### Prof. Daniel J. Field

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#### **EDUCATION**

PhD: Vertebrate Paleontology, Yale (2017) MPhil: Vertebrate Paleontology, Yale (2012)

BSc (Honours with Distinction): Zoology, UBC (2010)



## **APPOINTMENTS (\*DENOTES ONGOING)**

2023\*: Professor of Vertebrate Palaeontology, Department of Earth Sciences, University of Cambridge, UK

2021\*: Research Associate, Natural History Museum, London, UK

2021\*: Strickland Curator of Ornithology, University Museum of Zoology, Cambridge, UK 2019\*: Fellow in Natural Sciences, Christ's College, University of Cambridge, UK

2018\*: Research Associate, Denver Museum of Nature and Science, USA

2018-23: Assistant Professor, Department of Earth Sciences, University of Cambridge, UK

2017-18: 50th Anniversary Prize Fellow (fellowship & proleptic lectureship), Milner Centre for Evolution, University of Bath, UK

2016: Postdoctoral Associate, Department of Geology & Geophysics, Yale University, USA

2014: Predoctoral Fellow, Division of Birds, Smithsonian National Museum of Natural History, Washington D.C., USA

2010-16: Yale Graduate Fellow, Department of Geology & Geophysics, Yale University, USA

NSERC undergraduate student researcher, Department of Zoology, UBC, Vancouver, Canada
 Curatorial assistant, Cowan Vertebrate Museum, University of British Columbia, Vancouver, Canada
 NSERC undergraduate student researcher, Department of Zoology, UBC, Vancouver, Canada

2008: Preparation Lab Technician and Field Assistant, Royal Tyrrell Museum of Palaeontology, Drumheller, Canada

2007: Science Educator, Royal Tyrrell Museum of Palaeontology, Drumheller, Canada

#### **RESEARCH INTERESTS**

My research investigates the evolutionary origins of living bird diversity, as well as the origins of avian morphological, behavioural, and physiological specialisations. I draw on anatomical, embryological, and molecular data from across the living diversity of birds, and palaeontological evidence from across the avian total-group.

## **SELECTED HONOURS AND RECOGNITION**

2024:	Nominee, Blavatnik Awards for Young Scientists in the United Kingdom,	Life Sciences

2024: Nominee, Philip Leverhulme Prize in Earth Sciences

2024: Visiting Fellow, Durham Institute of Research, Development, and Invention

2023: UKRI Future Leaders Fellowship renewal

2023: Shortlist, Cambridge University Students' Union Student-led Teaching Award

2022: Honourary Member, British Waterfowl Association

2022: Nominee, Cambridge University Students' Union Student-led Teaching Award

2022: Shortlist (Top 10), Blavatnik Awards for Young Scientists in the United Kingdom, Life Sciences

2021: Best Performing Associate Editor: Proceedings of the Royal Society B

2021: Nominee, Philip Leverhulme Prize in Earth Sciences

2021: Nominee, Vice Chancellor Awards for Impact and Engagement

2021: Shortlist (Top 10), Blavatnik Awards for Young Scientists in the United Kingdom, Life Sciences

2021: Diversity best paper award

2020: Nominee, Cambridge University Students' Union Student-led Teaching Award

2019: Best Performing Associate Editor: Proceedings of the Royal Society B

2019: Winner, Royal Society Photography Competition, Animal Behaviour

2019: UKRI Future Leaders Fellowship

2018: Society of Systematic Biologists Publisher's Award

2017: 50th Anniversary Prize Fellowship, University of Bath

2016: Philip M. Orville Prize (outstanding research and scholarship in Yale Earth Sciences)

2014: W.D. Hamilton Award, Society for the Study of Evolution

2014: Cas Lindsey Prize, Canadian Society of Zoologists

2014: David and Marvalee Wake Award, Society for Integrative and Comparative Biology

2014: Smithsonian Predoctoral Fellowship

2013: G.G. Simpson Prize (co-authored publications also received the Simpson Prize in 2015 and 2016)

2013: Estwing Hammer Prize (exceptional performance as a Yale geology graduate student)

2013: William S. Hoar Award, Canadian Society of Zoologists

- 2011: Canadian Postgraduate Study Award, Golden Key International Honors Society
- 2010: Mary and Joseph Bryant scholarship for wildlife research, University of British Columbia
- 2010: Best Talk, UBC Multidisciplinary Undergraduate Research Conference
- 2009: Jamie Smith Memorial Scholarship (for field study in Africa; University of British Columbia)

## **PUBLICATIONS**

- I: Peer-Reviewed Papers & Invited Commentaries (Lab Members in Bold)
- 77) Chen, A., van Tuinen, M., Field, D.J. 2024. Birds, Diversification of. *Reference Module in Life Sciences*. Elsevier. ISBN 9780128096338. https://doi.org/10.1016/B978-0-443-15750-9.00054-9. [AC postdoc]
- 76) Rico-Guevara, A., Sustaita, D., Hurme, K.J., Hanna, J.E., Jung, S., **Field, D.J.** Upper beak bending as an adaptation for nectar feeding in hummingbirds. *Journal of the Royal Society Interface*, in press.
- 75) **Burton, M.G.P., Mellor, K., Smith, E., Benito, J.,** Martin-Silverstone, E., O'Connor, P., **Field, D.J.** The influence of soft tissue volume on estimates of skeletal pneumaticity: implications for fossil archosaurs. *Philosophical Transactions of the Royal Society*, in press. [MGPB PhD student; KM and EM undergraduate students; JB postdoc]
- 74) Chiappe, L.M., **Navalón, G.**, Martinelli, A.G., de Sousa Carvalho, I., Santucci, R.M., Wu, Y-H., **Field, D.J.** Cretaceous bird fills key gap in the evolution of the avian skull and brain. *Nature*, in press. **[GN POSTDOC]**
- du Toit, C.J., Bond, A.L., Cunningham, S.J., Field, D.J., Portugal, S.J. 2024. Tactile bill-tip organs in seabirds suggest conservation of a deep neornithine symplesiomorphy. *Biology Letters* 20: 20240259. doi:10.1098/rsbl.2024.0259. [Cover; CJdT postdoc]
- 72) Berv, J.S., Singhal, S., **Field, D.J.**, *et al.* 2024. Molecular early burst associated with the diversification of birds at the K–Pg boundary. *Science Advances* **10**: eadp0114. doi:10.1126/sciadv.adp0114. **[Cover]**
- 71) Crane, A., Benito, J., Chen, A., Musser, G., Torres, C., Clarke, J.A., Lautenschlager, S., Ksepka, D.T., Field, D.J. 2024. Taphonomic damage obfuscates interpretation of the retroarticular region of the *Asteriornis* mandible. *GeoBios*. https://doi.org/10.1016/j.geobios.2024.03.003. [AC MASTER'S STUDENT; JB AND AC POSTDOCS]
- 70) Chen, A., Costa, T.V.V., Field, D.J. On the origin of nightjars: perspectives from the fossil record. *Invited book chapter for 'Nightjars: from mystery to models in ecology and evolution'*, in press. [AC POSTDOC]
- Pimiento, C., Kacáková, K., Mathes, G.H., Argyriou, T., Cadena, E.-A., Cooper, J.A., Cortés, D., **Field, D.J.**, Klug, C., Scheyer, T.M., Valenzuela-Toro, A.M., Hatt, P., Holdener, G., Jacober, G., Kobelt, S., Masseraz, S., Mehli, I., Reiff, S., Rigendinger, E., Ruckstuhl, M., Schneider, S., Seige, C., Senn, N., Staccoli, V., Baumann, J., Flüeler, L., Guevara, L.J., Ickin, E., Kissling, K.C., Rogenmoser, J., Spitznagel, D., Villafaña, J.A., Zanatta, C. 2024. The extinct marine megafauna of the Phanerozoic. *Cambridge Prisms: Extinction* **2**: e7, 1-17. https://doi.org/10.1017/ext.2024.12.
- Field, D.J., Benito, J., Werning, S., Chen, A., Kuo, P.-C., Crane, A., Widrig, K.E., Ksepka, D.T., Jagt, J.M.W. 2024. Remarkable insights into modern bird origins from the Maastrichtian type area (northeast-Belgium, southeast-Netherlands). Netherlands Journal of Geosciences 103: e15. https://doi.org/10.1017/njg.2024.11. [A.CRANE MASTER'S STUDENT; PCK AND KEW PHD STUDENTS; JB AND A.CHEN POSTDOCS]
- Widrig, K.E., Navalón, G., Field, D.J. 2024. Palaeoneurology of stem palaeognaths clarifies the plesiomorphic condition of the crown bird central nervous system. *Journal of Morphology* 285: e21710. https://doi.org/10.1002/jmor.21710. [KEW PHD STUDENT; GN POSTDOC]
- Kuo, P.-C., Navalón, G., Benson, R.B.J., Field, D.J. 2024. Macroevolutionary drivers of morphological disparity in the avian quadrate. *Proceedings of the Royal Society B* 291: 20232250. http://doi.org/10.1098/rspb.2023.2250. [PCK PhD STUDENT; GN POSTDOC]
- 65) **Brocklehurst, N.** & **Field, D.J.** 2024. Tip dating and Bayes factors provide insight into the radiation of crown birds across the end-Cretaceous mass extinction. *Proceedings of the Royal Society B* **291**: 20232618. https://doi.org/10.1098/rspb.2023.2618 [**NB POSTDOC**]
- 64) Peacock, J., Spellman, G.M., **Field, D.J.**, Mason, M.J., Mayr, G. 2024. Comparative morphology of the avian bony columella. *The Anatomical Record* **307**(5): 1735–1763. https://doi.org/10.1002/ar.25278. **[Cover]**

- **Widrig, K.**, Bhullar, B.A-S., **Field, D.J.** 2023. 3D atlas of tinamou (Neornithes: Tinamidae) pectoral morphology: implications for reconstructing the ancestral neornithine flight apparatus. *Journal of Anatomy* **243**: 729–757. https://doi.org/10.1111/joa.13919. **[KEW PHD STUDENT]**
- **Kuo, P.-C.,** Benson, R.B.J., **Field, D.J.** 2023. The importance of fossils in macroevolutionary analyses of 3D geometric morphometric data: a case study of galloanseran quadrates. *Journal of Morphology* **284**(6): e21594. https://doi.org/10.1002/jmor.21594. **[PCK PhD STUDENT]**
- 61) **Burton, M.G.P.**, Benson R.B.J., **Field, D.J.** 2023. Direct quantification of skeletal pneumaticity reveals ecological drivers of a key avian trait. *Proceedings of the Royal Society B.* **290**: 20230160. https://doi.org/10.1098/rspb.2023.0160 [MGPB MASTER'S STUDENT]
- 60) Lowi-Merri, T.M., **Demuth, O.E.**, **Benito, J.**, **Field, D.J.**, Benson, R.B.J., Claramunt, S., Evans, D.C. 2023. Reconstructing locomotor ecology of extinct avialans: a case study of *Ichthyornis* comparing sternum morphology and skeletal proportions. *Proceedings of the Royal Society B* **290**: 20222020. http://doi.org/10.1098/rspb.2022.2020. **[OED PHD STUDENT, JB POSTDOC]**
- 59) Gayford, J.H., Whitehead, D.A., Field, D.J. 2023. The selective drivers of allometry in sharks (Chondrichthyes: Elasmobranchii). Zoological Journal of the Linnean Society zlac110. https://doi.org/10.1093/zoolinnean/zlac110. [JHG UNDERGRADUATE STUDENT]
- 58) Steell, E.M., Nguyen, J., Benson, R.B.J., Field, D.J. 2023. Evolution of the passerine carpometacarpus helps illuminate the early fossil record of crown Passeriformes. *Journal of Anatomy* 242: 495-509. doi: 10.1111/joa.13761. [EMS PHD STUDENT]
- Ksepka, D.T., **Field, D.J.**, Heath, T.A., Pett, W., Thomas, D.B., Giovanardi, S., Tennyson, A.J.D. 2023. Largest-known fossil penguin clarifies the evolution of sphenisciform body size and flipper anatomy. *Journal of Paleontology.* 1-20. doi:10.1017/jpa.2022.88.
- Benito, J., Kuo, P.-C., Widrig, K.E., Jagt, J.W.M., Field, D.J. 2022. Latest Cretaceous ornithurine supports a neognathous crown bird ancestor. *Nature* 612: 100-105. doi: https://doi.org/10.1038/s41586-022-05445-y. [JB, PCK, KEW PhD students]
- 55) Benito, J., Chen, A., Bhullar, B.A-S., Field, D.J. 2022. Forty new specimens of *Ichthyornis* provide unprecedented insight into the postcranial morphology of crownward stem group birds. *PeerJ* 10:e13919. https://doi.org/10.7717/peerj.13919. [JB, AC PhD STUDENTS]
- 54) Chiappe, L.M., **Navalón, G.**, Nava, W., Martinelli, A.G., **Field, D.J.** 2022. Three-dimensional enantiornithine braincase clarifies the origin of the avian central nervous system and inner ear. *Proceedings of the Royal Society B* **289**: 20221398. **[GN POSTDOC]**
- Demuth, O.E., Benito, J., Tschopp, E., Lautenschlager, S., Mallison, H., Heeb, N., Field, D.J. 2022. Topology-based three-dimensional reconstruction of delicate fossil remains and the quantification of taphonomic deformation. *Frontiers in Earth Science* 10: 10.3389/fevo.2022.828006. [OED, JB PhD STUDENTS]
- **Widrig, K.E.** & **Field, D.J.** 2022. The evolution and fossil record of palaeognathous birds (Neornithes: Palaeognathae). *Diversity* 14(2): 105 doi:10.3390/d14020105. **[KEW PhD STUDENT]**
- 51) Ducatez, S. & Field, D.J. 2021. Disentangling the avian altricial-precocial spectrum: Quantitative assessment of developmental mode, phylogenetic signal, and dimensionality. *Evolution* 75(11): 2717-2735. https://doi.org/10.1111/evo.14365. [COVER; SD POSTDOC]
- 50) Hughes, J.J., **Berv, J.S.**, Chester, S.J.B., Sargis, E.J., **Field, D.J.** 2021. Ecological selectivity and the evolution of mammalian substrate preference across the K–Pg boundary. *Ecology and Evolution* 11, 14540-14554. https://doi.org/10.1002/ece3.8114/. **[JSB visiting PhD Student]**
- 49) Klein, C.G., Pisani, D., Field, D.J., Lakin, R., Wills, M.A., Longrich, N.R. 2021. Evolution and dispersal of snakes across the Cretaceous-Paleogene mass extinction. *Nature Communications* 12:5335. http://doi.org/10.1038/s41467-021-25136y. [CGK co-ADVISED PHD STUDENT]
- Watanabe, J., Field, D.J., Matsuoka, H. 2021. Wing musculature reconstruction in extinct flightless auks (*Pinguinus* and *Mancalla*) reveals incomplete convergence with penguins (Spheniscidae) due to differing ancestral states. *Integrative Organismal Biology* 3(1): obaa040. https://doi.org/10.1093/iob/obaa040. [Cover; JW POSTDOC]

- 47) Louchart, A., Bhullar, B.A-S., Riamon, S., **Field, D.J.** 2021. The true identity of putative tooth alveoli in a Cenozoic crown bird, the gastornithid *Omorhamphus. Frontiers in Earth Science* 9:661699. doi: 10.3389/feart.2021.661699.
- 46) O'Connor, J.K., **Field, D.J.,** Sullivan, C. 2021. Early avian evolution. *Frontiers in Earth Science* 9:730214. doi: 10.3389/feart.2021.7302144.
- 45) **Brocklehurst, N.** & **Field, D.J.** 2021. Macroevolutionary dynamics of dentition in Mesozoic birds reveal no long-term selection towards tooth loss. *iScience* **24**: 102243. https://doi.org/10.1016/j.isci.2021.102243. **[NB POSTDOC]**
- 44) **Field, D.J.** The changing face of birds from the Age of Dinosaurs (Invited Commentary). 2020. *Nature* **588**: 221-222. https://doi.org/10.1038/d41586-020-03260-x
- 43) Field, D.J., Benito, J., Chen, A., Jagt, J.M.W., Ksepka, D.T. 2020. Late Cretaceous neornithine from Europe illuminates the origins of crown birds. *Nature* 579 397-401. https://doi.org/10.1038/s41586-020-2096-0. [JB, AC PhD STUDENTS]
- 42) Chen, A. & Field, D.J. 2020. Phylogenetic definitions for Caprimulgimorphae (Aves) and major constituent clades under the International Code of Phylogenetic Nomenclature. *Vertebrate Zoology* **74**(4): 571-585. http://www.doi.org/10.26049/VZ70-4-2020-03. [AC PhD STUDENT]
- Field, D.J., Berv, J.S., Hsiang, A.Y., Lanfear, R., Landis, M.J., Dornburg, A. 2020. Timing the extant avian radiation: The rise of modern birds, and the importance of modeling molecular rate variation. *In* Pennaraptoran theropod dinosaurs: Past progress and new frontiers (Pittman, M. & Xing, X. *Eds.*). *Bulletin of the American Museum of Natural History* 440: 159-181. [JSB VISITING PHD STUDENT]
- 40) Ding, A., Pittman, M., Upchurch, P., O'Connor, J.K., Field, D.J., Xing, X. 2020. The biogeography of coelurosaurian dinosaurs and its impact on their evolutionary history. *In Pennaraptoran theropod dinosaurs: Past progress and new frontiers* (Pittman, M. & Xing, X. Eds.). Bulletin of the American Museum of Natural History 440: 117-157.
- 39) Pittman, M., O'Connor, J.K., Tse, E., Makovicky, P., **Field, D.J.**, Ma, W., Turner, A.H., Xing, X. 2020. The fossil record of Mesozoic and Paleocene pennaraptorans. *In* Pennaraptoran theropod dinosaurs: Past progress and new frontiers (Pittman, M. & Xing, X. *Eds.*). *Bulletin of the American Museum of Natural History* 440: 37-95.
- 38) Pittman, M., O'Connor, J.K., **Field, D.J.**, Ma, W., Xing, X. Pennaraptoran systematics. 2020. *In* Pennaraptoran theropod dinosaurs: Past progress and new frontiers (Pittman, M. & Xing, X. *Eds.*). *Bulletin of the American Museum of Natural History* 440: 7-36.
- Pittman, M., Heers, A.M., Serrano, F.J., **Field, D.J.**, Habib, M.B., Dececchi, T.A., Kaye, T.G., Larsson, H.C.E. 2020. Methods of studying early theropod flight. *In* Pennaraptoran theropod dinosaurs: Past progress and new frontiers (Pittman, M. & Xing, X. *Eds.*). *Bulletin of the American Museum of Natural History*: 440: 277-294.
- Field, D.J. 2020. Preliminary paleoecological insights from the Pliocene avifauna of Kanapoi, Kenya: implications for the ecology of *Australopithecus anamensis*. *Journal of Human Evolution* 140 102384. doi.org/10.1016/j.jhevol.2017.08.007.
- Ksepka, D.T., Balanoff, A.M., Smith, N.A., Bever, G.S., Bhullar, B.A-S., Bourdon, E., Braun, E.L., Burleigh, J.G., Clarke, J.A., Colbert, M.W., Corfield, J.R., Degrange, F.J., De Pietri, V.L., Early, C.M., Field, D.J., Gignac, P.M., Gold, M.E.L., Kimball, R.T., Kawaba, S., Lefebvre, L., Marugán-Lobón, J., Mongle, C.S., Morhardt, A., Norell, M.A., Ridgely, R.C., Rothman, R.S., Scofield, R.P., Tambussi, C.P., Torres, C.R., van Tuinen, M., Walsh, S.A., Watanabe, A., Witmer, L.M., Wright, A.K., Zanno, L.E., Jarvis, E.D., Smaers, J.B. 2020. Tempo and pattern of avian brain size evolution. *Current Biology* 30: 226-236e3. doi.org/10.1016//j.cub.2020.03.060. [Cover]
- Dawson, R.R., **Field, D.J.**, Hull, P.M., Zelenitsky, D.K., Therrien, F., Affek, H. 2020. Eggshell geochemistry reveals ancestral metabolic thermal regulation in Dinosauria. *Science Advances* 6 eaax9361.
- 33) Saupe, E.E.\*, Farnsworth, A., Lunt, D.J., Sagoo, N., Pham, K.V., **Field, D.J.**\* 2019. Climatic shifts drove major contractions in avian latitudinal distributions throughout the Cenozoic. *Proceedings of the National Academy of Sciences* 116:26 12895-12900. 10.1073/pnas.1903866116. \*Co-lead authors.
- Oliveros, C.H., **Field, D.J.**, Ksepka, D.T., Barker, F.K., Aleixo, A., Anderson, M.J., Alström, P., Benz, B.W., Braun, E.L., Braun, M.J., Bravo, G.A., Brumfield, R.T., Chesser, R.T., Claramunt, S., Cracraft, J., Cuervo, A.M., Derryberry, E.P., Glenn, T.C., Harvey, M.G., Hosner, P.A., Joseph, L., Kimball, R.T., Mack, A.L., Miskelly, C.M., Peterson, A.T., Robbins, M.B., Sheldon, F.H., Silveira, L.F., Smith, B.T., White, N.D., Moyle, R.G., Faircloth, B.C. 2019. Earth history and the passerine superradiation. *Proceedings of the National Academy of Sciences* 116:16 7916-7925. 10.1073/pnas.1813206116. **[Cover]**

- 31) Kimball, R.T, Oliveros, C.H., Wang, N., White, N.D., Barker, F.K., **Field, D.J.**, Ksepka, D.T., Chesser, R.T., Moyle, R.G., Braun, M.J., Brumfield, R.T., Faircloth, B.C., Smith, B.T., Braun, E.L. 2019. A phylogenomic supertree of birds. *Diversity* 11:109 doi:10.3390/d11070109. **[Cover]**
- 30) Field, D.J. 2019. Bird Evolution: Convergence fits the bill (Invited Commentary). *Current Biology* 29: R132-R134. doi.org/10.1016/j.cub.2019.01.018.
- 29) **Chen, A.**, White, N.D., Benson, R.B.J., Braun, M.J., **Field, D.J.** 2019. Total-evidence framework reveals complex morphological evolution in nightbirds (Strisores). *Diversity* 11:143 doi:10.3390/d11090143. **[COVER; AC PHD STUDENT]**
- 28) Pimiento, C., Cantalapiedra, J.L., Shimada, K., **Field, D.J.**, Smaers, J.B. 2019. Evolutionary pathways toward gigantism in sharks and rays. *Evolution* 73-3:588-599. doi:10.1111/evo.13680.
- 27) Musser, G., Ksepka, D.T., **Field, D.J.** 2019. New material of Palaeocene-Eocene *Pellornis* (Aves: Gruiformes) clarifies pattern and timing of the extant gruiform radiation. *Diversity* 11:102 doi:10.3390/d11070102.
- **Field, D.J.**, Hanson, M., Burnham, D., Wilson-Brantley, L., Super, K., Ehret, D., Ebersole, E., Bhullar, B.A-S. 2018. Complete *lchthyornis* skull illuminates mosaic assembly of the avian head. *Nature* 557: 96-100. doi:10.1038/s41586-018-0053-y.
- Field, D.J., Bercovici, A., Berv, J.S., Dunn, R., Fastovsky, D., Lyson, T.R., Vajda, V., Gauthier, J.A. 2018. Early evolution of modern birds structured by global forest collapse at the end-Cretaceous mass extinction. *Current Biology* 28(11): 1825-1831.e2. https://doi.org/10.1016/j.cub.2018.04.062. [COVER; JSB VISITING PHD STUDENT]
- Berv, J.S.\* & Field, D.J.\* 2018. Genomic signature of an avian Lilliput Effect across the K-Pg Extinction. Systematic Biology 67(1): 1-13. https://doi.org/10.1093/sysbio/syx064. \*co-first authors. [Cover; WINNER OF THE SOCIETY OF SYSTEMATIC BIOLOGISTS PUBLISHER'S AWARD; JSB VISITING PHD STUDENT]
- **Field, D.J.** & Hsiang, A.Y. 2018. A North American stem turaco, and the complex biogeographic history of modern birds. *BMC Evolutionary Biology* 18:102. https://doi.org/10.1186/s12862-018-1212-3.
- Field, D.J. 2018. Endless skulls most beautiful (Invited Commentary). *Proceedings of the National Academy of Sciences* 115(3): 448-450. doi:10.1073/pnas.1721208115.
- 21) Faux, C.\* & **Field, D.J.**\* 2017. Distinct developmental pathways underlie independent losses of flight in ratites. *Biology Letters* 13(7): 20170234. http://dx.doi.org/10.1098/rsbl.2017.0234. \*co-first authors. **[Cover]**
- 20) **Field, D.J.** 2017. Big-time insights from a tiny bird fossil (Invited Commentary). *Proceedings of the National Academy of Sciences* 114(30): 7750-7752. doi:10/1073/pnas.1710941114.
- 19) Fabbri, M., Koch, N., Pritchard, A., Hanson, M., Hoffman, E., Bever, G., Balanoff, A., Morris, Z., **Field, D.J.**, Camacho, J., Rowe, T., Norell, M., Smith, R., Abzhanov, A., Bhullar, B.A-S. 2017. The skull roof tracks the brain during the evolution and development of reptiles including birds. *Nature Ecology and Evolution* 1(10): 1543-1550. doi: 10.1038/s41559-017-0288-2.
- Field, D.J., Boessenecker, R., Racicot, R., Ásbjörnsdóttir, L., Jónasson, K., Hsiang, A.Y., Behlke, A.D., Vinther, J. 2017. The oldest marine vertebrate fossil from the volcanic island of Iceland: A partial right whale skull from the high latitude Pliocene Tjörnes Formation. *Palaeontology* 60(2): 141-148. doi:10.1111/pala.12275.
- 17) Bever, G.S., Lyson, T.R., **Field, D.J.**, Bhullar, B.-A.S. 2016. The amniote temporal roof and the diapsid origin of the turtle skull. *Zoology* 119(6): 471-473. doi:10.1016/j.zool.2016.04.005.
- Balanoff, A.M., Bever, G.S., Colbert, M.W., Clarke, J.A., **Field, D.J.**, Gignac, P.M., Ksepka, D.T., Ridgely, R., Smith, N.A., Torres, C., Walsh, S., Witmer, L. 2016. Best practices for digitally constructing endocranial casts: Examples from birds and their dinosaurian relatives. *Journal of Anatomy* 229(2): 173-190. doi:10.1111/joa.12378. **[Cover]**
- Dumont, M., Tafforeau, P., Bertin, T., Bhullar, B.-A.S., **Field, D.**, Schulp, A., Strilisky, B., Thivichon-Prince, B., Viriot, L., Louchart, A. Synchrotron imaging of dentition reveals insights into the biology of *Hesperornis* and *Ichthyornis*, the 'last' toothed birds. 2016. *BMC Evolutionary Biology* 16(1): 1-28. doi:10.1186/s12862-016-0753-6.
- **Field, D.J.**, Leblanc, A., Gau, A., Belhke, A.D. 2015. Pelagic neonatal fossils support viviparity and precocial life history of Cretaceous mosasaurs. *Palaeontology* 58(3): 401-407. doi:10.1111/pala.12165.

- Prum, R.O., Berv, J.S., Dornburg, A., **Field, D.J.**, Townsend, J.P, Lemmon, E.M., Lemmon, A.R. 2015. A comprehensive phylogeny of birds (Aves) using targeted next generation DNA sequencing. *Nature* 526: 569-573. doi:10.1038/nature15697.
- 12) Bever, G.S., Lyson, T.R., **Field, D.J.**, Bhullar B.-A.S. 2015. Evolutionary origin of the turtle skull. *Nature* 525: 239-242. doi:10.1038/nature14900.
- Hsiang, A., **Field, D.J.**, Behlke, A.D., Davis, M.B., Racicot, R.A., Webster, T.H., Gauthier, J.A. 2015. The origin of snakes: revealing the ecology, behavior, and evolutionary history of early snakes using genomics, phenomics, and the fossil record. *BMC Evolutionary Biology* 15: 87. doi:10.1186/s12862-015-0358-5. **[Winner of the G.G. Simpson Prize]**
- Feo, T.J., **Field, D.J.**, Prum, R.O. 2015. Barb geometry of asymmetrical feathers reveals a transitional morphology in the evolution of avian flight. *Proceedings of the Royal Society B* 282: 20142864. http://dx.doi.org/10.1098/rspb.2014.2864. [Winner of the G.G. Simpson Prize]
- 9) Snow, S., **Field, D.J.**, Musser, J.M. 2015. Interspecific competition in *Grallaria* antpittas: observations at a feeder. *Bulletin of the Peabody Museum of Natural History* 56(1): 89-93.
- 8) **Field, D.J.**, Gauthier, J.A., King, B.L., Pisani, D., Lyson, T.R., Peterson, K.J. 2014. Toward consilience in reptile phylogeny: microRNAs support an archosaur, not lepidosaur, affinity for turtles. *Evolution & Development* 16(4): 189-196. doi:10.1111/ede.12081. **[Cover]**
- 7) **Field, D.J.**, Brown, C., Lynner, C., Darroch, S.A.F. 2013. Skeletal correlates for body mass estimation in modern and fossil flying birds. *PLoS ONE* 8(11): e82000. doi:10.1371/journal.pone.0082000.
- 6) Field, D.J., D'Alba, L., Vinther, J., Webb, S., Gearty, W., Shawkey, M.D. 2013. Melanin concentration gradients in modern and fossil feathers. *PLoS ONE* 8(3): e59451. doi:10.1371/journal.pone.0059451. [WINNER OF THE G.G. SIMPSON PRIZE]
- 5) McNamara, M.E., Briggs, D.E.G., Orr, P.J., **Field, D.J.**, Wang, Z. 2013. Experimental maturation of feathers: implications for reconstructions of fossil feather colour. *Biology Letters* 9(3): 20130184.
- 4) Longrich, N., **Field, D.J.** 2012. *Torosaurus* is not *Triceratops*: Ontogeny in chasmosaurine ceratopsids as a case study in dinosaur taxonomy. *PLoS ONE* 7(2): e32623. doi:10.1371/journal.pone.0032623.
- 3) **Field, D.J.**, Ben-Zvi, M., Lin, S.C., Goldbogen, J.A., Shadwick, R.E. 2011. Convergent evolution in rorqual whales and pelicans driven by similar feeding mechanics. *Anatomical Record* 294: 1273–1282. **[Cover]**
- 2) Longrich, N., Tokaryk, T., **Field, D.J.** 2011. Mass extinction of birds at the Cretaceous-Paleogene (K-Pg) boundary. *Proceedings of the National Academy of Sciences* 108(37): 15253-15257.
- 1) **Field, D.J.**, Campbell-Malone, R., Goldbogen, J.A., Shadwick, R. 2010. Quantitative computed tomography of humpback whale (*Megaptera novaeangliae*) mandibles: mechanical implications for rorqual lunge-feeding. *Anatomical Record* 293: 1240-1247.
- II: Peer Reviewed Papers in Review or Revision (Lab Members in Bold):
- R10) Field, D.J., Burton, M.G.P., Benito, J., Plateau, O.J.C., Navalón, G. Whence the birds: 200 years of dinosaurs, avian antecedents. *Biology Letters*, In review. [MGPB PhD student; JB, OJCP, and GN postdocs]
- R9) Chen, A., Steell, L., Field, D.J. Towards a comprehensive anatomical matrix for crown birds: phylogenetic insights from the pectoral girdle and forelimb skeleton. In submission (Integrative and Comparative Biology). [AC and LS PhD students]
- R8) **Arnaout, B.**, Brzezinski, K., Steventon, B., **Field, D.J.** Morphological criteria for staging near-hatching embryos of the domesticated Mallard (*Anas platvrhynchos*), *Journal of Morphology*, in review, **IBA PhD student1**
- R7) **MacGillavry, T.**, Pelliconi, F., Jønsson, K.A., **Field, D.J.**, Fusani, L. Complex song and dance evolves independently of brain size in the Birds-of-Paradise (Passeriformes: Paradisaeidae). *Ornithology*, in review. **[TM visiting PhD student]**
- R6) Bean, H., **Field, D.J.**, McNamara, M. Quantitative characterisation of melanin-based feather colour using reflectance spectrophotometry. In revision.

- R5) **Steell, E.M.**, Hsiang, A.Y., **Field, D.J.** The relative homoplasy index: a new cross-comparable metric for quantifying homoplasy in discrete character datasets. *Zoological Journal of the Linnean Society,* in review. **[EMS PhD student]**
- R4) Peacock, J., Benson, M.A., Greene, N.T., Tollin, D.J., **Field, D.J.**, Spellman, G.M. The morphology and mechanics of the middle ear in the barn owl (*Tyto alba*). In revision.
- R3) Dornburg, A., *et al.* (7 authors). Collapsing hotspots, extinction, and recovery: The evolutionary history of herbivorous reef fishes. In revision.
- R2) Smithwick, F.M., et al. (5 authors). Colour patterns in the early Eocene stem upupiform bird Messelirrisor. In revision.
- R1) Klein, C.G., *et al.* (6 authors). Competing hypotheses for the early evolution of crown Squamata: Evidence for delayed emergence of major squamate clades. In revision.

## III: Manuscripts in Final Preparation (Lab Members in Bold)

- P8) Chowdhury, S., et al. Interspecific variation in shorebird population trends in relation to migration route. In final preparation (*Nature Ecology & Evolution*).
- P7) Speer, J., et al. Ancestral state reconstructions of the deep-time history of primate behavior and ecology. In final preparation (*Journal of Mammalian Evolution*).
- P6) Early, C., Ksepka, D.T., Giles, S., **Field, D.J.** Neornithine olfactory bulb evolution informed by the earliest crown birds. In final preparation.
- P5) Arnaout, B., Brzezinski, K., Steventon, B., Field, D.J. Comparative osteogenesis of galloanseran skulls challenges von Baer's Laws. In final preparation (Evolution & Development). [BA PhD student]
- P4) Widrig, K.E. & Field, D.J. New insights into the postcranial morphology of *Lithornis vulturinus* from the Eocene London Clay. In final preparation (*Papers in Palaeontology*). [KEW PhD student]
- P3) Hunt, A., Plateau, O.J.C., Benito, J., Field, D.J. Post-hatching palate ontogeny illuminates avian pterygoid segmentation. In final preparation (*Journal of Anatomy*). [AH PhD student; OJCP and JB postdocs]
- P2) **Kuo, P.-C.**, Benson, R.B.J., **Field, D.J.** Anatomical variability and revised nomenclature of the avian quadrate. In final preparation (*Journal of Anatomy*). **[PCK PhD student]**
- P1) **Demuth, O.E.**, Hutchinson, J.R., La Barbera, V., Warner, S.E., **Field, D.J.** Soft tissue simulations constrain joint mobility estimates in the avian shoulder. In final preparation (*Journal of the Royal Society Interface*). **[OED PhD student]**

#### IV: Other Publications (Non-Peer Reviewed)

- O7) **Field, D.J.** 2024. *Surviving Catastrophe*. In *Birds: Brilliant and Bizarre*. Book accompanying Natural History Museum special exhibition.
- O6) Field, D.J. 2020. How we discovered the world's oldest modern bird skull. Nature Ecology & Evolution Blog.
- O5) Field, D.J. 2016. Macroevolutionary patterns in Avialae: The complex evolution of avian biogeography, and the origin of avian flight. PhD Dissertation (230pp.). Yale University. [WINNER OF THE PHILIP M. ORVILLE PRIZE]
- O4) Field, D.J. & Hsiang, A.Y. 2018. Feathered fruit-eater frozen in fossil form. Biomed Central Series Blog.
- O3) Field, D.J. 2018. How birds survived the dinosaur-killing asteroid. *The Conversation*.
- O2) Field, D.J. & Hsiang, A.Y. 2015. Limbless Triumph: The origin and diversification of snakes. Biomed Central Series Blog.
- O1) Luque, J., ..., **Field, D.J.**, *et al.* 2015. Diversity in all its forms: IPC4 as an invaluable opportunity for STEPPE grant recipients. *GSA Today* 25(1): 24-25.

# SELECTED SERVICE AND LEADERSHIP ROLES (\*DENOTES ONGOING)

## I: University of Cambridge

2023\*: NERC C-CLEAR DTP Management Committee

2023-25: Training Lead, NERC C-CLEAR Doctoral Training Program

2022\*: Senior Treasurer, The Sedgwick Club (University of Cambridge Earth Sciences society)

2020\*: Senior Treasurer, Cambridge University Ornithology Society

2020\*: Senior Treasurer, Cambridge University Ice Hockey Club [WINNER, 2022 CAMBRIDGE SPORTS CLUB OF THE YEAR]

2020: Panel Member, British Antarctic Survey-University of Cambridge joint fellowship funding seminar

2019\*: Lead Organiser, NERC C-CLEAR DTP "Evolution of our Planet" Advances Course (lectures and museum visits)

#### II: Department of Earth Sciences, University of Cambridge

2024\*: Sedgwick Building Remodeling Working Group

2023\*: Earth Sciences Research Committee 2021-23: Earth Sciences Teaching Committee

2021\*: NERC C-CLEAR DTP palaeontology application coordinator

2021-23: Course Coordinator, 1A Earth Sciences 2020-22: Earth Sciences Teaching Review Member

2020: A-Level recruitment video for Department of Earth Sciences 2019-21: NST Part IB and Part II Subjects Fair, ESC Representative

2019-21: Co-organiser, Cambridge Department of Earth Sciences Seminar Series

2019\*: Steering Committee, Sedgwick Museum of Earth Sciences

### III: Christ's College, Cambridge

2024: Co-convenor, Christ's College Climate Lecture and Roundtable on Nature, Biodiversity and Climate

2023-24: Junior Research Fellowship shortlisting and interviews

2022: Development Sub-Committee on Naming

2022\*: Co-Manager, Charles Darwin and Galápagos Islands Trust Fund

2022: MCR Liaison Committee

2021-23: Member of Council

2021-22: Financial Control and Risk Assurance Committee

2021: Working party on Fellow-Commoners and Bye-Fellows

2021: Mastership Interview Panel

2020-21: Mastership Shortlisting Committee

2020\*: Admissions Interviewer for Natural Sciences (Biological)

2020\*: Mentor for incoming fellows (Dr Ori Mautner, Dr Katie Dunkley, Dr Miles Kempton, Dr Maria Tocora)

2020\*: Host, 'Meet the Fellows' initiative for MCR students

2019-24: Development Board (merged with Development Committee in 2024)

2019\*: Development Committee

#### IV: Department of Zoology, University of Cambridge

2024-25: Acting Curator of Vertebrate Palaeontology, Herpetology and Ichthyology, University Museum of Zoology

2022\*: Senior Management Team, University Museum of Zoology 2022\*: Course Coordinator, Part II ZM1 Vertebrate Evolution

2021\*: Strickland Curator of Ornithology, University Museum of Zoology

2020\*: Co-Director, Cambridge Biotomography Centre

#### V: External

2024\*: Advisory panel, conservation of palaeontological resources of Corral Bluffs, Colorado

2024\*: Panel Member, Swiss National Science Foundation, Specialised Committee on Interdisciplinary Research
2024: Panel Member on Establishing Leadership, UKRI Future Leaders Fellowship Annual Conference, Manchester

2024: Panel Member on innovative undergraduate supervision, Sidney Sussex College

2023: Host and organizer: Frontiers in Vertebrate Evolution International Symposium, November 2023

2023\*: Member-at-large, Society of Avian Palaeontology and Evolution

2022\*: Science advisory board, Chicxulub Center for Scientific Research and Advanced Studies, Mérida, Mexico 2022\*: Advisory board for *Birds: Brilliant and Bizarre* (special exhibition at the Natural History Museum, London)

2021-22: Curatorial assistance, Cambridge Museum of Archaeology and Anthropology exhibit 'Colour: Art, Science, and Power'

2021: Curatorial assistance, ornithology collection, Saffron Walden Museum, Saffron Walden, Essex

2021: Reviewer, Smithsonian Institution Secretary's Research Prize (Smithsonian Congress of Scholars), Washington, D.C.

2020-21: Session Moderator, Society of Vertebrate Paleontology Annual Meeting

2020-23: Host committee, 2023 Palaeontological Association Annual Meeting, Cambridge, UK

- 2020: Best student presentation award committee, North American Ornithological Congress
- 2020: Early Career Researcher Mentor, Society for the Study of Evolution 2019\*: Scientific Committee, Society of Avian Palaeontology and Evolution
- 2019\*: UKRI Future Leader Fellowships Peer Review College
- 2019: Session Chair, International Congress on Vertebrate Morphology, Prague, Czechia
- 2018: Colbert Poster Prize committee, Society of Vertebrate Paleontology
- 2018: Inaugural Milner Prize selection committee
- 2018: Scientific Committee, 1st Palaeontological Virtual Congress
- 2017-18: Organising committee, communications co-chair, session chair: Milner Centre for Evolution opening conference, Bath, UK
- 2017: Session Chair, Society of Vertebrate Paleontology Annual Meeting, Calgary, Canada
- 2014: Session Chair, Society for the Study of Evolution Annual Meeting, Raleigh, USA
- 2013-17: Northeast Regional Ambassador, Society of Vertebrate Paleontology
- 2013: Host and lead organiser, SICB Joint DVM/DCB Northeastern Regional Meeting, New Haven, USA
- 2010: Canadian Society of Zoologists conference organisation and assistance, Vancouver, Canada
- 2009: Ecology Curriculum Advisory Committee, University of British Columbia
- 2009: Faculty of Science Student Representative, University of British Columbia

# **EDITORIAL SERVICE (\*DENOTES ONGOING)**

#### I: Editorial Duties

- 2022\*: Associate Editor (second term), Proceedings of the Royal Society B: Biological Sciences
- 2022\*: Editorial board, Avian Systematics
- 2021\*: Editor, Palaeontology and Papers in Palaeontology
- 2021-22: Guest Editor, eLife
- 2019-22: Associate Editor, Proceedings of the Royal Society B: Biological Sciences
- 2020-21: Guest Associate Editor, Frontiers in Earth Science: Early Avian Evolution
- 2019-20: Guest Editor, Diversity: Origins of Modern Avian Biodiversity

#### II: Peer Review Service

Journals: Acta Palaeontologica Polonica, Alcheringa, All Earth, The Auk, Avian Research, Biology Letters, Biological Reviews, Bulletin of the British Ornithologists' Club, Communications Biology, Cotinga, Cretaceous Research, Current Biology, Diversity, Ecology and Evolution, eLife, Evolution, Frontiers in Earth Science, Genome Biology and Evolution, Geobios, Geological Magazine, Geoscience Communication, Gondwana Research, Journal of Anatomy, Journal of Avian Biology, Journal of Biogeography, Journal of Experimental Zoology B: Molecular & Developmental Evolution, Journal of Ornithology, Journal of Systematic Palaeontology, Journal of Systematics and Evolution, Journal of Vertebrate Paleontology, Life, Methods in Ecology and Evolution, Molecular Biology and Evolution, Molecular Ecology, Molecular Phylogenetics and Evolution, National Science Review, Nature, Nature Communications, Nature Ecology & Evolution, Paläontologische Zeitschrift, Palaeontologia Electronica, Palaeontology, Paleobiology, Papers in Palaeontology, PeerJ, PLoS ONE, Proceedings of the National Academy of Sciences of the USA, Proceedings of the Royal Society of London Series B: Biological Sciences, Revista del Museo Argentino de Ciencias Naturales, Royal Society Open Science, Scientific Reports, Systematic Biology, Trends in Ecology and Evolution, Vertebrata PalAsiatica. Vertebrate Zoology, Wildfowl, Zoological Journal of the Linnean Society, Zootaxa

Book publishers: Academic Press, Cambridge University Press, CRC Press, Oxford University Press, Springer Open Books, Quarto, University of California Press

<u>Funding and research agencies</u>: Alexander von Humboldt Foundation (**Germany**), BBSRC (**UK**), Cambridge-Africa ALBORADA Research Fund (**UK**), European Research Council (**EU**), Isaac Newton Trust (**UK**), Leverhulme Trust (**UK**), MacArthur Foundation (**USA**), National Research Development and Innovation Office (**Hungary**), National Sciences and Engineering Research Council (**Canada**), Royal Society Te Aparangi (**New Zealand**), The Royal Society (**UK**), Society of Systematic Biologists (**USA**), Stanford Synchrotron Radiation Lightsource (**USA**), Swiss National Science Foundation (**Switzerland**), Future Leaders Fellowships Peer Review College—UK Research and Innovation (**UK**)

### RESEARCH FUNDING (\*DENOTES ONGOING)

#### I: Cambridge

- 2023-26\*: UK Research and Innovation Future Leaders Fellowship Renewal (£460,267)
- 2023-26\*: Australian Research Council Discovery Project [co-PI on proposal led by Prof. Alistair Evans] (\$467,058 AUD)
- 2023-25\*: Royal Society International Exchange [for collaboration with Pontificia Universidad Católica de Chile] (£11,310)
- 2023-25\*: Nawa Bekker Fellowship [international research fellowship to host Dr Andrzei Wolniewicz] (295,000 PLN)
- 2023-25\*: Swiss Mobility Postdoctoral Fellowship [Swiss Postdoc.Mobility Fellowship to host Dr Olivia Plateau] (126,527 CHf)
- 2023-25\*: Royal Society [Newton International Fellowship to host Dr Carla du Toit] (£131,250)
- 2021-23: Japan Society for the Promotion of Science [overseas research fellowship to host Dr Junya Watanabe] (~£100,000)
- 2019-23: UK Research and Innovation Future Leaders Fellowship (£911,790)

- 2019-21: Royal Society [Newton International Fellowship to host Dr Junya Watanabe] (£99,750)
- 2019-20: Royal Society Research Grant (£19,910)
- 2019: Isaac Newton Trust Early Career Support Scheme (£36,124)
- 2019: Systematics Research Fund (Linnean Society of London & Systematics Association) (£1,265)
- 2018: Japan Society for the Promotion of Science [overseas research fellowship to host Dr Junya Watanabe; declined]

#### II: Selected Funding Pre-Cambridge

- 50th Anniversary Prize Fellowship, University of Bath (2-year research fellowship and proleptic faculty position)
- 2012-16: NSERC Alexander Graham Bell Canada Graduate Scholarship Doctoral Level (\$105,000 CAD)
- 2015: National Science Foundation Doctoral Dissertation Improvement Grant (\$21,203 USD)
- 2015: Yale Institute for Biospheric Sciences Dissertation Improvement Grant (\$4,000 USD)
- 2015: Stephen J. Gould Award (Paleontological Society) (\$800 USD)
- 2015: Evolving Earth Foundation Research Grant (\$2,952 USD)
- Alexander Wetmore Memorial Research Award (American Ornithologists' Union) (\$2,486 USD) 2015:
- 2015: Frank M. Chapman Ornithological Research Grant (American Museum of Natural History) (\$2,610 USD)
- 2014: Smithsonian Predoctoral Fellowship (\$11,200 USD)
- 2014: IPC4 Travel Grant (Palaeontological Association) (£750)
- 2014: STEPPE Travel Award (\$2,500 USD)
- Jackson School of Geosciences Student Travel Award (Society of Vertebrate Paleontology) (\$600 USD) 2014:
- 2014: **NESCent Travel Award**
- 2013: EPCOR Water Ltd. Student Travel Award (Canadian Society of Zoologists) (\$500 USD)
- 2012: Sir James Lougheed Award of Distinction, PhD level (Government of Alberta) (\$20,000 CAD)
- 2012: Jurassic Foundation Research Grant (\$1,100 USD)
- 2011-12: NSERC Alexander Graham Bell Canada Graduate Scholarship M (\$17,500 CAD)
- Sir James Lougheed Award of Distinction, master's level (Government of Alberta) (\$15,000 CAD) 2011:
- 2011: National Geographic Society Young Explorer's Grant #EC0488-11 (\$4,300 USD)
- 2011: YIBS Center for Field Ecology Pilot Grant (\$2,000 USD)
- 2011: Dinosaur Research Institute Scholarship for Neoceratopsian Research (\$1,500 USD)
- 2011: Jurassic Foundation Research Grant (\$1,000 USD)
- 2010-16: Yale University Graduate Fellowship
- 2010: Jackson School of Geosciences Competitive Graduate Fellowship (U Texas at Austin; declined) (\$60,000 USD)
- 2010: National Sciences and Engineering Research Council Undergraduate Student Research Award (\$6,000 CAD)
- 2009: National Sciences and Engineering Research Council Undergraduate Student Research Award (\$6,000 CAD)

# RESEARCH SUPERVISION AND MENTORSHIP (\*DENOTES ONGOING)

#### 1: **Postdocs**

2020\*:

- 2024-27\* Lizzy Steell, Junior Research Fellow, Girton College, University of Cambridge
- 2024-27\*: Oliver Demuth, Junior Research Fellow, Clare College, University of Cambridge
- 2023-25\*: Olivia Plateau, Swiss Mobility Postdoctoral Research Fellow, University of Cambridge
- 2023-25\*; Carla du Toit, Newton International Research Fellow, University of Cambridge
- 2023-25\*: Andrzej Wolniewicz, Nawa Bekker Research Fellow, University of Cambridge
- 2023-25\*: Fabio Alfieri, Swiss National Science Foundation Postdoctoral Fellow, University of Bern & University of Cambridge
- 2022-24\*: Juan Benito, UKRI-funded postdoctoral associate, University of Cambridge
- 2022-25\*: Albert Chen, Junior Research Fellow, Jesus College, University of Cambridge
- 2021-24\*: Guillermo Navalón, UKRI-funded postdoctoral associate, University of Cambridge
- 2021-22: Neil Brocklehurst, UKRI-funded postdoctoral associate, University of Cambridge
  - Moved on to position as Machine Learning Scientist at Syngenta
- 2020-21: Simon Ducatez, UKRI-funded postdoctoral associate, University of Cambridge
  - Moved on to tenure-track faculty position at Institut de recherche pour le développement, France
- 2019-23: Junya Watanabe, Newton International Research Fellow & JSPS Overseas Research Fellow, University of Cambridge Moved on to postdoctoral fellowship at Universidad Autónoma de Madrid

#### II: PhD Students (primary supervisor)

- 2023\*: Grace Broderick, Earth Sciences, University of Cambridge
- 2022\*: Maria Grace Burton, Earth Sciences, University of Cambridge
- 2022\*: Annabel Hunt, Earth Sciences, University of Cambridge
- Katrina van Grouw, Earth Sciences, University of Cambridge 2021\*:
- Bassel Arnaout, Earth Sciences, University of Cambridge 2021\*:
- Armin Schmitt, Earth Sciences, University of Cambridge 2020-24: Klara Widrig, Earth Sciences, University of Cambridge
  - Moved on to Peter Buck postdoctoral fellowship at the Smithsonian National Museum of Natural History
- 2020-23: Oliver Demuth, Earth Sciences, University of Cambridge

Moved on to postdoc at Liverpool John Moores University, then to Girton College JRF

2020-23: Pei-Chen Kuo, Earth Sciences, University of Cambridge

Moved on to Meeker Postdoctoral Fellowship, Field Museum

2019-23: Lizzy Steell, Earth Sciences, University of Cambridge

Moved on to teaching lectureship, University College London, then to Girton College JRF

2017-22: Albert Chen, Biology & Biochemistry, University of Bath (moved with me to University of Cambridge)

Moved on to Junior Research Fellowship, Jesus College (University of Cambridge)

2017-22: Juan Benito, Biology & Biochemistry, University of Bath (moved with me to University of Cambridge)

Moved on to Junior Research Fellowship, Lucy Cavendish College (University of Cambridge)

### III: Master's Students (primary supervisor)

2024-25: Stanley Somogyi, University of Cambridge (MPhil)

2024-25: Jasper Lee, University of Cambridge (MPhil)

2023-24: Georgina Scott, University of Cambridge (MPhil)

2023-24: Christian Voiculescu-Holvad, University of Cambridge (MPhil)

2021-22: Abi Crane, University of Cambridge (MPhil)

Moved on to PhD studentship, University of Southampton

2020-21: Maria Grace Burton, University of Cambridge (MPhil)

Moved on to PhD studentship, University of Cambridge

2019-20: Klara Widrig, Earth Sciences, University of Cambridge (MPhil)

Moved on to PhD studentship, University of Cambridge

## IV: Undergraduate Final-year Project Students

- 2024-25: Jacob Barlow; Part III Research Project Student (MESc)
- 2024-25: Alexander Colesmith; Part III Research Project Student (MESc)
- 2023-24: Cian Williams; Part II Research Project Student [winner, John Ray Science Prize]
- 2023-24: Pip Young; Part II Research Project Student
- 2023-24: Anyaise Green; Part II Research Project Student
- 2023-24: Annabel Worth; Part II Research Project Student
- 2023-24: Stanley Somogyi; Part II Research Project Student
- 2023-24: Jasper Lee; Part II Research Project Student
- 2023-24: Alexander Adderley; Part II Research Project Student
- 2023-24: Liam Brady; Part III Research Project Student (MESc)
- 2023-24: Wayne Liang; Part II Research Project Student
- 2022-23: Kirsty Mellor; Part II Research Project Student
- 2022-23: Charles Gordon; Part II Research Project Student
- 2022-23: Astrid Xue; Part II Research Project Student
- 2022-23: Charlotte McConnell; Part II Research Project Student
- 2022-23: Georgina Scott; Part II Research Project Student
- 2022-23: Rachel Barham; Part II Research Project Student
- 2022-23: Sophie Truepenny; Part II Research Project Student [certificate of commendation, Zoological Society of London]
- 2021-22: Louis Fisher; Part II Research Project Student
- 2021-22: Joel Gayford; Part II Research Project Student [winner, John Ray Science Prize]
- 2021-22: Alexandra Davies; Part II Research Project Student
- 2021-22: Natalie Rose; Part II Research Project Student
- 2021-22: Emily Smith; Part II Research Project Student
- 2020-21: Zi Yang Chew, Part III Research Project Student (MESc)
- 2019-20: Kit Baker, Part III Research Project Student (MESc)
- 2018: Dania Kewbank, Biology & Biochemistry major, University of Bath
- 2017: Georgina Halford, Biology & Biochemistry major, University of Bath
   2017: Jonathan Gooch, Biology & Biochemistry major, University of Bath
- 2017: Joe Hardy, Biology & Biochemistry major, University of Bath
- 2017: Jake Callaghan, Biology & Biochemistry major, University of Bath

### V: PhD and Master's Students (co-supervisor/advisor/assessor)

2024\* Israel Rivera Molina, Department of Geosciences, Fort Hayes State University (committee member, MSc)

2023-24: Yi-Chieh "EJ" Huang, Functional Anatomy and Evolution, Johns Hopkins University (committee member, PhD)

2023\*: Princess Buma-At, Zoology, University of Cambridge (advisor, PhD)

2023\*: Giovanni Mussini, Earth Sciences, University of Cambridge (advisor, PhD)

2023\*: Bethany King, Earth Sciences, University of Cambridge (advisor, PhD)

2022-23: Cara Newsam, Zoology, University of Cambridge (advisor, MSc)

2022-23: Nikolai Madland Shorter, Zoology, University of Cambridge (advisor, MSc)

2022\*: Grace Varnham, Zoology, University of Cambridge (advisor, PhD)

- 2022\*: Andrés Alfonso Rojas, Zoology, University of Cambridge (advisor, PhD)
   2021\*: Kit Baker, Earth Sciences, University of Cambridge (co-supervisor, PhD)
- 2020\*: Katie Delahooke, Earth Sciences, University of Cambridge (assessor, PhD)
- 2020\*: Eloise Hunt MSc, Imperial College & Natural History Museum, London (co-supervisor, PhD)
- 2020-21: Emily Hillan, Zoology, University of Cambridge (second advisor, MPhil)
- 2019-24: Tom Jameson, Zoology, University of Cambridge (advisor, PhD)
- 2019-24: Mhairi Reid, Earth Sciences, University of Oxford (co-supervisor, PhD)
- 2019-22: Alexandra Howard, Zoology, University of Cambridge (advisor, PhD)
- 2019-22: Abigail Parker, Zoology, University of Cambridge (advisor, PhD)
- 2019-22: Lucy Roberts, Zoology, University of Cambridge (advisor, PhD)
- 2019-24: Sean Herrón, Earth Sciences, University of Cambridge (advisor, PhD)
- 2018-22: Brigit Tronrud, Earth Sciences, University of Oxford (co-supervisor, PhD)
- 2018-22: Claire Tanner, Biology & Biochemistry, University of Bath (co-supervisor, PhD)
- 2018-19: Ben Igielman, Zoology, University of Cambridge (advisor, MPhil)
- 2017-20: Dr Catherine Klein, Biology & Biochemistry, University of Bath (co-supervisor, PhD)
- 2017-18: Yimeng Li, Biology & Biochemistry, University of Bath (co-supervisor, PhD)
- 2017-18: Rebecca Lakin, Biology & Biochemistry, University of Bath (co-supervisor, PhD)
- 2017-18: Conrad Van den Ende, Biology & Biochemistry, University of Bath (co-supervisor, PhD)
- 2017-19: Dr Fiann Smithwick, Earth Sciences, University of Bristol (co-supervisor, PhD)

## VI: Long-term Visiting Researchers Hosted

- 2024: Grigory Evtukh, (Leibniz Museum & Collection Fellow), Institute for the Analysis of Biodiversity Change, Germany)
- 2024: Thomas MacGillavry (6-month PhD internship, University of Vienna, Austria)
- 2024-25\*: Dr João Botelho (Assistant Professor, Pontificia Universidad Católica de Chile, Santiago, Chile)
- 2023-24: Prof. David Fox (Christ's College Distinguished Visiting Scholar, University of Minnesota, USA)
- 2023: José Antonio Palma Liberona (6-month PhD internship, Pontificia Universidad Católica de Chile, Santiago, Chile)
- 2022-23: Grace Broderick (MSc University of Bristol, UK)
- 2021-22: Prof. Nancy Stevens (Christ's College Distinguished Visiting Scholar, The Ohio University, USA)
- 2021-22: Prof. Patrick O'Conner (Christ's College Distinguished Visiting Scholar, The Ohio University, USA)
- 2021: Matthieu Chotard (6-month master's internship, Université Rennes, France)
- 2020: Garance Robin (6-month master's internship, Université Rennes, France)
- 2019: Romeo Wong (BSc UCLA, **USA**)
- 2018: Jacob Berv (3-month PhD internship, Cornell University, USA)
- 2018: Alexandra Fischer (6-month master's internship, École Nationale Vétérinaire d'Alfort, France)

#### VII: Additional Student Mentorship

- 2024: Amy Cobley, King's College, Cambridge (undergraduate research experience)
- 2023: Landy Zhou, St John's College, Cambridge (undergraduate research experience)
- 2022-23: Anna Thibieroz, Part II Earth Sciences Dissertation (undergraduate research experience)
- 2019: Abi Crane, Homerton College, Cambridge (undergraduate research experience)
- 2018: Matt Granger, Biology & Biochemistry, University of Bath (co-supervisor for professional placement project)
- 2017: Naerhulan Halimubieke MSc, Biology & Biochemistry PhD Student, University of Bath (second examiner)
- 2015: Eva Hoffman, Ecology & Evolutionary Biology major, Yale College. Co-author of 2017 Nature Ecology & Evolution paper
- 2014-15: Michael Hanson, Ecology & Evolutionary Biology PhD student, Yale University. Co-author of 2018 Nature paper
- 2013: Kyle Hornick, Authentic Science Research program, Darien High School
- 2013-15: Adrien Gau, Geology and Geophysics major, Yale College. Co-author of 2015 Palaeontology paper
- 2011-13: Christian Brown, Geology major, Yale College. Co-author of 2013 PLoS ONE (avian skeletal allometry) paper
- 2011-13: William Gearty, Geology major, Yale College. Co-author of 2013 PLoS ONE (melanin concentration) paper

#### **TEACHING & EXAMINING (\*DENOTES ONGOING)**

#### I: University of Cambridge, Department of Earth Sciences

- 2024-25: Deputy Senior Examiner, Part III Earth Sciences
- 2023-24: Senior Examiner, Part III Earth Sciences
- 2023\*: Lecturer, Part II Earth Sciences
- 2022-23: Examiner, Part IA Earth Sciences
- 2021-23: Co-coordinator, 1A Earth Sciences
- 2021\*: Lecturer, IA Earth Sciences
- 2020-22: Lecturer, IB Earth Sciences A
- 2021-22: Examiner, Part III Earth Sciences
- 2020: Part II Earth Sciences field trips to Suffolk, Sussex, Norfolk
- 2019\*: Lecturer, Part III Earth Sciences
- 2020\*: IB Earth Sciences Field Course, Dorset

2020: Examiner, Part IB Earth Sciences A 2019: Part III Earth Sciences Field Course, Spain

2019: Examiner, Part II Earth Sciences

#### II: University of Cambridge, Department of Zoology

2024\*: Lakenheath Fen Field Trip (trip leader) 2023\*: Tropical Ecology Field Course, Borneo 2022\*: Co-coordinator, Part II Zoology ZM1 2022: Tropical Ecology Field Course, Panama

2022: Lakenheath Fen Field Trip

2021: Zoology/Plant Sciences Cambridge Field course

2019\*: Lecturer, Part II Zoology ZM1 2019\*: Assessor, Part II Zoology ZM1

#### III: Christ's College, Cambridge

2023: Interim Director of Studies (Earth Sciences), Churchill College

2021\*: Supervisor, Part IA Earth Sciences 2020-22: Director of Studies (Earth Sciences) 2020-23: Supervisor, Part IB Earth Sciences A

2020\*: Supervisor, Part II Zoology 2020\*: Supervisor, Part III Earth Sciences

2020\*: Lecturer, Christ's College-King's College Bridging Course

2019-21: Director of Studies (Pt II Zoology)

#### IV: Postgraduate Thesis Examining

2024: Internal Examiner, MPhil viva of Laura Chilver, Department of Zoology, University of Cambridge

2024: External Examiner, PhD viva of Yi-Chieh "EJ" Huang, Functional Anatomy and Evolution, Johns Hopkins University

2024: Internal Examiner, PhD viva of Gianluca Cerullo, Department of Zoology, University of Cambridge

2023: Internal Examiner, MPhil viva of Haobo (Robert) Yuan, Department of Zoology, University of Cambridge

2023: External Examiner, PhD viva of Zichuan Qin, School of Earth Sciences, University of Bristol

2022: Internal Examiner, PhD viva of Alexandra Howard, Department of Zoology, University of Cambridge

2022: External Examiner, PhD viva of Olivia Plateau, University of Fribourg, Switzerland

2022: Internal Examiner, PhD viva of Lucy Roberts, Department of Zoology, University of Cambridge

2021: External Examiner, PhD viva of Carolina Karoullas, School of Biological Sciences, University of Manchester

2020: Internal Examiner, MPhil viva of Oscar Wilson, Department of Zoology, University of Cambridge

2020: Internal Examiner, PhD viva of Luke Grinham, Department of Earth Sciences, University of Cambridge

2019: External Examiner, MSc viva of Andrea Estandía, Department of Biosciences, Durham University 2019: Internal Examiner, MPhil viva of Roxanne Armfield, Department of Zoology, University of Cambridge

2018: External Examiner, PhD viva of Serjoscha Evers, Department of Earth Sciences, University of Oxford

2018: Internal Examiner, MPhil viva of Minky Phantratanamongkol, Department of Zoology, University of Cambridge

#### ۷: Selected Other Teaching

2023: Guest Lecturer on marine megafauna for the Palaeontological Institute of the University of Zürich, Switzerland

2022: Guest Lecturer on marine megafauna for the Palaeontological Institute of the University of Zürich, Switzerland

2020: Guest Lecturer on 'Living Dinosaurs' for GEOS 1054: Age of Dinosaurs, Virginia Tech, USA

2019: Instructor, Vertebrate Palaeobiology, Northwest University China/Cambridge summer school, UK

2018: Instructor, PhD Course in Evolutionary Biology, European Molecular Biology Lab, Heidelberg, Germany

2018: Instructor, Current Trends in Ecology and Evolution (international postgraduate course), UNAM, Mexico City, Mexico

Instructor for the Massive Open Online Course (MOOC) "Understanding and Teaching Evolution" by FutureLearn 2018:

2017: Instructor, 4th Sun Yat-sen Summer School in Ecology and Evolution, Sun Yat-sen University, Guangzhou, China

2017: Instructor, Introduction to Avian Biodiversity (NERC DTP training course), South Africa

2017: Assessor, literature review for master's students (University of Bath Department of Biology & Biochemistry)

2016: Teaching Fellow, Yale ANTH 329/829 (Primate Diversity and Evolution)

2015: Teaching Fellow, Yale G&G 205 (Natural Resources and Sustainability)

Teaching Fellow, Yale EEB 290/291L (Comparative Vertebrate Anatomy) 2013:

2013: Teaching Fellow, EEB 272 (Ornithology)

Teaching Fellow, G&G 720 (Seminar in Systematics) 2013

Teaching Fellow, Yale G&G 125/E&EB 125 (History of Life) and G&G 631 (Vertebrate Paleontology) 2012:

2011: Teaching Fellow, Yale G&G 550 (Paleontology & Evolutionary Theory) and G&G 125/EEB 125 (History of Life)

### **SELECTED INVITED TALKS AND KEYNOTE PRESENTATIONS**

#### I: Academic Audiences

- 2024: University of East Anglia, Environmental Sciences seminar, Norwich, UK
- 2024: Eton College, Environmental Society seminar, Windsor, UK
- 2024: University of Bristol, Palaeobiology seminar series, Bristol, UK
- 2024: Lund University, Lund, **Sweden**
- 2024: University of Ottawa & Canadian Museum of Nature, Ottawa, Canada
- 2024: Royal Veterinary College Seminar Series, Hawkshead Campus, Hatfield, UK
- 2024: Department of Zoology, University of Cambridge, UK
- 2024: Evo/Devo Discussion Session, Department of Genetics, University of Cambridge, UK
- 2024: Invited symposium, 'Revolutionising methodological practices in vertebrate paleophysiology', Sorbonne, Paris, France
- 2024: University of Oxford, All Souls College, 'The past and future of life on our dynamic planet' lecture series, UK
- 2023: Institute of Organismic and Molecular Evolution, Johannes Gutenberg-Universität Mainz, Germany
- 2023: Ecology, Evolution, and Environment Seminar, Flinders University, Australia
- 2023: The Chinese University of Hong Kong, Second International Pennaraptoran Dinosaur Symposium, Hong Kong
- 2022: Maastrichtian fossils illuminate the origin of birds. Natuurhistorische Museum Maastricht, Netherlands
- 2022: Invited symposium, 'The appearance and loss of flight in paravians', IPC6, Khon Kaen, Thailand
- 2022: Consorcio Universidades por la Ciencia, Mexico
- 2022: Invited symposium, 'Contributions of the British fossil record to palaeobiology', Natural History Museum, London, UK
- 2022: Tetrapods Club, London, UK
- 2022: Canadian Society of Zoologists, Moncton, New Brunswick, Canada
- 2022: Palaeontological Museum of the University of Zürich, Switzerland
- 2022: Sedgwick Club Conference invited speaker, University of Cambridge, UK
- 2022: Behaviour, Ecology and Evolution Seminar, Department of Zoology, University of Cambridge, UK
- 2021: Ecology and Evolution Seminar Series, Imperial College London, UK
- 2021: Edward Grey Institute of Field Ornithology, University of Oxford, UK
- 2021: Nuttall Ornithological Club, Harvard University, Cambridge, Massachusetts, USA
- 2020: The Ohio University, Ohio Centre for Ecological and Evolutionary Studies Seminar Series, USA
- 2020: Agenda Cultural y Académica, Jardín Botánico de Bogotá, Colombia
- 2020: Colegio Nacional, Mexico
- 2020: Uniwersytet Pryzyrodniczy we Wrocławiu (Wrocław University of Environmental and Life Sciences), Poland
- 2020: Great Western 4 Palaeobiology Discussion Group, University of Bristol, UK
- 2019: XXVI Brazilian Congress of Paleontology, Uberlândia, Brazil
- 2019: Uppsala Universitet, Department of Organismal Biology Frontiers Seminar Series, Sweden
- 2019: Denver Museum of Nature and Science, Department of Earth Sciences departmental colloquium, USA
- 2019: University of Zürich/ETH Zürich Ecology, Evolution, Environment & Behaviour joint seminar series, Switzerland
- 2019: Keynote speaker, Chalk and Flint International Symposium, Maastricht, Netherlands
- 2019: Keynote speaker, Darwin Day 2019, University of East Anglia, Norwich, UK
- 2019: Oxford Palaeontology Symposium, University of Oxford, UK
- 2019: University of Sheffield, Department of Animal and Plant Sciences seminar series, UK
- 2019: University of Durham, Ecology, Evolution, and Environment speaker series, Department of Biological Sciences, UK
- 2019: British Trust for Ornithology, Thetford, UK
- 2019: Geological Curators Group Annual General Meeting, Cambridge, UK
- 2019: University of Cambridge, Department of Earth Sciences seminar series, UK
- 2019: Evolution and Development Seminar Series, Department of Zoology, University of Cambridge, UK
- 2018: Lapworth Lecture, Lapworth Museum of Earth Sciences, Birmingham, UK
- 2018: European Molecular Biology Lab, Blue Seminar, Heidelberg, Germany
- 2018: Universidad Nacional Autónoma de México, Instituto de Geofísica, Mexico City, **Mexico**
- 2018: Universidad Nacional Autónoma de México, Facultad de Ciencias, Mexico City, Mexico
- 2018: Universidad Nacional Autónoma de México, Instituto de Bíologia, Mexico City, **Mexico**
- 2018: Genes, Sex & Behaviour Symposium, UNAM, Instituto de Ecología, Mexico City, **Mexico**
- 2018: ÉLVONAL Conference on Social Evolution, Hortobágy, Hungary
- 2018: University of Hong Kong, International Pennaraptoran Dinosaur Symposium, Hong Kong
- 2018: Museum Für Naturkunde, Seminar Series, Berlin, Germany
- 2018: Evolution in the 21st Century: Inaugural Conference of the Milner Centre for Evolution. Bath. **UK**
- 2018: University of Cambridge, Department of Earth Sciences, **UK** (job talk)
- 2018: Biology and Biochemistry research day, University of Bath, UK
- 2017: Sun Yat-sen University, Guangzhou, **China** (Two Lectures)
- 2017: University College Cork, Biological, Earth and Environmental Science Seminar Series, Ireland
- 2017: Swedish Museum of Natural History, Phylogenetics Seminar, Stockholm, **Sweden**
- 2017: Macroevolution and the Vertebrate Fossil Record, SVPCA special symposium, University of Birmingham, UK
- 2017: University of Bristol Palaeontology Discussion Group, Bristol, UK
- 2016: Yale University, Verrill Symposium (150th Anniversary of the Yale Peabody Museum), New Haven, CT, USA
- 2016: National Geographic Headquarters, Closer Look Seminar, Washington DC, USA

- 2016: Zoology Seminar, Smithsonian National Museum of Natural History, Washington DC, USA
- 2016: University of Bath, UK
- 2016: University of Bristol, Palaeobiology Research Group, UK
- 2016: University of Oxford, Palaeobiology Research Group, UK
- 2016: UC Berkeley, Vertebrate Paleontology Lunch, USA
- 2016: Yale University, Geology & Geophysics Postdoctoral Seminar, New Haven, CT, USA
- 2015: Fundy Geological Museum, Parrsboro, NS, Canada
- 2015: Royal Ontario Museum, Toronto, ON, Canada
- 2015: Royal Tyrrell Museum Speaker Series, Drumheller, AB, Canada
- 2014: National Evolutionary Synthesis Center, Durham, NC, USA
- 2014: Ornithology Exchange, Smithsonian National Museum of Natural History, Washington DC, USA
- 2013: Brown University, Department of Ecology and Evolutionary Biology 'Brown Bag' Seminar, Providence, RI, USA
- 2011: University of Iceland Whale Research Station (Two Lectures), Húsavík, Iceland

#### II: Public Lectures and Events

- 2025: RSPB Guildford, UK
- 2024: Roundtable on nature, biodiversity and climate, Christ's Climate Lecture 2024
- 2023: Zoology Live! Livestream on winter wildlife, University Museum of Zoology, Cambridge
- 2023: Fisher Society Speech, Cambridge, UK
- 2023: Sedgwick Club, Cambridge, UK
- 2023: Cambridge University Ornithology Society, Cambridge, UK
- 2022: Cumberland Geological Society, UK
- 2022: Bournemouth Natural Science Society, UK
- 2022: Cambridge Festival, UK
- 2022: British Waterfowl Association, UK
- 2022: Toft Village Fireside, UK
- 2022: Cambridge Natural History Society, UK
- 2022: University Museum of Zoology volunteers, UK
- 2021: Cambridge University Scientific Society, UK
- 2021: Devonshire Geology Association, UK
- 2021: Topsham Birdwatching and Naturalists Society, UK
- 2021: Barnstaple U3A Geology Club, Barnstaple, UK
- 2021: Altrincham and District Natural History Society, Altrincham, UK
- 2021: Exmouth and District U3A monthly talk, Exmouth, UK
- 2021: Larmor Society (St John's College Natural Sciences Society), UK
- 2021: Friends of the Sedgwick Museum, Cambridge, UK
- 2020: University of Cambridge Alumni Festival, Cambridge, UK
- 2020: Cambridge Science Festival, Cambridge, UK
- 2020: Geological Society of Glasgow, UK
- 2020: Cambridgeshire Bird Club, Cambridge, UK
- 2020: Cambridgeshire Geological Society, Cambridge, UK
- 2020: Sedgwick Club, Cambridge, UK
- 2020: Canford School Upper Sixth Remote College Programme, Canford, UK
- 2020: Connecticut Parrot Club, USA
- 2019: British Science Festival, Coventry, UK
- 2019: Cambridge Pint of Science Festival, Cambridge, UK
- 2019: Cambridge University Ornithology Society, Cambridge, UK
- 2019: Open University Geological Society, Reading, UK
- 2019: Royal Society for the Protection of Birds, Bath, UK
- 2019: Friends of the Sedgwick Museum, Cambridge, UK
- 2019: Amersham Birdwatching Club, Amersham, UK
- 2019: Biological Sciences Taster Day: Darwin, Christ's College, Cambridge, UK
- 2018: Bath Geological Society, Bath, UK
- 2017: Oxford Geology Group, Oxford, UK
- 2017: Canford Festival of Ideas, Canford School, Wimborne, UK
- 2016: Connecticut Audubon Society, USA
- 2016: New York Paleontological Society, USA
- 2016: Yale Peabody Museum, USA
- 2016: Connecticut Parrot Club, USA
- 2015: Hartford Audubon Society, USA
- 2015: New Haven Bird Club, USA
- 2015: Connecticut Parrot Club, USA2014: Connecticut Audubon Society, USA
- 2014: O.C. Marsh Fellows, Peabody Museum of Natural History, New Haven, CT, USA
- 2014: Smithsonian National Museum of Natural History, Senate of Scientists Lightning Talks, Washington DC, USA

- 2012: Marmarth Research Foundation, Marmarth, ND, USA
- 2012: New Haven Public Library, 'Science in the News' open lecture, New Haven, CT, USA

## **OUTREACH**

# I: Selected Major Outreach Activities

- 2024: 'Evolution', scientific consultant, forthcoming BBC/Nova series
- 2024: 'Birds: Brilliant and Bizarre', principal advisor, special exhibition at the Natural History Museum, London
- 2024: 'Rise of the Birds', principal scientific consultant, forthcoming 90-minute Pernel Media documentary
- 2024: 'Surviving Earth', scientific consultant, forthcoming NBC/Universal documentary
- 2024: 'Birds', scientific consultant, forthcoming children's book from Quarto Group
- 2023: 'Life on our Planet', scientific adviser, 8-part documentary series from Netflix
- 2023: 'Mystery of the giant birds', one-hour documentary from St Thomas Productions available on Curiosity Stream
- 2023: 'After the asteroid', featured researcher, 90-minute documentary from Pernel Media
- 2022: 'Chicxulub: the meteorite that changed the world' featured researcher, six-part documentary series
- 2021: 'BIRDS', featured researcher, three-part documentary series
- 2020: 'Wonderchicken', New York Times Lesson of the Day home-schooling exercise
- 2020: Dawn of the Wonderchicken. Physical exhibit at the Sedgwick Museum of Earth Sciences.
- 2020: 'Dawn of the Wonderchicken Online' online version of exhibit to enable visitors during COVID-19 pandemic.
- 2020: 'Build-a-bird' educational activity for the Cambridge Science Festival
- 2020: 'Dino Nerds for Black Lives Matter' fundraiser panelist (online symposium and fundraiser)
- 2020: <u>Seeker online video on the "Wonderchicken"</u> (>130,000 views)
- 2018: Bath Festival of Nature, Milner Centre for Evolution representative
- 2017: 'Flap to the Future The Game About Bird Flight and Adaptations, scientific advisor
- 2012-16: Evolution Educator for AP high school students with Yale's 'Evolution Outreach Group'
- 2011-16: Yale Peabody Museum Dinosaur Days "Meet the Scientist" palaeontology educator

## II: Selected Media Experience

- 2024: Live national TV interviews regarding new fossil discoveries (e.g., BBC News, Sky News)
- 2022: Research on Janavis covered widely including Science, Nature, The Guardian, New Scientist, BBC, Smithsonian
- 2022: Research on bird brain evolution covered by *Science*
- 2022: Research on avian evolution widely covered including *The New Yorker*
- 2020: BBC live radio interview on dinosaur extinction and bird evolution (interview from 20-minute mark until 40-minute mark)
- 2020: Research on Asteriornis widely covered including National Geographic, CNN, Science, CBC, BBC, Scientific American.
- 2019: <u>Australian Broadcasting Corporation</u> extended radio interview on bird extinction, evolution, and climate change
- 2018: Multiple research projects and interview in <u>National Geographic Magazine</u>'s May 2018 feature article on bird evolution
- 2018: Research on avian extinction widely covered including National Geographic, BBC, CNN, Science, The Atlantic, CBC
- 2018: Research on bird skull evolution widely covered including *National Geographic, BBC, CNN, Science, NPR, The Guardian*
- 2018: Research on avian biogeography covered by the <u>BBC</u> and <u>Talk Radio</u>
- 2018: Palaeocast podcast interview on research into bird origins (~30 minutes)
- 2018: Cosmic Shed podcast interview on bird extinction and the science of Jurassic Park (~50 minutes)
- 2017: Live radio interview on evolution of flightlessness in emus and ostriches with the Australian Broadcasting Corporation
- 2017: Interview on pelican behavior and evolution with KQED San Francisco
- 2017: Scientific advisor for Deep Look (PBS Studios): www.youtube.com/watch?v=BfEboMmwAMw&feature=youtu.be
- 2017: Live radio interview with Australian Broadcasting Corporation on Emu and Ostrich biology
- 2016: Scientific advisor for online educational video series *Animalogic*
- 2016: Palaeocast podcast interview from the Society of Vertebrate Paleontology annual meeting
- 2016: Extended radio interview on bird evolution and dinosaurs on NPR Connecticut (The Colin McEnroe Show)
- 2015: Studio interview on Fox Business Channel's Strange Inheritance Unpacked about discovering dinosaur fossils
- 2015: Research on turtle evolution covered by NBC, Der Spiegel, and other news sources
- 2015: Research on snakes covered by the New York Times, NPR, and other news sources
- 2015: Research on mosasaurs covered by Science, National Geographic 'Phenomena' and other news sources
- 2015: Research on the evolutionary origins of feathers featured by National Geographic 'Phenomena' and other news sources
- 2014: Reptile phylogeny research featured by NPR (extended radio interview) and other news sources
- 2013: Feather taphonomy research featured by *Nature* and other news sources
- 2013: Interview on dissertation research featured by *The Integrative Paleontologists*
- 2012: Dinosaur research covered by the New York Times, BBC, Smithsonian, and other news sources
- 2012: American Association for the Advancement of Science Member Spotlight (two video interviews)
- 2011: Bird extinction research featured by TIME Magazine, BBC, and other news sources
- 2010: Whale morphology research featured by *LiveScience*, and other news sources

### SELECTED FIELD EXPERIENCE (\*DENOTES ONGOING)

2024\*: Magallanes, Chile: Vertebrate palaeontology

- 2024\*: Ecuador and Galápagos: Trip scholar for Cambridge and Oxford alumni
- 2023\*: Danum Valley, Borneo, Malaysia: Zoology and tropical ecology field course instructor
- 2022: Smithsonian Tropical Research Institute, Panama: Zoology and tropical ecology
- 2022\*: Ketton Quarry, England: Palaeontology and stratigraphy field course instructor
- 2021\*: Jurassic Coast, England: Palaeontology and stratigraphy field course instructor
- 2020\*: London Clay, England: Vertebrate palaeontology.
- 2019\*: Corral Bluffs, Colorado, USA: Vertebrate palaeontology and K-Pg stratigraphy
- 2019: Isle of Skye, Scotland: Discovered the 'Rosetta Stone' specimen of Marmarerpeton—Jones et al. 2022, PNAS
- 2019: Southern Spain: Geology field course instructor
- 2018: Chamela-Cuixmala Biosphere Reserve, Jalisco, Mexico: Ecology and evolutionary biology field course instructor
- 2018: Denver Basin, Colorado, USA: Vertebrate palaeontology and K-Pg stratigraphy
- 2017: South Africa: Avian biodiversity and ecology NERC DTP training course instructor
- 2014: Fruita Paleontological Area, Colorado, USA: Vertebrate palaeontology
- 2013: Tapichalaca Reserve, Ecuador: Documented antpitta behaviour—Snow et al. 2015, Peabody Bulletin
- 2012: North Dakota & Montana, USA: Vertebrate palaeontology
- 2012: Painted Desert Wilderness and Petrified Forest National Park, Arizona, USA: Vertebrate palaeontology
- 2011: South Africa & Namibia: Geology field course
- 2011: Húsavík, Iceland: Collected the first significant vertebrate fossil from Iceland—Field et al. 2017, Palaeontology
- 2011: Ad-Dakhla, Western Sahara: Vertebrate palaeontology
- 2011: Zagora, Morocco: Invertebrate palaeontology
- 2010: Milk River Natural Area, Alberta, Canada: Vertebrate palaeontology
- 2009: Hvalfjörður, Iceland: Cetacean morphology
- 2009: Mpala Research Station, Laikipia, Kenya: Community ecology field course
- 2008: Milk River Natural Area, Alberta, Canada: Vertebrate palaeontolog
- 2007-08: Dinosaur Provincial Park, Alberta, Canada: Vertebrate palaeontology

In addition to the professional fieldwork above, I am an enthusiastic natural historian and wildlife photographer. My wildlife photography has appeared in textbooks, academic publications, field guides, government reports, press releases, magazine articles, museum and zoo exhibits, television, IUCN reports and other conservation publications, wildlife ID apps (e.g., Merlin Bird ID), and on journal covers. In 2019 I won the Royal Society Photography Competition for Animal Behaviour. I have observed over 4,000 bird species around the world and actively contribute sightings and media to public repositories such as eBird.

### PROFESSIONAL MEMBERSHIPS

<u>Current</u>: Society for the Study of Evolution, International Society of Vertebrate Morphology, Society of Systematic Biologists, Society of Vertebrate Paleontology, Palaeontological Association, Tetrapods Club

<u>Past</u>: Paleontological Society, Society for Integrative and Comparative Biology, American Ornithologists Union, Wilson Ornithological Society, Canadian Society of Zoologists, New York Academy of Sciences, The Explorers Club, American Cetacean Society, Golden Key International Honors Society, Sigma Xi, Systematics Association, European Society for Evolutionary Biology

#### **SELECTED WORKSHOPS AND TRAINING COURSES**

- 2022-24: One-to-one Leadership Coaching Scheme, Future Leaders Fellows Development Network
- 2022: Inclusive Leadership Program for Academic and Research Leaders (Cambridge Personal and Professional Development)
- 2022: ITC Level 3 Award in in Outdoor First Aid
- 2020: How to be an Active Bystander at Work (Cambridge Personal and Professional Development)
- 2019: Recruitment Essentials: Appointing the Right Candidate (Academic Appointments), Cambridge PPD
- 2019: Supervising Graduate Students: workshop for supervisors in science, Cambridge Centre for Teaching and Learning
- 2019: ITC Certificate in Outdoor First Aid at SCQF Level 6
- 2014: Paleobiological and Phylogenetic Approaches to Macroevolution (National Evolutionary Synthesis Center, Durham, USA)
- 2014: Bodega Bay Workshop in Applied Phylogenetics (University of California at Davis, USA)
- 2014: A Deeper Look into the Avian Brain (National Evolutionary Synthesis Center catalysis meeting participant, Durham, USA)
- 2013: Paleobiology Database Intensive Workshop in Analytical Paleobiology (Macquarie University, Sydney, Australia)
- 2009: Techniques in Field Ecology (Mpala Research Station, Laikipia, Kenya)

# SELECTED CONFERENCE PRESENTATIONS (DJF PLATFORM PRESENTATIONS ONLY)

- 2023: Two special lumps of stone: insights into avian evolution from the Type Maastrichtian. SVP, Cincinnati, USA.
- 2023: Well-preserved cranial remains illuminate complex origins of the avian central nervous system. SVP, Cincinnati, USA.
- 2023: Remarkable insights into avian evolution from the Type Maastrichtian. ICVM, Cairns, Australia.
- 2023: Two special lumps of stone: insights into avian evolution from the Type Maastrichtian. SAPE, Málaga, Spain.
- 2023: Morphometry & computational biomechanics clarify the origins of avialan flight. Pennaraptoran Symposium, Hong Kong.
- 2022: Biomechanical insight into the refinement of powered flight among crownward avialans. IPC6, Khon Kaen, Thailand.
- 2022: New insight from Owen's aviary. SVPCA, London, UK.
- 2021: Mesozoic fossil insight into the palaeognath-neognath anatomical dichotomy. SVP, online.

- 2021: The oldest modern bird fossil, & the early evolutionary history of crown birds. SICB, online. 2020: Late Cretaceous neornithine from Europe illuminates the origins of crown birds. SVP, online. 2020: Oldest modern bird clarifies the earliest stages of the extant bird radiation. NAOC, online. 2020: Incorporating fossils into studies of avian macroevolution. NAOC, online. 2019: Maastrichtian fossils and the origin of birds. Chalk and Flint International Symposium, Maastricht, The Netherlands. 2019: Climatic shifts drove contractions in avian latitudinal distributions throughout the Cenozoic. SVP, Brisbane, Australia. 2019: Rapid diversification of birds following the end-Cretaceous mass extinction. EGU, Utrecht, The Netherlands. 2019: Exceptional Mesozoic fossils reveal the mosaic assembly of the crown bird skull. ICVM, Prague, Czech Republic. 2018: Evolution of neornithine ecology across the K-Pg boundary and through the Cenozoic. IPC5, Paris, France. 2018: Complete Ichthyornis skull reveals mosaic assembly of the avian head. SVP, Albuquerque, USA. 2018: Avian ecological selectivity in deep time. ÉLVONAL Conference, Hortobágy, Hungary. 2018: Strong avian ecological selectivity across the K-Pg: Evidence from lifestyle and body size. Lyell Meeting, London, UK. 2018: Cretaceous-Paleogene transition, and modernization of global avifaunas. Pennaraptoran Symposium, Hong Kong. 2017: Canopy destruction and ecological selectivity among birds across the K-Pg mass extinction. SVP, Calgary, Canada. 'Macroevolution and the Vertebrate Fossil Record', Vertebrate Palaeontology and Comparative Anatomy, Birmingham. 2017: 2016: Integrating fossils and niche modeling to investigate Cenozoic range shifts. Geological Society of America, Denver, USA. 2016: The complex evolution of avian biogeography, and the origin of avian flight, SVP, Salt Lake City, USA. 2016: K/Pg Lilliput Effects, and the avian molecular clock. Society for Avian Paleontology and Evolution, Diamante, Argentina. Late evolutionary origin of modern avian flight feathers in Mesozoic stem group birds. SVP, Dallas, USA. 2015: Integrative Ornithology. Evolution, Guarujá, Brazil. 2015: Late evolutionary origin of modern bird flight inferred from shoulder allometry. Evolution, Raleigh, USA. 2014: [Winner, W.D. Hamilton Prize, Society for the Study of Evolution] Reanalysis of vertebrate microRNAs reveals an archosaur rather than a lepidosaur affinity for turtles. SICB, Austin, USA. 2014: [Winner, Dave and Marvalee Wake Award for best student talk in phylogenetics and comparative biology] 2014: Toward consilience in reptile phylogeny. Genomes to Biomes, Montréal, Canada. [Winner, Cas Lindsey Prize for best student paper in behaviour, ecology or evolution] Assessing body mass of fossil birds: implications for paleoneuroscience. Brain evolution catalysis meeting, Durham, USA. 2014: 2014: Molecular consilience in reptile phylogeny. Northeast Regional Vertebrate Evolution Symposium, New York, USA.
- [Winner, Philip S. Hoar Award for best student talk]
  2013: Emerging consensus in the evolution of turtles. Division of Vertebrate Morphology, SICB, New Haven, USA.
- Inference of avialan flight ability from shoulder dimensions. Society of Vertebrate Paleontology, Los Angeles, USA.
   Allometry of the avian pectoral girdle: implications for flight origins. Vertebrate Morphology, SICB, UMass Amherst, USA.

Inference of flying ability in stem- and crown-group avialans. Canadian Society of Zoologists, Guelph, Canada.

- 2011: Definitive evidence of stem-avian mass extinction at the K-Pg boundary. Palaeontological Association, Plymouth, UK. Convergent evolution in rorquals and pelicans. Secondary Adaptations of Tetrapods to Life in Water, San Diego, USA.
- 2010: Feeding mechanics of the largest animals. Mutidisciplinary Undergrad Research Conference, Vancouver, Canada.

[Winner, top oral presentation]

2013:

2010: Convergent mechanical design of rorqual & pelican mandibles. Division of Vertebrate Morphology, SICB, Harvard, USA.

2010: Mechanics of rorqual mandibles: insights from quantitative CT. Canadian Society of Zoologists, Vancouver, Canada.