Updated 1/29/2021

CURRICULUM VITAE

Frederick Keith Barker

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I) IDENTIFYING INFORMATION:

A) ACADEMIC RANK

Associate Professor, Department of Ecology, Evolution and Behavior
Curator of Genetic Resources, Bell Museum of Natural History
Graduate faculty appointments in Ecology, Evolution and Behavior and Conservation Biology

B) EDUCATION

Ph.D., Evolutionary Biology, 1999. University of Chicago, Chicago, IL
B.A., Biology, 1993. Reed College, Portland, OR

C) CURRENT APPOINTMENTS

Associate Professor: Department of Ecology, Evolution and Behavior, University of Minnesota; August 2015-Present
Curator of Genetic Resources: Bell Museum of Natural History, University of Minnesota; August 2008-Present
Graduate Faculty: Department of Ecology, Evolution, and Behavior, University of Minnesota; September 2008-Present
Graduate Faculty: Conservation Biology, University of Minnesota; May 2012-Present
Research Associate: American Museum of Natural History, NY; January 2003-Present

D) PREVIOUS APPOINTMENTS

Interim Curator of Birds: Bell Museum of Natural History, University of Minnesota; March 2016-June 2018
Assistant Professor: Department of Ecology, Evolution and Behavior, University of Minnesota; August 2008-2015
Research Associate: Bell Museum of Natural History, University of Minnesota; October 2005-August 2008
Postdoctoral Associate: Bell Museum of Natural History, University of Minnesota; October 2002-October 2005
Chapman Postdoctoral Fellow: American Museum of Natural History, NY; October 1999-October 2002

E) SOCIETY AFFILIATIONS

American Ornithologists' Union
Society for the Study of Evolution
Society of Systematic Biologists

II) HONORS AND AWARDS

A) EXTERNAL SOURCES

Brina Kessel Award, American Ornithologists' Society, 2018
Fellow, American Ornithologists' Union, 2013
Elective Member, American Ornithologists' Union, 2005

III) Research and Scholarship

A) Research Grants

Funded (Current):

Legislative-Citizen Commission on Minnesota Resources. *Minnesota Biodiversity Atlas: Phase II Expansion*. PIs: G. Weiblen, **F.K. Barker**, S.A. Jansa, A. Simons, and K. Kozak. $543,138, July 2017-Present.

National Science Foundation, Division of Environmental Biology, Systematics and Biodiversity Science Cluster. *Collaborative Research: All Birds: A Time-Scaled Avian Tree From Integrated Phylogenomic and Fossil Data*. PIs: Smith, B., R.T. Brumfield, B. Faircloth, **F.K. Barker**, R. Kimball, E. Braun, R.T. Chesser and D. Ksepka. DEB-1655559. $1,705,070 ($32,290 to University of Minnesota, plus an REU Supplement, Summer 2018. $7,235). September 2017-Present.

Funded (Past):

National Science Foundation, Division of Environmental Biology, Systematics and Biodiversity Science Cluster. *EAGER: Guilt by proxy: the impact of selection and temperate-tropical transitions on the evolution of New World bird diversity*. PI **F.K. Barker**. DEB-1541312. $148,881, August 2015-June 2020.

Legislative-Citizen Commission on Minnesota Resources. *Integrating Minnesota's biodiversity data: a comprehensive, dynamic atlas*. PIs: **F.K. Barker**, S.T. Bates, S.A. Jansa, A. Simons, and G. Weiblen. $340,000, July 2015-June 2017.

University of Minnesota, Grant-in-Aid of Research, Artistry and Scholarship: *Testing the relative utility of mitochondrial genomes and large nuclear data sets for inferring the phylogeny of passerine birds.* PI: **F.K. Barker**. $28,110, September 2011-December 2012.

National Science Foundation, Division of Environmental Biology, Cluster for Systematic and Population Biology: *Collaborative Research: Historical inference in the Emberizinae (Aves: Passeriformes) using a complete species-level phylogeny*. PIs: **F.K. Barker**, K.J. Burns, J.T. Klicka, S.M. Lanyon, and I.J. Lovette. DEB-0316092. $333,449 ($117,740 to University of Minnesota, plus an REU supplement for $10,249 in 2004), June 2003-August 2007.

Advisee Funding:

NSF Graduate Research Fellowship: Matthew Dufort (2008), Jacob Musser (2010), Shanta Hejmadi (2017)

B) Publications

(published with mentee: *Undergraduate student, **Graduate student)

Manuscripts in Revision:

Vázquez-Miranda, H.**, and F.K. Barker. Autosomal, sex-linked and mitochondrial loci resolve evolutionary relationships among Neotropical wrens of the genus *Campylorhynchus*. *Molecular Phylogenetics and Evolution*.

Manuscripts in Review:

Imfeld, T.S.** and **F.K. Barker**. Diversification and morphological evolution are correlated and strikingly uniform across American songbirds (Passeriformes: Passeri). *Evolution*.

Reviewed Journal Papers:

Imfeld, T.S.**, **F.K. Barker**, and R.T. Brumfield. 2020. Mitochondrial genomes and thousands of ultraconserved elements resolve the taxonomy and historical biogeography of the *Euphonia* and *Chlorophonia* finches (Passeriformes: Fringillidae) *The Auk: Ornithological Advances* 137: 1–25. doi: 10.1093/auk/ukaa016

Kimball, R.T., C.H. Oliveros, N. Wang, N.D. White, **F.K. Barker**, D.J. Field, D.T. Ksepka, R.T. Chesser, R.G. Moyle, M.J. Braun, R.T. Brumfield, et al. 2019. A phylogenomic supertree of birds. *Diversity* 11(7):35. doi: 10.3390/d11070109

Oliveros, C.H., D.J. Field, D.T. Ksepka, **F.K. Barker**, A. Aleixo, M.J. Andersen, P. Alström, B.W. Benz, E.L. Braun, M.J. Braun, Gustavo A. Bravo, R.T. Brumfield, R.T. Chesser, S. Claramunt, J. Cracraft, A.M. Cuervo, E.P. Derryberry, T.C. Glenn, M.G. Harvey, P.A. Hosner, L. Joseph, R. Kimball, A.L. Mack, Colin M. Miskelly, A. Townsend Peterson, M.B. Robbins, F.H. Sheldon, L.

Fábio Silveira, B.T. Smith, N.D. White, R.G. Moyle, B.C. Faircloth. 2019. Earth history and the passerine superradiation. *Proc. Natl. Acad. Sci, USA* 116:7916.

Shaw, A., J. Sherman, **F.K. Barker**, and M. Zuk. 2018. Metrics matter: the effect of parasite richness, intensity and prevalence on the evolution of host migration. *Proc. R. Soc. Lond., Ser. B.* 285(1891): 20182147. DOI: 10.1098/rspb.2018.2147.

Barker, F.K. 2017. Molecular phylogenetics of the wrens and allies (Passeriformes: Certhioidea), with comments on the relationships of *Ferminia*. *American Museum Novitates* No. 3887: 27 pp.

Wells, M.T.** and **F.K. Barker**. 2017. Big groups attract bad eggs: brood parasitism correlates with but does not cause cooperative breeding. *Animal Behavior* 133: 47-56.

Avendano, J.E., **F.K. Barker**, C.D. Cadena. 2016. The Yellow-green Bush-tanager is neither a bush-tanager nor a sparrow: Molecular phylogenetics reveals that *Chlorospingus flavovirens* is a tanager (Aves: Passeriformes; Thraupidae). Zootaxa 4136(2): 373-381.

Remsen, J.V., Jr., A.F.L.A. Powell, **F.K. Barker**, and S.M. Lanyon. A revised classification of the Icteridae (Aves) based on DNA sequence data. *Zootaxa* 4093(2): 285-292.

Barker, F.K., S. Oyler-McCance, and D.F. Tomback. 2015. Blood from a turnip: tissue origin of low-coverage shotgun sequencing libraries affects recovery of mitogenome sequences. *Mitochondrial DNA* 26(3): 384-388.

Barker, F.K., K.J. Burns, J. Klicka, I.J. Lovette, S.M. Lanyon. 2015. New insights into New World biogeography: an integrated view from the phylogeny of blackbirds, cardinals, sparrows, tanagers, warblers, and allies. *The Auk: Ornithological Advances* 132: 333-348.

Jarvis, E.D., S. Mirarab, A.J. Aberer, B. Li, P. Houde, C. Li, S.Y.W. Ho, B.C. Faircloth, B. Nabholz, J.T. Howard, A. Suh, C.C. Weber, R.R. da Fonseca, J. Li, F. Zhang, H. Li, L. Zhou, N. Narula, L. Liu, G. Ganapathy, B. Boussau, Md.S. Bayzid, V. Zavidovych, S. Subramanian, T. Gabaldón, S. Capella-Gutiérrez, J. Huerta-Cepas, B. Rekepalli, K. Munch, M. Schierup, B. Lindow, W.C. Warren, D. Ray, R.E. Green, M. Bruford, X. Zhan, A. Dixon, S. Li, N. Li, Y. Huang, E.P. Derryberry, M.F. Bertelsen, F. Sheldon, R.T. Brumfield, C. Mello, P.V. Lovell, M. Wirthlin, J.A. Samaniego, A.M.V. Velazquez, A. Alfaro-Núñez, P.F. Campos, T. Sicheritz-Ponten, A. Pas, T. Bailey, P. Scofield, M. Bunce, D. Lambert, Q. Zhou, P. Perelman, A.C. Driskell, G. Ruby, B. Shapiro, Z. Xiong, Y. Zeng, S. Liu, Z. Li, B. Liu, K. Wu, J. Xiao, X. Yinqi, Q. Zheng, Y. Zhang, H. Yang, J. Wang, L. Smeds, F.E. Rheindt, M. Braun, J. Fjeldsa, L. Orlando, **F.K. Barker**, K.A. Jønsson, W. Johnson, K.-P. Koepfli, S. O'Brien, D. Haussler, O.A. Ryder, C. Rahbek, E. Willerslev, G.R. Graves, T.C. Glenn, J. McCormack, D. Burt, H. Ellegren, P. Alström, S. Edwards, A. Stamatakis, D.P. Mindell, J. Cracraft, E.L. Braun, T. Warnow, W. Jun, M.T.P. Gilbert, G. Zhang. 2014. Whole genome analyses resolve the early branches in the tree of life of modern birds. *Science* 346(6215): 1320-1331.

Winger, B.M., R.H. Ree, and **F.K. Barker**. 2014. The biogeographic history of seasonal bird migration between North America and the Neotropics. *Proceedings of the National Academy of Sciences, USA* 111(33) 12115-12120.

Barker, F.K. 2014. Mitogenomic data resolve basal relationships among passeriform and passeridan birds. *Molecular Phylogenetics and Evolution* 79: 313-324.

Klicka, J., **F.K. Barker**, K.J. Burns, S.M. Lanyon, I.J. Lovette, J.A. Chaves, and RW. Bryson, Jr. 2014. A comprehensive multilocus assessment of sparrow (Family Passerellidae) relationships. *Molecular Phylogenetics and Evolution* 77: 177-182.

Pasquet, E., **F.K. Barker**, J. Martens, J., A. Tillier, C. Cruaud, and A. Cibois. 2014. Evolution within the nuthatches (Sittidae: Aves, Passeriformes): molecular phylogeny, biogeography, and morphological perspectives. *Journal of Avian Biology* 155(3): 755-765.

Burns, K.J., A.J. Shultz, P.O. Title, N.A. Mason, **F.K. Barker**, J. Klicka, S.M. Lanyon, and I.J. Lovette. 2014. Phylogenetics and diversification of tanagers (Passeriformes: Thraupidae), the largest radiation of Neotropical songbirds. *Molecular Phylogenetics and Evolution* 75: 41-77.

Jansa, S.A., **F.K. Barker**, and R.S. Voss. 2014. The early diversification history of didelphid marsupials: a window into south america's 'splendid isolation. *Evolution* 68(3): 684-695.

Powell, A.F.L.A.**, **F.K. Barker**, Scott M. Lanyon, K.J. Burns, J. Klicka, and I.J.L. Lovette. 2014. A comprehensive species-level molecular phylogeny of the New World blackbirds (Icteridae). *Molecular Phylogenetics and Evolution* 71(1): 94-112.

Dufort, M.J.** and **F.K. Barker**. 2013. Asymmetric population expansion rather than convergent selection underlies the mosaic distribution of red-winged blackbird (*Agelaius phoeniceus*) phenotypes. *Ecology and Evolution* 3(15): 4851–5126. doi: 10.1002/ece3.859.

Alström, P., K. Barnes, U. Olsson, **F.K. Barker**, P. Bloomer, A. Ahmed Khan, M. Ahmed Qureshi, and P.G. Ryan. 2013. Multilocus phylogeny of the avian family Alaudidae (larks) reveals complex

morphological evolution, non-monophyletic genera and hidden species diversity. *Molecular Phylogenetics and Evolution* 69: 1043-1056.

Ryan, P.G., L.B. Klicka, **F.K. Barker**, and K.J. Burns. 2013. The origin of finches on Tristan da Cunha and Gough Island, central South Atlantic Ocean. *Molecular Phylogenetics and Evolution* 69: 299-305.

Barker, F.K., K.J. Burns, J. Klicka, I.J. Lovette, S.M. Lanyon. 2013. Going to extremes: contrasting rates of diversification in a recent radiation of New World passerine birds. *Systematic Biology* 62(2): 298-320.

Powell, A.F.L.A.**, **F.K. Barker**, S.M. Lanyon. 2013. Empirical evaluation of partitioning schemes for phylogenetic analyses of mitogenomic data: an avian case study. *Molecular Phylogenetics and Evolution* 66: 69-79.

Barker, F.K., M.K. Benesh*, A.J. Vandergon*, and S.M. Lanyon. 2012. Contrasting evolutionary dynamics and information content of the avian mitochondrial control region and ND2 gene. *PLoS ONE* 7(10): e46403. doi:10.1371/journal.pone.0046403

Molecular Ecology Resources Primer Development Consortium, **F.K. Barker**, J.J. Bell, S.M. Bogdanowicz, S.L. Bonatto, F. Cezilly, S.M. Collins, C. Dubreuil, M. Dufort**, C. Eraud, R. Fuseya, E.A. Heap, N. Jacobsen, M. Madders, R. McEwing, Andrew P. Michel, F. Mougeot, R. S. Ogden, Lucia C. Orantes, A.S. Othman, E. Parent, P. Pulido-Santacruz, R. Rioux-Paré , M.F. Roberts, R. Rosazlina, T. Sakamoto, P. Salinas-De-León, J.-M. Sévigny, P. St-Onge, J. Terraube, R.E. Tingay, R. Tremblay, S. Watanabe and R.A. Wattier. **2011**. Permanent genetic resources added to Molecular Ecology Resources Database 1 June 2011-31 July 2011. *Molecular Ecology Resources* 11(6): 1124-1126. Full manuscript available at: http://tomato.bio.trinity.edu/manuscripts/11-6/mer-11-0123.pdf.

Lovette, I.J., J.L. Pérez-Emán, J. Sullivan, R.C. Banks, I. Fiorentino, S. Córdoba-Córdoba, M. Echeverry-Galvis, **F.K. Barker**, K. Burns, J. Klicka, S.M. Lanyon, and E. Bermingham. 2010. A comprehensive multilocus phylogeny for the wood-warblers and a revised classification of the Parulidae (Aves). *Molecular Phylogenetics and Evolution* 57: 753-770.

McKay, B.D.**, **F.K. Barker**, H.L. Mays, Jr., S.M. Doucet, and G.E. Hill. 2010. A molecular phylogenetic hypothesis for manakin genera (Aves: Pipridae). *Molecular Phylogenetics and Evolution* 55(2): 733-737.

Fujishin, L.M., **F.K. Barker**, D.D. Huff, and L.M. Miller. 2009. Isolation of 13 polymorphic microsatellite loci for slimy sculpin (*Cottus cognatus*). *Conservation Genetics Resources* 1(1): 429-432. DOI 10.1007/s12686-009-9099-3.

Schmitt, I., and **F.K. Barker**. 2009. Phylogenetic methods in natural product research. *Natural Product Reports* 26: 1585-1602. DOI:10.1039/b910458p

Kimball, R.T., E.L. Braun., **F.K. Barker**, R.C.K. Bowie, M.J. Braun, J.L. Chojnowski, S.J. Hackett, K.-L. Han, J. Harshman, V. Heimer-Torres, W. Holznagel, C.J. Huddleston, B.D. Marks, K.J. Miglia, W.S. Moore, S. Reddy, F.H. Sheldon, J.V. Smith, C.C. Witt, and T. Yuri. 2009. A well-tested set of primers to amplify regions spread across the avian genome. *Molecular Phylogenetics and Evolution* 50: 654-660.

Mann, N.I., K.A. Dingess, **F.K. Barker**, J.A. Graves, and P.J.B. Slater. 2009. A comparative study of song form and duetting in neotropical *Thryothorus* wrens. *Behaviour* 146(1): 1-43.

Spellman, G., A. Cibois, R. Moyle, and K. Winker and **F.K. Barker**. 2008. Clarifying the systematics of an enigmatic avian lineage: What is a Bombycillid? *Molecular Phylogenetics and Evolution* 49(3): 2036-2040.

Powell, A.F.L.A.**, **F.K. Barker** and S.M. Lanyon. 2008. A complete species-level phylogeny of the grackles (*Quiscalus* spp.), including the extinct Slender-billed Grackle, inferred from mitochondrial DNA. *The Condor* 110(4): 718-728.

Barker, F.K., A.J. Vandergon*, and S.M. Lanyon. 2008. Assessment of species limits among yellow-breasted meadowlarks (*Sturnella* spp.) using mitochondrial and sex-linked markers. *The Auk* 125(4): 869-879.

Barker, F.K., A.J. Vandergon*, and S.M. Lanyon. 2008. Species status of the Red-shouldered Blackbird (*Agelaius assimilis*): implications for ecological, morphological, and behavioral evolution in *Agelaius*. *The Auk* 125(1): 87-94.

Jansa, S.A., V. Soarimalala, S.M. Goodman, and **F.K. Barker**. 2008. Morphometric variation and phylogeographic structure in *Macrotarsomys bastardi* (Rodentia: Nesomyidae), an endemic Malagasy dry forest rodent. *Journal of Mammalogy* 89(2): 316-324.

Chesser, R.T., **F.K. Barker**, and R.T. Brumfield. 2007. Four-fold polyphyly of the genus formerly known as *Upucerthia*, with notes on the systematics and evolution of the avian subfamily Furnariinae.

Molecular Phylogenetics and Evolution 44(3): 1320-1332.

Driskell, A.L. Christidis, B.J. Gill, W.E. Boles, **F.K. Barker**, and N.W. Longmore. 2007. A new endemic family of New Zealand passerine birds: adding heat to a biodiversity hotspot. *Australian Journal of Zoology* 55(7): 73-78.

Barker, F.K. 2007. Avifaunal interchange across the Panamanian Isthmus: insights from *Campylorhynchus* wrens. *Biological Journal of the Linnean Society* 90: 687-702.

Mann, N.I., **F.K. Barker**, J.A. Graves, K.A. Dingess-Mann, and P.J.B. Slater. 2006. Molecular data delineate four genera of "*Thryothorus*" wrens. *Molecular Phylogenetics and Evolution* 40: 750-759.

LeCroy, M., and **F.K. Barker**. 2006. A new species of bush-warbler from Bougainville Island and a monophyletic origin of southwest Pacific *Cettia*. *American Museum Novitates* 3511: 1-20.

Jansa, S.A., **F.K. Barker**, and L.R. Heaney. 2006. The pattern and timing of diversification of Philippine endemic rodents: Evidence from mitochondrial and nuclear gene sequences. *Systematic Biology* 55(1): 73-88.

Beresford, P., **F.K. Barker**, P.G. Ryan, and T.M. Crowe. 2005. African endemics span the tree of songbirds (Passeri): Molecular systematics of several evolutionary 'enigmas'. *Proceedings of the Royal Society of London, Series B* 272: 849-858.
[Times cited: 68]

Barker, F.K., A. Cibois, P. Schikler, J. Feinstein, and J. Cracraft. 2004. Phylogeny and diversification of the largest avian radiation. *Proceedings of the National Academy of Sciences*. 101(30): 11040-11045.

Barker, F.K. 2004. Monophyly and relationships of wrens (Aves: Troglodytidae): a congruence analysis of heterogeneous mitochondrial and nuclear DNA sequence data. *Molecular Phylogenetics and Evolution* 32(2): 486-504.

Barker, F.K., and F.M. Lutzoni. 2002. The utility of the incongruence length difference test. *Systematic Biology* 51(4): 625-637.

Barker, F.K., G.F. Barrowclough, and J. G. Groth. 2002. A phylogenetic hypothesis for passerine birds: taxonomic and biogeographic implications of an analysis of nuclear DNA sequence data. *Proceedings of the Royal Society of London, Series B* 269: 295-308.

Barker, F.K., and S.M. Lanyon. 2000. The impact of parsimony weighting schemes on inferred relationships among toucans and Neotropical barbets (Aves: Piciformes). *Molecular Phylogenetics and Evolution* 15(2): 215-234.

Lutzoni, F., and **F.K. Barker**. 1999. Sampling confidence envelopes of phylogenetic trees for combinability testing: A reply to Rodrigo. *Systematic Biology* 48(3): 596-603.

Reviewed Books and Book Chapters:

Barker, F.K. 2011. Phylogeny and diversification of modern passerines. Pp. 235-256 *in* G. Dyke and G. Kaiser, eds. *The Evolutionary History of Modern Birds*. J. Wiley and Sons.

Cracraft, J., and **F.K. Barker**. 2009. Passeriformes. Pp. 423-431 *in* S.B. Hedges and S. Kumar, eds., *The Timetree of Life*. Oxford University Press, New York.

Cracraft, J., **F.K. Barker**, M. Braun, J. Harshman, G.J. Dyke, J. Feinstein, S. Stanley, A. Cibois, P. Schikler, P. Beresford, J. García-Moreno, M.D. Sorenson, T. Yuri and D.P. Mindell. 2004. Phylogenetic relationships among modern birds (Neornithes): toward an avian tree of life. Pp. 468-489 *in* J. Cracraft and M. J. Donoghue, eds. *Assembling the Tree of Life*. Oxford University Press, New York.

Reviewed Committee Publications:

Chesser, R.T., R.C. Banks, **F.K. Barker**, C. Cicero, J.L. Dunn, A.W. Kratter, I.J. Lovette, P.C. Rasmussen, J.V. Remsen, J.D. Rising, D.F. Stotz, and K. Winker. **2013**. Fifty-fourth supplement ot the American Ornithologists' Union *Check-List of North American Birds. The Auk* 130(3): 558-571.

Chesser, R.T., R.C. Banks, **F.K. Barker**, C. Cicero, J.L. Dunn, A.W. Kratter, I.J. Lovette, P.C. Rasmussen, J.V. Remsen, J.D. Rising, D.F. Stotz, and K. Winker. 2012. Fifty-third supplement ot the American Ornithologists' Union *Check-List of North American Birds. The Auk* 129(3): 573-588.

Chesser, R.T., R.C. Banks, **F.K. Barker**, C. Cicero, J.L. Dunn, A.W. Kratter, I.J. Lovette, P.C. Rasmussen, J.V. Remsen, J.D. Rising, D.F. Stotz, and K. Winker. 2011. Fifty-second supplement ot the American Ornithologists' Union *Check-List of North American Birds. The Auk* 128(3): 600-613.

Chesser, R.T., R.C. Banks, **F.K. Barke**r, C. Cicero, J.L. Dunn, A.W. Kratter, I.J. Lovette,P.C. Rasmussen, J.V. Remsen, Jr., J.D. Rising, D.F. Stotz, and K. Winker. 2010. Fifty-first supplement to the American Ornithologists' Union *Check-list of North American Birds*. The Auk 127(3): 726-744.

Genome 10K Community of Scientists (including **F.K. Barker**). 2009. Genome 10K: A proposition to obtain whole genome sequence for 10,000 vertebrate species. *Journal of Heredity* 100(6): 659-674. DOI:10.1093/jhered/esp086

Chesser, R.T., R.C. Banks, **F.K. Barker**, C. Cicero, J.L. Dunn, A.W. Kratter, I.J. Lovette, P.C. Rasmussen, J. V. Remsen, Jr., J.D. Rising, D.F. Stotz, and K. Winker. 2009. Fiftieth Supplement to the American Ornithologists' Union Check-list of North American Birds. *The Auk* 126(3): 705–714.

Other Publications:

Cracraft, J., **F.K. Barker**, and A. Cibois. 2003. Avian higher-level phylogenetics and the Howard and Moore Checklist of Birds. *In* E. Dickinson, ed. *The Howard and Moore Complete Checklist of the Birds of the World: Third Edition*. Princeton University Press, Princeton, NJ.

Barker, F.K. 2001. Wrens. Pp. 440-444 *in* C. Elphick, J.B. Dunning, Jr., and D.A. Sibley, eds. *The Sibley Guide to Bird Life and Behavior*. Chanticleer Press, New York.

C) PRESENTATIONS

(presented with mentee: *Undergraduate student, **Graduate student)

Invited Departmental Seminars

Department of Zoology, Field Museum of Natural History; October 2014.
Department of Ecology and Evolutionary Biology, University of Kansas; February 2014.
Academy of Natural Sciences and Department of Biodiversity, Earth and Environmental Science, Drexel University; February 2014.
Department of Geophysical Sciences, University of Chicago; September 2013.
Department of Ecology and Evolutionary Biology, Yale University; September 2013.
Laboratory of Ornithology, Cornell University; September 2013.
American Museum of Natural History; March 2012.
Department of Wildlife and Fisheries Sciences, Texas A&M University; July 2007.
Department of Ecology, Evolution, and Behavior, University of Minnesota; April 2007.
Department of Biology, University of New Mexico; November 2005.
Department of Integrative Biology, University of California, Berkeley; February 2005.
Museum of Vertebrate Zoology, University of California, Berkeley; February 2005.
Bell Museum of Natural History, University of Minnesota; November 2002
Department of Conservation Biology, National Zoological Park; October 2001
American Museum of Natural History; May 2001

Invited Symposium Talks and Round Tables

Barker, F.K. Specify and Symbiota: An Introduction. Round Table: *Issues in Collections Management and Museum Science*. American Ornithologists' Union, Washington DC, August 2016

Barker, F.K. Taxonomic variation in crypsis: a survey with examples from wrens and blackbirds. Symposium: *Molecular Biogeography and the Classification Crisis*. American Ornithologists' Union; September 2014.

Barker, F.K. It matters how you slice it: a new molecular perspective on the timing and success of interhemispheric dispersal in oscine passerine birds. Symposium: *The Assembly of the North American Avifauna*. American Ornithologists' Union; August 2013.

Rabosky, D., B.M. Winger, I.J. Lovette, **F.K. Barker**, K.J. Burns, J. Klicka, and S.M. Lanyon. The temporal and spatial dynamics of speciation during the New World nine-primaried oscine radiation. Symposium: *The Assembly of the North American Avifauna*. American Ornithologists' Union; August 2013

Powell, A.F.L.A.**, **F.K. Barker** and S. M. Lanyon. Phylogeny of the genera of New World blackbirds (Icteridae) endemic to South America, as inferred from whole mitochondrial genome sequences. International Ornithological Congress, August 2010.

Cracraft, J., and **F.K. Barker**. A molecular time scale for avian diversification. Society for Molecular Biology and Evolution/American Genetics Association; June 2004.

Barrowclough, G.F., J.G. Groth, and **F.K. Barker**. Base composition heterogeneity in avian exons and phylogenetic inference. American Ornithologists' Union; September 2002.

Barker, F.K., A. Cibois, and J.G. Groth. Phylogenetic relationships within the Passerida based on nuclear DNA sequence data. 23rd International Ornithological Congress; August 2002.

Barker, F.K., and F.M. Lutzoni. Spurious rejection of partition homogeneity by the ILD test: A

simulation study. Mycological Society of America; August 2000

Meeting Presentations (talks, posters and panel discussions)

Hejmadi, S. and F.K. Barker. Evolutionary history and community assembly in diurnal birds of prey. North American Ornithological Congress, online (originally to be in San Juan, Puerto Rico). August 2020.

Barker, F.K. The Bell Museum genetic resources collections. International Society for Biological and Environmental Repositories Annual Meeting, Minneapolis, MN. November 2019

Imfeld, T.S.** and F.K. Barker. Species diversification and morphological evolution are not uniform among continental lineages of songbirds. Society for the Study of Evolution Annual Meeting, Providence, RI. August 2019.

Braun, E.L., R.T. Kimball, C. Oliveros, N. Wang, **F.K. Barker**, D.J. Field, D.T. Ksepka, R.T. Chesser, R.G. Moyle, R.T. Brumfield, B.C. Faircloth, B.T. Smith. Unlocking the phylogenomic (super)tree of birds (and other organisms). G10K Annual Meeting, New York, NY. September 2018.

Barker, F.K., M.B. Robbins, and S.A.M. Luttrell. Genetic differentiation in the Marsh Wren (*Cistothorus palustris*) species complex. International Ornithological Congress, Vancouver, B.C. August 2018.

Smith, B.T., **F.K. Barker**, E.L. Braun, R.T. Brumfield, R.T. Chesser, B.C. Faircloth, R.T. Kimball, D.T. Ksepka, R.G. Moyle, and C. Oliveros. OpenWings: Collaborative construction of a fossil-calibrated species-level bird phylogeny. International Ornithological Congress, Vancouver, B.C. August 2018.

Minor, N.R.*, and **F.K. Barker**, Species paraphyly and hidden diversity in the Buff-breasted Wren complex (Troglodytidae: *Cantorchilus*), International Ornithological Congress, Vancouver, B.C. August 2018.

Smith, B.T., F.K. Barker, E.L. Braun, R.T. Brumfield, R.T. Chesser, B.C. Faircloth, R.T. Kimball, D. T. Ksepka, R.G. Moyle, and C. Oliveros. OpenWings: Collaborative construction of a fossil-calibrated species-level bird phylogeny. American Ornithological Society, Tucson, AZ. April 2018.

Barker, F.K., D.M. Rowsey**, and M.T. Wells**. The use of avian museum specimen data in phenology studies: prospects and challenges. The Databases Working Group, Ottawa, ON, October 2017.

Barker, F.K. Biogeography outperforms mating systems in explaining rates of morphological evolution in Icteridae. American Ornithologists' Union, Washington DC, August 2016

Imfeld, T.S.** and **F.K. Barker**. The relationship between species diversification and morphological evolution in New World oscines. ASN/SSB/SSE, Austin TX, June 2016.

Barker, F.K. Assembly of the New World oscine passerine fauna. ASN/SSB/SSE, Raleigh NC, June 2014.

Wells, M.**, and **F.K. Barker**. Big groups, bad eggs and biogeography: regional and global patterns of brood parasitism's effect on cooperative breeding. ASN/SSB/SSE, Raleigh NC, June 2014.

Winger, B.**, **F.K. Barker**, and R. Ree. Geographic history of long-distance seasonal migration in the largest New World radiation of migratory birds. ASN/SSB/SSE, Raleigh NC, June 2014. [Won the Ernst Mayr award for best student paper, SSB]

Wells, M.J.**, and **F.K. Barker**. Production of variable microsatellites and application to a species of cooperatively breeding wren. American Ornithologists' Union; August 2013. [Poster]

Barker, F.K. Mitogenomic data resolve basal relationships among passeriform and passeridan birds. ASN/SSB/SSE; **June 2013**.

Vazquez-Miranda**, H., and **F.K. Barker**. Speciation in the Neotropics: a multi locus phylogeny of *Campylorhynchus* wrens (Aves: Troglodytidae). ASN/SSB/SSE, Norman OK, June 2011

Vazquez-Miranda**, H., y **F.K. Barker**. Especiación del género *Campylorhynchus* y el uso de múltiples loci, múltiples individuos y métodos de arboles de especies. IX Congreso de Ornitologia Neotropical, Cusco Peru, **November 2011**. [received third prize for student presentation]

Musser, J.M.*, **F.K. Barker**, and R.O. Prum. Measuring sexual selection from genetic estimates of effective population size in lekking manakins (Aves: Pipridae). Society for Integrative and Comparative Biology, **January 2011**. [received an Honorable Mention in the Best Platform Presentation category]

MacInnes, C.D., J.O. Leafloor, K.F. Abraham, and **F.K. Barker**. Is the type specimen of the lesser Canada Goose, *Branta canadensis parvipes*, actually a cackling goose? North American Arctic Goose Conference and Workshop, **January 2011**.

Barker, F.K., J.M. Musser*, and R.O. Prum. Impact of social mating systems on patterns of autosomal and sex-linked variation in blackbirds (Icteridae). International Ornithological Congress, August 2010.

Dufort, M.J**, and **F.K. Barker**. Patterns of genetic differentiation in phenotypically divergent populations of red-winged blackbird (*Agelaius phoeniceus*). International Ornithological Congress, August 2010. [Poster]

Musser, J.*, R.O. Prum, and **F.K. Barker**. Detecting patterns and intensity of sexual selection with population genetics: the lekking manakins (Pipridae). International Ornithological Congress, August 2010.

Barker, F.K., J.M. Musser*, and R.O. Prum. Impact of social mating systems on patterns of autosomal and sex-linked variation in blackbirds (Icteridae). American Ornithologists' Union, February 2010.

Barker, F.K., K.J. Burns, J. Klicka, S.M. Lanyon, and I.J. Lovette. Temporal and phylogenetic patterns of diversity in New World tanagers, cardinals, sparrows, blackbirds, and warblers. American Ornithologists' Union, August 2007.

Lanyon, S.M., and **F.K. Barker**. Exploring patterns of morphological evolution in the New World blackbirds. American Ornithologists' Union, August 2007.

Barker, F.K., K.J. Burns, J. Klicka, S.M. Lanyon, and I.J. Lovette. Assembling, and using, the nine-primaried oscine Tree of Life: the poster. American Ornithologists' Union, August 2007. [Poster]

Powell, A.F.L.A.**, **F.K. Barker** and S.M. Lanyon. A complete species-level phylogeny of the grackles, including the extinct Slender-billed Grackle (*Quiscalus palustris*), inferred from mitochondrial DNA. American Ornithologists' Union, August 2007. [Poster]

Barker, F.K., A.J. Vandergon*, and S.M. Lanyon. Phylogeny and origins of the meadowlarks. American Ornithologists' Union, October 2006. [Poster]

Mann, N.I., K.A. Dingess, J.A. Graves, **F.K. Barker**, and P.J.B. Slater. A comparative study of song duetting in *Thryothorus* wrens. International Ethological Congress, August 2005.

Barker, F.K. Phylogeny of the Sylvioidea from combined RAG-1 and RAG-2 sequences. American Ornithologists' Union, August 2005.

Babcock, M.K.*, **F.K. Barker**, and S.M. Lanyon. Mitochondrial, autosomal and sex-linked DNA variation within and between red-winged and tricolored blackbirds. American Ornithologists' Union, August 2005. [Poster]

Barker, F.K., K.J. Burns, J. Klicka, S.M. Lanyon, and I.J. Lovette. Multiple nuclear genes support major clades of New World nine-primaried oscines (Emberizinae). American Ornithologists' Union, August 2004.

Barker, F.K., and S.M. Lanyon. Polymorphism of mtDNA and a Z-linked intron in red-winged blackbirds. American Ornithologists' Union, August 2004.

Vandergon, A.J.*, **F.K. Barker**, and S.M. Lanyon. Molecular systematics of the meadowlarks and allies (Icterini). American Ornithologists' Union, August 2004. [Poster]

Beresford, P., **F.K. Barker**, P.G. Ryan, and T.M. Crowe. New answers to old questions: resolving enigmatic African songbirds with nuclear loci. American Ornithologists' Union, August 2004.

Barker, F.K., and J. Cracraft. A molecular time scale for avian diversification: the largest avian order (Passeriformes). Society for Molecular Biology and Evolution/American Genetic Association, June 2004.

Barker, F.K. Phylogeny of the Passerida (Passeriformes: Oscines). American Ornithologists' Union, August 2003.

Cracraft, J., and **F.K. Barker**. How birds escaped Armageddon: using phylogenetic history and biogeography to assess the impact of the KT extinction event. ASN/SSE/SSB, June 2003.

Barker, F.K., G.F. Barrowclough, and J.G. Groth. Passerine phylogeny from nuclear DNA sequences: taxonomic and biogeographic implications. American Ornithologists' Union; August, 2001

Barker, F.K. Phylogeny of *Campylorhynchus* wrens: Inferences from mitochondrial DNA and implications for historical biogeography. American Ornithologists' Union; August, 2000.

Barker, F.K. A comparative analysis of cooperative breeding in *Campylorhynchus* (Aves: Troglodytidae). ASN/SSE/SSB; June, 2000.

Barker, F.K. A total-evidence estimate of relationships within the family Troglodytidae using mitochondrial and nuclear sequence data. American Ornithologists' Union; April, 1998.

Barker, F.K. Relationships within the family Troglodytidae, with comments on the placement of *Donacobius*. American Ornithologists' Union, August, 1997.

Hackett, S., **F.K. Barker**, and E. Grismer. Fibrinogen introns and avian systematics. ASN/SSE/SSB, June 1997.

Barker, F.K., and S.M. Lanyon. A hypothesis of intrafamilial relationships in the toucans and New World barbets (Ramphastidae) based upon variation in cytochrome *b*. American Ornithologists' Union, August, 1996.
*Undergraduate student, **Graduate student

Organized Symposia
Lanyon, S.M., and **F.K. Barker**. Assembling, and using, the nine-primaried oscine Tree of Life. American Ornithologists' Union, August 2007.

D) Curation
Collecting
U.S.A: Minnesota, 2005-2012; California, 2007-2015; Missouri, 2009; Montana 2015; Nevada 2017.

International: México (Queretaro, Morelos), 1997; México (Estado de México), 2012.

Collections Management
Graduate CA supervision: Tom Giarla (Summer 2012; mapped bird collection database and completed preparations for updating of specimen data, including tissue availability); Michael Wells (Spring 2013; subsampled tissues on large [~700 specimen] loan from the Field Museum, prepared loan for return, organized and databased ~2000 Raptor Center samples); Danielle Drabeck (Fall 2013, Fall 2016; prepared loans, assisted in setup of vertebrate collections freezer, transitioned bird and mammal tissues, began database verification of tissues, organized and decontaminated Raptor Center blood collection); Michael Wells (Spring 2014; continued setup of verterate collections freezer, began integration of herpetology collections); Benjamin Lowe (Spring 2016; georeferencing herp collections).
Undergraduate CA supervision: Nick Minor (Fall 2015, Spring 2016, Summer 2016, Fall 2016; continued accessioning of specimens, returned outstanding loans, prepared outgoing loans). Alaina Friedrich (Summer 2018; collection pest surveillance). Leah Vaughn (Summer 2018; collection pest surveillance).

Collections Database Management
Bell Museum *Specify* account and database management (Fall 2013-present)
Development of the *Minnesota Biodiversity Atlas* with funding from LCCMR (2015-present, see grants)

IV) Teaching and Curriculum Development:
A) Faculty Development
EEB Writing Enhanced Curriculum Workshop: Responding to Student Writing; Fall 2009
Early Career Teaching Program (UMN Center for Teaching and Learning); Fall-Spring 2009
University of Minnesota Equity and Diversity Certificate Program

- ECHO: LGBTQIA Identities and Communities; Fall 2020
- ECHO: My Role in Equity and Diversity Work; Spring 2021
- ECHO: Navigating Challenging Conversations; Spring 2021
- ECHO: Understanding and Advancing Gender Equity; Spring 2021
- ECHO: Race, Racism, and White Supremacy; Spring 2021
- ECHO: Collective Access for All; Spring 2021

B) Teaching
Moderator
Systematics Seminar: University of Minnesota, Twin Cities; 2006-Fall 2017
EEB Graduate Evolution Reading Group: University of Minnesota, Twin Cities; Fall 2007

Lecturer
Evolution (EEB3409/5409): University of Minnesota, Twin Cities; Fall 2017 (co-taught with Harcombe)
General Zoology (BIOL2012): University of Minnesota, Twin Cities; Fall 2008-2011 (4 times), 2013
Ornithology (EEB4134) University of Minnesota, Twin Cities; Spring 2017-2021 (5 times)
Principles of Systematics (EEB5371): University of Minnesota, Twin Cities; Spring 2005, 2008, 2010,

2015, 2016; Fall 2019

Guest Lecturer
Biodiversity Science (EEB 3534): University of Minnesota, Twin Cities; Spring 2019

Workshops
Analysis of Target Enrichment Data (co-taught with Edward Braun, UF): Society of Systematic Biology, University of Florida, 6 January 2020
Workshop on Molecular Systematics (co-taught with Sharon Jansa, UMN): Instituto Tecnológico Metropolitano, Museo de Ciencias Naturales de la Salle, Medellín, Colombia (enrollment: 25 graduate students and professionals from Colombia) 11-17 February, 2013

V) Advising and Mentoring:

A) Faculty Development
Graduate School Workshop: Faculty Member as Mentor: Best Practices in the Successful Mentoring of Graduate Students; Fall 2009

B) Undergraduate Mentoring
Student Employees: 7
Independent Research (including UROP): 4
Directed Research: 19

C) Graduate Advising
Internships
Abigail Anderson (Museum Studies internship, Fall 2016)

M.S. Committees
Tyler Muller (U. of MN, Cons. Sci.; December 2020-present)
Carmen Martin (U. of MN, Cons. Sci.; 2017-2019, defended Spring 2019)
Sean Keogh (U. of MN, Cons. Sci.; 2015-2019, defended Spring 2019)
Lorissa Fujishin (U. of MN, Cons. Biol.; 2008-2010)

Graduate Advisory Committees (pre-prelim)
Sean Keogh (U. of MN, EEB; 2019-present, orals passed January 2021)
Brie Ilarde (U. of MN, EEB; 2019-present)
Zacky Ezedin (U. of MN, Plant Biol.; Fall 2017-present)
James Tumulty (U. of MN, EEB; 2012)

Ph.D. Committees
Sam Weaver (U. of MN, EEB; 2017-present, orals passed March 2019)
Lucas Camargo (U. of MN, CS; 2015-present, orals passed Fall 2016)
Dakota Rowsey (U. of MN, EEB; 2014-2019, defended Spring 2019)
Danielle Drabeck (U. of MN, EEB; 2012-2019, defended Summer 2019)
Josh Egan (U. of MN, CS; 2012-2019, defended Spring 2019)
Marta Lyons (U. of MN, EEB; 2013-2017, defended Fall 2017)
Peter Hundt (U. of MN, CB; 2010-2016, defended Spring 2016)
Juan Diaz-Neto (U. of MN, EEB; 2009-2016, defended Spring 2016)
Chih-Ming Hung (U. of MN, EEB; 2008-2012)
Pai Worata Klinsawat (U. of MN, Cons. Biol. 2010-2016, defended Fall 2016)
Tim Polnaszek (U. of MN, EEB; 2009-2015, defended Fall 2015)
Benjamin Lowe (U. of MN, EEB; 2008-2016, defended Spring 2016)
Tom Giarla (U. of MN, EEB; 2007-2013, defended Spring 2013)
Alexis Powell (U. of MN, EEB; 2006-2012)

Ph.D. Advisees
Simone Maddox (**advisor**; U. of MN, EEB; 2019-present)
Shanta Hejmadi (**advisor**; U. of MN, EEB; 2017-present, orals passed December 2019)
Tyler Imfeld (**advisor**; U. of MN, EEB; 2014-2020, defended July 2020)

Michael Wells (**advisor;** U. of MN, EEB; 2009-2015, defended November 2015)
Current position: Research Scientist, USFWS Avian Radar Project
Matt Dufort (**co-advisor;** U. of MN, EEB**;** 2008-2015, defended September 2015)
Current position: Bioinformatics Project Leader, Benaroya Research Institute
Hernan Vazquez-Miranda (**co-advisor;** U. of MN, EEB; 2008-2014, defended Summer 2014)
Current position: Investigador Titular "A" (equivalent to Assistant Professor), Instituto de Biología, Universidad Nacional Autónoma de México

Ph.D. Examining Committees
Alejandro Velez (U. of MN, EEB; Spring 2012)

VI) Service and Public Outreach:

A) Extramural Service

North American Check-list Committee, American Ornithologists' Union: March 2008-2013.

Editorial Board: Systematic Biology (January 2001-January 2008; October 2011-present)

Genome 10K Bird Working Group, co-Chair: March 2010-2015.

Journal Referee for:
Advances in the Study of Behavior; *American Museum Novitates*; *American Naturalist*; *The Auk; American Museum Novitates; American Naturalist; Behavioral Ecology and Sociobiology; Biological Journal of the Linnean Society; Biology Letters*; *BMC Evolutionary Biology; BMC Genomics; The Condor; Ecology; Evolution; Fungal Genetics and Biology; Heredity; Ibis; Journal of Avian Biology; Journal of Biogeography; Journal of Experimental Biology, Part B; Journal of Ornithology; Mitochondrial DNA; Molecular Biology and Evolution; Molecular Phylogenetics and Evolution; New Phytologist; Organisms, Diversity, and Evolution; Ornitología Neotropical*; *PeerJ; PLOS Genetics; Proceedings of the Royal Society of London, Series B; Proceedings of the Royal Society, Letters; Science; Systematic Biology; Western Birds*; *Wilson Journal of Ornithology; Zoologica Scripta; Zoology; Zootaxa*

SACNAS, Student Abstract Review (2020)

American Ornithologists' Society Research Awards Committee (January 2021-present)

Grant Referee:
National Science Foundation
DEB Population and Evolutionary Processes *ad hoc* review (2011)
DEB Early Career *ad hoc* reviews (2009)
DEB Systematics *ad hoc* review (2004, 2005)
Physiology, Organismal & Developmental Biology Virtual Panel (2021)

Other Funding Sources and Societies
American Philosophical Society, Lewis and Clark Fund for Exploration and Field Research (2007, 2009, 2010)

Outside Tenure Review:
Loyola University (Chicago, IL)

Committees:
Host Committee, 2021 National Meeting, Society of Vertebrate Paleontology (September 2019-present)

B) Intramural Service

Committees
UMN Institutional Animal Care and Use Committee: Spring 2019-present
EEB Advisory Committee: Fall 2019-present
EEB Faculty Evaluation Committee: Fall 2018-Fall 2019

EEB Salary Committee: Spring 2018
EEB Post-tenure Review Committee: Spring 2016-Spring 2017
EEB Seminar Committee: Fall 2009-Spring 2011, Fall 2012-2013
EEB Graduate Admissions Committee: 2011/2012, 2012/2013, 2017/2018
EEB Behavior Search Committee (ending in successful hire): Fall 2008-Spring 2009
MSI RISS Bioinformatics Analyst Search Committee: Spring 2011-Fall 2011 (2 rounds)
MSI Lab and Software Planning Committee: Fall 2011

Review
Bell Natural History Fund Applications (2017-2019)
Bell Fellowship Applications (2017-2019)
EEB Summer Fellowship Committee: 2018
EEB Written Preliminary Exam Review Panel (2011, 2020)
EEB Doctoral Dissertation Fellowship Applications (2010)
EEB Written Preliminary Exams (2009, 2015)
EEB Preliminary Exam Writing Seminar (2009)
EEB Elmer C. Birney Fellowship (2006, 2007)
Bell Museum Dayton-Wilkie Natural History Funds (2003, 2004, 2006, 2008)
Bell Museum Fellowship in Avian Conservation (2007)

Content Review and Exhibit Planning
Bell Museum, Seeing Birds Exhibit (2018-present)
Bell Museum, Permanent Exhibit Planning (2015-2018)
Bell Museum, Audubon and the Art of Birds Exhibit (2013)
Bell Museum, Birds & DNA: Biodiversity and Mountain Islands (2013)
Bell Museum Tree of Life Exhibit Design Committee (2009-2011)

C) Outreach

College of Biological Sciences
Biology Saves the World, Focal Scientist (Spring 2019)

Bell Museum
Bell Museum, *Bioblitz*, Scientific Coordinator: Spring 2009-present (2009: Crosby Farm Park [235 public, 64 scientist/volunteer participants], 2010: Vermillion Highlands [125 public, 53 scientist/volunteer participants], 2011: Katharine Ordway Natural History Study Area [55 public, 64 scientist/volunteer participants], 2012: Cedar Creek Ecosystem Science Reserve [61 public, 57 scientist/volunteer participants], 2013: Coldwater Spring, Mississippi National River and Recreation Area)
Bell Museum, *Saturday With a Scientist*: October 2013, October 2016
Bell Museum, *Summer Camp*: June 2017 (birding and mist-netting), June and August 2018 (mist-netting and discussing field research, ~30 students)

Lectures and Presentations
Barker, F.K. Wetland loss in the western hemisphere: impacts on avian diversity known and unknown. Minnesota Ornithologists' Union, St. Paul, Minnesota, United States. December 2020.
Barker, F.K. Global diversification of passerine birds. Minnesota Ornithologists' Union, St. Paul, Minnesota, United States. December 2019.
Barker, F.K. Geographic variation in Minnesota birds. Spring Primer, Minnesota Ornithologists' Union, ST. Paul, MN. March 2019.
Barker, F. K. Genomics and avian phylogeny. Minnesota Ornithologists' Union, St. Paul, Minnesota, United States. December 2018.
Barker, F.K. Mapping Change and Minnesota Biodiversity Atlas: Citizen Science and Museum Practice in the Digital Age. Minnesota Ornithologists Union, December 2016.
Barker, F.K. Genetic Insights into the Evolution of Red-winged Blackbirds (*Agelaius phoeniceus*). Minnesota Ornithologists Union, December 2016.
Barker, F.K. Little brown jobs: Phylogeny and species limits in wrens. Minnesota Ornithologists Union, December 2015.
Barker, F.K., and S.A. Jansa. Evolution 101. ASN/SSE/SSB 2008.

Barker, F.K. Origins and evolution of the North American passerine fauna. Cornell Laboratory of Ornithology, Cornell University; March 2005.

Barker, F.K. From molecules to earth history: an introduction to passerine phylogeny and biogeography. Minnesota Quality Teacher Network, sponsored by the Minnesota Department of Education; 2005.