Dr Natalie Cooper

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Webpage: nhcooper123.github.io; GitHub: github.com/nhcooper123;
Google Scholar profile: http://goo.gl/ehLTgG; Figshare: http://goo.gl/F2dPGh;
ORCID: 10000-0003-4919-8655; ResearcherID: I-7976-2012.

1. RESEARCH

PUBLICATIONS 2017-2021

Including estimated % personal contribution and role in italics.

1. Alewijnse, S.R., Stowasser, G., Saunders, R.A., Belcher, A., Crimmen, O.A., **Cooper, N**., Trueman, C.N. Otolith-derived field metabolic rates of myctophids (family Myctophidae) from the Scotia Sea (Southern Ocean). Marine Ecology Progress Series. In review.

   25%. SRA's first PhD chapter. I helped with Bayesian analyses and writing drafts, and co-managed the project.

2. V.Deepak et al. Multilocus phylogeny, natural-history traits, and classification of natricine (Serpentes: Natricinae) snakes. Zoological Journal of the Linnaean Society. In review.

   20%. Part of VD's Marie Skłodowska-Curie project. I advised on R analyses and visualisations, and helped run additional analyses required after the first round of reviews.

3. V.Deepak, Maddock, S.T., Williams, R., Zoltan Nagy, Z., Conradie, W., Rocha, S. Harris, D.J., Perera, A., Gvoždík, V., Doherty-Bone, T.M., Menegon, M., Labisko, J., Morel, C., **Cooper, N.**, Day, J.J. & Gower, D.J. 2020. Molecular phylogenetics of sub-Saharan African natricine snakes, and the biogeographic origins of the Seychelles endemic *Lycognathophis seychellensis*. Molecular Phylogenetics and Evolution. In press.

   5%. Part of VD's Marie Skłodowska-Curie project. I advised on R analyses and visualisations.

4. Mezzasalma, M., Guarino, F.M., Loader, S., Odierna, G., Streicher, J.W., & **Cooper, N.** 2020. First karyological analysis of the endemic Malagasy phantom gecko *Matoatoa brevipes* (Squamata: Gekkonidae). Acta Herpetologica. **15**, 137-141.

   10%. Part of MM's Marie Skłodowska-Curie project. I helped with the writing and framing of the paper and managed the project.

5. Buckingham, E., Curry, J., Emogor, C., Tomsett L. & **Cooper, N**. 2021. Using natural history collections to investigate changes in pangolin (Pholidota: Manidae) geographic ranges through time. PeerJ. **9**, e10843 http://doi.org/10.7717/peerj.10843.

   50%. Based on EB and JC's MRes projects. I rewrote and ran all R analyses, wrote the relevant methods/results sections, and co-devised and managed the project.

6. Bonsor, J.A., Barrett, P.M., Raven, T.J., & **Cooper, N.** Dinosaur evolutionary rates were not in decline prior to the K-Pg boundary. Royal Society Open Science. **7**, 201195. http://dx.doi.org/10.1098/rsos.201195.

   50%. Based on JAB's MSc project. I co-devised the project with PMB and performed all analyses, wrote the methods and results, and managed the project.

7. Guillerme, T., **Cooper, N.**, Brusatte, S.L., Davis, K.E., Jackson, A.L., Gerber, S., Goswami, A., Healy. K., Hopkins, M.J., Jones, M.E.H., Lloyd, G.T, O'Reilly, J.E., Pate, A., Puttick, M.N., Rayfield, E., Saupe, E.E., Emma Sherratt, E. Slater, G.J., Vera Weisbecker, V., Thomas, G.H. & Donoghue, P.C.J. 2020. Disparities in the analysis of morphological disparity. Biology Letters. **20200199**. DOI: 10.1098/rsbl.2020.0199.

   50%. I am joint first author. I developed the ideas in the review and co-wrote it with TG. Most co-authors attended a workshop on which the paper is based which I also organised and coordinated with TG.

8. Martins, M.C.I, Park, T., Racicot, R. & **Cooper, N**. 2020. Intraspecific variation in the cochleae of harbour porpoises (*Phocoena phocoena*). PeerJ. **8**, e8916 DOI: 10.7717/peerj.8916.

   50%. Based on MCIM's MRes project. I rewrote and ran all R analyses, wrote the relevant methods/results sections, and co-devised and managed the project.

9. Jones, M.E.H, Pistevos, J.C.A, **Cooper, N.**, Lappin, A.K., Georges, A., Hutchinson, M.N., & Holleley, C.E. 2020. Reproductive phenotype predicts adult bite-force performance in sex-reversed dragons (*Pogona vitticeps*). Journal of Experimental Zoology. 333, 252-263. DOI: 10.1002/jez.2353.

   15%. I ran all R analyses and wrote the relevant methods/results sections.

10. **Cooper, N.**, Bond, A.L., Davis, J.L., Portela Miguez, R., Tomsett, L., & Helgen K.M. Sex biases in natural history collections of birds and mammals. 2019. Proceedings of the Royal Society B: Biological Sciences. **286**, 20192025. DOI: 10.1098/ rspb.2019.2025.

    80%. I conceived the idea with KMH, ran all analyses, and wrote the paper.

11. Park, T., Mennecart, B., Costeur, L., Grohe, C. & **Cooper, N.** 2019. Convergent evolution in toothed whale cochleae. BMC Evolutionary Biology. **19**, 195. DOI: 10.1186/s12862-019-1525-x.

    25%. Part of TP's Marie Skłodowska-Curie project. I assisted with the analyses, helped draft the paper, and co-devised and managed the project.

12. Trueman, C.N., Jackson, A.L., Chadwick, K.E., Feyrer, L.J., Magozzi, S., Coombs, E.J., Sabin, R.C., & **Cooper, N.** 2019. Reconstructing the last known movements of one of Nature's giants. PeerJ. **7**, e7912. DOI: 10.7717/peerj.7912.

    50%. I co-devised and coordinated the project, made the figures, helped draft the paper, and obtained funding for analytical work.

13. Coombs, E.J., Deaville, R., Sabin, R.C., Allan, L., O'Connell, M., Berrow, S. Smith, B., Brownlow, A., Ten Doeschate, M., Penrose, R., Williams, R., Perkins, M.W., Jepson, P.D., & **Cooper, N.** 2019. What can cetacean stranding records tell us? A study of UK and Irish cetacean diversity over the past 100 years. Marine Mammal Science. **35**, 1527-1555. DOI: 10.1111/mms.12610.

    50%. EJC's first PhD chapter. I conceived the idea, helped with analyses and writing drafts, and managed the project.

14. Verde Arregoitia, L.D., **Cooper, N.**, & D'Elia, G. 2018. Good practices for sharing analysis-ready data in mammalogy and biodiversity research. Hystrix, the Italian Journal of Mammalogy. **29**, 155-161. DOI: 10.4404/hystrix-00133-2018.

    10%. LDVA is one of my mentees. I helped with framing the paper and making clearer figures.

15. Guillerme, T. & **Cooper, N.** 2018. Time for a rethink: time sub-sampling methods in disparity-through-time analyses. Palaeontology. **61**, 481-493. DOI: 10.1111/pala.12364.

    75%. I conceived the idea with TG, ran all empirical analyses and wrote the paper.

16. Page, C.E. & **Cooper, N.** 2017. Morphological convergence in 'river dolphin' skulls. PeerJ. **5**, e4090. DOI: peerj.com/articles/4090.

    50%. CEP's MSci project. I conceived the idea, helped with analyses and writing drafts, and managed the project.

PUBLICATIONS BEFORE 2017

1. **Cooper, N.**, Thomas, G.H., & FitzJohn, R.G. 2016. Shedding light on the "Dark Side" of phylogenetic comparative methods. Methods in Ecology and Evolution. **7**, 693699. doi: 10.1111/2041-210X.12533.

2. Guillerme, T. & **Cooper, N.** 2016. Assessment of available anatomical characters for linking living mammals to fossil taxa in phylogenetic analyses. Biology Letters. **12**, 20151003. doi: 10.1098/rsbl.2015.1003.

3. Guillerme, T. & **Cooper, N.** 2016. Effects of missing data on topological inference using a Total Evidence approach. Molecular Phylogenetics and Evolution. **94**, 146158. doi: 10.1016/j.ympev.2015.08.023.

4. **Cooper, N.**, Thomas, G.H., Venditti, C., Meade, A. & Freckleton, R.P. 2016. A cautionary note on the use of Ornstein Uhlenbeck models in macroevolutionary studies. Biological Journal of the Linnaean Society. **118**, 64-77. doi: 10.1111/bij.12701.

5. Healy, K., Guillerme, T., Finlay, S., Kane, A., Kelly, S.B.A., McClean, D., Kelly, D.J., Donohue, I., Jackson, A.L., & **Cooper, N.** 2014. Ecology and mode-of-life explain lifespan variation in birds and mammals. Proceedings of the Royal Society of London Series B: Biological Sciences. **281**, 20140298. doi: 10.1098/rspb.2014.0298.

6. Kelly, S.B.A, Kelly, D.J., **Cooper, N.**, Bahrun, A., Analuddin, K. & Marples, N. 2014. Molecular and phenotypic data reveal a cryptic species (Aves: Dicaeum) from the unique and understudied Sulawesi region. PLoS ONE. **9**, e98694. doi: 10.1371/journal.pone.0098694.

7. **Cooper, N.**, & Nunn, C.L. 2013. Identifying future zoonotic disease threats: Where are the gaps in our understanding of primate infectious diseases? Evolution, Medicine and Public Health. **2013**, 26-37. doi: 10.1093/emph/eot001.

8. Kamilar, J.M. & **Cooper, N.** 2013. Phylogenetic signal in primate behaviour, ecology, and life history. Philosophical Transactions of the Royal Society of London Series B: Biological Sciences. **368**, 20120341. doi: 10.1098/rstb.2012.0341.

9. Healy, K., McNally, L., Ruxton, G.D., **Cooper, N**., & Jackson, A.L. 2013. Metabolic rate and body size are linked with perception of temporal information. Animal Behaviour. **86**, 685-696. doi: 10.1016/j.anbehav.2013.06.018. *F1000 recommended.*

10. **Cooper, N**., Griffin, R., Franz, M., Omotayo, M., & Nunn, C.L. 2012. Phylogenetic host speci- ficity and understanding parasite sharing in primates. Ecology Letters. **15**, 1370-1377. doi: 10.1111/j.1461-0248.2012.01858.x. *F1000 recommended.*

11. **Cooper, N.**, Kamilar, J.M., & Nunn, C.L. 2012. Host longevity and parasite species richness in mammals. PLoS ONE. **7**, e42190. doi: 10.1371/journal.pone.0042190.

12. Davies, T.J., **Cooper, N.**, Diniz Filho, J.A.F, Thomas, G.H. & Meiri, S. 2012. Using phylogenetic trees to test for character displacement: a model and an empirical example from a desert mammal community. Ecology. 93, S44-S51. doi: 10.1890/11-0400.1.

13. **Cooper, N.,** Freckleton, R.P. & Jetz, W. 2011. Phylogenetic conservatism of environmental niches in mammals. Proceedings of the Royal Society of London Series B: Biological Sciences. 278, 2384-2391. doi: 10.1098/rspb.2010.2207.

14. Freckleton, R.P., **Cooper, N.** & Jetz, W. 2011. Comparative methods as a statistical fix: the dangers of ignoring an evolutionary model. The American Naturalist. 178, E10-E17. doi: 10.1086/660272.

15. Collen, B., McRae, L., Deinet, S., De Palma, A., Carranza, T., **Cooper, N.**, Loh, J. & Baillie, J.E.M. 2011. Predicting how populations decline to extinction. Philosophical Transactions of the Royal Society of London Series B: Biological Sciences. 366, 2577-2586. doi: 10.1098/rstb.2011.0015.

16. **Cooper, N.**, Jetz, W. & Freckleton, R.P. 2010. Phylogenetic comparative approaches for study- ing niche conservatism. Journal of Evolutionary Biology. 23, 2529-2539. doi: 10.1111/j.1420- 9101.2010.02144.x.

17. **Cooper, N.** & Purvis, A. 2010. Body size evolution in mammals: complexity in tempo and mode. The American Naturalist. 175, 727-738. doi: 10.1111/j.1420-9101.2009.01714.x.

18. Belmaker, J., **Cooper, N.**, Lee, T.M. & Wilman, H. 2010. Specialization and the road to academic success. Frontiers in Ecology and the Environment. 8, 514-515. All authors contributed equally. doi: 10.1890/10.WB.25.

19. **Cooper, N.** & Purvis, A. 2009. What factors shape rates of phenotypic evolution? A compara- tive study of cranial morphology of four mammalian clades. Journal of Evolutionary Biology. 22, 1024-1035. doi: 10.1111/j.1420-9101.2009.01714.x.

20. Bielby, J., Cardillo, M. **Cooper, N.** & Purvis, A. 2009. Modeling extinction risk in multispecies data sets: phylogenetically independent contrasts versus decision trees. Biodiversity and Conservation. 19, 113-127. doi: 10.1007/s10531-009-9709.0.

21. **Cooper, N.**, Rodriguez, J. & Purvis, A. 2008. A common tendency for phylogenetic overdis- persion in mammalian assemblages. Proceedings of the Royal Society of London Series B: Biological Sciences. 275, 2031-2037. doi: 10.1098/rspb.2008.0420.

22. **Cooper, N.**, Bielby, J., Thomas, G.H. & Purvis, A. 2008. Macroecology and extinction risk correlates of frogs. Global Ecology and Biogeography. 17, 211-221. doi: 10.1111/j.1466- 8238.2007.00355.x.

23. Meiri, S., **Cooper, N.** & Purvis, A. 2008. The island rule: made to be broken? Proceedings of the Royal Society of London Series B: Biological Sciences. 275, 141-148. doi: 0.1098/rspb.2007.1056.

24. Bielby, J., **Cooper, N.**, Cunningham, A., Garner, T. & Purvis, A. 2008. Predicting susceptibility to future declines in the world's frogs. Conservation Letters. 1, 82-90. doi: 10.1111/j.1755- 263X.2008.00015.x.

2. GRANTS

*Below are all grants I have applied for since 2015. Total income **£3,382,547**; value to NHM **£1,565,368**; where I am PI/major Co-I **£976,849**.*

UNDER 30K							
Dates	**Awarding body and type of grant**	**Project title**	**Total value**	**Value to NHM**	**Role**	**Collaborators**	**Funded?**
2018	Royal Society International Scientific Seminar Grant	Reconciling disparate perspectives on the evolution of disparity	£5000	£0	Co-I	Thomas Guillerme (University of Queensland) Phil Donoghue (University of Bristol)	**YES**
2015 - 2016	British Ecological Society. Small Research Grant	A Whale of a Time: how have changing human pressures through time affected the ecology of rorqual whales?	£5000	£5000 (no staff costs included)	PI	Clive Trueman (University of Southampton) Andrew Jackson (Trinity College Dublin)	**YES**
30K TO 100K							
2017 - 2018	BBSRC STARS Training Course Grant	Advancing computational and data literacy skills schools for Life Scientists	£42,738	£25,292	PI	Karthik Ram (University of Berkeley)	**YES**
MORE THAN 100K							
2021 - 2023	Marie Skłodowska -Curie Individual Fellowship to IB	EARtH: Exploring the Australian Reptile Hypervolume: Assembly and evolution of a continental fauna	€224,934	*NA*	Host	Ian Brennan	**YES**
2021 - 2023	Marie Skłodowska -Curie Individual Fellowship to LDA	CONVERS: Convergent evolution in rodents and other small mammals.	€212,934	*NA*	Host	Luis Darcy Verde Arregoitia	NO
2020 -	NERC Standard Grant	Unshifting the baseline: inferring global patterns of pre-	£572,278	*NA*	PI	Jeffrey Streicher Andy Purvis	NO (scored

2023		Anthropocene vertebrate diversity v2.					8/10)
2020 - 2023	Leverhulme Research Project Grant pre-proposal	Constraining past biodiversity patterns through simulations in time and space.	£259,499	*NA*	Co-I	Phil Mannion (UCL) Erin Saupe (University of Oxford)	NO
2020 - 2023	Leverhulme Research Project Grant	Back to the water: macroevolutionary dynamics of secondarily aquatic tetrapods.	£337,468	£337,468 (no core staff costs included)	PI	Graham Slater (University of Chicago) Erich Fitzgerald (Museums Victoria) Travis Park (named PDRA)	**YES**
2019 - 2022	NERC Standard Grant	MacroCovar: The macroevolutionary consequences of trait correlations v2.	£586,643	£146,000	Co-I	Gavin Thomas (PI) (University of Sheffield) Andrew Beckerman (University of Sheffield)	**YES**
2019 - 2022	NERC Standard Grant	Unshifting the baseline: inferring global patterns of pre-Anthropocence vertebrate diversity.	£572,278	*NA*	PI	Jeffrey Streicher Andy Purvis	NO (scored 8/10)
2019 - 2022	NERC Standard Grant	Assessing sponge reproductive biology in warming oceans: molecular toolkits for sex determination and adaptation.	£739,662	*NA*	Co-I	Ana Riesgo Gil (PI) Jordi Paps (University of Bristol) Jordi Solana (Oxford Brookes University) Alison Wright (University of Sheffield)	NO (scored 7/10)
2019 - 2021	Royal Commission of 1851 Research Fellowship to TP	ECHO part 2: Evolution of the Cochlea and Hearing in Odontocetes	£129,000	*NA*	Host	Travis Park	NO
2019 - 2021	Marie Skłodowska -Curie Individual Fellowship to JC	FISHDIV: Testing major controls on the evolution of morphological diversity in fish.	€163,454	*NA*	Host	John Clarke	NO

2018 - 2021	NERC Standard Grant	MacroCovar: The macroevolutionary consequences of trait correlations.	£586,643	*NA*	Co-I	Gavin Thomas (PI) (University of Sheffield) Andrew Beckerman (University of Sheffield)	NO (scored 6/10)
2018 - 2021	H2020-WIDESPREAD grant	iBioGen: Twinning for European excellence in Island Biodiversity Genomics	€999,320	€226,987	Participant	Alfried Vogler (PI) + many others	**YES**
2018 - 2020	Marie Skłodowska -Curie Individual Fellowship to MM	CHROMREP: An integrative approach linking chromosomal evolution and biodiversity in reptiles from Madagascar	€183,454	€183,454	Host	Marcello Mezzasalma Jeffrey Streicher Simon Loader	**YES**
2018 - 2020	Royal Commission of 1851 Research Fellowship to JC	Testing major controls on the evolution of morphological diversity	£127,000	*NA*	Host	John Clarke	NO
2017 - 2019	Marie Skłodowska -Curie Individual Fellowship to TP	ECHO: Evolution of the Cochlea and Hearing in Odontocetes	€195,454	€195,454	Host	Travis Park	**YES**
2017 - 2019	Marie Skłodowska -Curie Individual Fellowship to VD	NATRICINE: Phenotypic and lineage diversification of natricine snakes	€183,000	€183,000	Co-host	Deepak Veerappan David Gower (Main host)	**YES**
2017 - 2020	NERC Standard Grant	Reef refugia out of the shadows: dynamics of marginal coral reef ecosystems over the past 30 million years in the Coral Triangle v2.	£614,919	£8,052 (value of my time as a Co-I)	Co-I	Ken Johnson (PI) Nadia Santadomingo (named PDRA)	**YES**
2016 - 2020	Leverhulme Research Project Grant	Molecules meet fossils - an integrated approach to studying marine palaeodiversity.	£350,090	£350,090 (no core staff costs included)	Co-I	Andrea Waeschenbach (PI) Paul Taylor Lee Hsiang Liow (University of Oslo)	**YES**
2016	NERC	Reef refugia out of the	£614,919	*NA*	Co-I	Dr Ken Johnson (PI).	NO

- 2019	Standard Grant	shadows: dynamics of marginal coral reef ecosystems over the past 30 million years in the Coral Triangle.				Dr Nadia Santadomingo (named PDRA)	
2016 - 2018	Royal Commission of 1851 Research Fellowship to TP	Ears and Echoes: Cochlear evolution in toothed whales.	£129,000	*NA*	Host	Travis Park	NO
2016 - 2021	ERC Starting Grant	Convergent evolution across species, space, traits and time.	€1,499, 787	*NA*	PI	NA	NO

3. TALKS TO SCIENTIFIC AUDIENCES

INVITED TALKS AT CONFERENCES

2020

WISE: Women in Science Ecology meeting. Online.
My experiences as a woman in ecology.

2019

American Ornithological Society annual meeting, Anchorage, Alaska, USA.
Sex biases in natural history collections of birds.

2018

Chilean Society for Evolution annual meeting, Puerto Varas, Chile.
Convergent evolution and echolocation.

2017

Palaeontological Association annual meeting, London, UK.
Time for a rethink - time slicing approaches to disparity-through-time.

2015

Methods in Ecology & Evolution 5th anniversary symposium, London, UK.
The limitations of PCMs.

2014

Linnaean Society Radiations & Extinctions meeting, London, UK.
Reproducibility in macroevolution.

INVITED SEMINARS

2019 University of York, UK.
University of Nottingham, UK.

2018 University of Durham, UK.

2017 University of Bangor, Wales, UK.

2016 Tel Aviv University and Israeli National Natural History Museum, Israel.
Edward Grey Institute for Ornithology, University of Oxford, UK.
CMEC (Centre for Macroecology Evolution & Climate), University of Copenhagen, Denmark.

2015 University of Lausanne, Switzerland.
Dublin City University, Dublin, Ireland.

2014 Swansea University, Wales, UK.
University of Exeter, UK.
Queens University, Belfast, UK.
University College Dublin, Ireland.

2013 University of Southampton, UK.
University of Sheffield, UK.
University of Liverpool, UK.
University of Chicago, IL, USA.

Trinity College Dublin, Ireland.
University of Southampton, UK.
2011 Harvard University, MA, USA.

INVITED KEYNOTES AT EARLY CAREER EVENTS

2018
School of Natural Sciences Postgraduate Symposium plenary speaker.
Trinity College Dublin, Dublin, Ireland.

2015
LERN: London Evolutionary Research Network, UK.
BLAM: Biology at Lund Annual Postgraduate Symposium plenary speaker.
Lund University, Lund, Sweden.

CONFERENCE PRESENTATIONS AND POSTERS

2018 BES Annual Meeting, Birmingham, UK. *TALK.*
Sex biases in natural history collections

2017 Joint BES and SfE Annual Meeting, Ghent, Belgium. *POSTER.*
Reconstructing the last known movements of one of Nature's giants

2016 Evolution, Austin, TX, USA. *POSTER.*
Skeletons in the closet: using NHM collections for evolutionary research

2014 Evolution, Raleigh, NC, USA. *SYMPOSIUM TALK.*
The "Dark Side" of phylogenetic comparative methods

2013 ESEB, Lisbon, Portugal. *POSTER.*
Ecological correlates of extrinsic mortality in mammals and birds
Evolution, Snowbird, UT, USA. *TALK.*
Ecological correlates of extrinsic mortality in mammals and birds

2012 Evolution, Ottawa, Canada. *TALK.*
Host phylospecificity and parasite sharing in primates and humans

2011 EEID, Santa Barbara, CA, USA. *POSTER.*
Methods for detecting phylogenetic host specificity in parasites

2010 Evolution, Portland, OR, USA. *TALK.*
Phylogenetic niche conservatism in mammals

2008 Evolution, Minneapolis, MN, USA. *TALK.*
A common pattern of overdispersion in mammalian assemblages

4. EDUCATION

STUDENT SUPERVISION

Below I have listed all students I have supervised since starting at the Museum in 2015.

PhD students
For each student I have listed their start and (expected) end dates, project titles, the DTP funding the project, the university involved, and their main supervisor where this was not me. Note that I co-supervise all of my current PhD students, but I am heavily involved in discussing their progress, editing drafts, training them in R, and providing pastoral care where their main supervisors are unavailable.

Name	Dates	Project title	DTP	University	Main supervisor
Louie Rombaut	2019 - 2023	Trait correlations: linking micro- and macro- evolutionary patterns	ACCE	Sheffield	Dr Gavin Thomas
Tom Trapman	2018 - 2022	Disparity and complex- ity in arthropods	GW4+	Bath	Prof Matthew Wills*
Sarah Alewijnse	2017 - 2022¶	Field metabolic rate in fishes using otoliths	SPITFIRE	Southampto n	Dr Clive Trueman
Ellen Coombs	2016 - 2020	Cetacean responses to climate change: past, present and future	London	UCL	Prof Anjali Goswami
Thomas Guillerme	2012 - 2015	Macroevolution with fossils and living species.	NA	Trinity College Dublin	NA

**Tom Trapman is technically primarily supervised by Matthew Wills at Bath, but due to some issues there he is now permanently based in my group at NHM.*

¶*For medical and personal reasons Sarah has taken a couple of suspensions of studies but is on target to complete in 2022.*

Masters students

For each student I have listed the year they handed in their project, project titles, the course they were on, the length of the project, the university involved, and co-supervisors. I was primary supervisor for the majority of these students; where I was not the main supervisor's name is in bold.

Name	Year	Project title	Course	Project length	Host	Co-supervisor
Tara Wainwright	2021	Sex biases in herpetology collections worldwide	MSc Evolution, Taxonomy & Biodiversity	4.5 months	ICL	-
Noah Hearne	2021	Geographical biases in NHM collections; investigating the imprint of colonialism.	MSc Evolution, Taxonomy & Biodiversity	4.5 months	ICL	-
Christian Ching	2021	Exploring cryptic diversity in colugos	MSci Zoology	9 months	RVC	Roberto Portela Miguez
Lucy Ball	2021	Limb proportions and locomotion in miniature frogs	MSci Biological Sciences	9 months	UCL	**-**
Morwenna Trevenna	2020	Sex biases in herpetology museum collections.	MSc Evolution, Taxonomy & Biodiversity	4.5 months	ICL	-
Justin Isip*	2020	A comparative study of bite force in reptiles	MSc Evolution, Taxonomy & Biodiversity	4.5 months	ICL	Marc Jones (UCL)
Hermione Blomfield-Smith	2020	Methods for investigating extinction risk in chameleons.	MSc Evolution, Taxonomy & Biodiversity	4.5 months	ICL	Marcello Mezzasalma
Rebecca Bentley	2020	Diversity of catfishes.	MRes Biosystematics	3.5 months	ICL	-
Shizhe Ma	2020	Correlates of extinction risk in chameleons.	MRes Biosystematics	3.5 months	ICL	-
Mengdi Li*	2020	Amphibian type specimen localities and IUCN ranges.	MSci Biological Sciences	9 months	UCL	Jeff Streicher
Maria Iruzun Martins*	2019	Intraspecific variation in harbour porpoise cochleae.	MRes Biodiversity, Evolution & Conservation	5 months	UCL	**Travis Park**
Jake Curry*	2019	Computational approaches for studying	MRes Computational	9	ICL	Jeff Streicher

		species distributions through time.	Methods in Ecology & Evolution	months		
Emily Buckingham*	2019	Protecting pangolins using museum specimen locality data.	MRes Biosystematics	3.5 months	ICL	Louise Tomsett
Steven Allain*	2018	Changes in Asian amphibian distributions through time.	MRes Ecology, Evolution & Conservation	5 months	ICL	Jeff Streicher
Tom Weeks*	2018	Mismatches in East African amphibian type localities and current distributions.	MSci Biological Sciences	9 months	UCL	Jeff Streicher
Naomi Berkowitz*	2018	South American amphibian type distributions and IUCN Red List maps.	MRes Biodiversity, Evolution & Conservation	5 months	UCL	Jeff Streicher
Alice Pawlik*	2018	Salamander type specimen localities and current distributions.	MRes Ecology, Evolution & Conservation	5 months	ICL	**Jeff Streicher**
Joseph Bonsor*	2017	Were dinosaurs in decline before K-Pg?	MSc Evolution, Taxonomy & Biodiversity	4.5 months	ICL	Paul Barrett
Wui Shen Ng*	2017	Convergence in afrotherian and laurasiatherian “insectivores”.	MSc Evolution, Taxonomy & Biodiversity	4.5 months	ICL	Louise Tomsett
Olivia Morris	2017	Biogeographic origins of Galapagos reptiles.	MSc Ecology, Evolution & Conservation	4.5 months	ICL	-
Danielle Moraviec	2017	Geometric morphometrics of ornithischian dinosaurs.	MSc Ecology, Evolution & Conservation	4.5 months	ICL	Paul Barrett
Charlotte Page*	2017	Convergence in “river dolphins”.	MSci Biological Sciences	9 months	UCL	Richard Sabin
Jack Davies*	2017	Amphibian type distributions and IUCN Red List maps.	MRes Biodiversity, Evolution & Conservation	4.5 months	UCL	**Jeff Streicher**
Andrea Sartorius*	2017	Marsupial type distributions and IUCN Red List maps.	MRes Biodiversity, Evolution & Conservation	4.5 months	UCL	Roberto Portela Miguez
Dan Bell	2016	Predicting cetacean length from skull measurements	MRes Ecology, Evolution & Conservation	5 months	ICL	Richard Sabin
Guillermo	2016	Biogeographic origins of Galapagos mammals	MRes Ecology, Evolution	5	ICL	-

Gilbert		and birds.	& Conservation	months		

**Work done by these students has contributed to publications on which the students are authors. See publications list, plus three in prep; one on convergence in insectivores, one on georeferencing amphibian type collections, one on bite force in lepidosaurs.*

MASTERS COURSE TEACHING

I teach on both taught Masters courses at NHM, and many Masters students also attend my annual R course. In 2020-21 these courses will be run remotely so timings will differ.

Masters course	Years	Topic	Classes	Total annual hours
MRes Biodiversity, Evolution & Conservation	2016 - present	Using phylogenies to ask evolutionary questions.	1 x 3 hours plus assessment	3 hours
MSc Evolution, Taxonomy & Biodiversity	2016 - present	Methods in macroecology and macroevolution	7 x 3 hours plus assessment	21 hours

POST-DOC TRAINING

I have hosted or co-hosted three Marie Skłodowska-Curie postdocs during the last five years, and co-supervise a postdoc on a NERC grant who is based in Sheffield, plus two postdocs on a Leverhulme grant. Details are in the table below, with the main host/supervisor in bold where this was not me. I continue to work with the two postdocs who have finished their grants. I also informally train many postdocs during my annual R course and my *Methods in macroecology and macroevolution* course.

Name	Dates	Project title	Funding	Location	Supervisor/host
Dr Travis Park Dr Gustavo Burin	Aug 2020 - 2023	Back to the water: macroevolutionary dynamics of secondarily aquatic tetrapods	Leverhulme	NHM	Dr Erich Fitzgerald Dr Graham Slater
Dr Thomas Guillerme	2020 - 2023	MacroCovar: Trait correlations: linking micro- and macro-evolutionary patterns	NERC	University of Sheffield	**Dr Gavin Thomas** Prof Andrew Beckerman
Dr Marcello Mezzasalma	2018 - 2020	CHROMREP: An integrative approach linking chromosomal evolution and biodiversity in reptiles from Madagascar	MSCA	NHM	Dr Simon Loader Dr Jeff Streicher
Dr Deepak Veerappan	2017 - 2019	NATRICINE: Phenotypic and lineage diversification of natricine snakes	MSCA	NHM	**Dr David Gower**
Dr Travis Park	2017 -	ECHO: Evolution of Cochlea & Hearing	MSCA	NHM	-

	2019	in Odontocetes			

OTHER TERTIARY LEVEL TEACHING

The following courses were open to PhD students, postdocs and in the case of the R training, Museum staff (from 2018). Over 200 Museum staff and students have taken my introductory R course. I also offer informal mentoring and advice to at least four or five students/postdocs a year looking for advice on CVs, jobs and grant writing.

Course	**Years**	**Total hours**
Intro to R, basic statistics and reproducible research tools (Git, GitHub, RMarkdown etc.).	2016 - present	3 days annually (6 hours each day). Sole teacher. ~ 60 students a year
BBSRC STARS "Advancing computational and data literacy skills schools for Life Scientists"	2017 & 2018	Two 5 day courses (8 hours each day). Two co-teachers.
BES and Methods in Ecology and Evolution "Best Practice for Code Archiving" workshop	2016	1 day (8 hours). 4 co-teachers.

5. OUTREACH

NHM OUTREACH

I have been extensively involved with outreach over the last five years, and have a good relationship with many members of the Public Engagement team. I get excellent public feedback from my events. In addition to the NHM events I have taken part in, I also helped comedian Helen Arney develop content for the Emerge festival, gave PEG staff tours of osteology to help with plans for future NHM Live and Curious Science events, consulted with the Fantastic Beasts and Whales exhibition teams, and have contributed to discussions about the Gallery Enhancement Project refurbishment of the Mammal Hall.

Year	NHM event	Type of NHM event
2021	WPY (Wildlife Photographer of the Year) judge	WPY 57
	Period drama: Do animals have periods?	Nature Live online
	The ins and outs of vaginas	Nature Live online
	Arctic camels	Surprising Science video
2020	Screaming goats	Surprising Science video
	Spooky animal screams	Surprising Science video
	Living in groups	Lates online panel discussion
	Unlikely animal friends	Surprising Science video
	Hope and the wonderful world of whales	Nature Live online
	Conception and deception: the weird world of animal sex	Valentine's Day Event
	Storytelling	Women in Science Lates
2019	Drones in conservation and TV	Nature Live. BBC 7 Worlds One Planet Lates
	Asia Science Stand	BBC 7 Worlds One Planet Lates
	Ask the Scientist.	Tour and Evolve magazine article
	Vertebrates Science Stand	European Researchers' Night
	Hyaenas	Surprising Science video
2018	Everything you ever wanted to know about mammal and bird penises and more!	Dinosnores for Grownups
	Vertebrates Science Stand	European Researchers' Night
	Green Seas Science Stand	Blue Planet II Lates
	NHM Research Highlights for Hong Kong student prize winners.	Nature Live
2017	Everything you ever wanted to know about mammal and bird penises and more!	Dinosnores for Grownups
	Hope the blue whale	Nature Live
	Marine Vertebrates Science Stand	Science Uncovered
	Hope the blue whale	Nature Live. Science Uncovered

	EU pub	Science Uncovered
	Whale hall tours.	Members' Summer Party
	Wonderful world of whales!	Dinosnores for Kids
	Giraffes	Audio recording for new giraffe WonderBay in Hintze Hall.
	Survival in the Snow	Dinosnores for Kids.
2016	Survival in the Snow	Dinosnores for Kids.
	EU pub	Science Uncovered
	Leading Ladies tour	Pride Lates
	Everything you ever wanted to know about mammal and bird penises and more!	Dinosnores for Grownups
2015	Science Cafe	Science Uncovered

OUTREACH BEYOND NHM

I have actively engaged with Media, Digital and Website teams to promote my research and activities. My recent (2019) paper on sex biases in museum collections received extensive press coverage including in the Guardian, Daily Mail, Economist (magazine and podcast), CNN online, Russia 24 (TV interview), NewsTalk Ireland (radio interview), BBC Three Counties Drive Time show (radio interview), multiple blogs and websites from countries including France, Ireland, Sweden, and China.

I am also an active Twitter user (@nhcooper123) with over 3,700 followers.

PUBLIC TALKS

Year	External outreach event	Location
2019	Royal Society of Biology, West Midlands branch Charter Lecture	Aston University, Birmingham
2018	New Scientist Live! Hope the blue whale	ExCel centre, London

8. LEARNED SOCIETIES, GOVERNMENT, FUNDING BODIES, EXTERNAL AGENCIES ETC.

PROFESSIONAL SERVICE

My main external roles are as follows.

1. I am an Editor at the journal Methods in Ecology and Evolution. I handle between 10 and 30 papers a year, and I also contribute to developing journal policies and promoting the journal at external events. Additionally, I was the Deputy Chair of the British Ecological Society (BES) Publications committee, which manages journal policies and improvements on the six journals of the BES (Journal of Animal Ecology, Journal of Applied Ecology, Journal of Ecology, Functional Ecology, Methods in Ecology and Evolution, and People and Nature) until 2021.
2. I am Chair of the BES Macroecology special interest group (SIG). Before becoming Chair I was Deputy Chair for three years. In this role I coordinate events, including an annual meeting attended by over 100 people, workshops, social events at the main BES conference, and early career researcher training. I am responsible for budgets, reporting, planning and communication. The SIG has several thousand members, and over 4,700 followers on Twitter.

Date	Role
2021	PhD External Examiner, Yichen He, University of Sheffield.
2020	PhD External Examiner, Lewis Jones, Imperial College London.
2019 - 2021	Deputy Chair of BES Publications Committee.
2017 - present	Chair of BES Macroecology Special Interest Group committee.
2015 - present	Associate Editor at Methods in Ecology & Evolution.
2012 - present	Member of BES including Macroecology SIG.
2016	Member of Methods in Ecology & Evolution code archiving strategy group.
2015 - 2019	Ordinary Member of BES Publications Committee.
2015 - 2017	Deputy Chair of BES Macroecology Special Interest Group committee.
2015	PhD External Examiner, Kevin Arbuckle, University of Liverpool.
	Conference organisation
2021	Organiser of BES Macroecology SIG annual meeting, ONLINE (Zoom). Three day event.
2020	Organiser of BES Macroecology SIG ECR Twitter event, ONLINE (Twitter). One day event.
2017	Organiser of BES Macroecology SIG annual meeting, NHM, London. Three day event.
2017	Organiser of BES Macroecology SIG Early Career Mentoring event, Charles Darwin House, London. One day event.
2016	Organiser of BES Macroecology SIG annual meeting, University of Oxford. Two day event.

2016	Organiser of London Vertebrate Researchers Meeting, UCL, London. One day event.

REVIEWING

I review standard grants for NERC, CSERC (Canada), and FONDECYT (Chile). I also review Systematics Association small grants.

I have reviewed papers for The American Naturalist, Animal Conservation, Biological Reviews, BMC Evolutionary Biology, Conservation Biology, Current Biology, Ecography, Ecology, Ecology and Evolution, Ecology Letters, Evolution, Global Ecology & Biogeography, International Journal of Primatology, Journal of Animal Ecology, Journal of Applied Ecology, Journal of Biogeography, Journal of Evolutionary Biology, Methods in Ecology & Evolution, Nature Communications, Nature Ecology & Evolution, Oecologia, PeerJ, Philosophical Transactions of the Royal Society: B, PLoS One, Proceedings of the National Academy of Sciences USA, Proceedings of the Royal Society: B, Proceedings of the Royal Society: Interface, Trends in Ecology & Evolution.