**Matthew L. Aardema**

 Department of Biology +1 (616) 799-2918

 Montclair State University aardemam@mail.montclair.edu

 1 Normal Ave maardema@gmail.com

 Montclair, New Jersey 07043 www.aardemalab.com

**Current Positions**

 **Assistant Professor**, Department of Biology 2017 - present

 Montclair State University, Montclair, NJ

 **Visiting Scientist**,Sackler Institute for Comparative Genomics 2017 - present

 American Museum of Natural History, New York, NY

 **Doctoral Faculty**, PhD program in Environmental Science and Management 2019 - present

 Montclair State University, Montclair, NJ

**Past Positions**

 **Gerstner Scholar, Bioinformatics and Computational Biology** 2015 - 2017

American Museum of Natural History, New York, NY

 **Adjunct Instructor, Science Department** 2017

Cabrini University, Radnor, PA

**Education**

 **Ph.D.** Department of Ecology & Evolutionary Biology, Princeton University 2015

 **M.S. (dual degree)** Department of Entomology and Program in Ecology, 2010 Evolutionary Biology & Behavior (EEBB), Michigan State University

 **B.S.** Department of Zoology, Michigan State University 2008

**Editorial Boards**

 **Editor**, Medical, Urban & Veterinary (MUVE) section newsletter, 2022 - present

 Entomological Society of America (ESA)

 **Associate Editor**, Environmental Entomology (Journal of the ESA) 2019 - present

**Peer-Reviewed and Currently Submitted Publications** (\*student mentored co-author)

38) **Aardema ML,** Schmidt KL, SeaburyCM, Amato G (in prep) Examination of cytonuclear divergence between two subspecies of the Scarlet Macaw (*Ara macao*) in Central America. Journal of Heredity.

37) **Aardema ML**, Campana MG, Wagner NE, Ferreira FC, Fonseca DM (accepted) A gene-based capture assay for surveying patterns of genetic diversity and insecticide resistance in a worldwide group of invasive mosquitoes. PLoS Neglected Infectious Diseases.

36) **Aardema ML**, Archer QE\*, Bates N\*, von Loewenich FD (2022) Demographic expansions and the emergence of host specialization in genetically distinct ecotypes of the tick-transmitted bacterium *Anaplasma phagocytophilum*. Applied and Environmental Microbiology. https://doi.org/10.1128/aem.00617-22.

35) Borgerson C, **Aardema ML**, Monroe A, Randriamanetsy JM, Borgerson SJ, Razafindrapaoly BN, Fisher BL (2022) Life cycle and production potential of a traditional edible insect (*Zanna tenebrosa*) in Madagascar. Journal of Insects as Food and Feed. https://doi.org/10.3920/JIFF2021.0140.

**Peer-Reviewed Publications** (cont.)(\*student mentored co-author)

33) **Aardema ML**, Olatunji SK\*, Fonseca DM (2022) The enigmatic *Culex pipiens* species complex: phylogenetic challenges and opportunities from a notoriously tricky mosquito group. Annals of the American Entomological Society. 115, 95-104.

34) vonHoldt BM, Brzeski KE, **Aardema ML**, Schell C, Rutledge LY, Fain SR, Shutt A, Linderholm A, Murphy WJ (2021) Persistence and expansion of cryptic endangered red wolf genomic ancestry along the American Gulf coast. Molecular Ecology. http://doi.org/10.1111/mec.16200.

32) Borgerson C, Fisher B, Herrera P\*, Martinez K, Rajaon D, Randriamanetsy JM, Rasolofoniaina BJR, Razafindrapaoly BL, Razafindrapaoly BN, **Aardema ML** (2021) A nutrient-rich traditional insect tool for improving food security and reducing biodiversity loss in Madagascar and sub-Saharan Africa. Conservation Science and Practice. 3:e480.

31) **Aardema ML**, Zimmerman KI\* (2021) The establishment of a new autogenous line of the Asian Tiger Mosquito, *Aedes albopictus*, from its current northern range limit in the United States. Journal of Vector Ecology. 46: 112-115.

30) Clark R\*, **Aardema** **ML**, Andolfatto P, Barber P, Hattori A, Hoey J, Montes Jr. H, Pinsky M (2021) Genomic signatures of spatially divergent selection at clownfish range margins. Proceedings of the Royal Society B, Special Feature on "Evolution in Changing Seas". 288: 20210407.

29) Epstein NR\*, Saez K\*, Polat A\*, Davis SR, **Aardema ML** (2021) The urban-adapted underground mosquito, *Culex pipiens* form *molestus*, maintains exogenously influenceable circadian rhythms. Journal of Experimental Biology. 224: jeb242231.

28) Hekkala E, Gatesy J, Narechania A, Meredith R, Russello M, **Aardema ML**, Jensen E, Montanari S, Brochu C, Norell M, Amato G (2021) Paleogenomics illuminates the evolutionary history of the extinct Holocene “horned” crocodile of Madagascar, *Voay robustus.* Communications Biology. 4:505.

27) **Aardema ML**, DeSalle R (2021) Can public online databases serve as a source of phenotypic information for *Cannabis* genetic association studies? PLoS One. 16:e0247607.

26) Hekkala ER, **Aardema ML**, Narechania A, Amato G, Ikramd S, Shirley MH, Vliet KA, Cunningham SW, Gilbert MTP, Smith O (2020) The Secrets of Sobek - A crocodile mummy mitogenome from ancient Egypt. Journal of Archaeological Science: Reports. 33:1024832.

25) **Aardema ML,** Stiassny MLJ, Alter SE (2020) Genomic analysis of the only blind cichlid reveals extensive inactivation in eye and pigment formation genes. Genome Biology and Evolution. 12: 1392–1406.

24) vonHoldt BM, **Aardema ML** (2020) Updating the bibliography of interbreeding among *Canis* in North America. Journal of Heredity. 111: 249-262.

23) **Aardema ML**, vonHoldt BM, Fritz ML, Davis SR (2020) Global evaluation of taxonomic relationships and genetic exchange within the *Culex pipiens* complex of mosquitoes. Parasites & Vectors. 13:8.

22) Schmidt KL, **Aardema ML†**, Amato G (2020) Genetic analysis reveals strong phylogeographic divergences within the Scarlet Macaw, *Ara macao*. IBIS. 162:735–748. [**†**corresponding author]

21) von Loewenich FD, Seckert C, Dauber E, Kik MJL, de Vries A, Sprong H, Buschmann K, **Aardema ML**, Brandstetter M (2020) Prosthetic Valve Endocarditis with *Bartonella washoensis* in a Human European Patient and its Detection in Red Squirrels (*Sciurus vulgaris*). Journal of Clinical Microbiology. 58:e0140419.

20) Langenwalder D, Schmidt S, Gilli U, Pantchev N, Ganter M, **Aardema ML**, Silaghi C, von Loewenich FD (2019) Genetic characterization of *Anaplasma phagocytophilum* strains from goats and water buffalo by 16S rRNA gene, ankA gene and multilocus sequence typing. Ticks and Tick-Borne Diseases. 10:101267.

19) Myers EA, Bryson Jr. RW, Hansen RW, **Aardema ML**, Lazcano D, Burbrink FT (2019) Exploring Chihuahuan Desert diversification in the graybanded kingsnake, *Lampropeltis alterna* (Serpentes: Colubridae). Molecular Phylogenetics and Evolution. 131:211-218.

**Peer-Reviewed Publications** (cont.)

18) **Aardema ML**, Andrea MR (2018) Likely extirpation of the previously common milkweed butterfly *Danaus eresimus* (Danaidae) from Grand Cayman Island. Journal of the Lepidopterists’ Society. 72:329-333.

17) vonHoldt BM, Ji SS, **Aardema ML**, Stahler D, Udell MAR, Sinsheimer JS (2018) Activity of genes with functions in human Williams-Beuren Syndrome are impacted by mobile element insertions in the gray wolf genome. Genome Biology and Evolution 10:1546-1553.

16) McCulloch KJ, Yuan F, Zhen Y, **Aardema ML**, Smith G, Llorente-Bousquets J, Andolfatto P, Briscoe AD (2017) Sexual dimorphism and retinal mosaic diversification following the evolution of a violet receptor in butterflies. Molecular Biology and Evolution 34:2271-2284.

15) Ryan SF, Valella P, Thivierge G, **Aardema ML**, Scriber JM (2017) The role of latitudinal, genetic and temperature variation in the induction of diapause of *Papilio glaucus* (Lepidoptera: Papilionidae). Insect Science. 25:328-336.

14) **Aardema ML**, Andolfatto P (2016) Phylogenetic incongruence and the evolutionary origins of cardenolide-resistant forms of Na+,K+-ATPase in *Danaus* butterflies. Evolution 70:1913-1921.

13) Vu B, Jafari A\*, **Aardema ML**, Tran H, Nguyen D, Dao T, Nguyen T, Tran T, Nguyen C, Fox A, Bañuls A-L, Thwaites G, Nguyen K, Wertheim H (2016) Population structure of colonizing and invasive *Staphylococcus aureus* strains in northern Vietnam. Journal of Medical Microbiology 65: 298-305.

12) **Aardema ML**, von Loewenich FD (2015) Varying influences of selection and demography in host adapted populations of the tick-transmitted bacterium, *Anaplasma phagocytophilum*. BMC Evolutionary Biology 15:58.

11) **Aardema ML**, Scriber JM (2015) Ultraviolet coloration in tiger swallowtail butterflies (*Papilio glaucus* group, Papilionidae) with a method for objectively quantifying adult butterfly wing wear. Journal of the Lepidopterists’ Society 69:58-62.

10) Huhn C, Winter C, Wolfsperger T, Wüppenhorst N, Strašek Smrdel K, Skuballa J, Pfäffle M, Petney T, Silaghi C, Dyachenko V, Straubinger RK, Schaarschmidt-Kiener D, Ganter M, **Aardema ML**, von Loewenich FD (2014) Analysis of the population structure of *Anaplasma phagocytophilum* using multilocus sequence typing. PLoS One 9:e93725.

9) **Aardema ML**, Scriber JM (2013) No evidence that male choice contributes to the maintenance of a shared, sex-limited trait in mimetic and non-mimetic female tiger swallowtail butterflies, *Papilio glaucus.* Evolutionary Biology 40:108-116.

8) Zhen Y, **Aardema ML**, Medina EM, Schumer M, Andolfatto P (2012) Parallel molecular evolution in an herbivore community. Science 337:1634-1637.

7) Scriber JM, Maher E\*, **Aardema ML** (2012) Differential effects of short term winter thermal stress on diapausing tiger swallowtail butterflies (*Papilio* spp.). Insect Science 19:277-285.

6) **Aardema ML**, Zhen Y, Andolfatto P (2012) The evolution of cardenolide-resistant forms of Na+,K+- ATPase in Danainae butterflies. Molecular Ecology 21:340-349.

5) **Aardema ML**, Scriber JM, Hellmann JJ (2011) Considering local adaptation in issues of Lepidopteran conservation - a review and recommendations. American Midland Naturalist 165:294-303.

4) Kunte K, Shea C, **Aardema ML**, Scriber JM, Juenger TE, Gilbert LE, Kronforst MR (2011) Sex chromosome mosaicism and hybrid speciation among Tiger Swallowtail Butterflies. PLoS Genetics 7:e1002274.

3) Ording GJ, Mercader RJ, **Aardema ML**, Scriber JM (2010) Allochronic isolation and incipient speciation in tiger swallowtail butterflies. Oecologia 162:523-531.

**Peer-Reviewed Publications** (cont.)

2) Mercader RJ, **Aardema ML**, Scriber JM (2009) Hybridization leads to host-use divergence in a polyphagous butterfly sibling species pair. Oecologia 158: 651-662.

1) Mercader RJ, **Aardema ML**, Scriber JM (2008) Old hickory records and John Abbot’s drawings: North American host records evaluated for *Papilio glaucus*. Journal of the Lepidopterists’ Society 62:166-170.

**Other Publications**

 **Aardema ML** (2022 - present) Jest Management Column (bimonthly)

Medical, Urban & Veterinary Entomology (MUVE) Newsletter, Entomological Society of America

 **Aardema ML,** Zimmerman KI (2022) Modified use and taxonomic expansion of the citrated blood-feeding method for mosquito rearing. Newsletter of the New Jersey Mosquito Control Association 34:23-24.

 **Aardema ML** (2020) Applications of next-generation sequencing in health psychology. In: Handbook of Research Methods in Health Psychology. Fish Ragin D, Keenan J, eds. Routledge, Taylor & Francis Group, New York

 **Aardema ML** (2020) Hybrid speciation in the *Culex pipiens* mosquito complex? BugBitten (Blog hosted by the journal *Parasites and Vectors*)

**Research Grants, Fellowships and Awards** (including non-funded NSF & NIH submissions)

 NSF-MRI: Major Research Instrumentation Program (declined) *“Acquisition of a* 2022

*Shared Use Integrated High Throughput Next-Generation Sequencing Platform”*

 (Co-PI, PI: Robert Meredith)

 Separately Budgeted Research Award ($4271), Montclair State University 2021

 American Mosquito Control Association, Research Fund (pre-proposal accepted; 2021

full proposal not funded) “*Epigenetic changes in two arbovirus vector mosquito species*

*exposed to a sub-lethal dose of Bacillus thuringiensis israelensis (Bti)*” (PI, co-PIs:

Scott Crans, Nicholas Indelicato, Bridgett vonHoldt)

 NSF-DISES: Dynamics of Integrated Socio-Environmental Systems (declined): 2020

*“An evidence-based tool to address feedback loops between food insecurity and the*

*unsustainable hunting of threatened species in sub-Saharan Africa*”

 (Co-PI, PI: Cortni Borgerson)

 NSF-CNH2: Dynamics of Integrated Socio-Environmental Systems (declined): 2019

 *“Novel Edible Insects for Reducing Illegal Hunting and Improving Global Food Security”*

 (Co-PI, PI: Cortni Borgerson)

 NSF-DEB Proposal (declined): “The Emergence of Insecticide Resistance in Prairie Dog Flea 2019

Holobionts”, (PI, Co-PIs: Hugh Britten, Jose Pietri)

 Summer Grant Proposal Development Award ($4000), Montclair State University 2018

 Student Faculty Scholarship Internal Award ($2000), Montclair State University 2018

 NSF-DEB Preliminary Proposal (not invited): “Complex life-history evolution in parallel: molecular 2017

 basis for the repeated emergence of social insect symbiosis in rove beetles”, (PI, Co-PIs:

 Joseph Parker, Steve, Robert DeSalle)

 NIH-NRSA Fellowship (declined): “Relationship between passage history and genetic diversity 2015

 in a rodent malaria model system”, [PI, co-PIs: Jane Carlton & Andrea Graham]

 Princeton Center for Health and Wellbeing, Research Grant ($6500) 2014

**Research Grants, Fellowships and Awards** (cont.)

 NSF-DEB Preliminary Proposal (not invited): “The influence of divergent adaptation 2013

 on patterns of genetic diversity in *Papilio* butterflies”, [co-wrote, PI: Peter Andolfatto]

 NSF-DEB Preliminary Proposal (not invited): “Genetically mapping diapause induction strategy 2012

 and mimetic coloration in tiger swallowtail butterflies with an investigation of

 trait-related gene flow”, [co-wrote, PI: Peter Andolfatto]

 Walbridge Award, Princeton Environmental Institute ($7000) 2011

 NSF-DEB Full Proposal (declined): “The genetic basis of chronobiology in Schistosoma: 2011

 a mechanism for host-switching?” [co-wrote, PIs: Peter Andolfatto & Andrew Dobson]

 Dr. Paul Wooley Memorial Award for Outstanding MS Degree 2011

 Hutson Research Grant ($1200) 2009

 NSF-DEB, Collaborative Research (Awarded: $110,653): “Assessing temperature-related 2009

 changes in introgression of hybridizing species across time and space”

 (Award #0918879) [co-wrote and managed grant research, PI: Mark Scriber]

 Plant Sciences Recruitment Fellowship (2 yrs. stipend, tuition) 2008 – 2010

 Michigan State University

 NSF-REU, (Awarded: $4600): “Female-limited, secondary sexual characteristics in *Papilio* 2008

 male mate recognition” [co-wrote, PI: Mark Scriber]

 Scriber Scholar Award in Butterfly Biology and Conservation ($2000) 2007

 Enhancing Linkages between Mathematics and Ecology (ELME) Fellowship ($8300), 2007

 Kellogg Biological Station, Michigan State University

**Select Academic Presentations**

 New Jersey Mosquito Control Association (NJMCA), Annual Convention, Poster Presentation: 2022

“Laboratory maintenance of the eastern tree hole mosquito, *Aedes triseriatus*, using

the citrated blood feeding method” (with K. Zimmerman [*presenter]*)

 Society for Integrative and Comparative Biology Annual Meeting, Oral Presentation: “The 2021

visual genes associated with eye reduction and loss in bat flies (Streblidae, Nycteribiidae)”

(with M. Atkins [*presenter*], K. Dittmar, C. Dick, H. Lutz, K. Speer, S. Davis, & M. Porter)

 California Academy of Sciences’ Genomics Social Hour, Invited Talk: “Genomic Convergence 2020

from Divergent Habitats: a sightless, pigment-less Cichlid from the Lower Congo River”

 New Jersey Mosquito Control Association (NJMCA), Annual Convention, Poster Presentation: 2020

“The expression of circadian rhythms in the non-diapausing mosquito *Cx. pipiens* form

*molestus*” (with N. Epstein [*presenter]*)

 New Jersey Mosquito Control Association (NJMCA), Annual Convention, Oral Presentation: 2020

“Contrasting seasonal presence of West Nile virus in mosquitoes between coastal and

inland communities” (with D. Mousa [*presenter]*)

 New York Area Population Genomics (NYAPG) Meeting, Poster Presentation: “The use of 2020

 (mostly) publicly available data to assess global admixture and taxonomic relationships

within the *Culex pipiens* species complex of mosquitos”

 Rutgers University, Entomology Department Seminar Series, Invited Talk: “Patterns of 2019

Evolutionary Divergence and Genetic Exchange in *Danaus* Butterflies and *Culex* Mosquitoes”

**Select** **Academic Presentations** (cont.)

 17th Annual Ecology and Evolution of Infectious Diseases (EEID) meeting, Poster Presentation: 2019

 “Demographic expansion of a host-specialist strain of the tick-vectored bacterium

*Anaplasma phagocytophilum* correlates with a population increase in its host*”*

 Seton Hall University, Biology Department Seminar Series , Invited Talk: “Insect Adaptations 2019

 to Toxic Diets”

 II Joint Congress on Evolutionary Biology, Poster Presentation: “Demographic reconstruction 2018

and mutation accumulation in genomes of seal species with dramatically different

population histories” (with *S. Gaughran* [*presenter*], M. Stoffel, J. Hoffman, A. Caccone,

J. Powell & G. Amato)

New Jersey Mosquito Control Association (NJMCA), Annual Convention, Poster Presentation: 2018

“Protein variation in the larval diet directly effects the development time and

adult size of *Culex pipiens* f. *molestus*, but maternal effects are minimal”

(with D. Jones [*presenter]*)

 Michigan Entomological Society, 63rd Annual Meeting, Invited Keynote Talk: 2017

 “Unraveling evolutionary processes in milkweed herbivores and their kin”

 EEB research symposium, City University of New York (CUNY), Invited talk: 2016

 “Evolutionary processes in butterflies and bacteria”

 Center for Infectious Disease Dynamics, Penn State University, Invited talk: 2016

“Strain divergence in *Plasmodium chabaudi*”

 Infectious Disease Genomics, Wellcome Genome Campus, Poster Presentation: “Genomic 2015

 comparisons of phenotypically distinct isolates of the rodent malaria *Plasmodium*

*chabaudi* reveal genes of potential functional importance” (with A. Graham)

 Conférences Jacques-Monod, Infectious Diseases as Drivers of Evolution, Oral Presentation: 2014

 “Divergent demographic histories among host-adapted populations of a tick-borne

infectious bacteria”

 Society for Molecular Biology and Evolution (SMBE) Annual Meeting, Oral Presentation: 2014

 “Contrasting influences of natural selection across multiple Lepidopteran species”

(with P. Andolfatto)

**Teaching Experience**

 Faculty Instructor, Montclair State University

 BIOL 415 “Population Genetics” 2022

 BIOL 486 “Special Topics, Evolutionary Ecology of Emerging Zoonotic Diseases” 2021

 BIOL 213 “Introduction to Ecology” 2017 - 2021

 BIOL 486 “Special Topics, Forensic Biology” 2019

 BIOL 432 “Medical Entomology” 2019, 2021

 BIOL 431/BIOL 532 “Entomology/Advanced Entomology” 2017, 2018, 2020, 2022

 Guest Lecturer, RGGS674, “Modern Techniques and Evo-Devo” 2018

 Richard Gilder Graduate School, American Museum of Natural History

 Adjunct Lecturer, MBIO 652 "Advanced Computational Molecular Biology" Cabrini University 2017

 Assistant in Instruction (AI), EEB 327 “Evolutionary Immunology”, Princeton University 2015

 Assistant in Instruction (AI), EEB 309 “Evolutionary Biology”, Princeton University 2011 - 2013

 Assistant in Instruction (AI), EEB/MOL 355 “Intro to Statistics for Biology” 2013

 Princeton University

**Student Mentoring**

 *Graduate Students*

Montclair State University:

 Valeria Montoya, MS, Aardema Lab (2022-present)

Nicole Scanlon, MS, Aardema (2022-present)

Mbemba Ceesay, MS, Aardema Lab (2021-present)

Moonia Ammari, MS, Aardema Lab (2020-present)

Nathan Klunk, MS, Aardema Lab (2020-present)

Kelly Zimmerman, PhD, Aardema Lab (2019-present)

Natalie Epstein, MS, Aardema Lab (2018-2020)

Domenica Mousa, MS, Aardema Lab (2018-2020)

Karen Catalina, MS, Aardema Lab (2018-2020)

Yale University: Stephen Gaughran, PhD (2017-2020)

Princeton University: Lu Yang (2015-2017), Patrick Riley (2015-2017)

 *Undergraduate Students* (last 5 years)

Montclair State University: Britney Ferdetta (2022-present), Gregg Dianthony (2021-present), Anesia

Choice (2021), Ilana Castor (2020-2021), Qiana Archer (2020-2021), Sarah Olatunji (2020-2021), Giuseppe Di Roberto (2020), Asya Polat (2020), Izabella Domian (2020), Patsy Herrera (2018-2019), Kevin Saez (2017-2019), Brian Toedtmann (2018-2019), Nina Bates (2018-2019), Emma Akuffo (2018), Sumaya Islam (2017-2018)

 University of Chicago: Emily Lipstein (2016, at AMNH)

 *High School Students*

Montclair High School: Shannon Huhn (2022 at MSU [MHS Career Internship Program])

 Elinor Behlman (2022 at MSU [MHS Career Internship Program])

 Dylan Tapper (2019 at MSU [MHS Career Internship Program])

Hanan Abdellatif(2019 at MSU [MHS Career Internship Program])

Emma Demefack, Palmer Holland, Alexandros Anastasopoulos

(2019 at MSU [Weston Scholars Program])

Jackson Cant, Pablo Romero, Ethan Ryder, and Josh Shapiro

(2018 at MSU [Weston Scholars Program])

Livingston High School: Grace Hu (2022, at MSU)

South Brunswick High School: Jinay Shah (2021, at MSU)

Putnam Valley High School: Karina Davis (2018, at MSU)

 Pelham Memorial High School: James Chandler (2016, at AMNH)

**Additional Outreach**

 Mentor, Entomological Society of America, MUVE Mentorship Network, 2021 - present

 Guest Lecture, Buzz Aldrin Middle School (Mount Hebron), “Forensic Entomology” 2021

 Public Lecture, *Wilderness and Wildlife* lecture series, Flat Rock Brook Nature Association, 2021

 “Molecular Adaptation in the Milkweed-Insect Communities of NJ”

 CSAM Mentoring and Student Research Oversight Committee, Montclair State Univ. 2019 - present

 Departmental Advisor, Louis Stokes Alliances for Minority Participation (LSAMP), 2019 - present

Montclair State Univ.

 Darwin Day Organizer, Dept. of Biology, Montclair State University 2019 - 2022

 Mentor, Weston Program, Montclair State University 2018, 2019

 Class Visit & Demonstration, Ben Samuels Children's Center, “Insect Friends” 2017, 2019

 **Additional Outreach** (cont.)

 Mentor, Montclair High School’s Career Internship Program 2019

 Public lecture for MSU Presidential Scholars, “Adaptation: Friend or Foe?” 2019

 Scientific Advisor, California Science Center, Los Angeles CA 2018

 Poster Judge, Metropolitan Association of College and University Biologists (MACUB) 2017

 Discussion Panelist, SEISMIC: The Science Mindset Collaborative (pre-college science 2016

 program for high school students), The New York Academy of Sciences

 Presenter, BridgeUp: STEM program (for high school women), Computing and its 2016

 applications in the biological sciences, American Museum of Natural History

 Quoted in Print/Online News Articles

 “Tips for getting rid of mosquitoes without harming pollinators” 6 July 2022

 For: *The Washington Post*

“They're back: Spotted lanternflies are hatching again. Here's what you need to know” 18 June 2022

 For: *USA TODAY Network* & *northjersey.com*

 “First Stomp, Now Scrape?” 2 Dec 2021

 For: *njconservation.org*

 “NJ squashed thousands of spotted lanternflies. Still, it's impossible to wipe them out” 30 Sept 2021

 For: *New Jersey Herald*

 “What you need to know about ticks, from preventing them to treating bites” 21 July 2021

 For: *HuffPost.com*

 “Fierce tick season to hit NJ this year, experts say” 20 May 2021

 For: *NJ.com*

 Interviews for Television

 “NJ Sees Spike in Human West Nile Virus Cases as Mosquito Season Keeps Going” 11 October 2021

 For: *NBC10, Philadelphia*

 “Flu-Like Symptoms This Summer May Not Be Caused By COVID, But Ticks” 26 May 2021

 For: *CBS New York*

**Professional Service**

 Grant Review Committee, 2021 American Mosquito Control Association Research Fund

 Sample provider, Iridian Genomes

 Non-profit organization, “dedicated to genomic studies of Earth’s biota”

 Sponsor, Biodiversity Heritage Library

 Reviewer for:

*Biological Journal of the Linnean Society Molecular Ecology Resources PNAS*

*BMC Evolutionary Biology PLoS Neglected Tropical Diseases Evolution*

*Environmental Entomology Journal of Insect Behavior Current Biology*

 *Molecular Ecology Wellcome Open Research Bioinformatics*

 *BMC Genomics Parasites & Vectors PLoS One*

 *Journal of Medical Entomology*

**Professional Service** (cont.)

 Current Society Memberships:

* + American Mosquito Control Association
	+ New Jersey Mosquito Control Association
	+ Society of Vector Ecology
	+ Entomological Society of America
	+ American Society for Microbiology

**Professional Development**

 Attendee, Entomological Society of America, Webinar 2021

‘Lessons Learned from Teaching Entomology Online’

 Participant, Engaged Teaching Fellows Program, Montclair State University 2019-2020

 Attendee, NIH Regional Seminar on Program Funding and Grants Administration 2018