

Sadie J. Ryan
Department of Geography & Emerging Pathogens Institute
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ASSOCIATE PROFESSOR OF MEDICAL GEOGRAPHY, UNIVERSITY OF FLORIDA

Department of Geography
Emerging Pathogens Institute (EPI)
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

PhD, University of California at Berkeley 2006
Department of Environmental Science, Policy and Management (ESPM)
Museum of Vertebrate Zoology (MVZ)
BA, Princeton University 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

POSTDOCTORAL VISITOR, Department of Geography, University of California Santa Barbara 2010-2011

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

POSTDOCTORAL FELLOW, NSF Biological Informatics, Stanford University and McGill University 2006-2009

LECTURER, Department of Anthropology, Stanford University 2008

AWARDS/CONTRACTS/FUNDING/ FELLOWSHIPS

IDB/UWI Contract: Climate-health audit tool for Caribbean climate and arbovirus data 2019-2020

USAID Climate ATLAS/PMI Contracts (Chemonics) Southern Africa malaria vulnerability, country drill-downs, Malawi, Madagascar country reviews, plague and environment in Madagascar, \$136,700 2018-2019

Early Career Fellowship, Florida Climate Institute, \$2000/annum 2017-2020

University Term Professorship, UF, \$5,000/annum 2017-2020

USAID Climate ATLAS/PMI Contract (Chemonics) supporting future vulnerability modeling, part 1:\$48,493 2017-

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: Dinglasen, 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",

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\$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 Politécnica 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. , <i>investigator</i>	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 (<i>Agrilus planipennis</i>) Infestation”, \$55,029 – PI: Ryan, S.J. , Co-PI: Fierke, M.	2013-2015
DOD- GEIS : “Capacity Building in Ecuador: Partnering to develop predictive models of infectious disease vulnerability.” \$300K/year. (<i>investigator</i>)	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
NSF CHANS-NET 2013 Fellowship Award - \$1,000	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 Balancan, 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
NSF ECTMB travel grant - \$1,000	2011
SMB (Society for Mathematical Biology) Landahl Award - \$500	2011
NIMBioS short-term visitor award “Can we build Foot-and-Mouth disease (FMD) management models for the US, and would they be used?” 2011	
NIMBioS short-term visitor award “Using GIS to inform spatial epidemic models”	2010
NCEAS (National Center for Ecological Analysis and Synthesis) Postdoctoral Fellowship - \$135,000	2008-2011
NSF Postdoctoral Research Fellowship in Biological Informatics - \$120,000	2006-2008
EPA STAR (Science to Achieve Results) Fellowship - \$98,772	2004-2007
FLAS (Foreign Language and Area Studies) Fellowship (x2) - \$38,169	2002-2004

COURSES TAUGHT:

GEO 3930: People, Parks, and Conservation in Africa (Study Abroad)	2018
GEO 4938: Field techniques for Conservation and Landscape Analysis (Study Abroad)	2018
GEO 3454: Peoples and Plagues, UF	2015-
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

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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

POSTDOCTORAL:

Alexis White, PhD, CDC Center of Excellence Funded, Bioinformatics, Outreach and Communications, UF 2020 -
Rachel Sippy, PhD, (co-mentor with A. Stewart-Ibarra), Vectorborne Disease – Climate, Geography, UF 2018-

GRADUATE: Catherine Lippi, PhD track, Geography, UF; Stephanie Mundis, PhD track, Geography, UF; Shreejana Bhattarai, PhD track, Geography, UF;

COMMITTEE: Catherine Frocks, PhD track, WEC, UF; Boris Arevalo, PhD track, WEC; Caroline Poli, PhD track, SNRE; Zoliswa Nhelko, PhD track, SNRE; Matthew Albrecht, PhD track, Anthropology, UF; Elizabeth Moreau, PhD track, Fisheries and Aquatic Sciences, UF; Lee Ann Lyons, PhD track, Pathobiology, UIUC; Johnny Uelman, PhD Track, Pathobiology, UIUC.

UNDERGRADUATE: Emily Stone, BSc MCB, Bioinformatics Research Experience, UF Emerging Scholars Program Scholarship 2019-2020;

COMPLETED

James Martin, MSc, 2019. “*Social-ecological systems analysis of household Aedes aegypti risk in Huaquillas, Ecuador.*” *Medical Geography, University of Florida, Gainesville, FL*

Gabriela Hamerlinck, PhD, Geography, UF, CDC Center of Excellence Funded 2018-2019

Phillip Boersch-Supan, PhD, (co-mentored with L. Johnson), Geography, UF, 2014-2018. NSF POLAR funded “*Quantifying how Bioenergetics and Foraging Determine Population Dynamics in Threatened Antarctic Albatrosses*”

Karoun Bagamian, PhD, Postdoctoral Researcher, 2017. World Bank Funded “*WASH Poverty Risk Modeling*”.
Department of Environmental and Global Health (EGH), University of Florida.

Luis Escobar, DVM, PhD, Postdoctoral Researcher, 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.*”
Center for Global Health and Translational Science (CGHATS), SUNY Upstate Medical University, Syracuse, NY

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*

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COMMITTEE/ EXAMINER

- Anni Yang, PhD, 2019, “Multi-Scale Modeling of Zoonoses: Exploring Two Indirectly Transmitted Pathogens in Southwestern Montana” Doctoral Dissertation, Geography, University of Florida, Gainesville, FL, *committee member*
- Morgan Walker, MS, 2019 “Ungulate Use of Locally Infectious Zones (LIZs) in a Re-Emerging Anthrax Risk Area” Masters Thesis, Geography, University of Florida, Gainesville, FL, *committee member*
- Stephanie Cinkovich, PhD, 2018, “The role of host composition and asymptomatic infection on the transmission dynamics of zoonotic diseases” Doctoral Dissertation, Biology, University of Florida, Gainesville, FL, *committee member*
- Audrey Smith, MS, 2017, “Vegetation Dynamics and Undernutrition: A Spatio-Temporal Analysis of NDVI and Child Stunting in Zambia”, Masters Thesis, Geography, University of Florida, Gainesville, FL, *committee member*
- Jacob Atem, PhD, 2017, “*Characterization of Risk Factors, Morbidity, and Mortality, Associated with Diarrheal Disease Among Children Under Five (CU5) in East African Refugee Camps*”, Doctoral Dissertation, Environmental and Global Health, University of Florida, Gainesville, FL, *committee member*
- Amanda Cheeseman, PhD 2017, “*Factors Limiting Recovery of the New England Cottontail in New York*”, Doctoral Dissertation, SUNY ESF, Syracuse, NY, *committee member*
- Dawn Nekorchuk, PhD 2017, “*Modeling Indirect Transmission Disease Risk: Anthrax in Bison in Southwestern Montana*” Doctoral Dissertation. University of Florida, Gainesville, FL, *committee member*
- Ian Kracalik, PhD 2017, “*Impact of zoonotic diseases control policies: an evaluation of three countries of the former Soviet Union*” Doctoral Dissertation. University of Florida, Gainesville, FL, *committee member*
- Lili Morris, PhD 2016, “*Wildlife movement and disease risk: anthrax transmission in Montana*”, Doctoral Dissertation. University of Florida, Gainesville, FL, *committee member*
- Sarah Wilkinson, MS, 2013. “*Dynamics of Un-hunted White-tailed Deer at Eastern National Park Service Sites*”, MS Thesis, SUNY ESF, Syracuse, NY, *committee member*
- Anna Stewart-Ibarra, PhD, 2012. “*A Social-Ecological Analysis of Vulnerability to Dengue Fever in Southern Coastal Ecuador*”, Doctoral Dissertation. SUNY ESF, Syracuse, NY, *committee member*
- Frank Sylvester, MS/JD, 2013. “*The Continuing Problem of the Non-Consenting Owner: How States Balance Natural Resource Development and Landowner Rights*”, MS Thesis, SUNY ESF, Syracuse, NY. *Examiner*
- Emily Byrne, MS, 2012. *The Role of Politics in the Allocation of Funds from the American Recovery and Reinvestment Act for Renewable Energy.*” MS Thesis, SUNY ESF, Syracuse, NY. *Examiner*
- Scott Warsen, MS, 2012. “*Coyotes in the Central Adirondack Mountains of New York State: Evolving Dietary Niche and Interspecific Competition*” MS Thesis, SUNY ESF, Syracuse, NY. *Examiner*

UNDERGRADUATE (RESEARCH PROJECTS)

- 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*

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SYNERGISTIC ACTIVITIES

Working Groups (participant)

SESYNC Pursuit: “Modeling Risk Perception, Vector-borne Diseases, and Environmental Integrity: Understanding Environmental Impacts of Policy Decisions for Vector Control.”	2018-
VectorBite: an NIH RCN	2016-
NCEAS/LUCE Foundation: “Malaria and Climate Change”	2011-
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

Associate Editor, <i>African Journal of Wildlife Research</i>	2018-
Editor, <i>Animal Conservation</i>	2017-
Associate Editor, <i>Remote Sensing in Ecology and Conservation</i>	2015-
Associate Editor, <i>Animal Conservation</i>	2011-2017
Academic Editor, <i>PLOS ONE</i>	2012-2017
Society for Conservation Biology (SCB) – Chair of Education and Student Affairs, Board of Governors	2012-2015, 2017

Service to University

Department:

Graduate Coordinator, Department of Geography	2018-
Admissions Committee, Department of Geography, chair	2018-
Medical Geography Certificate (Graduate and Undergraduate) coordinator	2017-
Awards Committee, Department of Geography, chair	2016-
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:

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

Reviewer

Journals: *J Remote Sens & Ecol (Assoc Ed)*, *PLOS ONE (Academic Ed)*, *Anim Cons (Assoc Ed)*, *J Afr Ecol (Intl Rev Panel)*, *Ecology*, *J Appl Geog*, *Malaria J.*, *PNAS.*, *EID*, *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: *Ford Fellowship Foundation (National Academy of Sciences) Diversity Fellowship*, *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*

September 2019

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WORK HISTORY

- Conservation & Research Associate**, *Department of Conservation and Science, Lincoln Park Zoo* 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)
- Researcher**, *Environmental and Conservation Program, Chicago Field Museum* 1998
Field research and data collection, Yasuni National Park, Ecuador
Amazonian woody plant classification, identification and documentation, Chicago Field Museum

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

ARTICLES

Preprints

- Ryan, S.J.**, Lippi, C.A., Zermoglio, F. *online*. Shifting transmission risk for malaria in Africa with climate change: a framework for planning and intervention *bioRxiv* [[LINK](#)]
- Ngongala, C.N., **Ryan, S.J.**, Tesla, B., Demakovskys, L.R., Mordecai, E.A., Murdock, C.C., Bonds, M.H. *online*. Effects of temperature on Zika dynamics and control. *bioRxiv* [[LINK](#)]
- Lippi, C.A., Mao, L., Stewart-Ibarra, A.M., Heydari, N., Beltrán Ayala, E., Burkett-Cadena, N.D., Blackburn, J.K., **Ryan, S.J.** *online*. A Network Analysis Framework to Improve the Delivery of Mosquito Abatement Services in Machala, Ecuador. *medRxiv* [[LINK](#)]
- Miazgowicz, K.L., Mordecai, E.A., **Ryan, S.J.**, Hall, R.J., Owen, J., Adanlawo, T., Balaji, K., Murdock, C.C. *online*. Mosquito species and age influence thermal performance of traits relevant to malaria transmission. *bioRxiv* [[LINK](#)]
- El Moustaid, F., Thronton, Z., Slamani, H., **Ryan, S.J.**, Johnson, L.R. *online*. Understanding the effect of temperature on Bluetongue disease risk in livestock. *bioRxiv* [[LINK](#)]
- Rohat, G., Monaghan, A., Hayden, M.H., **Ryan, S.J.**, Wilhelmi, O.V. *online*. Intersecting vulnerabilities: Climatic and demographic contributions to future population exposure to Aedes-borne viruses in the United States. *bioRxiv* [[LINK](#)]

2020

- Ervin, D., Lopez-Carr, D., Riosmena, F., **Ryan, S.J.** *in press* Examining the relationship between migration and forest cover change in Mexico from 2001 to 2010. *Land Use Policy*
- 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. *accepted*. Severity Index for Suspected Arbovirus (SISA): machine learning for accurate prediction of hospitalization in subjects suspected of arboviral infection.
- 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. *accepted*. A generic arboviral model framework for exploring trade-offs between vector control and environmental concerns. *J. Theor. Biol.*
- 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. *accepted*. 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*

2019

- Johansson, M.A (and 81 others), 2019. An open challenge to advance probabilistic forecasting for dengue epidemics. *PNAS* 116(48): 24268-24274
- 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., *accepted*. 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

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- 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
- 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
- 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
- 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
- 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.
- 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
- 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
- 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
- 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
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- 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.
- 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.
- 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.
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- 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
- 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*.
- 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
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- RECENT SELECTED TALKS/PANELS**
- Invited:**
- 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 9-13th, 2019
- Ryan, S.J.** 2019. "Keynote: Linking vector borne disease to climate at multiple scales with mechanistic and geospatial models." 11th Annual Undergraduate Research Conference at the Interface of Biology and Mathematics, NIMBioS, University of Tennessee, Knoxville, November 16-17th, 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 13th-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 25-26th, 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." *2nd 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.*

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- 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 1st, 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 5-6th, 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 14th, 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 27th, 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 27th, 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 2nd, 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”. *1st 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: 5th 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: Remediating 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*

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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.

Conference:

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 10th, 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 and Context in Geography and GIScience Featured Theme), *Annual Meeting of the American Association of Geographers*, April 5th-9th, 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

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- International Geography, GIScience, and Urban Health Theme, Health and Medical Geography Specialty Group). *Annual Meeting of the American Association of Geographers*, March 29-April 2nd, 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 2nd, 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 2nd, 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." *27th International Congress for Conservation Biology and 4th 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." *27th International Congress for Conservation Biology and 4th 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. *Vth 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 8-12th, 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 4-9th, 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

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- 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 11th, 2012

RECENT POSTERS

- 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*

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- 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*
- Knesson 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 1st 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.

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- 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 23rd, 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 23rd, 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 23rd, 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 23rd, 2017, Gainesville, FL.
- Mordecai, E.A., Cohen, J., Evans, M., Johnson, L.R., Gudapati, P., Miazgowicz, 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) 65th Annual Meeting*, November 13-17th, 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 65th 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 Ecuadorean estuarine system. *American Society for Tropical Medicine and Hygiene 65th 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 65th 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 64th Annual Meeting*, October 25-29, 2015, Philadelphia, PA
- McMahon, E., Stewart-Ibarra, A.M., Barbachano-Guerro, A., Kirchoff, 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 64th 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 64th Annual Meeting*, October 25-29, 2015, Philadelphia, PA

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- 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 64th 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 64th 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 26th, 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. **3rd 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. **1st 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. **3rd 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) 62st 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.

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- 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), 11th 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.
- 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) 61st 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=yAlwChrlfw>
- *Graduate student presenter **Undergraduate student presenter ***Postdoctoral presenter*

Workshops/ Field Courses:

MPE 2013+ Workshop on Global Change and Vector-borne Diseases: Mapping Emerging Infectious Diseases (*Workshop lead/co-organizer*). George Mason University Fairfax, VA, August 13th-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. (*Workshop 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

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OCCASIONALLY USEFUL SKILLS

Languages: Intermediate French, Spanish, Afrikaans

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)