JOHN E. MCCORMACK

Moore Laboratory of Zoology & Biology Department
Occidental College
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Webpage
ISI Researcher ID
Google Scholar Profile

Academic Positions

Director and Curator of Birds and Mammals, Moore Laboratory of Zoology (2012-current)
Associate Professor, Biology Department, Occidental College (2017-current)
Assistant Professor, Biology Department, Occidental College (2011-2017)
Postdoctoral Researcher, Louisiana State University (2009-2011)
Postdoctoral Researcher, University of Michigan (2007-2009)

Education

Ph.D.	2007	**UCLA**, Ecology & Evolutionary Biology (2007)
B.S.	1998	**University of Arizona**, Ecology & Evolutionary Biology *summa cum laude* with honors

Summary

- 67 peer-reviewed publications
  - 13 undergraduate student authors
  - Co-authored papers in *Science* and *Nature*
- $3.26 million in extramural grants
  - 6 National Science Foundation grants
  - 2 other foundation grants
- Teaching & Mentoring
  - 13 semester courses taught: Evolutionary Biology, Avian Biology, Molecular Phylogenetics
  - 73 undergraduate students in mentored research

Publications

undergraduate co-author ****JM Lab key paper**

67. Pie MR, MR Bornschein, LF Ribeiro, BC Faircloth & **JE McCormack**. 2019. Phylogenomic species delimitation in microendemic frogs of the Brazilian Atlantic Forest. **Molecular Phylogenetics & Evolution**. In press. Link to Early View

66. Tsai WLE, ME Schedl, JM Maley & **JE McCormack. 2019. More than skin and bones: comparing extraction methods and alternative sources of DNA from avian museum specimens. **Molecular Ecology Resources**. In press. Link to Early View

65. Vinciguerra NT, WLE Tsai, BC Faircloth & **JE McCormack. 2019. Comparison of ultraconserved elements (UCEs) to microsatellite markers for the study of avian hybrid zones: a test in *Aphelocoma* jays. **BMC Research Notes** 12: 456. Link to open access article

64. Ströher PR, A Meyer, E Zarza, WLE Tsai, **JE McCormack** & MR Pie. 2019. Phylogeography of ants from the Brazilian Atlantic forest. **Organisms, Diversity & Evolution**. https://doi.org/10.1007/s13127-019-00409-z

63. Palacios C, S Garcia-R, JL Parra, AM Cuervo, G Stiles, **JE McCormack**, CD Cadena. 2019. Shallow genetic divergence and distinct phenotypic differences between two Andean hummingbirds: Speciation with gene flow? **The Auk.** Link to Early View.

62. Linck E, K Epperly, P van Els, GM Spellman, RW Bryson Jr, **JE McCormack**, R Canales-del-Castillo & J Klicka. 2019. Dense geographic and genomic sampling reveals paraphyly and a cryptic lineage in a classic sibling species complex. **Systematic Biology** 68: 956-966. Link to Article.

61. DeRaad DA, JM Maley, WLE Tsai & **JE McCormack. 2019. Phenotypic clines across an unstudied hybrid zone in Woodhouse's Scrub-Jay (*Aphelocoma woodhousei*). **The Auk** 136: 1-11.

60. Tsai WLE, C Mota-Vargas, O Rojas-Soto, R Bhowmik, EY Liang, JM Maley, E Zarza & **JE McCormack. 2019. Museum genomics reveals the speciation history of *Dendrortyx* wood-partridges in the Mesoamerican highlands. **Molecular Phylogenetics & Evolution** 136: 29-34.

59. Venkatraman MX, DA DeRaad, WLE Tsai, E Zarza, AJ Zellmer, JM Maley & **JE McCormack. 2019. Cloudy with a chance of speciation: integrative taxonomy reveals extraordinary divergence within a Mesoamerican cloud forest bird. **Biological Journal of the Linnean Society** 126: 1-15. Link to PDF

58. Blair C, RW Bryson Jr, CW Linkem, D Lazcano, J Klicka, JE McCormack. 2019. Cryptic diversity in the Mexican highlands: thousands of UCE loci help illuminate phylogenetic relationships, species limits and divergence times of montane rattlesnakes (Viperidae: *Crotalus*). **Molecular Ecology Resources** 19: 249-265. Link to PDF

57. Miller ET, **JE McCormack**, G Levandoski, BR McKinney. 2018. Sixty years on: birds of the Sierra del Carmen, Coahuila, Mexico, revisited. **Bulletin of the British Ornithologists' Club** 138: 318-334. Link to PDF

56. Zarza E, EM Connors, JM Maley, WLE Tsai, P Heimes, M Kaplan & **JE McCormack. 2018. Bridging multilocus species delimitation and DNA barcoding through target enrichment of UCEs: a case study with Mexican highland frogs. **PeerJ** e6045. Link to open access article

55. Michel AJ, LM Ward, SK Goffredi, KS Dawson, DT Baldassarre, A Brenner, KM Gotanda, **JE McCormack**, SW Mullin, A O'Neill, GS Tender, JAC Uy, K Yu, VJ Orphan & JA Chaves. 2018. The gut of the finch: uniqueness of the gut microbiome of the Galápagos vampire finch. **Microbiome** 6: 167. Link to open access article

54. Friis G, G Fandos, AJ Zellmer, **JE McCormack**, BC Faircloth & B Milá. 2018. Genome-wide signals of drift and local adaptation during rapid lineage divergence in a songbird. **Molecular Ecology** 27: 5137-5153. Link to PDF

53. Bryson RW Jr., E Zarza, JA Gummer, G Parra-Olea, A Flores-Villela, J Klicka & **JE McCormack**. 2017. Phylogenomic insights into the diversification of salamanders in the *Isthmura bellii* group across the Mexican highlands. **Molecular Phylogenetics and Evolution** 125: 78-84. Link to PDF

52. Pie MR, BC Faircloth, MR Bornschein, LF Ribeiro & **JE McCormack**. 2017. Phylogenomics of montane frogs of the Brazilian Atlantic Forest is consistent with isolation in sky islands followed by climatic stability. **Biological Journal of the Linnean Society** 125: 72-82. Link to PDF

51. Bryson RW Jr., DA Wood, MR Graham, ME Soleglad & **JE McCormack**. 2018. Genome-wide SNP data and morphology support the distinction of two new species of *Kovarikia* Soleglad, Fet & Graham, 2014 endemic to California (Scorpiones, Vaejovidae). **Zookeys** 739: 79-106. Link to article

50. Pie MR, PR Ströher, R Belmonte-Lopes, MR Bornschein, LF Ribeiro, BC Faircloth & **JE McCormack**. 2017. Phylogenetic relationships of diurnal, phytotelm-breeding *Melanophryniscus* (Anura: Bufonidae) based on mitogenomic data. **Gene** 628: 194-199.

49. Lacey EA, TT Hammond, RE Walsh, KC Bell, SV Edwards, ER Ellwood, R Guralnick, SM Ickert Bond, AR Mast, **JE McCormack**, AK Monfils, PS Soltis, DE Soltis & JA Cook. 2017. Climate change, collections, and the classroom: using big data to tackle big problems. **Evolution: Education and Outreach** 10: 2. Link to open access article

48. Pie MR, PR Ströher, MR Bornschein, LF Ribeiro, BC Faircloth & **JE McCormack**. 2017. The mitochondrial genome of *Brachycephalus brunneus* (Anura: Brachycephalidae), with comments on the phylogenetic position of Brachycephalidae. **Biochemical Systematics and Ecology** 71: 26-31.

47. Bryson RW Jr., CW Linkem, CJ Pavón-Vázquez, A Nieto-Montes de Oca, J Klicka & **JE McCormack**. 2017. A phylogenomic perspective on the biogeography of skinks in the *Plestiodon brevirostris* group inferred from target enrichment of ultraconserved elements. **Journal of Biogeography** 44: 2033-2044. Link to article

46. **McCormack JE, F Rodriguez-Gomez, WLE Tsai & BC Faircloth. 2017. Transforming museum specimens into genomic resources. In: Emerging Frontiers in Collections-based Ornithological Research: The Extended Specimen. MS Webster, editor. CRC Press, Boca Raton, Florida. Link to PDF

45. Maley JM, JE McCormack, WLE Tsai, EM Schwab, J Van Dort, RC Juárez & MD Carling. 2016. Fonseca Mangrove Rail: a new subspecies from Honduras. **Western Birds** 47: 262-273.

44. Maley JM, TM Liu, WLE Tsai, **JE McCormack**. 2016. Molecular identification of a mystery rail from Panama results in the first country record of King Rail *Rallus elegans*. **Bulletin of the British Ornithologists' Club** 136: 291-292.

43. Kaplan M, P Heimes, E Zarza & **JE McCormack**. 2016. On the morphology of *Plectrohyla chryses* (Anura: Hylidae: Hylini), with comments on some controversial characters, phylogenetic relationships, and diagnosis of this species. **Caldasia** 38: 257-273. Link to open access article

42. Ströher PR, E Zarza, WLE Tsai, **JE McCormack**, RM Feitosa & MR Pie. 2017. The mitochondrial genome of *Octostruma stenognatha* (Hymenoptera: Formicidae) and its phylogenetic implications. **Insectes Sociaux** 64: 149-154. Link

41. Starrett J, S Derkarabetian, M Hedin, RW Bryson, **JE McCormack** & BC Faircloth. 2016. High phylogenetic utility of an ultraconserved element probe set designed for Arachnida. **Molecular Ecology Resources** 17: 812-823. Link

40. Zarza E, BC Faircloth, WLE Tsai, RW Bryson Jr., J Klicka, **JE McCormack. 2016. Hidden histories of gene flow in highland birds revealed with genomic markers. **Molecular Ecology** 25: 5144-5157. Link to open access article

39. Bryson Jr. RW, WE Savary, AJ Zellmer, RB Bury & **JE McCormack**. 2016. Genomic data reveal ancient microendemism in forest scorpions across the California Floristic Province. **Molecular Ecology** 25: 3731-3751. Link

38. Milá B, P Aleixandre, S Alvarez-Nordström & **JE McCormack**. 2016. More than meets the eye: lineage diversity and evolutionary history of dark-eyed and yellow-eyed juncos. In: Snowbird: Integrative Biology and Evolutionary Diversity in the Junco. ED Ketterson & JW Atwell, editors. University of Chicago Press, Chicago, Illinois.

37. Bryson Jr. RW, BC Faircloth, WLE Tsai, **JE McCormack** & J Klicka. 2016. Target enrichment of thousands of ultraconserved elements sheds new light on the early relationships within New World sparrows (Aves: Passerellidae). **The Auk** 133: 451-458. Link

36. Alvarez S, JF Salter, **JE McCormack** & B Milá. 2016. Speciation in mountain refugia: phylogeography and demographic history of the pine siskin and black-capped siskin complex. **Journal of Avian Biology** 47: 335-345. Link

35. Edwards SV, Z Xi, A Janke, BC Faircloth, **JE McCormack**, TC Glenn, B Zhong, S Wu, EM Lemmon, AR Lemmon, AD Leache, L Liu & CC Davis. 2016. Implementing and testing the multispecies coalescent model: a valuable paradigm for phylogenomics. **Molecular Phylogenetics & Evolution** 94: 447-462. Link to open access article.

34. Toews DPL, L Campagna, SA Taylor, CN Balakrishnan, DT Baldassarre, PE Deane-Coe, MG Harvey, DM Hooper, DE Irwin, CD Judy, NA Mason, **JE McCormack**, KG McCracken, CH Oliveros, RJ Safran, ESC Scordato, K Faust Stryjewski, A Tigano, JAC Uy & BM Winger. 2016. Genomic approaches to understanding population divergence and speciation in birds. **The Auk** 133: 13-30. Link to open access article

****33. McCormack JE**, WLE Tsai & BC Faircloth. 2016. Sequence capture of ultraconserved elements from bird museum specimens. **Molecular Ecology Resources** 16: 1189-1203. Link

32. Kaplan M, P Heimes & **J McCormack**. 2015. Contributions to the morphology of *Plectrohyla mykter* (Anura: Hylidae), with comments on some controversial characters and the diagnosis of this species. **Caldasia** 37: 211-220. Link to open access article

31. Ribiero RD, **JE McCormack**, HG Alvarez, L Carrasco, GF Grether, P Mena, R Sedano, TB Smith & J Karubian. 2015. Loss of sexual dimorphism is associated with loss of lekking behavior in the green manakin *Xenopipo holochora*. **Journal of Avian Biology** 46: 307-314. Link

****30. McCormack JE** & JM Maley. 2015. Interpreting negative results with taxonomic and conservation implications: another look at distinctness of coastal California gnatcatchers. **The Auk** 132: 380-388. Link to open access article

29. Jarvis ED and 105 co-authors. 2014. Whole genome analyses resolve early branches in the tree of life of modern birds. **Science** 346: 1320-1331. Link

28. Green RE and 54 co-authors. 2014. Three crocodilian genomes reveal ancestral patterns of evolution among archosaurs. **Science** 346: 1254449. Link

27. Smith BT, **JE McCormack**, AM Cuervo, MJ Hickerson, A Aleixo, CD Cadena, J Pérez-Emán, CW Burney, X Xie, MG Harvey, BC Faircloth, TC Glenn, EP Derryberry, J Prejean, S Fields & RT Brumfield. 2014. The drivers of tropical speciation. **Nature** 515: 406-409. Link

******26. Gowen FC, JM Maley, C Cicero, AT Peterson, BC Faircloth, TC Warr & **JE McCormack**. 2014. Speciation in Western Scrub-Jays, Haldane's rule, and genetic clines in secondary contact. **BMC Evolutionary Biology** 14: 135. Link to open access article

****25. McCormack JE** & MX Venkatraman. 2013. A distinctive genetic footprint of ancient hybridization. **The Auk** 130: 469-475. Link

PRE-TENURE TRACK JOB BELOW

24. McCormack JE, MG Harvey, BC Faircloth, NG Crawford, TC Glenn & RT Brumfield. 2013. A phylogeny of birds based on over 1,500 loci collected by target enrichment and high-throughput sequencing. **PLOS One** 8(1): e54848. Link to open access article

23. McCormack JE & BC Faircloth. 2013. Next-generation phylogenetics takes root. **Molecular Ecology** 22: 19-21. Link

22. McCormack JE, SM Hird, AJ Zellmer, BC Carstens & RT Brumfield. 2013. Applications of next-generation sequencing to phylogeography and phylogenetics. **Molecular Phylogenetics & Evolution** 66: 526-538. Link

21. Crawford NG, BC Faircloth, **JE McCormack**, RT Brumfield, K Winker & TC Glenn. 2012. More than 1,000 ultraconserved elements provide evidence that turtles are the sister group of archosaurs. **Biology Letters** 8: 783-786. Link

20. St. John JA & 47 co-authors. 2012. Sequencing three crocodilian genomes to illuminate the evolution of archosaurs and amniotes. **Genome Biology** 13: 415. Link

19. Faircloth BC, **JE McCormack**, NG Crawford, MG Harvey, RT Brumfield & TC Glenn. 2012. Ultraconserved elements anchor thousands of genetic markers for target enrichment spanning multiple evolutionary timescales. **Systematic Biology** 61: 717-726. Link to open access article

18. McCormack JE, BC Faircloth, NG Crawford, PA Gowaty, RT Brumfield & TC Glenn. 2012. Ultraconserved elements are novel phylogenomic markers that resolve placental mammal phylogeny when combined with species tree analysis. **Genome Research** 22: 746-754. Link to open access article

17. McCormack JE, JM Maley, SM Hird, EP Derryberry, GR Graves & RT Brumfield. 2012. Next-generation sequencing reveals population genetic structure and a species tree for recent bird divergences. **Molecular Phylogenetics & Evolution** 62: 397-406. Link

16. Berg EC, RA Aldredge, AT Peterson & **JE McCormack**. 2012. New phylogenetic information suggests both an increase and at least one loss of cooperative breeding during the evolutionary history of *Aphelocoma* jays. **Evolutionary Ecology** 26: 43-54. Link

15. Arteaga MC, **JE McCormack**, LA Eguiarte & RA Medellín. 2011. Genetic admixture in multidimensional environmental space: asymmetrical niche similarity promotes gene flow in armadillos (*Dasypus novemcinctus*). **Evolution** 65: 2470-2480. Link

14. McCormack JE, J Heled, KS Delaney, AT Peterson & LL Knowles. 2011. Calibrating divergence times on species trees versus gene trees: Implications for speciation history of *Aphelocoma* jays. **Evolution** 65: 184-202. Link

13. McCormack JE, AJ Zellmer & LL Knowles. 2010. Does niche divergence accompany allopatric divergence in *Aphelocoma* jays as predicted under ecological speciation?: Insights from tests with niche models. **Evolution** 64: 1231-1244. Link

12. McCormack JE & EC Berg. 2010. Small-scale divergence in egg color along an elevation gradient in the Mexican Jay: a condition-dependent response? **The Auk** 127: 35-43. Link

11. McCormack JE, H Huang & LL Knowles. 2010. Maximum-likelihood estimates of species trees: how accuracy of phylogenetic inference depends upon the divergence history and sampling design. **Systematic Biology** 58: 501-508. Link to open access article

10. Pease KM, A Freedman, JP Pollinger, WP Buermann, **JE McCormack**, J Rodzen, J Banks, E Meredith, V Bleich, K Jones & RK Wayne. 2009. Landscape genetics of California mule deer (*Odocoileus hemionus*): the roles of ecological and historical factors in generating differentiation. **Molecular Ecology** 18: 1848-1862. Link

9. Berg EC, **JE McCormack** & TB Smith. 2009. Test of an adaptive hypothesis for egg speckling along an elevational gradient in a population of Mexican jays (Aphelocoma ultramarina). **Journal of Avian Biology** 40: 448-452. Link

8. **McCormack JE** & TB Smith. 2008. Niche expansion leads to small-scale adaptive divergence along an elevation gradient in a medium-sized passerine bird. **Proceedings of the Royal Society, Series B** 275: 2155-2164. Link

7. **McCormack JE**, BS Bowen & TB Smith. 2008. Integrating paleoecology and genetics of bird populations in two sky island archipelagos. **BMC Biology** 6: 28. Link to open access article

6. **McCormack JE**, AT Peterson, E Bonaccorso & TB Smith. 2008. Speciation in the highlands of Mexico: genetic and phenotypic divergence in the Mexican jay (*Aphelocoma ultramarina*). **Molecular Ecology** 17: 2505-2521. Link

5. Milá B, **JE McCormack**, G Castañeda, TB Smith & RK Wayne. 2007. Recent postglacial range expansion drives the rapid diversification of a songbird lineage in the genus *Junco*. **Proceedings of the Royal Society, Series B** 274: 2653-2660. Link

4. **McCormack JE**, P Jablonski & JL Brown. 2007. Producer-scrounger roles and the effect of dominance on preferential joining in a free-living group of Mexican jays (*Aphelocoma ultramarina*). **Behaviour** 144: 967-982. Link

3. **McCormack JE**, G Castañeda-Guayasamin & G Levandoski. 2007. Sierra Santa Rosa: an oasis of bird diversity in arid northern Mexico. **Ornitología Neotropical** 18: 369-377. Link to PDF

2. **McCormack JE**, G Castañeda Guayasamin, B Milá & F Heredia-Pineda. 2005. Slate-throated redstarts (Myioborus miniatus) breeding in Maderas del Carmen, Coahuila, Mexico. **Southwestern Naturalist** 50: 501-503. Link

1. Avilés L, **J McCormack**, A Cutter & T Bukowski. 2000. Precise, highly female-biased sex ratios in a social spider. **Proceedings of the Royal Society, Series B** 267: 1445-1449. Link

Funded Extramural Grants ($3.26 million)

**Lead PI

2018	National Science Foundation. Division of Biological Infrastructure. Major Research Instrumentation	MRI: Launching an undergraduate-driven Genomics Center through acquisition of an Illumina MiSeq (DBI 1828738)	**JE McCormack, D Pondella, A Zellmer, S Goffredi, J Schulz	**$226,559**
2018	National Science Foundation. Division of Biological Infrastructure. Collections in Support of Biological Research	RUI: CSBR: Natural History: Securing and digitizing an extensive spatio-temporal collection of southern California's marine biodiversity (DBI 1756456)	D Pondella, A Zellmer, J Maley, **JE McCormack**	**$346,916**

2017	National Science Foundation. Division of Environmental Biology, Systematics & Biodiversity Science	CAREER: Integrating undergraduate research, citizen science, and museum genomics to explore a century of change in North American birds (DEB 1652979)	****JE McCormack**	**$787,347**

2015	Keck Foundation	Moore Laboratory of Zoology – Genomics Center	**JE McCormack,** Dan Pondella & Occidental College	**$400,000**

2015	Fletcher Jones Foundation	Proposal to Establish The Fletcher Jones Foundation Genomics Center	**JE McCormack,** Occidental College	**$750,000**

2014	National Science Foundation. Division of Biological Infrastructure. Collections in Support of Biological Research	RUI: CSBR: Natural History: Securing and digitizing the world's largest Mexican bird collection (DBI 1349179)	****JE McCormack**	**$399,598**

2013	National Science Foundation. Division of Environmental Biology. Systematics & Biodiversity Science	RUI: Collaborative Proposal: Genomic approaches to comparative phylogeography in a biodiversity hotspot (DEB 1258205)	****JE McCormack**	**$300,000**

2012	National Science Foundation. Division of Environmental Biology. Evolutionary Processes.	EAGER: RUI: The genomic architecture of speciation in an avian hybrid zone (DEB 1244739)	****JE McCormack**, C Cicero & BC Faircloth	**$53,849**

PRE-TENURE TRACK JOB BELOW

2005	UC Mexus Doctoral Dissertation Grant	Genetic differentiation in sky islands	****JE McCormack**	**$11,400**

2001	National Science Foundation	Graduate Research Fellowship	****JE McCormack**	**$98,500**

Popular Writing, Scientific Outreach & Consulting

2019 Article on Science Friday about 3D bird models, with undergrad Josh Medina
2019 Blog post on **Sketchfab** on 3D modeling of bird specimens, with undergrad Josh Medina
2018 Co-wrote with Harvard Law a legal brief on species definitions in the Endangered Species Act
2018 Full article in **Birding Magazine** on the utility of the Moore Lab collection
2018 Op-Ed in the Los Angeles Times on public funding for museums
2018 Appeared in Smithsonian Magazine article regarding a book on theft of bird specimens
2018 Guest on Ologies podcast with Alie Ward discussing evolution
2018 Quoted in **Baltimore Sun** article on raven speciation

2017 Scientific Consulting Board, Sherman Fairchild Foundation (2017-present)
2017 Quoted in **Omaha World-Herald** article on bird speciation.
2016 Research focus of **KCET** coverage of a threatened bird
2015 Quoted in **Los Angeles Times** article on bird migration
2015 Focus of **Los Angeles Times** article on bird and crocodilian genomics
2014 Wrote letter to the **Los Angeles Times** on the threatened California Gnatcatcher
2013 Scientific consulting for **Travel Channel** show Human Safari (screen credit)
2013 Consulting and on-camera speaking for The Ordinary Extraordinary Junco, an NSF-funded video project that explains the remarkable behavior and evolution of a backyard bird (example on-camera is on Vimeo here starting at 0:55)
2013 Conducted DNA testing on a feather sample for an episode of **The Doctors TV**
2003 Letter published in **The New Yorker** (September 15, 2003 issue)
2000 Book review in the **Tucson Weekly** on Carl Sagan: A Life by Keay Davidson

Teaching & Mentoring

Research Mentoring (since 2011 at Occidental College)
Undergraduates: 73 (roughly equal gender split and 33% under-represented)
High School Students: 8

Courses Taught

Evolutionary Biology. Professor. Occidental College. 2019, 2017, 2016, 2015, 2014, 2012, 2011
Avian Biology. Professor. Occidental College. 2017, 2016, 2013, 2012
Molecular Phylogenetics. Professor. Occidental College. 2020, 2013
Multicultural Summer Institute. Professor. Occidental College. 2017
Senior Comprehensive Seminar. Professor. Occidental College. 2016, 2013
Museum Science. Professor. Occidental College. 2020, 2014, 2013, 2012
Evolutionary Genomics and the Museum: Enhancing Insight into Evolutionary Processes Using Museum Collections. Collaborative Video-Conference Course between Occidental College, Harvard University, and University of New Mexico (as part of NSF-funded AIM-UP initiative). 2013.
Conservation Biology. Graduate Teaching Assistant. UCLA. 2007, 2003, 2002
Vertebrate Morphology. Graduate Teaching Assistant. UCLA. 2001.
Marine Discovery. Undergraduate Instructor. University of Arizona. 1998

Invited Talks

2016 to present
Pomona Audubon (October 2019), San Fernando Valley Audubon (October 2019), Western Foundation of Vertebrate Zoology, Camarillo, CA (September 2019), UC Berkeley (March 2019), Los Angeles Breakfast Club (August 2018), Episcopal School of Los Angeles (2018), Santa Monica Bay Audubon Society (October 2017), Cal Poly Pomona (April 2017), Azusa Pacific University (2017), Pasadena Audubon Society (February 2016)

2012 to 2015
Los Angeles Audubon Society (June 2015), UC Riverside (June 2015), San Diego Field Ornithologists (March 2015), Field Museum, Chicago (March 2015), Southern California Ornithological Group, UCLA

(February 2015), CSU Dominguez Hills (October 2014), American Museum of Natural History, New York City (November 2013), University of Southern California (October 2013), University of New Mexico (April 2013), Harvey Mudd College (February 2013), Natural History Museum of Los Angeles County (February 2013), San Diego State University (September 2012), UC Berkeley, Museum of Vertebrate Zoology (March 2012)

2011 and before

Pomona College (October 2011), University of Kansas (2011), Southeastern Louisiana University (2011), University of Mississippi (2010), Occidental College (2010), CSU Northridge (2010), Louisiana State University (2010), University of Arizona (2009), University of Michigan (2008), Dartmouth College (2008), CSU Northridge (2007), Harvard University (2006)

Selected Presentations

Joint Meeting of Icthyologists and Herpetologists, Snowbird, Utah (July 2019)

REGULAR TALK: "Yes, and" is better than "No, but": genomic and barcoding data help uncover cryptic lineages of Mexican highland frogs

American Ornithological Society, Anchorage, AK (June 2019)

Lab members: one collections manager talk (James Maley), two student posters (Josh Medina and David Mosack), one lab manager talk (Whitney Tsai), one postdoc talk (Ryan Terrill)

CECAM (Congreso para el Estudio y Conservacion de las Aves en Mexico), Saltillo, Mexico (2018)

INVITED KEYNOTE TALK: 100 years of change to the birds of Mexico: What can we learn from the 1933-1955 collections of Chester C. Lamb?

American Ornithological Society, Tucson, AZ (2018)

POSTER: A complete evolutionary history of the New World Jays

Lab members: one collections manager talk (James Maley), two post-grad student posters (Ben Scott and Maggie Schedl), three current student posters (Miles Collins, Annie Stevens, Betty Du)

American Ornithological Society, East Lansing, MI (2017)

LIGHTNING TALK: A fresh look at some old specimens: revisiting a Collared and Spotted Towhee hybrid zone.

Lab members: one lab manager talk (Whitney Tsai), one student poster (Devon DeRaad)

North American Ornithological Congress, Washington, DC (2016)

REGULAR TALK: Hidden histories of gene flow in highland birds.

INVITED SYMPOSIUM TALK: Museum Genomics and Advancing Integration of Museum into Undergraduate Education (AIM-UP!)

Lab members: One student talk (Emma White), two student posters (Ella Fornari and Megan Liu), one lab tech talk (Whitney Tsai), one collections manager talk (James Maley), one postdoc talk (Flor Rodriguez)

Evolution Meeting, Austin, Texas (2016)

REGULAR TALK: Hidden histories of gene flow in highland birds.

American Society for Ethnohistory Conference, Las Vegas, Nevada (2015)

SYMPOSIUM TALK: The Moore Laboratory of Zoology at Occidental College: The Largest Natural History Collection of Mexican Birds in the World and Their Potential Use for Ethnohistory

American Ornithologists' Union / Cooper Ornithological Society, Estes Park (2014)

INVITED SYMPOSIUM TALK: Whole-genome approach to speciation in scrub-jays. Symposium "Genomic Approaches to Understanding Avian Speciation".

Lab members: One student talk (Jessie Salter), one lab tech talk (Whitney Tsai), one postdoc talk (Eugenia Zarza)

American Ornithologists' Union / Cooper Ornithological Society, Chicago (2013)

INVITED SYMPOSIUM TALK: Prospects for using target enrichment and next-generation sequencing to collect thousands of DNA loci from museum specimens. Symposium "The Extended Specimen: Emerging Frontiers in the Collections-based Ornithological Research".

Lab members: one student talk (Madhvi Venkatraman) and one Master's student talk (Fiona Gowen)

Evolution Meeting, Snowbird, Utah (2013)

REGULAR TALK: The deep history of tetrapods explored through sequence capture and high-throughput sequencing.

Lab members: one student talk (Madhvi Venkatraman)

North American Ornithological Congress, Vancouver, Canada (2012)

INVITED SYMPOSIUM TALK: Sequence capture of 416 ultraconserved elements provides resolution to the bird tree of life. Symposium "The Application of Next-Generation Sequencing to Ornithological Research".

Lab members: one student talk (Madhvi Venkatraman) and one Master's student poster (Fiona Gowen)

Evolution Meeting, Ottawa, Canada (2012)

REGULAR TALK: Sequence capture of 416 ultraconserved elements provides resolution to the bird tree of life.

Evolution Meeting, Norman, Oklahoma (2011)

REGULAR TALK: Ultraconserved elements are novel phylogenomic markers that facilitate species-tree analysis of the bird and mammal tree of life.

Evolution Meeting, Portland, Oregon (2010)

REGULAR TALK: A simple and cost-effective application of next-generation sequencing to phylogeography and population genetics: investigating four bird divergences.

Evolution Meeting, Moscow, Idaho (2009)

REGULAR TALK: Ecological divergence as a consequence of speciation in *Aphelocoma* jays: niche models, null models, and a new multivariate model.

Cooper Ornithological Society, Tucson, Arizona (2009)

INVITED SYMPOSIUM TALK: A multilocus phylogeny and biogeographic history of *Aphelocoma*. Symposium "Conservation Biology And Evolutionary Genetics Of *Aphelocoma* Jays".

Evolution Meeting, Minneapolis, Minnesota (2008)

REGULAR TALK: Breaking them down and building them up: Reconstructing maximum-likelihood gene trees from discordant gene trees.

Neotropical Ornithological Congress, Maturín, Venezuela (2007)

REGULAR TALK: Genetic differentiation in the Mexican jay (*Aphelocoma ultramarina*): diversification in the Mexican highlands.

North American Ornithological Congress, Veracruz, Mexico (2006)

REGULAR TALK: Phylogeography of the Mexican jay (*Aphelocoma ultramarina*): implications for taxonomy and diversification in the Mexican highlands.

American Ornithologists' Union, Santa Barbara, California (2005)

REGULAR TALK: Locally adaptive bill morphology in Mexican jays on an elevation gradient.

Animal Behavior Society, Oaxaca, Mexico (2004)

POSTER: Producer-scrounger roles and the effect of dominance on preferential joining in a free-living group of Mexican jays (*Aphelocoma ultramarina*).

Service

Editorial

Systematic Biology, Associate Editor, 2013-2019

Systematic Biology, Editorial Board Member, 2012-2018

Revista Bio Ciencias, Editorial Board, 2015-present

Professional Committees

National Science Collections Alliance, Executive Board, 2018-present
Elected Council, Society of Systematic Biologists, 2015-2019
Chair, American Ornithologists Union/Cooper Ornithological Society Joint Communications Committee, 2015-2016
Cooper Ornithological Society, Nominations Committee - Board of Directors, 2011-2013

Memberships

Society for the Study of Evolution, Society for Systematic Biologists (lifetime), American Ornithological Society (Elective Member 2015, Fellow 2019), Wilson Ornithological Society

Student Dissertation Committees

2018-present: Outside Committee Member, Ph.D. student, Xuanyi Wu, UCLA Materials Science and Engineering Department (Advisor: Ioanna Kakoulli)
2013-present: Outside Committee Member, Ph.D. student, Guillermo Friis, Museo Nacional de Ciencias Naturales, Departamento de Biodiversidad y Biología Evolutiva, Madrid, Spain (Advisor: Borja Milá)
2011-2013: Advisor, Master's student, Fiona Gowen, Occidental College (2011-2013)
2010: Outside Committee Member, Master's Student, Angela Navas-Berdugo, Universidad de los Andes, Bogotá, Colombia (Advisor: Daniel Cadena)

Major College Committees

Faculty Council (2014–2016), Committee for Intellectual Community (2017–2018)

Languages

Spanish, Professional Working Proficiency