

SHANNON L. LADEAU

The Cary Institute of Ecosystem Studies

Box AB, Millbrook, NY 12545

(845) 845-677-5343 ext. 204 LADEAUS@caryinstitute.org

ORCID ID: <https://orcid.org/0000-0003-4825-5435>

EDUCATION

- 2005 Ph.D., Duke University, Biological Sciences, Durham, North Carolina
Certificate in Ecology (Minor focus in Statistics)
- 1997 B.A., Mount Holyoke College, Biology Department, South Hadley, Massachusetts
- 1995 School for Field Studies, Sustainable Development Studies, Atenas, Costa Rica

POSITIONS

- 2014- Associate Scientist, Cary Institute of Ecosystem Studies, Millbrook, New York
- 2008-14 Assistant Scientist, Cary Institute of Ecosystem Studies, Millbrook, New York
- 2009- Adjunct Graduate Faculty in Ecology, Rutgers University, New Brunswick, New Jersey
- 2008-9 Affiliate Scientist, Program in Spatial Statistics and Environmental Statistics, The Ohio State University, Columbus, Ohio

Postdoctoral Fellowships

- 2006-8 NSF Program in Biological Informatics Fellowship, The Ohio State University, Department of Statistics, Columbus, Ohio
- 2005-8 Smithsonian Fellowship, Smithsonian Migratory Bird Center, Washington, DC

PUBLICATIONS

- Rothman, S., Jones, J., LaDeau, S.L., and P.T. Leisnham. Higher West Nile virus infection in *Aedes albopictus* and *Culex* mosquitoes from lower income neighborhoods in urban Baltimore, Maryland. **Journal of Medical Entomology**. *Submitted* (6.2020)
- Lofton, M.E., Brentrup, J.A., ... and S.L.LaDeau. Using near-term forecasts and uncertainty partitioning to improve predictions of low-frequency cyanobacterial events. **Ecological Applications**. *Submitted* (6.2020)
- Biehler, D., Pitas, J.H., Bode-George, Y., Sorensen, A., Jordan, R., LaDeau, S.L., Leisnham, P., Baker, J., and S. Wilson. Degraded and overgrown infrastructure as community hazards and stressors: Photovoice as a guide to residents' daily experiences with imposed investments and greening. **International Journal of Environmental Research and Public Health**. *Submitted* (3.2020)
- Fischhoff, I., Han, B.A., Oggenfuss, K., LaDeau, S.L., and R.S. Ostfeld. Cofeeding by larval and nymphal blacklegged ticks: Ecological predictors and effects on Anaplasmosis. **Parasites & Vectors**. *Submitted* (12.2019)
- Pickett, S.T.A., Grove, J.M., LaDeau, S.L., Rosi, E.J., and M.L. Cadenasso. 2020. Urban ecology as an integrative science and practice. In: Barbosa, P. (ed.) **Urban ecology-its nature and challenges**. The Center for Agriculture and Bioscience International, Boston, MA. *Accepted* (1.2020)

- Cator, L., Johnson, L., Mordecai, E., El Moustaid, F., Smallwood, T.R.C., LaDeau, S.L., et al. 2020. More than a flying syringe: Using functional traits in vector borne disease research. [**BioRxiv** 501320. doi.org/10.1101/501320] **Frontiers Ecology Evolution Accepted (6.20201)**
- Fischhoff, I., Huang, T., Hamilton, S., Han, B., LaDeau, S., Ostfeld, R., Rosi, E., and C. Solomon. 2020. Do pathogens matter for ecosystem processes? A meta-analysis. **Ecosphere** 11(5) e03057. <https://doi.org/10.1002/ecs2.3057>
- Turner, M.G., Calder, W.J., Cumming, G.S., Hughes, T.P., Jentsch, A., LaDeau, S.L., et al. 2020. Climate change, ecosystems, and abrupt change: Science priorities. **Philosophical Transactions of the Royal Society B**. doi.org/10.1098/rstb.2019.0105
- Pickett, S.T.A., Cadenasso, M., Baker, M., LaDeau, S.L., et al. 2020. Theoretical perspectives of the Baltimore Ecosystem Study: Conceptual evolution in a social-ecological research project. **BioScience**. doi.org/10.1093/biosci/biz166
- Paez, D.J.*, LaDeau, S.L., Breyta, R., Kurath, G., Naish, K.A., and P.F.B. Ferguson. 2020. IHN virus specialization in a multi-host salmonid system. **Evolutionary Applications**. doi.org/10.1111/eva.12931 (*postdoc, co-advised)
- Biehler, D., Leisnham, P., LaDeau, S.L., and D. Bodner. 2019. Knowing nature and community through mosquitoes: Reframing pest management through lay vector ecologies. **Local Environment** 24:1119-1135. doi.org/10.1080/13549839.2019.1681387
- Katz, G.[‡], Leisnham, P., and S.L. LaDeau. 2019. *Aedes albopictus* body size differs across neighborhoods with varying infrastructural abandonment. **Journal of Medical Entomology**. doi.org/10.1093/jme/tjz170 ([‡]High School intern)
- Leisnham, P., Scott, B., Baldwin, A., and S. LaDeau. 2019. Effects of detritus on the mosquito *Culex pipiens*: *Phragmites* and *Schedonorus* (Festuca) invasion affect population performance. **International Journal of Environmental Research and Public Health** 16:4118. doi:10.3390/ijerph16214118
- Belinsky, K., Ellick, T., and S. LaDeau. 2019. Using a birdfeeder network to explore the effects of suburban design on invasive and native birds. **Avian Conservation and Ecology** 14:2. doi.org/10.5751/ACE-01408-140202
- Fischhoff, I., Keesing, F., Pendleton, J., DePietro, D., Teator, M., Duerr, S., Mowry, S., Pfister, A., LaDeau, S.L., and R.S. Ostfeld. 2019. Assessing effectiveness of recommended residential yard management measures against ticks. **Journal of Medical Entomology** 56:1420-1427. doi.org/10.1093/jme/tjz077
- Sorensen, A.E.[‡], Jordan, R.C., LaDeau, S.L., Biehler, D., Wilson, S., Pitas, J., and P. Leisnham. 2019. Reflecting on efforts to design an inclusive citizen science project in west Baltimore. **Citizen Science: Theory and Practice** 4:13. doi.org/10.5334/cstp.170 ([‡]PhD, coadvised)
- Stefopoulou, A., Balatsos, G., Petraki, A., LaDeau, S.L., Papachristos, D., and A. Michaelakis. 2018. Reducing *Aedes albopictus* breeding sites through education: A study in urban area. **PLOS One** 13(11).
- Bodner, D.[‡], LaDeau, S.L., and P. Leisnham. 2018. Urban larval mosquito habitats and biting adult population abundances along a socioeconomic gradient in Baltimore, Maryland (USA). **Journal of Medical Entomology**. doi.org/10.1093/jme/tjy185 ([‡]MS, coadvised)
- Jordan, R.C., Sorensen, A., Biehler, D., Wilson, S., and S. LaDeau. 2018. Citizen science and civic ecology: Merging paths to stewardship. **Journal of Environmental Studies and Sciences**. doi.org/10.1007/s13412-018-0521-6
- Goodman, H., Egizi, A., Fonseca, D., Leisnham, P.T., and S.L. LaDeau*. 2018. Primary blood-hosts of mosquitoes are influenced by social and ecological conditions in a complex urban landscape. **Parasites and Vectors** 11:218. doi.org/10.1186/s13071-018-2779-7 (*corresponding lead)
- Ferguson, P.F.B.*, Breyta, R., Brito, I., Kurath, G., and S.L. LaDeau. 2018. An epidemiological model of virus transmission in salmonid fish of the Columbia River Basin. **Ecological Modelling** 377:1-15. (*postdoctoral advisee)

- challenges of engaging community for environmental justice in infested urban spaces. In: Lave, R., Biermann, C., and Lane, S. (eds.). **The Palgrave Handbook of Critical Physical Geography**. Palgrave Macmillan, Cham. doi.org/10.1007/978-3-319-71461-5_14
- Sorensen, A.E.[‡], Jordan, R.C., and S. LaDeau. 2017. Effects of framing in Zika Virus communication: Increasing public compliance and breaking the transmission cycle. **Cogent Environmental Science** 3:1402498. doi.org/10.1080/23311843.2017.1402498 ([‡]PhD, coadvised)
- Jordan, R.C., Sorensen, A.E., and S. LaDeau. 2017. Citizen science as a tool for mosquito control. **Journal of American Mosquito Control Association** 33:241-245. doi.org/10.2987/17-6644R.1
- Breyta, R.*, Brito, I., Ferguson, P., Kurath, G., Naish, K., Purcell, M.K., Wargo, A., and S.L. LaDeau. 2017. Transmission routes maintaining a viral pathogen of steelhead trout within a complex multi-host assemblage. **Ecology and Evolution**. doi.org/10.1002/ece3.3276 (*postdoctoral advisee)
- Villena, O.C., Terry, I., Iwata, K., Landa, E.R., LaDeau, S.L., and P.T. Leisnham. 2017. Effects of tire leachate on the invasive mosquito *Aedes albopictus* and the native congener *Aedes triseriatus*. **PeerJ** 5:e3756. doi.org/10.7717/peerj.3756
- Little, E.[‡], Biehler, D., Jordan, R., Leisnham, P., Wilson, S., and S.L. LaDeau*. 2017. Socio-ecological mechanisms supporting high densities of *Ae. albopictus* in Baltimore, MD. **Journal of Medical Entomology** 54:1183-1192. doi.org/10.1093/jme/tjx103 ([‡]PhD, co-advised)
- Manore, C., Ostfeld, O., Agosto, F., Gaff, H., and S.L. LaDeau*. 2017. Defining the risk of Zika and chikungunya virus transmission in human population centers of the eastern United States. **PLOS Neglected Tropical Disease** 11:e0005255. doi.org/10.1371/journal.pntd.0005255
- Breyta, R.*, Brito, I., Kurath, G., and S.L. LaDeau*. 2017. Infectious hematopoietic necrosis virus virological and genetic surveillance 2000-2012. Data Papers. **Ecology** 98:283. doi.org/10.1002/ecy.1634 (*postdoctoral advisee)
- LaDeau, S.L., Han, B.A., Rosi-Marshall, E., and K. Weathers. 2016. The next decade of big data in ecosystem science. **Ecosystems** 20:274-283. doi.org/10.1007/s10021-016-0075-y
- Pickett, S.T.A., Cadenasso, M.L., Rosi-Marshall, E.J., Belt, K., Groffman, P.M., Grove, J.M., Irwin, E.G., Kaushal, S.S., LaDeau, S.L., Nilon, C.H., Swan, C.M., and P.S. Warren. 2016. Dynamic heterogeneity: A framework to promote ecological integration and hypothesis generation in urban systems. **Urban Ecosystems**. doi.org/10.1007/s11252-016-0574-9
- LaDeau, S.L. and B.A. Han. 2016. The emergence of disease ecology. **Japanese Journal of Zoo and Wildlife Medicine** 21:53-58.
- Bodner, D.[‡], LaDeau, S.L., Biehler, D., and P. Leisnham. 2016. Effectiveness of print education at reducing urban mosquito infestation through improved resident-based management. **PLOS ONE** 11:e0155011. doi.org/10.1371/journal.pone.0155011 ([‡]MS student, co-advised)
- Lovett, G.M., Weiss, M., Liebhold, A.M., Holmes, T.P., Leung, B., Lambert, K.F., Orwig, D.A., Campbell, F.T., Rosenthal, J., McCullough, D.G., Wildova, R., Ayres, M.P., Canham, C.D., Foster, D.R., LaDeau, S.L., and T. Weldy. 2016. Nonnative forest insects and pathogens in the United States: Impacts and policy options. **Ecological Applications** 26:1437-1455. doi.org/10.1890/15-1176
- Springer, Y.P.**, Hoekman, D., Johnson, P.T.J., Duffy, P.A., Hufft, R.A., Barnett, D.T., Allan, B.F., ... LaDeau, S.L., et al. 2016. Tick-, mosquito-, and rodent-borne parasite sampling designs for the National Ecological Observatory Network. **Ecosphere** 7:e01271. doi.org/10.1002/ecs01272.01271
- Hoekman, D., **Springer, Y.P.**, Barker, C.M., Barrera, R., Blackmore, M.S., Bradshaw, W.E., Foley, D.H., Ginsberg, H.S., Hayden, M.H., Holzapfel, C.M., ... LaDeau, S.L., et al. 2016. Design for mosquito abundance, diversity, and phenology sampling within the National Ecological Observatory Network. **Ecosphere** 7:e01320. doi.org/10.1002/ecs01322.01320
- Jordan, R., Gray, S., Sorensen, A., Newman, G., Mellor, D., Hmelo-Silver, C., LaDeau, S., Biehler, D., and A. Crall. 2016. Studying citizen science through adaptive management and learning feedbacks as mechanisms for improving conservation. **Conservation Biology** 30:487-495. doi.org/10.1111/cobi.12659

- Parham, P.E., Waldock, J., Christophides, G.K., Hemming, D., Agosto, F., Evans, K.J., ... LaDeau, S., et al. 2015. Climate, environmental and socio-economic change: Weighing up the balance in vector-borne disease transmission. **Philosophical Transactions of the Royal Society B-Biological Sciences** 370:1665. doi:10.1098/rstb.2013.0551
- Zhang, T., Victor, T.R., Rajkumar, S.S., Li, X.J., Okoniewski, J.C., Hicks, A.C., Davis, A.D., Broussard, K., LaDeau, S.L., Chaturvedi, S. and V. Chaturvedi. 2014. Mycobiome of the bat white nose syndrome affected caves and mines reveals diversity of fungi and local adaptation by the fungal pathogen *Pseudogymnoascus (Geomyces) destructans*. **PLOS ONE** 9:e108714. doi.org/10.1371/journal.pone.0108714
- Becker, B.[‡], Leisnham, P., and S.L. LaDeau*. 2014. A tale of two city blocks: Differences in immature and adult mosquito abundances between socioeconomically different urban blocks in Baltimore, Maryland. **International Journal of Environmental Research and Public Health** 11:3256-3270. (†REU student advisee)
- Hersh, M.H., LaDeau, S.L., Previtali, M.A., and R.S. Ostfeld. 2014. When is a parasite not a parasite? Effects of larval tick burdens on white-footed mouse survival. **Ecology** 95:1360-1369.
- Leisnham, P., LaDeau, S., and S. Juliano. 2014. Spatial and temporal habitat segregation of mosquitoes in urban Florida. **PLOS ONE** 9:e91655.
- Angert, A.L., LaDeau, S.L. and R.S. Ostfeld. 2013. Climate change and species interactions: Ways forward. **Annals of the New York Academy of Sciences** 1237:1-7
- Dowling, Z.[‡], LaDeau, S.L., Armbruster, P., Biehler, D., and P.T. Leisnham. 2013. Socioeconomic status affects types of mosquito larval habitat and infestation. **Journal of Medical Entomology** 50:764-772. (†MS student, co-advised)
- Dowling, Z.[‡], Armbruster, P., LaDeau, S.L., DeCotiis, M., Mottley, J., and P.T. Leisnham. 2013. Linking mosquito infestation to resident socioeconomic status, knowledge, and source reduction practices in suburban Washington, DC. **EcoHealth** 10:36-47. (†MS student, co-advised)
- LaDeau, S.L., Leisnham, P.T., Biehler, D., and D. Bodner. 2013. Higher mosquito production in low-income neighborhoods of Baltimore and Washington, DC: Understanding ecological drivers and mosquito-borne disease risk in temperate cities. **International Journal of Environmental Research and Public Health** 10:1505-1526.
- Wilson, S., LaDeau, S.L., Tottrup, A., and P.P. Marra. 2011. Range-wide effects of breeding and non-breeding season climate on the abundance of a Neotropical migrant songbird. **Ecology** 92:1789-1798.
- Luo, Y., Ogle, K., Tucker, C., Fei, S., Gao, C., LaDeau, S., Clark, J., and D. Schimel. 2011. Ecological forecasting and data assimilation in a data-rich era. **Ecological Applications** 21:1429-1442.
- LaDeau, S.L., Glass, G., Hobbs, N.T., Latimer, A.L., and R.S Ostfeld. 2011. Data-model fusion to better understand emerging pathogens and improve infectious disease forecasting. **Ecological Applications** 21:1443-1460.
- LaDeau, S.L., Calder, C.A., Doran, P.J., and P.P. Marra. 2011. West Nile virus impacts in American crow populations are associated with human land use and climate. **Ecological Research** 26:909-916.
- LaDeau, S.L. 2010. Advances in modeling highlight a tension between analytical accuracy and accessibility. **Ecology** 91:3488-3492.
- Clark, J.S., Bell, D., Chu, C., Courbaud, B., Dietze, M., Hersh, M., HilleRisLambers, J., Ibanez, I., LaDeau, S., McMahon, S., Metcalf, J., Mohan, J., Moran, E., Pangle, L., Pearson, S., Salk, C., Shen, Z., Valle, D., and P. Wyckoff. 2010. High dimensional coexistence based on individual variation: A synthesis of evidence. **Ecological Monographs** 80:569-608.
- Pace, M., Hampton, S., Limburg, K., Bennett, E., Cook, D., Davis, A., Grove, M., Kaneshiro, K., LaDeau, S., et al. 2010. Individual ecologists: Opportunities and rewards for engaging with environmental issues. **Ecological Applications** 8:292-298.
- McCarthy, H.R., Oren, R., Johnsen, K.H., Finzi, A.C., Pritchard, S.G., Cook, C.W., Gallet-Budynek, A., LaDeau, S.L., and R.B. Jackson. 2010. Reassessment of plant carbon dynamics at the Duke Free Air CO₂ Enrichment Facility. *Journal of Geophysical Research* 115:G02001. doi:10.1029/2009JG012511

- Way, D., LaDeau, S.L., McCarthy, H.R., Clark, J.S., Oren, R., Finzi, A.C., and R.B. Jackson. 2010. Greater seed production in elevated CO₂ is not accompanied by reduced seed quality in *Pinus taeda*. **Global Change Biology** 16:1046-1056.
- Clark, J.S., Bell, D., Dietze, M., Hersh, M., Ibanez, I., LaDeau, S., McMahon, S., Metcalf, J., Moran, E., Pangle, L., and M. Wolosin. 2010. Models for demography of plant populations. Pages 431-481 In: T. O'Hagan and M. West (eds.). **The Oxford Handbook of Applied Bayesian Analysis**. Oxford University Press, New York.
- LaDeau, S.L., Marra, P.P., Kilpatrick, A.M., and C.A. Calder. 2008. West Nile virus revisited: Consequences for North American ecology. **BioScience** 58:937-946.
- LaDeau, S.L., Kilpatrick, A.M., and P.P. Marra. 2007. West Nile virus emergence and large-scale declines of North American bird populations. **Nature** 447:710-713.
- Kilpatrick, A.M., LaDeau, S., and P.P. Marra. 2007. West Nile virus in the western hemisphere. **Auk** 124:1121-1136.
- Clark, J.S., Wolosin, M., Dietze, M., Ibanez, I., LaDeau, S., Welsh, M., and B. Kloeppel. 2007. Tree growth inference and prediction from diameter censuses and ring widths. **Ecological Applications** 17:1942-1953.
- Clark, J.S., Dietze, M., Chakraborty, S., Agarwal, P., Ibanez, I., LaDeau, S., and M. Wolosin. 2007. Resolving the biodiversity paradox: The dimensionality of coexistence. **Ecology Letters** 10:647-662.
- Ibanez, I., Clark, J.S., LaDeau, S. and J. HilleRisLambers. 2007. Exploiting temporal variability to understand tree recruitment response to climate change. **Ecological Monographs** 77:167-177.
- LaDeau, S.L. and J.S. Clark. 2006. Pollen production by *Pinus taeda* growing in elevated atmospheric CO₂. **Functional Ecology** 20:541-547.
- LaDeau, S.L. and J.S. Clark. 2006. Elevated CO₂ and tree fecundity: The role of tree size, inter-annual variability and population heterogeneity. **Global Change Biology** 12:822-833.
- Ibáñez, I., Clark, J.S., Dietze, M.C., Feeley, K., Hersh, M., LaDeau, S., McBride, A., Welch, N.E., and M.S. Wolosin. 2006. Predicting biodiversity change: Outside the climate envelope, beyond the species-area curve. **Ecology** 87:1896-1906.
- Clark, J.S. and S.L. LaDeau. 2006. Synthesizing ecological experiments and observational data with Hierarchical Bayes. Pages 41-58 In: J.S. Clark and A. Gelfand (eds.). **Hierarchical Modeling for the Environmental Sciences**. Oxford University Press, New York.
- Williams, C.G., LaDeau, S.L., Oren, R., and G.G. Katul. 2006. Modeling seed dispersal distances: Implications for transgenic *Pinus taeda*. **Ecological Applications** 16:117-124.
- Clark, J.S., LaDeau, S., and I. Ibanez. 2004. Fecundity of trees and the colonization-competition hypothesis. **Ecological Monographs** 74:415-442.
- LaDeau, S.L. and J.S. Clark. 2001. Rising CO₂ levels and the fecundity of forest trees. **Science** 292:95-98.
- Clark, J.S., Beckage, B., HilleRisLambers, J., Ibanez, I., LaDeau, S., MacLachlan, J., Mohan, J., and M. Rocca. 2000. Dispersal and plant migration. Pages 81-93 In: H. Mooney and J. Canadell (eds.). **Encyclopedia of Global Environmental Change**, Vol 3. Wiley, Chichester, England.
- LaDeau, S. and A. Ellison. 1999. Seed bank composition of a northeastern U.S. tussock swamp. **Wetlands** 19:255-261.

GRANTS

PENDING

Berkowitz, A., Caplan, B., and S.L. LaDeau. EcoComp: Urban youth integrating ecology and computation for civic engagement and identity formation. NSF (2020-2023)

Han, B., LaDeau, S.L., Ostfeld, R., et al. Integrating across multi-scale processes to understand and predict zoonotic disease emergence in the Anthropocene. NSF Biology Integration Institutes (2020-2025)

AWARDED

Ostfeld, R., Canham, C., and S.L. LaDeau. LTREB: Resource pulses and the dynamics of rodents, ticks, and Lyme-disease risk in oak forests. NSF (2020-2025)

CURRENT:

Naish, K., Ferguson, P., Kurath, G., LaDeau, S., Purcell, M. and A. Wargo. A specialist-generalist framework for viral transmission in salmon of the Northwest. USDA (EEID) 9/2017-2020

LaDeau, S.L. and K. Weathers. Collaborative Proposal: MSB-ENSA: The Near-term Ecological Forecasting Initiative. NSF 1638575. 1/2017-2021

Ostfeld, R., LaDeau, S.L., Bruner, J., and M. Killilea. Understanding Climatic Controls of Blacklegged Ticks and Lyme Disease: Experiments and Models to Quantify Risk in a Changing Climate. SERDP Project Number: 16 RC01-031 / RC-2637. 9/2016 – 2021

Berkowitz A. and S.L. LaDeau. REU Site: Translational Ecology for Undergraduates. NSF 1559769. 5/2016-12/2021

Leisnham, P., et al. CNH-L: Stormwater Management Across Urban Ecosystems: Diagnostic Tools and Community Engagement for Ecological Restoration, Equitable Community Development and Revitalization. NSF (CNHS) 12/2018-2022

Rosi, E., et al. LTER: Synthesis of long-term studies of how multiple human and biophysical factors interact to drive ecological change of an urban ecosystem. NSF LTER. 2018-2021

Rosi-Marshall, E., et al. LTER: Dynamic heterogeneity: Investigating causes and consequences of ecological change in the Baltimore urban ecosystem. NSF LTER. 2017-2021

PAST:

Groffman, P., Grove, M., Kaushal, S., LaDeau, S., and E. Rosi-Marshall. NSF Coastal SEES Collaborative Research: Restoration, redevelopment, revitalization and nitrogen in a coastal watershed. NSF SEES. 6/2017 - 2020

LaDeau, S.L., Leisnham, P., Biehler, D., Jordan, R. and S. Wilson. CNH: Urban Disamenities and Pests: Coupled Dynamics of Urban Mosquito Ecology and Human Systems Across Socioeconomically Diverse Communities. NSF Coupled Natural Human Systems (CNH 1211797). \$1,434,906. 9/2012 -2017

Naish, K., Kurath, G; LaDeau, S.L. and M. Purcell. Ecological drivers of transmission, emergence, and displacement of an aquatic virus in fish hosts. NSF Ecology and Evolution of Infectious Disease (EEID 1216110). \$2,062,822. 9/2012-2016

Leisnham, P., LaDeau, S.L., and G. Hager. Management of the Asian tiger mosquito among socioeconomically diverse urban neighborhoods through community-based education and involvement. Northeastern IPM Agency (USDA Z544501/Z542501), \$36,000, 7/2011-6/2013

Yanai, R. and S.L. LaDeau. Uncertainty in Precipitation Inputs in Ecosystem Studies. NSF EAGER (DEB 1216092). \$30,000. 1/15/2012-1/14/2013

LaDeau, S.L., Cole, J., and E.J. Rosi-Marshall. Collaborative Research: Trophic regulation and support of mosquitoes: An ecosystem approach to pest emergence along an urban gradient. NSF Ecosystem Science, \$150,000; 3/1/11 - 2/28/13

Luo, Y., Clark, J., LaDeau, S., Ogle, K., and D. Schimel. RCN: Forecasts Of Resource and Environmental Changes: Data Assimilation Science and Technology (FORECAST). \$300,000. (NSF 0840964) 2009-2014

LaDeau, S.L. Bioinformatics Starter Grant: Hierarchical Bayesian modeling to investigate climate and land-use drivers in the multi-species ecology of West Nile virus. \$50,000. NSF 2009-2010

Whitmer, A. ULTRA-Ex: Urban Sustainability and Push-Pull Drivers of Long Term Urban Residential Change: Washington, D.C., Baltimore, Maryland, and the Chesapeake Bay. *As Senior Personnel*. \$300000. (2009-2011, National Science Foundation).

LaDeau, S.L. Postdoctoral Fellowship in Biological Informatics: Bayesian hierarchical models of invasion: Integrating diverse data to understand the ecology of a successful pathogen invasion. (NSF DBI-0630745) 2006-2008

SERVICE (PAST 5 YEARS)

ACADEMIC COMMUNITY

- Co-organizer ESA's virtual issue on Ecology of Infectious Disease, March 2020
- Associate Editor-in-Chief for Disease Ecology, Ecosphere
- Co-author – US Forest Service National Assessment on the Wildland Urban Interface– Human Health Chapter (with lead M. Kondo)
- Co-organizer and Lecturer: NEFI Summer Course on Ecological Forecasting, Boston University (2018, 2019, 2020(virtual)).
- Invited Speaker (7 invited research seminars in past 12 months)
- Panelist (2 NSF Panels in past 12 months, plus external reviewer for Israeli Science Foundation (ISF) and The Dutch Research Council (NOW))
- Technical Mosquito Working Group, NEON (member 2016-current)(TWG Secretary 2019-)
- Advisory Board Member: Centers for Disease Control, Vector-Borne Diseases (VBD) Workgroup of the Board of Scientific Counselors (BSC), National Center for Environmental Health/Agency for Toxic Substances and Disease Registry (NCEH/ATSDR) (2018-current)
- Steering Committee, VectorBiTE RCN (NSF) (2016-current)
- Subject Matter Editor (PLOS ONE:2015-2017)
- Invited Speaker: Zika webinar, invited speaker: Southern Legislative Conference of The Council of State Governments. June 9, 2016
- Invited Panelist: *KATRINA@10: Assessments of Recovery, Return, Resilience, and Enduring Vulnerabilities - Preliminary Results and Policy Implications from two sets of studies funded by NSF and NIH.* August 27, 2015.
- Workshop Advisor: *Science for a Sustainable City: Biodiversity.* Environmental Sustainability Initiative Forum at Ecological Society of America, Baltimore, MD. August 11, 2015
- Participant, NIMBIOS working group: Climate Change and Vector-borne Disease (2014-2016)

CARY INSTITUTE SERVICE

- Chair, Scientist Search Committee 2019-2020
- Chair, Seminar Committee 2020-
- Member, IRB Committee (current)
- Member, Staff Retreat Committee (current)
- Member, Staff Review Committee (current)
- Member, Diversity Committee (current)
- Coordinator, REU Writing Workshop (summer program 2018, 2019)
- Coordinator, Fundamentals of Ecosystem Ecology winter-term (2016)
- Lecturer, Fundamentals of Ecosystem Ecology winter-term (2014, 2015, 2016)

ACADEMIC SOCIETY MEMBERSHIPS

- Ecological Society of America
- Entomological Society of America
- American Association for the Advancement of Science
- American Mosquito Control Association
- International Association for Landscape Ecology

HONORS/AWARDS

- (Invited Plenary Tutorial) Ecological Forecasting. ASLO 2019 Annual Meeting, San Juan, PR
- (Invited Plenary Speaker) What Is Disease Ecology. The 21st Annual Meeting of Japanese Society of Zoo and Wildlife Medicine. Rakuno Gakuen Univ. Hokkaido, Japan. July 30, 2015.
- Secretary's Research Prize (with Peter Marra), Smithsonian Institution, 2008
- National Science Foundation Fellowship in Biological Informatics, 2006
- American Association of University Women, Dissertation Fellowship, 2004
- *Duke University, Biology Grant-in-Aid of Research, 2003, 2001*
- Sigma Xi Grant-in-Aid, 2002
- National Science Foundation Pre-Doctoral Research Fellowship 1999