

Jason Munshi-South, Ph.D.

Department of Biodiversity, Earth & Environmental Sciences
 3245 Chestnut Street, PISB 323
 Philadelphia, PA 19104
 Phone: (215) 895-2628
 E-mail: jm5383@drexel.edu

POSITIONS

Betz Endowed Chair & Professor, BEES Department, Drexel University	2024-present
Professor, Department of Biological Sciences, Fordham University	2018-2024
Associate Professor, Department of Biological Sciences, Fordham University	2013-2018
Assistant Professor, Baruch College, City University of New York	2007-2013
Faculty Member, Ph.D. Program in Biology (EEB), CUNY Grad. Center	2007-2013
Postdoctoral Fellow, Smithsonian Institution	2006-2007

EDUCATION

University of Maryland, College Park: 2000-2006

Ph.D., Behavior, Ecology, Evolution, and Systematics (BEES)

Dissertation Co-advisors: Devra Kleiman & Jerry Wilkinson

Dissertation: Asocial Monogamy, Extra-pair paternity, and Dispersal in the Large Treeshrew, *Tupaia tana*

University of Chicago: 1996-2000

A.B., Biological Sciences (specialization in Ecology & Evolution)

Special and General Honors, Dean's List 1997-2000

Honors Thesis Advisor: Steve Pruett-Jones

Honors Thesis: Patterns of Flock Size, Diet, and Vigilance of Naturalized Monk Parakeets in Hyde Park, Chicago

BOOKS & BOOK CHAPTERS

Szulkin, M., **J. Munshi-South**, and A. Charmantier, editors. 2020. "Urban Evolutionary Biology". Oxford University Press, Oxford, United Kingdom.

Munshi-South, J., and J. L. Richardson. 2020. Landscape genetic approaches to understanding movement and gene flow in cities. Chapter 4, pp. 54-73 in "Urban Evolutionary Biology", Szulkin, Munshi-South, and Charmantier, eds. Oxford University Press, Oxford, United Kingdom.

Szulkin, M., **J. Munshi-South**, and A. Charmantier. 2020. Introduction. Chapter 1, pp. 1-12 in "Urban Evolutionary Biology", Szulkin, Munshi-South, and Charmantier, eds. Oxford University Press, Oxford, United Kingdom.

SCIENTIFIC JOURNAL ARTICLES (NB: name appears as J. M. South before 2004)

- Johnson, M.T.J., I. Arif, F. Marchetti, J. Munshi-South, et al. 2024. Effects of urban-induced mutations on ecology, evolution and health. *Nature Ecology & Evolution* 8:1074-1086.
- Urban, M.C., ..., J. Munshi-South, et al. (one of 20 authors). 2024. Interactions between climate change and urbanization will shape the future of biodiversity. *Nature Climate Change* 14:436-447.
- Caizergues, A., ..., J. Munshi-South, et al. (one of 26 authors). 2024. Does urbanization lead to parallel demographic shifts across the world in a cosmopolitan plant? *Molecular Ecology* 33(7):e17311. <https://doi.org/10.1111/mec.17311>
- Haghani, A., ..., J. Munshi-South, et al. (one of many authors). 2023. DNA methylation networks underlying mammalian traits. *Science* 381(6658):eabq5693.
- Lu, A.T., Fei, Z., Haghani, A.,...J. Munshi-South, (one of many authors) et al. Universal DNA methylation age across mammalian tissues. *Nature Aging* 3:1144–1166 (2023). <https://doi.org/10.1038/s43587-023-00462-6>
- Parsons, M.H., R. Stryjek, P. Bebas, M. Fendt, D.T. Blumstein, Y. Kiyokawa, M.M. Chrzanowski, and **J. Munshi-South**. 2023. Why are predator cues in the field not more evocative? A ‘real world’ assay elicits subtle, but meaningful, responses by wild rodents to predator scents. *Frontiers in Ecology and Evolution* DOI:10.3389/fevo.2022.1054568
- Henger, C.S., E. Hargous*, C.M. Nagy, M. Weckel, C. Wultsch, K. Krampis, N. Duncan, L. Gormezano, and **J. Munshi-South**. 2022. DNA metabarcoding reveals that coyotes in New York City consume wide variety of native prey species and human food. *PeerJ* 10:e13788. DOI:10.7717/peerj.13788 (**undergraduate coauthor*)
- Schmidt, C., **J. Munshi-South**, S. Dray, and C.J. Garroway. Determinants of genetic diversity and species richness of North American amphibians. *Journal of Biogeography* 49(11):2005-2015. DOI:10.1111/jbi.14480
- Verrelli, B.C.,...**J. Munshi-South** (one of 28 authors), et al. 2022. A global horizon scan for urban evolutionary ecology. *Trends in Ecology & Evolution* 37(11):1006-1019.
- Santangelo, J.S.,...**J. Munshi-South** (one of 278 authors),...and M.T.J. Johnson. Global urban environmental change drives adaptation in white clover. *Science* 375(6586):1275-1281. DOI: 10.1126/science.abk0989
- Dunn, R.R., J.R. Burger, E.J. Carlen, A.M. Koltz, J.E. Light, R.A. Martin, **J. Munshi-South**, L.M. Nichols, E.L. Vargo, S. Yitbarek, Y. Zhao, and A. Cibrian-Jaramillo. 2022 A theory of city biogeography and the origin of urban species. *Frontiers in Conservation Science* DOI: 10.3389/fcsc.2022.761449

- Aloisio, J.M., S. Roberts, R. Becker-Klein, S. Dunifon, J.D. Lewis, J.A. Clark, **J. Munshi-South**, and K. Tingley. 2022. Impacts of a near-peer urban ecology research mentoring program on undergraduate mentors. *Frontiers in Ecology and Evolution* DOI:10.3389/fevo.2022.803210
- Orrock, J.L., L. Abueg*, S. Gammie, and **J. Munshi-South**. 2021. Exome sequencing of deer mice on two California Channel Islands identifies potential adaptation to strongly contrasting ecological conditions. *Ecology and Evolution* 11(23):17191-17201. DOI: 10.1002/ece3.8357 (**undergraduate coauthor*)
- Plimpton, L.D., C.S. Henger, **J. Munshi-South**, D. Tufts, S. Kross, and M. Diuk-Wasser. 2021. Use of molecular scatology to assess the diet of feral cats living in urban colonies. *Journal of Urban Ecology* 7(1):juab022 DOI: 10.1093/jue/juab022
- Parsons. M.H., J.L. Richardson, Y. Kiyokawa, R. Stryjek, R.M. Corrigan, M.A. Deutsch, M. Ootaki, T. Tanikawa, F.E. Parsons, and **J. Munshi-South**. 2021. Rats and the COVID-19 pandemic: considering the influence of social distancing on a global commensal pest. *Journal of Urban Ecology* 7(1):juab027 DOI: 10.1093/jue/juab027
- Beauchamp, A.L., S.-J. Roberts, J.M. Aloisio, D. Wasserman, J.E. Heimlich, J.D. Lewis, **J. Munshi-South**, J.A. Clark, and K. Tingley. 2021. Effects of research and mentoring on underrepresented youths' STEM persistence into college. *Journal of Experiential Education* DOI: 10.1177/10538259211050098
- Fusco, N.A., E. J. Carlen, and **J. Munshi-South**. 2021. Urban landscape genetics: are biologists keeping up with the pace of urbanization? *Current Landscape Ecology Reports* 6:35-45. DOI: 10.1007/s40823-021-00062-3
- Byers, K. A., Booker, T. R., Combs, M., Himsworth, C. G., **Munshi-South, J.**, Patrick, D. M., Whitlock, M. C. 2021. Using genetic relatedness to understand heterogeneous distributions of urban rat-associated pathogens. *Evolutionary Applications* 14(1):198-209. DOI: 10.1111/eva.13049
- Harpak, A., Garud, N., Rosenberg, N. A., Petrov, D. A., Combs, M., Pennings, P. S., and **J. Munshi-South**. 2020. Genetic Adaptation in New York City Rats. *Genome Biology and Evolution* 13(1):evaa247. DOI: 10.1093/gbe/evaa247
- Richardson, J. L., Michaelides, S., Combs, M., Djan, M., Bisch*, L., Barrett*, K., Silveira*, G., Butler, J., Aye, T. T., **Munshi-South, J.**, DiMatteo, M., Brown, C., McGreevy Jr., T. J. 2021. Dispersal ability predicts spatial genetic structure in native mammals persisting across an urbanization gradient. *Evolutionary Applications* 14(1):163-177. DOI: 10.1111/eva.13133 (**undergraduate coauthor*)
- Des Roches, S., Brans, K. I., Lambert, M. R., Rivkin, L. R., Savage, A. M., Schell, C. J., Correa, C., De Meester, L., Diamond, S. E., Grimm, N. B., Harris, N. C., Govaert, L., Hendry, A. P., Johnson, M. T., **Munshi-South, J.**, Palkovacs, E. P., Szulkin, M., Urban, M. C.,

- Verrelli, B. C., Alberti, M. 2021. Socio-eco-evolutionary dynamics in cities. *Evolutionary Applications* 14(1):248-267. DOI: 10.1111/eva.13065
- Alberti, M., Palkovacs, E. P., Roches, S. D., Meester, L. D., Brans, K. I., Govaert, L., Grimm, N. B., Harris, N. C., Hendry, A. P., Schell, C. J., Szulkin, M., **Munshi-South, J.**, Urban, M. C., Verrelli, B. 2020. The complexity of urban eco-evolutionary dynamics. *BioScience*, 70(9), 772-793. DOI: 10.1093/biosci/biaa079
- Sjodin, B. M., Puckett, E. E., Irvine, R. L., **Munshi-South, J.**, Russello, M. A. 2021. Global origins of invasive brown rats (*Rattus norvegicus*) in the Haida Gwaii archipelago. *Biological Invasions*, 23:611-623. DOI: 10.1007/s10530-020-02390-7
- Carlen, E., and **J. Munshi-South**. 2021. Widespread genetic connectivity of feral pigeons across the Northeastern megacity. *Evolutionary Applications* 14(1):150-162. DOI: 10.1111/eva.12972
- Fusco, N.A., E. Pehek. and **J. Munshi-South**. 2021. Urbanization reduces gene flow but not genetic diversity of stream salamander populations in the New York City metropolitan area. *Evolutionary Applications* 14(1):99-116. DOI: 10.1111/eva.13025
- Puckett, E.E., E. Sherratt, M. Combs, E.J. Carlen, W. Harcourt-Smith, and **J. Munshi-South**. 2020. Variation in brown rat cranial shape shows directional selection over 120 years in New York City. *Ecology & Evolution* 10(11):4739-4748. DOI: 10.1002/ece3.6228
- Puckett, E.E., D. Orton, and **J. Munshi-South**. 2020. Commensal Rats and Humans: Integrating Rodent Phylogeography and Zooarchaeology to Highlight Connections between Human Societies. *BioEssays* 42(5):1900160 DOI: 10.1002/bies.201900160
- Puckett, E.E., E. Magnussen, L.A. Khlyap, T.J. Strand, A. Lundkvist, and **J. Munshi-South**. 2020. Genomic analyses reveal three independent introductions of the invasive brown rat (*Rattus norvegicus*) to the Faroe Islands. *Heredity* 124(1):15-27. DOI: 10.1038/s41437-019-0255-6
- Puckett, E.E., and **J. Munshi-South**. 2019. Brown rat demography reveals pre-commensal structure in eastern Asia before expansion into Southeast Asia. *Genome Research* 29(5): 762-770. DOI:10.1101/gr.235754.118
- Miles, L.S., L.R. Rivkin, M.T.J. Johnson, **J. Munshi-South**, and B.C. Verrelli. Gene flow and genetic drift in urban environments. *Molecular Ecology* 28(18): 4138-4151. DOI: 10.1111/mec.15221
- Henger, C.S., G.A. Herrera*, C.M. Nagy, M.E. Weckel, L.J. Gormezano, C. Wultsch, and **J. Munshi-South**. Genetic diversity and relatedness of a recently established population of eastern coyotes (*Canis latrans*) in New York City. *Urban Ecosystems* DOI: 10.1007/s11252-019-00918-x (**undergraduate coauthor*)

- Combs, M., K. Byers, C. Himsworth, and **J. Munshi-South**. 2019. Harnessing population genetics for pest management: theory and application for urban rats. *Human-Wildlife Interactions* 13(2):250-263. DOI: 10.26077/0bcx-v339
- Parsons, M.H., M.A. Deutsch, D. Dumitriu, and **J. Munshi-South**. 2019. Differential responses by urban brown rats (*Rattus norvegicus*) toward male or female-produced scents in sheltered and high-risk presentations. *Journal of Urban Ecology* 5(1): juz009. DOI: 10.1093/jue/juz009
- DeCandia, A.L, C.S. Henger, A. Krause, L.J. Gormezano, M. Weckel, C. Nagy, **J. Munshi-South**, and B.M. vonHoldt. 2019. Genetics of urban colonization: neutral and adaptive variation in coyotes (*Canis latrans*) inhabiting the New York metropolitan area. *Journal of Urban Ecology* 5(1):juz002 DOI: 10.1093/jue/juz002
- Rivkin, L. R., J.S. Santangelo, M. Alberti, M.F. Aronson, C.W. de Keyzer, S.E. Diamond, M. Fortin, L.J. Frazee, A.J. Gorton, A.P. Hendry, Y. Liu, J.B. Losos, J.S. MacIvor, R.A. Martin, M.J. McDonnell, L.S. Miles, **J. Munshi-South**, R.W. Ness, A.E. Newman, M.R. Stothart, P. Theodorou, K.A. Thompson, B.C. Verrelli, A. Whitehead, K.M. Winchell, and M.T. Johnson. 2019. A roadmap for urban evolutionary ecology. *Evolutionary Applications* 12(3):384-398 DOI:10.1111/eva.12734
- Combs, M., K.A. Byers, B.M. Ghersi, M.J. Blum, A. Caccone, F. Costa, C.G. Himsworth, J.L. Richardson, and **J. Munshi-South**. 2018. Urban rat races: spatial population genomics of brown rats (*Rattus norvegicus*) compared across multiple cities. *Proceedings B* 285(1880):20180245
- Aloisio, J. M., B. Johnson, J.D. Lewis, J.A. Clark, **J. Munshi-South**, S.-J. Roberts, D. Wasserman, J. Heimlich, and K. Tingley. 2018. Pre-college urban ecology research mentoring: Promoting broader participation in the field of ecology for an urban future. *Journal of Urban Ecology* 4(1):juy023
- Parsons, M. H., P.B. Banks, M.A. Deutsch, and **J. Munshi-South**. Temporal and Space-Use Changes by Rats in Response to Predation by Feral Cats in an Urban Ecosystem. 2018. *Frontiers in Ecology and Evolution* 6:146 DOI:10.3389/fevo.2018.00146
- Anglely, L. *, M. Combs, C. Firth, M. Frye, I. Lipkin, J. Richardson, and **J. Munshi-South**. 2018. Spatial variation in the parasite communities and genomic structure of urban rats in New York City. *Zoonoses and Public Health* 65(1):e113-e123. (***undergraduate author**)
- Puckett, E.E., O. Micci-Smith*, and **J. Munshi-South**. 2018. Genomic analyses identify multiple Asian origins and deeply diverged mitochondrial clades in inbred brown rats (*Rattus norvegicus*). *Evolutionary Applications* 11(5):718-726 (***undergraduate coauthor**)

- Combs, M., E.E. Puckett, J. Richardson, D. Mims*, and **J. Munshi-South**. 2018. Spatial population genomics of the brown rat (*Rattus norvegicus*) in New York City. *Molecular Ecology* 27(1):83-98 (***undergraduate coauthor**)
- Johnson, M.T.J., and **J. Munshi-South**. 2017. Evolution of life in urban environments. *Science*, 358(6363):eaam8327.
- Harris, S.E., and **J. Munshi-South**. 2017. Signatures of positive selection and local adaptation to urbanization in white-footed mice (*Peromyscus leucopus*). *Molecular Ecology* 26(22):6336-6350.
- Garcia-Elfring, A., R.D.H. Barrett, M. Combs, T.J. Davies, **J. Munshi-South**, and V. Millien. 2017. Admixture on the northern front: Population genomics of range expansion in the white-footed mouse (*Peromyscus leucopus*) and evidence of introgression from the deer mouse (*Peromyscus maniculatus*). *Heredity* 119:447-458.
- Izuogu, A., K.L. McNally, S.E. Harris, J. Presloid, C. Burlak, **J. Munshi-South**, S.M. Best, and R.T. Taylor. 2017. Interferon signaling in *Peromyscus leucopus* confers a potent and specific restriction to tick-borne flaviviruses. *PLOS One* 12(6):e0179781.
- Munshi-South, J.**, and J.R. Richardson. 2017. *Peromyscus* transcriptomics: understanding adaptation and gene expression plasticity within and between species of deer mice. *Seminars in Cell & Developmental Biology* 61:131-139.
- Alter, S.A., **J. Munshi-South**, and M.L.J. Stiassny. 2017. Genome-wide SNP data reveal cryptic phylogeographic structure and microallopatric divergence in a rapids-adapted clade of cichlids from the Congo River. *Molecular Ecology* 26(5):1401-1419.
- Yu, A.*, **J. Munshi-South**, and E. Sargis. 2017. Morphological differentiation in white-footed mouse (Mammalia: Rodentia: Cricetidae: *Peromyscus leucopus*) populations from the New York City metropolitan area. *Bulletin of the Peabody Museum of Natural History* 58(1):3-16. (***undergraduate author**)
- Fusco, N., A. Zhao*, and **J. Munshi-South**. 2017. Urban forests sustain diverse carrion beetle assemblages in the New York City metropolitan area. *PeerJ* 5:e3088. (***undergraduate coauthor**)
- Puckett, E.E., J. Park, M. Combs, M.J. Blum, J.E. Bryant, A. Caccone, F. Costa, E. Deinum, A. Esther, C.G. Himsworth, P. Keightley, A. Ko, A. Lundkvist, L.M. McElhinney, S. Morand, J. Robins, J. Russell, T.M. Strand, O. Suarez, L. Yon, and **J. Munshi-South**. 2016. Global population divergence and admixture of the brown rat (*Rattus norvegicus*). *Proceedings of the Royal Society of London B* 283(1841):20161762.
- Munshi-South, J.**, C.P. Zolnik, and S.E. Harris. 2016. Population genomics of the Anthropocene: urbanization is negatively associated with genome-wide variation in white-footed mouse populations. *Evolutionary Applications* 9(4):546-564.

- Harris, S.E., A.T. Xue, D. Alvarado-Serrano, J.T. Boehm, T. Joseph*, M.J. Hickerson, and **J. Munshi-South**. 2016. Urbanization shapes the demographic history of a native rodent (the white-footed mouse, *Peromyscus leucopus*) in New York City. *Biology Letters* 12:20150983. **(undergraduate coauthor)*
- Martin, L.J., NESCent Working Group on the Evolutionary Biology of the Built Environment, ... (**J. Munshi-South** one of 23 middle authors) ..., and R.R. Dunn. 2015. Evolution of the indoor biome. *Trends in Ecology & Evolution* 30(4):223-232.
- Harris, S.E., R. O'Neill, and **J. Munshi-South**. 2015. Transcriptome resources for the white-footed mouse (*Peromyscus leucopus*): new genomic tools for investigating ecologically divergent urban and rural populations. *Molecular Ecology Resources*, 15(2):382-394.
- Tanner, C.J., F.R. Adler, N.B. Grimm, P.M. Groffman, S.A. Levin, **J. Munshi-South**, D.E. Pataki, M. Pavao-Zuckerman, and W.G. Wilson. 2014. Urban ecology: advancing science and society. *Frontiers in Ecology and the Environment*, 12(10):574-581.
- Franks, S.J., and **J. Munshi-South**. 2014. Go forth, evolve and prosper: the genetic basis of adaptive evolution in an invasive species. *Molecular Ecology* 23(9):2137-2140.
- Munshi-South, J.**, and C. Nagy. 2014. Urban park characteristics, genetic variation, and historical demography of white-footed mouse (*Peromyscus leucopus*) populations in New York City. *PeerJ* 2:e310.
- Harris, S.E., **J. Munshi-South**, C. Obergfell, & R. O'Neill. 2013. Signatures of rapid evolution in urban and rural transcriptomes of white-footed mice (*Peromyscus leucopus*) in the New York metropolitan area. *PLOS One* 8(8): e74938.
- Munshi-South, J.**, Y. Zak*, & E. Pehek. 2013. Conservation genetics of extremely isolated urban populations of the Northern Dusky Salamander (*Desmognathus fuscus*) in New York City. *PeerJ* 1:e64. **(undergraduate coauthor)*
- Munshi-South, J.** 2012. Urban landscape genetics: canopy cover predicts gene flow between white-footed mouse (*Peromyscus leucopus*) populations in New York City. *Molecular Ecology* 21(6): 1360-1378.
- Munshi-South, J.** 2011. Relatedness and demography of African forest elephants: inferences from noninvasive fecal DNA analyses. *Journal of Heredity* 102(4): 391-398.
- Munshi-South, J.** and H. Bernard. 2011. Genetic diversity and distinctiveness of the proboscis monkeys (*Nasalis larvatus*) of the Klias peninsula, Sabah, Malaysia. *Journal of Heredity* 102(3): 342-346.
- Munshi-South, J.** and K. Kharchenko*. 2010. Rapid, pervasive genetic differentiation of urban white-footed mouse (*Peromyscus leucopus*) populations in New York City. *Molecular Ecology* 19(19): 4242-4254. **(undergraduate coauthor)*

- Munshi-South, J.** and G. S. Wilkinson. 2010. Bats and birds: exceptional longevity despite high metabolic rates. *Ageing Research Reviews* 9: 12-19.
- Munshi-South, J.,** L. Tchignoumba, J. Brown, N. Abbondanza, J.E. Maldonado, A. Henderson, and A. Alfonso. 2008. Physiological indicators of stress in African forest elephants (*Loxodonta africana cyclotis*) in relation to petroleum operations in Gabon, Central Africa. *Diversity & Distributions* 14(6): 993-1001.
- Munshi-South, J.** 2008. Female-biased dispersal and gene flow in a behaviorally monogamous mammal, the large treeshrew (*Tupaia tana*). *PLoS ONE* 3(9): e3228.
- Munshi-South, J.** 2007. Extra-pair paternity and the evolution of testis size in a behaviorally monogamous tropical mammal, the large treeshrew (*Tupaia tana*). *Behavioral Ecology and Sociobiology* 62:201-212.
- Munshi-South, J.,** L.H. Emmons, and H. Bernard. 2007. Behavioral monogamy and fruit availability in the large treeshrew, *Tupaia tana*, in Sabah, Malaysia. *Journal of Mammalogy* 88(6): 1427-1438.
- Munshi-South, J.,** and G.S. Wilkinson. 2006. Isolation and characterization of polymorphic microsatellite loci in Bornean treeshrews (*Tupaia* spp.) *Molecular Ecology Notes* 6: 698-699.
- Munshi-South, J.,** and G.S. Wilkinson. 2006. Diet influences life span in parrots (Order: Psittaciformes). *Auk* 123(1):108-118.
- Munshi-South, J.** 2005. *Boiga dendrophila* (Mangrove Snake) Diet. *Herpetological Review* 36(2):188.
- South, J. M.,** and T.F. Wright. 2002. Nestling sex ratios in the Yellow-naped Amazon: no evidence for adaptive modification. *Condor* 104:437-440.
- Wilkinson, G.S., and **J.M. South.** 2002. Life history, ecology and longevity in bats. *Ageing Cell* 1:124-131.
- South, J.M.,** and S. Pruett-Jones. 2000. Patterns of flock size, diet, and vigilance of naturalized Monk Parakeets in Hyde Park, Chicago. *Condor* 102:848-854.

RESEARCH GRANTS & AWARDS

2022-2023	PI: National Science Foundation BCS-2130598	\$35,000
2018-2023	co-PI: National Science Foundation DEB-1840663	\$498,817
2018	Outstanding Externally Funded Research Award, Fordham U.	\$1,000
2018-2019	Fordham Faculty Research Grant	\$6,500
2014-2019	co-PI: National Science Foundation DRL-1421019	\$1,218,730

2017-18	co-PI: National Pest Management Foundation	\$70,000
2017-18	PI: NYC Department of Health & Mental Hygiene contract	\$9,580
2017	PI: Fordham-NYU Research Fellowship	\$5,000
2017	co-PI: Society for the Study of Evolution	\$9,000
2015-18	PI: National Science Foundation DEB-1457523	\$672,071
2015-18	PI: National Science Foundation MRI-1531639	\$134,401
2014-17	Mianus River Gorge RAP Grant	\$15,000
2014	Fordham Faculty Research Grant	\$6,500
2012-16	PI: National Inst. of General Medical Sciences R15GM099055	\$260,113
2008-11	PI: National Science Foundation DEB-0817259	\$168,589

TEACHING EXPERIENCE

2022-23	Urban Ecology & Evolution, BISC 3466, Fordham University
2014-23	Population & Community Ecology, BISC 7501, Fordham University
2014, '18-22	Ecology (lecture / lab), BISC 2561 / 2571, Fordham University
2016-17, '21-24	Evolutionary Biology, BISC 3244, Fordham University
2020-21	Seminar in Genetics, BISC 8710, Fordham University
2015	Animal Behavior, BISC 4642, Fordham University
2012	Ecological & Population Genomics, BIOL 79302, CUNY Graduate Center
2008-13	Conservation Biology, BIO / ENV 3009, Baruch College
2009-12	Seminar 3: Science in the City, IDC 3002H, Macaulay Honors College
2010	Principles of Genetics, BIO 3015, Baruch College
2009	Conservation Genetics Seminar, BIOL 79302, CUNY Graduate Center
2007-09	Principles of Ecology, ENV 1020, Baruch College
2007	Conservation Biology, BiSc 160, George Washington University
2003-05	Teaching Assistant, Mammalogy Lab, BSCI 338, University of Maryland
2001, 2005	Teaching Assistant, Animal Behavior, BSCI 360, University of Maryland
2000	Teaching Assistant, Introductory Biology, BSCI 105, University of Maryland

JOURNALISTIC / OTHER PUBLICATIONS

Munshi-South, J. Guest Essay: "I've studied NYC rodents for 12 years. The enemy is us." *New York Times*, 27 August 2023. <https://www.nytimes.com/2023/08/27/opinion/nyc-rats-eric-adams.html>

Munshi-South, J. 2021. Opinion: Turn off the blower and let the leaves be this Fall. *Stamford Advocate*, 23 October. <https://www.ctinsider.com/opinion/article/Opinion-Turn-off-the-blower-and-let-the-leaves-16556779.php>

Parsons, M.H. and J. Munshi-South. 2020. Better rat control in cities starts by changing human behavior. <https://theconversation.com/better-rat-control-in-cities-starts-by-changing-human-behavior-129232>

Munshi-South, J. 2016. Love the deer, fear the coyotes? *New York Daily News*, 17 December.

Munshi-South, J. 2012. Development will damage Flushing Meadows' role as a marshy buffer against storm surge and coastal flooding. *New York Daily News*, 03 December.

Munshi-South, J. 2009. Book Review: The Elephant's Secret Sense: The Hidden Life of the Wild Herds of Africa. *Journal of Mammalian Evolution* 16:137-138.

Munshi-South, J. 2008. Book Review: *Colugo: The Flying Lemur of Southeast Asia*. *Journal of Mammalogy* 89(2):518.

Munshi-South, J. 2006. Monogamy and misunderstanding: Malaysia's treeshrews. *Malaysian Naturalist* 59(3): 42-47.

Munshi-South, J. 2005. Animal behavior in Borneo's logged forests. *The Conservation Behaviorist* 3(1):5-7.

Munshi-South, J. 2004. Book Review: *Monogamy: Mating Strategies and Partnerships in Birds, Humans and Other Mammals*. *Journal of Mammalogy* 85:1030-1031.

South, J. 2000. Photo Credit: Monk parakeet nest near Jackson Park, in De Vore, S. 2000. *Birding Illinois*. Falcon Publishing, Helena, MT.

South, J. 1999. The status of the Monk Parakeet in Illinois with comments on its native habitat and habits. *Meadowlark: A Journal of Illinois Birds* 8:2-5.

SELECTED PUBLIC OUTREACH & MEDIA APPEARANCES

Radio Interview: "Why your car is a rat haven." *The Brian Lehrer Show*, 18 January 2024. WNYC, New York. NY. <https://www.wnyc.org/story/why-your-car-rat-haven/>

Print Interview: Jared Weber. "Stamford considers limiting gas-powered leaf blowers. Will amendment make any difference?" 19 January 2023. *Stamford Advocate* <https://www.stamfordadvocate.com/news/article/Stamford-considers-limiting-gas-powered-leaf-17723560.php>

Print Interview: Rubinstein, Dana. "Wanted: N.Y.C. Rat Overlord With 'Killer Instinct.' Will Pay \$170,000." 02 December 2022. *New York Times*. <https://www.nytimes.com/2022/12/02/nyregion/nyc-rat-control-job.html>

Print Interview: Gupta, Dhriti. "'I can't go out there and manage the garbage': What the city is - and isn't - doing about Toronto's growing rat problem". 20 October 2022. *Toronto Star* <https://www.thestar.com/news/gta/2022/10/20/i-cant-go-out-there-and-manage-the-garbage-what-the-city-is-and-isnt-doing-about-torontos-exploding-rat-problem.html>

- Radio / Podcast Interview: "'Throughline': How rats became one of Earth's most successful mammalian colonizers". 26 April 2022 *NPR - Morning Edition*.
<https://www.npr.org/2022/04/26/1094766076/throughline-how-rats-became-one-of-earths-most-successful-mammalian-colonizers>
- Print Interview: Bender, Eric. "Urban evolution: How species adapt to survive in cities". 21 March 2022. *knowable Magazine from Annual Reviews*.
<https://knowablemagazine.org/article/living-world/2022/urban-evolution-species-adapt-survive-cities>
- Print Interview: Del Valle, Veronica. "Stamford doesn't have a ban on gas-powered leaf blowers. One resident wants to change that". 21 February 2022, *Stamford Advocate*.
<https://www.stamfordadvocate.com/news/article/Stamford-doesn-t-have-a-ban-on-gas-powered-leaf-16931955.php>
- Print Interview: Shanahan, Ed. "N.Y.C. Rats: They're in the Park, on Your Block and Even at Your Table". 5 November 2021, *New York Times*, Section A, Page 12.
<https://www.nytimes.com/2021/11/05/nyregion/nyc-rats-sightings.html>
- Podcast Interview: Unsupervised Learning. Jason Munshi-South: rats and evolution. 13 August 2021. <https://unsupervisedlearning.libsyn.com/jason-munshi-south-rats-and-evolution>
- Print Coverage: Callaway, Ewen. "Rats are New Yorkers, too! Genome study reveals how rodents conquered the Big Apple". *Nature*, 26 February 2020.
<https://www.nature.com/articles/d41586-020->
- Print Coverage: Koerner, Brendan. "How Cities Reshape the Evolutionary Path of Urban Wildlife". *Wired*, 23 September 2019. <https://www.wired.com/story/urban-wildlife-evolution-climate-change/>
- Print Interview: de Freytas-Tamura, Kimiko. "Rats Have Ruled New York for 355 Years. Can a Mystery Bucket Stop Them?" 05 September 2019, *New York Times*, Section A, Page 18.
<https://www.nytimes.com/2019/09/05/nyregion/rats-new-york.html>
- Print Coverage: Beans, Carolyn. "News Feature: Cities serve as testbeds for evolutionary change". 19 February 2019, *PNAS* 116(8): 2787-2790.
<https://www.pnas.org/content/116/8/2787>
- Radio Interview: Nalpathanchil, Lucy. "Oh Rats! The Rodents Scurrying Among Us". *WNPR Where We Live, CT Public Radio*, 01 February 2019. <https://www.wnpr.org/post/oh-rats-rodents-scurrying-among-us>
- Print Coverage: Offord, Catherine. "Cities Can Serve as Cauldrons of Evolution". *The Scientist*, 01 January 2019. <https://www.the-scientist.com/features/cities-can-serve-as-cauldrons-of-evolution-65211>

- Online Coverage: Guarino, Ben. "Speaking of Science: As cities report more rats than ever, scientists find eastside and westside rodents". *Washington Post*, 05 June 2018. <https://www.washingtonpost.com/news/speaking-of-science/wp/2018/06/05/as-cities-report-more-rats-than-ever-scientists-find-eastside-and-westside-rodents/>
- Print Coverage: Holloway, Marguerite. "A Rat Named Nemesis". *The New Yorker*, 19 May 2018. <https://www.newyorker.com/science/elements/a-rat-named-nemesis>
- Online Coverage: Mandelbaum, Ryan. "Mice are Evolving to Survive Life in New York City". *Gizmodo*, 04 October 2017. <https://gizmodo.com/mice-are-evolving-to-survive-life-in-new-york-city-1819153141>
- Online Coverage: Baraniuk, Chris. "New York City Mice May Be Evolving To Eat Fast Food Like Pizza". *New Scientist*, 04 October 2017. <https://www.newscientist.com/article/2149355-new-york-city-mice-may-be-evolving-to-eat-fast-food-like-pizza/>
- Online Coverage: Poon, Linda. "Will Cities Ever Outsmart Rats?" *CITYLAB*, 09 August 2017. <https://www.citylab.com/solutions/2017/08/smart-cities-fight-rat-infestations-big-data/535407/>
- Online Coverage: Walter, Katharine. "Central Park Mice Don't Get Out Much: The Genetic Stories of New York City Rats and Mice". *Nautilus*, 03 August 2017. <http://nautil.us/issue/51/limits/central-park-mice-dont-get-out-much>
- Print Coverage: Blanding, Michael. "Consider the Rats: On the Ecology and Evolutionary Biology of the City's Most Reviled Rodent". *Fordham Magazine*, Spring 2017 issue, pgs. 40-43.
- Online Coverage: "Congo River fish evolution shaped by intense rapids: Genomic study in lower Congo reveals microscale diversification." *ScienceDaily*, 17 February 2017. www.sciencedaily.com/releases/2017/02/170217161005.htm
- Print Coverage: Pennisi, Elizabeth. "Africa's deadliest rapids give birth to new fish species". *Science* doi:10.1126/science.aal0805
- Public Panel Discussion: "Our Pesky Neighbors Part 3: Rats". *Brooklyn Historical Society*, November 21, 2016.
- Online Coverage: "Tracing the global invasion of brown rats" *National Geographic*, 31 October 2016.
- Print interview: Zimmer, Carl. "How the Brown Rat Conquered New York City (and Every Other One, Too)". *The New York Times*, Page A18, 28 October 2016.

Online Coverage: “How rats got from Mongolia to New York City subway tunnels: geneticists trace the brown rat's path to world domination” *Popular Science*, 21 October 21 2016.

Radio Interview: “Why are there so many rats in Seattle?” *KUOW 94.9 FM Seattle*, 18 October 2016.

Radio Interview: “Rats of New York”. *The Leonard Lopate Show, WNYC 93.9 FM*, 6 October 2016.

Television Documentary: “Rats”. <http://www.imdb.com/title/tt4033926/> *Produced by Morgan Spurlock and Warrior Poets, aired on Discovery and Netflix*, 15 September 2016.

Print Coverage: Schilthuizen, Menno. “Evolution is happening faster than we thought”. *The New York Times*, 23 July 2016.

Online Interview: “Cities create accidental experiments in plant, animal evolution”. *Science News*, 24 June 2016.

Print Interview: Colangelo, Lisa. “Experts doubt NYC’s \$5.6M plan for rat-repellent mint garbage bags”. *New York Daily News*, 17 May 2016.

Print Interview: “Lizard gets to grips with city life by evolving stickier feet” *New Scientist*, 27 April 2016.

Print Coverage: “Town mice differ from country ones”. *Nature* 532:285 doi:10.1038/532285d , 21 April 2016.

Print Coverage: Netburn, Deborah. “Why the city mouse and the country mouse have different genes”. *Los Angeles Times*, 15 April 2016.

Online Interview: “Was pizza rat a hoax?” *Gothamist*, 07 January 2016.

Radio interview: Hamilton, Alec. “What City Life Does to the Country Mouse”. *Hypothesis—WNYC 93.9 FM*, <http://www.wnyc.org/story/city-life-and-the-country-mouse/>, New York, NY, 31 December 2015.

Online coverage: Denton, Rob. “Isolation by Aesop’s Fable in NYC Mice”. *The Molecular Ecologist*, <http://www.molecularecologist.com/2015/12/isolation-by-aesops-fable-in-nyc-mice/>, 02 December 2015.

Print interview: Shaltiel, Jason. “NYC rats: 10 need-to-know facts, including how great pizza is for them”. *AM New York*, 22 September 2015.

Online interview: Robbins, Christopher. “Who Released Dozens of White Rats Next to Hudson River Park?”. *Gothamist*, http://gothamist.com/2015/07/14/these_rats_are_doomed.php, 14 July 2015.

Print interview: Bradley, Ryan. "The Rat Paths of New York". *The New York Times Magazine*, 23 April 2015.

Radio interview: Shannon, Robin. "Pests of New York City". *WFUV 90.7 FM*, Bronx, NY, 10 April 2015.

Online interview: Keim, Brandon. "The Intriguing New Science That Could Change Your Mind About Rats". *Wired*, <http://www.wired.com/2015/01/reconsider-the-rat/>, 28 January 2015.

Online interview: Jabr, Ferris. "Urban Ecologists are Studying How Wildlife Have Evolved to Fit Their City Environment, Block by Block". *New York Magazine – The Daily Intelligencer*, <http://nymag.com/daily/intelligencer/2015/01/uptown-mice-are-different-from-downtown-mice.html>, 07 January 2015.

Online video / coverage: Yakas, Ben. "Video: Manhattan Biologist Researching Rats to Understand our Rodent Overlords". *Gothamist*, http://gothamist.com/2014/08/17/video_manhattan_biologist_researchi.php, 17 August 2014

Online photo exhibit: Milano, Johnny. "A Different Kind of Rat Pack". CNN Photos blog, <http://cnnphotos.blogs.cnn.com/2014/09/25/a-different-kind-of-rat-pack/>, 25 September 2014.

Print coverage: Booth, Laura. "Where the Wild Things are: Urban Ecology and the Changing Landscape of New York City". *Columbia Spectator*, 11 September 2014.

Radio interview: The Leonard Lopate Show. "What We Can Learn from the Rats of Manhattan". *WNYC 93.9 FM*, New York, NY, 14 August 2014.

Television interview: *Al Jazeera English* segment on the controversy surrounding control of non-native mute swans in New York State. Aired 14-15 February 2014.

Print interview: Rainey, Clint. "Our Future Neighbors". *New York*, 26 January 2014.

Print coverage: McCloskey, Danielle. "Scott Draves and his Electric Sheep". *SciArt in America*, February 2014, pgs. 38-39.

Print coverage: DeWeerd, Sarah. "Cohabitation". *Conservation*. 11 December 2013.

Print interview: Rothenborg, Michael. "Mus og myrer trives i storbyjunglen (Mice and ants thrive in the urban jungle)". *Politiken*, Page 8 | Viden, 10 November 2013.

Print interview: Zimmer, Carl. "As Humans Change Landscape, Brains of some Animals Change, Too". *New York Times*. Page D3, 22 August 2013.

Print interview: Keim, Brandon. “How City Living is Changing the Brains and Behavior of Urban Animals“. *Wired Science*, 22 August 2013.

Invited Speaker: *The Secret Science Club* at the Bell House, 22 October 2012, Brooklyn, NY.

Invited Plenary Speaker: *Science in the Modern World Series*, “Urbanization as an Evolutionary Force”, 10 April 2012, New York Academy of Sciences & Purchase College, Purchase, NY.

Invited Panel Speaker: *NPR’s Science Friday*, 28 March 2012, recorded radio conversation on urban biodiversity at the American Museum of Natural History, New York, NY.

Invited Speaker: *TEDYouth* conference, “Evolution in a Big City”, 19 November 2011, New York, NY. (*this TED talk is available as an animated video with online lessons as of April 2012 on <http://education.ted.com/>*)

Radio interview: Science Cabaret on Air. 04 September 2011. “Eco in the City”. *Radio interview, WICB 91.7 FM*, Ithaca, NY.

Radio interview: The Leonard Lopate Show. 29 July 2011. “Please Explain: Urban Evolution”. *Radio interview, WNYC 93.9 FM*, New York, NY.

Print interview: Zimmer, C. 26 July 2011. “Evolution Right Under Our Noses”. *The New York Times – Science Times*. Pg. D1.

Print interview: Ravich, V. 16 July 2009. “Going Wild in Queens”. *The Queens Tribune*.

PROFESSIONAL PRESENTATIONS

2022 Urban Landscape Genomics: Lessons from New York City and Beyond, Invited Seminar, Behavior, Ecology, Evolution & Research Club, California State University – Northridge, 09 December.

Urbanization, Population Genomics & Connectivity: Lessons from New York City, Invited Seminar, Department of Molecular, Cellular and Biomedical Sciences, University of New Hampshire, 21 October.

New Approaches to City-scale Management of Brown Rats: lessons from New York City. Invited Plenary Talk, 2022 International Conference on Urban Pests, Barcelona, Spain, 27 June.

Urbanization, Gene Flow and Landscape Connectivity: Lessons from New York City, Invited Seminar, Milner Centre for Evolution, University of Bath, United Kingdom, 12 January.

- 2021 Urbanization, Gene Flow, and Connectivity: Lessons from New York City. Accepted talk, International Urban Wildlife Conference, 26 May.
- 2020 The Evolution of Life in Urban Environments, Invited Seminar, Department of Biology, Laurentian University, Sudbury, Ontario, Canada, 24 January.
- 2019 The Evolution of Life in Urban Environments: New York City Rodents as a Case Study. Invited Seminar, Ecology & Evolutionary Biology, UCLA, Los Angeles, CA, 13 November.

Ecology, Evolution & Behavior of Urban Mammals. Co-organized symposium with Matthew Combs and Carol Henger at the 99th Annual Meeting of the American Society of Mammalogists, Washington, DC, 2 July.

The Evolution of Life in Urban Environments: rodents as a case study. Invited Seminar, BISI-BEES Program, University of Maryland, College Park, MD, 15 April.

The Evolution of Life in Urban Environments: rodents as a case study. Invited Seminar, Department of Biology, Temple University, Philadelphia, PA, 1 April.

Evolution of Life in Urban Environments: City-dwelling Rodents as a Case Study. Invited Seminar, Department of Biology, University of Helsinki, Helsinki, Finland, 07 January.

- 2018 Population Genomics of Urban Wildlife: Insights from New York City and Beyond. Invited Seminar, Frontiers of Ecology and Evolution Seminar Series, Institute of Ecology, National University of Mexico (UNAM), Mexico City, Mexico, 09 November.

Microbiomes and genetic connectivity of rats in New York City. Invited Seminar, “It’s a Brave New World: Applications, Promise and Public Implications of Metagenomics in Urban Settings”, Symposium sponsored by NYC Department of Health and Mental Hygiene / NYU Center for Genomics and Systems Biology, New York, NY, 12 October.

Landscape Genomics of Rodents in New York City. Invited Seminar, Department of Biology, Rutgers University, Newark, NJ, 25 September.

Landscape Genomics of Rodents in New York City. Invited Seminar, Columbia Evolution Supergroup, Columbia University, New York, NY, 05 September.

Local adaptation and gene flow within and between cities are influenced by urban infrastructure and socioeconomics. Invited Seminar, Symposium: Exploring Links between Cities and Surrounding Landscapes: Can Cities Enhance Regional Resilience and Biodiversity in an Era of Climate Change and Extreme Events? Ecological Society of America Annual Meeting, New Orleans, LA, 07 August.

The Ecology and Evolution of Life in Urban Environments: A Prospectus for International Collaboration. Invited Seminar, International Research Forum on Comparative Urban Studies, Sophia University, Tokyo, Japan, 26 May.

Conquering the Rat Uncertainty Principle: How Can Cooperation between Academics, Public Health Agencies, and Pest Management Professionals Improve Urban Rat Research? Invited Seminar, Commensal Rodents Symposium, 28th Vertebrate Pest Conference, Sonoma, CA, 28 February.

2017 Evolution of Life in Urban Environments. Keynote Address, Bronx Science Consortium, Bronx Zoo, 27 September.

Population Genomics of Rodents in New York City. Invited Seminar, “Urban Evolution” Symposium, 2017 Congress of the European Society for Evolutionary Biology, Groningen, the Netherlands, 23 August.

Contemporary Evolution of Rodents in New York City. Invited Seminar and participant, “Synthesis in the City: Urban Evolutionary Ecology”, the 19th New Phytologist Workshop, University of Toronto-Mississauga, Toronto, Canada, 28 July.

A Tale of Two Rodents: Population Genomics of Deer Mice and Rats in New York City. Invited Seminar, Tyson Summer Seminar Series, Washington University, St. Louis, MO, 06 July.

Urban Evolutionary Biology. Oral Presenter and Co-Organizer, “Evolution in Urban Ecosystems” Symposium, Evolution 2017, Portland, OR, 26 June.

A Tale of Two Rodents: Population Genomics of Deer Mice and Rats in New York City. Invited Seminar, Queens College, CUNY, Queens, NY, 03 May.

A Tale of Two Rodents: Population Genomics of Deer Mice and Rats in New York City. Invited Speaker, NYU’s Annual Darwin Lecture, New York University, 10 March.

A Tale of Two Rodents: Population Genomics of Deer Mice and Rats in New York City. Invited Seminar, Columbia E3B seminar series, Columbia University, New York, NY, 14 February.

2016 A Tale of Two Rodents: Population Genomics of White-footed Mice and Rats in New York City. Invited Seminar, Department of Biology, University of Toronto-Mississauga, 04 November.

Population Genomics of Rats in New York City. Invited Seminar, NY State Community IPM Coordinating Council, Albany, NY, 28 October.

Historical demography of the Brown Rat (*Rattus norvegicus*) inferred from whole genome sequences. Oral presentation, Evolution 2016—Annual Meeting of the Society for the Study of Evolution, Austin, TX, 19 June.

A Tale of Two Rodents: evolution of deer mice and rats in New York City. Invited Seminar, Urban Wildlife Institute, Lincoln Park Zoo, Chicago, IL, 02 June.

A Tale of Two Rodents: evolution of deer mice and rats in New York City. Invited Seminar, Comparative Behavioral Biology Workshop, University of Chicago, Chicago, IL, 01 June.

A Tale of Two Rodents: population genomics of deer mice and rats in New York City. Invited Seminar, Department of Biology, Pace University, New York, NY, 13 April.

A Tale of Two Rodents: population genomics of deer mice and rats in New York City. Invited Seminar, School of Forestry & Environmental Studies, Yale University, New Haven, CT, 24 February.

- 2015 A Tale of Two Rodents: population genomics of deer mice and rats in New York City. Invited seminar, Department of Ecology, Evolution and Natural Resources, Rutgers University, New Brunswick, NJ, 12 November.

Population genomics of a global urban invader, the brown rat (*Rattus norvegicus*). Oral presentation, 95th Annual Meeting of the American Society of Mammalogists, Jacksonville, FL, 15 June.

Population genomics of brown rats, *Rattus norvegicus*. Oral presentation, International Urban Wildlife Conference, Chicago, IL, 20 May.

Evolution in the Anthropocene: New York City wildlife as a case study. Invited seminar, EvoS: Evolutionary Studies Program, SUNY Binghamton, Binghamton, NY, 09 February.

- 2014 Population genomics of rodents in New York City. Invited seminar, Department of Forestry, Northern Arizona University, Flagstaff, AZ, 12 November.

NYC as an evolutionary force. Invited seminar, Gowanus Canal Conservancy, Brooklyn, NY, 14 October.

Population genomic structure and historical demography of rats in New York City. Oral presentation, Evolution 2014—Annual meeting of the Society for the Study of Evolution, Raleigh, NC, 24 June.

Evolution in the Anthropocene: landscape genomics of NYC wildlife. Invited seminar, Department of Biology, Hofstra University, Hempstead, NY, 04 April.

Evolution in the Anthropocene: population genomics of NYC wildlife. Invited seminar, Yale Climate & Energy Institute, Yale University, New Haven, CT, 31 March.

Evolution in the Anthropocene: landscape genomics of NYC wildlife. Invited seminar, Department of Entomology and Wildlife Ecology, University of Delaware, Newark, DE, 19 March.

- 2013 Landscape Genomics of New York City Wildlife. Invited talk, Priscilla F. Pollister Biology Seminar Series, Brooklyn College-CUNY, Brooklyn, NY, 12 December.

Landscape Genomics of New York City Wildlife. Invited seminar, Department of Biological Sciences, University of Tulsa, Tulsa, OK, 08 November.

Landscape Genomics of White-footed Mice along an Urban to Rural Gradient. Oral presentation, 20th Annual Conference of the Wildlife Society, Milwaukee, WI, 09 October.

Evolutionary Forces in Urban Landscapes. Invited talk, IGNITE session-*Urban Ecology: From Biophysics to Society*, 98th Annual Meeting of the Ecological Society of America, Minneapolis, MN, 06 August.

Landscape Genomics of White-footed Mice along an Urban-to-Rural Gradient. Oral presentation, 98th Annual Meeting of the Ecological Society of America, Minneapolis, MN, 06 August.

Evolution in the Anthropocene: landscape genomics of NYC *Peromyscus*. Invited talk, thematic session on *Recent Advances in Mammalogy*, 93rd Annual Meeting of the American Society of Mammalogists, Philadelphia, PA, 15 June.

Evolution in the Anthropocene: landscape genetics of NYC wildlife. Invited talk, *The Ecology of New York City: Organisms, Environment & History*, Columbia University, New York, NY, 20 April.

Landscape Genomics of New York City. Invited seminar, Department of Biology, North Carolina State University, Raleigh, NC, 28 February.

- 2012 Adaptive landscape genomics of white-footed mice in New York City. Invited Seminar, NYU Evening Evolution Group, New York University, New York, NY, 16 October.

Evolution in the Anthropocene. Invited seminar, Natural Resources Group of the NYC Dept of Parks & Recreation, The NYC Urban Field Station, Ft. Totten, NY, 25 April.

Urbanization as an evolutionary force. Invited seminar, The Ehrenpreis Lecture, Department of History, Bronx Community College, New York, NY, 19 April.

Animal behavior and evolution in the Anthropocene: white-footed mice as a model for adaptation to urban environments. Invited seminar, The CUNY Animal Behavior Initiative 1st Annual Conference, The Roosevelt House, New York, NY, 31 March.

Evolutionary dynamics of white-footed mice (*Peromyscus leucopus*) in New York City. Invited seminar, Bard College, Annandale-on-Hudson, NY, 09 February.

Urbanization as an evolutionary force. Invited seminar, Student Pugwash Society, Rockefeller University, New York, NY, 24 January.

- 2011 Genetic connectivity of white-footed mouse populations is associated with urban canopy cover in New York City. Invited speaker, Special Session on “Natural History of the New York Botanical Garden: Interpreting an Urban Old Growth Forest”, Northeast Natural History Conference, Albany, NY, 07 April.

Landscape-scale associations between genetic connectivity of white-footed mouse populations and urban canopy cover in New York City. Invited seminar, Columbia University Seminar in Population Biology (#521), 21 March.

- 2010 Population genetics of white-footed mice (*Peromyscus leucopus*) in New York City, Invited seminar, Department of Natural Sciences, York College, 18 November.

Population genetics of white-footed mice (*Peromyscus leucopus*) in New York City, Invited seminar, Department of Natural Sciences, Queens College, 17 November.

Landscape genetics of white-footed mice (*Peromyscus leucopus*) in New York City. Oral presentation at Evolution 2010-Annual meeting of the Society for the Study of Evolution, Portland, OR, 27 June.

Landscape genetics of white-footed mice (*Peromyscus leucopus*) in New York City, Invited seminar, Department of Biology, Adelphi University, 16 April.

Landscape genetics of white-footed mice (*Peromyscus leucopus*) in New York City, Invited seminar, New York Entomological Society, 16 March.

Urbanization results in rapid genetic differentiation of white-footed mouse (*Peromyscus leucopus*) populations in New York City, Poster presented at MillionTrees NYC, Green Infrastructure, and Urban Ecology Research Symposium, The New School, 05 March.

- 2009 Landscape genetics of white-footed mice (*Peromyscus leucopus*) in New York City: concepts and preliminary results, Invited Speaker, Comparative Biology Seminar Series, Richard Gilder Graduate School, American Museum of Natural History, 07 December.

Landscape genetics of white-footed mice (*Peromyscus leucopus*) in New York City: concepts and preliminary results, Invited seminar, Department of Biology, City College of New York, 30 November.

- Landscape genetics of white-footed mice (*Peromyscus leucopus*) in New York City: preliminary results from a model system for investigating the evolutionary implications of urbanization. Oral presentation at the 94th Annual Meeting of the Ecological Society of America, Albuquerque, NM, 04 August.
- Landscape genetics of white-footed mice (*Peromyscus leucopus*) in New York City: concepts and preliminary results, Invited seminar, Center for Environmental Research and Conservation (CERC), Columbia University, 21 April.
- Landscape genetics of white-footed mice (*Peromyscus leucopus*) in New York City: concepts and preliminary results, Invited seminar, Department of Biology, Fordham University, 08 April.
- 2008 Conservation Genetics and Physiology of Forest Elephants in Central Africa. Invited talk, Institute for Tropical Biology and Conservation, University of Malaysia, Sabah, 21 August.
- Genetic Examination of Recent Demographic History in African Elephants: Poaching or Climate? Oral presentation at the 22nd annual meeting of the Society for Conservation Biology, Chattanooga, TN, 17 July.
- 2007 Biodiversity Conservation in a Resource Hungry World. Invited talk; Biological Anthropology Colloquium, Department of Anthropology, Yale University, 08 November.
- Biodiversity Conservation in a Resource Hungry World. Invited talk; Animal Behavior and Conservation seminar, Hunter College, City University of New York, 15 November.
- Physiological Stress and Individual Movements of African Forest Elephants (*Loxodonta cyclotis*) in relation to anthropogenic disturbance in Gabon. Poster presented at the 3rd International Conservation Genetics Symposium, American Museum of Natural History, New York, NY, 27-29 September.
- Physiological Stress and Individual Movements of African Forest Elephants (*Loxodonta africana*) in relation to human disturbance in Gabon. Oral presentation at the 21st annual meeting of the Society for Conservation Biology, Port Elizabeth, South Africa, 03 July.
- 2006 Extra-pair Paternity and Female-Biased Dispersal in the Large Treeshrew, *Tupaia tana*. Poster presented at Biennial Congress of the International Society for Behavioral Ecology (ISBE), Tours, France, 23-29 July.
- 2005 Social Organization, Monogamy, and Dispersal in the Large Treeshrew, *Tupaia tana*, in Primary and Logged Forests in Sabah, Malaysia (NE Borneo). Oral presentation at the 42nd annual meeting of the Animal Behavior Society, Snowbird, Utah, 10 August

Behavioral Responses of the Large Treeshrew, *Tupaia tana*, to Mast Fruiting and Selective Logging in Sabah, Malaysia. Oral presentation at the 16th annual meeting of the Society for Conservation Biology, Brasilia, Brazil, 18 July.

- 2004 Evolution of Monogamy in the Large Treeshrew, *Tupaia tana*. Invited talk, Institute for Tropical Biology and Conservation, University of Malaysia, Sabah.
- 2002 The Ecological Basis of Longevity in Parrots. Poster presented at 9th Biennial Congress of the International Society for Behavioral Ecology (ISBE), Montréal, Canada.

PROFESSIONAL SERVICE & SYNERGISTIC ACTIVITIES

- I am a co-director of the Science & Justice Initiative at Fordham University that began in 2022.
- I am the faculty advisor for St. Rose's Garden, a student-run community garden on Fordham's Bronx campus.
- I am a Board Member for iLand: Interpretive Laboratory for Art Nature Dance. This nonprofit was founded by NYC-based dancer Jennifer Monson to promote collaboration between scientists and movement artists. My role on the Board primarily involves advising iLand on programmatic activities and funded residences for art / science collaboration.
- I served on National Science Foundation grant review panels in 2009, 2011, 2015, 2016 and 2017.
- I am on the Board of Editors for the *Journal of Urban Ecology*, and an Associate Editor for *Animal Biodiversity and Conservation*. The latter is run by the Museum of Natural Sciences in Barcelona, Spain.

CURRENT POSTDOCTORAL AND GRADUATE STUDENT ADVISEES

Dr. Kevin Aviles-Rodriguez, NSF Postdoctoral Fellow, Fordham University

Liam Engel, Biological Sciences, Fordham University (Ph.D.)

Jada Henry, Biological Sciences, Fordham University (M.S.)

Kimberly Hughes, Biological Sciences, Fordham University (Ph.D.)

PAST ADVISEES

Linelle Abueg, M.S. Biological Sciences, Fordham University (*defended April 2019; current position: bioinformatician at American Museum of Natural History*)

Corentin Bohl, Ph.D. The Graduate Center, City University of New York (*defended September 2013*)

Elizabeth Carlen, Ph.D. Biological Sciences, Fordham University (*defended April 2021; current position: NSF Postdoc at Washington University in St. Louis*)

Matthew Combs, Ph.D. Biological Sciences, Fordham University (*defended May 2019; current position: Research at USDA, Fort Collins, Colorado*)

Nicole Fusco, Ph.D. Biological Sciences, Fordham University (*defended April 2020; current position: postdoc at Yale University, Lecturer: UCONN-Stamford*)

Stephen E. Harris, Ph.D., The Graduate Center, City University of New York (*defended June 2015; current position: Assistant Professor of Biology at Purchase College*)

Carol Henger, Ph.D. Biological Sciences, Fordham University (*defended April 2020; current position: postdoc at the Wildlife Conservation Society*)

Giselle Herrera, M.S. Biological Sciences, Fordham University (*defended April 2020; current position: environmental educator*)

Dr. Emily Puckett, Postdoctoral Researcher, Biological Sciences, Fordham University (2015-2017; *current position: Assistant Professor of Biology at University of Memphis*)