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https://lmdavalos.github.io/

# Liliana M. Dávalos

#### Recent Experience

Fall 2008– present

# Stony Brook University, USA

Assistant Professor (2008–2014), Associate Professor (2014–2018), Full Professor (2018–present): Department of Ecology and Evolution, Consortium for Inter–Disciplinary Environmental Research

- Instructor and research lab leader
- External fundraising for research: >\$5M, >\$2M as principal investigator
- Internal team management: >10-person team of scientists ranging from undergraduate to postdoctoral researchers
- Generating, coordinating, and leading collaborations: successfully delivering global multiteam projects

#### 2021-2022

#### United Nations Office on Drug and Crime

Consultant for the United Nations 2022 World Drug Report thematic chapter

- Study designer and data analyst
- Analyzed literature on main deforestation drivers
- Designed, interpreted, and visualized Bayesian geostatistical models
- Coordinated and wrote the report

2007– present American Museum of Natural History, New York, USA

Research Associate, Division of Vertebrate Zoology

#### Education

2001-2004	Columbia University, Graduate	PhD (May) Ecology, Evolution, and Environmental Biology
	School of Arts and Sciences	
	(GSAS)	
1998–2001	Columbia University, GSAS	MPhil (Oct) Ecology and Evolutionary Biology
1998-2001	Columbia University, School of	Certificate (Oct) Environmental Policy Studies
	International and Public Affairs	,
1998–2000	Columbia University, GSAS	MA (Feb) Ecology and Evolutionary Biology
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1991–1997	Universidad del Valle	<b>BSc</b> (Oct) Biology with emphasis in Genetics

### Current grant funding (percent of applications funded)

Pending 2220859: "EDGE FGT: Senescence as a paradigm to link genotype to phenotype" co-PI,

National Science Foundation, \$412,560 to SBU, \$3,109,608 total.

Pending 2217296: "Collaborative Research: Integrated mechanisms of environment-host-virome interactions" PI, National Science Foundation, \$739,197 to SBU, \$2,134,953 total.

Current May 13, 2022

Pending	2627864: "BBSRC/NSF: A comparative and mechanistic study of the bat inflammasome" PI, National Science Foundation, \$592,861 to SBU, £1,490,542 total.
Pending	2217797: "Collaborative Research: Evolution of regulatory diversity via transposable element activity" PI, National Science Foundation, \$347,044 to SBU, \$1,711,888 total.
2022–2024	"Co-evolution of viruses with host genome-editing enzymes in bats" co-PI, New Frontiers of Research Fund (NFRF), \$100,186 to SBU, CAD250,000 total.
2020–2025	2020577: "Collaborative Research: AccelNet: Global Union of Bat Diversity Networks (GBatNet): Bats as a model for understanding global vertebrate diversification and sustainability" PI, National Science Foundation, \$185,025 to SBU, \$1,670,697 total. (8 funded)
2020–2022	2032063: "RAPID: Collaborative Research: Bat goblet cells as immuno-hotspots for infection of coronavirus" PI, National Science Foundation, \$59,204 to SBU, \$194,959 total. (~2.7%)
2020–2022	2031906: "RAPID: Collaborative Research: Immunological adaptations in bats to moderate the effect of coronavirus infection" co–PI, National Science Foundation, \$73,574 to SBU, \$200,000 total. (~2.7%)
2019–2023	RGP0013/2019: "Regrowing the brain: evolution and mechanisms of seasonal reversible size changes in a mammal" co–PI, Human Frontiers of Science Program, \$327,261 to SBU, \$1,050,000 total. (4%)
2016–2022	1633299: "NRT-DESE: Interdisciplinary Graduate Training to Understand and Inform Decision Processes Using Advanced Spatial Data" co-Pl, National Science Foundation, \$2,994,707 total. (8%)

# Honors and Awards (Last 10 years)

2021	Scott A. Margolin '99 Lecture in Environmental Affairs, Middlebury College.
2016	Elected to the Council, Society for Systematic Biology
2016	Stony Brook University College of Arts and Sciences Teaching Excellence Award for
	outstanding teaching and true caring for students in and outside of the classroom
2013	Kavli Frontiers of Science Symposium Fellow
2012–2013	National Academy of Sciences Education Fellow in the Life Sciences

# **Publications**



Google Scholar (most reliable source for 2 publication names):

H-index: 37, i10-index: 81, total cites: 6,157 Most cited paper: Thompson et al. 2017 (1358)

Most cited lead author paper: Reddy and Dávalos 2003 (449)

# Peer-reviewed journal articles (90 published, 8 in process; SBU †undergraduate, ‡graduate, \$\phi\$postdoctoral trainee; non SBU \*mentee)

Paulat, N.S., J.M Storer, <b>D.D. Moreno-Santillán°</b> , A.B. Osmanski, K. Sullivan, J.R Grimshaw, J.
Korstian, M. Halsey, C.J Garcia, C. Crookshanks, J. Roberts, A.F.A. Smit, R. Hubley, J. Rosen,
E.C. Teeling, S.C. Vernes, E. Myers, Zoonomia Consortium, D. Rojas, L.M. Dávalos, D.A. Ray.
Chiropterans are a hotspot for horizontal transfer of DNA transposons in Mammalia.
Barreto, E., M. Lim‡, D. Rojas, L.M. Dávalos, A. Machac, C. Graham. Not all traits influence
hummingbird diversification, but their evolutionary rates do.
Michielsen, N.M., S.M. Goodman, V. Soarimalala, A.A.E. van der Geer, L.M. Dávalos, G.I.
Saville, N. Upham, L. Valente. The macroevolutionary impact of recent and imminent extinctions
of mammals in Madagascar. Proceedings of the National Academy of Sciences, USA.
Leadley, P., D. Obura, L. Shannon, M. Cecilia, K. Millette, A. Rankovic, E. Archer, F. Ato, N.

Bax, A. Kutchhi, J.M. Costello, **L.M. Dávalos**, F. de Oliveira Roque, F. DeClerck, L. Dee, F. Essl, S. Ferrier, S. Hashimoto, C. Ifejika, F. Isbell, M. Kok, S. Lavery, D. Leclère, R. Loyola, S. Lwasa, M. McGeoch, A.S. Mori, E. Nicholson, J. Manuel, K. Öllerer, S. Polasky, C. Rondinini, O. Selomane, B. Strassburg, R. Sumaila, D.P. Tittensor, E. Turak, L. Urbina, M. Vallejos, E. Vázquez-Domínguez, P. Verburg, P. Visconti, S. Woodley, J. Xu, S. Jellesmark. Achieving global biodiversity goals by 2050 requires urgent and integrated actions. *One Earth. EcoEvoRxiv* DOI: 10.32942/osf.io/hy7a2

- In 2<sup>nd</sup> Mutumi, G.L.°, R.P. Hall, B.P. Hedrick, L.R. Yohe, A. Sadier, K.T.J. Davies, S.J. Rossiter, K.E. Revision Sears; **L.M. Dávalos**; E.R. Dumont. Disentangling biomechanical and sensory modules in a hyper-diverse radiation. *American Naturalist*.
- In Revision Balk, M., J. Deck, K.F. Emery, R.L Walls, D. Reuter, R. LaFrance, J. Arroyo-Cabrales, P. Barret, J. Blois, A. Boileau, L. Brenskelle, N.R. Cannarozzi, J.A. Cruz, **L.M. Dávalos**, M. Hantak, S. Hopkins, B. Kohli, J.N. King, M. Koo, M. Lawing, H. Machado, S.S. McCrane, B. McLean, M. Morgan, S. Pilaar-Birch, D. Reed, E.J. Reitz, N. de la Sancha, N. Sewnath, N.S. Upham, A. Villaseñor, **L. Yohe**, R.P Guralnick, E.B. Davis. Best practices for aggregating and reporting individual traits. *iScience*.
- Accepted Yohe, L.R.♦, M. Fabbri, D. Lee, K. Davies, T.P. Yohe, M. K. R. Sanchez, E. Rengifo, R. Hall, G. Mutumi, B.P. Hedrick, A. Sadier, N.B. Simmons, K.E. Sears, E. Dumont, S. Rossiter, B.-A. Bhullar, and L.M. Dávalos. 2021. Ecological Constraints on Highly Evolvable Olfactory Receptor Genes and Morphology. *Evolution. bioRxiv* DOI: 2021.09.06.459178
- Accepted Osmanski, A.B., N.S. Paulat, J. Korstian, J.R. Grimshaw, M. Halsey, K.A.M. Sullivan, **D.D.**Moreno-Santillán°, C. Crookshanks, J. Roberts, C. Garcia, L.M. Dávalos, M.G. Johnson, L.D.

  Densmore, R. D. Stevens, Zoonomia Consortium, J. Rosen, J. M. Storer, R. Hubley, A.F.A.

  Smit, D.A. Ray. Insights into mammalian TE diversity via the curation of 200+ mammalian genome assemblies. *Science*.
- Doronina, L\*, G.M. Hughes\*, D. Moreno-Santillan, C. Lawless, T. Lonergan, L. Ryan, D. Jebb, B.M. Kirilenko, J.M. Korstian, **L.M. Dávalos**, S. C. Vernes, E.W. Myers, E.C. Teeling, M. Hiller, L.S. Jermin, J. Schmitz, M.S. Springer, D.A. Ray\*. Contradictory phylogenetic signals in the Laurasiatheria anomaly zone. *Genes* **13**. DOI: 10.3390/genes13050766 \*Equal contribution.
- Mohammed, R.S., G. Turner, K. Fowler, M. Pateman, M.A. Nieves-Colón, L. Fanovich, S.B. Cooke, **L.M. Dávalos**, S.M. Fitzpatrick, C.M. Giovas, M. Stokowski, A.A. Wrean, M. Kemp, M.J. LeFebvre, A.M. Mychajliw. Colonial legacies influence biodiversity lessons: how past trade routes and power dynamics shape present day scientific research and professional opportunities for Caribbean scientists. *American Naturalist*. DOI: 10.1086/720154
- Porzecanski, A., A. Bravo, M. Groom, **L.M. Dávalos**, N. Bynum, B. Abraham, J. Cigliano, C. Griffiths, D. Stokes, E. Sterling. Using Case Studies to Improve the Critical Thinking Skills of Undergraduate Conservation Students. *Case Studies in the Environment* 5(1): 1536396. DOI: 10.1525/cse.2021.1536396
- Dávalos, L.M., E. Dávalos, J.S. Holmes, C. Tucker‡, D. Armenteras. Forests, coca, and conflict: grass frontier dynamics and deforestation in the Amazon-Andes. *Journal of Illicit Economies and Development* 3(1): 74–96. DOI: 10.31389/jied.87
- Potter, J.H.T.°\*, R. Drinkwater, K.T J. Davies°, M.C.W. Lim‡, L.R. Yohe◊, X. Zhang, H. Chi, I. Levantis, B.K. Lim, C.C. Witt, G. Tsagkogeorga, M. dos Reis, Y. Liu, W. Furey, M.J. Whitley, D. Aksentijevic, L.M. Dávalos, S.J. Rossiter\*. Nectar-feeding bats and birds show parallel molecular adaptations in sugar metabolism enzymes. *Current Biology* 31(20): 4667-4674. DOI: 10.1016/j.cub.2021.08.018 \*Corresponding authors.
- Armenteras-Pascual, D., **L.M. Dávalos**, J.S. Barreto, A. Miranda, A. Hernández-Moreno, C. Zamorano-Elgueta, T. M. González-Delgado, M. C. Meza, Javier Retana-Alumbreros. Fire-induced loss of the world's most biodiverse forests in Latin America. *Science Advances* **7**(33), eabd3357. DOI: 10.1126/sciadv.abd3357
- Santana, S.E.\*, Z.A. Kaliszewska°\*, L.B. Leiser-Miller°, **M.E. Lauterbur**◊, J.H. Arbour, **L.M. Dávalos**, J.A. Riffell. Fruit odorants mediate co-specialization in a multispecies plant-animal mutualism. *Proceedings of the Royal Society B: Biological Sciences* **288**: 28820210312. DOI:

- 10.1098/rspb.2021.0312 \*Equal contribution.
- Lertxundi, U., S. Domingo-Echaburu, **L.M. Dávalos**, G. Orive. Drug pollution & Sustainable Development Goals. *Science of the Total Environment* **800**: 149412. DOI: 10.1016/j.scitotenv.2021.149412
- Yohe, L.R.♦, L.B. Leiser-Miller, Z.A. Kaliszewska, P. Donat‡, S.E. Santana, L.M. Dávalos. Diversity in olfactory receptor repertoires is associated with dietary specialization in a genus of frugivorous bat. *G3: Genes*|*Genomes*|*Genetics* 11(10): jkab260. DOI: 10.1093/g3journal/jkab260
- Moreno Santillan, D.°, T. Lama◊, Y.G. Guerrero, A. Brown‡, P. Donat‡, H. Zhao, S. Rossiter, L.R. Yohe◊, J. Potter, E.C. Teeling, S. Vernes, K.T.J. Davies, E. Myers, G. Hughes, Z. Huang, F. G. Hoffmann, A.P. Corthals, D. Ray\*, L.M. Dávalos\*. Large-Scale Genome Sampling Reveals Unique Immunity and Metabolic Adaptations in Bats. *Molecular Ecology* 30(23): 6449-6467. DOI: 10.1111/MEC.16027 \*Corresponding authors.
- Hall, R.P.°, G. Mutumi°, B.P. Hedrick, L.R. Yohe⋄, A. Sadier°, K.T.J. Davies°, S.J. Rossiter, K. Sears, L.M. Dávalos, E.R. Dumont. Find the Food First: An Omnivorous Sensory Morphotype Predates Biomechanical Specialization for Plant Based Diets in Phyllostomid Bats. *Evolution* 75(11): 2791-2801. DOI: 10.1111/evo.14270
- Murillo-Sandoval, P.°, E. Gjerdseth, C. Correa-Ayram, D. Wrathall, J. Van Den Hoek, **L. M. Dávalos**, R. Kennedy. No peace for the forest: Rapid, widespread land changes in the Andes-Amazon region following the Colombian civil war. *Global Environmental Change* **69**: 102283.

  DOI: 10.1016/j.gloenvcha.2021.102283
- Turvey, S.T.\*, C. Duncan, N.S. Upham, X. Harrison, **L.M. Dávalos**\*. Where the wild things were: intrinsic and extrinsic extinction predictors in the world's most depleted mammal fauna. *Proceedings of the Royal Society B: Biological Sciences* **288**: 20202905. DOI: 10.1098/rspb.2020.2905 \*Corresponding authors.
- Lim, M.‡, K. Bi, C. Witt, C. Graham, L. Dávalos. Pervasive genomic signatures of local adaptation to altitude across highland specialist Andean hummingbird populations. *Journal of Heredity*. DOI: 10.1093/jhered/esab008
- Potter, J.H.T.°, K.T J. Davies°, L.R. Yoheo, K. Warren, G. Tsagkogeorga, B.K. Lim, M. dos Reis, L.M. Dávalos, S.J. Rossiter\*. Dietary diversification and specialisation in neotropical bats facilitated by early molecular evolution. *Molecular Biology and Evolution* 38(9):3864–3883. DOI: 10.1093/molbev/msab028
- Jebb, D., Z. Huang, M. Pippel, G. M. Hughes, K. Lavrichenko, P. Devanna, S. Winkler, L. S. Jermiin, E.C. Skirmuntt, A. Katzourakis, L. Burkitt-Gray, D.A. Ray, K.A.M. Sullivan, L.M. Dávalos, Angelique P. Corthals, M.L. Power, G. Jones, R.D. Ransome, D. Dechmann, A.G. Locatelli, S.J. Puechmaille, O. Fedrigo, E.D. Jarvis, Mark S. Springer, M. Hiller, S.C. Vernes, E.W. Myers, E. C. Teeling. Six new reference quality bat genomes illuminate the molecular basis and evolution of bat adaptations. *Nature* 583: 578-584. DOI: 10.1038/s41586-020-2486-3
- Wang, K., S. Tian, J. Galindo-González, **L.M. Dávalos**, Y. Zhang, H. Zhao. Molecular adaptation and convergent evolution of frugivory in Old World and neotropical fruit bats. *Molecular Ecology* **29**(22): 4366-4381. DOI: 10.1111/mec.15542
- Dávalos, E., **L.M. Dávalos**. Social Investment Deters Smallholder Coca Cultivation. *Journal of Development Studies* **56**(6): 1118-1140. DOI: 10.1080/00220388.2019.1650167
- Shankar, A.‡, D.R. Powers, L.M. Dávalos, C.H. Graham. The allometry of daily energy expenditure in hummingbirds. *Journal of Animal Ecology* 89: 1254-1261. DOI: 10.1111/1365-2656.13185
- Davies, K.\*\*, L. YoheO, J. Almonte, M. Sánchez, E. Rengifo, E. Dumont, K. Sears, L.M. Dávalos\*, S. Rossiter\*. Foraging shifts and visual preadaptation in ecologically diverse bats. *Molecular Ecology* 29: 1839–1859. \*Corresponding authors. DOI: 10.1111/mec.15445
- Yohe, L.◊, K.T.J. Davies°, N.B. Simmons, K.E. Sears, E.R. Dumont, S.J. Rossiter, L.M. Dávalos. Evaluating the performance of targeted sequence capture, RNA-Seq, and degenerate-primer PCR cloning for sequencing the largest mammalian multigene family. *Molecular Ecology Resources* 20(1): 140-153. DOI: 10.1111/1755-0998.13093

Hedrick, B., G. Mutumi°, D. Munteanu, A. Sadier°, K. Davies°, S. Rossiter, K. Sears, **L. Dávalos**, E. Dumont. Morphological diversification under high integration in a hyper diverse mammal clade. *Journal of Mammalian Evolution* **27**: 563–575. DOI: 10.1007/s10914-019-09472-x

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- Yohe, L.♦, K.T.J. Davies°, S.J. Rossiter, L.M. Dávalos. Expressed *vomeronasal type-1 receptors* (*V1rs*) in bats uncover conserved sequences underlying social chemical signaling. *Genome Biology and Evolution* 11(10): 2741-2749. DOI: 10.1093/gbe/evz179
- Lim, M.‡, C. Witt, C. Graham, L.M. Dávalos. Parallel molecular evolution in pathways, genes, and sites in high-elevation hummingbirds revealed by comparative transcriptomics. *Genome Biology and Evolution* 11(6): 1552-1572. DOI: 10.1093/gbe/evz101
- Dávalos, L.M.\*, W.C. Lancaster, M.S. Núñez-Novas°, Y.M. León, B. Lei°, J. Flanders, A.L. Russell\*. A coalescent-based estimator of genetic drift, and acoustic divergence in the *Pteronotus parnellii* species complex. *Heredity* 122(4): 417-427. \*Equal contribution. DOI: 10.1038/s41437-018-0129-3
- Armenteras, D., L. Schneider, **L.M. Dávalos**. Fires in Protected Areas Reveal Unforeseen Costs of Colombian Peace. *Nature Ecology and Evolution* **3**: 20-23. DOI: 10.1038/s41559-018-0727-8
- Sadier, A.\*, K.T.J. Davies\*, **L. Yohe**‡, K. Yun, **P. Donat**‡, B.P. Hedrick\*, E.R. Dumont, **L.M. Dávalos\***, S.J. Rossiter\*, K.E. Sears\*. Evidence for multifactorial processes underlying phenotypic variation in bat visual opsins. *eLife* 2018;7: e37412. \*Corresponding authors. DOI: 10.7554/eLife.37412
- Rojas, D.◊, M. Moreira, M.J. Ramos Pereira, C. Fonseca, **L.M. Dávalos**. Updated distribution maps for neotropical bats in the superfamily Noctilionoidea. *Ecology* 99(9): 2131. DOI: 10.1002/ecy.2404 (Data Paper)
- Dávalos, E., L. Morales, J. Holmes\*, **L.M. Dávalos**. Opposition Support and the Experience of Violence Explain the Colombian Peace Referendum. *Journal of Politics in Latin America* 10(2): 99-122. \*Corresponding author. DOI: 10.1177/1866802X1801000204
- Hedrick, B.P.°, L. Yohe‡, A. Vander Linden, L. M. Dávalos, K. Sears, A. Sadier°, S.J. Rossiter, K.T.J. Davies°, E. Dumont. Assessing Soft-Tissue Shrinkage Estimates in Museum Specimens Imaged With Diffusible Iodine-based Contrast-Enhanced Computed Tomography (diceCT). *Microscopy and Microanalysis* 24(3): 284-291. DOI: 10.1017/S1431927618000399
- Yohe, L.‡, L.M. Dávalos. Genetic function of *Trpc2* predicts accessory olfactory bulb form in bat vomeronasal evolution. *Biological Journal of the Linnean Society* 123(4): 796-804. DOI: 10.1093/biolinnean/blv015
- Holmes, J.S., A. Palao Mendizabal°, D. Saucedo De La Fuente, K. Mets‡, A. Cárdenas, D. Armenteras, **L.M. Dávalos**. Identifying municipal risk factors for leftist guerrilla violence in Colombia. *Peace Economics, Peace Science and Public Policy* 24(2): 23-51. DOI: 10.1515/peps-2017-0009
- Tavares, V.d.C.\*, **O.M. Warsi**‡, F. Balseiro, C. Mancina, **L.M. Dávalos**\*. Out of the Antilles: Fossil Phylogenies Support Reverse Colonization of Bats to South America. *Journal of Biogeography* 45(4): 859-873. \*Equal contribution. DOI: 10.1111/jbi.13175
- Rojas, D.O\*, M.J. Ramos Pereira, C. Fonseca, **L.M. Dávalos\***. Eating down the food chain: generalism is not an evolutionary dead end for herbivores. *Ecology Letters* 21(3): 402-410. \*Corresponding authors. DOI: 10.1111/ele.12911 **Corrigendum**: DOI: 10.1111/ele.12968
- Teeling, E., S. Vernes, **L.M. Dávalos**, D.A. Ray, M.T. Gilbert, E. Myers, and the Bat1K Consortium. Bat Biology, Genomes, and the Bat1K Project: to generate chromosome-level genomes for all living bat species. *Annual Review of Animal Biosciences* 6, 23-46. DOI: 10.1146/annurev-animal-022516- 022811
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Y., Janssen, S., Morton, J.T., Mirarab, S., Xu, Z.Z., Haroon, M.F., Kanbar, J., Zhu, Q., Gonzalez, A., Song, S.J., Kosciolek, T., Bokulich, N.A., Lefler, J., Brislawn, C.J., Humphrey, G.C., Owens, S.M., Hampton-Marcell, J., Berg-Lyons, D., McKenzie, V., Fierer, N., Fuhrman, J.A., Clauset, A., Stevens, R.L., Shade, A., Pollard, K.S., Goodwin, K.D., Jansson, J.K., Gilbert, J.A., Knight, R., The Earth Microbiome Project Consortium\*. A communal catalogue reveals Earth's multiscale microbial diversity. *Nature* 551, 457-463. DOI: 10.1038/nature24621 \* As part of this massive consortium.

- 2017 **Mets, K.D.**‡, D. Armenteras, **L.M. Dávalos**. Spatial autocorrelation reduces model precision and predictive power in deforestation analyses. *Ecosphere* 8(5), e01824. DOI: 10.1002/ecs2.1824
- Armenteras, D., C. Gibbes, J. Anaya, **L.M. Dávalos**. Integrating remotely sensed fires for predicting deforestation for REDD+. *Ecological Applications* 27(4), 1294-1304. DOI: 10.1002/eap.1522
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- Nuñez-Novas, M.S.°, Y.M. León, J. Mateo, **L.M. Dávalos**. Records of the cave-dwelling bats (Mammalia: Chiroptera) of Hispaniola with an examination of seasonal variation in diversity. *Acta Chiropterologica* 18(1), 269-278. DOI: 10.3161/15081109ACC2016.18.1.016
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- Dahan, R.A.\*‡, R.P. Duncan°, A.C.C. Wilson, L.M. Dávalos\*. Expansion of amino acid transporters is associated with the evolution of obligate endosymbiosis in sap-feeding insects (Hemiptera: Sternorrhyncha). *BMC Evolutionary Biology* 15, 52. \*Corresponding authors. DOI: 10.1186/s12862-015-0315-3
- Corthals, A.P., A. Martin°, **O.M. Warsi**‡, M. Woller-Skar, W. Lancaster, A. Russell, **L.M. Dávalos.** From the field to the lab: Best practices for field Preservation of Bat Specimens for Molecular Analyses. *PLoS One* 10(3), e0118994. DOI: 10.1371/journal.pone.0118994
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# Edited Books (3 published)

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- 2020 <u>Phyllostomid bats: A Unique Mammalian Radiation</u>. T. Fleming, **L.M. Dávalos**, and M.A. Ribeiro de Mello (eds.). <u>Chicago: University of Chicago Press</u>.

2018 <u>The Origins of Cocaine: Colonization and Failed Development in the Amazon Andes</u>. P. Gootenberg, and **L.M. Dávalos** (eds.). London: Routledge.

# Peer-reviewed policy report (1 published)

Leadley, P., D. Obura, L. Shannon, M. Cecilia, K. Millette, A. Rankovic, E. Archer, F. Ato, N. Bax, A. Kutchhi, J.M. Costello, L.M. Davalos, F. de Oliveira Roque, F. DeClerck, L. Dee, F. Essl, S. Ferrier, S. Hashimoto, C. Ifejika, F. Isbell, M. Kok, S. Lavery, D. Leclère, R. Loyola, S. Lwasa, M. McGeoch, A.S. Mori, E. Nicholson, J. Manuel, K. Öllerer, S. Polasky, C. Rondinini, O. Selomane, B. Strassburg, R. Sumaila, D.P. Tittensor, E. Turak, L. Urbina, M. Vallejos, E. Vázquez-Domínguez, P. Verburg, P. Visconti, S. Woodley, J. Xu, S. Jellesmark. Transformative actions on all drivers of biodiversity loss are urgently required to achieve the global goals by 2050. Expert Input to the Post-2020 Global Biodiversity Framework. biodiscovery & GEO BON.

# Peer-reviewed book sections (11 published)

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# Abstracts and short–form publications (33 published)

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# Invited Talks (Last 3 years)

- 20 April, Dávalos, L.M. How different are bats from non-bats? Insights from the age of genomes.
  - 2022 Department of Ecology and Evolution Colloquium. Stony Brook University, NY.
- 14 April, Dávalos, L.M. How different are bats from non-bats? Insights from the age of genomes.
  - 2022 Department of Ecology and Evolutionary Biology Seminar. Virginia Tech University. Via Zoom.
- 14 March, Dávalos, L.M. Integrative Biodiversity Science for a Global Future. Department of Biodiversity,
  - 2022 Earth & Environmental Science Seminar. Drexel University. Philadelphia, Pennsylvania and via Zoom.
- 14 January, Dávalos, L.M. Sensing in the dark. Florida Museum's Department of Natural History Seminar Series, University of Florida. Via Zoom.
  - 22 Dávalos, L.M. Sentir en la oscuridad: ecología molecular de los sentidos de los murciélagos.
- November, Opening Keynote of the IV Congreso Colombiano de Mastozoología. Via Zoom. 2021
- 19 Gootenberg, P., M. Paredes, M.C. Torres, and L.M. Dávalos. Webinar: Lanzamiento Los
- November, Orígenes de la Cocaína moderated by Maria Alejandra Vélez (CESED, UniAndes). Via Zoom. 2021
- Spitzer, P., J. Uriarte, and **L.M. Dávalos**. *Approaches to Global and Environmental Issues*November, moderated by Sophie Raynard-Leroy (Institute for Globalization Studies, UniAndes). Via Zoom.
- 2021

  19 October, Dávalos, L.M. Sensing in the dark: molecular ecology\* of #BatSenses. Department of Ecology
- 2021 and Evolutionary Biology Seminar, University of Arizona. Via Zoom.
- 15 October, Dávalos, L.M. Forests, bats, guerrillas: A systems approach for thought and action in the Anthropocene. Living World Open Night Series of the College of Arts and Sciences. Via Zoom.
- 12 October, Dávalos, L.M. Sensing in the dark: molecular ecology\* of #BatSenses. Centre for Biodiversity and Conservation Science Seminar, University of Queensland. Via Zoom.

- 21 Dávalos, L.M. Forests, drugs, frontiers. Drugs and the environment: towards a dedicated
- September, booklet for the World Drug Report 2022 UNODC/GIZ Expert Meeting September 20-21. Via
  - 2021 Teams
  - 23 June, Dávalos, L.M. & L.R. Yohe. Protocols for maximizing future use of bat tissues. Bats without
    - 2021 Borders Webinar. Via Zoom.
  - 21 June, Dávalos, L.M. Diversity in the Skies: Molecular Ecology of #BatSenses. II Virtual Meeting of
    - 2021 Systematics, Biogeography and Evolution (SBE). Via Zoom.
  - 27 May, Dávalos, L.M. ¿Cómo interactúan los cultivos ilícitos y la deforestación en Colombia?
    - 2021 Asamblea de Estudiantes, Universidad Nacional de Colombia. Via Zoom.
  - 22 April Dávalos, L.M. Forests, bats, querrillas: A systems approach for thought and action in the
    - **2021** Anthropocene. Scott A. Margolin '99 Lecture in Environmental Affairs, Middlebury College. Via Zoom.
- 12 February Dávalos, L.M. *Diversity in the Skies: A Genomic Journey among Bats*. Biological Sciences & 3 March Darwin Day Seminar, DePaul University and EAWAG. Via Zoom.
  - 2021
- 12 **Dávalos, L.M.** <u>Some of what I learnt from collecting "big data" from decidedly non-model</u>
  November <u>organisms</u>. IACS Seminar. Via Zoom.
  - 2020
- 29 October Dávalos, L.M. <u>Más Preguntas que Respuestas en la Genómica Sensorial de Murciélagos</u>.
  - 2020 Seminario Virtual de Ciencias Biológicas. Via Youtube.
- 28 October Dávalos, L.M. *Integrative Biodiversity Science for a Global Future*. Wyss Symposium on Integrative Biodiversity Conservation Science. Via Zoom.
- 14 October Dávalos, L.M. <u>Webinar: Economías Ilícitas y Medio Ambiente</u>. Centro de Estudios sobre Seguridad y Drogas. Via WebEx.
- 9 October, Dávalos, L.M. & Olival, K. *Emerging diseases, biodiversity, and human wellbeing: links and opportunities.* Mack Lipkin Man and Nature Series Panel Discussion. Via Facebook Live.
  - 9 August Dávalos, L.M. & A.P. Corthals. <u>COVID–19 in context</u>. Indian Scientists' Response to COVID–2020 19. Via Zoom.
- 31 July 2020 **Dávalos, L.M,** A. Hart, T. Kingston, A. Morss. <u>Bats in the Media Webinar</u> moderated by Dan Riskin. Via Zoom.
- 29 July 2020 Dávalos, L.M. <u>Building an inclusive bioethics for field work in the 21<sup>st</sup> century</u>. <u>Gender and diversity in STEMM: building an inclusive community</u>. I Virtual Meeting of Systematics, Biogeography and Evolution (SBE). Via Zoom.
  - 13 June Dávalos, L.M. <u>Muerte y Vida de la biodiversidad: el caso de las Antillas</u>. Semana de los
  - 2020 Murciélagos. Via Zoom.
- 2 June 2020 **Dávalos, L.M**. <u>Más Preguntas que Respuestas en la genómica sensorial de murciélagos</u>. Programa de Conservación de Murciélagos de Perú. Via Zoom.
- 29 August Dávalos, L.M. & the Bat1K Team. *The Genomics of Why There are So Many Species of Bats*.
  - 2019 Genome 10K Annual Meeting. Rockefeller University, New York, New York.
- 6 August Dávalos, L.M. Deforestación, Desarrollo y Política Pública. Seminario: ¿El Medio Ambiente
  - 2019 Como Víctima de la Paz? Deforestación y Conservación De Biodiversidad. Universidad de Los Andes, Bogotá, Colombia.

#### Conference Presentations (Last 3 years)

26 May, Dávalos, L.M. Phyllostomid phylogeny is still a work in progress.
 2021 2.

29 May Dávalos, L.M. What Makes Phyllostomid Bats A Unique Mammalian Radiation. World Bat

2020 Twitter Conference 1.

26 October Dávalos, L.M., L.R. Yohe, P. Pulido-Santacruz, M. González, A. McPherran, J.A. Soto-

2019 Centeno, D.M. Morales Martinez, A.J. Lozano Florez, J. Flanders, D. Rojas, W. Frick, & A.P. Corthals. *Labs without Borders: Methods for Extracting, Amplifying, and Sequencing in the* 

Field: 49th Annual North American Symposium on Bat Research, 23–26 October 2019

Kalamazoo, Michigan.

# **University Teaching**

Undergraduate courses taught at SUNY Stony Brook

1.5 credits/instructor Global, Cultural, and Environmental Issues, GLI 320 offered first Spring 2021

4.0 credits Statistics and Data Analysis: A Conceptual Approach, BIO 211, offered every

semester Fall 2017–Fall 2018

3.0 credits Conservation Biology, BIO 336/BEE572 offered first Spring 2010, every Fall

2010–2019, Spring 2022

1.5 credits/instructor General Ecology, BIO113 (con-instructor with D. Padilla) 2010

Undergraduate Research Supervising (molecular and bioinformatics lab) and Mentoring

Spring 2020–present
Spring 2020–present
Fall 2020–Spring 2021
Fall 2020–Spring 2021
Fall 2020–Spring 2021
Spring 2020–Spring 2021
Spring 2020–Summer

Sarah Vaccaro
Trinity Chen
Mirena Medina
Isabelle Loop
Amena Islam
Jessica Semel
Julie Micko

2021

Summer 2019–Spring Clara Tucker

2020

2016

Spring 2018–Spring 2019
Summer–Fall 2018
Summer 2017
Fall 2014–Spring 2017
Spring 2014–Spring 2016
Spring 2014–Spring 2016
Spring 2016
Spring 2018
Sarah Heder
Kaitlyn Malewicz
Yakov Pichkar
John Navilio
Greg Poterewicz

Summer 2015-Spring

Ramatu Abubakar (SBU), Sanah Afzal (John Jay College), Margarita

Bartasunaite (John Jay College), Bhavana Patil (SBU)

Spring 2013 Rachel Lohrdal (Anthropology program)

Fall 2012–Spring 2013
Fall 2012–Spring 2013
Summer 2010–Fall 2010
Spring 2010
Spring 2010
Fall 2009–Spring 2011

Yesha Shah
Donald J. Pantino
Melissa Zheng
Alexander Lucaci
Tiffany Wang
Anne Szeto

Fall 2009–Spring 2011 Anne Szeto
Fall 2009–Spring 2010 Rosa Guerrero

Spring 2009 Co-advised undergraduate engineering students Muhammad Hussain, Kevin Li

and Jawad Rana, 3rd place winners of the 2009 Ureca! Competition

Graduate courses and seminars taught

Intensive 3X 3-hr-session

workshop

Taller de Escritura Científica en Ecología y Biología Evolutiva (Ecology and Evolutionary Biology Scientific Writing Workshop) 11–12 March 2019 at Universidad Nacional of Colombia. With Danny Rojas and Laurel Yohe.

2.0 credits Seminar on the ecology and evolutionary biology of early state formation, BEE

692 2018

4 lectures on

Principles of Evolution BEE551 Fall 2013

phylogenetics

Intensive 3X 8-hr day

workshop

Análisis Espacial para la Conservación de la Biodiversidad y Manejo de Paisajes

Tropicales (Spatial Analysis for Biodiversity Conservation and Tropical

Landscape Management Workshop) 8-10 July 2013 at Universidad Nacional of

Colombia

2 lectures Principles of Evolution BEE551 Fall 2012

Principles and Applications of Ecology and Evolution BEE 576 (currently with J. 2.0 credits/person

Gurevitch) offered every Fall 2011–2016

3.0 credits Conservation Biology, BEE 572 offered Fall 2010-present

1.0 credit Seminar on the evolutionary consequences of anthropogenic activities, BEE 692

(with W. Aguirre) 2009

#### Dissertation and other advising

Nicolette Sipperly, SBU-Ecology and Evolution Joined lab Spring 2021 Joined lab Spring 2021 Paul Donat, SBU-Ecology and Evolution Clara Tucker, SBU-Ecology and Evolution Joined Ma Fall 2020 Joined PhD Fall 2019 Alexis Brown, SBU-Ecology and Evolution Joined PhD Fall 2018 William Thomas, SBU-Ecology and Evolution Anna McPherran. SBU-Ecology and Evolution Joined PhD Fall 2017 Joined PhD Fall 2014 Kristjan Mets, SBU-Ecology and Evolution Joined PhD Fall 2012 Fanny Cornejo, SBU-Anthropology (co-advised with P. Wright) M. Elise Lauterbur, SBU-Ecology and Evolution (co-advised with P. Wright) E&E PhD, Spring 2019 E&E PhD, Fall 2018 Marisa Lim SBU–Ecology and Evolution (co–advised with C. Graham) Elizabeth Fitzgerald, SBU-Ecology and Evolution E&E MA, Spring 2018 E&E MA, Spring 2018 Alexander Lengers, SBU-Ecology and Evolution E&E PhD, Spring 2017 Laurel Yohe, SBU-Ecology and Evolution E&E MA, Spring 2017 Katherine (Katie) R. Martin, SBU-Ecology and Evolution MSc, Fall 2014 Maria Alejandra Chadid, masters student at *Universidad Nacional* (Bogota, Colombia) E&E MA, Spring 2014 Xiayou Zhang, SBU-Ecology and Evolution E&E MA dropout Spring Shaelyn Bishop, SBU-Ecology and Evolution 2014

Samantha DelSerra, SBU-Ecology and Evolution

Romain Dahan, SBU-Ecology and Evolution

Genna Tudda, SBU-Ecology and Evolution

E&E MA, Spring 2014 E&E MA, Spring 2014 E&E MA, Spring 2013

BSc, Spring 2011

Miguel Santiago Núñez, undergraduate student at Universidad Autónoma de Santo Domingo (UASD) E&E MA, Spring 2011 Aaron Goldberg, SBU-Ecology and Evolution

E&E MA, Spring 2011 Amanda Crow, SBU-Ecology and Evolution E&E MA, Spring 2011 Alison Onstine, SBU-Ecology and Evolution David Carlson (SBU-E&E, graduated Spring 2022), James Herrera (SBU-Dissertation committees

Anthropology, graduated Spring 2015), Joseph Kelly (SBU-E&E, graduated Summer 2020), Maureen Lynch (SBU-E&E, graduated Spring 2019), Shannon Morgan (SUNY Albany, graduated Spring 2015), Miguel Pinto (CUNY-Graduate Center, graduated Fall 2014), Lisa Prowant (SBU-E&E, graduated Spring 2021), Vladimir Rojas (Universidad del Valle-Biology, graduated Fall 2012), Ryan Rothman (SBU-Anthropology), Haeyeong Ryu (SBU-E&E, MA Fall 2016), Gena Sbeglia (SBU-E&E, graduated Spring 2017), Anusha Shankar (SBU-E&E,

graduated Fall 2019), Mihir Umarani (SBU-E&E), David Vanier (IDPAS), Nicolas

Wiggenhauser (SBU-IDPAS)

Postdoctoral supervising (where they are now)

Fall 2020–present Dr. Tanya Lama (NSF postdoctoral fellow)

Summer 2019 Dr. M. Elise Lauterbur (NSF postdoctoral fellow at University of Arizona)

Summer 2017-Spring Dr. Laurel R. Yohe (Assistant Professor at University of North Carolina, Charlotte)

2018

Spring 2013-Fall 2016 Dr. Danny Rojas (Assistant Professor at Universidad Javeriana, Cali, Colombia) Fall 2013-Summer 2015 Dr. Marianne S. Moore (Assistant Professor at Arizona State University, Mesa)

Lab rotation

Fall 2009 Emmanuel Asare (Genetics program)

Guest lectures

Spring 2015 1 lecture and discussion to undergraduate student of Tembo: the Wildlife

Conservation Society of Stony Brook University

Fall 2013 1 lecture in BEE585 Research Design and Analysis in Ecology and Evolution,

instructor: Jessica Gurevitch

Spring 2013 1 lecture in Anthropology 360 Primate Conservation, instructor: Patricia Wright Fall 2012

1 lecture in History 380 Topics in Latin American History, instructor: Paul

Gootenberg

# Department Service

Fall 2021-present Lead, awards and advancement committee Fall 2021-present Lead, newsletter, and communications committee Summer 2020-Spring Faculty representative, Code of Conduct committee

2021

Summer 2020-Spring Department culture committee member

2021

2020 Executive committee member

Fall 2019-present Academic mentor: Dr. Natasha Vitek

Fall 2012-Spring 2020 Department representative at Undergraduate Biology Executive Committee

Spring 2019 Chair, preliminary exam committee

Spring 2018–Spring 2019 Member search committee joint TBI-E&E hire

Evaluator for BIO204 Phylogenetics lab session Fall 2017 Spring 2013–Fall 2015 Member, Masters program executive committee.

Fall 2012-Spring 2013 Member Ecology and Evolution Chair search committee

Summer 2012 Department representative at Howard Hughes Medical Institute and the National

Academies Summer Institutes for Undergraduate Education

Spring 2012 Chair of PhD admissions committee

Fall 2011 Member faculty search committee, human genomics/genetics hire for Human

**Evolution UG major** 

Fall 2010-Spring 2011

ESAC (second year student advisory committee) Spring 2010 Ecology and Evolution Strategic Planning Committee

Spring 2009 Ecology and Evolution Graduate Program Admissions committee

Fall 2008-2010 Member Steering Committee, SBU-BNL Center for Impacts of Regional Climate

Change

#### University Service

Spring 2022–present Member, Governor's Island Research Steering Group

Spring 2022–present Member, REACH Visioning Committee

https://www.youtube.com/watch?v=6nmMv8s787M Marine Conservation and Policy committee, SOMAS

Fall 2020–present Marine Conservation and Policy committee, SC Fall 2019–present Advisory Board for Institute for Global Studies Spring 2022 Moderator, Global Drug History Book Launch

Fall 2021 Lead, Globalization working group, College of Arts and Sciences.

Fall 2021 Entering Mentoring Undergraduate Biology Faculty Panel

Fall 2021 Reviewer, Governors Island RFEI Proposal

Fall 2021 Lead, Climate Change and Natural and Anthropogenic Disaster Prevention-

Mitigation

Spring 2021 Research & Innovation Task force member

Spring 2021 Strategic Research Growth Working Group member Fall 2019–Spring 2020 Member search committee SOMAS ecologist hire

Fall 2019 INSPIRES summary panelist

Spring 2019 Member Dean's committee on Global Environment/Energy and Natural

Resources

Spring 2017 Lab selected for Stony Brook University promotional video "The Future is Now"

https://www.youtube.com/watch?v=J1Zg7 QT1zY

Spring 2016–Spring 2017 Diversity Working Group

Fall 2016–Spring 2017 Member search committee joint GHI–E&E hire

Spring 2014 Tinker Grant Committee

Fall 2013 Interviewer of Global Health Initiative Director
Fall 2013 Globalization initiative writing committee member

Spring 2013 University–wide STEM committee

Spring 2013 Co-organizer with P. Gootenberg of Coca at the Crossroads Symposium

(http://tinyurl.com/kxgzuyr), 3 April.

Spring 2013 Member STEM education initiative

Spring 2011 Chair in Panel 3: On Sustainability: Experiences, Essays, Programs in Stony

Brook University Latin American & Caribbean Studies Center 10th Annual

Graduate Conference 8 April

Fall 2010–present Co–organizer Latin American and Caribbean Studies Center Seminar Series

Spring 2010 Panel discussion of Communicating Science workshop 14 May

Spring 2010 Tinker Grant Committee

Fall 2008–2010 Member Steering Committee, SBU–BNL Center for Impacts of Regional Climate

Change

# Community Service

Summer 2014 Mentoring research of Alessondra Bruno, Courtney Cheng, Samantha DeRosa, Cameron Morales, and Yasin Perez, Long Island High School students

Fall 2012–Spring 2013 Mentoring research of volunteer and SBU UG graduate Brandon Baird

Mentoring research of Syracuse UG student Jonah Rothleder

Mentoring research of Gabrielle Donnelly, Samuel Gochman, Edward LI,
Cameron Morales, and Yasin Perez, Long Island High School students

Mentoring research of Flodia Caballero (admitted at Columbia University).

Mentoring research of Elodia Caballero (admitted at Columbia University), Johana Peña, Zachary Rowe (admitted at Stony Brook University), and Nancy

Wei (admitted at Northwestern University), Long Island High School students

Summer 2011 Mentoring research of Alexander Legakis (admitted at Cornell University), Long

Island High School student

Summer 2010 Mentoring research of Bonnie Lei (admitted at Harvard University), southern

California High School student, Siemens Regional Finalist 2010, Finalist Intel Science Talent Search 2011, 2<sup>nd</sup> Grand Award Animal Sciences category at Intel

International Science and Engineering Fair 2011

Summer 2010 Mentoring research of Laura Barger (admitted at University of Pennsylvania),

Long Island High School student

Summer 2009-Summer

2010

Mentoring research of Peter Connell (admitted at SUNY College of Environmental Science and Forestry), Long Island High School student, semifinalist at the Long Island Junior Science and Humanities Symposium, NOAA "Taking the Pulse of

the Planet" award at NYSSEF 2011

Spring 2010–Spring 2012 Fall 2009–Spring 2010 Mentoring research of volunteer Mark Hall

Mentoring research of Kendra Cornejo, High School student, Intel Science Talent

Search Semifinalist 2011 (at Gurevitch lab)

Fall 2008–Fall 2009 Mentoring research of volunteer and SBU UG graduate Elizabeth Simola

# Past Experience

#### 2015–2016 United Nations Office on Drug and Crime

Consultant for the United Nations 2016 World Drug Report thematic chapter on environmental sustainability

- Reviewed environmental impact of illegal drugs worldwide
- Analyzed new data identifying 1960s/70s development projects as coca and deforestation nuclei
- Helped shift official policy toward considering social sustainability in development projects

#### 2007–2008 Open University, Milton Keynes, UK

Lecturer (US equivalent: Assistant Professor): Molecular Ecology

• Generated exercises in evolutionary biology for non-traditional, distance learners

#### 2005–2006 Columbia University, New York, USA

Instructor, Department of Ecology, Evolution, and Environmental Biology (E3B)

• Co-designed and co-taught adult learner course: Evolution: from Darwin to DNA

#### 2005–2006 American Museum of Natural History, New York, USA

Postdoctoral Research Associate, PI: Susan L. Perkins

- Generated and aligned genome-based orthologs from malaria parasites
- Discovered and mitigated sources of systematic error in malaria parasite phylogenomics

#### 2004–2005 University of Arizona, Tucson, USA

Postdoctoral Research Associate, PI: Howard Ochman

- Co-designed and implemented strategies for finding prokaryotic pseudogenes
- Discovered the largest set of *E. coli* pseudogenes ever reported
- Upended conventional wisdom that prokaryotes lack pseudogenes

# 1998–2004 <u>Columbia University and American Museum of Natural History, New York, USA</u>

# Graduate Fellow in Ecology, Evolution and Environmental Biology, PI: Nancy B. Simmons

- Collected and analyzed data leading to 17 peer-reviewed publications, most single-author
- Organized and led field expeditions throughout Latin America, including the

#### Caribbean islands

 Assisted teaching and evaluation of undergraduate-level lecture and field courses

#### 1997–1998 Colombia '98 Expedition

#### Field Researcher

- Organized, raised funds, and conducted field ornithology survey at Serranía de los Churumbelos, site declared National Natural Park Serranía de los Churumbelos on 30 August 2007 partly based on this expedition
- First biologist to visit the Serranía de San Lucas in 50 years, site proposed as National Natural Park Serranía de San Lucas in 2010 partly based on this reconnaissance survey
- Research assistant for "Avifauna of Tambito and Munchique", endorsed by the Cambridge Expedition Committee and Museo de Historia Natural (Universidad del Cauca), Popayán

# 1996–1997 <u>Biotechnology Research Unit, Centro Internacional de Agricultura Tropical</u> (CIAT), Cali, Colombia

#### Undergraduate fellow

- Generated rice breeding segregating cross to discover molecular markers of virus resistance
- Conducted DNA extractions and restricted fragment polymorphism analyses

### 1994–1996 Universidad del Valle, Cali, Colombia

#### **Teaching Assistant**

 Assisted teaching and evaluation of advanced ecology, evolutionary biology, and genetics undergraduate-level lecture

#### Languages

First language: SpanishMost fluent: English

Working knowledge: Portuguese, French

#### Media Mentions and Appearances (original reporting only)

2022	Mowbray, S. All coked up: The global environmental impacts of cocaine <i>Mongabay</i> 4 April https://news.mongabay.com/2022/04/all-coked-up-the-global-environmental-impacts-of-cocaine/
2022	Cornwall, W. How a disappearing ear bone turned bats into masters of echolocation. <i>Science</i> 26 January https://tinyurl.com/bdct29d9
2022	Mouterde, P. Pour protéger la biodiversité, des scientifiques appellent à des changements majeurs. <i>Le Monde</i> 19 January https://tinyurl.com/yckh2v7n
2022	Anonymous. Biodiversity faces its make-or-break year, and research will be key. <i>Nature</i> 19 January https://www.nature.com/articles/d41586-022-00110-w
2021	Bustamante Hernández, N. To change policies, insert yourself in them': Q&A with biologist Liliana Dávalos. <i>Mongabay</i> 29 October https://news.mongabay.com/2021/10/to-change-policies-insert-yourself-in-them-qa-with-biologist-liliana-davalos/
2021	Hittier, R. Bat Superpowers. <i>PBS NOVA</i> 15 September https://www.pbs.org/video/bat-superpowers-nfuph6/
2021	Hayden, E.K. Could editing the genomes of bats prevent future coronavirus pandemics? Two scientists think it's worth a try. <i>STAT News</i> 1 July https://tinyurl.com/e6zrvbuk

Sanford, K. Episode 829 – Why Are Bats Disease Vectors? *This Week in Science* (podcast) 16 June https://www.twis.org/16-june-2021-episode-829-why-are-bats-disease-vectors/

- 2020 Cummins, E. Bats, museums, and viruses collide: a scientific love story. *National Geographic* 4 December https://www.nationalgeographic.com/science/2020/12/bat-scientist-and-forensic-pathologist-team-up-on-covid-19-science/
- Burby, L.N. A Faculty Perspective on How 2020 Will Change Us. *Stony Brook University Magazine* Fall https://www.stonybrook.edu/magazine/2020-fall/a-faculty-perspective-on-how-2020-will-change-us
- Calle, M. C. ¿Cambia el escenario ambiental en Latinoamérica con la llegada de Joe Biden a la presidencia de Estados Unidos? *Mongabay LatAm* 18 November https://es.mongabay.com/2020/11/joe-biden-medio-ambiente-y-cambio-climatico-latinoamerica/
- Calle, H & M. M. Monsalve. ¿Comer menos carne para evitar una crisis ambiental? Esto dice la ciencia. *El Espectador* 12 November https://www.elespectador.com/noticias/medio-ambiente/diasin-carne-si-funciona-contra-el-cambio-climatico-esto-dice-la-ciencia/
- 2020 Wilcox, C. Out of the Darkness. *Bats* 39(3): 14–17 https://www.batcon.org/article/out-of-the-darkness/
- Montanari, S. Gene Genius: Researcher and BCI science advisory committee member unveils new knowledge about bat genomes. *Bats* 39(3):24 https://www.batcon.org/article/gene-genius/
- Barham, E. Colombia's lawmakers are debating how to regulate cocaine. Here's what we know about decriminalization. *Washington Post* 19 October https://www.washingtonpost.com/politics/2020/10/19/colombias-lawmakers-are-debating-how-regulate-cocaine-heres-what-we-know-about-decriminalization/
- 2020 Calle, H. (Infoamazonia). La Amazonia que queremos necesita a la ciencia. *El Espectador* 10 August https://www.elespectador.com/noticias/medio-ambiente/la-amazonia-que-queremos-necesita-a-la-ciencia/
- Anonymous. Comment les chauves-souris survivent-elles à des virus mortels? *Radio-Canada* 25 July <a href="https://ici.radio-canada.ca/nouvelle/1721849/chiropteres-genome-six-especes-consortium-bat1k">https://ici.radio-canada.ca/nouvelle/1721849/chiropteres-genome-six-especes-consortium-bat1k</a>
- 2020 Koumoundouros, T. Bats Can Survive Carrying Deadly Viruses, And We're Starting to Figure Out How. *Sciencealert* 25 July https://www.sciencealert.com/bat-genomes-may-hold-clues-to-their-deadly-virus-resisting-superpowers
- 2020 Giardina, V. The Week That Wasn't in COVID-19: Bat Study, Handwashing Apps, No Immunity? *Medscape* 26 June https://www.medscape.com/viewarticle/933044
- Ebrahim, Z. Bats are immune to coronaviruses, so scientists are looking at what we can learn from them. *health24* 24 June https://tinyurl.com/yccucyuv
- Anonymous. Holy goblet cells! Scientists studying bat-immunity. *InnovateLI* 18 June https://www.innovateli.com/innovation-in-the-age-of-coronavirus/
- Hertzberg, N. Les secrets de la chauve-souris, «souche à virus» au système immunitaire d'exception. *Le Monde* 13 April https://tinyurl.com/yd843xwy
- 2020 InfoAmazonia. Tres claves para saber qué pasó con los incendios de La Macarena. *El Espectador* 24 February https://www.elespectador.com/ambiente/tres-claves-para-saber-que-paso-con-los-incendios-de-la-macarena-article-906168/
- 2019 Morales, L. La carretera es un boquete para explotar de manera desaforada el Amazonas. *El Espectador* 17 October https://tinyurl.com/y43sjwg5
- InfoAmazonia. La pregunta de un niño sobre la Amazonia que Duque respondió mal. *El Espectador* 24 September https://www.elespectador.com/noticias/medio-ambiente/la-pregunta-de-un-nino-sobre-la-amazonia-que-duque-respondio-mal/
- 2019 Paz, A. Estudio concluye que deforestación aumenta a medida que se intensifica el conflicto armado en Colombia. *Mongabay LatAm* 3 September https://es.mongabay.com/2019/09/conflicto-armado-y-coca-incrementan-deforestacion-en-colombia/
- 2019 Lancaster, W. Speciation and Divergent Behaviour in Caribbean Populations of the Greater Mustached Bat. *Nature Ecology and Evolution Behind the Paper* 31 August https://tinyurl.com/y67huwlv

2019 Romero, S. Where is the Amazon Rainforest Vanishing? Not Just in Brazil. *New York Times* 30 August https://www.nytimes.com/2019/08/30/world/americas/amazon-rainforest.html

- Paz, A. Incendios en la Amazonía de Brasil traen consecuencias devastadoras. *Mongabay LatAm* 22 August https://es.mongabay.com/2019/08/incendios-en-amazonia-de-brasil-y-afectacion-flora-y-fauna/
- 2019 Paz, A. Día Internacional de los Bosques Tropicales: ecosistemas en máxima alerta. *Mongabay LatAm* 26 June https://es.mongabay.com/2019/06/dia-internacional-de-los-bosques-tropicales/
- 2019 Power, M. Your Drug Habit Is Destroying the Planet. *Vice* 29 May https://www.vice.com/en\_us/article/j5wjwp/your-drug-habit-is-destroying-the-planet
- 2019 Paz, A. "Luego del acuerdo con las Farc, los conflictos ambientales cambiaron pero no desaparecieron" *Semana Sostenible* 4 May https://tinyurl.com/yy2vn2bj
- Dunavin, D. What Could The Tiny Shrew Teach Us About Science's Biggest Questions? *WSHU Public Radio* 22 April https://tinyurl.com/yyufppe3
- Zeller, G. Honey, I shrunk the shrew (and maybe your kidney). *InnovateLI* 15 April http://www.innovateli.com/honey-i-shrunk-the-shrew-and-maybe-your-kidney/
- Smith, A. Eco-friendly drug dealers are now selling cocaine in reusable plastic vials. *Metro* 7 January https://tinvurl.com/vb4vmf2a
- Bates, T. How peace with FARC threatens Colombia's forests. *Futurity* 12 September https://www.futurity.org/colombia-farc-deforestation-1930522-2/
- 2018 Rodriguez Mega, E. From Fog of War to Flames of Peace—Wildfires Surge in Post-FARC Colombia. Scientific American 26 November https://www.scientificamerican.com/article/from-fog-of-war-to-flames-of-peace-wildfires-surge-in-post-farc-colombia/
- 2018 Silva, S., H. Calle. Colombia le dice adiós a sus selvas. *Semana* 29 September https://www.semana.com/nacion/articulo/colombia-le-dice-adios-a-sus-selvas/585144
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# **Professional Service**

2021-present	Editor, Quarterly Review of Biology
2020-present	Awards Director, Society for Systematic Biology
2019-present	Bat Conservation International (BCI) Science Advisory Board member
2019-present	Associate Editor, Systematic Biology
Fall 2021	Contributor, Connecting the dots between ambitious outcomes for biodiversity and the
	actions required to achieve them, Expert Input to the Post-2020 Global Biodiversity
	Framework of the CBD.
2020–2021	Contributor, Working Group 7: Drivers of Amazon Deforestation, Science Panel for the
2020 2021	Amazon
2013–2021	Associate Editor, Quarterly Review of Biology
Summer 2018	Convener with Sharlene Santana and Guillaume Chomicki of the symposium on ecological
Summer 2010	interactions at the II Joint Congress on Evolutionary Biology (Montpellier, France)
2017–2020	
	Associate Editor, Mastozoología Neotropical
2017-present	Executive Board Member, Bat1K
January 2016–	Elected Council member, Society for Systematic Biology
December 2019	Commence with Elizabeth Domest and Venue Commentate but a great and venue 4.7th
Summer 2016	Convener with Elizabeth Dumont and Karen Sears of the bat sensory symposium at the 17 <sup>th</sup>
0	International Bat Research Congress (Durban, South Africa)
Spring 2015	NSF Division of Environmental Biology Panelist
Winter 2013	Chair of symposium on island biogeography at the International Biogeography Society
= " 0040	biennial meeting in Miami, Florida
Fall 2012	NSF Division of Environmental Biology Panelist
2012	Guest Lecturer in Topics in Global Change, graduate course convened by T. Mitch Aide at
	the University of Puerto Rico, Rio Piedras. Responsible for 2 1.5-hr lectures (9 and 11
	April), and 1 3.5–hr workshop (13 April).
2012	27–28 March Socio-Environmental Synthesis Center (SESYNC) Theme Meeting participant
2012–2018	Associate Editor, Molecular Phylogenetics and Evolution
2011	Judge of oral presentations at the North American Symposium for Bat Research, Toronto,
	Ontario.
2007-present	Collaboration with the Illicit Crop Monitoring System of Colombia (SIMCI), sponsored by the
	United Nations Office on Drug and Crime; advising monitoring bodies in Peru and Bolivia
	through SIMCI
2006-present	Ad hoc grant reviewer for the Agence Nationale de la Recherche (France), Biotechnology
•	and Biological Sciences Research Council (BBSRC, UK), Consejo Nacional de Ciencia y
	Tecnología (CONACYT, Mexico), National Geographic Society, and the National Science
	Foundation (NSF) of the United States.
2004-present	Ad hoc reviewer in Evolutionary Biology: <i>Acta Chiropterologica</i> , <i>Axios</i> reviews, <i>The</i>
_50 i pioconi	American Naturalist, Biological Journal of the Linnean Society, BMC Ecology and Evolution,
	BMC Evolutionary Biology, BMC Genomics, Canadian Journal of Zoology, Communications
	Biology, Ecography, Evolution, FEBS Letters, Frontiers in Ecology and Evolution, Frontiers in
	Zoology, Gene, Genetica, Genome Biology and Evolution, Journal of Biogeography, Journal
	of Field Ornithology, Journal of Heredity, Journal of Mammalian Evolution, Journal of
	Mammalogy, Journal of Parasitology, Methods in Ecology and Evolution, MicrobiologyOpen,

Liliana M. Dávalos Curriculum Vitae

> Molecular Biology and Evolution, Molecular Ecology, Nature Ecology and Evolution, Molecular Ecology Notes (currently Mol. Ecol. Resources), Molecular Phylogenetics and Evolution, Nature Ecology and Evolution, Notes and Records: the Royal Society, PeerJ. Philippine Journal of Science, PLoS One, Proceedings of the Biological Society of Washington, Proceedings of the Royal Society B: Biological Sciences, Quaternary Science Reviews, Scientific Publications of the American Museum of Natural History, Scientific Reports, Systematic Biology, Trends in Ecology and Evolution, University of Chicago Press, Zootaxa.

Ad hoc reviewer in Ecology: Actualidades Biológicas, Caribbean Journal of Science, Chiroptera Neotropical, Diversity and Distributions, Environmental Science & Technology, Emu, Ornitología Neotropical, Quarterly Review of Biology.

Ad hoc reviewer in Conservation Biology: Animal Biodiversity and Conservation, Biodiversity and Conservation, Biological Conservation, Conservation Biology, Ecosphere, Ecosystems, Environmental Science & Technology, Science.

Ad hoc reviewer in Environmental Humanities: Forest Policy and Economics, Journal of Peasant Studies, Landscape and Urban Planning, and Landscape Ecology, Journal of World Systems Research.

Summer 2010 Convener with Nancy Simmons of the bat extinction symposium at the 15th International Bat

Research Congress (Prague, Czech Republic)

2009 Judge of oral presentations at the North American Symposium for Bat Research, Portland,

Oregon

Fall 2009 NSF Division of Biological Infrastructure Panelist

2008-2012 Editorial Board member, Molecular Phylogenetics and Evolution

2008 Judge of oral presentations at the North American Symposium for Bat Research, Scranton,

Pennsylvania

2008 IUCN Global Mammal Assessment: Mesoamerican and Caribbean

**IUCN** Global Mammal Assessment: northern Andes 2006

2006 Technical consultant: IMAX film "Mummies: Secrets of the Pharaohs"

2000 BirdLife International assessment (neotropical)

# **Professional Society Membership**

2013-present 1998-present 2014-2015,	Society for Systematic Biology, Life Member North American Society for Bat Research Society for the Study of Evolution
2018– present	
2012–2016	International Biogeography Society
2017–2018	Society for Conservation Biology
2005–2006	American Society of Mammalogy