James I. Watling
John Carroll University
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http://jamesiwatling.wordpress.com

Education

2005 Ph.D., Biological Sciences. Florida International University. *Distribution and ecology of amphibians and reptiles in a fragmented landscape, Bolivia*
2000 M.S., Biological Sciences. Florida International University. *Reproductive patterns among the leaf litter anurans of La Selva, Costa Rica*
1999 OTS 99-3, Tropical Biology: An Ecological Approach. Organization for Tropical Studies, Costa Rica
1996 B.A., Environmental Science. Boston University
1995 Studies in Tropical Ecology. Boston University/Universidad San Francisco de Quito, Ecuador

Professional Appointments

Since 2019 Associate Professor, John Carroll University
2020 Fulbright Specialist, Pontificia Universidad Javeriana (Bogotá, Colombia)
2015-2019 Assistant Professor, John Carroll University
2011-2014 Research Assistant Professor, University of Florida
2010 Post-doctoral Researcher, University of Florida
2008-2010 Post-doctoral Researcher, Washington University in St. Louis
2007-2008 Suriname Site Scientist, Tropical Ecology Assessment and Monitoring (TEAM) Network, Conservation International
2005-2007 Post-doctoral Researcher, Florida International University

Teaching and Mentoring

L indicates classes with a lab section in addition to lecture

Lecture & lab courses

John Carroll University. AR 125. **Entering Research** (one credit, two sections since 2018)
John Carroll University. BL 159. **Principles of Biology III** (three credits, seven sections since 2015)
John Carroll University. BL 222. **General Ecology** (three credits, three sections since 2016)
John Carroll University. BL 417/517/L. **Introduction to GIS** (four credits, four sections since 2015)
John Carroll University. BL 419. **Conservation Biology** (three credits, two sections since 2016)
John Carroll University. BL 598. **Master's thesis** (one credit, one section since 2019)
John Carroll University. PH 115/L. **Environmental Earth Science** (four credits, six sections since 2015)
John Carroll University. PH 206. **Earth Systems Science** (three credits, three sections since 2015)
Miami Dade College. BSC 1005. **General Education Biology** (three credits, 40 students, undergraduate) Fall 2013
University of Florida. SUR 6905. **Special Problems in Geomatics** (three credits, one student, graduate) Spring 2012

Field courses, summer programs & workshops

Since 2018 Summer Bridge Program, John Carroll University. Developed and instructed a two-week program for incoming first-year STEM students

2016 JMIH R workshop, New Orleans. Co-Instructor, One-day workshop for attendees of the Joint Meeting of Ichthyology and Herpetology

2012 Museo de Historia Natural Noel Kempff Mercado, Bolivia. Instructor. Species Distribution Modeling Workshop. Two-day workshop for undergraduate students

2008 Organization for Tropical Studies, Costa Rica. Resource Person. Neotropical Herpetology, Graduate Specialty Course

Postdoc Advisor

2012-2014 Mathieu Basille, University of Florida [currently Assistant Professor, UF]

Graduate Advisor

Since 2020 Antoinette Esposito, MS program, John Carroll University

Since 2020 Noah Van Ee, MS program, John Carroll University

Since 2019 Micah Ashford, MS program, John Carroll University

Since 2019 Rachel Snyder, MS program, John Carroll University

Since 2017 Consuelo Alarcón Rodríguez, MS program, John Carroll University

2018-2020 Osmary Medina Báez, MS program, John Carroll University [currently a PhD student at Case Western Reserve University]

2018-2020 Andrew Veselka, MS program, John Carroll University [currently employed in environmental field]

2017-2019 Zack Lange, MS program, John Carroll University [currently a PhD student at University of Texas, Arlington]

2016-2018 Julia Laterza, MS program, John Carroll University [currently a PhD student at Yale University]

2015-2017 Ian Reider, MS program, John Carroll University [currently employed in environmental field]

2015-2016 Becca Weir, MS program, John Carroll University [left program early]

Graduate Co-advisor

2018-2020 Andrés Aponte Gutiérrez, MS student, Universidad Nacional de Colombia, Bogotá, Colombia

Graduate committee member

Since 2020 Ryan Mayer, MS student, John Carroll University

Since 2019 Teah Evers, MS student, John Carroll University

Since 2019 Kelsey Garner, MS student, John Carroll University

Since 2018 Courtney Thomas, MS student, John Carroll University

2018-2020 Jessica Ryan, MS student, John Carroll University

2018-2020 Olivia Brooks, MS student, John Carroll University

2015-2020 Jaime Burbano Girón, PhD student, Universidad Pontificia Javeriana, Bogotá, Colombia

2017-2019 Liliana Saboyá Acosta, PhD student, Universidad Pontificia Javeriana, Bogotá, Colombia

2017-2018 Bryant Brumbill, MS student, John Carroll University

2017-2018 Derek Thiry, MS student, John Carroll University

2016-2018 Joseph DeMarchi, MS student, John Carroll University

2017 Nickie Trudeau, MS student, John Carroll University [left program early]

2015-2017 Abraham Perez, PhD student, Case Western Reserve University

2015-2017 Marissa Ganzfried, MS student, John Carroll University

2012-2014 Justin Nowakowski, PhD student, Florida International University

2011 Monica Isola, MS student, Florida International University

External Reader

2019 Manqoba Zungu, PhD, University of Kwazulu-Natal, South Africa

2018 Jorge Astwood Romero, MS, Universidad de los Llanos, Colombia

2010 Paula Coca Soto, MS, Instituto Nacional de Pesquisas da Amazônia, Brazil

Mentoring

Graduate students

Since 2020 Adolfo Rodriguez Velazquez, University of Puerto Rico [through the American Society of Ichthyologists and Herpetologists' Cashner Student Award program]
2008-2010 Caleb Hickman, Washington University in St Louis
2008-2009 Amy Conley, Washington University in St. Louis

Undergraduate students

Since 2020 Raymond Tobias, John Carroll University
Since 2019 Jacob Bellamy, John Carroll University
2021 Sydney Hall, John Carroll University
2020 Naresh Khanal, Tribhuvan University, Nepal [through EEB Mentor Match program]
2019-2020] Sandra Catalina Valderrama Robles, Universidad Pedagógica y Tecnológica de Colombia
2017-2020 Andrew Benos, John Carroll University
2018-2020 Heydee Villanueva Romero, Universidad de los Llanos, Colombia
2019 Michael Fitch, John Carroll University [currently MPH student, Johns Hopkins University]
2018-2019 Hope Uwase, John Carroll University [currently lab technician, University of Pennsylvania]
2017 Michael Rodríguez, John Carroll University [enrolled at JCU]
2015-2018 Arianna Zrzavy, John Carroll University [currently MS student, University of Michigan]
2015-2018 Blake Dixon, John Carroll University [currently employed in environmental field]
2015-2018 Lindsey Molter, John Carroll University [currently employed in environmental field]
2015-2018 Samantha Skerlec, John Carroll University [currently MS student, Wichita State University]
2016-2017 Joseph Mruzek, John Carroll University [currently PhD student, University of Texas, Arlington]
2015-2016 Nicole Koballa, John Carroll University
2015 Alex Murray, John Carroll University [currently PhD student, University of Texas, Arlington]
2015 Ian Reider, John Carroll University
2012 Lorenzo Braga, Universidad Autónoma Gabriel René Moreno, Bolivia
2009 Eric Lee, Washington University in St Louis
2009 Kai Wang, Washington University in St Louis
2008-2009 Kaity Mattos, Washington University in St. Louis
2006-2007 Kallia Cooper, Florida International University
2006-2007 Monica Isola, Florida International University
2003 Paula Coca Soto, Universidad Mayor de San Andrés, Bolivia
2003 Yara Sorena Higueras, Universidad Mayor de San Andrés, Bolivia
2002-2003 Carlos Ivan Zambrana Flores, Universidad Mayor de San Andrés, Bolivia

Teaching assistant

Teaching Assistant, Florida International University. General Biology I Laboratory (Spring 1999—2001); General Biology II Laboratory (Fall 1998-Fall 2000, Summer 1999), Introduction to Botany Laboratory (Summer 2000) 1998—2001

Guest lecturer

Florida International University (1998, 2006, 2010, 2012); University of Florida (2011); Washington University in St Louis (2009)

Miscellaneous

University of Florida. Participant in the university's Teacher's College for junior faculty 2011

Peer-reviewed Publications

** denotes undergraduate collaborator †denotes graduate student collaborator*
*Publications based entirely on work at JCU are indicated in **bold***

43 Arroyo-Rodríguez V, Fahrig L, Tabarelli M, **Watling JI**, Tischendorf L, Benchimol M, Cazetta E, Faria D, Leal I, Melo FPL, Morante-Filho JC, Santos BA, Arasa-Gisbert R, Arce-Peña N, Cervantes-López MJ, Cudney-Valenzuela S, Galán Acedo C, San-José M, Vieira ICG, Ferry Slick

JW, Nowakowski AJ & Tscharntke T (2020) Designing optimal human-modified landscapes for forest biodiversity conservation. *Ecology Letters* 23:1404-4020.

42 Costanza, JK, **Watling JI**, Sutherland R, Belyea C, Dilkina B, Cayton H, Bucklin D, Romañach SS & Haddad NM (2020) Preserving connectivity under climate and land-use change: no one-size-fits-all approach for focal species in similar habitat. *Biological Conservation* 248:108678.

41 **Watling JI**, Arroyo-Rodríguez V, Pfeifer M, Banks-Leite C, Cisneros LM, Fang R, Lander B, Leal IR, Lens L, Possingham HP, Raheem DC, Ribeiro DB, Slade EM, Urbina-Cardona JN, Wood EM & Fahrig L (2020) Support for the habitat amount hypothesis from a global synthesis of species density studies. *Ecology Letters* 23:674-681.

40 Basille M, **Watling JI**, Romañach S & Borkhataria R (2020) Joint seasonality in geographic and ecological spaces, illustrated by a partially migratory bird. *Ecosphere* 11:e03110.

39 Cherkiss M, **Watling JI**, Brandt L, Mazzotti F, Lindsey J, Beauchamp J, Lorenz J, Wasilewski J, Fujisaki I & Hart K (2020) Shifts in hatching date of the American crocodile (*Crocodylus acutus*) in southern Florida. *Journal of Thermal Biology* 88:10251.

38 Betts MG, Wolf C, Pfeifer M, Banks-Leite C, Arroyo-Rodríguez V, Ribeiro DB, Barlow J, Eigenbrod F, Faria D, Fletcher RJ Jr, Hadley AS, Hawes JE, Holt RD, Klingbeil B, Kormann U, Lens L, Levi T, Medina-Rangel GF, Mezger D, Morante-Filho JC, Orme D, Peres CA, Phalan BT, Pidgeon A, Possingham H, Ripple WJ, Slade EM, Somarriba E, Tobias J, Tylianakis JM, Urbina-Cardona JN, Valente JJ, **Watling JI**, Wells K, Wearn OR, Wood E, Young R & Ewers RM (2019) Extinction filters mediate the global effects of fragmentation on animals. *Science* 366: 1236-1239.

37 †Cameron AC, Page RB, **Watling JI**, Hickerson C-AH & Anthony CD (2019) Using a comparative approach to investigate the relationship between landscape and genetic connectivity among woodland salamander populations. *Conservation Genetics* 20:1265-1280.

36 Fahrig L, Arroyo-Rodríguez V, Bennett JR, Boucher-Lalonde-V, Cazetta E, Currie DJ, Eignbrod F, Ford AT, Harrison SP, Jaeger JAG, Koper N, Martin AE, Martin J-L, Metzger JP, Morrison P, Rhodes JR, Saunders DA, Simberloff D, Smith AC, Tischendorf L, Vellend M & **Watling JI** (2019) Is habitat fragmentation bad for biodiversity? *Biological Conservation* 230:179–186

35 †Reider IJ, Donnelly MA & **Watling JI** (2018) The influence of matrix quality on species richness in remnant forest. *Landscape Ecology* 33:1147–1157.

34 Nowakowski AJ, **Watling JI**, Thompson ME, Brusch IV GA, Catenazzi A, Whitfield SM, Kurz DJ, Suárez-Mayorga Á, Aponte-Gutiérrez A, Donnelly MA & Todd BD (2018) Thermal biology mediates responses of amphibians and reptiles to habitat modification. *Ecology Letters* 21:345-355.

33 Pfeifer M, Lefebvre V, Peres CA, Banks-Leite C, Wearn OR, Marsh CJ, Mutchart SHM, Arroyo-Rodríguez V, Barlow J, Cerezo A, Cisneros L, D-Cruze N, Faria D, Hadley A, Harris S, Klingbeil BT, Kormann U, Lens L, Medina-Rangel GF, Morante-Filho JC, Olivier P, Peters S, Pidgeon A, Ribeiro DB, Scherber C, Schneider-Maunory L, Struebig M, Urbina-Cardona N, **Watling JI**, Willig MR, Woods EM, &Ewers RM (2017) Creation of forest edges has a global impact on forest vertebrates. *Nature* 551:187-191.

32 Nowakowski AJ, **Watling JI**, Whitfield SM, Todd BD, Kurz DJ & Donnelly MA (2017) Tropical amphibians in shifting thermal landscapes under land-use and climate change. *Conservation Biology* 31:96-105

31 Brandt LA, Benscoter AM, Harvey R, Speroterra C, Bucklin D, Romañach SS, **Watling JI** & Mazzotti FJ (2017) Comparison of climate envelop models developed using expert-selected variables versus statistical selection. *Ecological Modelling* 345:10-20.

30 Hudson LN et al. (**Watling JI** one of 200+ authors) (2017) The database of the PREDICTS (Projecting Responses of Ecological Diversity in Changing terrestrial Systems) project. *Ecology and Evolution* 7:145-188.

29 **Watling JI** & *Braga L (2015) Desiccation resistance explains amphibian distributions in a fragmented tropical forest landscape. *Landscape Ecology* 30:1449-1459.

28 **Watling JI**, Brandt LA, Bucklin DN, Fujisaki I, Mazzotti FJ, Romañach SS & Speroterra C (2015) Performance metrics and variance partitioning reveal sources of uncertainty in species distribution models. *Ecological Modelling* 309—310:48-59.

27 Fujisaki I, Mazzotti FJ, **Watling JI**, Krysko KL & Escribano Y (2015) Geographic risk assessment reveals spatial variation in invasion potential of exotic reptiles in an invasive species hotspot. *Herpetological Conservation and Biology* 10:621-632.

26 Bucklin DN, Basille M, Benscoter AM, Brandt LA, Mazzotti FJ, Romañach SS, Speroterra C & **Watling JI** (2015) Comparing species distribution models constructed with different subsets of environmental data. *Diversity and Distributions* 21:23-35.

25 Hudson LN et al. (**Watling JI** one of 200+ authors) (2014) The PREDICTS database: a global database of how local terrestrial biodiversity responds to human impacts. *Ecology and Evolution* 4:4701-4735.

24 **Watling JI**, Fletcher RJ Jr., Speroterra C, Bucklin DN, Brandt LA, Romañach SS, Pearlstine LG, Escribano Y & Mazzotti FJ (2014) Assessing the effects of variation in global climate datasets on spatial predictions from climate envelope models. *Journal of Fish and Wildlife Management* 5:14-25.

23 †Hickman CR & **Watling JI** (2014) Leachates from an invasive shrub cause risk-prone behavior in a larval amphibian. *Behavioral Ecology* 25:300-305.

22 Bucklin DN, **Watling JI**, Speroterra C, Romañach SS, Brandt LA, & Mazzotti FJ (2013) Climate downscaling effects on predictive ecological models: a case study for threatened and endangered vertebrates in the southeastern United States. *Regional Environmental Change* 13:S57-S68.

21 Benscoter AM, Reece JS, Noss RF, Brandt LA, Mazzotti FJ, Romañach SS & **Watling JI** (2013) Threatened and endangered subspecies with vulnerable ecological traits also have high susceptibility to sea level rise and habitat fragmentation. *PLOS ONE* 8:e70647.

20 †Nowakowski AJ, Hyslop NL, **Watling JI** & Donnelly MA (2013) Matrix identity alters metacommunity structure of vertebrates in cypress domes. *Biodiversity and Conservation* 22:497-511.

19 **Watling JI**, Bucklin DN, Speroterra C, Brandt LA, Romañach SS, & Mazzotti FJ (2013) Validating predictions from climate envelope models.*PLOS ONE* 8:e63600.

18 *Mattos K, Orrock JL & **Watling JI** (2013) Rodent granivores generate context-specific seed removal in invaded and uninvaded habitats. *American Midland Naturalist* 169:168-178.

17 **Watling JI**, Romañach SS, Bucklin DN, Speroterra C, Brandt LA, Pearlstine LG & Mazzotti FJ (2012) Do bioclimate variables improve performance of climate envelope models? *Ecological Modelling* 246:79-85.

16 **Watling JI**, †Hickman CR & Orrock JL (2011) Invasive shrub alters native forest amphibian communities. *Biological Conservation* 144:2597-2601.

15 **Watling JI**, †Hickman CR & Orrock JL (2011) Predators and invasive plants affect performance of amphibian larvae. *Oikos* 120:735-739.

14 †Conley A, **Watling JI** & Orrock JL (2011) Invasive plant alters ability to predict disease vector distribution. *Ecological Applications* 21:329-334.

13 **Watling JI**, †Hickman CR, *Lee E, *Wang K & Orrock JL (2011) Extracts of the invasive shrub *Lonicera maackii* increase mortality and alter behavior of amphibian larvae. *Oecologia* 165:153-159.

12 **Watling JI**, †Nowakowski AJ, Donnelly MA & Orrock JL (2011) Meta-analysis reveals the importance of matrix composition for animals in fragmented habitat. *Global Ecology and Biogeography* 20:209-217.

11 Orrock JL & **Watling JI** (2010) Local community size mediates ecological drift and competition in metacommunities. *Proceedings of the Royal Society B Biological Sciences* 277:2185-2191.

10 **Watling JI** & Orrock JL (2010) Measuring edge contrast using biotic criteria helps define edge effects on the density of an invasive plant. *Landscape Ecology* 25:69-78.

9 **Watling JI**, Gerow K & Donnelly MA (2009) Isolation and nested species subsets of amphibians

and reptiles on Neotropical forest islands. *Animal Conservation* 12:467-476.

8 **Watling JI** & Donnelly MA (2008) Amphibian and reptile species richness and composition in a fragmented forest landscape in northeastern Bolivia. *Basic and Applied Ecology* 9:523-532.

7 Savage JM & **Watling JI** (2008) Not so rare snakes: a revision of the *Geophis sieboldi* group (Colubridae: Dipsadinae) in lower Central America and Colombia. *Zoological Journal of the Linnean Society* 153:561-599.

6 **Watling JI** & Donnelly MA (2007) Multivariate correlates of extinction proneness in a naturally fragmented landscape. *Diversity and Distributions* 13:372-378.

5 **Watling JI** & Donnelly MA (2006) Fragments as islands: a synthesis of faunal responses to habitat patchiness. *Conservation Biology* 20:1016-1025.

4 **Watling JI**, Waddle JH, Kizirian DA & Donnelly MA (2005) Reproductive phenology of three lizard species in Costa Rica, with comments on seasonal reproduction of Neotropical lizards. *Journal of Herpetology* 39:341-348.

3 **Watling JI** (2005) Edaphically-biased distributions of amphibians and reptiles in a lowland tropical rainforest. *Studies on Neotropical Fauna and Environment* 40:15-21.

2 **Watling JI** & Donnelly MA (2002) Seasonal patterns of reproduction and abundance of leaf litter frogs in a Central American rainforest. *Journal of Zoology (London)* 258:269-276.

1 Boback SM, Burroughs E, Ugarte C, & **Watling JI** (2000) *Boa constrictor Diet. Herpetological Review* 31:244-245.

Published Reports and Popular Articles

** denotes undergraduate collaborator †denotes graduate student collaborator*

3 **Watling JI** (2021) El tema emergente de los paisajes termicos. EcoBlog, Sociedad Cientifica Mexicana de Ecologia.

2 **Watling JI**, †Hickman CR & Orrock JL (2011) Invasive plants and amphibians: a cryptic connection. FrogLog 97:47.

1 **Watling JI** & *Ngadino L (2007) Amphibians and Reptiles of Eastern Suriname. In: Alonso, L. E. and J. H. Mol (Editors), pp 119-125. A Rapid Biological Assessment of the Lely and Nassau Plateaus, Suriname (with additional information on the Brownsberg Plateau). RAP Bulletin of Biological Assessment 43. Arlington, VA: Conservation International.

Funded Proposals

Grants received while at JCU are indicated in ***bold***

2019 Society for the Study of Amphibians and Reptiles, Grants in Herpetology. Assessing temperature-mediated responses to forest edges in the tropical Andes. Graduate student award to Andrew Veselka. ($500)

2018 Chicago Herpetological Society. Thermal biology and habitat use may lead terrestrial-breeding frogs (*Pristimantis*) into an ecological trap. Graduate student award to Zachary Lange. ($1000)

2018 American Society of Ichthyologists and Herpetologist, Gaige Fund Award. Thermal biology and habitat use may lead terrestrial-breeding frogs (*Pristimantis*) into an ecological trap. Graduate student award to Zachary Lange. ($500)

2016-2017 U.S. Geological Survey, Southeastern Climate Science Center. Turning the science of connectivity into action. Principal Investigator. ($87,030 total; $13,075 to JCU)

2012-2015 U.S. Fish and Wildlife Service, Office of the Science Advisor. Comparability of landscape connectivity products for large-scale landscape planning. Principal Investigator. $167,328

2013-2015 U.S. Fish and Wildlife Service, Peninsular Florida Landscape Conservation Cooperative. Setting conservation targets for the Peninsular Florida Landscape Conservation Cooperative. Principal Investigator. $91,367

2012-2014 U.S. Geological Survey, Southeast Climate Science Center. Assessing landscape connectivity for wildlife in the southeastern USA. Principal Investigator. $32,207

2011-2014 U.S. Fish and Wildlife Service and U. S. Geological Survey. Integrating land cover into predictive models of threatened and endangered species responses to climate change. Principal Investigator. $166,993

2011-2014 U.S. National Park Service. Climate envelope modeling for evaluating anticipated effects of climate change on threatened and endangered species. Co-PI. $282,775

2011-2012 Weeden Foundation. Experimental effects of simulated climate change in northeastern Bolivia. Principal Investigator. $10,000

2010-2012 U.S. Fish and Wildlife Service. Climate envelope models in support of landscape conservation. Co-PI. $309,795

2004-2005 Florida International University Dissertation Year Fellowship. $20,000

2001-2004 United States Environmental Protection Agency Science to Achieve Results (STAR) Fellowship $77,972

2001 Organization for Tropical Studies. Pilot Research Grant. $1000

2000 Florida International University. Tropical Biology Program. $1,383

1999 Organization for Tropical Studies. $280

1999 Florida International University. Tropical Biology Program. $1,000

Invited Presentations and Symposia

Presentations made while at JCU are indicated in ***bold***

2020 Shurong Fang, James I. Watling, R. Todd Bruce & Rebecca E. Drenovsky. Summer and academic year STEM programming support transition to college. American Association of Colleges Universities Virtual Conference on Transforming STEM Higher Education.

2020 James I. Watling. Es la fragmentación del hábitat mala para la biodiversidad? Universidad San Francisco de Quito, College of Biological & Environmental Sciences, Ecuador.

2020 James I. Watling. Biodiversity responses to habitat fragmentation. Pontificia Universidad Javeriana, School of Rural and Environmental Studies, Colombia.

2019 James I. Watling. ¡Aye que calor! Biología térmica, cambio climatico y deforestación tropical. Universidad Nacional de Colombia, Institute of Natural Sciences, Colombia.

2018 James I. Watling. Integrando la ecofisiología en el estudio de la modificación del paisaje en anfibios y reptiles. Jornada Nacional de Herpetología, Universidad de los Llanos, Villavicencio, Colombia.

2017 James I. Watling. ¡Aye que calor! Biología térmica, cambio climatico y deforestación tropical. National Meeting of Biology Students, Universidad de los Llanos, Colombia.

2016 & 2017 James I. Watling. The heat is on: thermal biology, climate change, and tropical deforestation.
- Cleveland Museum of Natural History
- Cleveland Botanical Garden

2015 & 2016 James I. Watling. Landscape complexity alters species distributions in fragmented habitat.
- Baldwin Wallace University, Department of Biology and Geology
- Cleveland State University, Biological, Geological, and Environmental Sciences
- Case Western Reserve University, Department of Biology

2015 James I Watling. Modelamiento de ensambles ayuda a identificar áreas de mayor conectividad para la vida silvestre. Workshop 'Procesos de fragmentación, conectividad y permeabilidad de paisajes en Colombia', Bogotá, Colombia

2013 James I. Watling. Forecasting global change effects on Florida's endangered vertebrates. John Carroll University, Department of Biology

2013 James I. Watling. Global change effects on the distribution and abundance of species: the importance of habitat connectivity. University of Maryland, Baltimore County, Department of Geography and Environmental Systems

2012 James I. Watling. Prediction maps from climate envelope models: what can they tell us? Safeguarding Wildlife from Climate Change web conference series

2012 James I. Watling. Climate envelope models for threatened and endangered vertebrates in

peninsular Florida. University of Florida, Ft Lauderdale Research and Education Center

2011 James I. Watling. Landscape structure, invasive species and climate change: describing the biotic response to the drivers of global change. University of Florida, Department of Wildlife Ecology and Conservation

2010 James I. Watling. Understanding threats to biodiversity through the lens of landscape ecology. Florida International University, Department of Biological Sciences

2010 James I. Watling. Global change effects on ecological communities
- University of Florida, Ft Lauderdale Research and Education Center
- St Louis University, Department of Biology
- Washington University in St Louis, Ecology, Evolution & Population Biology

2009 James I. Watling, Justin A. Nowakowski, Natalie Hyslop & Maureen A. Donnelly. Matrix-mediated connectivity effects on aquatic vertebrate communities in Big Cypress National Preserve. Big Cypress National Preserve Research Symposium

2008 Kenneth Tjon, James I. Watling & Krisna Gajapersad. Defining an appropriate spatial scale for monitoring threats to biodiversity in the Central Suriname Nature Reserve. Symposium: Measuring biodiversity responses to changing human influences: Meeting of the Association for Tropical Biology and Conservation, Paramaribo, Suriname

2008 James I. Watling. Community assembly in a naturally-fragmented landscape: island biogeography, habitat and space. Washington University in St. Louis

2007 James I Watling. Ecology of amphibians and reptiles in a naturally-fragmented landscape, northeastern Bolivia.
- Florida International University, Department of Environmental Studies
- University of Maryland, Department of Biology and Department of Natural Resource Sciences and Landscape Architecture

2006 James I. Watling & Maureen A. Donnelly. A re-examination of diversity patterns of South American herpetofaunas using multivariate statistical approaches (Presented by M. A. Donnelly). Symposium in honor of Joseph B. Slowinski, Joint Meeting of Ichthyologists and Herpetologists, New Orleans USA

2005 James I. Watling. Ecology and natural history in an ecological transition zone: a perspective from northeastern Bolivia. Everglades National Park, USA

Contributed Presentations

> 50 presentations total; only student-led presentations listed separately

** denotes undergraduate collaborator †denotes graduate student collaborator ‡ denotes award-winning presentation*

Presentations made while at JCU are indicated in ***bold***

2021 †Medina-Baez O, †Aponte-Gutiérrez AF, †Veselka AJ & Watling JI. Are populations of the salamander *Bolitoglossa altamazonica* declining at low elevations due to rising temperatures? Talk, Society of Integrative & Comparative Biology, Virtual Meeting

2019 †Aponte A & Watling JI. Thermal hardening of *Prisitmantis medemi* (Anura: Craugastoridae) from forest around Villavicencio (Meta) Colombia. Talk, Joint Meeting of Ichthyology & Herpetology, Snowbird, USA

2019 †‡Lange Z, †Aponte A & Watling JI. *Pristimantis* frogs experience shifting patterns of thermal quality with elevation and forest cover in the Colombian Andes. Talk, Joint Meeting of Ichthyology & Herpetology, Snowbird, USA

2018 *Benos A & Watling JI. Behavioral avoidance of UV-B in *Pristimantis* and *Leptodactylus*. Talk, OU/JCU Herpetology Symposium, Cleveland, USA

2018 †Medina-Baez O & Watling JI. Critical thermal limits in *Bolitoglossa altamazonica* across an elevational gradient. Talk, OU/JCU Herpetology Symposium, Cleveland, USA

2018 †Veselka A & Watling JI. Herpetofauna in a thermal landscape: how temperature determines distribution. Talk, OU/JCU Herpetology Symposium, Cleveland, USA

2018 †Laterza Barbosa J & Watling JI. Using experimental translocations of reptiles and amphibians to evaluate faunal rescue in the Brazilian Amazon. Talk, Joint Meeting of Ichthyology & Herpetology, Rochester, USA

2018 *Molter L & Watling JI. Using mechanistic niche models to identify habitat patches with limited potential for recolonization by amphibians and reptiles. Poster, JCU Celebration of Scholarship, Cleveland, USA

2018 *Skerlec S, *Dixon B & Watling JI. Effect of temperature acclimation on CTmax of a terrestrial salamander, *Plethodon cinereus*, and how this influences performance and movement through experimental landscapes. Poster, JCU Celebration of Scholarship, Cleveland, USA

2018 *Zrzavy A, Watling JI, Burns J & Medeiros J. Ecological niche modeling of *Rhododendron* species in contemporary and paleoclimates. Poster, JCU Celebration of Scholarship, Cleveland, USA

2018 *Dixon B & Watling JI. Can remnant vegetation in modified landscapes serve as stepping stones for movement of tropical frogs? Poster, JCU Celebration of Scholarship, Cleveland, USA

2018 †Lange Z & Watling JI. Thermal biology and habitat use may lead terrestrial-breeding frogs (*Pristimantis*) into an ecological trap. Poster, JCU Celebration of Scholarship, Cleveland, USA

2018 †Alarcón Rodriguez C & Watling JI. Phylogeny and ecological history of the Neotropical genus *Oxyrhopus*. Poster, JCU Celebration of Scholarship, Cleveland, USA

2017 *Dixon B, *Skerlec S & Watling JI. Thermal tolerances of Red-backed salamanders, *Plethodon cinereus*, with differing temperature exposure histories. Poster, Joint Meeting of Ichthyologists and Herpetologists, Austin, USA

2017 †Reider IJ & Watling JI. Does matrix structure influence the strength of the species-area relationship in fragmented landscapes? Talk, Annual Meeting of the Ecological Society of America, Portland, USA

2016 †Laterza J & Watling JI. Faunal rescue in Brazil: bridging the gap between scientific knowledge and practice. Talk, Annual Meeting of the Ecological Society of America, Fort Lauderdale, USA

2016 †‡Cameron A & Watling JI. Can species distribution models predict abundance? Poster, Joint Meeting of Ichthyologists and Herpetologists, New Orleans, USA

2015 Watling JI,*Koballa N & *Reider I. Using agar models to assess desiccation risk of amphibians among vegetation types in a fragmented tropical forest landscape. Talk, Joint Meeting of Ichthyologists and Herpetologists, Reno, USA

2009 *Wang K, Watling JI & Orrock JL. Effects of invasive plant, *Lonicera maackii* on amphibian larvae. Poster, Washington University Fall Undergraduate Research Symposium, St. Louis, USA

Since 2000 Joint Meeting of Ichthyologists and Herpetologists

Since 2006 Ecological Society of America

2014 International Association for Landscape Ecology

2013 The Wildlife Society

2010 & 2012 Greater Everglades Ecosystem Restoration Meeting

2000 & 2005 Florida International University Biology Symposium

2002 & 2005 Association for Tropical Biology and Conservation

2002 Coalition for Excellence in Tropical Biology (CEToB) Meeting

2000 All Florida Herpetology Conference

Service

University

Since 2020 Member, JCU Committee on Research Service

Since 2018 Faculty sponsor, JCU Environmental Interest Group

Since 2016 Member, JCU Choose Ohio First scholarship team

Since 2016 Member, JCU Sustainability Committee

Since 2015 Member, JCU National Science Foundation S-STEM team

2018-2019 Co-organizer, JCU Untenured Faculty Organization

2017 Facilitator, JCU Environmental Issues Group/People's Climate March

2017 Facilitator, JCU Advising workshop on STEM retention

2015 & 2016 Judge, JCU Celebration of Scholarship

2016 JCU Representative, Heartland/Delta Faculty Conversations conference

2016 Member, JCU Improving Teacher Quality grant team

2015 JCU Representative, National Science Foundation grants conference

2015 JCU Representative, Loyola University Chicago climate change conference

Professional

Since 2020 Mentor, Cashner Student Award program through the American Society of Ichthyologists and Herpetologists.

Since 2020 Board Member, Biodiversa Foundation.

2016-2019 Associate Editor. *Current Landscape Ecology Reports*

2014-2018 Associate Editor. *Biotropica*

2013-2017 Board of Governors, American Society of Ichthyologists and Herpetologists.

2016, 2017 Mentor. Ecological Society of America Strategies for Ecology Education, Diversity and Sustainability (SEEDS) program.

2008-2016 Editorial Board. *Copeia*

2016 Editorial Board. *Current Landscape Ecology Reports*

2010-2015 Associate Editor. *Journal of Herpetology.*

2012-2014, 2019 Student awards judge, American Society of Ichthyologists and Herpetologists, Ecological Society of America, International Association for Landscape Ecology

Since 2004 Reviewer. *African Journal of Ecology* (2011), *Amphibia-Reptilia* (2006, 2011), *Animal conservation* (2007), *Basic and Applied Ecology* (2012), *Biodiversity and Conservation* (2012, 2013), *Biological Conservation* (2013, 2017), *Biological Invasions* (2011, 2016), *Biological Reviews* (2019), *Bioscience* (2017), *Biotropica* (2010, 2011, 2013), *Canadian Journal of Zoology* (2012), *Collaboration for Environmental Evidence, UK* (2010), *Conservation Biology* (2006, 2011, 2013), *Copeia* (2005—2010), *Current Landscape Ecology Reports* (2016), *Current Zoology* (2014), *Diversity and Distributions* (2013, 2014), *Ecography* (2011, 2013, 2015-2017), *Ecology* (2012, 2013, 2015-2016), *Ecology Letters* (2009, 2012), *Ecosphere* (2011), *Ethology* (2018), *Field Museum of Natural History* (2010), *Forest Ecology and Management* (2012), *Forests* (2012), *Frontiers in Ecology and Evolution* (2018), *Functional Ecology* (2013), *Global Ecology and Biogeography* (2004), *Global Ecology and Conservation* (2018), *Heredity* (2012), *Herpetologica* (2005, 2011-2013), *Herpetological Conservation Biology* (2010), *Herpetological Journal* (2005, 2008), *Herpetological Review* (2005, 2018), *Israeli National Science Foundation* (2010, 2011), *Journal for Nature Conservation* (2018), *Journal of Applied Ecology* (2010), *Journal of Biogeography* (2014, 2016-2018), *Journal of Freshwater Ecology* (2012), *Journal of Herpetology* (2006-2007, 2012), *Journal of Tropical Ecology* (2006-2008, 2016, 2017), *Journal of Zoology* (2013), *Landscape Ecology* (2010, 2012, 2019), *Oecologia* (2012, 2016), *Oikos* (2014), *Phyllomedusa* (2012), *PLOS ONE* (2013, 2015-2016), *Proceedings of the Royal Society B* (2013), *Regional Environmental Change* (2012), *Restoration Ecology* (2013), *Salamandra* (2008), *Scientific Reports* (2016, 2017), *United States-Israel Binational Science Foundation* (2011), *Wetlands* (2015), *Zoological Science* (2014)