

CURRICULUM VITAE

NANCY B. SIMMONS

Department of Mammalogy
Division of Vertebrate Zoology
American Museum of Natural History
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CURRENT POSITIONS

- 1999—Present Curator-in-Charge, Department of Mammalogy, Division of Vertebrate Zoology, American Museum of Natural History (AMNH)
- 2008—Present Professor, Richard Gilder Graduate School, AMNH
- 2004—Present Curator, Department of Mammalogy, Division of Vertebrate Zoology, AMNH
- 2020—Present Research Associate, National Museum of Natural History, Smithsonian Institution
- 1997—Present Adjunct Senior Research Scientist, Graduate Program in Ecology and Evolutionary Biology, Columbia University
- 1993—Present Adjunct Professor, Ph.D. Program in Biology, City University of New York Graduate School

PREVIOUS POSITIONS

- 2000—2011 Chair, Division of Vertebrate Zoology, AMNH
- 1998—2004 Associate Curator, Department of Mammalogy, Division of Vertebrate Zoology, AMNH
- 1993—1998 Assistant Curator, Department of Mammalogy, AMNH
- 1991—1993 Research Scientist, Department of Mammalogy, AMNH
- 1991—1993 Adjunct Assistant Professor, Department of Natural Sciences, Baruch College, City University of New York
- 1989—1991 Kalbfleisch/Hoffman Postdoctoral Research Fellow, Department of Mammalogy, AMNH
- 1989 Lecturer, Department of Biological Sciences, San Francisco State University
- 1987—1989 Instructor, Department of Paleontology, University of California, Berkeley
- 1988 Lecturer, Department of Zoology, University of California, Berkeley
- 1986—1987 Teaching Assistant and Associate, Department of Zoology, University of California, Berkeley
- 1982—1986 Senior Museum Preparator, University of California Museum of Paleontology

EDUCATION

Ph.D. 1989 University of California, Berkeley, California
Ph.C. 1985 University of California, Berkeley, California
B.A. 1981 Cum Laude, Pomona College, Claremont, California

Special Courses Completed:

2017 Wilderness First Aid & CPR
1990 Four-week course in scanning electron microscopy (AMNH)
1989 Six-week course in optical microscopy (University of California)
1984 Fifteen-week course in scientific illustration (Univ. of California)

GRANTS FUNDED

2023—2025 Department of Defense DARPA Grant "Prediction and Monitoring of Disease Transmission." PD = Ward Wheeler; I am Co-PI. \$1.5M.
2021—2025 National Science Foundation Grant "Collaborative: AccelNet: Global Union of Bat Diversity Networks (GBatNet): Bats as a model for understanding global vertebrate diversification and sustainability." I am PI; Co-PI = Susan Tsang. \$207,834.
2020—2024 Niarchos Grant "Discovering the deep roots of Amazonian bat diversity in the Middle Miocene of La Venta, Colombia." I am PI; Co-PIs = Liliana Dávalos, Siobhán Cooke, Melissa Tallman, Andrés Link, Camilo Lopez-Aguirre, and Laurel Yohe. \$49,865.
2019—2023 National Geographic Society: "Vampire bat diet, movement, and rabies risks in a changing landscape in Belize." PI = Daniel Becker, Co-PIs = Stuart Parsons, Venetia Briggs-Gonzales, Brock Fenton, and Daniel Streicker. \$28,510.
2015—2021 National Science Foundation Grant "ABI: Sustaining – MorphoBank: The Web Tool and Database for Phylogenetic Tree-Building with Phenotypes and the Interpretation of Trait Evolution." PD = Maureen O’Leary; Co-PI David L. Ferguson. \$462,551.
2016—2021 National Science Foundation Grant "Innovative tools for incorporating continuous data from fossils in phylogenetic tree-building: leveraging in the MorphoBank platform." PD = Maureen O’Leary; Co-PI David L. Ferguson. \$189,898.
2015—2020 National Science Foundation Grant "CSBR: Natural History: Upgrading Infrastructure to Protect an Irreplaceable and Heavily Used Primate Collection." PD = Robert Voss, Co-PI Neil Duncan. \$498,439.
2013—2016 National Institutes for Health (NIH) Explorator/Developmental Research Grant (R21): "Diversity and dispersal routes of bat-borne paramyxoviruses in densely populated tropical Asia." PD = David Lohman, Co-PI Vijaykrishna Dhanasekaran. \$365,000.

GRANTS FUNDED (continued)

- 2012—2016 National Science Foundation Grant “Collaborative Research: AVAToL – Next Generation Phenomics for the Tree of Life.” Co-PIs Paul Velazco and Andrea Cirranello. \$64,843.
- 2010—2014 National Science Foundation Grant “Collaborative Research: Phylogeny and rates of evolution in an ecologically hyperdiverse mammalian radiation (Chiroptera: Noctilionoidea).” \$229,919.
- 2010—2013 National Science Foundation Biological Research Collections Grant "Safeguarding Our National Biodiversity Heritage: An Infrastructure Upgrade for the Marsupial Collection at the American Museum of Natural History." Co-PIs Robert Voss and Darrin Lunde. \$338,249.
- 2006—2012 National Science Foundation AToL Program “AToL: Collaborative Research: Resolving Mammalian Phylogeny with Genomic and Morphological Approaches.” PD = Mike Novacek, CoPIs = Jin Meng and John Flynn. \$861,588.
- 2004—2006 National Science Foundation Doctoral Dissertation Improvement Grant "Dissertation Research: Sources of Neotropical bat diversity: Have cave-rich areas been centers of cave bat speciation? " (Dissertation grant for Adrian Tejedor) \$9,585.
- 2004—2005 National Science Foundation Biological Research Collections Grant “Support for meeting and workshop on emergency preparedness, response, and salvage in natural history collections” (CoPIs = Christopher Norris and Lisa Kronthal) \$9,912
- 2002—2005 National Aeronautics and Space Administration Grant "New ways to see, understand, teach and conserve biological diversity." (PD = Darrel Frost; I was PI for the “Vertebrate Zoology Database” component of the grant). \$410,462.
- 2002—2004 National Science Foundation Doctoral Dissertation Improvement Grant "Doctoral Dissertation: Historical biogeography of the Antilles: earth history and phylogenetics of endemic chiropteran taxa" (Dissertation grant for Liliana Davolos; CoPI = Rob DeSalle). \$9,470.
- 2000—2004 National Science Foundation Biological Research Collections Grant "Improvement of specimen storage in the mammal collections of the American Museum of Natural History" (CoPI = R. S. Voss). \$188,845.
- 2001—2003 National Geographic Society Grant "Rainforest mammal diversity and Matses ethnozoology in the Peruvian Amazon." (For fieldwork in 2002 and 2003; PD = Rob Voss). \$25,000.
- 1999—2003 National Science Foundation Research Grant “Collaborative Research: higher level relationships among microchiropteran bats based on mitochondrial gene sequences, morphology, and echolocation call structure.” \$123,796.

GRANTS FUNDED (continued)

- 1999 AMNH Center for Biodiversity and Conservation Research Grant
“Rainforest mammal diversity and Matses ethnozoology in the
Peruvian Amazon: Part 2.” (CoPIs = R. S. Voss and D. W. Fleck)
- 1999 Columbia University Center for Environmental Research and
Conservation Preliminary Implementation Grant "Plants dispersed
by bat in the lowland forests of central French Guiana" (CoPIs =
S. Mori, R. Voss, and E. Dierenfeld)
- 1998 AMNH Center for Biodiversity and Conservation Research Grant
“Rainforest mammal diversity and Matses ethnozoology in the
Peruvian Amazon.” (CoPIs = R. S. Voss and D. W. Fleck)
- 1991—1996 National Science Foundation Research Grant "Higher-level
phylogeny of Chiroptera: evidence from the postcranial
musculoskeletal system" (Co-PI = M. J. Novacek)
- 1988 University of California Miscellaneous Student Aid Grant (for
travel to present talk at Society of Vertebrate Paleontology
Meetings)
- 1987 American Museum of Natural History Collection Study Grant
- 1987 University of California Miscellaneous Student Aid Grant (for
travel to present talk at Society of Vertebrate Paleontology)
- 1986 University of California Education Improvement Grant (to design
and teach a new undergraduate paleontology course, "Vertebrate
Adaptations")

AWARDS AND FELLOWSHIPS

- 2008 Gerrit S. Miller Award from the North American Society for Bat
Research for “outstanding contributions in the field of chiropteran
biology”
- 1989—1991 American Museum of Natural History Kalbfleisch/Hoffman
Postdoctoral Research Fellowship
- 1989 Outstanding Graduate Student Instructor Award, University of
California
- 1988 Romer Prize, Society of Vertebrate Paleontology (for best student
paper presented at annual meetings)
- 1988 Stirton Award, Department of Paleontology, University of
California, Berkeley (for excellence in teaching and research)
- 1986 Honorable Mention, Romer Prize, Society of Vertebrate
Paleontology (for best student paper presented at annual meetings)
- 1983—1986 National Science Foundation Graduate Fellowship
- 1982—1983 University of California Graduate Fellowship
- 1981 Phi Beta Kappa, Pomona College

TEACHING AND MENTORING

Graduate Teaching

- 2022 Lecture on Bat Evolution for “Vertebrate Paleobiology” course taught through RGGGS
- 2019 Taught Independent Study Course “Machine Learning Algorithms for Ecological Datasets” in RGGGS (2 credits) for Melissa Ingala
- 2019 Lecture on Bat Evolution for “Vertebrate Paleobiology” course taught through RGGGS
- 2017 Taught graduate course “Mammalogy” in RGGGS (3 credits)
- 2016 Taught Independent Study Course “Field and Lab Techniques for Identification of Bats and Ectoparasites” in RGGGS (3 credits) for Kelly Speer
- 2015 Lecture on Bat Evolution for “Vertebrate Paleobiology” course taught through RGGGS
- 2011 Lecture on Bat Evolution for “Vertebrate Paleobiology” course taught through RGGGS

Major Advisor for Ph.D. Students:

- 2021—2022 Aless Vecino, AMNH RGGGS Comparative Biology Ph.D. program; co-advisor with Ashley Hammond
- 2019—2020 Maddy Foote, AMNH RGGGS Comparative Biology Ph.D. program; co-advisor with Frank Burbrink (left program for job in 2020)
- 2016—2020 Melissa Ingala, AMNH RGGGS Comparative Biology Ph.D. program; co-advisor with Susan Perkins, degree awarded June 2020
- 2015—2019 Kelly Speer, AMNH RGGGS Comparative Biology Ph.D. program; co-advisor with Susan Perkins, degree awarded September 2019
- 2013—2017 Zachary Calamari, AMNH RGGGS Comparative Biology Ph.D. program; co-advisor with John Flynn, degree awarded October 2017
- 2009—2015 Susan Tsang, City University of New York EEB program; co-advisor with David Lohman (CCNY), degree awarded May 2015
- 2009—2014 Miguel Pinto, City University of New York EEB program; co-advisor with Susan Perkins, degree awarded December 2014
- 2011—2013 Lauren Oliver, AMNH RGGGS Comparative Biology Ph.D. program; 1st year co-advisor with Chris Raxworthy
- 1999—2008 Valeria Taveres, City University of New York EEB program, degree awarded May 2008
- 2000—2006 Adrian Tejedor, City University of New York EEB program, degree awarded December 2006
- 1998—2004 Liliana Davalos, Columbia University CERC/E3B, degree awarded May 2004

Major Advisor for Ph.D. Students (continued):

1995—2003 Andrea Wetterer Cirranello, Columbia University
CERC/E3B, degree awarded May 2003

Ph.D Committee Member/Mentor for Students:

2023—present Pedro Monico, Rutgers University Ph.D. Program in
Ecology and Evolution
2022—present Aless Vecino, AMNH RGGGS Comparative Biology Ph.D.
program
2018—2021 Rafael Cardoso, Universidad Federal do Rio Grande do
Sul, Brazil
2016—2019 Anna Ragni, AMNH RGGGS Comparative Biology Ph.D.
program
2017—2019 Bruna Fonseca, Universidad Federal do Espírito Santo,
Brazil
2010—2016 Camilo Sanin, Columbia University E3B program
2014—2016 Sylvia Pavan, City University of New York EEB program
2012—2015 Eugenia Gold, AMNH RGGGS Comparative Biology Ph.D.
program
2008—2014 Snorri Sigurdsson, Columbia University E3B program
2006—2010 Esther Quintero, Columbia University E3B program
2004—2010 Cullen Geiselman, Columbia University E3B program
2004—2008 Kevin Olival, Columbia University E3B program
2003—2006 Rasit Bilgin, Columbia University E3B program
2002—2006 Karen Samonds, SUNY Stony Brook Ph.D. Program in
Anatomical Sciences
2002—2004 Sushma Reddy, City University of New York EEB
program
1996—2004 Marcelo Weksler, City University of New York EEB
program
1998—2003 Amy Russell, University of Tennessee at Knoxville Ph.D.
Program in Ecology and Evolutionary Biology
1997—2003 Ana Luz Porzecanski, Columbia University CERC/E3B
1996—2003 Victor Pacheco, City University of New York EEB
program
1999—2001 Jonathan Geisler, Columbia University Vertebrate
Paleontology Ph.D. Program
1998—2000 Rebecca Kirchner, New York University Ph.D. Program in
Genetics, no degree awarded

Major Advisor for Masters Students:

2017—2020 Brian O'Toole, Fordham University; co-advisor with Evon
Hekkala
2018—2019 Tim Rietbergen, University of Leiden, The Netherlands;
co-advisor with Lars van den Hoek Ostende

Major Advisor for Masters Students (continued):

- 2015—2019 Alexis Brown, Columbia University E3B; co-advisor with Susan Perkins
- 2015—2017 Maggie O'Brien, Columbia University E3B; co-advisor with Frank Burbrink
- 2013—2015 Amy Wray, Columbia University E3B; co-advisor with Kevin Olival
- 2003—2006 Scott Carrdiff, Columbia University CERC/E3B

Masters Committee Member for Students:

- 2009—2014 Aja Marcato, Long Island University
- 2005—2007 Maria Amour, C.W. Post University

Postdoctoral Fellows Advised

- 2019—2021 Advisor for Dr. David Boerma (funded by NSF)
- 2018—2020 Advisor for Dr. Ariadna Morales (AMNH funded; co-advisor with Frank Burbrink)
- 2017—2019 Advisor for Dr. Daniel Urban (funded by NSF)
- 2017—2018 Advisor for Dr. Ana Pavan (funded by grant from Brazilian government - FAPESP)
- 2015—2017 Advisor for Dr. James Herrera (AMNH funded; co-advisor with John Flynn)
- 2014—2016 Advisor for Dr. Abigail Curtis (AMNH funded)
- 2013—2016 Advisor for Dr. Angelo Soto-Centeno (AMNH funded)
- 2012—2015 Advisor for Dr. Andrea Ciranello (NSF grant funded)
- 2009—2013 Advisor for Dr. Paul Velazco (AMNH funded 2009-2011, NSF grant funded 2011-2013)
- 2002—2011 Advisor for Dr. Norberto Giannini (AMNH funded 2002-2005 and NSF grant funded 2005-2011; part-time 2007-2011)
- 2007—2009 Advisor for Dr. Francisca Almeida (AMNH funded)
- 2001 Advisor for Dr. Jonathan Geisler (AMNH funded)
- 1997—1998 Advisor for Dr. Albert Ditchfield (AMNH funded)
- 1995—1997 Advisor for Dr. William Schutt (AMNH funded)

Undergraduate Teaching and Mentoring

- 1992—2020 AMNH Research Experiences for Undergraduates (REU) Program, Intern Advisor in all years except 2003, 2006-2008, 2015, and 2018 (25 years total)
- 1991—1992 Baruch College (City University of New York), Adjunct Assistant Professor: Biology 1003, "A Survey of the Living World" (Fall 1991, Spring 1992)
- 1991 AMNH/CUNY "Courses for Teachers" Program, Instructor: AMNH 6023, "A Survey of Mammals of the World" (Spring 1991)

Undergraduate Teaching and Mentoring (continued)

- 1989 San Francisco State University, Lecturer: Biology 492, "Comparative Vertebrate Anatomy" (Spring 1989)
- 1988 University of California at Berkeley, Department of Zoology, Lecturer: Zoology 106, "Evolutionary and Functional Vertebrate Anatomy" (Spring 1988; Teaching Assistant in 1986, 1987)
- 1988 University Of California Extension, Instructor: Paleontology XB2H, "Vertebrate Adaptations" (Summer, 1988)
- 1987—1989 University of California at Berkeley, Department of Paleontology, Instructor: Paleontology 2A, "Ecology and Evolution of Dinosaurs" (Summer 1989)
Paleontology 2C, "The Age of Mammals" (Spring 1989)
Paleontology 2H, "Vertebrate Adaptations" (Summer and Fall 1987, 1988)

High School Education

- 2018 “Skull Detectives” (Visualizing Science Youth Team, AMNH) - helped to develop and teach module using bats as a model for understanding how scientists use imaging and visualization tools to study functional morphology of the skull.
- 2016 “Secrets of the Specimens” (Lang Science Program) – helped to develop and run part of a program for high-school students through the AMNH Education Department. Worked to train students in how to use MorphoBank with research examples.
- 2013 “Morpholution” – helped to develop and run a day-long digital-learning program for high-school students through the AMNH Education Department. Website description of the program: <http://www.amnh.org/explore/news-blogs/education-posts/morpholution-an-authentic-youth-science-program>
Associated video: http://www.youtube.com/watch?feature=player_embedded&v=v20Qx3Pu2pI

FIELD EXPERIENCE

- 2023 Ten days in Belize capturing and PIT tagging bats, collecting hair and wing punches, testing passive antenna arrays for monitoring
- 2023 Ten days in Colombia collecting fossils and matrix for screen-washing in the Miocene La Venta Fossil beds of the Tatacoa Desert
- 2022 Ten days in Colombia collecting fossils in the Miocene La Venta Fossil beds of the Tatacoa Desert; scouting for strata for matrix collection; setting up screen-washing operations
- 2022 Two weeks in Belize collecting bats (including vouchers, tissue, hair, and fecal samples), PIT tagging bats for long-term study

FIELD EXPERIENCE (continued)

- 2022 One week in Belize locating bat roosts and photographing bats at emergence for identification; scouting netting and trapping sites for subsequent trips
- 2021 Two weeks in Belize collecting bats (including vouchers, tissue, hair, and fecal samples), PIT tagging bats for long-term study
- 2021 4 days in Black Rock Forest (New York) trapping for opossums (*Didelphis virginiana*)
- 2019 Two weeks in Belize collecting tissue samples, hair, fecal samples, and ectoparasites of bats
- 2019 Ten days in Peru collecting bats (vouchers, tissue samples, endoparasites and ectoparasites)
- 2018 Two weeks in Belize collecting tissue samples and ectoparasites of bats.
- 2017 Two weeks in Belize collecting bats (vouchers, tissue samples, and ectoparasites)
- 2016 Ten days in Malaysia; bat sampling in forest and cave, survey of flying fox roost, training students in field techniques as part of SEABCRU workshop
- 2016 Two weeks in Belize collecting bats (vouchers, tissue samples, and ectoparasites)
- 2015 Ten days in Belize collecting bats (vouchers and tissue samples)
- 2014 Ten days in Belize collecting bats (vouchers and tissue samples)
- 2013 One week in Belize collecting bats (vouchers and tissue samples)
- 2012 Ten days in Belize collecting bats and small marsupials (vouchers and tissue samples)
- 2011 One week in Belize collecting bats, rodents, and small marsupials (vouchers and tissue samples)
- 2010 One week in Belize collecting bats and small marsupials (vouchers and tissue samples)
- 2009 One week in Tobago collecting small mammals (vouchers and tissue samples)
- 2007 Two weeks in Malaysia and Thailand; captured pteropidids for tissue samples, evaluated use of harp traps to capture hipposiderids and rhinolophids
- 2002 Two weeks in Belize; survey of bat diversity, evaluation of methods of using harp traps to capture Neotropical bats
- 1999 Three weeks in French Guiana; study of seed dispersal by bats in a lowland tropical rainforest
- 1994 Two months in French Guiana; continuation of survey of mammal diversity at a single Neotropical rainforest locality; emphasis bats and assessment of systematic biases introduced by different collecting techniques
- 1992 Two months in French Guiana; continuation of survey of mammal diversity at a single Neotropical rainforest locality

FIELD EXPERIENCE (continued)

- 1991 Two months in French Guiana; survey of mammal diversity in a Neotropical lowland rainforest; collection of small mammals with emphasis on bats
- 1987 One month in Petrified Forest National Park (Arizona); Assistant Field Director for University of California Research Expeditions program "Field Paleontology: Life at The Beginning of the Age Of Dinosaurs"
- 1986 One week in Sierra Nevada Mountains (California); trapping small mammals
- 1986 Two weeks in western Nevada; collection of Barstovian and Clarendonian mammals
- 1985 One month in Petrified Forest National Park (Arizona); collection of Late Triassic marine and terrestrial vertebrates
- 1985 Two weeks in western Nevada; collection of Miocene mammals, fish, and plants
- 1984 One month in Hell Creek Badlands (Montana); geologic mapping, collection of Late Cretaceous and Paleocene vertebrates
- 1983 Six weeks in Hell Creek Badlands (Montana); collection of Late Cretaceous and Paleocene vertebrates
- 1981 Three months at Lamb Spring (Colorado); excavation of archaeological site containing mammoth and bison remains
- 1981 One month field study in San Gabriel Mountains (California); mark and recapture study of habitat utilization of *Dipodomys* (kangaroo rats) in fire succession communities
- 1980 Three months at Lamb Spring (Colorado); excavation of archaeological site containing mammoth and bison remains
- 1979 Three months at Dolores Project (Colorado); attended archaeological field school; prepared recent vertebrate skeletons

PROFESSIONAL ACTIVITIES

- 2022—present Member, Working Group for Ecological Countermeasures for Pandemic Prevention (NSF-funded RCN)
- 2020—present Founding Organizer and Executive Committee Member, GBatNet (Global Union of Bat Diversity Networks)
<https://www.gbatnet.org>
- 2020—present Member of CETAF-DiSSCo Natural Science Collections COVID-19 Task Force (CETAF = Consortium of European Taxonomic Facilities, DiSSCo = Distributed System of Scientific Collections)
<https://www.youtube.com/watch?v=60KMgjqhP-E>
- 2020—present Member, Bat One Health Research Network
<https://www.bohrn.net/about>
- 2019—present Director, Board of Directors, Bat Conservation International (Science Advisory Committee Chair, 2019—present; Program Committee Member, 2019—present)
<https://www.batcon.org>

PROFESSIONAL ACTIVITIES (continued)

- 2017—present Chair, Global Bat Taxonomy Working Group (committee of IUCN SSC Bat Specialist Group; <https://www.iucnbsg.org/global-bat-taxonomy-working-group.html>)
- 2017—present Steering Committee Member for Taxonomy and Collections, Bat1K Consortium (<https://bat1k.com>)
- 2014—present Member of IUCN Bat Specialist Group of Species Survival Commission (<http://www.iucnbsg.org>)
- 2008—present Miller Award Committee, North American Society for Bat Research
- 1999—present Editorial Board Member, Acta Chiropterologica
- 2021—2023 Founding Organizer and network leader of BPEN (Bat Phenomics and Evolution Network)
- 2020—2022 Founding Member of iDigBio's ViralMuse Task Force
https://www.idigbio.org/wiki/index.php/ViralMuse_Task_Force
- 2018—2022 Steering Committee Member, NSF Revitalizing Monography Project
- 2010—2020 Steering Committee Member, SEABCRU (Southeast Asian Bat Conservation Research Union; <http://www.seabcru.org/>) and member of NSF-funded RCN; Team Leader for Taxonomy and Systematics Team (2010-2014)
- 2019 Search Committee Member, Mammalogy Curator Search at US National Museum (Smithsonian)
- 2016—2019 Member, Bat Conservation International Science Advisory Board
- 2009—2018 Executive Committee Chair, MorphoBank
(<http://morphobank.org>; MorphoBank is a web resource for collaborative phylogenetic research and permanent archiving of morphological data)
- 1997—2016 Checklist Committee Member, American Society of Mammalogists
- 2009—2015 Steering Committee Member, VertNet
(<http://vertnet.org/index.php>; VertNet is a global database network linking vertebrate museum collections around the world)
- 2009—2010 Steering Committee Member, "Future of Systematics" Initiative (NSF funded project to assess the needs and goals of the field of systematics)
- 2002—2009 Advisory Panel on Bat Taxonomy, Eurobats Committee Mammalogists
- 1996—2009 Editorial Board Member, Journal of Mammalian Evolution
- 2004—2007 Board of Directors Member, North American Symposium for Bat Research
- 2004—2007 Treasurer, North American Symposium for Bat Research
- 2001—2007 American Society of Mammalogists Nomenclature Committee Member
- 2003—2004 Co-chair, Local Organizing Committee for the 2004 meeting of the Society for the Preservation of Natural History Collections (SPNHC)

PROFESSIONAL ACTIVITIES (continued)

- 2001—2003 Treasurer, North American Symposium for Bat Research
- 2001—2003 Advisory Committee Member, "First in Flight: Aerial Animals" Exhibition (North Carolina Museum of Natural Sciences)
- 2000—2003 Board of Directors Member, North American Symposium for Bat Research
- 2002 Working Group Member, Global Bat Biodiversity Initiative (co-sponsored by Conservation International and Bat Conservation International)
- 1998—2001 Editorial Board Member and Subject Editor, *Biotropica*
- 1996—2001 Systematic Collections Committee Member, American Society of Mammalogists
- 1994—2001 Secretary, Society for the Study of Mammalian Evolution (Acting Secretary, 1994--1995; Secretary, 1996--2001)
- 2000 National Science Foundation Biological Research Collections Advisory Panel Member
- 1997—1998 Society of Vertebrate Paleontology Program Committee
- 1995 National Science Foundation Systematics Advisory Panel Member (served on panels in Spring and Fall 1995)
- 1992—1993 Co-chair for Public Education Committee, Systematics Agenda 2000
- 1978—1988 Member, Society of Vertebrate Paleontology Publications Promotion Committee

Symposia and Workshops Organized:

- 2023 "*GBatNet Network Leaders Workshop*," Baltimore, MD; in-person 5-day workshop funded by AccelNet NSF Grant; co-organized with Tigga Kingston, Liliana Davalos, and Susan Tsang
- 2022 "*Multiple Dimensions of Biodiversity: A Systems Approach*," symposium at 19th International at Research Conference, Austin, Texas; co-organized with Brock Fenton and Stuart Parsons
- 2022 "*GBatNet Big Bat Brainstorm Research Prioritization Workshop*," Austin, Texas; in-person 3-day workshop funded by AccelNet NSF Grant; co-organized with Tigga Kingston, Liliana Davalos, and Susan Tsang
- 2020 "*The "Who" in Collections: Revealing the Network of Collectors and Determiners of Bat Specimens*," workshop co-organized with University of Florida/iDigBio as part of a NSF RAPID project
- 2018 "*Global Bat Taxonomy Workshop 2*," 48th Annual Symposium of the North American Society for Bat Research, Puerto Vallarta, Mexico
- 2017 "*Global Bat Taxonomy Workshop 1*," 47th Annual Symposium of the North American Society for Bat Research, Knoxville, TN
- 2016 "*Fossil Bats: New Discoveries and Insights*," symposium at 17th International Bat Research Conference, Durban, South Africa; co-organized with Gregg Gunnell and Suzanne Hand

Symposia and Workshops Organized (continued):

- 2013 *"Biology and Evolution of the Earliest Bats: New Insights from the Fossil Record,"* 16th International Bat Research Conference, Costa Rica; co-organized with Gregg Gunnell
- 2013 *"High-throughput Automation of 3D Digitization of Natural History Collections,"* workshop co-organized with Rolf Mueller, Kris Helgen, and John Wible
- 2010 *"Bat Extinctions: Past, Present, and Future,"* symposium at 15th International Bat Research Conference, Prague; co-organized with Liliana Dávalos
- 2007 *"Fossils, Molecules, and Morphology: Evolutionary History of Bats,"* 2007 meeting of the Society of Vertebrate Paleontology; half-day symposium; co-organized with Gregg Gunnell and Thomas Eiting; contributions published in an edited volume by Cambridge University Press
- 2001 *"Methods of Analyzing Faunal Composition and Community Structure,"* 12th International Bat Research Conference, Malaysia; half-day symposium; co-organized with Elisabeth Kalko
- 1998 *"Evolution of Echolocation and Flight Behavior in Bats,"* 11th International Bat Research Conference, Brasilia, Brazil; half-day symposium; co-organized with Elisabeth Kalko
- 1995 *"Phylogeny and Evolution of Bats,"* 10th International Bat Research Conference, Boston University; (half-day symposium; contributions published by Smithsonian Institution Press; co-organized with Susanne Hand

Service to other Institutions:

- 2019 Search Committee Member, Curator of Mammals search at United States National Museum (Smithsonian Institution)

Society Memberships:

American Society of Mammalogists
North American Society for Bat Research
Society for the Preservation of Natural History Collections
Society for the Study of Mammalian Evolution
Bat Conservation International

Reviewed research proposals for: National Science Foundation, National Geographic Society, Bat Conservation International

Reviewed manuscripts for: *Nature*, *Science*, *Science Communications*, *Evolution*, *Biotropica*, *PLoS ONE*, *Journal of Mammalogy*, *Biological Letters*, *Journal of Mammalian Evolution*, *Journal of Comparative Biology*, *Fieldiana*, *Acta Anatomica*, *Journal of Morphology*, *Cladistics*, *Journal of Anatomy*, *Journal of*

Vertebrate Paleontology, Alcheringa, Studies on Neotropical Fauna and Environment, Paleobiology, AMNH Novitates and Bulletin, Systematic Biology, Reviewed manuscripts for (continued)
Mammalia, Journal of Human Evolution, Acta Chiropterologica, Cornell University Press, Smithsonian Institution Press, Wildlife Conservation Society, U.S. Fish and Wildlife Service, Zoological Journal of the Linnean Society

INSTITUTIONAL SERVICE AT AMERICAN MUSEUM OF NATURAL HISTORY

Administrative Positions:

Curator-in-Charge, Department of Mammalogy, AMNH (1999—present)
Chairman, Division of Vertebrate Zoology (2000—2011)

Senate of the Scientific Staff:

Senate Finance Committee Member (2022—present)
Senate Executive Committee Member (1998—2006, 2018—2020)
Senate Science Support Committee (2014—2018)
Senate Education Committee (2004—2006)
Senate Library Committee Member (1995—1996, 1998—2004)
Senate Nominating Committee Member (2006)
Senate Ad Hoc Committee on Graduate and Postdoc Programs
(Chair, 2004)
Vice-Chairman of the Senate (1998—2000)

Richard Gilder Graduate School Committees:

Academic Affairs and Fellowships Committee (2010—2014,
2019—2021)
Admissions Committee (2017)
Comparative Biology Ph.D. Program Committee (2010—2014)

Standing Committees, Task Forces, Ad Hoc Committees:

Institutional Animal Care and Use Committee (IACUC; 2021—present)
Lerner-Gray Grant Committee Member (1996, 1998—present)
Chapman Committee (1999—2022)
Appointments and Promotions Committee (Chair, 1999—2000, 2004—
2005; member, 2000—2001, 2005—2006, 2014—2018,
2020—2022)
Comparative Biology Morphology Ad Hoc Committee Member (2017—
2018)
Niarchos & Explore 21 Review Committee Member (2017—2018)
Strategic Planning Committee (2000—2002; 2004; 2007; 2009—2011)
Graduate School Task Force (2004—2006)
Ad Hoc Committee on Conflict of Interest (2006)
Theodore Roosevelt Memorial Fund Committee Member (1998—2000,
2006)

Grants and Fellowships Committee (Chairman, 1995—1997; member, 1994, 2000, 2003, 2007)

Standing Committees, Task Forces, Ad Hoc Committees (continued):

Public Programs Committee Member (1995—2000)

Security Task Force (1999)

Exhibition and Education Planning Committee Member (1994—1996)

Organizing Committee for Professional Meeting Hosted at AMNH:

Host and Steering Committee Member, NSF Monographs in Systematics Workshop (2018)

Co-chair, Local Organizing Committee for the 2004 meeting of the Society for the Preservation of Natural History Collections

Search Committees:

- 2022 Member of Search Committee for Curator and Professor in Dinosaur Paleobiology (Roger Benson hired)
- 2019 Member of Search Committee for Dean of Science (no hire)
- 2015 Member of Search Committee for Senior Curator and Director in Invertebrate or Vertebrate Zoology (Cheryl Hayashi hired)
- 2013 Member of Search Committee for Senior Curator and Director in Invertebrate or Vertebrate Zoology (no hire)
- 2012 Member of Search Committee for Physical Anthropology Curator (no hire)
- 2008 Member of Search Committee for Invertebrates Curator (Estefania Rodriguez hired)
- 2006 Chair of Search Committee for Herpetology Curator (no hire)
- 2004 Member of Search Committee for Microbial Systematics Curator (Susan Perkins hired)
- 2004 Member of Search Committee for Astrophysics Curator (Rebecca Oppenheimer hired)
- 2003 Member of Search Committee for Mammal Paleontology Curator (John Flynn hired)
- 2003 Member of Search Committee for Microbial Systematics Curator (no hire)
- 2001 Chair of Search Committee for Ichthyology Curator (John Sparks hired)
- 2000 Member of Search Committee for Ford Foundation Fellow (Department of Anthropology)
- 2000 Member of Search Committee for Assistant Director of Library Reference Services (no hire)
- 1999 Member of Search Committee for Vertebrate Paleontology Curator (Jin Meng hired)
- 1998 Member of Search Committee for Ornithology Curator (no hire)
- 1997 Member of Luce Postdoctoral Fellowship Committee (Department of Anthropology; Alexia Bloch hired)

- 1996 Member of Search Committee for Invertebrates Curator (Paula Mikkelsen hired)
- Search Committees (continued):
- 1995 Member of Search Committee for Ichthyology Curator (Scott Schaeffer hired)
- 1995 Member of Search Committee for Entomology Curator (Jim Miller hired)
- 1995 Member of Search Committee for Dean of Public Programs (no hire)
- 1994 Member of Search Committee for Invertebrates Curator (Alan Harvey hired)

Special Programs and Presentations:

- 2022 Presentation for Niarchos Foundation meeting “Discovering the Deep Roots of Amazonian Bat Biodiversity” + behind-the-scenes tour of the Department of Mammalogy
- 2022 Presentation for Jesup Legacy Society (AMNH donor group) “Searching for Fossil Bats in Colombia”
- 2020 Webinar for Volunteer Corps – “What We Know (And Don’t Know) About Bats”
<https://www.dropbox.com/sh/evo5hlik5pf2jfx/AABVG9IvbWZ1ExQboXeb6bYla?dl=0&preview=Dr+Nancy+Simmons+Bat+Lecture+Video.mp4>
- 2017 Behind-the-Scenes Tour “Museum Collections and Conservation” for Board of Directors of Bat Conservation International
- 2015 Chairman’s Circle Dinner Panelist: “Museum Scientific Collections: Crossing the 33 Million Mark”
- 2015 Presentation to the Junior Council on the role of collections (centering on “Shelf Life: Episode 4: The Skull of the Olingito”)
- 2013 Presentation to the Museum Advisory Council on the AToL Mammals project and tour of Mammalogy Department
- 2013 Presentation to the AMNH Board of Trustees on the AToL Mammals project
- 2011 Collections tour for Crown Prince of Japan
- 2010 Chairman’s Circle Dinner speaker: “Bat Evolution: Old Problems, New Approaches”
- 2004 Science at Work Luncheon: “From Flying Foxes to Vampires: Bat Research and Collections in the Department of Mammalogy”
- 1995 Science at Work Supper: “Studying Mammal Diversity in French Guiana”
- 1992 American Museum of Natural History Members Evening, "Neotropical Bat Diversity and Global Warming"
- 1992 Behind-the-Scenes Presentation, "The Use of Collection Resources in Studying Bat Evolution"
- 1990 Visiting Committee Meeting, "Origin and Evolution of Bats: Did Flight Evolve Twice in Mammals?"

AMNH Exhibition Department Programs:

- 2021—2023 Co-Curator for Artiodactyl Exhibit for Collections Core
- 2020—2023 Curator for Bat Exhibit for Collections Core
- 2019 Curatorial Advisor, AMNH 150th Anniversary Exhibition
- 2019 Content Advisor for AR Bats in AMNH Explorer App
- 2014—2017 Curatorial Advisor, Digital Tree of Life project
- 2010 Curatorial Advisor, Renovation of Hall of North American Mammals (assisting in early planning stages only)
- 2000—2001 Curatorial Advisor, Aging Exhibition (planning only; exhibition never completed)

AMNH Education Department Programs:

- 2020 Speaker for Lang Science Program – participated in panel for incoming cohort on AMNH collections (breadth and use)
- 2018 Content specialist for 8-week/30-hour “Skull Detectives” module for high school students in “Visualizing Science Youth Team” program. Module involves using bats as a model for understanding how scientists use imaging and visualization tools to study functional morphology of the skull.
- 2017 Participated in brainstorming session for “Sci Viz” (Science visualization) program for high school students
- 2016 “Secrets of the Specimens” (Lang Science Program) – helped to develop and run part of a program for high school students. Trained students in how to use MorphoBank with research examples, and provided a tour of the Mammalogy Department.
- 2015—2016 Consultant for “Evolving Digits/Digital Evolution” summer camp for high school students (1-week intensive course)
- 2013—2014 Professional Development Program on MorphoBank for Educators (helped to design and run a 3-session workshop for AMNH Education Staff)
- 2013 Helped to develop and run “Morpholution,” a one-day program for high school students sponsored by the AMNH Education Department (see info under High School education above)

Public Science Education:

- 2022 SciCafe presentation “Hunting Ancient Bats in Colombia” for an audience of >250 adults. <https://www.amnh.org/learn-teach/adults/scicafe/microfossils-colombia>
- 2022 Podcast for Pulsar: A Science Podcast (Boston Museum of Science) titled “Do Vampire Bats Really Drink Blood?” <https://podcasts.apple.com/us/podcast/pulsar/id1504978888>
- 2022 Podcast for Pulsar: A Science Podcast (Boston Museum of Science) titled “How Did Bats Evolve Flight?” <https://www.mos.org/pulsar/bats-evolved-flight>

Public Science Education (continued):

- 2022 Subject of a short film made about my Niarchos-funded fieldwork titled “Searching for Fossil Bats in Colombia”
<https://www.youtube.com/watch?v=Oa5rFaZAnws>
- 2021 Belize fieldwork featured by National Geographic in “Meet the Bat That Eats Other Bats”
<https://www.nationalgeographic.com/animals/article/more-mysteries-revealed-about-bat-eating-bat>
- 2021 Belize fieldwork featured in a Canadian Broadcasting Company piece “The Race to Avoid the Next Pandemic”
<https://www.cbc.ca/newsinteractives/features/tracking-the-next-pandemic>
- 2021 Hour-long podcast interview and associated illustrated web pages on bat evolution featured on Palaeocast Palaeontology Podcasts
<https://www.palaeocast.com/bats/>
- 2021 Participated in “#AskACurator” Day on Twitter and Instagram, made 8 short videos about bats that were posted by AMNH Communications, and answered questions live on Twitter.
- 2021 Featured in article in *The Elective* about AMNH curators
<https://elective.collegeboard.org/school-days-influences-career-american-museum-natural-history>
- 2020 Guest expert on “Vilified Beasts: The Bat”, a half-hour TV program on *The Agenda* (Canadian public TV daily news show on TVO) <https://www.youtube.com/watch?v=IsRfqFWT9uI>
- 2020 Host for AMNH “In the Field with Bat Researchers – Live Watch Party and Q&A”; viewed by >3,600 people in first pass in summer 2020, rebroadcast in October 2020 for more viewers
<https://www.youtube.com/watch?v=6N8Kbn0rYwI&feature=youtu.be>
- 2020 Panelist for AMNH Public Program “COVID-19: Origins, Spread, and Impact” distributed via Facebook; viewed by >8,000 people
<https://www.amnh.org/calendar/covid-19-origins-spread>
<https://www.facebook.com/watch/live/?v=708081639984731&ref=external>
- 2020 In-person interview with Anderson Cooper for CNN documentary “Bats: The Mystery behind COVID-19”
<https://f.io/3MNC8kCO> or
<https://cnnpressroom.blogs.cnn.com/2020/06/09/cnn-to-air-special-on-the-connection-between-bats-and-covid-19/>
- 2020 Invited webinar for Bats Without Borders Webinar Series – “What Do We Know Now? An Update on African Bat Diversity.”
<https://www.youtube.com/watch?v=yOdJif48zqQ&feature=youtu.be>

Public Science Education (continued):

- 2020 Panelist for AMNH Earth Day Press Briefing & Webinar: “Earth Day in the Age of COVID-19”) <https://web.microsoftstream.com/video/f675dbe9-bfb3-4b72-8940-53eea8429a84?list=trending>
- 2019 YouTube video “Research Profiles: Bats in Amazonia” https://www.youtube.com/watch?v=lByrLM1Ds_E&fbclid=IwAR1DzHJICA3zhcUkFMi5j1DHddYbVsXDt474R_NgX_hk_P5QtmnzpoXa10M&app=desktop
- 2019 Blog post for Ecology and Evolution Blog: “Vampire bats have a ‘gut reaction’ to habitat destruction” <https://ecologyandevolution.blog/2019/05/09/vampire-bats-have-a-gut-reaction-to-habitat-destruction/>
- 2018 Facebook Live (4/18) “Bat Appreciation Day” – viewed by >7,600 people <https://www.facebook.com/naturalhistory/videos/10155078242456991/>
- 2017 Helped develop and appeared in “The Science of Speciation – Molecular Adaptation in Vampire Bats” video produced for Science Bulletins at AMNH <http://www.youtube.com/watch?v=S3ietoB5qLE>
- 2016 Facebook Live (10/16) “The Truth About Vampire Bats” – viewed by >13,000 people <https://www.facebook.com/naturalhistory/videos/10153767724751991/>
- 2016 Presenter at “Bat Week” Kickoff Event at Central Park Zoo (sponsored by the Wildlife Conservation Society, United States Fish and Wildlife, and the National Fish and Wildlife Foundation)
- 2016 Facebook Live (10/16) “Answering Questions About Bats” – viewed by >10,000 people <https://www.facebook.com/naturalhistory/videos/10153701937341991/>
- 2015 SciCafe presentation (10/15) “Seeing Inside Bats” cohosted with Postdoc Abigail Curits for an audience of >450 adults. https://www.youtube.com/watch?v=QfjERb0CNC0&feature=em-%09%09%09%09subs_digest-g
- 2015 Featured in an article in Scienceline “A new perspective on old specimens” <http://scienceline.org/2016/01/a-new-perspective-on-old-specimens/>
- 2015 Participated extensively in production of the AMNH video series “Shelf Life: Episode 4: The Skull of the Olingito” and associated blog -- <http://www.amnh.org/shelf-life/shelf-life-skull-of-the-olinguito>
- 2013 K-12 lecture: “Bat Biology, Research, and Conservation” presented at Stillman Elementary School, Tenafly, NJ

Public Science Education (continued):

- 2013 Participated in production of video describing results and significance of AToL Mammals project – “Researchers Reconstruct the Common Ancestor of Placental Mammals”
<http://www.youtube.com/watch?v=jBBJvgK5YAg>
- 2012 Subject of AMNH video profile available at
<http://www.amnh.org/explore/amnh.tv?SearchText=Simmons&x=21&y=24>
- 2009—2012 Editor-in-Chief, Grzimek’s Animal Web, a project by Gale Publishing to produce an on-line version of Grzimek’s Animal Encyclopedia
- 2008 Subject of a 3-part video series produced by Scientific American “Beyond Twilight: Evolution of Bats”
<http://www.sciam.com/article.cfm?id=bats-beyond-twilight>
- 2008 Published article on bat evolution in Scientific American: “Taking Wing” (December 2008)
- 2008 Interviewed on “The Leonard Lopate Show” on NPR about bat evolution
- 2007 Subject of short TV feature “Bats” on CUNY “Study with the Best” series (DVD available)
- 2006 Subject of New York Times video on bats: available at
<http://www.nytimes.com/video/science/1194817110627/the-science-of-bats.html>
- 2006 Worked with the AMNH Education Department and the National Center for Science Literacy, Education and Technology to produce two articles on my research on bats for Scholastic’s “Superscience” and “Science World” magazines for children.
<http://www.amnh.org/education/resources/scholastic/bats/>
- 2006 Worked with the AMNH Education Department and the National Center for Science Literacy, Education and Technology to design a web site on bats for Scholastic:
<http://teacher.scholastic.com/activities/explorations/bats/>
- 2005 Worked with the AMNH Education Department and the National Center for Science Literacy, Education and Technology on a “Meet the Scientist” profile of myself for use in MacMillan/McGraw Hill science textbooks

Other Activities:

- AMNH Women in Science Mentoring Circles Participant (2016—2020, 2022—present)
- Boy Scout Merit Badge Classes taught:
 - “Mammal Study” – Middlesex District Merit Badge Fair, 2015 & 2016; Winter NoBe 2017
 - “Reptile & Amphibian Study” – Middlesex District Merit Badge Fair, 2015 & 2016

Judge for “Young Naturalists” essay contest sponsored by AMNH (1998,
2001, 2008—2015; 10 years total)

DIGITAL SCHOLARSHIP

Simmons, N.B. and A.L. Cirranello. 2023. Bat Species of the World: A taxonomic and geographic database. Version 1.3. <https://batnames.org>

Francis, C. M.; N. B. Simmons, V. Van Cakenberghe, N. S. Upham, and C. Burgin, on behalf of the Global Bat Taxonomy Working Group of the IUCN SSC Bat Specialist Group. 2023. On the taxonomy of *Lasiurus* (v1.0). Zenodo. <https://doi.org/10.5281/zenodo.7696845>

Bakwo Fils, E.M., Flanders, J., Frick, W.F. & **Simmons, N.** 2022. *Myotis nimbaensis*. *The IUCN Red List of Threatened Species* 2022: e.T216617275A21661736. <https://www.iucnredlist.org/species/216617275/216617367#assessment-information>

Simmons, N.B. and A.L. Cirranello. 2022. Bat Species of the World: A taxonomic and geographic database. Version 2022B. <https://batnames.org>

Francis, C. M., and **N. B. Simmons** on behalf of the Global Bat Taxonomy Working Group of the IUCN SSC Bat Specialist Group. 2022. On the taxonomy of *Myotis lucifugus* (v1.0). Zenodo. <https://doi.org/10.5281/zenodo.7338575>

Mast, A. R., D. L. Paul, N. Rios, R. Bruhn, T. Dalton, E.R. Krimmel, K.D. Pearson, A. Sherman, D.P. Shorthouse, **N. B. Simmons**, P. Soltis, and N. Upham, Nathan. 2021. Rapid Creation of a Data Product for the World's Specimens of Horseshoe Bats and Relatives, a Known Reservoir for Coronaviruses (Version 1.6) [Data set]. Zenodo. <https://zenodo.org/record/5044247#.YN3wni9h1TY>

Poelen, Jorrit, Upham, Nathan, Agosti, Donat, Ruschel, Tatiana, Guidoti, Marcus, Reeder, DeeAnn, **Simmons, Nancy**; Penev, Lyubomir; Dimitrova, Mariya; Csorba, Gabor; Groom, Quentin, and Willoughby, Anna. 2020. CETAF-DiSCCo/COVID19-TAF biodiversity-related knowledge hub working group: indexed biotic interactions and review summary. Zenodo. <https://zenodo.org/record/4068958#.X3zXDS9h0n0>

POPULAR ARTICLES, ENCYCLOPEDIA CHAPTERS, BOOK INTRODUCTIONS, AND BOOK REVIEWS

Simmons, N. B. 2022. 50 Years of Bat Research: Foundations and New Frontiers (Book Review). *Quarterly Review of Biology* 97: 218-219. <https://www.journals.uchicago.edu/doi/10.1086/721510>

Simmons, N. B. 2008. Taking wing: uncovering the evolutionary origins of bats. *Scientific American*, Dec. 2008: 96-103 (available in an online version at <http://www.sciam.com/article.cfm?id=uncovering-bat-evolutionary-origins>)

Simmons, N. B. 1999. Eutheria. In McGraw Hill Encyclopedia of Science and Technology, 9th Edition.

Simmons, N. B., and S. J. Hand. 1998. Bat phylogeny and evolution. In T. H. Kunz and P. A. Racey (eds.) *Bats Biology and Conservation*, pp. 1-2. Smithsonian Institution Press.

Greenwald, N. S. 1990. Book review of "Mass Extinctions: Processes and Evidence" edited by S. K. Donovan. *Quarterly Review of Biology* 65(2): 216-217.

PEER-REVIEWED PUBLICATIONS: BOOKS & EDITED VOLUMES

M. B. Fenton and **N. B. Simmons**. 2015. *Bats: A World of Science and Mystery*. University of Chicago Press, 303pp. (Reviewed in the Wall Street Journal: <http://www.wsj.com/articles/the-beautiful-mysterious-bat-1423259909>)

G. F. Gunnell and **N. B. Simmons** (eds.). 2012. *Evolutionary History of Bats: Fossils, Molecules, and Morphology*. Cambridge University Press, 560 pp.

PEER-REVIEWED PUBLICATIONS: ARTICLES

Simmons, N. B., and M. F. Jones. Accepted. Foraging in the fossil record: diet and behavior of the earliest bats. In: D. Rosso and M. B. Fenton (eds.), *A Natural History of Bat Foraging*. Elsevier Press.

Anthwal, N., D. J. Urban, A. Sadier, R. Takenaka, S. Spiro, **N. B. Simmons**, R. R. Behringer, C. J. Cretokos, J. J. Rasweiler, and K. Sears. Accepted. Control of variation and initiation of a novel chiropteran wing membrane are revealed by embryonic development. *BMC Biology*.

Garrett, N.R., J. Watkins, C. Francis, **N. B. Simmons**, N. V. Ivanova, A. Naaum, A. Briscoe, R. Drinkwater, and E. L. Clare. Accepted. Out of thin air: surveying tropical bat roosts through air sampling of eDNA. *PeerJ*.

Simmons, N. B., M. R. Ingala, M. Pieri, T. L. Volkert, L. N. Singh, P. Philip, L. L. Lindsey, N. Zhang, J. Gray, B. P. O'Toole, M. Mai, E. Teeling, S. C. Vernes, the Bat Biology Foundation, and the Bat1K Consortium. Accepted. The genome sequence of *Molossus nigricans* (Chiroptera, Molossidae; Miller, 1902). *Open Research*.

Goswami, A., E. Noirault, E. Coombs, J. Clavel, A.-C. Fabre, T. Halliday, M. Churchill, A. Curtis, A. Watanabe, **N. B. Simmons**, D. Fox, B. Beatty, J. Geisler, and R. Felice. Accepted. Developmental origin underlies evolutionary rate variation across the placental skull. *Philosophical Transactions B*.

Rietbergen, T. B., van den Hoek Ostende, L. W., Aase, A, Jones, M. F., Medeiros, E. D, and **N. B. Simmons**. Accepted. The oldest known bat skeletons and their implications for Eocene chiropteran diversification. *PLOS ONE*.

Garrett, N., J. Watkins, **N. B. Simmons**, M. B. Fenton A. M. Obregon, D. E. Sanchez, E. M. Froehlich, F. M. Walker, J. E. Littlefair, and E. L. Clare. 2023. Airborne eDNA documents a diverse and ecologically complex tropical bat and other mammal community. *Environmental DNA* 5:350–362. <https://doi.org/10.1002/edn3.385>

Soto-Centeno, J. A., and **N. B. Simmons**. 2022. Environmentally-driven phenotypic convergence and niche conservatism accompany speciation in hoary bats. *Scientific Reports* (2022) 12:21877. <https://doi.org/10.1038/s41598-022-26453-y>

Sammonds, K. E., S. M. Goodman, J. L. Alumbaugh, and **N. B. Simmons**. 2022. Fossil and subfossil bats. Pp. 1859-1862 in S. Goodman (ed.) *The New Natural History of Madagascar*, Volume 2, Princeton University Press.

Ch'ng, Lena., Susan M. Tsang, Zoe A. Ong, Dolyce H.W. Low, Sigit Wiantoro, Ina L. Smith, **N. B. Simmons**, Yvonne C.F. Su, David J. Lohman, Gavin J.D. Smith, and Ian H. Mendenhall. 2022. Co-circulation of alpha- and beta- coronaviruses in *Pteropus vampyrus* flying foxes from Indonesia. *Transboundary and Emerging Diseases* 00, 00– 00. <https://doi.org/10.1111/tbed.14762>

Goswami, A., E. Noirault, E. Coombs, J. Clavel, A.-C. Fabre, T. Halliday, M. Churchill, A. Curtis, A. Watanabe, **N. Simmons**, D. Fox, B. Beatty, J. Geisler, and R. Felice. 2022. Attenuated evolution of mammals through the Cenozoic. *Science* 378 (6618): 377-383. <https://doi.org/10.1126/science.abm7525>

Yohe, L. R., D. Lee, M. Fabbri, K. T.J. Davies, T. P. Yohe, S. Scranton, M. K.R. Sánchez, E. M. Rengifo, J. Almonte, R. Hall, G. Mutumi, B. Hedrick, A. Sadier, **N. B. Simmons**, K. E. Sears, E. Dumont, S. J. Rossiter, B.-A.S. Bullar, and L. M. Dávalos. 2022. Ecological constraints on highly evolvable olfactory receptor genes and morphology. *Evolution* 76-10: 2347–2360. <https://doi.org/10.1111/evo.14591>

Groom, Q. T. Adrianens, S. Bertolino, K. Phelps, J. Poelen, D. Reeder, D. Richardson, **N. Simmons**, M. Trekels, and N. Upham. 2022. The importance of collecting and archiving data on domestic and cultivated organisms. *Biodiversity Data Science* 6 (2022): e90864. <https://doi.org/10.3897/biss.6.90864>

Speer, K. A., T. S. M. Teixeira, A. M. Brown, S. L. Perkins, K. Dittmar, M. R. Ingala, C. Wultsh, K. Krampis, C. W. Dick, S. C. Galen, **N. B. Simmons**, and E. L. Clare. 2022. Cascading effects of habitat loss on ectoparasite-associated bacterial microbiomes. *ISME Communications* no. 1 (2022): 1-12. <https://doi.org/10.22541/au.159200503.35915032>

Becker D. J. Guang-Sheng Lei, Michael G. Janech, Alison M. Brand, M. Brock Fenton, **N. B. Simmons**, Ryan F. Relich, Benjamin A. Neely. 2022. Serum proteomics identifies

immune pathways and candidate biomarkers of coronavirus infection in wild vampire bats. *Frontiers in Virology* Vol. 2, Art. 862961, 1-13.

<https://doi.org/10.3389/fviro.2022.862961>

Ferreira, R., E. Bernard, F. Cruz, L. Piló, A. Calux,... G. McCracken, **N. B. Simmons**, P. Racey,... P. Cardoso, and S. Mammola. 2022. Brazilian cave heritage under siege. *Science* 375 (6586): 1238-1239. <https://www.science.org/doi/10.1126/science.abo1973>

López-Aguirre, C.; S. Hand, Suzanne; **N. B. Simmons**, and M. Silcox. 2022. Untangling the ecological signal in the dental morphology in the bat superfamily Noctilionoidea.

Journal of Mammalian Evolution. <https://link.springer.com/article/10.1007/s10914-022-09606-8>

Murphy, C.T., M. Marx, W.N. Martin, H. Jiang, J.M. Lapsertis, A.N. French, **N.B. Simmons**, and M. Moore. 2022. Feeling for food: Can rostro-mental hair arrays sense hydrodynamic cues for foraging North Atlantic right whales? *The Anatomical Record* 2022: 1-15.

https://anatomypubs.onlinelibrary.wiley.com/doi/pdfdirect/10.1002/ar.24858?casa_token=nkyhWPDRJjIAAAAA:AdTmtTZNYeFbYYo9g8kXUN4ARftxcIEJRLbp0WPLnmCCVx95x5KoIGhK1SJRxwQNAEKrC6URC8iOjQ

Mabry, M. E., F. Zapata, D. L. Paul, P. M. O’Conner, P. S. Soltis, D. C. Blackburn, and **N. B. Simmons**. 2022. Monographs as a nexus for building extended specimen networks using persistent identifiers. *Bulletin of the Society of Systematic Biologists* 1(1): 8323: 1-12. <https://doi.org/10.18061/bssb.v1i1.8323>

Giron, J. C., P. M. O’Conner, **N. B. Simmons**, E. Valderrama, D. L. Paul, and M. J., Yoder. 2022. Enhanced monography in a collaboratively evolved hub. *Bulletin of the Society of Systematic Biologists* 1(1): 8340: 1-6. <https://doi.org/10.18061/bssb.v1i1.8340>

Becker, D., G. F. Albery, A. R. Sjodin, T. Poisot, L.M. Bergner, T. A. Dallas, E. A. Eskew, M. J. Farrell, S. Guth, B. A. Han, **N. B. Simmons**, M. Stock, E. C. Teeling, C. J. Carlson. 2022. Predicting wildlife hosts of betacoronaviruses for SARS-CoV-2 sampling prioritization: a modeling study. *The Lancet Microbe* 2022: 1-13.

[https://doi.org/10.1016/S2666-5247\(21\)00245-7](https://doi.org/10.1016/S2666-5247(21)00245-7)

Ruhs E. C., D. J. Becker, S. Oakey, H. F. Droke, O. Ogunsina, M. B. Fenton, **N. B. Simmons**, L. B. Martin, C. J. Downs. 2021. Body size shapes immune cell proportions in birds and non-volant mammals, but not bats. *Journal of Experimental Biology* 224(13), jeb241109.

Luis Viquez-R, K. Speer, K. Wilhelm, **N. B. Simmons**, R. A. Medellín, S. Sommer, and M. Tschapka. 2021. A faithful gut: Core features of gastrointestinal microbiota of long-distance migratory bats remain stable despite dietary shifts driving differences in specific bacterial taxa. *Microbiology Spectrum* 9, no. 3 (2021): e01525-21.

<https://journals.asm.org/doi/pdf/10.1128/Spectrum.01525-21>

Ingala, M. R. **N. B. Simmons**, M. Dunbar, C. Wultsch, K. Krampis, and S. L. Perkins. 2021. You are more than what you eat: differential enrichment of microbiome functions across bat dietary niches. *Animal Microbiome* (2021) 3:82, 17pp.

<https://doi.org/10.1186/s42523-021-00139-8>

Van der Jeucht, L., Q. Groom, D. Agosti, K. Phelps, D. Reeder, and **N. B. Simmons**. 2021. Using iNaturalist to monitor adherence to best practices in bat handling.

Biodiversity Data Journal 9: e68052

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8484243/>

Upham, N. S., J. H. Poelen, D. Paul, Q. J. Groom, **N. B. Simmons**, M. P. M. Vanhove, S. Bertolino, D.M. Reeder, Cr. Bastos-Silveira, A. Sen, B. Sterner, N. Franz, M. Guidoti, L. Penev, and D. Agosti. 2021. Liberating host-virus knowledge from biological dark data. *Lancet Planetary Health* 5 (10) e746-e750.

<https://www.sciencedirect.com/science/article/pii/S2542519621001960>

Velazco, P. M., R. S. Voss, D. W. Fleck, and **N. B. Simmons**. 2021. Mammalian diversity and Matses ethnomammalogy in Amazonian Peru. Part 4: Bats. *Bulletin of the American Museum of Natural History* 451: 1-199.

<https://digitallibrary.amnh.org/bitstream/handle/2246/7277/B451.pdf?sequence=1&isAllowed=y>

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