

Last updated August 2019

Elizabeth P. Anderson

Dept. of Earth & Environment
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EDUCATION

Ph.D. Ecology , Institute of Ecology (now Odum School of Ecology), University of Georgia, Athens, GA, USA. <i>Dissertation</i> : Ecological and social implications of hydropower development on a Neotropical watershed, Costa Rica. <i>Advisor</i> : Catherine M. Pringle.	2004
Tropical Biology: An Ecological Approach , Organization for Tropical Studies and Duke University, Costa Rica	2000
B.A., Honors Program , University of Georgia, Athens, GA USA	1998
Advanced Spanish Grammar and Translation , Universidad de Salamanca, Spain	1997

PROFESSIONAL APPOINTMENTS / POSITIONS

Assistant Professor , Department of Earth & Environment, Florida International University, Miami, FL, USA	2017-present
Fulbright Specialist , U.S. Department of State, Bureau of Educational and Cultural Affairs (Assignments: Colombia, 2015)	2014-present
Environmental Flows Consultant , Independent. Review and design of environmental flow regimes for hydropower projects (Patuca-Honduras; Hidrowarm & Due, Ecuador)	2006-present
Director of International Research Programs , School of Environment, Arts & Society, Florida International University, Miami, FL, USA	2013-2016
Fulbright Scholar to Peru , U.S. Department of State, Bureau of Educational and Cultural Affairs; Visiting Faculty , Universidad Nacional Mayor San Marcos, Lima, Peru	2014
Program Executive Officer , Global Water for Sustainability Program, Florida International University, Miami, FL, USA	2010-2013
Conservation Sustainability Director , Division of Environment, Culture and Conservation, The Field Museum of Natural History, Chicago, IL, USA	2008-2010
Deputy Director and Postdoctoral Associate , Global Water for Sustainability Program, Florida International University, Miami, FL, USA	2005-2008
Program Coordinator , U.S. National Science Foundation International Research Experience for Undergraduates (REU), La Selva Biological Station, Organization for Tropical Studies, Costa Rica	2004
Instructor , Tropical Rainforests. The Evergreen State College, Olympia, WA, USA and The Monteverde Institute, Costa Rica	2004
Fulbright Fellow to Costa Rica , U.S. Department of State, Bureau of Educational and Cultural Affairs	2001

Doctoral Student , Institute of Ecology (now Odum School of Ecology), University of Georgia, Athens, GA, USA	1999-2004
Aquatic Ecology Laboratory Manager , Institute of Ecology (now Odum School of Ecology), University of Georgia, Athens, GA, USA	1998-1999
Editorial Assistant , Center for Latin American and Caribbean Studies, University of Georgia, Athens, GA, USA	1998-1999
Peer Tutor , Biology, Chemistry, Math, Spanish, French, Student Learning Center, University of Georgia, Athens, GA, USA	1997-1998

FUNDING / GRANTS (Total received or managed to date: \$23,753,444)

Current funding as lead PI (\$696,000):

U.S. National Science Foundation. Project: REU Site: Research Experiences for Undergraduates in Conservation Science at Zoo Miami. Role: co-PI with Dr. Steven Whitfield, Zoo Miami (\$378,000)	2019-2022
The MacArthur Foundation. Project: Rios Vivos Andinos: Regionwide collaboration for conservation of free-flowing rivers. Role: PI (\$300,000)	2016-2020
Pave the Way Foundation. Project: Building and Connecting Young Leaders in Environmental Conservation in South Florida. Role: PI (\$60,000)	2018-2019
The Gordon and Betty Moore Foundation (through Wildlife Conservation Society). Project: Citizen Science for the Amazon: Water Sensor Network. Role: PI (\$125,000)	2017-2019
The Tinker Foundation. Project: Sustainable Flow Management for Humans and Nature in the Andean-Amazon. Role: PI (\$161,000)	2016-2019
The Deering Foundation. Project: An Assets-Based Approach to Understanding Nature-Culture Linkages in a Multicultural Urban Area. Role: PI (\$50,000)	2017-2020

Past funding (\$22,679,444 received or managed):

The MacArthur Foundation. Project: Catchment-scale management for ecosystem, health, economic, and cultural benefits in the lower Mara River Basin: The Serengeti-Lake Victoria (SELVA) Sustainable Water Initiative. Role: PI (\$275,000)	2015-2018
Pave the Way Foundation. Building and Connecting Young Leaders in Environmental Conservation in South Florida. Role: PI (\$60,000)	2017-2018
National Social-Ecological Synthesis Center (SESYNC). Project: Social and ecohydrological science connections for environmental flows. Role: Senior Personnel (est. \$50,000)	2016-2017
Pave the Way Foundation. Tropical Conservation Internships: Hands-on Training, Environmental Stewardship, and Sustainability. Role: PI (\$40,000)	2016-2017
National Geographic. Project: Introduced Hippos in Colombia: Consequences for Natural and Human Systems. Role: PI (\$14,870)	2016-2017
USAID/Tanzania. Project: Tanzania Integrated Water, Sanitation, and Hygiene Program. Role: Program Officer (3/2010-7/2013) and Senior Personnel (7/2013-2016); PI: Maria Donoso, Florida International University (\$13,836,339)	2010-2016
U.S. Department of State, Bureau of Educational and Cultural Affairs. Project: Fulbright Specialist, Environmental Science, Universidad de Santander, Colombia. Role: Fulbright Specialist (estimated: \$5,000)	2015

USAID/ICAA through Higher Education for Development. Project: Strengthening local capacity for prioritizing conservation research and action in the Colombian Amazon: A networked approach. Role: PI (\$749,961)	2012-2015
U.S. Department of State, Bureau of Educational and Cultural Affairs. Project: Ecology and Conservation of Freshwater Biodiversity in Peru's Andean-Amazon. Role: Fulbright Scholar (estimated: \$17,000)	2014
The Global Environment & Technology Foundation / The Coca-Cola Foundation. Project: Tanzania Water and Development Alliance II. Role: co-PI with Maria Donoso, Florida International University (\$1,051,787)	2010-2014
HidroEx. Project: Travel support for Latin American graduate students to attend the Ecology and Conservation of Tropical Rivers course in Costa Rica. Role: Instructor (\$10,000)	2013
Inter-American Development Bank. Project: Sustainability Report 2013: Perspectives on Central America. Role: PI (\$9,987)	2012-2013
USAID/East Africa. Project: Transboundary Water for Biodiversity and Human Health in the Mara River Basin, Kenya and Tanzania. Role: Program Officer; PI: Michael McClain, Florida International University (\$2,595,000)	2010-2012
USAID/Washington (subcontract). Project: A pilot environmental assessment for the Pastaza River Basin, Ecuador. Role: Consultant; PI: Michael McClain, Florida International University (~\$16,000)	2009
The Global Environment & Technology Foundation / The Coca-Cola Foundation (subcontract). Project: Environmental flow assessment and strengthened information systems for the Wami River Basin, Tanzania. Role: Senior Personnel; PI: Donald Robadue, University of Rhode Island (~\$90,000)	2007
USAID/Washington. Project: Global Water for Sustainability Program. Role: Deputy Director; PI: Michael McClain, Florida International University (~\$3,750,000)	2005-2008
University of Georgia. Dissertation Completion Award. Role: Doctoral Student (~\$25,000 for tuition and stipend)	2003-2004
University of Georgia Women's Club. Diane C. Davidson Award (to support graduate research). Role: Scholarship recipient (\$3000)	2003
University of Georgia, Institute of Ecology. Teaching Assistantship. Role: Doctoral Student (~\$20,000 for tuition and stipend)	2002-2003
U.S. Department of State, Bureau of Educational and Cultural Affairs. Project: A study of the ecological effects of hydropower development on the Sarapiquí River Basin, Costa Rica. Role: Fulbright Fellowship Recipient (\$14,000)	2001
University of Georgia. University-Wide Graduate Assistantship. Role: Graduate Student (~\$45,000 for tuition and stipend)	1999-2002
Organization for Tropical Studies. Pilot Research Award: A study of the ecological effects of hydropower development on the Sarapiquí River Basin, Costa Rica. Role: Graduate student (\$1500)	1999

PUBLICATIONS (*Journal articles; * denotes graduate student or postdoc first author*)

- Anderson, E.P.**, M. Varese, G. Leite, N. Piland, S. Heilpern, P. Olivas, B. Kays, F. Brown, and J. Dutka-Gianelli. Why tropical ecology and conservation need citizen science. *Biotropica* To submit September 2019
- Anderson, E.P.**, A.L. Subalusky, G.L Jimenez-Romero, D. Echeverri-Lopez, S. Garcia, L.J. Nova-Leon, J.F. Reatiga-Parrish, A. Rojas, and S.A. Sethi. Hippos in Colombia: The social side of rewilding. *Proceedings of the National Academy of Sciences* To submit September 2019
- *Ruegg, J., C.C. Conn, **E.P. Anderson**, T.J. Battin, E.S. Bernhardt, M.B. Canadell, S.M. Bonjour, J.D. Hosen, N.S. Marzolf, and C.B Yackulic. Thinking like a consumer: linking aquatic basal metabolism and consumer dynamics. *Limnology and Oceanography Letters* To submit August 2019
- Mumladze, L., B. Japoshvili, and **E.P. Anderson**. Faunal biodiversity research in the Republic of Georgia: a short review of trends, gaps, and needs in the Caucasus biodiversity hotspot. *Biological Conservation* In review
- *Farah-Perez, A., G.Umaña-Villalobos, J. Picado-Barboza, and **E.P. Anderson**. River fragmentation by dams and dewatered reaches in Costa Rica and potential consequences for fish fauna. *River Research and Applications* In revision
- *Seeteram, N., **E.P. Anderson**, P. Hyera, and L. Kaaya. Examining urban and agricultural growth trends in Tanzania: Implications for conservation of rivers and their biodiversity. *Water* In revision
- Anderson, E.P.**, S. Jackson, R. Tharme, M. Douglas, J.E. Flotemersch, M. Zwarteveen, C. Lokgariwar, M. Montoya, A. Wali, G.T. Tipa, T.D. Jardine, J.D. Olden, A.H. Arthington, L. Cheng, J. Conallin, B. Cosens, C. Dickens, D. Garrick, L. Perras Gordon, D. Groenfeldt, J. Kabogo, D. Roux, and A. Ruhi. Understanding relationships between people and rivers to advance the science of environmental flows. *WIREs Water* 2019
- Encalada, A.C., A.S. Flecker, N.L. Poff, E. Suarez, G.A. Herrera-R., B. Ríos-Touma, S. Jumani, E.I. Larson, and **E.P. Anderson**. A global perspective on tropical montane rivers. *Science* 2019
- Anderson, E.P.**, T. Osborne, J.A. Maldonado-Ocampo, M. Mills-Novoa, L. Castello, M. Montoya, A.C. Encalada, and C.N. Jenkins. Energy development reveals blind spots for Amazon ecosystem conservation. *Frontiers in Ecology and the Environment* 2019
- *Subalusky, A.L., **E.P. Anderson**, G.L Jimenez-Romero, D.M. Post, L.F. Jimenez-Segura, D. Echeverri-Lopez, S. Garcia, L.J. Nova-Leon, J.F. Reatiga-Parrish, A. Rojas, and S.A. Solari-Torres. Fertility and chaos? Potential impacts of hippopotamus introductions into Colombia's Magdalena River Basin. *Oryx* 2019
- Tognelli, M., **E.P. Anderson**, L. Jimenez-Segura, J. Chuctaya, J. Maldonado-Ocampo, J. Mojica, F. Carvajal-Vallejos, V. Correa, H. Ortega, J.F. Rivadeneira-Romero, P. Sanchez-Duarte, N. Cox, M. Hidalgo, P. Jimenez Prado, C. Lasso, J. Sarmiento, M. Velasquez, and F. Villa-Navarro. Assessing conservation priorities of endemic freshwater fishes in the Tropical Andes region. *Aquatic Conservation: Marine and Freshwater Systems* 2018

- Anderson, E.P.**, C.N. Jenkins, S. Heilpern, J.A. Maldonado-Ocampo, F. Carvajal-Vallejos, A.C. Encalada, J.F. Rivadeneira-Romero, M. Hidalgo, C.M. Cañas, H. Ortega, N. Salcedo, M. Maldonado, and P.A. Tedesco. Fragmentation of Andes-to-Amazon riverine connectivity by hydropower dams. *Science Advances* 4:eaao1642. 2018
- Wu, X., J. Gomes-Selman, Q. Shi, Y. Xue, R. García-Villacorta, **E. Anderson**, S. Sethi, S. Steinschneider, A. Flecker, and C.P. Gomes. 2018. Efficiently Approximating the Pareto Frontier: Hydropower Dam Placement in the Amazon Basin. *Proc. Thirty-Second AAAI Conference on Artificial Intelligence (AAAI-18)*, New Orleans, LA, USA, 2–7 February 2018; pp. 849–858. 2018
- Kabogo, J., **E.P. Anderson**, P. Hyera, and G. Kajanja. Facilitating public participation in freshwater resources management: Reflections from Tanzania. *Ecology and Society* 22(4):26. 2017
- Anderson, E.P.** and J.C. Veilleux. Cultural costs of tropical dams. *Science* 352:159. 2016
- *Neibaur, E.E. and **E.P. Anderson**. Sustainability of domestic rainwater harvesting systems in a rural region of Mexico. *Water Science and Technology* 16:1388-97. 2016
- *Auerbach, D., B. Buchanan, A. Alexiades, **E.P. Anderson**, A.C. Encalada, E. Larson, R. McManamay, G. Poe, T. Walter, and A. Flecker. Towards rapid, rigorous and reproducible ecohydrologic classification of data scarce regions. *Ecohydrology* 2016
- *Veilleux, J.C. and **E.P. Anderson**. 2015 Snapshot of water security in the Nile, Mekong, and Amazon Basins. *Limnology and Oceanography Bulletin* 25:8-14. 2016
- Gaiser, E.E., **E.P. Anderson**, E. Castañeda-Moya, L. Collado-Vides, J.W. Fouqurean, M.R. Heithaus, R. Jaffe, D. Lagomasino, N.J. Oehm, R.M. Price, V.H Rivera-Monroy, R.R. Chowdhury, and T.G. Troxler. New perspectives on an iconic landscape from comparative international long-term ecological research. *Ecosphere* 6(10):1-18. 2015
- Salisbury, D.S., **E.P. Anderson**, R. Bilsborrow, C. Campbell, J. Maldonado-Ocampo, S. Perz, E. Diaz-Zuñiga. Transforming higher education for a changing Amazon. *Investigación Universitaria, Edición Extraordinaria, Revista de la Universidad Nacional de Ucayali*. 7-9. (In Spanish) 2015
- McClain, M.E., A. Subalusky, **E.P. Anderson**, P. Ndomba, J. Mtamba, R. Tamatamah, C. Mligo, and J. Ayieko. Comparing flow regime, channel hydraulics and biological communities to infer flow-ecology relationships in the Mara River of Kenya and Tanzania. *Hydrological Sciences Journal* 59:1-19. 2014
- Anderson, E.P.** and J.A. Maldonado-Ocampo. Returning to the Colombian Amazon. *Science* 342:692-93 2013
- *Snyder, M.N., **E.P. Anderson**, and C.M. Pringle. A migratory shrimp's perspective on habitat fragmentation in the Neotropics: Extending knowledge from Puerto Rico. *New Frontiers in Crustacean Biology* 169-182. 2011
- Anderson, E.P.** and J.A. Maldonado-Ocampo. A regional perspective on diversity and conservation of tropical Andean fishes. *Conservation Biology* 25(1): 30-39. 2011
- *Stiefel, J.M., A.M. Melesse, M.E. McClain, R.M. Price, **E.P. Anderson**, and N.K. Chauhan. Effects of rainwater-harvesting induced artificial recharge on the groundwater of wells in Rajasthan, India. *Hydrogeology Journal* 17:2061-2073. 2009

- Anderson, E.P.**, M. Montoya, A. Soto, H. Flores and M.E. McClain. Challenges and opportunities for co-management of a migratory fish, *Prochilodus nigricans*, in the Peruvian Amazon. ***American Fisheries Society Symposium*** 69:741-756. 2009
- Anderson, E.P.**, J. Sarmett, D. Robadue, and J. Tobey. How much water do we need for nature, livelihoods and people? Assessing the environmental flow of rivers in the Wami River Basin. ***Basins and Coasts*** 2:18-23. 2008
- Anderson, E.P.**, C.M. Pringle, and M.C. Freeman. Quantifying the extent of river fragmentation by hydropower dams in the Sarapiquí River Basin, Costa Rica. ***Aquatic Conservation: Marine and Freshwater Systems*** 18:408-417. 2008
- McClain, M.E., **E.P. Anderson**, and D. Ombara. Securing water for the environment in the Mara River Basin of East Africa. ***Basins and Coasts*** 1:4-5. 2006
- Anderson, E.P.**, C.M. Pringle, and M. Rojas. Transforming tropical rivers: An environmental perspective on hydropower development in Costa Rica. ***Aquatic Conservation: Marine and Freshwater Systems*** 16:679-693. 2006
- Anderson, E.P.**, M.C. Freeman, and C.M. Pringle. Ecological consequences of hydropower development in Central America: Small dams and water diversion on Neotropical stream fish assemblages. ***River Research and Applications*** 22:397-411. 2006
- PUBLICATIONS** (*Books, book chapters, and technical reports*)
- Jimenez-Segura, L.F., **E.P. Anderson**, and >15 coauthors. Ichthyofauna of the Tropical Andes. International Union for the Conservation of Nature. 2016
- Anderson, E.P.** (ed). GLOWS-FIU. A Rapid Assessment of the Aquatic and Riparian Biota of the Wami-Ruvu Basin, Tanzania. Global Water for Sustainability Program. 66 pages. 2016
- Pringle, C.M., **E.P. Anderson**, and 9 coauthors. Rivers of Costa Rica. In: Kappelle, M. and L.D. Gomez (eds), *Ecosystems of Costa Rica*. 2015
- McClain, M.E. and **E.P. Anderson**. The gap between best practice and actual practice in the allocation of environmental flows in integrated water resources management. In: Setegn, S.G. and M.C. Donoso (eds), *Sustainability of Integrated Water Resources Management: Water Governance, Climate, and Ecohydrology*. 2015
- Anderson, E.P.** (ed). *Inambari: Towards an Integrated Approach to River Basin Management*. Wildlife Conservation Society. 23 pages. 2014
- Anderson, E.P.** (ed). GLOWS-FIU. Environmental Flow Recommendations for the Ruvu River Basin, Tanzania. Global Water for Sustainability Program. 52 pages. 2014
- Anderson, E.P.** (ed). GLOWS-FIU. Wami River Sub-Basin: Environmental Flow Assessment Phase II. Global Water for Sustainability Program. 66 pages. 2014
- Anderson, E.P.** Hydropower development and ecosystem services in Central America. Inter-American Development Bank Technical Note: IDB-TB-513. 41 pages. 2013
<http://www10.iadb.org/intal/intalcdi/PE/2013/11508.pdf>
- Subalusky, A., **E.P. Anderson**, and M.E. McClain. An Environmental Flow Assessment for Mara River Basin, Kenya and Tanzania. Global Water for Sustainability, Miami, FL. 2012
- Anderson, E.P.**, A.C. Encalada, M. Ayala, A. Sanchez, C. Romero, M. MONTeluisa, M.J. Ordóñez, and S. Davila. The concept of environmental flows in Ecuador: Summary of a pilot project in the Pastaza River Basin. Fundación Natura, Quito, Ecuador. 2012

- Herzog, S.K., P.M. Jørgensen, R. Martínez Güingla, C. Martius, **E.P. Anderson**, D.G. Hole, T.H. Larsen, J.A. Marengo, D. Ruiz Carrascal, H. Tiessen. Effects of climate change on the biodiversity of the tropical Andes: state of scientific knowledge. Summary for decision makers and public policy makers. Inter-American Institute for Global Change Research (IAI), São José dos Campos, Brasil. 2011
- Anderson, E.P.**, J.A. Marengo, R. Villalba, S. Halloy, B. Young, D. Cordero, F. Gast, E. Jaimes, and D. Ruiz. 2011. Consequences of climate change for ecosystems and ecosystem services in the tropical Andes. Chapter 1 in: Herzog, S.K., R. Martinez, P.M. Jorgensen, and H. Tiessen (eds). *Climate change effects on the biodiversity of the tropical Andes: An assessment of the status of scientific knowledge*. Inter-American Institute of Global Change Research (IAI) and Scientific Committee on Problems of the Environment (SCOPE). San Jose dos Campos and Paris. 2011
- Anderson, E.P.**, A. Encalada, J.A. Maldonado-Ocampo, M.E. McClain, H. Ortega, and B.P. Wilcox. Environmental flows: A tool for addressing effects of river alterations and climate change in the Andes. Chapter 23 in: Herzog, S.K., R. Martinez, P.M. Jorgensen, and H. Tiessen (eds). *Climate change effects on the biodiversity of the tropical Andes: An assessment of the status of scientific knowledge*. Inter-American Institute of Global Change Research (IAI) and Scientific Committee on Problems of the Environment (SCOPE). San Jose dos Campos and Paris. 2011
- Rivadeneira, J.F., **E.P. Anderson**, and S. Davila. *Common fishes of the Pastaza River Basin*. Fundación Natura, Quito, Ecuador. 31 pages. (In Spanish) 2010
- C. Vriesendorp, W. Alverson, D. Moskovits, D. Stotz, S. Fuentes, B. Coronel-Tapia, and **E.P. Anderson**, editors. *Ecuador: Cabeceras Cofanes-Chingual*. Rapid Biological Inventories Report 21. The Field Museum, Chicago. 2009
- Maldonado-Ocampo, J.A., A. Torres-Noboa, and **E.P. Anderson**. Fishes. In: C. Vriesendorp, W. Alverson, D. Moskovits, D. Stotz, S. Fuentes, B. Coronel-Tapia, and E.P. Anderson (eds). *Ecuador: Cabeceras Cofanes-Chingual*. Rapid Biological Inventories Report 21. The Field Museum, Chicago. 2009
- Beard, T.D., H. Allan, **E.P. Anderson**, and K.L. Smith. Tradeoffs in management of freshwater ecosystem services under international environmental conventions: The case of inland waters fisheries. In: Schechter, M.G., W.W. Taylor, and N.J. Leonard (eds). *International governance of fisheries ecosystems: Learning from the past, finding solutions for the future*. American Fisheries Society, Bethesda, MD. 2009
- Anderson, E.P.** and J. Sarmett. 2008. *An initial environmental flow assessment for the Wami River sub-Basin, Tanzania*. Technical report prepared for the Tanzanian Ministry of Water and Irrigation. 151 p. 2008
- Saunders, T.J., **E.P. Anderson**, and J.E. Celi. 2007. *Status and trends of water quality in the Pastaza River Basin, Ecuador*. Technical report prepared for the Secretaria Nacional del Agua (Ecuador) and the Global Water for Sustainability Program. 150 pages. 2007
- Anderson, E.P.**, C.G. McNally, B. Kalangahe, H. Ramadhani, and H. Mhitu. *The Wami River Estuary, Tanzania: A rapid ecological assessment*. Technical report prepared for the Tanzania Coastal Management Partnership and the Coastal Resources Center, University of Rhode Island. 35 pages 2007

Seares, J., K. Smith, E.P. Anderson , and C.M. Pringle. Effects of globalization on freshwater biodiversity and strategies for conservation. In Taylor, W.W., M.G. Schechter, and L.G. Wolfson (eds). <i>Globalization: Effects on Fisheries Resources</i> .	2007
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PUBLICATIONS (*Other*)

Litzinger, M., E.P. Anderson , B. Martinez-Guerrero, and J.A. Maldonado-Ocampo. Where the Andes Meet the Amazon: Bringing the Fairchild Challenge to the Colombian Amazon. <i>The Tropical Garden</i> , Fairchild Tropical Botanic Garden, Spring Issue.	2014
Anderson, E. Electricity sector reform means more dams for Costa Rica. <i>World Rivers Review</i> 17:3.	2002

TEACHING EXPERIENCE: Graduate Level

Florida International University

Integrated Solutions for Water in Environment and Development (EVR 5332)	2017-19; 2006-13
Graduate Seminar in Earth & Environment (ISC 5151; ISC 6152)	2017
Amazon Biodiversity Conservation: Protected Areas and Influences of Scale. Field Course at Amacayacu National Park, Colombia (Coordinator and Instructor)	2014
Experimental Design and Field Techniques for Biodiversity Conservation Research in the Andean Amazon, Florencia, Colombia (Coordinator and Instructor)	2013
Independent Study in Conservation Issues	2013-on
Guest Lectures in Conservation Biology, Resource Management, among other courses	2010-on

Organization for Tropical Studies, Costa Rica

Ecology and Conservation of Neotropical Rivers, Field Course in Costa Rica. Graduate Specialty Course offered every 2-3 years. (Coordinator and Instructor)	2011-present
Tropical Ecology: An Ecological Approach – English and Spanish courses (Resource Faculty on Tropical River Ecology and Conservation)	2013,2005 2000-02

Universidad Nacional Mayor San Marcos, Lima, Peru

Ecology and Conservation of Tropical Rivers (Instructor)	2014
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TEACHING EXPERIENCE: Undergraduate Level

Florida International University

EVR 1017: Global Environment and Society (~50 students)	2018-19
EVR 4941: Internship in Environmental Studies (~10 students / semester)	2017-19

Universidad de Santander, Colombia

Integrated Water Resources Management (~30 students)	2012
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The Evergreen State College, Washington

Tropical Rainforests, Field Course in Costa Rica (Co-Instructor with John Longino)	2004
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University of Georgia

Costa Rica Ecology Program (Resource Faculty)	2003-2004
Honors Interdisciplinary Field Program in Geology, Anthropology and Ecology. (Ecology Instructor)	2003
Tropical Ecology and Field Research in Costa Rica (Teaching Assistant)	2001-2003
Introduction to Ecology – ECOL 3500 (Lead Teaching Assistant)	2002

Ecological Basis for Environmental Issues – ECOL 1000 (Teaching Assistant)	1999
Peer Tutor, University of Georgia: Biology, Chemistry, Math, Spanish, French	1997-1998

TEACHING EXPERIENCE: Training and Technical Courses

Tutorial on environmental flows: scientific concepts and practical applications. Audience: Tanzanian Ministry of Water. Duration: 2 days; Location: Tanzania	2014
Environmental flow assessment for freshwater biodiversity conservation. Audience: academics, environmental consultants, government. Duration: 1 day; Location: Lima, Peru	2014
Environmental flows for freshwater biodiversity conservation. Audience: academics, consultants, government. Duration: 2 days; Location: Bogotá, Colombia	2013
Forest inventory Methods for REDD Projects, Cordillera Azul National Park, Peru. Audience: Park guards. Duration: 5 days; Location: Tarapoto, Peru	2009
Environmental Flows: Principles, Methodologies, and Examples of Implementation. Audience: academics, environmental consultants, government. Duration: 5 days; Location: Quito, Ecuador	2009
Forest Inventory Methods for Carbon Projects, Cordillera Azul National Park, Peru. Audience: Park guards. Duration: 7 days; Location: Lima and Tarapoto, Peru	2008
Participatory Water Quality Monitoring. Audience: NGOs, local governments. Duration: 2 days; Location: Riobamba, Ecuador	2007
Management, Conservation and Restoration of Central American Wetlands, Palo Verde, Costa Rica. Audience: conservation practitioners. Duration: 7 days; Location: Palo Verde, Costa Rica	2006-2007

GRADUATE ADVISOR(*), RESEARCH MENTOR or COMMITTEE MEMBER

Current: Daniela Daniele* (MS, FIU); Brenna Kays* (PhD, FIU); Nadia Seeteram* (PhD, FIU); Aldo Farah* (PhD, FIU); Ana Rojas* (MS, FIU); Tim Kirby (PhD, FIU); Carlos Varela (PhD, FIU); Kenny Anderson (PhD, FIU); Alexander Shepack (PhD, FIU); Jordan Massie (PhD, FIU); David Robles (PhD, FIU); Cody Eggenberger (MS, FIU)

Past: Katherine Brownson (PhD; Univ of Georgia, 2019); Cindy Lewis (PhD, FIU, 2019); Ana Lemos (MS, FIU, 2017); Andrew Shantz (PhD, FIU, 2016); Elena Neibaur* (MS, FIU, 2015); Rebeca de Jesus (PhD, Univ of Georgia, 2015); Mark Ladd (PhD, FIU, 2015-transfer); Drew Cooper (MA, Univ. of Miami, 2011); Ximena Mesa (MS, FIU, 2010); Catherine McNally (PhD, Univ of Rhode Island, 2007); John Stiefel (MS, FIU, 2007); Miriam Ramos (MS, Univ. of Missouri, 2000)

UNDERGRADUATE MENTOR OR RESEARCH SUPERVISOR

Current: Francina Simonpetri, FIU; Melissa Lau, FIU; Adrian Figueroa, FIU

Past: Brenna Kays, FIU (2017); Maria Jose Ordóñez, Escuela Politecnica de Ecuador (2009); Nasser Brahim, FIU (2005-06); Pamela Sullivan, University of British Columbia (2005); Suzanne Alvarez, Princeton University (2004); Liabeth Yohannes, Wesleyan University (2004); Andrea Suarez, Universidad Nacional Autonoma, Costa Rica (2004-06); Suzanne Mollendorf, Wellesley College (2001); Bishara Baddour, Univ of Georgia (2001); Paul Chmura, Univ of Georgia (2001)

AWARDS

Research Award, College of Arts, Sciences and Education, Florida International University	2018
Top Scholar Award, Florida International University (University-wide recognition)	2018
Operational Excellence Award, Florida International University	2007
Environmental Policy Award, Institute of Ecology, University of Georgia	2004
Outstanding Teaching Assistant Award, University of Georgia	2003
Distinguished Teaching Assistant Award, Institute of Ecology, University of Georgia	2003
Honors Program Certificate of Academic Achievement, Univ. of Georgia	1998
Modern Languages Scholarship for Study Abroad (Spain), University of Georgia	1997
HOPE Scholarship, Full tuition support, University of Georgia	1994-1998
Regents Scholarship, University of Georgia	1994-1995

INVITED SEMINARS *denotes major international event

International

International Conference on Water and Environment, Cartagena, Colombia	2018
*AQUATROP, Plenary speaker, Quito, Ecuador	2018
Aguas Amazónicas Conference, Wildlife Conservation Society, Lima, Peru	2016
Universidad de Santander, Bucaramanga, Colombia (2 seminars)	2015
Municipal Government of Bucaramanga, Colombia	2015
USAID/Peru, Lima, Peru	2014
Universidad San Francisco de Quito, Ecuador	2014
Museum of Natural History, Universidad Nacional Mayor San Marcos, Lima, Peru	2014
Latin American Conference of Environmental Ministers, Bogotá, Colombia	2013
*Rio+20, United Nations Conference on Sustainable Development, Rio de Janeiro, Brazil	2012
Pontificia Universidad Javeriana, Bogotá, Colombia	2012
Universidad Nacional Autonoma, Heredia, Costa Rica	2012
Universidad Distrital Francisco Jose de Caldas, Bogotá, Colombia	2010
Universidad San Francisco de Quito, Ecuador	2007
Spanish Institute for Research and Food Science Technology, Spain	2006
New Water Culture Foundation, Spain	2006
*The 4 th World Water Forum, Mexico	2006
Costa Rican Institute of Electricity	2003
Organization for Tropical Studies, La Selva Biological Station Advisory Committee Meeting, Costa Rica	1999

USA

Oregon State University, Department of Integrative Biology, Corvallis, OR	2019
University of Miami, Department of Biology, Miami, FL	2018
Florida International University, Dept. of Earth and Environment, Miami, FL	2018
UF Amazon conference, University of Florida, Gainesville, FL	2017
Cary Institute for Ecosystem Studies, NY	2016
H.T. Odum Center for Wetlands, University of Florida, Gainesville, FL	2016
Zoo Miami	2016

University of Colorado, Law School, Boulder, CO	2016
Miami Dade College, Earth Ethics Institute	2016
Florida International University, Dept. of Earth & Environment, Miami, FL	2015
Zoo Miami	2013
*Inter-American Conference of Mayors and Local Authorities, Miami, FL	2013
Florida International University, Dept. of Biological Sciences, Miami, FL	2013
Duke University, Durham, North Carolina	2013
University of Georgia, Odum School of Ecology, Athens, GA	2013
Ransom Everglades High School, Miami, FL	2013
Inter-American Development Bank, Washington, DC (2 seminars)	2012
University of Nebraska, Water for Food Institute; School of Natural Resources, Lincoln, NE	2012
Florida International University, Dept. of Biological Sciences, Miami, FL	2012
Fairchild Tropical Botanic Garden, Miami, FL	2012
DePaul University, Department of Environmental Studies, Chicago, IL	2012
Florida International University, Miami, FL (2 seminars)	2010
University of Georgia, Odum School of Ecology Graduate Student Symposium	2010
DePaul University, Department of Biology, Chicago, IL	2010
The Field Museum of Natural History, Chicago, IL	2010
The Field Museum of Natural History, Chicago, IL	2008
Florida International University, Department of Environmental Studies, Miami, FL	2004

ATTENDANCE AT SCIENTIFIC CONFERENCES

AQUATROP (Plenary speaker)	2018
Annual Meeting of the Society for Freshwater Science (invited symposium speaker, 2007; symposium organizer and speaker, 2018)	2003,2007, 2018, 2019
International Congress on Conservation Biology	2017
Annual Meeting of the American Association for Geographers (invited symposium speaker)	2016
Latin American Studies Association, 50 th Anniversary Meeting (invited symposium speaker)	2016
Annual Meeting of the Ecological Society of America (invited symposium speaker 2015)	2005, 2007,2015
Annual Meeting of the Association for Tropical Biology and Conservation (invited symposium speaker 2013)	2004,2013, 2019
XII Colombian Congress of Ichthyology and III Encounter of South American Ichthyologists (invited pre-meeting course instructor)	2013
Inter-American Conference of Mayors and Local Authorities, Panel Sessions on Water Resources Issues, Miami, FL	2005-07
World Water Week, Stockholm, Sweden (invited symposium speaker)	2007

MEETINGS AND WORKSHOPS

Exploring the Importance of Flow and Connectivity for the Andean Amazon. Quito, Ecuador (Organizer, Facilitator)	2018
Respiration Regimes: A Cross Biome Perspective. Ovornnaz, Switzerland (Participant)	2018
Amazon Dams Network, Annual Meeting, Palmas, Brazil (Participant)	2018
Citizen Science for the Amazon, Annual Meeting. Iquitos, Peru (Participant, Presenter)	2018

Tools and Strategies for Conservation and Development in the Amazon: Lessons Learned and Future Pathways, University of Florida, Gainesville, FL (Participant)	2017
Conservation Technologies and Low-Cost Environmental Monitoring, The Moore Foundation, CA (Participant)	2017
SESYNC Workshop: Social and Ecohydrological Connections for Environmental Flows (Organizer, Facilitator)	2017
Amazon Dams Network, Annual Meeting, Flagstaff, AZ (Participant)	2017
Citizen Science for the Amazon, Project Launch Meeting, Lima, Peru. (Participant)	2017
Amazon Computational Sustainability, Data Identification and Analysis Meetings. Cornell University and Lima, Peru. (Participant)	2017
Living Andean Rivers Planning Workshop. Miami, FL. (Organizer, Facilitator)	2017
Low-Cost Solutions for Water Monitoring, Musoma, Tanzania. (Organizer, Facilitator)	2016
Climate Reality Leadership Training, Sponsored by Al Gore and The Climate Reality Project. Miami, FL. (Participant)	2015
Perspectives on Conservation and Development of Andean-Amazon Rivers. Bogotá, Colombia. (Organizer)	2015
USAID Initiative for Conservation in the Andean Amazon II: Higher Education Partnership Program, Annual Conference Meeting. Pucallpa, Peru. (Participant)	2015
NSF Florida Coastal Everglades-LTER All Scientists' Meeting Workshop, Miami, FL (Participant)	2015
International Symposium on Environmental Flows and Integrated River Basin Management in Colombia and the Andean Region. Bogotá, Colombia. (Organizer)	2014
Train the Trainers: Active Techniques for Scientific Teaching workshop. Organized by the American Museum of Natural History and Univ. of Florida. Peru (Participant)	2014
USAID Initiative for Conservation in the Andean Amazon II: Higher Education Partnership Program, Annual Conference Meeting. Leticia, Colombia. (Organizer)	2014
Environmental Flows in the Andes. Sponsored by Cornell University and the Universidad San Francisco de Quito, Ecuador (Invited Participant)	2014
Data Analysis and Consolidation for Environmental Flow Methodology for the Republic of Georgia. Delft, The Netherlands (Invited Expert)	2014
Development of an Environmental Flow Assessment Framework and Methodology for the Republic of Georgia. Tbilisi, Georgia. (Invited Expert)	2014
Workshops (2) on the development of an environmental flow prescription for the Ruvu River, Tanzania (Facilitator and Participant)	2013-14
Workshop on revision and inter-institutional exchange of curricula in conservation biology. Sponsored by Partners for Conservation in the Colombian Amazon. Bogota, Colombia. (Organizer and Facilitator)	2013
Sustainability Report Panel. Sponsored by the Inter-American Development Bank, Washington, DC (Invited Expert/Panelist)	2013
Annual Meeting of the Partners for Conservation in the Colombian Amazon program, Bogotá, Colombia (Organizer)	2013
USAID Initiative for Conservation in the Andean Amazon II: Higher Education Partnership Program, Annual Conference Meeting. Tiputini, Ecuador. (Participant)	2013

USAID Initiative for Conservation in the Andean Amazon II: Higher Education Partnership Program, Launch Meeting. Washington, DC (Participant)	2012
Sustainability Report Review Session Sponsored by the Inter-American Development Bank, Washington, DC (Invited Expert/Panelist)	2012
Mara River Basin conference. Sponsored by USAID/East Africa and the Global Water for Sustainability Program, Florida International University, Dar es Salaam, Tanzania (Organizer and Facilitator)	2012
Workshops (3) on the development of an environmental flow prescription for the Mara River in Tanzania. Sponsored by the Tanzanian Ministry of Water, USAID, and Florida International University, Dar es Salaam, Tanzania (Organizer and Facilitator)	2011-2012
NSF Research Coordination Network on Long-term Change in Tropical Ecosystems. Sponsored by the Organization for Tropical Studies, Costa Rica (Invited participant)	2012
Workshops (4) on the declaration of a new protected area in northern Ecuador. Sponsored by The Field Museum, the Municipal Government of Sucumbios and the Ecuadorian Ministry of the Environment, Ecuador (Organizer and Facilitator)	2008-2010
Workshops (3) and training courses on the development of a REDD project (Reduced Emissions from Deforestation and Degradation) for Cordillera Azul National Park, Peru (Organizer)	2008-2010
Workshop on the assessment of research and institutional needs to cope with the effects of climate change on Andean biodiversity. Sponsored by the Inter-American Institute, SCOPE, and the MacArthur Foundation, Ubatuba, Brazil (invite)	2009
Workshop on the development of a conservation vision for the Bolivian Amazon: Our Amazonia, Our Future. Cobija, Bolivia. (Organizer)	2009
Workshop on Integrated Water Resources Management in the Wakal River Basin, India. (Co-organizer and Facilitator)	2008
Workshops (3) on environmental flow assessment for the Wami River, Tanzania. Sponsored by the Tanzanian Ministry of Water and the Tanzanian Coastal Management Partnership, Dar es Salaam, Tanzania (Organizer and Facilitator)	2007
Special panel session at the Interamerican Conference of Mayors and Local Authorities. Miami, FL, USA, Payment for Environmental Services as a Strategy for Water Resources Management. (Organizer and Facilitator)	2007
Workshop on the development of environmental flow recommendations for the Patuca River, Honduras, downstream from the proposed Patuca III Dam. Sponsored by the Honduran National Electricity Company (ENEE) and The Nature Conservancy, Tegucigalpa, Honduras (Invited Expert on Central American rivers)	2006
Workshop on integrated water resources management in the Wakal River Basin, Rajasthan, India. (Organizer)	2006
Special panel session at the Inter-American Conference of Mayors and Local Authorities. Miami, FL, USA, Meeting the Millennium Development Goals for Water and Sanitation in Latin America. (Organizer and Facilitator)	2006
Special panel session at the Inter-American Conference of Mayors and Local Authorities. Miami, FL, USA, Pure Water for Your City: Challenges and Solutions for Water Resource Management. (Organizer and Facilitator)	2005

Public hearings on a proposal for a new water law in Peru. Iquitos and Tarapoto, Peru. Sponsored by the Peruvian government, WWF-Peru and the Global Water for Sustainability Program. (Organizer and Participant)	2005
Workshop on environmental flows for Costa Rica. Sponsored by IUCN and the Organization for Tropical Studies, San Jose, Costa Rica. (Participant)	2004
Freshwater Biodiversity Conservation in Central America. Conference sponsored by The Nature Conservancy. Lago Yojoa, Honduras. (Participant)	2002
Workshop on the development of a management plan for the Sarapiquí River Basin. Sponsored by the World Bank and the Costa Rican Institute of Electricity. Puerto Viejo de Sarapiquí, Costa Rica. (Participant)	2002
Workshop on the ecological impacts of the Cariblanco Hydropower Project. Sponsored by the Costa Rican Institute of Electricity. Sarapiquí, Costa Rica. (Participant)	2001
La Selva Advisory Committee Meeting. Puerto Viejo, Costa Rica (Invited Participant)	1999

SELECTED U.S. and INTERNATIONAL MEDIA COVERAGE

BBC Science in Action (interview) https://www.bbc.co.uk/programmes/w3csvrh4	2018
Academic Minute (90 second overview) https://academicminute.org/2018/09/elizabeth-anderson-florida-international-university-dams-are-changing-amazonian-rivers/	2018
Dam Building Binge Will Shred Ecosystems, Scientists Warn (in Science) https://www.sciencemag.org/news/2018/01/dam-building-binge-amazon-will-shred-ecosystems-scientists-warn	2018
FIU Tropical Conservation Internship Welcomes Spring Cohort https://casenews.fiu.edu/index.php/2018/02/26/fiu-tropics-tropical-conservation-internship-welcomes-spring-cohort/	2018
Andean Dams Twice as Numerous as Thought are Fragmenting the Amazon (Mongabay) https://news.mongabay.com/2018/02/andes-dams-twice-as-numerous-as-thought-are-fragmenting-the-amazon/	2018
Las 142 Represas Que Ponen en Riesgo la Cuenca Amazónica https://www.eltiempo.com/vida/medio-ambiente/estudio-fragmentacion-de-la-conectividad-de-los-andes-al-amazonas-por-represas-hidroelectricas-177480	2018
A Amazonia Desconectada pelas Barragens https://www.oeco.org.br/noticias/a-amazonia-desconectada-pelas-barragens/	2018
Fiona the Famous Baby Hippo—Everything You Need to Know: https://news.nationalgeographic.com/2017/11/fiona-hippo-cincinnati-zoo-conservation-video-spd/	2017
Proposed Andean Dams as an Ecological Calamity https://news.mongabay.com/2015/06/proposed-andean-headwater-dams-an-ecological-calamity-for-amazon-basin/	2015

Environmental Conservation Efforts in the Andean Amazon Prove Fruitful: http://news.fiu.edu/2014/02/environmental-conservation-efforts-in-the-andean-amazon-prove-fruitful/73981	2014
An Alliance for the Conservation of Amazonian Biodiversity: http://www.javeriana.edu.co/noticias/noticias?aID=594426&tID=22767#.UxT_mdzspG6	2014
Conservation Ecologist Puts Focus on Water Resources Management in Latin America: http://news.fiu.edu/2013/08/conservation-ecologist-puts-focus-on-water-resources-management-in-latin-america/65030	2013
Inhabitants of the Amazon Have Studied Little of their Region: http://www.elespectador.com/noticias/actualidad/vivir/habitantes-de-amazonia-estudian-poco-su-region-articulo-455668	2013
FIU Partners with Colombian Universities for Environmental Conservation in the Amazon: http://news.fiu.edu/2013/02/fiu-partners-with-colombian-universities-for-environmental-conservation-in-the-andean-amazon/51863	2013

REVIEWING ACTIVITIES (3-5 manuscripts/year)

Science; Nature; Frontiers in Ecology and Environment; Inter-American Development Bank; PLoS ONE; Conservation Letters; Science of the Total Environment; Annals of the Association of American Geographers; Journal of Freshwater Science; Freshwater Biology; River Research and Applications; Environmental Management; Journal of Environmental Management; Hydrological Processes; Ecology of Freshwater Fishes; Journal of Fish Biology; Marine and Freshwater Research; Coastal Management; Hydrobiologia; Ecohydrology	2008-present
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