

**ASSOCIATE PROFESSOR OF MEDICAL GEOGRAPHY, UNIVERSITY OF FLORIDA**

Department of Geography	
Emerging Pathogens Institute (EPI)	
Co-Director, Florida Climate Institute	2020-
Graduate Faculty, SNRE (Interdisciplinary Ecology) Program	2014-
Graduate Faculty, Center for Latin American Studies	2016-
Graduate Faculty, Environmental and Global Health	2017-
Affiliate Faculty, Center for African Studies	2015-

**HONORARY RESEARCH FELLOW, UNIVERSITY OF KWAZULU-NATAL, SOUTH AFRICA**

School of Life Sciences, College of Agriculture, Engineering, and Science	2018-
---	-------

**EDUCATION**

<b>PhD, University of California at Berkeley</b>	2006
--	------

Department of Environmental Science, Policy and Management (ESPM)	
Museum of Vertebrate Zoology (MVZ)	

<b>BA, Princeton University</b>	1998
---------------------------------	------

Department of Ecology and Evolutionary Biology (EEB)	
--	--

**PREVIOUS POSITIONS**

**RESEARCH ASSISTANT PROFESSOR, SUNY Upstate Medical University**

Department of Microbiology and Immunology, Center for Global Health and Translational Science	2012-2017
---	-----------

**ASSISTANT PROFESSOR, SUNY College of Environmental Science and Forestry**

Department of Environmental and Forest Biology (EFB)	2011-2014
Graduate Program in Environmental Science (GPES)	2011-2014
Program Coordinator, Environmental Health, Division of Environmental Science (ESC)	2011-2014

<b>POSTDOCTORAL VISITOR, Department of Geography, University of California Santa Barbara</b>	2010-2011
--	-----------

<b>POSTDOCTORAL FELLOW, National Center for Ecological Analysis and Synthesis (NCEAS)</b>	2009-2011
---	-----------

<b>POSTDOCTORAL FELLOW, NSF Biological Informatics, Stanford University and McGill University</b>	2006-2009
---	-----------

<b>LECTURER, Department of Anthropology, Stanford University</b>	2008
--	------

**AWARDS/HONORS/FELLOWSHIPS**

<b>University Term Professorship Award, University of Florida</b>	2021-2024
---	-----------

<b>Evan Coe Award for Excellence in Medical Geography, University of Florida</b>	2021
--	------

<b>Co-Director, Florida Climate Institute, University of Florida</b>	2020-2023
--	-----------

<b>University Term Professorship Award, University of Florida</b>	2017-2020
---	-----------

<b>Early Career Faculty Fellowship, Florida Climate Institute</b>	2017-2020
---	-----------

<b>NSF CHANS-NET Fellowship Award</b>	2013
---------------------------------------	------

<b>NSF ECTMB travel grant award</b>	2011
-------------------------------------	------

<b>SMB (Society for Mathematical Biology) Landahl Award</b>	2011
---	------

<b>NIMBioS short-term visitor award “Can we build Foot-and-Mouth disease (FMD) management models for the US, and would they be used?”</b>	2011
---	------

<b>NIMBioS short-term visitor award “Using GIS to inform spatial epidemic models”</b>	2010
---	------

<b>NCEAS Postdoctoral Fellowship</b>	2008-2011
--------------------------------------	-----------

<b>NSF Postdoctoral Research Fellowship in Biological Informatics</b>	2006-2008
---	-----------

<b>EPA STAR (Science to Achieve Results) Fellowship</b>	2004-2007
---	-----------

<b>FLAS (Foreign Language and Area Studies) Fellowship (x2)</b>	2002-2004
---	-----------

**FUNDING/CONTRACTS**

<b>NSF PIPP Phase I: “Predicting Emergence in Multidisciplinary Pandemic Tipping-points (PREEMPT)”</b> , \$999,800, PI: Fefferman; <b>Ryan, S.J.</b> , Co-PI	2022-2024
--	-----------

## Sadie J. Ryan

---

- NSF: NSF Bioinformatics Institute (BII):** “Predicting the global host-virus network from molecular foundations”, \$12,500,000, PI: Carlson; **Ryan, S.J.** Co-PI 2022-2027
- CDC Vector-Borne Disease Regional Centers of Excellence (U01):** “Southeast Regional Center of Excellence in Vector Borne Disease: The Gateway Program” \$10,000,000, PI: Dinglasan, R., Informatics Core Co-I: **Ryan, S.J.** 2022-2027
- CDC:** “Seroepidemiology of COVID in Africa (SICA)”, \$10,000,000, PI: Dinglasan; **Ryan, S.J.** Co-I 2021-2026
- Wellcome Trust/IAI:** “Landscaping software tools for climate-health”, \$49,000 2021
- NSF: NSF BII Design Grant.** “BII-Design: Exploring the ecology and evolution of the global virome with big data and machine learning.”, \$169,000, PI: Carlson, C.J., co-PIs: Dallas, T.A., **Ryan, S.J.** 2020-2022
- NSF: Collaborative Research: CIBR:** VectorByte: A Global Informatics Platform for studying the Ecology of Vector-Borne Diseases, \$436,000 to **Ryan, S.J.** 2020-2025
- IAI/UWI/IDB:** Integrating Climate Variability into the Surveillance, Prevention, and Control of Vector-Borne Diseases, \$49,584 2020-2021
- IAI/UWI/IDB:** Gender and arboviruses in the Caribbean, \$7,000 2020-2021
- IDB/UWI:** Climate-health audit tool for Caribbean climate and arbovirus data, \$30,000 2019-2020
- WHO/PAHO Contract:** Climate-Health course framework development, \$3,000 2019
- USAID Climate ATLAS/PMI/CHEMONICS:** Southern Africa malaria vulnerability; Malawi, Madagascar country reviews; plague and environment in Madagascar, \$136,700 2018-2019
- USAID Climate ATLAS/PMI/CHEMONICS:** supporting future vulnerability modeling, \$48,493 2017-2018
- NIH EEID R01:** “Spatial eco-epidemiology of tick-borne Rickettsial pathogens” \$2,500,000, PI: H.D. Gaff, co-PIs: **Ryan, S.J.**, D. Gauthier, R.J. Brinkerhoff. 2017-2022
- USAID/BRCCC:** “Development of a health-climate spatio-temporal modeling framework for the Caribbean” 2017
- World Bank:** “WASH poverty diagnostics: multi-country synthesis” (Phase 2), PI: **Ryan, S.J.** \$13,500 2017
- CDC:** “Insecticide resistance in *Aedes aegypti* in a Zika Transmission Region in Ecuador” \$149,000. Co-Is: **Ryan, S.J.**, A.M Stewart-Ibarra, M. Neira 2017
- CDC Vector-Borne Disease Regional Centers of Excellence (U01):** “Southeast Regional Center of Excellence in Vector-Borne Disease: The Gateway Program” \$10,000,000, PI: Dinglasan, R., Informatics Core Co-I: **Ryan, S.J.** 2016-2021
- USAID-PMI-Abt-Akros:** “Developing strategies for targeted indoor residual spraying to control malaria”, \$12,000 2016
- Wellcome Trust: Our planet, our health:** “Farming, food, and forecasting: developing outbreak resilience and sustainability in global agricultural systems” (Planning grant) £29,000. PI: Gilligan, C.; **Ryan, S.J.**, *key collaborator*
- WASH (World Bank):** “WASH poverty diagnostics” (Phase 1), PI: Rheingans, R.; co-PI: **Ryan, S.J.** 2016-2017
- Gates/PATH:** “Global economics of rotavirus vaccination” PI: Rheingans, R.; co-PI: **Ryan, S.J.** \$24,500 2017
- NSF EEID RAPID:** “In-situ Zika-vector-climate dynamics in a high burden region in Ecuador”, \$199, 583, PI: Stewart-Ibarra, A.M, co-PI: **Ryan, S.J.**, Neira, M.V. 2016-2017
- NIH EEID R01:** “Spatio-temporally explicit estimation of  $R_0$  for pathogens with environmentally-mediated transmission”, \$ 1,461,632, PI: J. Blackburn, Co-PIs: **Ryan, S.J.**, Getz, W.M., Holt, R., Ponciano, J. 2015-2019
- NSF EEID:** “Effects of temperature on vector-borne disease transmission: integrating theory with empirical data”, \$ 1,846,842, PI: E. Mordecai, Co-PIs: **Ryan, S.J.**, Johnson, L.R., Savage, V., Thomas, M. 2015-2020
- NSF AOE Polar:** “Quantifying how Bioenergetics and Foraging Determine Population Dynamics in Threatened Antarctic Albatrosses”, \$552,327, PI: Johnson, L.R. Co-PI: **Ryan, S.J.** 2014-2018
- USDA McIntire-Stennis:** “Assessing Use of Newly-Restored Early Successional Forest by the Imperiled New England Cottontail, Using Genetic Dispersal Analysis”, \$52k, PI: Cohen, J., Co-PI: Whipps, C.M., **Ryan, S.J.** 2015-2018
- NYSDEC:** “Factors Limiting New England Cottontail Populations in New York”, \$860,000, PI: J. Cohen, Co-PIs: **Ryan, S.J.**, Whipps, C.M. 2013-2018
- Escuela Superior Politecnica del Litoral (ESPOL):** “Interactions among climate variability and the occurrence of harmful algal blooms (HABs) and their impact on human health in an estuarine-coastal gradient (Guayaquil-Santa Elena)”, \$100,000 PI: Borbor-Cordova, M.; **Ryan, S.J.**, *investigator* 2014-present
- UF Informatics Institute Seed Fund:** “Death, disease and distribution: challenging current approaches and methodologies to the study of zoonotic diseases.” 2014, \$36k, PI: Southworth, J., Co-PIs: Blackburn, J.K., Muñoz Carpena, R., Glass, G.G., Kiker, G., **Ryan, S.J.**, Waylen, P. 2014-2015
- DOD GEIS:** “Evaluating the potential use of oceanographic information and remotely sensed algal blooms to predict risk of cholera and other climate and water-sensitive diseases.”, \$294K/year - PI: Polhemus, M. Co-PI: **Ryan, S.J.**, Stewart-Ibarra, A., Finkelstein, J. 2014-2015
- USDA McIntire-Stennis:** “Modeling Super Spreading in an Emerging Emerald Ash Borer (*Agrilus planipennis*) Infestation”, \$55,029 – PI: **Ryan, S.J.**, Co-PI: Fierke, M. 2013-2015

# Sadie J. Ryan

---

- DOD- GEIS:** “Capacity Building in Ecuador: Partnering to develop predictive models of infectious disease vulnerability.”  
\$300K/year. (*investigator*) 2013-2015
- SUNY RF Conversations in the Disciplines Program:** “From the lab to the landscape: Integrated Infectious Disease Research”, \$4,900 PI: **Ryan, S.J.**, Co-PI: Stewart, A.M., Polhemus, M. 2013
- National Geographic:** “Parks, People, and Climate Change: Assessing Household Vulnerability in Equatorial Africa”  
\$20,000 – Co-PIs: Hartter, J., **Ryan, S.J.** 2012
- INECOL/SUNY-ESF Seed Grant:** “Emerging diseases and health of black howler monkeys in degraded habitat in Balancán, Tabasco, Mexico” \$5,000 – PI: **Ryan, S.J.**, Co-PI: Serio-Silva, J.C. 2012
- NSF-CNH-Ex:** “Hotter Hotspots: Land-Use Intensification and Protected-Area Vulnerability in Africa's Albertine Rift”  
\$249,995 – PI: Hartter, J., Co-PIs: **Ryan, S.J.**, Palace, M., Chapman, C., Diem, J. 2011-2014

## **COURSES TAUGHT:**

- GEO 3454: Peoples and Plagues, UF 2015- *present*
- GEO 3930: People, Parks, and Conservation in Africa (Study Abroad) 2018
- GEO 4938: Field techniques for Conservation and Landscape Analysis (Study Abroad) 2018
- EFB 496/796: Emerging Infectious Diseases, SUNY ESF 2011-2014
- EFB 360: Introduction to Epidemiology, SUNY ESF 2011-2014
- EFB 496/796: Parameter Estimation and Modeling in Population Biology Studies, SUNY ESF 2011-2014
- EFB 497: Seminar: Conservation in Ecuador, SUNY ESF 2011-2014
- EFB 497/797: Seminar: Emerging Diseases of Humans and Wildlife, SUNY ESF 2011-2014
- EFB 797: Seminar: Vertebrate Conservation Conversation, SUNY ESF 2011
- EFB 797: Seminar: Adaptive Peaks, SUNY ESF 2011, 2012
- ANSCI 178/278: Past and Present Pestilence: an interdisciplinary examination of zoonotic diseases, Stanford, 2008
- ESPM 298: Foundations of Ecology, Seminar co-facilitator, UC Berkeley 2003
- ESPM 114: Wildlife Ecology, Graduate Student Instructor, Lecturer, UC Berkeley 2003, 2006
- ESPM 104: Modeling and Management of Biological Resources, Reader, Instructor, UC Berkeley 2004, 2005

## **Workshops/Institutes (Instructor/Organizer)**

- MPE 2013+ Workshop on “Global Change and Vector-borne Diseases: Mapping Emerging Infectious Diseases”, George Mason University and Center for Discrete Mathematics and Computer Science (DIMACS), Co-Organizer 2018
- IV Curso Internacional de Primatología de Campo: Ecología, Comportamiento y Conservación en la Interfase humano – ambiente. Estación de Investigación Primatológica y Vida Silvestre, INECOL, Balancán, Tabasco, MX 2013
- Complexity and Biology: Tick-borne disease dynamics for wildlife, livestock and humans, UKZN 2013
- Quantitative Landscape Ecology and Environmental Science (QLEES), DIMACS/MBI, UKZN 2012
- Institute and workshop on Conservation Biology, DIMACS/MBI, S. Africa, Kenya 2010, 2011
- Workshop: Introduction to GIS for Habitat Analysis and Home Range Estimation. SCB/SCGIS 2006

## **ADVISING - CURRENT**

- GRADUATE:** Shreejana Bhattarai, PhD track, Geography, UF; Anusha Chaudhary, PhD track, Geography, UF; Gavi Hecht, PhD track, Geography, UF
- POSTDOCTORAL:** Catherine A. Lippi, PhD
- UNDERGRADUATE:** Kaylinn Escobar, *FCI Climate Scholar*
- HIGH SCHOOL:** Aspen Singh
- ENV GLOB HEALTH ROTATION:** Bianca Punch, MPH
- COMMITTEE MEMBER:** Veronique Etienne, VetMed, UF; Virnaliz Cruz, SNRE, UF; Matthew Albrecht, Anthro, UF; Ke Zhang, WEC, UF; Christopher Gulick, WEC, UF.

## **ADVISING - COMPLETED**

### **GRADUATE:**

- Catherine Lippi, PhD, 2021. “*Leveraging Mosquito Surveillance and Epidemiological Data to Inform Public Health Response: A Spatial Statistics Framework for Arbovirus Management and Vector Control in Ecuador*”, *Doctoral Dissertation, Medical Geography, Entomology Minor, University of Florida, Gainesville, FL*

# Sadie J. Ryan

---

- Stephanie Mundis, PhD, 2021. “*Spatial Patterns in Mosquito Populations That Mediate Vector Control Effectiveness and Disease Risk at the Local, State, and National Level in the United States*”, Doctoral Dissertation, Medical Geography, University of Florida, Gainesville, FL
- James Martin, MSc, 2019. “*Social-ecological systems analysis of household Aedes aegypti risk in Huaquillas, Ecuador.*” Medical Geography, University of Florida, Gainesville, FL
- Emily (Gavard) Almeroth, MPS. 2017. *Conservation Biology*, SUNY ESF, Syracuse, NY
- Tess Youker-Smith, MSc, 2016. “*Epidemics of an amphibian ranavirus in two species of vernal pool-breeding anurans: disease surveillance and environmental drivers of prevalence*” Conservation Biology, SUNY ESF, Syracuse, NY
- Rebecca Fuda, MSc, 2015. “*A park under pressure: human disturbance and its impact in Murchison Falls Conservation Area, Uganda*” Fish and Wildlife Biology and Management, SUNY ESF, Syracuse, NY
- Andrea Thomen, MSc, 2014. “*Evaluating avian assemblages in Dominican cacao farms: implications for management and conservation*” Conservation Biology, SUNY ESF, Syracuse, NY
- Lindsay Scales, MPS, 2014. *Conservation Biology*, SUNY ESF, Syracuse, NY

## POSTDOCTORAL:

- Alexis White, PhD, Geography, UF, CDC Center of Excellence Funded 2020-2021
- Rachel Sippy, PhD, (co-mentor with A. Stewart-Ibarra), Vectorborne Disease – Climate, Geography, UF, 2018-2020
- Gabriela Hamerlinck, PhD, Geography, UF, CDC Center of Excellence Funded 2018-2019
- Phillip Boersch-Supan, PhD, NSF POLAR funded (co-mentored with L. Johnson), Geography, UF, 2014-2018.  
“*Quantifying how Bioenergetics and Foraging Determine Population Dynamics in Threatened Antarctic Albatrosses*”
- Karoun Bagamian, PhD, World Bank funded, Department of Environmental and Global Health (EGH), UF 2017  
“*WASH Poverty Risk Modeling*”
- Luis Escobar, DVM, PhD, DOD GEIS funded, SUNY Upstate Medical University, NY 2014-2015.  
“*Evaluating the potential use of oceanographic information and remotely sensed algal blooms to predict risk of cholera and other climate and water-sensitive diseases.*”

## COMMITTEE/ EXAMINER

- Elizabeth Moreau, PhD 2022 Fisheries and Aquatic Sciences, University of Florida
- Boris Arevalo, PhD, 2021, Wildlife Ecology and Conservation, University of Florida
- Lee Ann Lyons, PhD 2021, Pathobiology, University of Illinois at Urbana-Champaign
- Caroline Poli, PhD, 2020, SNRE and Wildlife Ecology & Conservation, University of Florida
- Zoliswa Nhleko, PhD, 2020 SNRE and Wildlife Ecology & Conservation, University of Florida
- Johnny Uelman, 2020 PhD, Department of Pathobiology, University of Illinois at Urbana-Champaign
- Anni Yang, PhD, 2019, PhD, Geography, University of Florida
- Morgan Walker, MSc, 2019 Geography, University of Florida
- Stephanie Cinkovich, PhD, 2018, Biology, University of Florida, Gainesville, FL
- Audrey Smith, MSc, 2017, Geography, University of Florida
- Jacob Atem, PhD, 2017, Environmental and Global Health, University of Florida
- Amanda Cheeseman, PhD 2017, Wildlife Ecology, SUNY ESF
- Dawn Nekorchuk, PhD 2017, Geography, University of Florida
- Ian Kracalik, PhD 2017, Geography, University of Florida
- Lili Morris, PhD 2016, Geography, University of Florida
- Sarah Wilkinson, MSc, 2013. SUNY ESF
- Anna Stewart-Ibarra, PhD, 2012. SUNY ESF
- Frank Sylvester, MS/JD, 2013. SUNY ESF, *Examiner*
- Emily Byrne, MS, 2012. SUNY ESF, *Examiner*
- Scott Warsen, MS, 2012. SUNY ESF, *Examiner*

## UNDERGRADUATE (RESEARCH PROJECTS)

- Julia Bellot, BSc, PHHP, Medical Geography research using GIS and Online Portals for health communication, 2020-2021
- Anna Lavrentieva, BSc Mathematics and Spanish, UMD, PostBac Remote Experience in Medical Geography, 2020-2021
- Emily Stone, BSc MCB, Bioinformatics Research Experience, UF Emerging Scholars Program Scholarship 2019-2020

October 2022



# Sadie J. Ryan

---

Kimberlie Vera, BSc WEC, UF, Undergraduate Research in Savanna Ecology 2018-2019  
Stephen Mackay, BSc Geography, UF, NSF REU funded researcher, 2017-2018  
Taylor Rouviere, BSc Biology, Psychology; Geography minor, UF, University Scholars Program Scholarship 2017  
Tyler James, BSc Psychology, Geography minor, UF, University Scholars Program Scholarship 2016  
Rachel Brubaker, SUNY-ESF, 2014. *Cacao Project research: a meta-analysis of avian conservation – tropical agroforestry perceptions and conflicts.*  
Logan Osterhoud, SUNY-ESF, 2014. *Ranavirus Project research: field based data collection at vernal pools, and sample preparation for genetic analyses*  
Katie Luukkonen, SUNY-ESF, 2013. *Researching published studies of parasites of cottontail rabbits in the continental US, to establish lab ID protocols, optimal fecal sample preparation and parasite recovery*  
Heather Holmes, SUNY-ESF, 2013. *2013: Conducting phlebotomy based research in conjunction with Dengue vaccine trials; 2012: Investigating the potential for horticultural therapy in Syracuse*  
Dennis Chan, Honors Program, SUNY-ESF, 2012. *Investigating ecological correlates in colobine monkey evolution*  
Tom Ryan, SUNY-ESF, 2012. *Collecting and collating data for phylogenetic construction; phylogenetic methods*

## SYNERGISTIC ACTIVITIES

Mentor, BWF-funded "mentored research collaboration" program, U Tennessee, Knoxville	2022-2023
<b>Working Groups (participant)</b>	
Ecological Forecasting Institute (EFI): "Tick Challenge Design Team"	2020
Ecological Forecasting Institute (EFI): "Ecological Forecasting Institute RCN"	2020
SESYNC Pursuit: "Modeling West Nile Virus Disease"	2020-2021
SESYNC Pursuit: "Modeling Risk Perception, Vector-borne Diseases, and Environmental Integrity: Understanding Environmental Impacts of Policy Decisions for Vector Control."	2018-2020
VectorBite: an NIH RCN	2016-2022
NCEAS/LUCE Foundation: "Malaria and Climate Change"	2011-2013
DHS/Fogarty: Research and Policy for Infectious Disease Dynamics (RAPIDD) "Foot and Mouth Disease"	2011
NIMBioS: "Modeling the Impact of Cattle Movements on Transmission Dynamics of Bovine TB in the US"	2009
NCEAS: "Efficient wildlife disease control: From social network self-organization to optimal vaccination"	2008
Conservation International: "Parasite Diversity and Mammalian Conservation"	2006

## Software and Tools development and dissemination

With J. Ladau, developing software tools for community ecologists: *MPower*, *CoOccur* and *FixIt*

## Service to Scientific Community

Advisor, <i>F1000 Ecology and Global Change Gateway</i>	2022-
Steering Committee, <i>Species On The Move 2023</i>	2022-
Associate Editor, Infectious Disease Epidemiology, <i>Frontiers in Epidemiology</i>	2022-
Academic Editor, Climate and Health Section, <i>Int J. Env Res in Pub Health</i>	2021-
Associate Editor, <i>African Journal of Wildlife Research</i>	2018-
Editor, <i>Animal Conservation</i>	2017-2021
Associate Editor, <i>Remote Sensing in Ecology and Conservation</i>	2015-2020
Associate Editor, <i>Animal Conservation</i>	2011-2017
Academic Editor, <i>PLOS ONE</i>	2012-2015
<i>American Association of Geographers (AAG):</i>	
Program Excellence Committee, Chair,	2021-
Program Excellence Committee, Member	2020-2021
AAG Health and Medical Geography Specialist Group (HMGSG): Board Member (elected)	2021-
AAG HMGSG Peter Gould Award and Symposium, Co-chair	2021-
Society for Conservation Biology (SCB): Education and Student Affairs, Chair; Board of Governors	2012-2015, 2017

## Service to University

### Department:

Graduate Admissions Committee Department of Geography, Member	2022-
---	-------

*October 2022*

# Sadie J. Ryan

---

Hiring Committee, Medical Geography, Chair	2021-2022
Graduate Coordinator, Department of Geography	2018-2021
Graduate Admissions Committee, Department of Geography, Chair	2018-2021
Medical Geography Certificate (Graduate and Undergraduate) coordinator	2017-
Awards Committee, Department of Geography, Chair	2016-
Merit Committee, member	2021-
Recruitment Committee, member	2020-
Medical Geography Steering Committee, member	2015-
Hiring Committee, Medical Geography Lecturer, Chair	2018
Hiring Committee, GIS Lecturer, Department of Geography, member	2016-2017
Hiring Committee, Climate Modeler, Department of Geography, member	2017

## *College and University:*

College Professional Development Leave Committee	2022
Florida Climate Institute, Co-Director	2020-2023
UF Climate Action Plan, Advisory Board member	2021 -
College Curriculum Committee	2020-2023
College Sabbatical Leave Committee	2021
College Professional Development Leave Committee	2020
Center for African Studies, Merit Review Committee, Chair	2019
Undergraduate Research CLAS working group, member	2018
Hiring Committee, Chair of African Studies, member	2016
Center for African Studies, board member	2016-2019
SUNY-ESF, EFB Graduate Program Advisory Committee (GPAC), Member	2012-2014
SUNY-ESF Institutional Animal Care and Use Committee (IACUC), Member	2011-2014
SUNY-ESF Committee on Geospatial Modeling and Analysis (CGMA), Member	2011-2014
SUNY-ESF Conservation Biology Club, Faculty Advisor	2013

## **Professional Societies**

American Geophysical Union (AGU), American Association of Geographers (AAG), Sigma Xi, Society for Conservation Biology (SCB), Ecological Society of America (ESA), Entomological Society of America (ESA), Society for Mathematical Biology (SMB), Wildlife Society (TWS), World Lagomorph Society (WLS)

## **Reviewer**

**Journals:** *PNAS.*, *EID*, *J Remote Sens & Ecol*, *PLOS ONE (Academic Ed)*, *Anim Cons (Assoc Ed)*, *J Afr Ecol (Intl Rev Panel)*, *Ecology*, *J Appl Geog*, *Malaria J.*, *Koedoe*, *J Appl Ecol*, *J Anim Ecol*, *Phil Trans Roy Soc*, *Proc Roy Soc B*, *Ecol Mod*, *J Zool*, *Cons Letters*, *Am J Primatol*, *J Mamm*, *J Env Mod and Assmt*, *J Am Stat Assoc*, *Oikos*, *Polar Biol*, *Biol Cons*, *J Trop Ecol*, *Biol J Linnean Soc*, *Primates*

**Grants/prizes:** *Ford Fellowship Foundation (National Academy of Sciences) Diversity Fellowship*, *AAG HMGSG Jacques May Prize*; *NSF EEID*, *NSF PIRE (OISE)*, *NSF DEB*, *NSF POLAR Program*, *SCB Smith Fellows*, *NSRC*, *EPA STAR*, *American Association of University Women (AAUW)*, *Graduate Women in Science (GWIS)*, *National Geographic*, *ESEI Consortia (UK MRC)*, *UF TCD FRG*

## **WORK HISTORY**

<b>Conservation &amp; Research Associate</b> , <i>Department of Conservation and Science, Lincoln Park Zoo</i>	1998-2002
Conducted research on risk of herpes transmission in Asian and African elephants	
Participated in team development of stage based demographic models for AZA	
Web site and web survey for TB (contract of the AAZV and the Audubon Society)	
<b>Researcher</b> , <i>Environmental and Conservation Program, Chicago Field Museum</i>	1998
Field research and data collection, Yasuni National Park, Ecuador	
Amazonian woody plant classification, identification and documentation, Chicago Field Museum	

**PUBLICATIONS** (online at <http://www.sadieryan.net>)

**ARTICLES**

**Preprints**

- Ryan, S.J.**, Ladau, J. Exploring species assemblages in Kruger National Park, South Africa *BioRxiv*  
<https://doi.org/10.1101/147652>
- Uelmen, J.A., Lamczyk, B., Irwin, P., Bartlett, D., Stone, C., Mackay, A., Arsenault-Benoit, A., **Ryan, S.J.**, Mutebi, J.-P., Hamer, G.L., et al. 2022. Human biting mosquitoes and implications for WNV transmission.  
<https://doi.org/10.21203/rs.3.rs-1999780/v1>
- Bhattarai, S., Blackburn, J.K., McKune, S., **Ryan, S.J.** 2021. Spatio-temporal patterns of malaria in Nepal from 2005 to 2018: a country progressing towards malaria elimination. <https://doi.org/10.21203/rs.3.rs-951343/v1>
- Lippi, C.A., Rund, S.S.C., and **Ryan, S.J.** 2022. Characterizing the Vector Data Ecosystem. *EcoEvoRxiv*
- Chen, B., Sweeny, A.R., Wu, V.Y., Christofferson, R., Ebel, G., Fagre, A.C., Gallichotte, E., Kading, R., **Ryan, S.J.**, and Carlson, C.J. 2022. Exploring the mosquito-arbovirus network: a survey of vector competence experiments. *bioRxiv*
- Nikc, K., Albery, G.F., Becker, D.J., Eskew, E.A., Fagre, A.C., **Ryan, S.J.**, and Carlson, C.J. 2022. Viral diversity and zoonotic risk in endangered species. *bioRxiv*
- Dallas, T., **Ryan, S.J.**, Bellekom, B., Fagre, A.C., Christofferson, R.C., Carlson, C.J. 2021. Predicting the tripartite network of mosquito-borne disease. *EcoEvoRxiv*
- Poisot, T., Gibb, R., **Ryan, S.J.**, Carlson, C.J. 2021. NCBITaxonomy.jl - rapid biological names finding and reconciliation. Available from Github from August 4, 2021.

**In Press**

- Neta, G., Pan, W., Ebi, K., Buss, D., Castranio, T., Lowe, R., **Ryan, S.**, Stewart-Ibarra, A., Rollock, L., Hapairai, L., Sehgal, M., Wimberly, M., Lichtveld, M., Balbus, J. *in press* Advancing Climate Change Health Adaptation through Implementation Science. *Lancet PH*
- Welsh et al. *accepted*. Mosquito Net Fishing as a Normal Accident and the Roles of Traditional and Bureaucratic Authority in Barotseland, Zambia. *Society and Natural Resources*
- Klinger, B. A. and **Ryan, S.J.** *accepted*. Population distribution within the human climate niche. *PLOS Climate*

**Published**

154. Dallas, T.A., J. Carlson, C., Stephens, P.R., **Ryan, S.J.**, and Onstad, D.W. 2022. insectDisease: programmatic access to the Ecological Database of the World's Insect Pathogens. *Ecography* <https://doi.org/10.1111/ecog.06152>.
153. Wu, V.Y., Chen, B., Christofferson, R., Ebel, G., Fagre, A., Gallichotte, E., Sweeny, A.R., Carlson, C.J., **Ryan, S.J.** 2022. A minimum data standard for vector competence experiments. *Sci Data* 9, 634.  
<https://doi.org/10.1038/s41597-022-01741-4>.
152. Mundis, S.J., Harrison, S., Pelley, D., Durand, S., and **Ryan, S.J.** 2022. Spatiotemporal Environmental Drivers of Eastern Equine Encephalitis Virus in Central Florida: Towards a Predictive Model for a Lethal Disease. *J. Med. Entomol.* <https://doi.org/10.1093/jme/tjac113>.
151. Albery, G.F., Carlson, C.J., Cohen, L.E., Eskew, E.A., Gibb, R., **Ryan, S.J.**, Sweeny, A.R., and Becker, D.J. 2022. Urban-adapted mammal species have more known pathogens. *Nat Ecol Evol* 6, 794–801.  
<https://doi.org/10.1038/s41559-022-01723-0>.
150. Carlson, C.J., Colwell, R., Hossain, M.S., Rahman, M.M., Robock, A., **Ryan, S.J.**, Alam, M.S., and Trisos, C.H. 2022. Solar geoengineering could redistribute malaria risk in developing countries. *Nat. Commun.* 13, 2150.  
<https://doi.org/10.1038/s41467-022-29613-w>.
149. Coatsworth, H., Lippi, C.A., Vasquez, C., Ayers, J.B., Stephenson, C.J., Waits, C., Florez, M., Wilke, A.B.B., Unlu, I., Medina, J., **Ryan, S. J.**, Lednicky, J. A., Beier, J. C., Petrie, W., & Dinglasan, R. R. 2022. A molecular surveillance-guided vector control response to concurrent dengue and West Nile virus outbreaks in a COVID-19 hotspot of Florida. *The Lancet Regional Health - Americas* 11, 100231. <https://doi.org/10.1016/j.lana.2022.100231>.
148. Fagre, A.C., Cohen, L.E., Eskew, E.A., Farrell, M., Glennon, E., Joseph, M.B., Frank, H.K., **Ryan, S.J.**, Carlson, C.J., and Albery, G.F. 2022. Assessing the risk of human-to-wildlife pathogen transmission for conservation and public health. *Ecol. Lett.* 25, 1534–1549. <https://doi.org/10.1111/ele.14003>.
147. Villena, O.C., **Ryan, S.J.**, Murdock, C.C., and Johnson, L.R. 2022. Temperature impacts the environmental suitability for malaria transmission by *Anopheles gambiae* and *Anopheles stephensi*. *Ecology*. e3685. doi:10.1002/ecy.3685

146. López-Carr, D.\*, **Ryan, S. J.\***, & Clark, M. L. 2022. Global Economic and Diet Transitions Drive Latin American and Caribbean Forest Change during the First Decade of the Century: A Multi-Scale Analysis of Socioeconomic, Demographic, and Environmental Drivers of Local Forest Cover Change. *Land*, 11(3), 326.
145. Carlson, C.J., Gibb, R.J., Albery, G.F., Brierley, L., Connor, R.P., Dallas, T.A., Eskew, E.A., Fagre, A.C., Farrell, M.J., Frank, H. K., Muylaert, R.L., Poisot, T., Rasmussen, A.L., **Ryan, S.J.**, Seifert, S.N. 2022. The Global Virome in One Network (VIRION): an atlas of vertebrate-virus associations. *Mbio* 13(2): e02985–21
144. Stewart-Ibarra, A. M., Rollock, L., Best, S., Brown, T., Diaz, A. R., Dunbar, W., Lippi, C. A., Mahon, R., **Ryan, S. J.**, Trotman, A., Van Meerbeeck, C. J., & Lowe, R. 2022. Co-learning during the co-creation of a dengue early warning system for the health sector in Barbados. *BMJ Global Health*, 7(1), e007842.
143. Gibb, R., Albery, G. F., Mollentze, N., Eskew, E. A., Brierley, L., **Ryan, S. J.**, Seifert, S. N., & Carlson, C. J. 2022. Mammal virus diversity estimates are unstable due to accelerating discovery effort. *Biology Letters*, 18(1), 20210427.
142. Berger A, James TG, Ryan SJ. 2021. HIV-Related Stigma Moderates the Relation Between Perceived Susceptibility and HIV Testing Intention Among Heterosexual (but Not Sexual Minority) College Students. *Health Promot Pract*. 2021; 15248399211024993. doi:10.1177/15248399211024993
141. Albery, G. F., Becker, D. J., Brierley, L., Brook, C. E., Christofferson, R. C., Cohen, L. E., Dallas, T. A., Eskew, E. A., Fagre, A., Farrell, M. J., Glennon, E., Guth, S., Joseph, M. B., Mollentze, N., Neely, B. A., Poisot, T., Rasmussen, A. L., **Ryan, S. J.**, Seifert, S., Sjodin, A. R., Sorrell, E., Carlson, C. J. 2021. The science of the host-virus network. *Nature Microbiology*, 6(12), 1483–1492.
140. Walker M.A., Urbasterra M., Asher V., Getz W.M., **Ryan S.J.**, Ponciano J.M., et al. 2021. Anthrax Surveillance and the Limited Overlap Between Obligate Scavengers and Endemic Anthrax Zones in the United States. *Vector Borne Zoonotic Dis*. 21(9), 675–684
139. Lippi, C.A., **Ryan, S.J.**, White, A.L., Gaff, H.D., Carlson, C.J. 2021. Trends and opportunities in tick-borne disease geography. *J. Med Entomol* 58(6), 2021–2029.
138. Martin, J. L., Stewart-Ibarra, A.M., Beltran, E., Mordecai, E.A, Sippy, R., Heras, F., Blackburn, J.K., **Ryan, S.J.** 2021. Household and climate factors influence *Aedes aegypti* risk in the arid city of Huaquillas, Ecuador. *PLOS NTDS* 15(11): e0009931
137. Gibb, R., Albery, G.F., Becker, D.J., Brierley, L., Connor, R., Dallas, T.A., Eskew, E.A., Farrell, M.J., Rasmussen, A.L., **Ryan, S.J.**, Sweeny, A.R., Carlson, C.J., Poisot, T. 2021. Data proliferation, reconciliation, and synthesis in viral ecology. *BioScience* 71(11), 1148–1156
136. Carlson, C.J., Farrell, M.J., Grange, Z., Han, B. A., Mollentze, N., Phelan, A.L., Albery, G.F., Bett, B., Brett-Major, D., Cohen, L., Dallas, T., Eskew, E., Fagre, A., Forbes, K., Gibb, R., Halabi, S., Hammer, C., Katz, R., Kindrachuk, J., Muylaert, R., Nutter, F., Ogola, J., Olival, K.J., Rourke, M., **Ryan, S.J.**, Ross, N., Seifert, S., Sironen, T., Standley, C., Taylor, K., Venter, M., Webala, P. 2021. The future of zoonotic risk prediction. *Philos Trans R Soc Lond B Biol Sci*. Nov 8;376(1837):20200358.
135. Mundis, S.J., Hamerlinck, G., Stone, E.K., Whiteman, A., Delmelle, E., Rapp, T., Dulin, M., **Ryan, S.J.** 2021. Examining wing length-abundance relationships and pyrethroid resistance mutations among *Aedes albopictus* in a rapidly growing urban area with implications for mosquito surveillance and control. *Int J. Environ. Res. Public Health* 18(8): 9443.
134. El Moustaid, F., Thronton, Z., Slamani, H., **Ryan, S.J.**, Johnson, L.R. 2021 Predicting temperature-dependent transmission suitability of bluetongue virus in livestock. *Parasites Vectors* 14, 382.
133. Ngongala, C.N., **Ryan, S.J.**, Tesla, B., Demakovskys, L.R., Mordecai, E.A., Murdock, C.C., Bonds, M.H. 2021. Effects of changes in temperature on Zika dynamics and control. *J. R. Soc. Interface*. 18:20210165
132. McCoy KD, Weldon CT, Ansumana R, Lamin JM, Stenger DA, **Ryan SJ**, et al. 2021. Are malaria transmission-blocking vaccines acceptable to high burden communities? Results from a mixed methods study in Bo, Sierra Leone. *Malar J*. 20: 183
131. Lippi, C.A., Stewart-Ibarra, A.M., Endy, T.P., Abbott, M., Cueva, C., Heras, F., Beltran-Ayala, E., **Ryan, S.J.** 2021. Exploring the utility of social-ecological and entomological risk factors for dengue infection as surveillance indicators in the dengue hyper-endemic city of Machala, Ecuador. *PLOS Negl Trop Dis* 15 (3), e0009257
130. Lippi, C.A., Gaff, H.D., White, A.L., **Ryan, S.J.** 2021 Scoping review of distribution models for selected Amblyomma ticks and rickettsial group pathogens. *PeerJ*. 9: e10596.



129. Caldwell, J.M., LaBeaud, A.D., Lambin, E.F., Stewart-Ibarra, A.M., Ndenga, B. A., Mutuku, F.M, Krystosik, A.R., Beltran Ayala, E., Anyamba, A., Borbor-Cordova, M., Damoah, R., Grossi-Soyster, E.N., Heras, F., Ngugi, H. N., **Ryan, S.J.**, Shah, M. M., Sippy, R., Mordecai, E.A. 2021. Climate predicts geographic and temporal variation in mosquito-borne disease dynamics on two continents. *Nat Commun* 12:1233
128. Cheeseman, A.E., Cohen, J.B., **Ryan, S.J.**, Whipps, C.M. 2021. Is conservation based on best available science creating an ecological trap for an imperiled lagomorph? *Ecol Evol*,11(2): 912-930
127. Walker M.A., Uribasterra M., Asher V., Getz W.M., **Ryan S.J.**, Ponciano J.M., et al. 2021. Factors influencing scavenger guilds and scavenging efficiency in Southwestern Montana. *Sci Rep.* 11: 4254.
126. Yang, A., Proffitt, K.M., Asher, V., **Ryan, S.J.** and Blackburn, J.K. 2021. Sex-Specific Elk Resource Selection during the Anthrax Risk Period. *Jour. Wild. Mgmt.*, 85: 145-155.
125. **Ryan, S.J.**, Carlson, C.J., Tesla, B., Bonds, M., Ngonghala, C.N., Mordecai, E.A., Johnson, L.R., Murdock, C.C. 2021. Warming temperatures could expose more than 1.3 billion new people to Zika virus risk by 2050. *Global Change Biology* 27: 84– 93.
124. Larsen, D.A., Makaure, J., **Ryan, S.J.**, Stewart, D., Traub, A. Welsh, R., Love, D.H., Joseph H Bisesi, J.H. Jr. 2021. Implications of Insecticide-Treated Mosquito Net Fishing in Lower Income Countries. *Environmental Health Perspectives* 129 (1), 015001
123. James, T.G., Gebru, N.M., **Ryan, S.J.**, & Cheong, J. 2021. Measuring dimensions of HIV-related stigma among college students. *Stigma and Health*, 6(3), 296–303.
122. **Ryan, S.J.** 2020. Mapping Thermal Physiology of Vector-Borne Diseases in a Changing Climate: Shifts in Geographic and Demographic Risk of Suitability. *Curr. Env. Health Rep.* 7:415–423
121. Lippi, C.A., Gaff, H.D., White, A.L., St. John, H.K., Richards, A.L., **Ryan, S.J.** 2020. Exploring the Niche of *Rickettsia montanensis* (Rickettsiales: Rickettsiaceae) Infection of the American Dog Tick (Acari: Ixodidae), Using Multiple Species Distribution Model Approaches. *J. Med Entomol* 58(3):1083–1092
120. Lowe R, **Ryan SJ**, Mahon R, Van Meerbeeck CJ, Trotman AR, et al. 2020. Building resilience to mosquito-borne diseases in the Caribbean. *PLOS Biology* 18(11): [Part of the PLOS Biology Collection: “Epidemics on the Move: Climate Change and Infectious Disease”](#)
119. Walker, M.A., Uribasterra M., Valpa, A., Ponciano, J.M., Getz, W.M., **Ryan, S.J.** and Blackburn, J.K. 2020. Ungulate use of locally infectious zones in a re-emerging anthrax risk area. *R. Soc. Open Sci.* 7200246
118. **Ryan, S.J.**, Martin, A.C., Walia, B., Winters, A., Larsen, D.A. 2020. Comparing prioritization strategies for delivering indoor residual spray (IRS) implementation, using a network approach. *Malaria J.* 19: 326
117. Mordecai E.A., **Ryan S.J.**, Caldwell J., Shah M.M., LaBeaud A.D. 2020. Climate change could shift disease burden from malaria to arboviruses in Africa. *Lancet Planetary Health*.
116. Carlson, C.J., Gomez, A.C.R., Bansal, S., **Ryan, S.J.** 2020. Misconceptions about weather and seasonality must not misguide COVID-19 response *Nature Communications* 11:4312
115. Sippy, R., Lippi, C.A., Stewart-Ibarra, A.M., **Ryan, S.J.** 2020. Arbovirosis endemicas y epidemias en Ecuador/ Endemic and Emerging Arboviruses of Mosquitoes in Ecuador. *Práctica Familiar Rural* 5:2.
114. Miazgowicz, K.L., Shocket, M.S., **Ryan, S.J.**, Villena, O.C., Hall, R.J., Owen, J., Adanlawo, T., Balaji, K., Johnson, L.R., Mordecai, E.A., Murdock, C.C. 2020. Age influences the thermal suitability of *Plasmodium falciparum* transmission in the Asian malaria vector *Anopheles stephensi*. *Proc Roy Soc B* 287:20201093
113. Rohat, G., Monaghan, A., Hayden, M.H., **Ryan, S.J.**, Charriere, E., Wilhelmi, O.V. 2020. Intersecting vulnerabilities: Climatic and demographic contributions to future population exposure to *Aedes*-borne viruses in the United States. *Environmental Research Letters* 15: 084046
112. Evans, K.L., Ewen, J.G., Guillera-Arroita, G., Johnson, J.A., Penteriani, V., **Ryan, S.J.**, Sollmann, R., Gordon, I.J. 2020. Conservation in the maelstrom of Covid-19—a call to action to solve the challenges, exploit opportunities and prepare for the next pandemic. *Animal Conservation* 3: 235–238
111. Lippi, C.A., Stewart-Ibarra, A.M., Romero, M., Lowe, R., Mahon, R., Van Meerbeeck, C.J., Rollock, L., Gittens-St. Hilaire, M., Trotman, A.R., Holligan, D., Kirton, S., Borbor-Cordova, M.J., **Ryan, S.J.** 2020. Spatiotemporal tools for emerging and endemic disease hotspots in small areas: an analysis of dengue and chikungunya in Barbados, 2013-2016. *Am J. Trop Med* 103(1): 149-156
110. Mundis, S.J., Estep, A.S., Waits, C.M., **Ryan, S.J.** 2020. Spatial variation in the frequency of knockdown resistance genotypes in Florida *Aedes aegypti* populations. *Parasites and Vectors* 13(1), 1-12

109. **Ryan, S.J.**, Lippi, C.A., Zermoglio, F. 2020. Shifting transmission risk for malaria in Africa with climate change: a framework for planning and intervention. *Malaria Journal* 19:170
108. Lippi, C.A., Mao, L., Stewart-Ibarra, A.M., Heydari, N., Beltrán Ayala, E., Burkett-Cadena, N.D., Blackburn, J.K., **Ryan, S.J.** 2020. A Network Analysis Framework to Improve the Delivery of Mosquito Abatement Services in Machala, Ecuador. *Int J. Health Geographics* 19:3
107. Ervin, D., Lopez-Carr, D., Riosmena, F., **Ryan, S.J.** 2020. Examining the relationship between migration and forest cover change in Mexico from 2001 to 2010. *Land Use Policy* 91:104334
106. Berry, I.M., Rutvisuttinunt, W., Sippy, R., Beltran-Ayala, E., Figueroa, K., **Ryan, S.**, Srikanth, A., Stewart-Ibarra, A.M., Endy, T., Jarman, R.G. 2020. The origins of dengue and chikungunya viruses in Ecuador following increased migration from Venezuela and Colombia *BMC Evolutionary Biology* 20(1):1-12
105. Sippy, R., Farrell, D.F., Lichtenstein, E., Nightingale, R., Harris, M., Toth, J., Hantztidiamantis, P., Usher, N., Cueva, C., Barzallo Aguilar, J., Puthumana, A., Endy, T., **Ryan, S.J.**, Stewart-Ibarra, A.M. 2020. Severity Index for Suspected Arbovirus (SISA): machine learning for accurate prediction of hospitalization in subjects suspected of arboviral infection. *PLOS NTDs* 14(2):e0007969
104. Suarez, G.P., Udiani, O., Allan, B.F., Price, C., **Ryan, S.J.**, Lofgren, E., Coman, A.I., Stone, C.M, Gallos, L.K., Fefferman, N.H. 2020. A generic arboviral model framework for exploring trade-offs between vector control and environmental concerns. *J. Theor. Biol.* 490:110161
103. Anderson, K.B., Stewart-Ibarra, A.M., Buddhari, D., Beltran Ayala, E.F., Iamsirithaworn, S., **Ryan, S.J.**, Fernandez, S., Jarman, R.G., Thomas, S.J., Endy, T.P. 2020. Key findings and comparisons from analogous case-cluster studies for dengue virus infection conducted in Machala, Ecuador, and Kamphaeng Phet, Thailand. *Frontiers in Public Health*
102. Johansson, M.A (and 81 others), 2019. An open challenge to advance probabilistic forecasting for dengue epidemics. *PNAS* 116(48): 24268-24274
101. Stewart-Ibarra, A.M., Romero, M., Hinds, A.Q.J., Lowe, R., Mahon, R., Van Meerbeeck, C.J., Rollock, L., Gittens-St Hillaire, M., St Ville, S., **Ryan, S.J.**, Trotman, A.R., Borbor-Cordova, M.J. 2019. Co-developing climate services for public health: stakeholder needs and perceptions for the prevention and control of Aedes-transmitted diseases in the Caribbean. *PLOS Negl Trop Dis.* 13(10): e0007772
100. Cheeseman, A.E., Cohen, J.B., Whipps, C.M., Kovach, A.I., **Ryan, S.J.** 2019. Hierarchical population structure of a rare lagomorph indicates recent fragmentation has disrupted metapopulation function. *Cons. Gen.* 20(6): 1237-1249
99. Mordecai, E., Caldwell, J., Grossman, M., Lippi, C., Johnson, L., Neira, M., Rohr, J.R.; **Ryan, S.**, Savage, V., Shocket, M., Sippy, R., Stewart Ibarra, A., Thomas, M., Villena, O. 2019. The thermal biology of mosquito-borne disease. *Ecol Lett.* 22: 1690-1708
98. Taylor, R.A., **Ryan, S.J.**, Lippi, C.A., Hall, D.G., Narouei-Khandan, H.A., Rohr, J.R., Johnson, L.R. 2019. Predicting the fundamental thermal niche of crop pests and diseases in a changing world: a case study on citrus greening. *J Appl. Ecol.* 56: 2057-2068
97. **Ryan, S.J.**\*†, Mundis, S.J.†, Aguirre, A.†, Lippi, C.A., Beltran, E., Heras, F., Sanchez, V., Borbor-Cordova, M.J., Sippy, R., Stewart-Ibarra, A.M\*, Neira, M.V\*. 2019 Seasonal and geographic variation in insecticide resistance in *Aedes aegypti* among four cities in southern Ecuador. *PLOS Negl Trop Dis* 13(6): e0007448
96. Richards, L., Erko, B., Ponpetch, K., **Ryan, S.J.**, Liang, S. 2019. Assessing the nonhuman primate reservoir of *Schistosoma mansoni* in Africa: a systematic review. *Infectious Diseases of Poverty* 8:32.
95. Whipps, C.M., Gavard, E.J., Cohen, J.B. **Ryan, S.J.** 2019. Gastrointestinal Parasites of the New England Cottontail rabbit (*Sylvilagus transitionalis*) and Eastern Cottontail rabbit (*Sylvilagus floridanus*) in the Hudson Valley, New York. *Parasitology Research* 118(7): 2257–2262
94. Cheeseman, A.E., Cohen, J.B., **Ryan, S.J.**, Whipps, C.W. 2019 Determinants of home range size of imperiled New England and introduced eastern cottontails. *Canadian Journal of Zoology*, 2019, 97(6): 516-523
93. James, T.G., Cheong, J., **Ryan, S.J.** 2019. Sexual risk factors and HIV testing intention among at-risk college students who have never been tested. *Sexually Transmitted Diseases* 46(7): 76-79
92. Lippi, C.A., Stewart-Ibarra, A.M., Bajana Loor, M.E.F., Duenas Zambrano, J.E., Epinoza Lopez, N.A., Blackburn, J.K., **Ryan, S.J.** 2019. Geographic shifts in *Aedes aegypti* habitat suitability in Ecuador using larval surveillance data and ecological niche modeling: implications of climate change for public health vector control. *PLOS Negl Trop Dis* 13(4): e0007322

91. Rund, S.S.C., Braak, K., Cator, L., Copas, K., Emrich, S.J., Giraldo-Calderon, G.I., Johansson, M.A., Heydari, N., Hobern, D., Kelly, S.A., Lawson, D., Lord, C., MacCallum, R.M., Roche, D.G., **Ryan, S.J.**, Schigel, D., Vandegrift, K., Watts, M., Zaspel, J.M., Pawar, S. 2019. Minimum Information for Reusable Arthropod Abundance Data (MIReAAD). *Scientific Data* 6:40
90. Jaramillo-Ochoa, R., Sippy, R., Farrell, D.F., Cueva-Aponte, C., Beltrán-Ayala, E., Gonzaga, J.L., Ordoñez-León, T., Quintana, F.A., **Ryan, S.J.**, Stewart-Ibarra, A.M. 2019. Political instability in Venezuela threatens local elimination of malaria: Recent resurgence of cases in the Ecuador-Peru border region. *Emerging Infectious Diseases* 25(4)
89. **Ryan, S.J.**, Carlson, C.J., Mordecai, E.A., Johnson, L.R. 2019. Global expansion and redistribution of Aedes-borne virus transmission risk with climate change. *PLOS Negl Trop Dis.* 13(3): e0007213
88. Blackburn, J.K., Ganz, H.H., Ponciano, J.M., Turner, W.C., **Ryan, S.J.**, Kamath, P.L., Cizauskas, C., Kausrud, K., Holt, R.D., Stenseth, N.C., Getz, W.M. 2019. Modeling  $R_0$  for pathogens with environmental transmission: animal movements, pathogen populations, and local infectious zones. *Int. J. Env. Res in Public Health (IJERPH)* 16(6): 954 *part of a Special Issue The Next Frontier in Health Geography: Context and Implications for Interventions*
87. **Ryan, S.J.**, Lippi, C.A., Nightingale, R., Hamerlinck, G., Borbor-Cordova, M.J., Cruz B, M., Ortega, F., Leon, R., Waggoner, E., Stewart-Ibarra, A.M. 2019. Socio-Ecological Factors Associated with Dengue Risk and *Aedes aegypti* Presence in the Galápagos Islands, Ecuador. *Int. J. Env. Res in Public Health (IJERPH)* 16(5): 682 *part of a Special Issue Mosquito Borne Disease*
86. Nekorchuk, D., Morris, L.R., Asher, V., Hunter, D.L., **Ryan, S.J.**, Blackburn, J.K. 2019. Potential *Bacillus anthracis* risk zones for male bison in Southwestern Montana. *J. Wild. Dis.* 55(1): 136-141
85. Tao, D., McGill, B., Hamerly, T., Kobayashi, R., Khare, P., Dziedzic, A., Leski, T., Holtz, A., Shull, B., Jedlicka, A.E., Walzer, A., Slowey, P.D., Slowey, C.C., Nsango, S.E., Stenger, D.A., Chaponda, M., Mulenga, M., Jacobsen, K.H., Sullivan, D.J., **Ryan, S.J.**, Ansumana, R., Moss, W.H., Morlais, I., Dinglasan, R.R. 2019. A saliva-based rapid test to quantify the infectious subclinical malaria parasite reservoir. *Science Translational Medicine* 11, ean4479.
84. Nekorchuk, D.M.\*, Gomez, J.P.\*, Mao, L., **Ryan, S.J.**, Ponciano, J.M., Blackburn, J.K. 2018. Decoupling environmental effects and host population dynamics in a classic reservoir-driven disease. *PLOS ONE* 13(12): e0208621.
83. Southworth, J., Bunting, E., Zhu, L., **Ryan, S.J.**, Herrero, H.V., Waylen, P.R., Muñoz-Carpena, R., Campo-Bescós, M.A., and Kaplan, D. 2018. Using a coupled dynamic factor - random forest analysis (DFRFA) to reveal drivers of spatiotemporal heterogeneity in the Semi-Arid Regions of Southern Africa. *PLOS ONE* 13(12): e0208400.
82. Fuda, R.K., **Ryan, S.J.**, Cohen, J.B., Hartter, J., Frair, J.L. 2018 Assessing the impacts of oil exploration and restoration on mammals in Murchison Falls Conservation Area, Uganda. *African Journal of Ecology* 56(4): 804-817 *part of a Special Issue on Camera Trapping in Africa*
81. Cheeseman, A.E., **Ryan, S.J.**, Whipps, C.M., and Cohen, J.B. 2018. Competition alters seasonal resource selection and promotes use of invasive shrubs by an imperiled native cottontail. *Ecology and Evolution* 8:11122–11133
80. Youker-Smith, T., Boersch-Supan, P., Whipps, C.M., **Ryan, S.J.** 2018. Environmental drivers of ranavirus in free living amphibians in constructed ponds. *EcoHealth* 15(3): 608–618
79. Shocket, M.S., **Ryan S.J.**, Mordecai, E.A. 2018 Temperature explains broad patterns of Ross River virus transmission. *eLife.* 2018(7): e37762.
78. Tesla, B., Demakovsky, L.R., Mordecai, E.A., **Ryan, S.J.**, Bonds, M.H., Ngonghala, C.N., Brindley, M.A., Murdock, C.C. 2018. Temperature drives Zika transmission: evidence from empirical and mathematical models. *Proc Roy Soc B* 285: 20180795
77. Lowe, R.A., Gasparrini, A., Van Meerbeeck, C.J., Lippi, C.A., Mahon, R., Trotman, A.R., Rollock, L., Hinds, A.Q.J., **Ryan, S.J.**, Stewart Ibarra, A.M. 2018. Non-linear and delayed impacts of climate on dengue risk in Barbados: a modelling study. *PLOS MED* 15(7): e1002613
76. Bunting, E., Southworth, J., Herrero, H., **Ryan, S.J.**, and Waylen, P. 2018. Understanding Long-Term Savanna Vegetation Persistence across Three Drainage Basins in Southern Africa. *Remote Sens.* 10(7), 1013
75. **Ryan, S.J.\***, Lippi, C.A.\*, Carlson, C.J., Stewart-Ibarra, A.M., Romero, M., Cox, S., Mahon, R., Trotman, A., Rollock, L., King, D., Daniel, S., Gittens-St. Hillaire, M. 2018. Zika Virus Outbreak, Barbados, 2015-2016. *Am J. Trop Med Hyg.* 98(6): 1587-1589
74. James, T.G. and **Ryan, S.J.** 2018. HIV knowledge mediates the relationship between HIV testing history and stigma in college students. *Journal of American College Health* 66(7): 561-569



73. Lippi, C.A., Stewart-Ibarra, A.M., Munoz, A.G., Borbor Cordova, M.J., Mejia, R., Rivero, K., Castillo, K., Cardenas, W.B., **Ryan, S.J.** 2018. The social and spatial ecology of dengue presence and burden during an outbreak in Guayaquil, Ecuador, 2012. *Int. J. Env. Res in Public Health (IJERPH)* 15(4), 827
72. Stewart-Ibarra, A.M., **Ryan, S.J.**, Kenneson, A., King, C.A., Abbott, M., Barbachano, A., Beltran, E., Borbor-Cordova, M.J., Cardenas, W.B., Cueva, C., Finkelstein, J., Lupone, C., Jarman, R., Maljkovic Berry, I., Mehta, S., Polhemus, M., Silva, M., Endy, T. 2018. The burden of dengue fever and chikungunya in southern coastal Ecuador: Epidemiology, clinical presentation, and phylogenetics from the first two years of a prospective study. *Am J. Trop Med Hyg* 98(5) 1444-1459
71. Carlson, C. J., Dougherty, E., Boots, M., Getz, W.M., **Ryan, S.J.** 2018. Consensus and conflict among ecological forecasts of Zika virus outbreaks in the United States. *Scientific Reports* 8:4921
70. Boersch-Supan, P.H., Johnson, L.R., Phillips, R., **Ryan, S.J.** 2018. Surface temperatures of albatross eggs and nests. *Emu - Austral Ornithology* 118(2): 224-229
69. Salerno, J., Chapman, C.A., Diem, J.E., Dowhaniuk, N., Goldman, A., MacKenzie, C. A., Omeja, P.A., Palace, M.W., Reyna-Hurtado, R., **Ryan, S.J.**, Hartter, J. 2018. Park isolation in anthropogenic landscapes: land change and livelihoods at park boundaries in the African Albertine Rift. *Regional Environmental Change* 18(3): 913-928.
68. **Ryan, S.J.**, Stewart-Ibarra, A.M., Ordóñez, E., Chu, W., Finkelstein, J.L., King, C.A., Escobar, L.E., Lupone, C., Heras, F., Tauzer, E., Waggoner, E., James, T.G., Cárdenas, W.B., Polhemus, M. 2018. Environmental *Vibrio cholerae* dynamics in an estuarine system in southern coastal Ecuador. *Int. J. Env. Res in Public Health (IJERPH)* 15(3), 486
67. Dobbins, M., Steinberg, M., Broadbent, E., **Ryan, S.J.** 2018. Habitat use, activity patterns, and human interactions with jaguars in southern Belize. *Oryx*, 52(2), 276-281.
66. Johnson, L.R., Gramacy, R.B., Cohen, J., Mordecai, E., Murdock, C., Rohr, J., **Ryan, S.J.**, Stewart-Ibarra, A., Weikel, D. 2018. Phenomenological forecasting of disease incidence using heteroskedastic Gaussian processes: a dengue case study. *Annals of Applied Statistics* 12(1), 27-66.
65. Dowhaniuk, N., Hartter, J., **Ryan, S.J.**, Palace, M.W., Congalton, R.G. 2018. The Impact of Industrial Oil Development on a Protected Area Landscape: Demographic Change and Corporate Social Responsibility at Murchison Falls Conservation Area, Uganda. *Population and Environment*, 39(3), 197-218
64. Getz, W.M, Marshall, C., Carlson, C.J., Giuggioli, L., **Ryan, S.J.**, Romanach, S., Boettiger, C., Chamberlian, S., Larsen, L., D'Odorico, P., O'Sullivan, D. 2018. Making ecological models adequate. *Ecology Letters*, 21: 153–166.
63. **Ryan, S.J.\***, Lippi, C.A.\*, Boersch-Supan, P.H., Heydari, N., Silva, M., Adrian, J., Noblecilla, L.F., Ayala, E.B., Encalada, M.D., Larsen, D.A., Krisher, J.T., Krisher, L., Fregosi, L.N., Stewart-Ibarra, A.M. 2017. Quantifying Seasonal and Diel Variation in Anopheline and Culex Human Biting Rates in Southern Ecuador. *Malaria Journal*, 16:479
62. Kenneson, A., Beltran-Ayala, E., Borbor-Cordova, M.J., Polhemus, M.E., **Ryan, S.J.**, Endy, T.P., Stewart-Ibarra, A.M. 2017. Social-ecological factors and preventive actions decrease the risk of dengue infection at the household-level: results from a prospective dengue surveillance study in Machala, Ecuador. *PLOS NTDs* 11(12): e0006150
61. Bardosh, K.L., **Ryan, S.J.**, Ebi, K., Welburn, S., Singer, B. 2017. Addressing Vulnerability, Building Resilience: Community-based Adaptation to Vector-Borne Diseases in the Context of Global Change. *Infectious Diseases of Poverty*, 6:166
60. **Ryan, S.J.**, Carlson, C., Stewart-Ibarra, A.M., Borbor-Cordova, M.J., Romero, M.M., Cox, S., Mahon, R., Trotman, A., St Ville, E.S., Ahmed, S. 2017. Zika Virus Outbreak, Dominica, 2016. *Emerging Infectious Diseases*, 23(11):1926-1927
59. Kracalik, I., Malania, L., Broladze, M., Navdarashvili, A., Imnadze, P., **Ryan, S.J.**, Blackburn, J.K. 2017. Changing livestock policy alters the epidemiology of human anthrax, Georgia, 2000-2013. *Vaccine*, 35(46): 6283-6289.
58. Johnson, L.R., Boersch-Supan, P.H., Phillips, R.A., **Ryan, S.J.** 2017. Changing measurements or changing movements? Sampling scale and movement model identifiability across generations of biologging technology. *Ecology and Evolution*. DOI: 10.1002/ece3.3461
57. MacKenzie, C.A., Fuda, R.K., **Ryan, S.J.**, Hartter, J. 2017. Drilling through Conservation Policy: Oil Exploration in Murchison Falls Protected Area, Uganda. *Conservation & Society*, 15(3): 322-333
56. Bardosh, K.L., Jean, L., Beau de Rochers, V.M., Lemoine, J.F., Okech, B., **Ryan, S.J.**, Welburn, S., Morris, J. G. 2017. Polisye Kont Moustik: A culturally competent approach to larval source reduction in the context of lymphatic filariasis and malaria elimination in Haiti. *Tropical Medicine and Infectious Disease*, 2(39).



55. Pettorelli, N., Nagendra, H., Rocchini, D., Rowcliffe, M., Williams, R., Ahumada, J., De Angelo, C., Atzberger, C., Boyd, D., Buchanan, G., Chauvenet, A., Disney, M., Duncan, C., Fatoyinbo, T., Fernandez, N., Haklay, M., He, K., Horning, N., Kelly, N., de Klerk, H., Liu, X., Merchant, N., Paruelo, J., Roy, H., Roy, S., **Ryan, S.**, Sollmann, R., Swenson, J. and Wegmann, M. 2017. Remote Sensing in Ecology and Conservation: three years on. *Remote Sens Ecol Conserv*, 3: 53–56.
54. Mordecai, E.A., Cohen, J., Evans, M.V., Gudapati, P., Johnson, L.R., Lippi, C.A., Miazgowicz, K., Murdock, C.C., Rohr, J.R., **Ryan, S.J.**, Savage, V., Shocket, M., Stewart Ibarra, A.M., Thomas, M.B., Weikel, D.P. 2017. Detecting the impact of temperature on transmission of Zika, dengue, and chikungunya using mechanistic models. *PLOS NTDs*. 11 (4): e0005568
53. **Ryan, S.J.**, Palace, M., Hartter, J., Diem, J.E., Chapman, C.A., Southworth, J. 2017. Population pressure and global markets drive a decade of forest cover change in Africa's Albertine Rift. *Applied Geography*. 81:52-59
52. Boersch-Supan, P., **Ryan, S.J.**, Johnson, L.R. 2017. deBInfer: Bayesian inference for dynamical models of biological systems in R. *Methods in Ecology and Evolution*. 8(4): 511-518. (R package on [CRAN](#))
51. Youker-Smith, T.E., Whipps, C.M., **Ryan, S.J.** 2016. Detection of an FV3-like Ranavirus in Wood Frogs (*Lithobates sylvaticus*) and Green Frogs (*Lithobates clamitans*) in a Constructed Vernal Pool Network in Central New York State. *Herpetological Review*. 47(4): 595-598
50. Fuda, R.K., **Ryan, S.J.**, Cohen, J., Hartter, J., Frair, J. 2016. Assessing impacts to primary productivity at the park edge in Murchison Falls Conservation Area, Uganda. *Ecosphere*. 7(10): e01486
49. **Ryan, S.J.**, Gavard, E.J., Cheeseman, A.E., Cohen, J.B., Whipps, C.W. 2016. Reference and baseline hematocrit measures for the threatened New England cottontail (*Sylvilagus transitionalis*) and comparison with sympatric Eastern cottontail (*Sylvilagus floridanus*) rabbits. *Journal of Zoo and Wildlife Medicine*. 47(2):659-662
48. Cameron, E.Z.\*, and **Ryan, S.J.\*** 2016. Welfare at multiple scales: importance of zoo elephant population welfare in a world of declining wild populations. *PLOS ONE* 11(7): e0158701
47. Handel A., Beltran, E., Borbor Cordova M.J., Fessler A., Finkelstein J., Robalino, R., **Ryan S.J.**, Stewart Ibarra A.M. 2016. Knowledge, attitudes, and practices regarding dengue infection among healthcare providers in Machala, Ecuador. *BMC Tropical Diseases, Travel Medicine and Vaccines* 2(8):1-10
46. Taylor, R., **Ryan, S.J.**, Brashares, J., Johnson, L.R. 2016. Hunting, food subsidies, and mesopredator release: the dynamics of crop-raiding baboons in a managed landscape. *Ecology* 97(4): 951-960
45. Hartter, J., Dowhaniuk, N., MacKenzie, C.A., **Ryan, S.J.**, Diem, J.E., Palace, M.W., Chapman, C.A. 2016. Perceptions of Risk in Communities near Parks in an African Biodiversity Hotspot. *Ambio* 45(6): 692-705
44. Southworth, J., Zhu, L., Bunting, E., **Ryan, S.J.**, Herrero, H., Waylen, P.R., Hill, M.J. 2016. Changes in vegetation persistence across global savanna landscapes, 1982-2010. *Journal of Land Use Science*, 11(1): 7-32
43. **Ryan, S.J.**, McNally, A., Johnson, L.R., Mordecai, E.A., Ben-Horin, T., Paaijmans, K.P., Lafferty, K.D. 2015. Mapping physiological suitability limits of malaria in Africa under climate change. *Vector Borne and Zoonotic Diseases*, 15(12): 718-725.
42. **Ryan, S.J.**, Ben-Horin, T., Johnson, L.R. 2015. Malaria control and senescence: the importance of accounting for the pace and shape of ageing in wild mosquitoes. *Ecosphere* 6(9):170.
41. Escobar, L.E., **Ryan, S.J.**, Stewart-Ibarra, A.M., Finkelstein, J.L., King, C.A., Qiao, H., Polhemus, M.E. 2015. A Global Map of Suitability for Coastal *Vibrio cholerae* Under Current and Future Climate Conditions. *Acta Tropica* 149: 202-211.
40. **Ryan, S.J.**, Southworth, J., Hartter, J., Dowhaniuk, N., Fuda, R., Diem, J. 2015. Household level influences on fragmentation in an African park landscape. *Applied Geography* 58: 18-31.
39. Johnson, L.R. Ben-Horin, T., Lafferty, K.D., McNally, A., Mordecai, E., Paaijmans, K.P., Pawar, S., **Ryan, S.J.** 2015. Understanding uncertainty in temperature effects on vector-borne disease: A Bayesian approach. *Ecology* 96(1): 203-213.
38. Hartter, J., **Ryan, S.J.**, Mackenzie, C.A., Goldman, A., Dowhaniuk, N., Palace, M.W., Diem, J.E., Chapman, C.A. 2015. Now there is no land: A story of ethnic migration in a protected area landscape in western Uganda. *Population and Environment* 36(4): 452-479.
37. Stewart Ibarra, A.M Muñoz, A.G., **Ryan, S.J.**, Borbor Cordova, M.J., Beltran Ayala, E., Finkelstein, J.L., Mejía, R., Ordoñez, T., Recalde Coronel, G.C, Rivero, K. 2014. Spatiotemporal clustering, climate periodicity, and social-ecological risk factors for dengue during an outbreak in Machala, Ecuador, in 2010. *BMC Infectious Diseases* 14:610

36. Stewart Ibarra, A.M., Luzadis, V.A., Borbor Cordova, M.J., Silva, M., Ordoñez, T., Beltran Ayala, E., **Ryan, S.J.** 2014. Community perceptions of dengue fever and *Aedes aegypti* in central and peripheral urban areas in Machala, Ecuador *BMC Public Health* 14:1135
35. Diem, J.E., **Ryan, S.J.**, Hartter, J., Palace, M. 2014. A drying trend in central equatorial Africa over the past three decades. *Climatic Change*. 126(1-2): 263-272.
34. Dowhaniuk, N., Hartter, J., **Ryan, S.J.** 2014. Discrepancies in geographic data cause challenges for managing protected areas. *Environmental Management*. 54(3): 596-605.
33. Diem, J.E. Hartter, J., **Ryan, S.J.**, Palace, M. 2014. Validation of satellite rainfall products for central equatorial Africa. *Journal of Hydrometeorology*. 15(5): 2030-2038.
32. Hartter, J., Solomon, J., **Ryan, S.J.**, Jacobson, S.K., Goldman, A. 2014. Contrasting perceptions of ecosystem services of an African forest park. *Environmental Conservation* 41(4): 330-340
31. **Ryan, S.J.**, Jones, J.H., Dobson, A.P. 2013. Interactions between social structure, demography, and transmission determine disease persistence in primates. *PLOS ONE* 8(10): e7686
30. Stewart Ibarra, A.M., **Ryan, S.J.**, Beltran, E. Mejía, R., Silva, M., Muñoz, A. 2013. Dengue vector dynamics (*Aedes aegypti*) influenced by climatic and social factors in Ecuador: implications for targeted control. *PLOS ONE* 8(11): e78263
29. Hartter, J.\*, **Ryan, S.J.\***, MacKenzie, C.A., Parker, J.N., Strasser, C. 2013. Spatially explicit data: stewardship and ethical challenges in science. *PLOS Biology* 11(9): e1001364
28. Mordecai, E.A., Paaijmans, K.P., Johnson, L.R., Balzer, C.H., Ben-Horin, T., deMoor, E., McNally, A., Pawar, S., **Ryan, S.J.**, Smith, T.C., Lafferty, K.D., 2013. Physiological constraints dramatically lower the expected temperature for peak malaria transmission. *Ecology Letters* 16(1):22-30
27. **Ryan, S.J.** and Hartter, J. 2012. Beyond ecological success of corridors: integrating land use history and demographic change to provide a whole landscape perspective. *Ecological Restoration* 30(4): 320-328. *Invited paper*. Special Issue on Design Approaches to Ecological Restoration
26. M.J. Tildesley and **Ryan, S.J.** 2012. Disease prevention versus data privacy: using landcover maps to inform spatial epidemic models. *PLOS Computational Biology* 8(11): e1002723
25. Rudnick, D., **Ryan, S.J.**, Preziosi, D., Epps, C., Deiffenbach, F., Kintsch, J., Beier, P., Jenness, J., Perkl, R., Trombulak, S., Hartter, J., Gerber, L., Merenlender, A., Austen, D., Cushman, S. 2012. Emerging principles in understanding landscape connectivity: practical tools for conservation decision-making. *Issues in Ecology* 16 (Fall 2012)
24. **Ryan, S.J.**, Brashares, J. S, Walsh, C., Milbers, K., Kilroy, C., Chapman, C.A. 2012. A survey of gastrointestinal parasites of olive baboons (*Papio anubis*) in human settlement areas of Mole National Park, Ghana. *Journal of Parasitology* 98:885-888
23. **Ryan, S.J.**, Cross, P.C., Winnie, J, Jr, Hay, C., Bowers, J., Getz, W.M. 2012. The utility of NDVI for predicting African buffalo forage quality. *Journal of Wildlife Management* 76(7):1499-1508
22. Hartter, J., Stampone, M.D., **Ryan, S.J.**, Kirner, K., Chapman, C.A., Goldman, A. 2012. Patterns and perceptions of climate change around a biodiversity hotspot. *PLOS ONE* 7(2) e32408
21. **Ryan, S.J.** and Walsh, P.D. 2011. Consequences of non-intervention for infectious disease in African great apes. *PLoS ONE* 6(12): e29030
20. Wolf, A., Anderegg, W., **Ryan, S.J.**, Christensen, J. 2011. Robust detection of plant species range shifts under biased sampling regimes. *Ecosphere* 2(10):115
19. Hartter, J.\*, **Ryan, S.J.\***, Southworth, J., and Chapman, C.A. 2011. Landscapes as continuous entities: forest disturbance and recovery in the Albertine Rift Landscape. *Landscape Ecology* 26(6):877-890
18. Stampone, M.D., Hartter, J., Chapman, C.A., **Ryan, S.J.** 2011. Localized Precipitation Trends in and around a Forest Park in Equatorial East Africa. *Research Journal of Environmental and Earth Sciences* 3(1):14-23
17. Petorelli, N., **Ryan, S.J.**, Mueller, T., Bunnefeld, N., Jedrzejewska, B., Lima, M., Kausrud, K. 2011. The Normalized Difference Vegetation Index (NDVI) in ecology: a decade of unforeseen successes. *Climate Research* 46:15-27
16. Hartter, J. and **Ryan, S.J.** 2010. Top-down or bottom-up? Decentralization, natural resource management and usufruct rights in the forests and wetlands of Western Uganda. *Land Use Policy* 27(3): 815-826
15. Ladau, J. and **Ryan, S.J.** 2010. MPowering ecologists: community assembly tools for community assembly rules. *Oikos* 119(7): 1064-1069

14. Bar-David, S, Bar-David, I, Cross, P.C. **Ryan, S.J.**, Knechtel, C.U., Getz, W.M. 2009. Methods for assessing movement path recursion with application to African buffalo in South Africa. *Ecology* 90(9) 2467–2479
13. Sánchez, M.S., Lloyd-Smith, J.O., Williams, B.G., Porco, T.C., **Ryan, S.J.**, Borgdorff, M.W., Mansoer, J., Dye, C. and Getz, W.M. 2009. Incongruent HIV and tuberculosis co-dynamics in Kenya: Interacting epidemics monitor each other. *Epidemics* 1(1):14-20
12. **Ryan, S.J.**, Starks, P.T., Milton, K. and Getz, W.M. 2008. Intersexual conflict and group size in mantled howler monkeys: a 23-year evaluation. *International Journal of Primatology* 29:405-420
11. Gusset, M\*. and **Ryan, S.J.\***, Hofmeyr, M., Van Dyk, G., Davies-Mostert, H.T., Graf, J.A., Owen, C., Szykman, M., Macdonald, D.W., Monfort, S.L., Wildt, D.E., Maddock, A.H., Mills, M.G.L., Slotow, R., Somers, M.J. 2008. Efforts going to the dogs? Evaluating attempts to re-introduce endangered wild dogs in South Africa. *Journal of Applied Ecology* 45:100-108
10. **Ryan, S.J.**, Knechtel, C.U. and Getz, W.M. 2007. Ecological cues, gestation length and birth timing in African Buffalo (*Syncerus caffer*). *Behavioral Ecology* 18:635-644.
9. Getz W.M., Fortmann-Roe S, Cross P.C., Lyons A.J. **Ryan, S.J.**, and Wilmers, C.C. 2007. LoCoH: Nonparametric kernel methods for constructing home ranges and utilization distributions. *PLoS ONE* 2: e207
8. **Ryan, S.J.** 2006. The role of culture in conservation of small or endangered populations. *Conservation Biology* 20:1321-1324.
7. **Ryan, S.J.**, Knechtel, C.U. and Getz, W.M. 2006. Range and habitat selection of African buffalo in South Africa. *Journal of Wildlife Management* 70: 764-776
6. Redfern, J.V., **Ryan, S.J.** and Getz, W.M. 2006. Defining herbivore assemblages in the Kruger National Park: a correlative coherence approach. *Oecologia* 146:632-640
5. **Ryan, S.J.** and Getz, W.M. 2005. A spatial location allocation GIS framework for managing water sources in a savanna nature reserve. *South African Journal of Wildlife Research* 35(2):153-178
4. **Ryan, S.J.** and Jordaan, W. 2005. Activity patterns of African Buffalo *Syncerus caffer* in the Lower Sabie region, Kruger National Park, South Africa. *Koedoe* 48: 117-124
3. Faust, L.J., Thompson, S.D., Earnhardt, J.M., Brown, E., **Ryan, S.J.**, Sherman, M. and Yurenka, M. 2003. Using stage-based system dynamics modeling for demographic management of captive populations. *Zoo Biology*, 22:45-64
2. **Ryan, S.J.**, Roth, A.M., Thompson, S.D. and Gold, K.C. 2002. Effects of hand rearing on the reproductive success of Western Lowland Gorillas in North America. *Zoo Biology* 21:389-401
1. **Ryan, S.J.** and Thompson, S.D. 2001. Disease risk and inter-institutional transfer of specimens in cooperative breeding programs: herpes and the elephant Species Survival Plans. *Zoo Biology* 20:89-101

## CHAPTERS

11. Castellanos et al., 2022. WGII Sixth Assessment Report IPCC 2022 - Chapter 12: Central and South America, contributing author
10. **Ryan, S.J.** 2021. "Disease Ecology", in COVID-19 and Similar Futures: Pandemic Geographies, Andrews, G., Crooks, V., Pearce, J., Messina, J., (Eds), Springer
9. **Ryan, S.J.**, Lippi, C.A., Bardosh, K.L., Frydenlund, E.F., Gaff, H.D., Heydari, N., Wilson, A.J., Stewart-Ibarra, A.M. 2020. "Chapter 14: Direct and Indirect Social Drivers and Impacts of Vector Borne Diseases" in Population Biology of Vector Borne Diseases, Drake, J.M, Bonsall, M., Strand, M., (Eds.) Oxford University Press, Oxford.
8. Southworth J., **Ryan S.J.**, Bunting E., Herrero H.V., Nagendra H., Gibbes C., Agarwal S. 2018. "Chapter 16: Protected Areas, Climate Change, and Ecosystem Sustainability", in Comprehensive Remote Sensing, Vol 9, Liang, S., (Ed.), Elsevier, Oxford, pp 202-219
7. Liang, S., Kintziger, K., Reaves, P., **Ryan, S.J.** 2017. "Chapter 4: Climate Change Impacts on Human Health", in Florida's Climate: Changes, Variations, & Impacts, *Florida Climate Institute*, pp. 125-152.
6. Borbor-Cordova, M., Ayala, E., Cardenas, W., Endy, T., Finkelstein, J., Leon, R., Muñoz, Á., Mejía, R., Polhemus, M., Recalde Coronel, G., **Ryan, S.**, Stewart-Ibarra, A. 2016. "Chapter 5: Developing and delivering health-tailored climate products and services: Case study 5.C Vector-virus microclimate surveillance system for dengue control in Machala, Ecuador", Climate Services for Health: Global case studies of enhancing decision support for climate risk management and adaptation, WHO/WMO, Geneva

5. Johnson, L.R., Lafferty, K.D., McNally, A., Mordecai, E., Paaijmans, K., Pawar, S., **Ryan, S.J.** 2014. "Mapping the distribution of malaria: current methods and considerations", in Spatial and temporal dynamics of infectious diseases, Chen, D. ed., John Wiley & Sons. pp.109-209
4. Prins, H.T., Melletti, M., Korte, L., Cornelis, D., Mirabile, M., **Ryan, S.J.** 2014. "Species Account: African Buffalo (*Syncerus caffer*)", in Ecology, Evolution and Behaviour of Wild Cattle: Implications for Conservation. Burton, J. and Melletti, M., eds. Cambridge University Press
3. Chapman, C.A., Huffman, M.A. **Ryan, S.J.**, Sengupta, R. and Goldberg, T. 2009. "Ways forward in the study of primate parasite ecology". In Primate parasite ecology: the dynamics and study of host-parasite relationships. Huffman, M.A. and Chapman, C.A., eds. Cambridge Studies in Biological and Evolutionary Anthropology. Cambridge University Press. pp. 487-505
2. Getz, W.M., Cross, P.C., Jolles, A.E., Lloyd-Smith, J.O., **Ryan, S.J.**, Baxter, P.W.J., Bowers, J., Hay, C.T., Knechtel, C., Tambling, C.J., Turner, W.C., duToit, J.T. 2005. "Bovine Tuberculosis in the African Buffalo: The Role of Population Models". In Conservation and development interventions at the wildlife/livestock interface: implications for wildlife, livestock and human health. Osofsky, S. A., S. Cleaveland, et al., Eds. Gland, Switzerland and Cambridge, UK, IUCN pp.xxiii
1. Dobson, A., Ralls, K., Foster, M., Soule, M., Simberloff, D., Doak, D., Estes, J., Mills, S., Mattson, D., Dirzo, R., Arita, H., **Ryan, S.**, Norse, E., Noss, R., Johns, D. 1999. "Corridors: Reconnecting Fragmented Landscapes", pp.121-179 in Continental Conservation. Michael E. Soule & John Terborgh, eds. The Wildlands Project, Island Press.

#### REPORTS/PROCEEDINGS/BOOK REVIEWS

21. **Ryan, S.J.**, Stewart-Ibarra, A., Dunbar, W., Diaz, A., Lowe, R., Thomas, S.J. 2020. "Climate health audit tool: regional health audit of climate and vector borne diseases data, Haiti, St. Lucia, Jamaica." Technical Report. Pilot Programme for Climate Resilience (PPCR), University of the West Indies, Mona. 60pp
20. **Ryan, S.J.**, Steynor, A., Jack, C., Wolski, P., van Aardenne, L., Lennard, C., Zermoglio, F. 2020. "Shifting Risks of Malaria in Southern Africa: a regional analysis." Technical Report. United States Agency for International Development Adaptation Thought Leadership and Assessments (USAID-ATLAS). 44pp <https://www.climatelinks.org/resources/shifting-risks-of-malaria-in-southern-africa>
19. Steynor, A., Jack, C., Wolski, P., van Aardenne, L., Lennard, C., **Ryan, S.J.**, Ebi, K., Allen, L., Graff, N., Zermoglio, F. 2020. "The Influence of Climate on Malaria in Malawi, a Retrospective Analysis." Technical Report. United States Agency for International Development Adaptation Thought Leadership and Assessments (USAID-ATLAS). 64pp <https://www.climatelinks.org/resources/influence-climate-malaria-incidence-malawi-0>
18. **Ryan, S.J.**, Zermoglio, F. 2020. Shifting Burdens: Malaria Risk Under Rising Temperatures in Botswana. Briefing note. United States Agency for International Development Adaptation Thought Leadership and Assessments (USAID-ATLAS). 13pp <https://www.climatelinks.org/resources/shifting-burdens-malaria-risk-under-rising-temperatures-botswana>
17. **Ryan, S.J.**, Zermoglio, F. 2019. Plague in a Changing Environment: A literature review for Madagascar. Technical Report. United States Agency for International Development Adaptation Thought Leadership and Assessments (USAID-ATLAS). 62pp <https://www.climatelinks.org/resources/plague-changing-environment-literature-review-madagascar>
16. Zermoglio, F., **Ryan, S.J.**, Swaim, M. 2019. Shifting Burdens: Malaria Risk in a Hotter Africa. Technical Report. United States Agency for International Development Adaptation Thought Leadership and Assessments (USAID-ATLAS). 54pp <https://www.climatelinks.org/resources/shifting-burdens-malaria-risks-hotter-africa>
15. Stewart-Ibarra, A.M., **S.J. Ryan**, M.B. Cordova, M. Romero, R. Lowe, C.A. Lippi, and C. Carlson. 2017. A spatio-temporal modeling framework for *Aedes aegypti* transmitted diseases in the Caribbean. *United States Agency for International Development (USAID) Programme for Building Regional Climate Capacity in the Caribbean (BRCCC Programme)*.
14. **Ryan, S. J.**, Rheingans, R., Amratia, P., Amaya, M.P., Laytner, L. A., Bagamian, K. H., Anderson, J.D., Watson, J., McNamara, K., Cumming, O. 2016. "WASH Poverty Diagnostic; Poverty Risk Model Assessment: Ecuador." World Bank Report, 51pp. Report commissioned by the "Poverty Risk Models (PRM) for water, sanitation and health (WASH) project" for World Bank, Washington, D.C.
13. Rheingans, R., Bagamian, K. H., Anderson, J. D., **Ryan, S. J.**, Amratia, P., Amaya, M. P., Bouland, J., Laytner, L. A., Watson, J., Cumming, O. 2016. "WASH Poverty Diagnostic; Poverty Risk Model Assessment: Bangladesh." World



- Bank Report, 56pp. Report commissioned by the “*Poverty Risk Models (PRM) for water, sanitation and health (WASH) project*” for World Bank, Washington, D.C.
12. Rheingans, R., Anderson, J. D., Bagamian, K. H., **Ryan, S. J.**, McNamara, K., Laytner, L. A., Amratia, P., Watson, J., Cumming, O. 2016. “WASH Poverty Diagnostic; Poverty Risk Model Assessment: Democratic Republic of Congo.” World Bank Report, 56pp. Report commissioned by the “*Poverty Risk Models (PRM) for water, sanitation and health (WASH) project*” for World Bank, Washington, D.C.
  11. Rheingans, R., Bagamian, K. H., Anderson, J. D., **Ryan, S. J.**, Laytner, L. A., McNamara, K., Watson, J., Cumming, O. 2016. “WASH Poverty Diagnostic; Poverty Risk Model Assessment: Ethiopia.” World Bank Report, 56pp. Report commissioned by the “*Poverty Risk Models (PRM) for water, sanitation and health (WASH) project*” for World Bank, Washington, D.C.
  10. Rheingans, R., Bagamian, K. H., Anderson, J. D., **Ryan, S. J.**, Laytner, L. A., McNamara, K., Amaya, M. P., Watson, J., Cumming, O. 2016. “WASH Poverty Diagnostic; Poverty Risk Model Assessment: Haiti.” World Bank Report, 54pp. Report commissioned by the “*Poverty Risk Models (PRM) for water, sanitation and health (WASH) project*” for World Bank, Washington, D.C.
  9. Rheingans, R., Anderson, J.D., Bagamian, K.H., **Ryan, S.J.**, Watson, J., Laytner, L.A., Cumming, O. 2016. “WASH Poverty Diagnostic; Poverty Risk Model Assessment: Mozambique.” World Bank Report, 62pp. Report commissioned by the “*Poverty Risk Models (PRM) for water, sanitation and health (WASH) project*” for World Bank, Washington, D.C.
  8. Rheingans, R., Bagamian, K. H., Anderson, J.D., **Ryan, S. J.**, Laytner, L. A., McNamara, K., Watson, J., Cumming, O. 2016. “WASH Poverty Diagnostic; Poverty Risk Model Assessment: Nigeria.” World Bank Report, 54pp. Report commissioned by the “*Poverty Risk Models (PRM) for water, sanitation and health (WASH) project*” for World Bank, Washington, D.C.
  7. Rheingans, R., Anderson, J. D., Bagamian, K. H., **Ryan, S.J.**, Amaya, M. P., Laytner, L. A., McNamara, K., Watson, J., Cumming, O. 2016. “WASH Poverty Diagnostic; Poverty Risk Model Assessment: Tajikistan.” World Bank Report, 54pp. Report commissioned by the “*Poverty Risk Models (PRM) for water, sanitation and health (WASH) project*” for World Bank, Washington, D.C.
  6. Rheingans, R., Bagamian, K. H., Anderson, J. D., **Ryan, S. J.**, Watson, J., Amratia, P., Laytner, L. A., Cumming, O. 2016. “WASH Poverty Diagnostic; Poverty Risk Model Assessment: Pakistan.” World Bank Report, 58pp. Report commissioned by the “*Poverty Risk Models (PRM) for water, sanitation and health (WASH) project*” for World Bank, Washington, D.C.
  5. Bardosh, K, Ebi, K., **Ryan, S.J.**, Welburn, S., Singer, B. 2015. “Addressing Vulnerability, Building Resilience: Community-based Adaptation to Vector-Borne Diseases in the Context of Global Change.” Review commissioned by the UNICEF/UNDP/World Bank/WHO Special Programme for Research and Training in Tropical Diseases (TDR) as part of the research initiative “*Population Health Vulnerabilities to Vector-Borne Diseases: Increasing Resilience under Climate Change Conditions in Africa.*” With funding support from the International Development Research Centre (IDRC) of Canada.
  4. **Ryan, S.J.**, 2011. *Invited Book Review*. "Governing Africa's Forests in a Globalized World Laura A German, Alain Karsenty and Anne-Marie Tiani (Editors)". *Natural Resources Forum* 35(2): 146-147
  3. Hartter, J., **Ryan, S.J.**, Southworth, J., and Chapman, C.A. 2010. "Fortresses and Fragments: Impacts of Fragmentation in a Forest Park Landscape". In *Proceedings of IUFRO Landscape Ecology International Conference*. Braganca, Portugal.
  2. **Ryan, S.**, Roth, A.M., Thompson, S.D. and Gold, K.C. 2001. "Effects of hand rearing on the reproductive success of Western Lowland Gorillas in North America". pp. 99 In *The Apes: Challenges for the 21st Century Brookfield Zoo, May 10-13, 2000. Conference Proceedings*, Chicago Zoological Society, Brookfield, Illinois, U.S.A. viii + 376 pp. ISBN 0-913934-28-3.
  1. Faust, L. J., Thompson, S.D., Earnhardt, J.E., Sherman, M., Brown, E. and **Ryan, S. J.** 2001. "Innovative techniques in population demography to improve captive management of western lowland gorillas". pp.207 In *The Apes: Challenges for the 21st Century Brookfield Zoo, May 10-13, 2000. Conference Proceedings*, Chicago Zoological Society, Brookfield, Illinois, U.S.A. viii + 376 pp. ISBN 0-913934-28-3.

## RECENT SELECTED TALKS/PANELS

### *Invited:*

- Ryan, S.J.** 2022. *Invited Panelist* “Open for Climate Justice: How does open access and open science help address issues in climate justice?”, *George A. Smathers Libraries, University of Florida*, October 26<sup>th</sup>, 2022
- Ryan, S.J.** 2022. “Impact of climate change on arboviral diseases” *IDWeek mini-symposium: "Impact of Climate Change on infectious diseases in children, IDWeek 2022*, Washington D.C., October 23rd, 2022
- Ryan, S.J.** 2022. *Guest Lecture*: “Pox be upon us: history of smallpox and response as a framing for MonkeyPox 2022” STIA 251: Emerging diseases after Covid-19: what comes next? *Science, Technology & International Affairs (STIA) Program, Walsh School of Foreign Service, Georgetown University*, October 14<sup>th</sup>, 2022 (online)
- Ryan, S.J.**, 2022. *Featured Keynote Speaker, Strickman Memorial Lecture*: “Plans may change: shifting risks of vector-borne diseases on a warming planet” Society of Vector Ecology (SOVE) 8<sup>th</sup> International Congress, Honolulu, HI, September 19<sup>th</sup>, 2022
- Ryan, S.J.** 2021. *Guest Lecture*. “Models and maps: making sense of vector borne disease risk in a changing world”. GLID 525: Quantitative Evidence in Infectious Disease Research, *Global Infectious Disease Program, Georgetown University*, Sept 23, 2021 (online)
- Ryan, S.J.** 2021. “Section 2: Ecophysiological models for vector borne diseases”. US Department of State International Visitor Leadership Program (IVLP): Building a Resilient Healthcare System (Moldova), March 11, 2021 (online)
- Ryan, S.J.** 2021. *Invited Panelist*. “Sustainability into Practice: Climate Change, Health & Equity” *Bob Graham Center for Public Service in partnership with the University of Florida's Office of Sustainability, Florida Climate Institute, and the UF Thompson Earth Systems Institute*. 6pm, March 4, 2021
- Ryan, S.J.** 2021. Mini-PIPP Summary and Synthesis: “Shifting Risks: global change and vectorborne disease suitability models”, NSF PIPP workshop: Predicting Pandemic Emergence, February 25, 2021 (online)
- Ryan, S.J.** 2021. Plenary Talk: “Shifting Risks: global change and vectorborne disease suitability models”, NSF PIPP workshop: Predicting Pandemic Emergence, *uploaded* February 19, 2021.
- Ryan, S.J.** *Invited Panelist*. “Climate, Health & Equity; Live on Disasters: Deconstructed Podcast” Noon, February 12, 2021 (YouTube: [https://youtu.be/jCX\\_fU9y\\_fQ](https://youtu.be/jCX_fU9y_fQ))
- Ryan, S.J.** 2021. “Shifting risks: aligning climate change predictions for mosquito-borne disease with health decision frameworks” (online) Emory University School of Medicine Infectious Diseases Seminar, January 21, 2021.
- Ryan, S.J.** 2020. *Guest Lecture*: “Decisions will be made: Aligning climate change predictions for vector-borne disease with planning frameworks.” PHC6764 Global Public Health and Development, Environmental and Global Health, University of Florida. November 9, 2020.
- Ryan, S.J.** 2020. “Climate and Dengue: Aligning climate change predictions for vector-borne disease with planning frameworks” Talk and Panel Discussion, UNGA 75 Side Event – *From Local to Global Cooperation in Dengue*. (online) International Society for Neglected Tropical Diseases (ISNTD), September 28, 2020. (YouTube <https://youtu.be/KT5biT2-zuE>)
- Ryan, S.J.** 2020. *Guest Lecture*: “Aligning climate change predictions for vector-borne disease with planning frameworks.” Pandemics and the Environment; Environmental Capstone, LAW 6930, UF Law School. (online) August 25, 2020
- Ryan S.J.** 2020. “Decisions will be made: modeling vector borne disease at multiple scales for different purposes and use” MEGA:BITESS Lunch and Learn for K-12 Teachers, Knoxville, TN (online) June 22, 2020.
- Ryan S.J.** 2020. “*Aedes* and landscapes: A short tour of *Aedes* (and tick) mapping projects from the Southeastern CoE” Midwest CDC Center of Excellence in Vector Borne Diseases (online seminar) April 14, 2020.
- Ryan, S.J.** 2020. “*Aedes* and landscapes: A short tour of *Aedes* mapping projects from the Southeastern CoE” CDC Vector Week 2020 Conference, Fort Collins, CO, February 25-28, 2020.
- Ryan, S.J.** 2019 “*Global shifts in risk of Aedes-transmitted diseases under future climate scenarios*” Centennial Annual Meeting of the American Geophysical Union (AGU 100) **Session: Assessment Of Global Climate Variability And Hydroclimatological Processes On Infectious Diseases I**, San Francisco, CA, December 9-13<sup>th</sup>, 2019
- Ryan, S.J.** 2019. “*Keynote: Linking vector borne disease to climate at multiple scales with mechanistic and geospatial models.*” 11<sup>th</sup> Annual Undergraduate Research Conference at the Interface of Biology and Mathematics, NIMBioS, University of Tennessee, Knoxville, November 16-17<sup>th</sup>, 2019.

- Ryan, S.J.** 2019. “Decisions will be made: modeling vector borne disease at multiple scales for different purposes and use” Seminar, Department of Ecology, Evolution, and Environmental Biology (E3B) Columbia University, October 22, 2019
- Ryan, S.J.**, 2019. “*The Future is Uncertain: Mapping and Communicating Suitability for Vector-borne Diseases under Climate Change*” Seminar, Center for Infectious Disease Dynamics (CIDD), The Pennsylvania State University, September 30, 2019.
- Ryan, S.J.** 2019 “*Decisions will be made: Aligning climate change predictions for vector-borne disease with planning frameworks.*” Symposium: Pathogens Gone Global: Disease Ecology and Evolution in a Changing World, Duke University, September 26, 2019.
- Ryan, S.J.** 2019 “*Decisions will be made: Aligning climate change predictions for vector-borne disease with planning frameworks.*” Symposium 15: Complex Disease Problems across Scales: Perspectives on Advancing Disease Ecology with Trans-Disciplinary Research, Ecological Society of America (ESA) Annual Meeting, August 16, 2019
- Ryan, S.J.** 2018. “Uncertain futures: incorporating climate projection uncertainty into vector borne disease models” *MPE 2013+ Workshop on Global Change and Vector-borne Diseases: Mapping Emerging Infectious Diseases* George Mason University Fairfax, VA, August 13<sup>th</sup>-15, 2018
- Ryan, S.J.** 2018. “Uncertain futures: incorporating climate projection uncertainty into (uncertain) vectorborne disease models.” *MPE 2013+ Workshop on Mathematics of Planet Earth - The Future. Center for Discrete Mathematics and Computer Science (DIMACS), Rutgers University, New Brunswick, July 25-26<sup>th</sup>, 2018*
- Ryan, S.J.** 2018. “The Future is Uncertain: mapping and communicating suitability for vectorborne diseases under climate change.” *USDA CMAVE, May 10, 2018*
- Ryan, S.J.** 2018. “The Future is Uncertain: mapping and communicating suitability for vector borne diseases under climate change.” *Energy and Environment Forum, Howard J. Baker Center for Public Policy, University of Tennessee, Knoxville, TN, April 26, 2018*
- Ryan, S.J.** 2018. “The Future is Uncertain: mapping and communicating suitability for vector borne diseases under climate change.” *2<sup>nd</sup> Annual Symposium on Climate and Health, University of Miami, Miami, FL, April 14, 2018*
- Ryan, S.J.** 2018. “The Future is Uncertain: mapping and communicating suitability for vector borne diseases under climate change.” *Cary Institute Seminar, Cary Institute for Ecosystem Studies, Millbrook, NY, March 1, 2018.*
- Ryan, S.J.** 2018. “Direct and Indirect Social Drivers and Impacts of Vectorborne Diseases” *Population Biology of Vector-borne Diseases Symposium. UGA Center for the Ecology of Infectious Diseases (CEID), University of Georgia, Feb 24, 2018.*
- Ryan, S.J.** 2017. “GIS for Vector borne diseases: a needs assessment.” *CSTE South Central and Atlantic Vector-Borne Diseases Regional Meeting, New Orleans, LA, December 5-6, 2017*
- Ryan, S.J.** 2017. “Overview of the SE Regional COE in VBD: The Gateway Program.” *CSTE South Central and Atlantic Vector-Borne Diseases Regional Meeting, New Orleans, LA, December 5-6, 2017*
- Ryan, S.J.** “The shifting burden of health in a changing climate; Discussion on ongoing approach under 2.4 Health and Climate Change ATLAS Project.” *Africa Bureau Speaker, USAID, Washington, D.C., November 30, 2017*
- Ryan, S.J.** 2017. “GIS for Vector borne diseases: a needs assessment.” *CSTE North and Mid-Atlantic Vector-Borne Diseases Regional Meeting, Arlington, VA, November 28-29, 2017*
- Ryan, S.J.** 2017. “Overview of the SE Regional COE in VBD: The Gateway Program.” *CSTE North and Mid-Atlantic Vector-Borne Diseases Regional Meeting, Arlington, VA, November 28-29, 2017*
- Ryan, S.J.** 2017. “Webinar: Geospatial Tools for Vector Borne Diseases”, *commissioned by USAID and CIMH Programme for building regional climate capacity in the Caribbean (BRCCC), livecast and recorded, June 16, 2017*
- Ryan, S.J.** 2017. “Issues of Space and Place in a world of large-scale vectorborne disease models.” *DIMACS/NSF Special Program: Mathematics of Planet Earth (MPE): Appropriate Complexity Modeling of the Impacts of Global Change on Ecosystems, UC Berkeley, Mar 27-29, 2017*
- Ryan, S.J.** 2017. “Tales from local scales: implications for conservation after decisions have been made”. *Wildlife Seminar, Department of ESPM, UC Berkeley, Mar 24, 2017.*
- Ryan, S.J.** 2017. *Guest Lecture. “The usual suspects: Issues of space, place, and model intent for climate and water driven diseases.” ESPP 90D: Planetary Health: Understanding the human health impacts of accelerating environmental change. Department of Environmental Health, Harvard T.H. Chan School of Public Health, Harvard University Center for the Environment. February 1<sup>st</sup>, 2017. Cambridge, MA*



- Ryan, S.J.** 2016. "Forecasting Zika under global change: available data", *DIMACS/NSF Special Program: Mathematics of Planet Earth (MPE), Zika workshop, UC Berkeley, Dec 5-6<sup>th</sup>, 2016.*
- Ryan, S.J.** 2016. "The usual suspects: Issues of space, place, and model intent for climate and water driven diseases." *Population Biology, Ecology and Evolution Program Seminar Series, Emory University, October 14<sup>th</sup>, 2016.*
- Ryan, S.J.** 2016. "Cape buffalo and savanna seasonality: feeding, breeding, and some notes on the future." *Natural Resource Management in Africa Working Group Seminar, University of Florida. October 27<sup>th</sup>, 2016.*
- Ryan, S.J.**, 2016. "Malaria and cholera: examining space, place, and scale, in modeling climate-disease systems". *Department of Environmental and Global Health (EGH) Seminar Series, University of Florida, September 27<sup>th</sup>, 2016.*
- Ryan, S.J.** 2016. "The usual suspects". Panel discussant, Global health and the environment I: Research (Sponsored by Human Dimensions of Global Change Specialty Group, Population Specialty Group, Health and Medical Geography Specialty Group). Organizers: Lopez-Carr, D., Kwan, M. *Annual Meeting of the American Association of Geographers, March 29-April 2<sup>nd</sup>, 2016, San Francisco, CA.*
- Ryan, S.J.** 2016. "Reflections on the Ebola Response". Panel discussant, *NSF Workshop: Mathematical Modeling of Infectious Diseases, March 8-10, 2016, Dakar, Senegal.*
- Ryan, S.J.**, Gavard, E., Cohen, J., Cheeseman, A., Whipps, C. 2015. "The Effect of an Introduced Competitor and Non-Native Forage Plants on Parasites and Body Condition of the New England Cottontail in Fragmented Habitat." Symposium: International and Collaborative Approaches to Lagomorph Conservation in a Changing World. *Vth International Wildlife Management Congress 2015. July 26-30, 2015. Sapporo, Japan*
- Ryan, S.J.** 2014. "Cape buffalo and savanna seasonality: feeding, breeding, and some notes on the future". *1<sup>st</sup> Symposium on African Buffalo, IUCN Antelope SSC, International Foundation for Wildlife Management (Fondation IGF), CIRAD Research Center, hosted by the Fondation François Sommer. November 5-6, 2014, Paris, France.*
- Ryan, S.J.** 2014. "Clash of the Titans: People, Environment, and Climate in the Albertine Rift." *Integrative Biology Departmental Seminar Series, University of Southern Florida (USF), Tampa, FL.*
- Ryan, S.J.** 2013. "Shifting ecologies of vector-borne diseases: novel emergence, recent resurgence, and the usual suspects." *Tipping Points for Action: 5<sup>th</sup> annual invasive species workshop. Alverna Heights, Fayetteville, NY.*
- Ryan, S.J.**, Hartter, J., Palace, M., Diem, J., and C. Chapman. 2013. "Parks, People, and Fragments: Remedying Decoupled Research into Natural-Human Systems." Session: New Frontiers for Research and Engagement in African Conservation Landscapes *Association of American Geographers (AAG) Annual Meeting. April 9-13, 2013. Los Angeles, CA. Sponsored by Human Dimensions of Global Change Specialty Group, Cultural and Political Ecology Specialty Group and the Hazards, Risks, and Disasters Specialty Group.*
- Ryan, S.J.** 2013. "Clash of the Titans: People, Environment, and Climate in the Albertine Rift." *Ecology & Evolution Graduate Program Seminar Series, Rutgers University, NJ.*
- Ryan, S.J.** 2013. "Climate change and Malaria: a hot topic that is cooler than you think". *Conversations in Global Health, Upstate Medical University, Department of Immunology and Microbiology.*
- Ryan, S.J.** 2012. "Extreme Conservation: The Consequences of Non-Intervention for Infectious Disease in Great Apes" *Fall Environmental Sciences Seminar Series, NRESS Program, the Institute for the Study of Earth Oceans and Space (EOS), the UNH Sustainability Academy, the Department of Natural Resources and the Environment, and the Department of Earth Sciences. University of New Hampshire, Durham, NH.*
- Ryan, S.J.** and Hartter, J. 2012. "Population, Environment, and Climate In the Albertine Rift: Local Impacts of Regional Change". Symposium: Making sense of climate change: global and local discourses. *American Association of Anthropology (AAA) Annual Meeting, San Francisco, CA.*
- Ryan, S.J.** and Hartter, J. 2012. "Living locally in the larger landscape: People, Environment and Climate in the Albertine Rift", *Wildlife Conservation Society, Bronx Zoo, NY*
- Ryan, S.J.** 2011. "From satellites to parasites: measuring health in African parks landscapes", *Department of Biology Seminar, Syracuse University.*
- Ryan, S.J.** 2010. *Guest Lecture, "Agent and individual based models for ecology", ESM 232, Bren School, USCB.*
- Ryan, S.J.** 2010. "From politics to parasites: assessing health in African parks landscapes". *Department of Geography Colloquium, UC Santa Barbara.*
- Ryan, S.J.** 2010. "The consequences of non-intervention for infectious disease in African great apes." *DIMACS/MBI US-African BioMathematics Initiative: Workshop on Conservation Biology. August 11-13, 2010. South African Wildlife College, Limpopo, South Africa.*
- Ryan, S.J.** 2009. "A Zoonotic Buffet: a survey of the diseases we share with animals". *Ecolunch, NCEAS.*



- Ryan, S.J.** 2009. "NDVI, forage quality and variation in reproductive patterns of African Buffalo (*Syncerus caffer*) in South Africa." Symposium: The use of satellite-based data in assessing ecological responses to environmental change. International Mammal Congress, Mendoza, Argentina
- Ryan, S.J.** 2009. "The effects of contact structure, demography and movement on disease transmission within a primate metapopulation" *Spring Ecology and Evolution Colloquium, Department of Biology, San Francisco State University.*
- Ryan, S.J.** 2008. "A structured model for disease transmission in primate populations". *Environmental Seminar Series, Santa Clara University.*

**Contributed/Conference:**

- Ryan, S.J.** Chair/Convener, "AGU GH013: Intersecting Vulnerabilities: The Compounded Impacts On Health In A Changing World" Virtual Poster and Discussion Session, American Geophysical Union (AGU) Fall Meeting, 2020. December 1-17, 2020, *virtual*.
- Ryan, S.J.,** Carlson, C.J., Tesla, B., Bonds, M., Ngonghala, C.N., Mordecai, E.A., Johnson, L.R., Murdock, C.C. 2020. "Warming temperatures could expose more than 1.3 billion new people to Zika virus risk by 2050." Oral Session GH022: Early Warning Systems for Infectious Disease Based on Climate and Environmental Variability I. American Geophysical Union (AGU) Fall Meeting, 2020. December 1-17, 2020, *virtual*.
- Villena, O., **Ryan, S.J.,** Murdock, C., Johnson, L.R. 2020. The effect of temperature on the transmission of malaria parasites: *Plasmodium falciparum* and *Plasmodium vivax* by *Anopheles gambiae* and *Anopheles stephensi*. 2020 Ecological Society of America (ESA) Annual Meeting, August 3-6, 2020, *virtual*.
- Stone, E.\*\*\*, E., Mundis, S.J., Hamerlinck, G., Whiteman, A., Rapp, T., Delmelle, E., and Ryan, S.J. 2020 Investigating the Effect of Spatial and Temporal Factors on *Aedes albopictus* Size. Florida Society of Geographers Annual Meeting, February 7-9, Gainesville FL.
- Martin, J.L.\*, Stewart-Ibarra, A.M., Mordecai, E.A., Heras, F.D.H., Ayala, E.B., Ryan, S.J. 2019 "Socioecological Systems Analysis of Household *Aedes aegypti* Risk in Huaquillas, Ecuador." Annual Meeting of the American Association of Geographers, April 3-7, Washington, D.C.
- Mundis, S.J.\*, S.J. Ryan. 2019. "Spatial dependence and the role of landscape factors as predictors of insecticide resistance in *Aedes aegypti* mosquitoes across Florida." Annual Meeting of the American Association of Geographers April 3-7, Washington, D.C.
- Lippi, C.A.\*, A.M. Stewart-Ibarra, M.E. Franklin Bajana Loor, J.E. Duenas Zambrano, N.A. Epinoza, J.K. Blackburn, and S.J. Ryan. 2019. Geographic shifts in *Aedes aegypti* habitat suitability in Ecuador using larval surveillance data and ecological niche modeling: implications of climate change for public health vector control. Annual Meeting of the American Association of Geographers April 3-7, Washington, D.C.
- Martin, J.L.\*, Martcheva, M., Ryan, S.J. 2019 "UF MathGeo Model: A Mechanistic Approach Using Vector Traits and Georeferenced Climate Data" 2019 Council of State and Territorial Epidemiologists Vector-Borne Diseases Forecasting Workshop, August 5, 2019, University of California Davis.
- Mundis, S.J.\*, S.J. Ryan. 2019. "Application of spatial analysis methods to identify and explain insecticide resistant clusters of *Aedes aegypti* mosquitoes in Florida." Annual Meeting of the American Society for Tropical Medicine & Hygiene (ASTMH) November 20-24, National Harbor, Maryland.
- Blaine, T., **Ryan, S.J.,** Zermoglio, F., Quinn, C. 2018. "Understanding and Responding to the Shifting Burden of Disease: Malaria Risks in Africa Under a Changing Climate." Session: GH13A: Developing Climate, Public Health, and Citizen Science Services to Predict and Prevent Climate-Sensitive Health Risks and Serve the Public Good. *American Geophysical Union Fall Meeting, December 10-14, 2018, Washington, D.C.*
- Ryan, S.J.** Carlson, C.J., Mordecai, E.A., Johnson, L.R. 2018. "The Future is Uncertain: global shifts in potential distribution and seasonal risk of *Aedes*-transmitted viruses." Session: Geographic Research on Vector-borne Diseases III. *Annual Meeting of the American Association of Geographers*, April 10-14, 2018, New Orleans, LA [Co-organizer "Geographic Research on Vector-borne Diseases" Sessions I-V, April 10<sup>th</sup>, 2018, Sponsored by Health and Medical Geography Specialty Group, Geographic Information Science and Systems Specialty Group, Spatial Analysis and Modeling Specialty Group]
- Lippi, C.A., Stewart-Ibarra, A.M., Mao, L., Heydari, N., **Ryan, S.J.** "Using a network analysis framework to discuss delivery of mosquito abatement services in Machala, Ecuador" Session: Geographic Research on Vector-borne Diseases I. *Annual Meeting of the American Association of Geographers*, April 10-14, 2018, New Orleans, LA
- Ryan, S.J.,** Johnson, L.R., Stewart Ibarra, A.M. 2017. "Bayesian uncertainty of physiological temperature models for vectorborne disease: how do you map that?" Session 4141: Uncertainty in health research (Sponsored by: Uncertainty October 2022

- and Context in Geography and GIScience Featured Theme), *Annual Meeting of the American Association of Geographers*, April 5<sup>th</sup>-9<sup>th</sup>, 2017, Boston, MA.
- Ryan, S.J.**, Stewart Ibarra, A.M., Chu, W., Finkelstein, J.L., Escobar, L.E., King, C.A., Ordonez, E., Heras, F., Waggoner, E., Tauzer, E., Enriquez, K., James, T., Polhemus, M. 2016. "Spatial and seasonal dynamics of *Vibrio spp.* in an estuary in southern coastal Ecuador" Special Session 2562: Spatial and eco-epidemiological modeling (Sponsored by International Geography, GIScience, and Urban Health Theme, Health and Medical Geography Specialty Group). *Annual Meeting of the American Association of Geographers*, March 29-April 2<sup>nd</sup>, 2016, San Francisco, CA.
- Dobbins, M.T., Steinberg, M.K., Broadbent, E.N., **Ryan, S.J.\*** 2016. "Habitat use, activity patterns, and human interactions with jaguars in southern Belize". *Annual Meeting of the American Association of Geographers*, March 29-April 2<sup>nd</sup>, 2016, San Francisco, CA.
- Nekorchuk, D.M.\*, Morris, L.R., Proffitt, K.M., Getz, W.M., **Ryan, S.J.**, Blackburn, J.K. 2016. 'Resource Selection of Bison and Anthrax Management Implications in Southwest Montana'. Session 2465: Mapping and Modeling Animal Geographies. *Annual Meeting of the American Association of Geographers*, March 29-April 2<sup>nd</sup>, 2016, San Francisco, CA.
- Ervin, D., Lopez-Carr, D., Riosmena, F., **Ryan, S.J.** 2015. "The relationship between land- use and land-cover change and migration processes in Mexico." *The International Geographic Union Regional Geographic Conference*, Moscow, Russia, August 19, 2015.
- Ryan, S.J.**, Southworth J., Hartter J., Fuda R., Dowhaniuk N., Diem J. 2015. "Household level influences on fragmentation in an African park landscape." *27<sup>th</sup> International Congress for Conservation Biology and 4<sup>th</sup> European Congress for Conservation Biology*. August 2-6th, 2015. Montpellier, France.
- Dowhaniuk, N., Hartter, J., Congalton, R.G., Palace, M.W., **Ryan, S.J.** 2015. "Landscape change, human population growth and oil development in Murchison Falls Conservation Area, Uganda." *27<sup>th</sup> International Congress for Conservation Biology and 4<sup>th</sup> European Congress for Conservation Biology*. August 2-6th, 2015. Montpellier, France.
- Cheeseman, A., Cohen, J., Whipps, C., Ryan, S.J. "The influence of invasive species on habitat use and dispersal of the New England cottontail, an imperiled endemic lagomorph in a human-dominated landscape." Symposium: International and Collaborative Approaches to Lagomorph Conservation in a Changing World. *V<sup>th</sup> International Wildlife Management Congress 2015. July 26-30, 2015. Sapporo, Japan*
- Ryan, S.J.**, Southworth, J., Hartter, J., Dowhaniuk, N., Fuda, R., Diem, J. 2015. "Household level influences on fragmentation in an African park landscape." Association of American Geographers (AAG) Annual Meeting, April 21-25, 2015, Chicago, IL.
- Jones, M.I., Ryan, S.J., Fierke, M.K. 2014. "Factors influencing spread of emerald ash borer in an urban forest: a case study in Syracuse, New York." Entomological Society of America Annual Meeting, November 15-19, 2014, Portland, OR.
- Ryan, S.J.**, McNally, A., Johnson, L.R., Ben-Horin, T., Mordecai, E., Paaijmans, K.P., Lafferty, K.D. 2014. "Rising suitability, declining severity: climate change and shifting malaria transmissibility in Africa." III Encuentro Nacional de Investigación en Enfermedades Infecciosas y Medicina Tropical; II Latin-American Network of Molecular Epidemiology and Evolutionary Genetics of Infectious Diseases (LAN MEEGID), July 21-23, 2014, Quito, Ecuador.
- Ryan, S.J.**, McNally, A., Johnson, L.R., Ben-Horin, T., Mordecai, E., Paaijmans, K.P., Lafferty, K.D. 2014. "Rising suitability, declining severity: climate change and shifting malaria transmissibility in Africa." Association of American Geographers (AAG) Annual Meeting, April 8-12<sup>th</sup>, 2014, Tampa, FL
- Ryan, S.J.**, Hartter, J. 2013 "Beyond Ecological Success of Corridors: Integrating Land Use History and Demographic Change to Provide a Whole Landscape Perspective". Ecological Society of America (ESA) Annual Meeting. August 4-9<sup>th</sup>, 2013. Minneapolis, MN. *Supported by NSF CHANS-net fellowship*.
- López-Carr, D., **Ryan, S.J.**, Clark, M.J. 2013. Population, Health, and Land Transitions at Multiple Scales: Evidence from Latin America. National Academies of Science, Kavli Frontiers of Science symposium. June 15-19, 2013. Irvine, CA.
- Hartter, J., Palace, M., **Ryan, S.J.**, Diem, J., and C.A. Chapman. 2013. Forest Loss, Agricultural Intensification, and the Islandization of Protected Areas in the African Albertine Rift. Association of American Geographers (AAG) Annual Meeting. April 9-13, 2013. Los Angeles, CA.
- Ryan, S.J.** and J. Hartter. 2012. Assessing Conservation Success: People, Wildlife, and Parks in the Albertine Rift. Society of Conservation Biology. North American Congress for Conservation Biology (NACCB). July 15-18, 2012. Oakland, CA.

- Ryan, S.J.** and Tildesley, M. 2012. Disease prevention or data privacy? Research and Policy for Infectious Disease Dynamics (RAPIDD) “Foot and Mouth Disease” Meeting. September 19-21, 2012. Washington, D.C.  
*Supported by Fogarty Institute, NIH and the Department of Homeland Security (DHS) RAPIDD program*
- Hartter, J. and **Ryan, S.J.** 2012. “The island fortress: people, wildlife and parks landscapes in the Albertine Rift” American Association of Geography (AAG) Annual Meeting, New York, NY
- Ryan, S.J.** and Hartter, J. 2011. “The value of fragments: extending park boundaries, dwindling resources, or sourcing crop raiders?”, Symposium: *Healthy Ecosystems, Healthy Communities?: Links between Conservation and Food Security*, International Congress on Conservation Biology (ICCB), Auckland, New Zealand
- Ryan, S.J.** and Gaff, H.C., 2011 “Looking to the future: how to progress to success from the US-Africa Biomathematics Initiative“ MiniSymposium (Gaff and Ryan): *Reports from US - African BioMathematics Initiative: Conservation Biology*, 8th European Conference on Mathematical and Theoretical Biology, and Annual Meeting of The Society for Mathematical Biology, Krakow, Poland, June 28 - July 2, 2011.
- Hartter, J., **Ryan, S.J.**, Southworth, J., Goldman, A.C., Binford, M.W., and C.A. Chapman. 2010. “Fortresses and Fragments: Impacts of Fragmentation in a Forest Park Landscape.” IUFRO Landscape Ecology International Conference. September 21-27, 2010. Bragança, Portugal.
- Ryan, S.J.** and Hartter, J. 2009. “The Social Impacts of landscape change around a fortress park in Uganda” American Association of Geographers (AAG) Annual Meeting, Las Vegas.

**Other:**

- Cohen, J.B., Cheeseman, A., Gavard, E., **Ryan, S.J.**, Whipps, C.M. 2014. New England cottontail. *New York Fish and Wildlife Advisory Board meeting*, Pulaski, NY.
- Cohen, J.B., Cheeseman, A., Gavard, E., **Ryan, S.J.**, Whipps, C.M. 2014. New England cottontail. *New York Forest Owner's Association meeting*, Syracuse, NY.
- Palace, M., J. Harter, **S. Ryan**, J. Diem, 2013, Remote sensing and tropical ecology in Africa. A talk given to visiting Rotary Group from Niger, at UNH 2013.
- Hartter, J, **Ryan, S**, Palace, M, Diem, J, MacKenzie, C, Goldman, A. 2014. *Invited*. “Parks in Peril?” Center for African Studies, University of Florida. April 25, 2014. Gainesville, FL
- Ryan, S.J.** “Human-Animal Interactions in Africa”, Museum of Cultural Zoology, hosted by: Multicultural Affairs & the Roosevelt Wildlife Collection, Nifkin Lounge, SUNY ESF, April 11<sup>th</sup>, 2012

**POSTERS** \*Graduate student presenter \*\*Undergraduate student presenter \*\*\*Postdoctoral presenter

- McCoy, K., Weldon, C.T. Rashid Ansumana, R., Joseph M. Lamin, J.M., Stenger, D.E., **Ryan, S.J.**, Bardosh, K., Jacobsen, K.H., Dinglasan, R.R. 2020. Knowledge, Attitudes and Practices related to malaria transmission-blocking vaccine acceptability in Bo, Sierra Leone: a mixed-methods study. Annual Meeting of the American Society for Tropical Medicine and Hygiene (ASTMH), 2020. November 15-19, 2020, *Virtual*
- Thomas Q, Boettiger C, Carey C, Dietze M, Fox A, Kenney MA, Laney, CM, McLachlan, JS, Peters, J, Weltzin, JF, Woelmer, WM, Foster, JR, Guinnip, JP, Spiers, A, **Ryan, S**, Wheeler, KI, Young, AR, Johnson LR et al. 2020. Introducing the NEON Ecological Forecasting Challenge hosted by the Ecological Forecasting Initiative Research Coordination Network. AGU Fall Meeting 2020. AGU; 2020.
- Uelmen JA, Li B, Brown WM, Karki S, Ruiz M, **Ryan S**, et al. 2020. An 18-Year Retrospective Analysis of West Nile Virus Infection in Culex Mosquitoes of the Midwestern United States. AGU Fall Meeting 2020. AGU; 2020.
- Martin, J.L.\*, Martcheva, M., **Ryan, S.J.** 2020 “UF MathGeo Model: A Mechanistic Approach Using Vector Traits and Georeferenced Climate Data” 2020 Council of State and Territorial Epidemiologists Vector-Borne Diseases Forecasting Workshop, February 24, 2020, Fort Collins CO.
- Caldwell, J., Mordecai, E.A., Lippi, C.A., **Ryan, S.J.** “Team *Aedes* Ladies: presenting a climate-dependent mechanistic disease model” 2020 Council of State and Territorial Epidemiologists Vector-Borne Diseases Forecasting Workshop, February 24, 2020, Fort Collins CO.
- Mundis, S.J.\*, A. Estep, C. Waits, **S.J. Ryan**. 2020. “Spatial variation in the frequency of knockdown resistance (KDR) genotypes in Florida *Aedes aegypti* mosquito populations.” February 8th, 2020. Florida Society of Geographers, Gainesville, Florida.

- Mundis, S.J. \*, **S.J. Ryan**. 2020. "Characterization of spatial and temporal factors related to Eastern Equine Encephalitis virus spillover in Orange County, Florida." February 13th, 2020. Emerging Pathogens Institute (EPI) Day, Gainesville, Florida.
- Lippi, C.A. \*, A.M. Stewart-Ibarra, E. Beltrán Ayala, and **S.J. Ryan**. Social-ecological influences on dengue fever and a comparison of surveillance indicators in Machala, Ecuador. 2020. February 13th, 2020. Emerging Pathogens Institute (EPI) Day, Gainesville, Florida.
- Bhattarai, S\*, and **Ryan, S.J.** 2020. Evaluating vector control interventions to eliminate malaria from Nepal. February 13th, 2020. Emerging Pathogens Institute (EPI) Day, Gainesville, Florida.
- Sippy R\*\*, Heras Heras F, Stewart Ibarra AM, Ryan SJ, Mordecai EA. Impact of Household Characteristics on *Aedes aegypti* Abundance in Rural Ecuador. 2019. *American Society for Tropical Medicine & Hygiene Annual Meeting*, National Harbor, MD
- Lippi, C.A. \*, L. Mao, A.M. Stewart-Ibarra, N. Heydari, E. Beltrán Ayala, N.D. Burkett-Cadena, J.K. Blackburn, and S.J. Ryan. A Network Analysis Framework to Improve the Delivery of Mosquito Abatement Services in Machala, Ecuador. 2019. *American Society of Tropical Medicine & Hygiene Annual Meeting*, National Harbor, MD.
- Blaine, T., **Ryan, S.J.**, Zermoglio, F., Quinn, C. 2018. Understanding and Responding to the Shifting Burden of Disease: Malaria Risks in Africa Under a Changing Climate. *American Geophysical Union Fall Meeting, December 10-14, 2018, Washington, D.C.*
- Ryan, S.J.**, Larsen, D.A, Walia, B., Martin, A.C., Pollard, D., Hamainza, B., Winters, A. 2018. Modeling the agreement and cost of indoor residual spray implementation strategies to control malaria transmission. *American Society for Tropical Medicine and Hygiene (ASTMH) Annual Meeting, October 28-November 1, 2018, New Orleans, LA*
- Ryan, S.J.**, Mundis, S.J. \*, Aguirre, A., Lippi, C.A., Beltrán, E., Heras, F., Stewart-Ibarra, A.M, Neira, M. 2018. Phenotypic and genotypic resistance to commonly used insecticides in *Aedes aegypti* among four cities in southern Ecuador *American Society for Tropical Medicine and Hygiene (ASTMH) Annual Meeting, October 28-November 1, 2018, New Orleans, LA*
- Lippi, C.A. \*, Stewart-Ibarra, A.M., Trotman, A., Mahon, R., Rollock, L., Holligan, D., Kirton, S., **Ryan, S.J.** 2018. Hotspots for public health intervention: different tools for emerging and endemic diseases in small areas, a spatiotemporal analysis of dengue and chikungunya in Barbados, 2013 – 2016. *American Society for Tropical Medicine and Hygiene (ASTMH) Annual Meeting, October 28-November 1, 2018, New Orleans, LA*
- López-Rosero, A. Stewart-Ibarra, A.M., Heras, F., Ryan, S.J., Mordecai, E.A., Neira, M. 2018. LB-5218 - Screening for Arboviral Infection in *Aedes aegypti* Populations from South-western Ecuador: Preliminary Results *American Society for Tropical Medicine and Hygiene (ASTMH) Annual Meeting, October 28-November 1, 2018, New Orleans, LA*
- Stewart-Ibarra, A.M., Romero, M., Borbor-Cordova, M.J., Cox, A., Hinds, A.Q., Lowe, R., Mahon, R., Van Meerbeek, C., Rollock, L., St. Ville, E.S., **Ryan, S.J.**, Trotman, A. 2018 Co-developing climate services for public health: stakeholder needs and perceptions for the prevention and control of *Aedes*-transmitted diseases in the Caribbean *American Society for Tropical Medicine and Hygiene (ASTMH) Annual Meeting, October 28-November 1, 2018, New Orleans, LA*
- Mordecai, E.A., Johnson, L.R., Rohr, J.R., **Ryan, S.J.**, Savage, V. Shocket, M.S., Stewart-Ibarra, A.M., Thomas, M.B. 2018. Ubiquitous, nonlinear effects of temperature on vector-borne disease: malaria, dengue, Zika, West Nile, and beyond *American Society for Tropical Medicine and Hygiene (ASTMH) Annual Meeting, October 28-November 1, 2018, New Orleans, LA*
- Berry, I. M., Stewart-Ibarra, A.M., Rutvisuttinunt, W., Beltrán-Ayala, E., Figueroa, K., Srikanth, A., Cárdenas, W.B., Cueva, C., Polhemus, M., **Ryan, S.J.**, Endy, T.P., Jarman, R.G. 2018. Molecular epidemiology of chikungunya virus from Ecuador demonstrates two introductions in 2013 and the E1-K211E mutation, suggesting presence of enhanced fitness to *Aedes aegypti*. *American Society for Tropical Medicine and Hygiene (ASTMH) Annual Meeting, October 28-November 1, 2018, New Orleans, LA*
- Sippy, R.\*\*, Heras, F., Mordecai, E., **Ryan, S.J.**, Stewart-Ibarra, A.M. 2018. Impact of household characteristics on mosquito abundance in rural Ecuador. *American Society for Tropical Medicine and Hygiene (ASTMH) Annual Meeting, October 28-November 1, 2018, New Orleans, LA*
- Shocket, M.S, Johnson, L., Stewart-Ibarra, A.M., Thomas, M., Rohr, J., **Ryan, S.J.**, Savage, V., Mordecai, E.A. 2018. Comparing temperature-based R0 models across vector-borne diseases and a new model for Ross River virus. *Population Biology of Vector-borne Diseases Symposium, Center for the Ecology of Infectious Diseases (CEID), February 24, 2018, Athens, GA*



- Ryan, S.J.\***, Lippi, C.A.\*, Boersch-Supan, P.H., Heydari, N., Silva, M., Adrian, J., Noblecilla, L.F., Ayala, E.B., Encalada, M.D., Larsen, D.A., Krisher, J.T., Krisher, L., Fregosi, L.N., Stewart-Ibarra, A.M. 2018. Quantifying Seasonal and Diel Variation in Anopheline and Culex Human Biting Rates in Southern Ecuador. *EPI Research Day, February 15, 2018, Gainesville, FL.*
- Kshirsagar, R.A., Menon, S., **Ryan, S.J.** 2018. Objects of reverence as carriers of diseases: health implications of pigeon exposure in Mumbai. *EPI Research Day, February 15, 2018, Gainesville, FL.*
- Martin, J.L., Lippi, C.A., Stewart-Ibarra, A.M, **Ryan, S.J.** 2018. Socio-ecological Factors Impacting Dengue risk in Huaquillas, Ecuador: A Binational Bridge of Health. *EPI Research Day, February 15, 2018, Gainesville, FL.*
- Shocket, M.S., Johnson, L., Stewart-Ibarra, A.M., Thomas, M., Rohr, J., **Ryan, S.J.**, Savage, V., Mordecai, E.A. 2018. Comparing temperature-based R0 models across vector-borne diseases and a new model for Ross River virus. Poster. *Stanford Global Health Research Convening, February 9, 2018, Stanford, CA.*
- Ryan, S.J.\***, Lippi, C.A.\* , Boersch-Supan, P.H., Heydari, N., Silva, M., Adrian, J., Noblecilla, L.F., Ayala, E.B., Encalada, M.D., Larsen, D.A., Krisher, J.T., Krisher, L., Fregosi, L.N., Stewart-Ibarra, A.M. 2017. Quantifying Seasonal and Diel Variation in Anopheline and Culex Human Biting Rates in Southern Ecuador. *American Society for Tropical Medicine and Hygiene (ASTMH) Annual Meeting, November 5-9, 2017, Baltimore, MD*
- Maljkovic-Berry I, Stewart-Ibarra AM, Rutvisuttinunt W, Beltran-Ayala E, Cardenas W, Cueva C, Polhemus M, **Ryan SJ**, Endy TP, Jarman RG. Spread of dengue 1 and 2 in Machala, Ecuador: Evidence of a dynamic epidemic genetically related to those of surrounding countries of Colombia, Venezuela, and Peru. *American Society for Tropical Medicine and Hygiene (ASTMH) Annual Meeting, November 5-9, 2017, Baltimore, MD*
- Ryan SJ**, Lippi CA, Boersch-Supan PH, Heydari N, Silva M, Adrian J, Noblecilla LF, Beltran Ayala E, Encalada MD, Larsen DA, Krisher JT, Krisher L, Fregosi LN, Stewart-Ibarra AM. Quantifying Seasonal and Diel Variation in Anopheline and Culex Human Biting Rates in Southern Ecuador. *American Society for Tropical Medicine and Hygiene (ASTMH) Annual Meeting, November 5-9, 2017, Baltimore, MD*
- Geneva II, Kenneson-Adams A, Lupone CD, **Ryan SJ**, Borbor-Cordova MJ, Beltran-Ayala E, Polhemus M, Endy TP, Stewart-Ibarra AM. Knowledge, perceptions, and socioeconomic status driving dengue prevention practices in urban coastal Ecuador. *American Society for Tropical Medicine and Hygiene (ASTMH) Annual Meeting, November 5-9, 2017, Baltimore, MD*
- Heydari N, **Ryan SJ**, Neira M, Rochford R, Lippi C, Geer J, Heras F, Stewart-Ibarra AM. The economic burden of household-level prevention to *Aedes aegypti* transmitted illnesses across low and high disease burden sites in southern coastal Ecuador. *American Society for Tropical Medicine and Hygiene (ASTMH) Annual Meeting, November 5-9, 2017, Baltimore, MD*
- Kenneson A, Beltran-Ayala E, Borbor-Cordova M, Polhemus M, **Ryan S**, Endy T, Stewart Ibarra AM. Socio-Ecological Factors and Preventive Actions Associated with Dengue Infections at the Household-Level Identified in a Prospective Dengue Surveillance Study in Machala, Ecuador. *American Society for Tropical Medicine and Hygiene (ASTMH) Annual Meeting, November 5-9, 2017, Baltimore, MD*
- James, T. G.**, & Ryan, S. J. 2017. Predicting HIV-related stigma in college students: Identifying target sub-populations for stigma reduction interventions. Poster. *Annual Meeting of the American College Health Association, June 2017, Austin, TX.* [Awarded 1<sup>st</sup> Place Student Poster]
- Shocket, M.S., Johnson, L., Stewart-Ibarra, A.M., Thomas, M., Rohr, J., **Ryan, S.J.**, Savage, V., Mordecai, E.A. 2017. Comparing temperature-based R0 models across vector-borne diseases and a new model for Ross River virus. Poster. *Impact of Environmental Changes on Infectious Diseases, International Center for Theoretical Physics. May 19, 2017. Trieste, Italy*
- Nightingale R, **Ryan SJ**, Lippi C, Borbor-Cordova MJ, Cruz BM, Ortega F., Leon R, Waggoner E, Stewart Ibarra AM. Dengue fever and *Aedes aegypti* risk in the Galapagos Islands, Ecuador. *Impact of Environmental Changes on Infectious Diseases, International Center for Theoretical Physics. May 19, 2017. Trieste, Italy*
- Richards, L\*\*., Erko, B., **Ryan, S.J.**, Liang, S. *Schistosoma mansoni* infection among nonhuman primates in Africa: a review. *EPI Research Day, February 23<sup>rd</sup>, 2017, Gainesville, FL.*
- Ponpetch, K., Erko, B., **Ryan, S.J.**, Yang, Y., Liang, S. Spatial distribution of *Schistosoma mansoni* endemic area in Ethiopia. *EPI Research Day, February 23<sup>rd</sup>, 2017, Gainesville, FL.*
- Nekorchuk, D.\*, Dougherty, E., Morris, L., Griffin, C. Yang, A., Dinh, E., Bohnett, E., Proffitt, K., **Ryan, S.J.**, Blackburn, J.K. Effects of available area definitions and animal movement pattern types in resource selection functions. *EPI Research Day, February 23<sup>rd</sup>, 2017, Gainesville, FL.*

- Lippi, C.A.\*, Stewart-Ibarra, A.M., Muñoz, A.G., Borbor-Cordova, M.J., Mejía, R., Rivero, K., Castillo, K., Cárdenas, W.B., **Ryan, S.J.** The social and spatial ecology of dengue presence and burden during an outbreak in Guayaquil, Ecuador, 2012. *EPI Research Day*, February 23<sup>rd</sup>, 2017, Gainesville, FL.
- Mordecai, E.A., Cohen, J., Evans, M., Johnson, L.R., Gudapati, P., Miazgowiec, K., Murdock, C.C., Rohr, J.R., **Ryan, S.J.**, Savage, V., Stewart Ibarra, A.M., Thomas, M.B., Shocket, M., Weikel, D.P. Temperature defines the fundamental risk of Zika, dengue, and chikungunya transmission. *American Society for Tropical Medicine and Hygiene (ASTMH) 65<sup>th</sup> Annual Meeting*, November 13-17<sup>th</sup>, 2016, Atlanta, GA.
- Lippi, C.A.\*, Castillo, K.C., Stewart-Ibarra, A.M., Cárdenas, W.B., Mejía, R., Borbor, M., Rivero, K., **Ryan, S.J.** The Social Ecology of Dengue Presence and Burden During an Outbreak in Guayaquil, Ecuador, 2012. American Society for Tropical Medicine and Hygiene 65<sup>th</sup> Annual Meeting, November 13-17, 2016, Atlanta, GA
- Ryan, S.J.**, Stewart Ibarra, A.M., Chu, W., Finkelstein, J.L., Escobar, L.E., Lupone, C., King, C.A., Ordonez, E., Heras, F., Waggoner, E., Tauzer, E., Enriquez, K., James, T., Cardena, W., Polhemus, M. 2016. Cholera and environmental dynamics in an Ecuadorian estuarine system. American Society for Tropical Medicine and Hygiene 65<sup>th</sup> Annual Meeting, November 13-17, 2016, Atlanta, GA
- Ortega, F., Nightingale, R., Leon, R., Basantes, D., Borbor-Cordova, M., Cruz, M., Waggoner, E., Lippi, C.\*, **Ryan, S.J.**, Stewart Ibarra, A.M. 2016. Dengue fever and *Aedes aegypti* risk in the Galapagos Islands, Ecuador. American Society for Tropical Medicine and Hygiene 65<sup>th</sup> Annual Meeting, November 13-17, 2016, Atlanta, GA
- Finkelstein, J.L., A.J. Layden, E. Beltrán Ayala, W.B. Cárdenas, T.P. Endy, **S.J. Ryan**, A.M. Stewart Ibarra, S. Mehta. 2016. Micronutrients and Dengue Fever in Coastal Ecuador. Cornell Univ., Machala and Guayaquil, Ecuador, SUNY Upstate Med. Univ. and Univ. of Florida. Session: GLOBAL NUTRITION: NUTRITION, INFECTION AND INFLAMMATION Poster (Sponsored by: Global Nutrition Council). *Experimental Biology 2016*, San Diego, CA, April 2-6, 2016.
- Tedesco, J.M., S. Mehta, E. Beltrán-Ayala, W.B. Cárdenas, T.P. Endy, **S.J. Ryan**, A.M. Stewart Ibarra, J.L. Finkelstein. 2016. Anthropometry and Dengue Fever in Coastal Ecuador. Cornell Univ., Ministry of Hlth. and Esc. Superior Politéc. del Litoral, Ecuador, SUNY Upstate Med. Univ. and Univ. of Florida. Session: GLOBAL NUTRITION Poster (Sponsored by: Global Nutrition Council). *Experimental Biology 2016*, San Diego, CA, April 2-6, 2016.
- James, T. G.\*\* & **Ryan S. J.** 2015. STI knowledge accuracy in college students: Identifying targets for safer sex education. 3rd Annual Fall Undergraduate Research Symposium, October 26, 2015, Gainesville, FL
- Fessler, A.G., Mehta, S., Beltra-Ayala, E., Arichabala Wilches, A.L., Endy, T.P., Polhemus, M., Stewart-Ibarra, A.M., **Ryan, S.J.**, Finkelstein, J.L. 2015. Burden of Tropical Diseases in Machala, Ecuador. American Society for Tropical Medicine and Hygiene 64<sup>th</sup> Annual Meeting, October 25-29, 2015, Philadelphia, PA
- McMahon, E., Stewart-Ibarra, A.M., Barbachano-Guerro, A., Kirchhoff, L., Beltrán-Ayala, E., Borbor-Cordova, M.J., Cueva-Aponte, C.K., Finkelstein, J.L., King, C.A., Lupone, C.D., Mehta, S., **Ryan, S.J.**, Silva, M., Endy, T.P. 2015. The prevalence of Chagas disease and co-infections with dengue from a dengue surveillance study in Machala, Ecuador. American Society for Tropical Medicine and Hygiene 64<sup>th</sup> Annual Meeting, October 25-29, 2015, Philadelphia, PA
- Chu, W., **Ryan, S.J.**, Freire, W.B., Stewart-Ibarra, A.M., Cardenas, W.B, Finkelstein, J.L. 2015. Burden and Distribution of Malnutrition in Guayaquil, Ecuador: Results from the Ecuadorian National Health and Nutrition Survey (ENSANUT-ECU). American Society for Tropical Medicine and Hygiene 64<sup>th</sup> Annual Meeting, October 25-29, 2015, Philadelphia, PA
- Stewart-Ibarra, A.M., King, C.A., Barbachano, A., Beltrán-Ayala, E., Borbor-Cordova, M.J., Cárdenas, W.B., Cueva, C., Finkelstein, J.L., Lupone, C.D., Mehta, S., **Ryan, S.J.**, Silva, M., Endy, T.P. 2015. High Burden of Dengue Fever in Southern Coastal Ecuador: Epidemiology from a prospective study in Machala in 2014. American Society for Tropical Medicine and Hygiene 64<sup>th</sup> Annual Meeting, October 25-29, 2015, Philadelphia, PA
- Handel, A., Beltran, E., Borbor Cordova, M.J., Espinoza, R.X.R., **Ryan, S.J.**, Stewart-Ibarra, A.M. 2015. Knowledge, Attitudes, and Practices Regarding Dengue Infection Among Healthcare Providers in Machala, Ecuador. IDWeek 2015, October 7-11, 2015, San Diego, CA.
- Borbor-Cordova, M.J., Torres, G., Bayot, B., Bermudez, R., Escobar, L.E., Hamilton, S., Pozo, M., Recalde, C., **Ryan, S.J.**, Stewart-Ibarra, A.M. 2015. Exploring the impact of Harmful Algal Blooms (HABs) on the health of coastal communities in the Gulf of Guayaquil, Ecuador. American Society for Tropical Medicine and Hygiene 64<sup>th</sup> Annual Meeting, October 25-29, 2015, Philadelphia, PA

- Ryan, S.J.**, McNally, A., Johnson, L.R., Ben-Horin, T., Mordecai, E., Paaijmans, K.P., Lafferty, K.D. 2015. Changing physiological suitability limits of malaria transmission in Africa under climate change. Ecology and Evolution of Infectious Diseases (EEID) meeting, May 26-29, 2015, Athens, GA.
- Ryan, S.J.**, McNally, A., Johnson, L.R., Ben-Horin, T., Mordecai, E., Paaijmans, K.P., Lafferty, K.D. 2015. Changing physiological suitability limits of malaria transmission in Africa under climate change. Emerging Pathogens Institute Research Day 2015, February 26<sup>th</sup>, 2015, Gainesville, FL.
- Escobar, L.E., **Ryan, S.J.**, Stewart Ibarra, A.M., Finkelstein, J.K., King, C.A., Qiao, H., Polhemus, M.E. 2014. A global map of suitability for coastal cholera under current and future climate conditions. American Society for Tropical Medicine and Hygiene Annual Meeting, November 2-6, 2014, New Orleans, LA
- Stewart Ibarra, A.M., Luzadis, V.A., Borbor Cordova, M.J., Silva, M., Ordonez, T., Beltran, E., **Ryan, S.J.** 2014. Community perceptions of emerging dengue in urban areas in southern coastal Ecuador. American Society for Tropical Medicine and Hygiene Annual Meeting, November 2-6, 2014, New Orleans, LA
- Cheesman, A.E.\* , Cohen J., **Ryan, S.J.**, Whipps, C.M. 2014. Survival and home range of New England Cottontail (*Sylvilagus transitionalis*) in response to hunting, competition, and habitat composition. American Society of Mammalogists Annual Meeting, Okalahoma City, OK. **Winner: student poster competition**
- Youker, T. E.\* & **Ryan, S. J.** 2014. Environmental factors affecting ranavirus prevalence among aquatic-breeding amphibians in natural and constructed ponds. SUNY-ESF Spotlight on Student Research and Outreach, April 15, 2014, Syracuse, NY
- Brubaker R.\*\* , Thomen A.P.\* , **Ryan, S.J.** 2014. A quantitative research synthesis of human-avian conflict in agriculture systems. SUNY-ESF Spotlight on Student Research and Outreach, April 16, 2014, Syracuse, NY
- Scales LN\* , **Ryan S.J.** 2014. Exploring the influence of migration temperature thresholds on captive migratory bird behavior. SUNY-ESF Spotlight on Student Research and Outreach, April 15, 2014, Syracuse, NY
- Gavard, E.G.\* , Cohen, J., **Ryan, S.J.**, and Whipps, C.M. 2014. Exploring the potential for parasite-mediated competition: New England and Eastern cottontails, invasive vegetation, and parasites in the Hudson Valley, NY. SUNY-ESF Spotlight on Student Research and Outreach, April 15, 2014, Syracuse, NY. **3<sup>rd</sup> place prize award: \$75**
- Youker, T. E.\* & **Ryan, S. J.** 2014. Environmental factors affecting ranavirus prevalence among aquatic-breeding amphibians in natural and constructed ponds. Northeast Fish & Wildlife Association Conference, April 10, Portland, ME
- Youker, T. E.\* & **Ryan, S. J.** 2014. Environmental factors affecting ranavirus prevalence among aquatic-breeding amphibians in natural and constructed ponds. SUNY CID: From Lab to Landscape: Integrated Infectious Disease Research Symposium, January 24, 2014, Syracuse, NY. **1<sup>st</sup> place prize: \$500**
- Jones, M.I.\* , M.K. Fierke, and **S.J. Ryan**. Understanding the emerging emerald ash borer infestation in New York. Poster Presentation. New York Society of American Foresters Annual Meeting, Syracuse, NY. January 2014.
- Jones, M.I.\* , M.K. Fierke, and **S.J. Ryan**. Detecting superspreader trees in the emerging emerald ash borer infestation in New York. Poster Presentation. SUNY CID: From Lab to Landscape: Integrated Infectious Disease Research Symposium, January 24, 2014, Syracuse, NY. **3<sup>rd</sup> place prize: \$250**
- Ibarra Stewart, A.M., Luzadis, V.A., Borbor Cordova, M.J., Silva, M., Ordoñez, T., Beltran, E., **Ryan, S.J.** 2013. Community perceptions of emerging dengue in urban areas in southern coastal Ecuador. Society for Tropical Medicine and Hygiene (ASTMH) 62<sup>nd</sup> Annual Meeting, November 13-17, Washington, D.C.
- Thomen, A.P.\* and **Ryan, S.J.** Evaluating avian communities in Dominican cacao farms: Management and Conservation. Student Conference on Conservation Science-New York. October 8-11, 2013. New York, NY.
- Fuda, B.\* , **Ryan, S.J.**, Hartter, J. and C.A. MacKenzie. 2013. Carnivore Conservation in Northwest Uganda: Assessing Human Impacts and Attitudes. Student Conference on Conservation Science-New York. October 8-11, 2013. New York, NY.
- Johnson, L.R., Ben-Horin, T., Mordecai, E., Paaijmans, K.P., Pawar, S., **Ryan, S.J.**, McNally, A., Lafferty, K.D. 2013. Effects of uncertainty in temperature dependencies in physiological responses on predictions of R0 for malaria: a Bayesian approach. Ecology and Evolution of Infectious Disease (EEID), 11<sup>th</sup> Annual Workshop and Conference. May 20-23, 2013. Penn State University, PA.
- Breytenbach, E., Diem, J.E., Hartter, J., **Ryan, S.J.**, and C.A. Chapman. 2013. Following the rains: Perceptions of climate change around Kibale National Park, Uganda. Association of American Geographers (AAG) Annual Meeting. April 9-13, 2013. Los Angeles, CA.

# Sadie J. Ryan

---

- Diem, J.E., Hartter, J., Palace, M.W., and **S.J. Ryan**. 2013. Validation of Satellite-Based Rainfall Products for Western Uganda. Association of American Geographers (AAG) Annual Meeting. April 9-13, 2013. Los Angeles, CA.
- Hartter, J., **Ryan, S.J.**, Palace, M., Diem, J., and C.A. Chapman. 2012. Population, Environment, and Climate in the Albertine Rift: Understanding Local Impacts of Regional Change. American Geophysical Union (AGU) Fall Meeting. December 3-7, 2012. San Francisco, CA.
- Ibarra Stewart, A.M.\*, **Ryan, S.J.**, Beltran, E., Meija, R., Silva, M. 2012. Dengue Vector Dynamics Influenced by Interacting Climatic and Social Factors in Ecuador: Implications for Targeted Control. American Society for Tropical Medicine and Hygiene (ASTMH) 61<sup>st</sup> Annual Meeting, November 11-15, 2012. Atlanta, GA
- Ryan, S.J.** and Tildesley, M. 2011 “Utility of landcover maps for spatial epidemic models of disease transmission in UK livestock”. *Epidemics* 3, November, 2011. **Poster Pitch:** <http://www.youtube.com/watch?v=yAlwChrlvfw>

## **Workshops/ Field Courses Taught:**

**MPE 2013+ Workshop on Global Change and Vector-borne Diseases: Mapping Emerging Infectious Diseases** (Lead/co-organizer). *George Mason University Fairfax, VA, August 13<sup>th</sup>-15, 2018. Funded by DIMACS/GMU*

IV Curso Internacional de Primatología de Campo: **Ecología, Comportamiento y Conservación en la Interfase humano – ambiente**. 2013 Estación de Investigación Primatológica y Vida Silvestre, INECOL, Balancán, Tabasco, México  
*Sessions 1-3: Emerging Diseases, Climate change and how we (could) approach them together*  
Talks: Malaria and Climate Change; Too few primates, too many primates, and disease

**Siyacabanga Workshop: Complexity and Biology: Tick-borne disease dynamics for wildlife, livestock and humans.** 12 - 14 March 2013. University of KwaZulu Natal, Pietermaritzburg, South Africa (Co-coordinator)  
*Session:* Coupled natural-human systems research and disease ecology on landscapes

**DIMACS/MBI Workshop: Quantitative Landscape Ecology and Environmental Sustainability.** 2 - 7 July 2012. University of KwaZulu Natal, Durban, South Africa. (Co-coordinator)  
Didactic Talk: If we know what sustainability is (theory), how do we take the next step (applied)?  
Home range and habitat selection: ArcGIS Morning Hands-on Workshop  
Thinking in Systems: Morning Hands-on Workshop

**US-Africa initiative on Conservation Biology at the Naivasha Research Institute, Kenya**, January 2011  
*Funded through NSF, Society for Mathematical Biology, DIMACS at Rutgers*  
Introduction to GIS for Wildlife; Global Change and GIS; Introduction to Agent-based Models; Harvesting Models for Conservation

**US-Africa initiative on Conservation Biology at the South African Wildlife College (SAWC)**, July-August 2010  
*Funded through NSF, Society for Mathematical Biology, DIMACS at Rutgers*  
Introduction to GIS for Wildlife; Global Change and GIS; Introduction to Agent-based Models; Harvesting Models for Conservation

## **OCCASIONALLY USEFUL SKILLS**

**Languages:** Intermediate French, Spanish, and Afrikaans (FLAS fellowships)

### **Software:**

*GIS/Remote Sensing:* ArcView, ArcGIS, ArcINFO, QGIS, DIVA-GIS, ERDAS Imagine, R;

*Statistical:* R, Matlab; *Programming:* rudimentary Java, Netlogo, HTML

*Collections/data management:* ARKS/SPARKS, ISIS, Paradox, MS Access, MySQL, Morpho (EML)

### **Certifications:**

CITI training for human subjects research (international and internet additional modules) (2015/2017)

AALAC training for ethical use of animals in research (2015)

EH&S certification for IACUC (UF)

Human Subjects Payments training (UF)

Laboratory environmental health and safety at SUNY ESF (2013)

Dry Ice Packaging, Blood Sample, and Pathogenic Biohazard Sample Packaging STAR training (Stanford, 2008)