
2022 Panelist, session “Boosting research activities through global funding for international collaboration”, Ghent University Event: External funding for research and education – maximizing untapped international potential
2022-present Member, Working Group Ethnic-Cultural Diversity and Inclusion in Flemish Universities, Flemish Interuniversity Council–Young Academy
2021-present Member, Diversity Team, Faculty of Sciences, Ghent University
2021-2022 Member, Study Program Committee, Department of Biology, Ghent University
2021 Member, Search Committee for PhD/teaching assistant position, Department of Biology, Ghent University
2016-2017 Member, Admissions Committee, *Programa de Maestría en Biología con Especialización en Biología Vegetal*, Herbario UCH, Universidad Autónoma de Chiriquí, Panama

Elected offices in professional societies

2022-2027 Member, Young Academy of Belgium

2014-2018 Councilor, New England Botanical Club
2012-2016 Communication Chair/Vice Chair/Chair/Past-Chair, Mycological Society of America Student Section

Other services to professional societies and organizations

2022-present Co-convenor, Working Group “Typification of older names”, International Commission on the Taxonomy of Fungi
2022 Panelist, webinar “Careers in Conservation”, Operation Wallacea
2019-present Member and Chair (2021-2023), Electronic Communication & Web Page Management Committee, Mycological Society of America
2018-present Member, Ladybird Specialist Group, International Union for Conservation of Nature (IUCN) Species Survival Commission
2018-2019 Member, Conservation Committee, Mycological Society of America
2016-2018 Member and Chair (2017-2018), Diversity and Inclusion Committee, Mycological Society of America
2015-2017 Student Representative, Conservation Committee, Mycological Society of America
2015-2016 Founding member, *ad-hoc* Diversity Committee, Mycological Society of America
2014-2018 Secretary, First Dutch School in Boston, Jamaica Plain, Massachusetts
2014-2018 Chair, Website & Social Media Committee, New England Botanical Club
2014-2017 Student Representative, Electronic Communication & Web Page Management Committee, Mycological Society of America
2014-2015 Student Representative, Program Committee, Mycological Society of America

VII. MEDIA APPEARANCES

Selected popular science articles

Haelewaters D. 2023. Taxonoom in zes stappen [in Dutch]. EOS Wetenschap 40(10): 16-19.
Haelewaters D, Meerburg F. 2023. Helikopterprofs moeten landen. EOS Wetenschap 40(10): 48-51.
Haelewaters D, Romero-Olivares A. 2019. In fieldwork, other humans pose as much risk to LGBTQIA+ people as the elements. *But there are steps allies can take to help*. Massive Science. Available from: <https://massivesci.com/notes/diversity-fieldwork-field-work/>.
Haelewaters D. 2019. Capturing bats to find fungi on flies. ReVista. Available from: <https://revista.drclas.harvard.edu/capturing-bats-to-find-fungi-on-flies/>.
Noordijk J, Haelewaters D, Boer P. 2016. Beschimmelde mieren [in Dutch]. Natuurbericht. Available from: <https://www.naturetoday.com/intl/nl/nature-reports/message/?msg=22595>.
Haelewaters D. 2013. *Hebeloma*, pioneer genus in forensic mycology. FUNGI Magazine 6(3): 47-48.
Haelewaters D. 2013. Er was eens ... een opwarmende aarde [in Dutch]. Scientias.nl. Available from: <https://scientias.nl/er-was-eens-een-opwarmende-aarde/>
Haelewaters D. 2012. *Exserohilum rostratum*, the killing fungus. FUNGI Magazine 5(5): 12-14.
Haelewaters D. 2012. Levend licht: nieuwe hypothese rond bioluminescentie [in Dutch]. EOS Wetenschap 29(10): 20-21.

Other media

2023: Feature in Ghent University online magazine Durf Denken, “Mieke en Danny speuren de wereld af naar zwammen”, <https://www.durfdenken.be/nl/onderzoek-en-maatschappij/mieke-en-danny-speuren-de-wereld-af-naar-zwammen>
2022: Science Café, “Fascinerende fungi - De verborgen wereld van zwammen en paddenstoelen”, <https://www.youtube.com/watch?v=Hl5NuTyZlbo&t=619s>

- 2021: Blog post for biodiversity research organization Operation Wallacea, “The art of taxonomy: how is a new species described?”, <https://www.opwall.com/article/how-is-a-new-species-described/>
- 2020: Press release on new species named after COVID-19 quarantine, “New species of fungus sticking out of beetles named after the COVID-19 quarantine”, <https://www.eurekalert.org/news-releases/609378>
- 2020: YouTube interview and blog post on Medium, “Forgotten Fungi”, Draw My Science series by Valentina Ferro, https://www.youtube.com/watch?v=vJTY_SC2FTA&t=4s, <https://medium.com/science-art/forgotten-fungi-interview-with-dr-danny-haelewaters-6d024fcd6b8d>
- 2018: Press release on a review paper about obligate multitrophic symbioses, “My host is my castle”, <https://www.eurekalert.org/news-releases/521352>

VIII. INVITED PRESENTATIONS

51 invited presentations since 2011. A selection is shown below.

- De ongebreidelde diversiteit aan fungi. *Invited guest speaker*, Dag van de Wetenschap, Universiteitsforum (UFO), Ghent, Belgium. 26 November 2023.
- Unexplored fungal diversity in unusual habitats. *Plenary speaker*, Mycology & Microbial Technology Session, 1st International Conference on Technological Research and Innovation, Faculty of Technology, Eastern University, Chenkaladi, Sri Lanka. 27 September 2023.
- Ten simple rules for Global North researchers to stop perpetuating helicopter research in the Global South. *Invited lecture*, interdisciplinary workshop “Access to Research Resources and Research Infrastructures: Current Tendencies and Future Implications for the Politics and Organization of Science”, Pufendorf Institute, Lund University, Sweden. 2 June 2023.
- Integrative taxonomy in a changing world. Department of Natural History, Norwegian University of Science and Technology, Trondheim, Norway. 24 April 2023.
- Quis custodiet ipsos custodiet? *Hesperomyces virescens*, a potential biocontrol agent against the invasive ladybird *Harmonia axyridis*. *Invited symposium talk*, XXVI International Congress of Entomology, Helsinki, Finland. 18 July 2022 (with M.D. de Groot).
- The future of collections-based research in systematic mycology. *Invited lecture*, Natural History Museum, University of Oslo, Norway. 10 November 2020.
- Understudied fungi in understudied habitats: Diversity, evolution, associations, and the role of collections. *Invited talk*, New York Botanical Garden, Bronx, New York. 6 January 2020.
- LGBT+ in STEM, a must-have conversation. *Invited symposium talk*, 11th International Mycological Congress, San Juan, Puerto Rico. 20 July 2018 (with A.L. Romero-Olivares).
- On the hunt for fungi on flies on bats: A summer of fieldwork in Panama. *Herbaria Seminar Series*, Harvard University Herbaria, Cambridge, Massachusetts. 26 September 2017.
- Fungal ectoparasite spreading throughout the world in the footsteps of its novel main host, the globally invasive harlequin ladybird *Harmonia axyridis*. *Invited symposium talk*, XXV International Congress of Entomology, Orlando, Florida. 30 September 2016.
- Introducción a los Laboulbeniales: hongos ectoparásitos estrictos de artrópodos. *Seminar as part of “Taller Internacional: Hongos asociados a insectos: Un aporte al conocimiento de la biodiversidad.”* Universidad Autónoma de Chiriquí, David, Panama. 26 July 2016.

IX. TEACHING ACTIVITIES

Courses taught

- 2022-2024 Lecturer in Biology (C003334: *Scientific Communication*).
- 2021-2024 Lecturer in Doctoral Schools Natural Sciences, (Bioscience) Engineering, and Life Sciences and Medicine (X000947: *Writing Academic Papers*).

- 2021-2024 Co-lecturer in Biology (C002777A: *Mycology: Basidiomycota*). Taught with Annemieke Verbeken.
- Fall 2016 Teaching Fellow in Organismic and Evolutionary Biology (OEB54: *Biology of the Fungi*). Taught with Donald H. Pfister. Recipient of Certificate of Distinction for Teaching Excellence.
- Spring 2016 Teaching Fellow in Organismic and Evolutionary Biology (OEB54: *Biology of the Fungi*). Taught with Donald H. Pfister.
- Fall 2015 Teaching Fellow in Organismic and Evolutionary Biology (OEB59: *Plants and Human Affairs*). Taught with Donald H. Pfister.
- Spring 2015 + Spring 2014 Teaching Fellow in Molecular and Cellular Biology (LS1b: *Genetics, Genomics, and Evolution*). Led three-hour laboratory sections with focus on in-class problem solving. Taught with Kevin Eggan, Hopi Hoekstra, Maryellen Ruvolo, Hopi Hoekstra, and Pardis Sabeti.

Workshops and short courses taught

- Summer 2023 *Taller: Microhongos Ectoparásitos Asociados con Insectos* as part of the XI Congreso Latinoamericano de Micología, 2-day workshop at Smithsonian Tropical Research Institute School House, Gamboa, 5-6 August 2023. Organizer and instructor. Panamanian partner: Rosa V. Villarreal Saucedo.
- Summer 2022 NSF-funded *Taller Internacional: Introducción a los Hongos Tropicales*: virtual symposium, 16 July 2022; followed by 2-day workshop at Smithsonian Tropical Research Institute School House, Gamboa, 1-2 August 2022. Organizer and instructor. Panamanian partners: Dr. Tina A. Hofmann and Dr. Luis Mejía.
- Summer 2017 Universidad Autónoma de Chiriquí, Herbario UCH, Panama: *DNA extraction techniques for Laboulbeniales fungi*, 1-day workshop, 12 August 2017. Co-instructor. Hosted by Dr. Tina A. Hofmann.
- Summer 2016 Universidad Autónoma de Chiriquí, Panama: *Taller Internacional: Hongos asociados a insectos: Un aporte al conocimiento de la biodiversidad*, 5-day workshop (lectures, field trips, and laboratory), 25-29 July 2016. Lecturer, co-instructor. Hosted by Dr. Juan Bernal-Vega and *M.Sc.* Rosa Villarreal.

Mentees advised

- Supervisor for 1 Research Assistant (0.5 FTE) since 2023
- Supervisor for 2 postdoctoral researchers since 2022
- (Co-)supervisor for 8 PhD students since 2019
- (Co-)supervisor for 15 Master students since 2018
- Supervisor for 26 undergraduate students since 2013



Updated January 2024