

MICHAEL D. SORENSON

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EDUCATION

University of Minnesota, Minneapolis
PhD in Ecology, Evolution and Behavior, August 1990

Luther College, Decorah, Iowa
BA in Biology, May 1984
Honors: Summa Cum Laude, Phi Beta Kappa

PROFESSIONAL EXPERIENCE

Department of Biology, Boston University, January 1998 – present
Professor, September 2010 – present
Department Chair, June 2010 – December 2015
Associate Chair, September 2007 – May 2010
Associate Professor, September 2004 – August 2010
Assistant Professor, January 1998 – August 2004

Courses taught:

BI107 Biology I: Ecology, Behavior & Evolution (Fall 1999-2004, 2006-2009, 2014-2017)
BI303 Evolutionary Ecology (Fall 1998)
BI508 Behavioral Ecology (Spring 1999-2004, 2006-2008, 2010, 2012, 2014)
BI515 Population Genetics (Spring 2009, 2013; Fall 2014, 2023)
BI549 Molecular Phylogenetics and Evolution (Fall 1999, 2001, 2003, 2005, 2007)
BI581 Seminar in Biology: Phylogeography (Fall 2000)
BI581 Seminar in Biology: Beyond the Modern Synthesis (Fall 2008)
BI582 Seminar in Biology: Molecular Ecology (Spring 2003, Fall 2004)
BI582 Seminar in Biology: Population Genetics (Spring 2007)

Senior Associate Dean of the Faculty, Natural Sciences, CAS, July 2019 – June 2022
Associate Dean of the Faculty, Natural Sciences, College of Arts & Sciences, Jan 2016 – June 2019
Visiting Scholar, Harvard University Museum of Comparative Zoology, January–May 2005
Postdoctoral Fellow, Museum of Zoology, University of Michigan, July 1995–Dec 1997
National Science Foundation Postdoctoral Fellow, Molecular Genetics Laboratory, U.S. National Zoological Park, July 1993–June 1995
Smithsonian Institution Postdoctoral Fellow / Research Associate, Conservation and Research Center, U.S. National Zoological Park, August 1990–June 1995
Dissertation Field Research in Manitoba, 1986–1989
Teaching Assistant, University of Minnesota, 1984–1988
Research Assistant, Delta Waterfowl and Wetlands Research Station, Manitoba, 1985
Research Assistant, University of Minnesota (fieldwork on sea otters in Alaska), 1984

BOSTON UNIVERSITY SERVICE

BU School of Engineering Strategic Plan Oversight Committee (2020–2022)
Sponsor for “Research that Matters” Strategic Plan Implementation (2020–2022)
COVID-19 Recovery Organization, Research & Clinical Working Group (2020)
Interdisciplinary Biomedical Research Advisory Board (2016–2022)
Ad hoc Committee on Research Security and Conflicts of Commitment (2019)
Working Group on Gender Harassment Prevention (2019)
NEASC Reaccreditation Standards Committees (2018–2019)
Employee Benefits Advisory Committee (2017–2019)
Co-Chair (with DR Rosene), Committee on the Basic Life Sciences (2016–2017)
National Emerging Infectious Diseases Laboratories, Internal Oversight Committee (2015–2016)
Charles River Campus Institutional Animal Care and Use Committee (2008–2011), Chair (2009–2011)
Undergraduate Research Opportunities Program (UROP), Faculty Advisory Committee (2004–2007)
Judge for Science Day poster competitions (2000–2004, 2009)

Biology Department

Department Chair (2010–2015)
Chair, Integrative Neurobiology Search Committee (2013–2015)
Chair’s Advisory Committee (2005–2010)
Director, DNA Sequencing Core Facility (1998–2007)
Computer / Web Page Committee (1998–1999, 2007 - 2010)
 Chair, Web Page Redesign Committee (2007–2008)
 Supervisor for Departmental IT Support Staff Person (2007–2010)
APT Committee (2005–2007)
Chair, Evolutionary Genomics Search Committee (2009–2010)
Chair, Marine Biology Search Committee (2008–2009)
Evolutionary Biology Search Committee (2000–2001)
Evolutionary Ecology Search Committee (1999–2000)
Evolutionary Developmental Biology Search Committee (1998–1999)
Graduate Admissions Committee (1998–2000)
Ecology, Behavior and Evolution Seminar Series Coordinator (2001–2002)
Faculty Merit Review Committee (2006, 2007)
Library Committee (1999–2000, 2003–2004)
Co-director (with TH Kunz) of National Science Foundation Research Experience for Undergraduates Site Program (2000–2002)
Honors Biology (BI107 HC) Participating Faculty (2000–2009)

HONORS & AWARDS

Conference Plenary, American Ornithology 2017: Annual Meeting of the American Ornithological Society and Society of Canadian Ornithologists, August 2017

Elliott Coues Award, American Ornithologists Union, August 2016

Hoslett Memorial Lecture, Luther College, Decorah IA, October 2014

American Ornithologists Union, Elected Fellow, August 2009

American Ornithologists Union, Elective Member, April 1998

National Science Foundation Postdoctoral Fellowship, 1993-1995

Smithsonian Institution Postdoctoral Fellowship, 1990-1991

Doctoral Dissertation Fellowship, University of Minnesota, 1988-1989

Bell Delta Waterfowl Fellowship, University of Minnesota, 1986-1988

McElroy Graduate Fellowship, R.J. McElroy Trust, Iowa, 1984-1987

University of Minnesota Graduate Fellowship, 1984-1986

Webster Fellowship, Delta Waterfowl & Wetlands Research Station, 1985

GRANTS & FELLOWSHIPS

COLLABORATIVE RESEARCH: Comparative Genomics of Host-specific Adaptation and Life History Evolution in Brood Parasitic Birds, NSF (lead PI: Sorenson, with CN Balakrishnan, East Carolina University; WC Warren, University of Missouri; TB Sackton, Harvard University; JM DaCosta, Boston College – Total Funding = \$1,147,452) 2018–2024 \$254,164

EAGER: The Genomic Landscape of Species Divergence in an Extraordinary Avian Radiation, NSF (PI: Sorenson) 2014–2018 \$149,902

White-nose Syndrome Research at Boston University, Bat Conservation International (PI: Sorenson) 2013–2017 \$225,000

DISSERTATION RESEARCH: Parent-embryo interactions in glassfrogs - female mating strategies, paternal effort, and adaptive plasticity in hatching, NSF (PI: KM Warkentin, co-PI: Sorenson; PhD Candidate: JRJ Delia) 2015–2016 \$16,380

DISSERTATION RESEARCH: Bats, Bugs and Pecans: Using Next-Generation Pyrosequencing to Evaluate Ecosystem Services of Insectivorous Bats, NSF (PI: Sorenson; PhD Candidate: EC Braun de Torrez) 2012–2015 \$14,969

DISSERTATION RESEARCH: Speciation Genomics: Expanded Sampling of a Remarkable Avian Radiation, NSF (PI: Sorenson; PhD Candidate: KF Stryjewski) 2012–2014 \$14,426

Assessing population genetic structure and gene flow in the little brown myotis, Myotis lucifugus, Morris Animal Foundation (PI: TH Kunz; co-PI: Sorenson) 2010–2014 \$196,759

Sponsor for Martina Boerner, Postdoctoral Fellow, Marie Curie Actions – International Outgoing Fellowships, European Union 2011–2013 \$148,232

Speciation in Lonchura munias, an extraordinary example of rapid evolutionary diversification, National Geographic Society (PI: Sorenson) 2011–2012 \$21,670

DISSERTATION RESEARCH: RAD Phylogenetics: Harnessing Next-Generation Sequencing for Molecular Systematics, NSF (PI: Sorenson; PhD Candidate: JM DaCosta) 2010–2013 \$13,223

Multilocus Analyses of Speciation, Hybridization, and Population Structure in Brood Parasitic Indigobirds, NSF (PI: Sorenson) 2007–2013 \$440,966

REU supplements, NSF 2007, 2008, 2011 \$19,500

ROA supplement, NSF 2011 \$10,352

<i>Immune Function, Body Composition and Genetic Correlates of Bat White-nose Syndrome</i> , US Fish & Wildlife Service (PI: TH Kunz; co-PI: Sorenson)	2010	\$105,000
<i>Ecology of Infectious Diseases: Ecological Influences on Rabies Infections in Bats</i> , NSF/NIH (PI: GF McCracken, University of Tennessee – Total Funding = \$1,496,000; Boston University sub-award: co-PI: TH Kunz; senior persons: EP Widmaier, MD Sorenson)	2004–2007	\$578,503
<i>Development of Additional Genetic Markers to Differentiate Mottled Ducks from Mallards and Hybrids in Florida</i> , Florida Fish and Wildlife Conservation Commission (PI: Sorenson)	2005–2006	\$20,000
<i>Conflicting Evidence in Waterfowl Systematics</i> , NSF (PI: Sorenson; co-PI: HF James, Smithsonian Institution)	2001–2006	\$190,970
<i>Speciation in Brood Parasitic Indigobirds</i> , NSF (PI: Sorenson)	2001–2005	\$269,714
<i>DISSERTATION RESEARCH: Genetic Diversity and Population Structure of Ectoparasitic Lice Associated with Brood Parasitic Finches Viduidae and their Estrildid Finch Hosts</i> , NSF (PI: Sorenson; PhD Candidate: CN Balakrishnan)	2003–2005	\$11,955
<i>An Automated DNA sequencer for the Department of Biology at Boston University</i> , NSF (PI: Sorenson; co-PIs: Celenza, Finnerty, Schneider)	2003–2005	\$102,887
<i>Hybridization Between Florida Mottled Ducks and Feral Mallards: An Assessment of the Florida Mottled Duck Genome</i> , Wildlife Foundation of Florida & Florida Fish & Wildlife Conservation Commission (PI: Sorenson)	2003–2004	\$24,329
<i>Population Genetics, Phylogeography, and Systematics of Black Ducks and Mallards</i> , Delta Waterfowl Foundation (PI: Sorenson)	2001–2004	\$56,500
<i>Collaborative Cross-Disciplinary Research in Ecology, Endocrinology, and Molecular Biology</i> , NSF REU Sites Program (PI: TH Kunz; co-PI: Sorenson)	2000–2003	\$163,500
Sponsor for Kristina Sefc, Postdoctoral Fellow, Austrian Science Fund	2000–2002	\$64,500
<i>Avian Ordinal Phylogeny Based on Mitochondrial DNA Sequences</i> , NSF (PI: DP Mindell, University of Michigan; co-PI: Sorenson)	1998–2002	\$210,803
REU supplements, NSF	1998–1999	\$15,000
National Science Foundation Postdoctoral Fellowship	1993–1995	\$69,600
Friends of the National Zoo (PI: SR Derrickson; co-PI: Sorenson)	1991–1994	\$41,000
Smithsonian Institution Postdoctoral Fellowship	1990–1991	\$21,000
Graduate Fellowships & Research Grants (various sources)	1984–1989	\$71,937

GRADUATE STUDENTS

- Marina Ramon (MA, 1999-2000, phylogeography of Caribbean hamlet fish *Hypoplectrus* spp., co-advised with PS Lobel)
- Becki French (MA, 2001-2002, analysis of population differentiation among sympatric indigobird populations using amplified fragment length polymorphisms)
- Christopher N. Balakrishnan (PhD, 1999-2005, behavioral and population genetic tests of reproductive isolation among indigobird species in Cameroon)
- Violeta Muñoz-Fuentes (PhD, 2001-2005, visiting student from Estacion Biologica de Doñana, Spain, population genetics and hybridization of white-headed ducks and introduced ruddy ducks in Europe)
- Ryan J. Harrigan (PhD, 2001-2006, phylogeography and hybridization of mallards, black ducks, and mottled ducks)

Kevin Yana Njabo (PhD, Jan. 2002-2006, phylogeography and systematics of montane forest birds in Cameroon)
Tejashree Modak (MA, 2009-2011, molecular systematics and biogeography of Samoan land birds)
Heather C. Shull (PhD, 2004-2012, molecular evolution and phylogenetics of estrildid and brood parasitic finches)
Jeff DaCosta (PhD, 2007-2014, coalescent analyses of population structure and speciation history in brood parasitic indigobirds)
Aryn Wilder (PhD, 2009-2014, population genomics of little brown myotis, co-advised with TH Kunz)
Katherine Faust Stryjewski (PhD, 2008-2015, speciation in the *Lonchura munias* of Papua New Guinea)

POSTDOCTORAL SCHOLARS

Kristina M. Sefc (2000-2003, indigobird speciation and population structure)
Heidi Fisher (2006-2007, hybridization in swordtails *Xiphophorus*, co-advised by Gil Rosenthal, Texas A&M University)
Marianne Moore (2010, MHC and white-nose syndrome in bats, co-advised with Thomas H. Kunz)
Martina (Boerner) Pauli (2011-2013, genetic variation for fitness in buzzards, co-advised with Oliver Kruger, University of Bielefeld, Germany)
Aryn Wilder (2014-2016, immunogenomics of little brown myotis in relation to white-nose syndrome)
Sara Smith (2019-2022, comparative genomics of avian brood parasites)

FIELD EXPERIENCE

Waterfowl: Manitoba (7 seasons, 22 months total), Alberta, Wisconsin, Nevada, Minnesota, New York; Bahamas (4 trips, New Providence, Abaco, Great Inagua, Long Island)
Songbirds: Papua New Guinea; Africa (7 trips): Cameroon (3), Tanzania (2), Zimbabwe/Zambia (1), Gambia/Guinea (1), Saint Vincent (1)

MEMBERSHIPS & PROFESSIONAL SERVICE

American Ornithologists Union/American Ornithological Society
Student Awards Committee, 2002
Society for the Study of Evolution
Society of Systematic Biologists
Council Member, 2007-2009
Ernst Mayr Award Committee, 2008
Associate Editor, *Evolution: International Journal of Organic Evolution*, 2004–2006
Associate Editor, *Ibis: The International Journal of Avian Science*, 2009–2010
Evolutionary Genetics Panel - National Science Foundation, April 2010
Evolutionary Genetics Panel - National Science Foundation, October 2008
Evolutionary Genetics Panel - National Science Foundation, November 2007
Systematic Biology Panel - National Science Foundation, October 2003

PUBLICATIONS

- Knief U, Müller IA, Stryjewski KF, Metzler D, Sorenson MD, Wolf JBW (in revision) Evolution of chromosomal inversions across an avian radiation. *Molecular Biology & Evolution*.
- Wilson RE, Sonsthagen SA, DaCosta JM, Sorenson MD, Fox AD, Weaver M, Skalos D, Kondratyev AV, Scribner KT, Walsh A, Ely CR, Talbot SL (2022) As the goose flies: Migration routes and timing influence patterns of genetic diversity in a circumpolar migratory herbivore. *Diversity* 14: 1067.
- Spottiswoode CN, Tong W, Jamie GA, Stryjewski KF, DaCosta JM, Kuras ER, Green A, Hamama S, Taylor IG, Moya C, Sorenson MD (2022) Genetic architecture facilitates then constrains adaptation in a host-parasite coevolutionary arms race. *Proceedings of the National Academy of Science USA* 119: e2121752119.
- DaCosta JM, Sorenson MD (2021) Variation in the non-mimetic vocalizations of brood-parasitic indigobirds and their potential role in speciation. *Frontiers in Ecology and Evolution* 9: 725979.
- Larison B, Lindsay AR, Bossu C, Sorenson MD, Kaplan JD, Evers DC, DaCosta JM, Smith TB, Ruegg K (2021) Leveraging genomics to understand threats to migratory birds. *Evolutionary Applications* 14, 1646-1658.
- Mapel XM, Gyllenhaal EF, Modak TH, DeCicco LH, Naikatini A, Utzurrum RB, Seamon JO, Cibois A, Thibault J-C, Sorenson MD, Moyle RG, Barrow LN, Andersen MJ (2021) Inter- and intra-archipelago dynamics of population structure and gene flow in a Polynesian bird. *Molecular Phylogenetics and Evolution* 156: 107034.
- D'Urban Jackson J, Bruford MW, Székely T, DaCosta JM, Sorenson MD, Russo I-RM, Maher KH, Cruz-López M, Galindo-Espinosa D, Palacios E, De Sucre-Medrano AE, Cavitt J, Pruner R, Morales AL, Gonzalez O, Burke T, Küpper C (2020) Population differentiation and historical demography of the threatened snowy plover *Charadrius nivosus* (Cassin, 1858). *Conservation Genetics* 21: 387-404.
- Wells CP, Lavretsky P, Sorenson MD, Peters JL, DaCosta JM, Turnbull S, Uyehara KJ, Malachowski CP, Dugger BD, Eadie JM, Engilis A (2019) Persistence of an endangered native duck, feral mallards, and multiple hybrid swarms across the main Hawaiian Islands. *Molecular Ecology* 28: 5203-5216.
- Dongmo J-B, DaCosta JM, Djieto-Lordon C, Ngassam P, Sorenson MD (2019) Variable phylogeographic histories of five forest birds with populations in Upper and Lower Guinea: Implications for taxonomy and evolutionary conservation. *Ostrich: Journal of African Ornithology* 90: 257-270.
- Lavretsky P, DaCosta JM, Sorenson MD, McCracken KG, Peters JL (2019) ddRAD-seq data reveal significant genome-wide population structure and divergent genomic regions that distinguish the mallard and close relatives in North America. *Molecular Ecology* 28: 2594-2609.
- DaCosta JM, Miller MJ, Mortensen JL, Reed JM, Curry RL, Sorenson MD (2019) Phylogenomics clarifies biogeographic and evolutionary history, and conservation status of West Indian tremblers and thrashers (Aves: Mimidae). *Molecular Phylogenetics & Evolution* 136: 196-205.
- Stryjewski KF, Sorenson MD (2017) Mosaic genome evolution in a recent and rapid avian radiation. *Nature Ecology and Evolution* 1, 1912-1922.
- Gomes ACR, Funghi C, Soma M, Sorenson MD, Cardoso GC (2017) Multi-modal signalling in estrildid finches: song, dance and colour are associated with different ecological and life history traits. *Journal of Evolutionary Biology* 30, 1336-1346.
- Gomes ACR, Sorenson MD, Cardoso GC (2016) Speciation is associated with changing ornamentation rather than stronger sexual selection. *Evolution* 70, 2823-2838.

PUBLICATIONS (CONT.)

- Peters JL, Lavretsky P, DaCosta JM, Bielefeld RR, Feddersen JC, Sorenson MD (2016) Population genomic data delineate conservation units in mottled ducks (*Anas fulvigula*). *Biological Conservation* 203, 272-281.
- Fossøy F, Sorenson MD, Liang W, Ekrem T, Moksnes A, Møller AP, Rutila J, Røskaft E, Takasu F, Yang C, Stokke BG (2016) Ancient origin and maternal inheritance of blue cuckoo eggs. *Nature Communications* 7, 10272.
- DaCosta JM, Sorenson MD (2016) ddRAD-seq phylogenetics based on nucleotide, indel, and presence-absence polymorphisms: analyses of two avian genera with contrasting histories. *Molecular Phylogenetics and Evolution* 94, 122-135.
- Pauli M, Chakarov N, Rupp O, Kalinowski J, Goesmann A, Sorenson MD, Krüger O, Hoffman JI (2015) *De novo* assembly of the dual transcriptomes of a polymorphic raptor species and its malarial parasite. *BMC Genomics* 16, 1038.
- Wilder AP, Kunz TH, Sorenson MD (2015) Population genetic structure of a common host predicts the spread of white-nose syndrome, an emerging infectious disease in bats. *Molecular Ecology* 24, 5495-5506.
- Lavretsky P, DaCosta JM, Hernández-Baños BE, Engilis A, Sorenson MD, Peters JL (2015) Speciation genomics and a role for the Z chromosome in the early stages of divergence between Mexican ducks and mallards. *Molecular Ecology* 24, 5364-5378.
- Ebel ER, DaCosta JM, Sorenson MD, Hill RI, Briscoe AD, Willmott KR, Mullen SP (2015) Rapid diversification associated with ecological specialization in Neotropical *Adelpha* butterflies. *Molecular Ecology* 24, 2392-2405.
- DaCosta JM, Sorenson MD (2014) Amplification biases and consistent recovery of loci in a double-digest RAD-seq protocol. *PLoS One* 9, e106713.
- DaCosta JM, Sorenson MD (2014) An experimental test of host song mimicry as a species recognition cue in brood parasitic indigobirds (*Vidua* spp.). *The Auk: Ornithological Advances* 131, 549-558.
- Spottiswoode CN, Stryjewski KF, Quader S, Colebrook-Robjent JFR, Sorenson MD (2011) Ancient host specificity within a single species of brood parasitic bird. *Proceedings of the National Academy of Science USA* 43, 17738-17742.
- Sorenson MD, DaCosta JM (2011) Genotyping HapSTR loci: phase determination from direct sequencing of PCR products. *Molecular Ecology Resources* 11, 1068-1075.
- Turmelle AS, Kunz TH, Sorenson MD (2011) A tale of two genomes: Contrasting patterns of phylogeographic structure in a widely distributed bat. *Molecular Ecology* 20, 357-375.
- Culumber ZW, Fisher HS, Tobler M, Mateos M, Barber PH, Sorenson MD, Rosenthal GG (2011) Replicated hybrid zones of *Xiphophorus* swordtails along an elevational gradient. *Molecular Ecology* 20, 342-356.
- Mertl AL, Sorenson MD, Traniello JFA (2010) Community-level interactions and functional ecology of major workers in the hyperdiverse ground-foraging *Pheidole* (Hymenoptera, Formicidae) of Amazonian Ecuador. *Insectes Sociaux* 57, 441-452.
- Sorenson MD, Hauber ME, Derrickson SR (2010) Sexual imprinting misguides species recognition in a facultative interspecific brood parasite. *Proceedings of the Royal Society of London, Series B* 277, 3079-3085.

PUBLICATIONS (CONT.)

- McCracken KG, Barger CP, Sorenson MD (2010) Phylogenetic and structural analysis of the HbA (a^A/b^A) and HbD (a^D/b^A) hemoglobin genes in two high-altitude waterfowl from the Himalayas and the Andes: bar-headed goose (*Anser indicus*) and Andean goose (*Chloephaga melanoptera*). *Molecular Phylogenetics and Evolution* 56, 649-658.
- Bulgarella M, Sorenson MD, Peters JL, Wilson RE, McCracken KG (2010) Phylogenetic relationships of *Amazonetta*, *Speculanas*, *Lophonetta*, and *Tachyeres*: four morphologically divergent duck genera endemic to South America. *Journal of Avian Biology* 41, 186-199.
- McCracken KG, Barger CP, Bulgarella M, Johnson KP, Sonsthagen SA, Trucco J, Valqui TH, Wilson RE, Winker K, Sorenson MD (2009) Parallel evolution in the major hemoglobin genes of eight species of Andean waterfowl. *Molecular Ecology* 18, 3992-4005.
- Krüger O, Sorenson MD, Davies NB (2009) Does coevolution promote species richness in parasitic cuckoos? *Proceedings of the Royal Society of London, Series B* 276, 3871-3879.
- Njabo KY, Sorenson MD (2009) Origin of Bannerman's turaco in relation to historical climate change and the distribution of West African montane forests. *Ostrich: Journal of African Ornithology* 80, 1-7.
- Campbell BC, Gray PB, Eisenberg DTA, Ellison P, Sorenson MD (2009) Androgen receptor CAG repeats and body composition among Ariaal men. *International Journal of Andrology* 32, 140-148.
- Balakrishnan CN, Sefc KM, Sorenson MD (2009) Incomplete reproductive isolation following host shift in brood parasitic indigobirds. *Proceedings of the Royal Society of London, Series B* 276, 219-228.
- Harrigan RJ, Mazza ME, Sorenson MD (2008) Computation versus cloning: evaluation of two methods for haplotype determination. *Molecular Ecology Resources* 8, 1239-1248.
- Muñoz-Fuentes V, Green AJ, Sorenson MD (2008) Comparing the genetics of wild and captive populations of white-headed ducks *Oxyura leucocephala*: consequences for recovery programmes. *Ibis* 150, 807-815.
- Njabo KY, Bowie RCK, Sorenson MD (2008) Phylogeny, biogeography and taxonomy of the African wattle-eyes (Aves: Passeriformes: Platysteiridae). *Molecular Phylogenetics and Evolution* 48, 136-149.
- Eisenberg DTA, Campbell B, Gray PB, Sorenson MD (2008) Dopamine receptor genetic polymorphisms and body composition in undernourished pastoralists: An exploration of nutrition indices among nomadic and recently settled Ariaal men of northern Kenya. *BMC Evolutionary Biology* 8, 173.
- Brown JW, Rest JS, García-Moreno J, Sorenson MD, Mindell DP (2008) Strong mitochondrial DNA support for a Cretaceous origin of modern avian lineages. *BMC Biology* 6, 6.
- Chilton G, Sorenson MD (2007) Genetic identification of eggs purportedly from the extinct Labrador duck. *The Auk* 124, 962-968.
- Sefc KM, Payne RB, Sorenson MD (2007) Single base errors in PCR products from avian museum specimens. *Conservation Genetics* 8, 879-884.
- Krüger O, Davies NB, Sorenson MD (2007) The evolution of sexual dimorphism in parasitic cuckoos: sexual selection or coevolution? *Proceedings of the Royal Society of London, Series B* 274, 1553-1560.
- Brennan PLR, Prum RO, McCracken KG, Sorenson MD, Wilson RE, Birkhead TR (2007) Coevolution of male and female genital morphology in waterfowl. *PLoS ONE* 2, e418.
- Payne RB, Sorenson MD (2007) Integrative systematics at the species level: plumage, songs and molecular phylogeny of quail-finch *Ortygospiza*. *Bulletin of the British Ornithological Club* 127, 4-26.

PUBLICATIONS (CONT.)

- Muñoz-Fuentes V, Vilà C, Green AJ, Negro JJ, Sorenson MD (2007) Hybridization between white-headed ducks and introduced ruddy ducks in Spain. *Molecular Ecology* 16, 629-638.
- Sefc KM, Payne RB, Sorenson MD (2007) Genetic differentiation after founder events: an evaluation of F_{ST} estimators with empirical and simulated data. *Evolutionary Ecology Research* 9, 21-39.
- Balakrishnan CN, Sorenson MD (2007) Dispersal ecology versus host specialization as determinants of ectoparasite distribution in brood parasitic indigobirds and their estrildid finch hosts. *Molecular Ecology* 16, 217-229.
- Muñoz-Fuentes V, Green AJ, Sorenson MD, Negro JJ, Vilà C (2006) The ruddy duck *Oxyura jamaicensis* in Europe: natural colonisation or human introduction? *Molecular Ecology* 15, 1441-1454.
- Balakrishnan CN, Sorenson MD (2006) Song discrimination suggests premating isolation among sympatric indigobird species and host races. *Behavioral Ecology* 17, 473-478.
- Barlow CR, Payne RB, Payne LL, Sorenson MD (2006) Sierra Leone prinia *Schistolais leontica* in the Fouta Djallon of Guinea, its song, distribution and taxonomic status. *Bulletin of the African Bird Club* 13, 45-48.
- Muñoz-Fuentes V, Green AJ, Negro JJ, Sorenson MD (2005) Population structure and loss of genetic diversity in the endangered white-headed duck, *Oxyura leucocephala*. *Conservation Genetics* 6, 999-1015.
- Kulikova IV, Drovetski SV, Gibson DD, Harrigan RJ, Rohwer S, Sorenson MD, Winker K, Zhuravlev YN, McCracken KG (2005) Phylogeography of the mallard (*Anas platyrhynchos*): hybridization, dispersal, and lineage sorting contribute to complex geographic structure. *The Auk* 122, 949-965.
- Edwards SV, Kingan SB, Calkins JD, Balakrishnan CN, Jennings WB, Swanson WJ, Sorenson MD (2005) Speciation in birds: genes, geography, and sexual selection. *Proceedings of the National Academy of Science USA* 102, 6550-6557.
- Sefc KM, Payne RB, Sorenson MD (2005) Genetic continuity of brood parasitic indigobird species in space and time. *Molecular Ecology* 14, 1407-1419.
- Sorenson MD, Payne RB (2005) A molecular genetic analysis of cuckoo phylogeny. Pp. 68-94 in R.B. Payne. *Bird Families of the World: Cuckoos*. Oxford University Press.
- McCracken KG, Sorenson MD (2005) Is homoplasy or lineage sorting the source of incongruent mtDNA and nuclear gene trees in the stiff-tailed ducks (*Nomonyx-Oxyura*)? *Systematic Biology* 54, 35-55.
- Payne RB, Barlow CR, Balakrishnan CN, Sorenson MD (2005) Song mimicry of black-bellied firefinch *Lagonosticta rara* and other finches by brood-parasitic indigobirds *Vidua camerunensis* in West Africa. *The Ibis* 147, 130-143.
- Cracraft J, Barker FK, Braun M, Harshman J, Dyke GJ, Feinstein J, Stanley S, Cibois A, Schikler P, Beresford P, García-Moreno J, Sorenson MD, Yuri T, Mindell DP (2004) Phylogenetic relationships among modern birds (Neornithes): toward an avian tree of life. Pp. 468-489 in Cracraft J, Donoghue MJ, eds. *Assembling the Tree of Life*. Oxford University Press, New York.
- Payne RB, Sorenson MD (2004) Behavioral and genetic identification of a hybrid *Vidua*: maternal origin and mate choice in a brood-parasitic finch. *The Auk* 121, 156-161.
- Sorenson MD, Balakrishnan CN, Payne RB (2004) Clade-limited colonization in brood parasitic finches (*Vidua* spp.). *Systematic Biology* 53, 140-153.
- Sefc KM, Payne RB, Sorenson MD (2003) Microsatellite amplification from museum feather samples: the effects of fragment size and template concentration on genotyping errors. *The Auk* 120, 982-989.

PUBLICATIONS (CONT.)

- Ramon ML, Lobel PS, Sorenson MD (2003) Lack of mitochondrial genetic structure in hamlets (*Hypoplectrus* spp.): recent speciation or ongoing hybridization? *Molecular Ecology* 12, 2975-1980.
- Payne RB, Sorenson MD (2003) Museum collections as sources of genetic data. In G. Rheinwald, ed. *Bird Collections in Europe: the Challenge of Mutual Cooperation. Bonner Zoologische Beiträge* 51 (2002), 97-104.
- Sorenson MD, Oneal E, García-Moreno J, Mindell DP (2003) More taxa, more characters: the hoatzin problem is still unresolved. *Molecular Biology and Evolution* 20, 1484-1499.
- Sorenson MD, Sefc KM, Payne RB (2003) Speciation by host switch in brood parasitic indigobirds. *Nature* 424, 928-931.
- García-Moreno J, Sorenson MD, Mindell DP (2003) Congruent avian phylogenies inferred from mitochondrial and nuclear DNA sequences. *Journal of Molecular Evolution* 57, 27-37.
- Sefc KM, Payne RB, Sorenson MD (2003) Phylogenetic relationships of African sunbird-like warblers: moho *Hypergerus atriceps*, green hylia *Hylia prasina* and tit-hylia *Pholidornis rushiae*. *Ostrich: Journal of African Ornithology* 74, 8-17.
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- Johnson KP, Sorenson MD (1999) Phylogeny and biogeography of the dabbling ducks (Genus: *Anas*): A comparison of molecular and morphological evidence. *The Auk* 116, 792-805.
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- Sorenson MD (1997) Effects of intra- and interspecific brood parasitism on a precocial host, the canvasback, *Aythya valisineria*. *Behavioral Ecology* 8, 153-161.
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- Arnold TW, Anderson MG, Emery RB, Sorenson MD, de Sobrino C (1995) The effect of late-incubation body mass on reproductive success of canvasbacks and redheads. *The Condor* 97, 953-962.

PUBLICATIONS (CONT.)

- Sorenson MD (1995) Evidence of conspecific nest parasitism and egg discrimination in the sora. *The Condor* 97, 819-821.
- Arnold TW, Sorenson MD, Rotella JJ (1993) Relative success of overwater and upland mallard nests in southwestern Manitoba. *Journal of Wildlife Management* 57, 578-581.
- Sorenson MD (1993) Parasitic egg laying in canvasbacks: frequency, success and individual behavior. *The Auk* 110, 57-69.
- Sorenson MD (1992) Comment: Why is conspecific nest parasitism more common in waterfowl than in other birds? *Canadian Journal of Zoology* 70, 1856-1858.
- Sorenson MD (1991) The functional significance of parasitic egg laying and typical nesting in redhead ducks: an analysis of individual behaviour. *Animal Behaviour* 42, 771-796.
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- Sorenson MD (1989) Effects of neck-collar radio transmitters on female redhead ducks. *Journal of Field Ornithology* 60, 523-528.
- Arnold TW, Sorenson MD (1988) A record early season for marsh-breeding birds in southwestern Manitoba. *Blue Jay* 46, 133-135.

COMPUTER PROGRAM

- Sorenson MD, Franzosa EA (2007) *TreeRot*, version 3. Boston University, Boston, MA. (Available at: <http://people.bu.edu/msoren/TreeRot>)
- Sorenson MD (1999) *TreeRot*, version 2. Boston University, Boston, MA.
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This program generates constraint statements that aid in the determination of support indices in phylogenetic analysis. Systematists have used the program extensively for analyses of both molecular and morphological data. The three versions of the program have been cited at least **1,274** times.

POPULAR ARTICLES

- Payne RB, Sorenson MD (2006) Song lines. *NATURAL HISTORY* 115(7): 41 (September 2006).
- Sorenson MD (1992) The parasitic tactics of redhead ducks. *ANIMA: Magazine of Natural History*. No. 237: 78-81 (June 1992). Heibonsha Limited, Publishers: Tokyo.
- Sorenson MD (1989) Brood parasitism in the redhead duck. *IMPRINT* 6(4): 4-5. James Ford Bell Museum of Natural History: Minneapolis.

MANUSCRIPT/PROPOSAL REVIEWS

<i>Acta Zoologica Sinica</i>	<i>Behavioral Ecology and Sociobiology</i>	<i>Cladistics</i>
<i>American Naturalist</i>	<i>Biological Journal of the Linnean Society</i>	<i>Climatic Change</i>
<i>Animal Behaviour</i>	<i>Biology Letters</i>	<i>The Condor</i>
<i>Animal Conservation</i>	<i>Bird Behavior</i>	<i>Conservation Genetics</i>
<i>The Auk: An International Journal of Ornithology</i>	<i>BMC Evolutionary Biology</i>	<i>Ecology</i>
<i>Avian Conservation & Ecology</i>	<i>Canadian Journal of Zoology</i>	<i>Ecology Letters</i>
<i>Behavioral Ecology</i>		<i>Emu: Austral Ornithology</i>
		<i>Ethology</i>

<i>Evolution</i>	<i>Journal of Zoological</i>	<i>PLoS Genetics</i>
<i>Evolutionary Ecology</i>	<i>Systematics and</i>	<i>PLoS One</i>
<i>Genes, Brain and Behavior</i>	<i>Evolutionary Research</i>	<i>Prairie Naturalist</i>
<i>Genetics</i>	<i>Methods in Ecology and</i>	<i>Proceedings of the National</i>
<i>Genome</i>	<i>Evolution</i>	<i>Academy of Sciences USA</i>
<i>Hormones and Behavior</i>	<i>Mitochondrial DNA</i>	<i>Proceedings of the Royal</i>
<i>The Ibis: The International</i>	<i>Molecular Biology and</i>	<i>Society of London B,</i>
<i>Journal of Avian Science</i>	<i>Evolution</i>	<i>Biological Sciences</i>
<i>Journal of Avian Biology</i>	<i>Molecular Ecology</i>	<i>Quarterly Review of Biology</i>
<i>Journal of Biogeography</i>	<i>Molecular Ecology Resources</i>	<i>Science</i>
<i>Journal of Biological Systems</i>	<i>Molecular Phylogenetics and</i>	<i>Scopus (East African Journal</i>
<i>Journal of Experimental</i>	<i>Evolution</i>	<i>of Ornithology)</i>
<i>Biology</i>	<i>Nature</i>	<i>Systematic Biology</i>
<i>Journal of Field Ornithology</i>	<i>Nature Communications</i>	<i>Trends in Ecology and</i>
<i>Journal of Great Lakes</i>	<i>Nature Ecology & Evolution</i>	<i>Evolution</i>
<i>Research</i>	<i>Ostrich: Journal of African</i>	<i>Wilson Bulletin</i>
<i>Journal of Heredity</i>	<i>Ornithology</i>	<i>Zoological Studies</i>
<i>Journal of Theoretical Biology</i>	<i>Philosophical Transactions of</i>	
<i>Journal of Wildlife</i>	<i>the Royal Society B</i>	
<i>Management</i>	<i>PLoS Biology</i>	
The American Ornithologists Union		Israel Science Foundation
Chilean National Fund for Scientific &		Marsden Fund, Royal Society of New Zealand
Technological Development (FONDECYT)		National Geographic Society
Delta Waterfowl & Wetlands Research Station		National Science Foundation
Finnish Academy of Science		Netherlands Organisation for Scientific
FWF (Austrian Science Fund)		Research (NWO)

INVITED CONFERENCE PRESENTATIONS

Symposium: Species Limits in Birds: Integrative and Practical Considerations for Taxonomy. American Ornithology Conference, Anchorage, AK, June 2019

Waterfowl Conservation Workshop, International Wild Waterfowl Association, Greenville, NC, October 2018

Conference Plenary, American Ornithology 2017: Annual Meeting of the American Ornithological Society and Society of Canadian Ornithologists, East Lansing, MI, August 2017

Frontiers in Phylogenetics Fall Symposium: Methods and Analysis of Coevolution Across Scales: From Within Genomes to Disease and Environments, National Museum of Natural History, September 2015

Symposium: Genomic Approaches to Understanding Avian Speciation. AOU, COS, SCO Joint Meeting, Estes Park, Colorado, September 2014 (presentation by PhD student Katherine Stryjewski)

Symposium: Avian Diversification in the Old World Tropics. American Ornithologists' Union, Chicago, Illinois, August 2013

International Symposium on Avian Brood Parasitism, Haikou, Hainan, China, November 2012

Symposium: Speciation. American Ornithologists' Union, Laramie, Wyoming, August 2007

Symposium: Phylogenies and Behaviour. Association for the Study of Animal Behaviour, London, December 2004

Symposium: Problems and Opportunities in Avian Deep Phylogenetics. 3rd North American Ornithological Conference, New Orleans LA. September 2002

Symposium: Untangling Coevolutionary History. Society for Systematic Biology, Champaign-Urbana, Illinois, June 2002

Symposium: Living Together: the Dynamics of Symbiotic Interactions. Society for Integrative and Comparative Biology, Chicago, Illinois, January 2001

Symposium: Coevolution in Brood Parasitism, 22nd International Ethological Conference, Nagano, Japan, August, 1991

Symposium: Parasitic Birds and Their Hosts, American Ornithologists' Union, Los Angeles, California, June, 1990

INVITED LECTURES

Department of Biological Sciences & FitzPatrick Institute of African Ornithology, University of Cape Town, October 2022

Nuttall Ornithological Club, Cambridge, MA, February 2017

CIBIO - Centro de Investigação em Biodiversidade e Recursos Genéticos, Universidade do Porto, Portugal, December 2014

Hoslett Memorial Lecture, Luther College, Decorah, IA, October 2014

Department of Biological Sciences, Wright State University, October 2013

Department of Ecology and Evolution, Stony Brook University, December 2012

Guest Lecture, OEB 190, Biology and Diversity of Birds, Harvard University, March 2012

Department of Evolution Ecology and Organismal Biology, Ohio State University, April 2011

31st Annual Darwin Festival, Salem State College, Salem, MA, February 2010

Department of Ecology and Evolutionary Biology, University of California Santa Cruz, September 2009

Department of Ecology and Evolutionary Biology, University of California Los Angeles, September 2009

California Academy of Sciences, San Francisco, September 2009

Museum of Vertebrate Zoology, University of California Berkeley, September 2009

National Geographic Society, Committee for Research and Exploration, Washington D.C., July 2009

Institute for Genomic Biology, University of Illinois at Urbana-Champaign, May 2009

Field Museum of Natural History, Chicago, IL, May 2009

Guest Lecture, OEB 190, Biology and Diversity of Birds, Harvard University, April 2009

"BioMixer", Department of Biology, Boston University, December 2008

Guest Lecture, OEB 190, Biology and Diversity of Birds, Harvard University, April 2007

Nuttall Ornithological Club, Cambridge, MA, April 2006

Department of Evolution, Genomics and Systematics, Uppsala University, Sweden, March 2006

Institute of Zoology, Karl Franzens University, Graz, Austria, March 2006

Edwards Lab, Department of Ornithology, Museum of Comparative Zoology, Harvard University, May 2005

Bauer Center for Genomics Research, Harvard University, May 2005

Guest Lecture, OEB 190, Biology and Diversity of Birds, Harvard University April 2005

Department of Biology, University of Massachusetts Amherst, April 2005

Department of Organismal and Evolutionary Biology, Harvard University, November 2004

Boston University Marine Program, Woods Hole, MA, October 2003

Department of Biology, Tufts University, September 2003
Woods Hole Oceanographic Institution, Woods Hole, Massachusetts, January 2003
Department of Biology, University of Missouri St. Louis, October 2002
Institute of Arctic Biology, University of Alaska Fairbanks, September 2002
Department of Biology and Wildlife, University of Alaska Fairbanks, September 2002
Department of Zoology, University of New Hampshire, Durham, November 2001
Plenary: Delta Student Seminars, Delta Waterfowl Foundation, Portage la Prairie, Manitoba, July 2001
Institute for Waterfowl and Wetlands Research, Ducks Unlimited, Oak Hammock, Manitoba, July 2001
Museum of Zoology, University of Michigan, Ann Arbor, April 2001
Department of Biology, University of Massachusetts, Boston, Massachusetts, October 2000
Conservation and Research Center, Front Royal, Virginia, September 2000
U.S. National Zoological Park, Smithsonian Institution, September 2000
Marine Biological Laboratory, Woods Hole, Massachusetts, May 2000
Department of Ecology & Evolutionary Biology, Brown University, Providence, Rhode Island, April 2000
Laboratory of Ornithology, Cornell University, Ithaca, New York, February 2000
Section of Ecology and Evolutionary Biology, Cornell University, Ithaca, New York, February 2000
American Museum of Natural History, New York, December 1999
Tiputini Biodiversity Station, Ecuador, March 1999
Department of Biology, SUNY-Albany, Albany, New York, April 1997
Department of Biology, St. Olaf College, Northfield, Minnesota, March 1997
Department of Biology, Boston University, February 1997
Department of Biology, University of California Santa Barbara, February 1997
Systematics Association of Michigan, Ann Arbor, December 1996
Delta Waterfowl and Wetlands Research Station, Manitoba, Canada, May 1996
Department of Biology, Illinois State University, Normal, February 1996
Museum of Zoology, University of Michigan, Ann Arbor, January 1995
Department of Biology, University of Pennsylvania, Philadelphia, October 1994
Department of Zoological Research, U. S. National Zoological Park, Washington, D.C., September 1994
Department of Biology, University of Maryland, College Park, April 1993
Appalachian Environmental Lab, University of Maryland, Frostburg, February, 1991
Department of Zoological Research, U. S. National Zoological Park, Washington, D.C., November, 1990
Canvasback Research Coordination Meeting, USFWS, Patuxent Wildlife Research Center, Laurel,
Maryland, April 1990
Biology Department, Gustavus Adolphus College, St. Peter, Minnesota, April, 1989
Biology Colloquium, Luther College, Decorah, Iowa, March 1988