EMMA M. DUNNE

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PROFESSIONAL APPOINTMENTS

2022–current Akademishe Rätin auf Zeit (=Assistant Professor, non-tenured)

Friedrich-Alexander-Universität (FAU) Erlangen-Nürnberg, Germany

2020–22 Postdoctoral Research Associate

University of Birmingham, UK

Project: "Climate as a driver in the evolution and macroecology of dinosaurs and their kin"

(funded by co-written Leverhulme Trust Research Project Grant)

2020 Postdoctoral Research Assistant (part-time)

University of Birmingham, UK

Project: "Temporal diversity and biogeography of ray-finned fishes (Actinopterygii)"

EDUCATION

2015–19 PhD Earth Sciences (Quantitative Palaeobiology)

University of Birmingham, UK

Thesis: "Patterns and Drivers of Tetrapod Diversity and Biogeography from the Late Palaeozoic to Early Mesozoic" (Lead supervisor: Prof. Richard Butler. Co-supervisors: Dr

Sarah Greene, Prof. Roger Benson, and Dr Roger Close)

2014–15 MSc Taxonomy & Biodiversity

Imperial College London & Natural History Museum London, UK

Thesis: "The John Williams Index of Palaeopalynology, digitising a Big Data archive: A

case study into the spatio-temporal richness of Aquilapollenites"

(Supervisors: Prof. Andy Purvis and Dr Stephen Stukins)

2010–14 BA (Mod) Natural Sciences: Zoology

Trinity College Dublin, Ireland

Freshman modules in geology, biology, chemistry and maths

Thesis: "The importance of dispersal in moderating the effects of disturbance on

zooplankton metacommunities" (Supervisor: Prof. Ian Donohue)

PUBLICATIONS

Key: * equal contribution to lead authorship; † student/supervisee author

Preprints & manuscripts in press

- 29. Foffa D, **Dunne EM**, Chiarenza AA, Wynd BM, Farnsworth A, Lunt DJ, Valdes PJ, Nesbitt SJ, Kligman BT, Marsh AD, Parker WG, Butler RJ, Fraser NC, Brusatte SL & Barrett PM. Climate drivers and paleobiogeography of lagerpetids and early pterosaurs. (In press at *Nature Ecology & Evolution*)
- 28. Brocklehurst N, Allen BJ, & **EM Dunne**. Relative abundance distributions reveal constraints on tetrapod community diversity. (In revision at *Palaeontology*). Preprint available at: <u>EcoEvoRxiv</u>

Journal articles & book chapters

- 27. **Dunne EM**, Chattopadhyay D, Dean CD, Dillon EM, Godoy PL, Smith JA, Raja NB. (2024) Data equity in paleobiology: Progress, challenges, and future outlook. *Paleobiology* (invited contribution to 50th anniversary edition) 10.1017/pab.2024.61 (online publication delayed due to hacking incident)
- 26. Paiva AL, Godoy PL, **Dunne EM**, Farnsworth A, Valdes PJ, Lunt DJ, Klein W, Langer, MC, & Hsiou AS. (2024) The Role of Climate on the Emergence of Giant Caimaninae from the Miocene Western Amazonian Region. *Palaeogeography, Palaeoclimatology, Palaeoecology* DOI: 10.1016/j.palaeo.2024.112582
- 25. Moreno R, **Dunne EM**, Mujal E, Farnsworth A, Valdes PJ, & Schoch RR. (2024) Impact of environmental barriers on temnospondyl biogeography and dispersal during the Middle–Late Triassic. *Palaeontology* DOI: 10.1111/pala.12724
- 24. Arenas-Castro H, Berdejo-Espinola V, Chowdhury S, Rodríguez-Contreras A, James A, Raja NB, **Dunne EM**, [28 other authors] & Amano T (2024) Academic publishing requires linguistically inclusive policies. *Royl. Soc. Proc. B.* DOI: 10.1098/rspb.2023.2840
- 23. Schnetz L, **Dunne EM**, Feichtinger I, Butler RJ, Coates MI, Sansom IJ (2024) Rise and diversification of chondrichthyans in the Paleozoic. *Paleobiology*. DOI: 10.1017/pab.2024.1
- 22. Smith JA, Raja NB, Clements T, Dimitrijević D, Dowding EM, **Dunne EM**, Gee BM, Godoy PL, Lombardi EM, Mulvey LPA, Nätscher PS, Reddin CJ, Shirley B, Warnock RCM, & Kocsis AT (2023) Increasing the equitability of data citation in paleontology: Capacity building for a big data future. *Paleobiology*. DOI: 10.1017/pab.2023.33
- 21. Lautenschlager S, Aston RF†, Baron JL†, [18 other authors †]. Bird CM, & **Dunne EM** (In press) Evolution of orbit size and estimated eye size and their implications for visual capabilities in dinosaurs and other archosaurs. *J. Vert. Paleo.* DOI: 10.1080/02724634.2023.2295518
- 20. **Dunne EM**, Thompson S, Rosindell J, Butler RJ, & Close RA (2023) Mechanistic neutral models show that sampling biases drive the apparent explosion of early tetrapod diversity. *Nature Ecology & Evolution* DOI: 10.1038/s41559-023-02128-3
- 19. Edgar KM, Haller L†, Cashmore DD, **Dunne EM** & Butler RJ (2023) Stratigraphic and geographic distribution of dinosaur tracks in the UK. *Journal of the Geological Society* DOI: 10.1144/jgs2023-003
- * Dillon EM, *Dunne EM, Womack TM, Kouvari M, Larina E, Claytor JR, Ivkić A, Juhn M, Milla Carmona PS, Robson SV, Saha A, Villafaña JA & Zill ME (2023) Challenges and directions in analytical paleobiology. *Paleobiology* 1–17. DOI: <u>10.1017/pab.2023.3</u>
- 17. **Dunne EM**, Farnsworth A, Benson RJB, Godoy PL, Greene SE, Valdes PJ, Lunt DJ, & Butler RJ (2023) Climatic controls on the ecological ascendancy of dinosaurs. *Current Biology* 33: 206-214. DOI: 10.1016/j.cub.2022.11.064
- 16. * Raja NB & *Dunne EM (2022) Fossil trafficking, fraud, and fakery. In Ostermann & Yates (Eds.) Art Crime in Context. Springer New York. DOI: 10.1007/978-3-031-14084-6 5
- 15. Stewens PP†, Raja NB, & **Dunne EM** (2022) The Return of Fossils Removed Under Colonial Rule. In press at *Santander Art and Culture Law Review* published by the UNESCO Chair on Cultural Property Law. DOI: 10.4467/2450050XSNR.22.013.17026
- 14. * Raja NB & *Dunne EM (2022) Publication pressure threatens the integrity of palaeontological research. *Geological Curator Special Edition*. DOI: <u>10.55468/GC1459</u>
- 13. Henderson S†, **Dunne EM**, Fasey SA†, & Giles S (2022) The early diversification of ray-finned fishes (Actinopterygii): hypotheses, challenges, and future prospects. *Biological Reviews*. DOI: 10.1111/brv.12907

- 12. Henderson S†, **Dunne EM**, & Giles S (2022) Sampling biases obscure the early diversification of the largest living vertebrate group. *Proceedings of the Royal Society B.* DOI: <u>10.1098/rspb.2022.0916</u>
- 11. Foffa D, **Dunne EM**, Barrett PM, Nesbitt SJ, Butler RJ, Walsh S, Brusatte SL, Farnsworth A, Valdes P, Lunt DJ, & Fraser NC (2022) *Scleromochlus* and the early evolution of Pterosauromorpha. *Nature* 610: 313–318. DOI: 10.1038/s41586-022-05284-x
- Dunne EM, Raja NB, Stewens P†, Zin Maung Maung Thein & Zaw K (2022) Ethics, law, and politics in palaeontological research: The case of Myanmar amber. Communications Biology DOI:
 10.1038/s42003-022-03847-2. Altmetrics and online attention: ranked 6th of similarly aged articles in Commun. Biol.
- 9. Cisneros JC, Raja NB, Ghilardi AM, **Dunne EM**, Pinheiro FL, Regalado Fernández OR, Sales MAF, Rodríguez-de la Rosa RA, Miranda-Martínez AY, González-Mora S, Bantim RAM, de Lima FJ & Pardo JD (2022) Digging deeper into colonial palaeontological practices in modern day Brazil and Mexico. *Royal Society Open Science*. DOI: 10.1098/rsos.210898
- 8. * Raja NB, *Dunne EM, Matiwane A, Tasnuva MK, Nätscher PS, Ghilardi AM, & Chattopadhyay D (2021) Colonial history and global economics distort our understanding of deep-time biodiversity. Nature Ecology and Evolution. DOI: 10.1038/s41559-021-01608-8. Altmetrics and online attention: Article accessed 65,000+ times and ranked 1st of similarly aged articles in Nat. Ecol. Evol.
- 7. **Dunne EM**, Farnsworth A, Greene SE, Lunt D, & Butler RJ (2021) Climatic drivers of latitudinal variation in Late Triassic tetrapod diversity. *Palaeontology*. DOI: 10.1111/pala.12514. Top cited article 2021 and 2022. Top downloaded article during first year of publication.
- 6. Maidment SCR, Sennikov AG, Ezcurra MD, **Dunne EM**, Gower DJ, Hendrick B, Meade LE, Paschchenko DI, Raven TJ, & Butler RJ (2020) The postcranial skeleton of the erythrosuchid archosauriform Garjainia prima from the Early Triassic of European Russia. *Royal Society Open Science*. DOI: 10.1098/rsos.201089
- 5. Close RA, Benson RBJ, Alroy J, Carrano MT, Cleary TJ, **Dunne EM**, Mannion PD, Uhen MD, Butler RJ (2020) The apparent exponential radiation of Phanerzoic land vertebrates is an artefact of spatial sampling biases. *Proceedings of the Royal Society B.* DOI: 10.1098/rspb.2020.0372
- 4. Butler RJ, Sennikov AG, **Dunne EM**, Ezcurra MD, Gower DJ, Hendrick B, Maidment SCR, Meade LE, & Raven TJ (2019) Taxonomy and cranial anatomy of the erythrosuchids archosauriform Garjainia prima from the Early Triassic (Olenekian) of European Russia. *Royal Society Open Science*. DOI: 10.1098/rsos.191289
- 3. Close RA, Benson RJB, Alroy J, Behrensmeyer AK, Benito J, Carrano MT, Cleary TJ, **Dunne EM**, Mannion PD, Uhen MD, & Butler RJ (2019) Diversity dynamics of Phanerozoic terrestrial tetrapods at the local-community scale. *Nature Ecology & Evolution*. DOI: 10.1038/s41559-019-0811-8
- Brocklehurst N, Dunne EM, Cashmore DD, & Fröbisch J (2018) Physical and environmental drivers of Paleozoic tetrapod dispersal across Pangaea. Nature Communications. DOI: 10.1038/s41467-018-07623-x
- Dunne EM, Close RA, Button DJ, Brocklehurst N, Cashmore DD, Lloyd GT, & Butler RJ (2018)
 Diversity change during the rise of tetrapods and the impact of the Carboniferous Rainforest
 Collapse. Proceedings of the Royal Society B. DOI: 10.1098/rspb.2017.2730

Other publications

- vi. Stewens PP, Raja NB & **Dunne EM** (2024) Law Will Find A Way: Legal Research at the Intersection with Palaeontology. In Interaktionen: Internationalität, Intra-und Interdisziplinarität (pp. 343-354). *Nomos Verlagsgesellschaft mbH & Co. KG.* DOI: 10.5771/9783748942733-343
- v. **Dunne EM** (2021) Paleobiogeography: Why some sauropods liked it hot. *Curr. Biol.* Dispatch 10.1016/j.cub.2021.12.052

- iv. Greene SE, Antell GS, Atterby J, Bhatia R, **Dunne EM**, Giles S, Groh S, Hanson EM, Hilton J, Knight H, Kraftl P, Morgan E, Rhodes I, Rockey FGT, Singh S, Stevenson CT, Sun S, Warren BA, Wheeley JR, & Yamoah KA. (2021) Safety and belonging in the field: a checklist for educators. Available on *EarthArXiv*: eartharxiv.org/repository/view/2607/
- iii. Raja NB & **Dunne EM** (2021) Minority Language Speakers in Palaeontology. *Palaeontological Association Newsletter*. Available at *OSF*: <u>osf.io/preprints/osf/nzjre</u>
- ii. Warnock RCM, **Dunne EM**, Giles S, Saupe E, Soul L, & Lloyd G. (2020) Are we reaching gender parity among Palaeontology authors? Available at *OSF*: osf.io/preprints/9puje/
- i. Greene SE, Ashley K, **Dunne EM**, Edgar K, Giles S, & Hanson EM. (2020) Toilet stops in the field: An educational primer and recommended best practices for field-based teaching. Available at *OSF*: osf.io/gnhj2/

GRANTS & FUNDING

Large grants as (co-)principal investigator (>€5000)

2025	DAAD-CAPES Research Exchange programme for project: "Environmental factors and dispersal capabilities of non-avian reptiles throughout the	
2024	Cenozoic" (co-PI; 2 years) Volkswagen Foundation Junior Professorship in Earth System Sciences.	€18,000
2022	Research programme entitled "Deep-time insights into terrestrial species extinction risk from climate change" (PI; 6 years; negotiations pending)	€1,447,300
2023	Emerging Talents Initiative (FAU seed funding for exceptional early career researchers) to fund pilot project "Cold-blooded creatures in warming worlds: Predicting extinction risk in squamate reptiles" (PI; 1.5 years)	€10,219
2020	Co-writer of Leverhulme Trust Research Project Grant "Climate as a driver in the evolution and macroecology of dinosaurs and their kin" (named postdoc; 3 years)	£222,975
Small ara	ants as principal investigator/supervisor (<€5000)	·
2023	Palaeontological Association Undergraduate Research Bursary for E. Tasimov's 8-week project: "Veggiesaurus rex: diversification of herbivorous theropods in the Early Cretaceous"	£2,917
2023	Paleosynthesis (supported by Volkswagen Foundation) funding for workshop on the "Integrated Record of Ancient Life (IRAL): A new data lake for	55000
0000	paleobiology"	€5000
2022	Travel Fund, School of Geography, Earth & Environmental Sciences, University of Birmingham to attend IPC6 in Thailand	£1,000
2021	Paleontological Society Outreach and Education Grant for <u>PalaeoParty!</u> live podcast and streaming series	£1200
2021	Paleosynthesis funding for virtual speaker series and associated community survey study ' <u>Diversity Dynamics and Crises in Palaeontology</u> '	€1500
2020	Internationalisation Fund, University of Birmingham to partake in fieldwork in South Africa (postponed due to COVID-19 pandemic)	£1,000
2019	Whittington Award from the Palaeontological Association for museum-based project entitled "Harnessing the power of 'Dark Data' for Enhancing	11,000
	Estimates of Tetrapod Diversity"	£1,500
2018	Conference Travel Prize, College of Life & Environmental Sciences, University of Birmingham to attend SVP in Albuquerque, NM	£1,200
	or birmingham to attend over in Albaquerque, two	1,200

Grants as named collaborator

2025 FAPESP (São Paulo Research Foundation) Characterizing diversity and evolutionary patterns of Amniota: systematics, macroevolution and paleoecology (PI: Pedro Godoy; 5 years, link to description)

AWARDS & HONORS

2024	Nominated for DFG Heinz Maier-Leibnitz Prize (national science prize awarded to early career scientists in recognition of outstanding achievements)
2023	Shortlisted for the Paläontologische Gesellschaft Tilly Edinger Award for young researchers
2020	Council Flash Talk Prize, Palaeontological Association Annual Meeting
2019	Council Poster Prize, Palaeontological Association Annual Meeting
2018	Gertrude Elles Award (awarded by the Palaeontological Association for public engagement work with education charity The Brilliant Club)
2018	Michael K O'Rourke Prize (Best PhD student publication in the College of Life & Environmental Sciences, University of Birmingham)
2018	Outstanding Student Poster Prize, European Geosciences Union General Assembly

Best Poster Prize, Society for Vertebrate Palaeontology & Comparative Anatomy Conference

INVITED & KEYNOTE TALKS

2017

2022

2021

INVITED & REYNOTE TALKS			
2025 2025	Keynote speaker: Crossing the Palaeontological-Ecological Gap (CPEG), Zurich, Switzerland Invited speaker: Seminar of the Earth and Environmental Sciences department at the University of		
2023	Manchester, UK		
2025	Invited speaker: Geology seminar at Ludwig-Maximilians-Universität, Munich, Germany		
2024	Invited speaker: Seminar of the Earth Sciences department at the University of Bristol, UK		
2024	Keynote speaker: "Insights from the past for a better future" session at World Biodiversity Forum, Davos, Switzerland (declined, schedule clash)		
2023	Invited speaker: Museum für Naturkunde Berlin Ecology & Evolution seminar series, Berlin, Germany		
2023	Keynote speaker: "Biocrises and Recoveries" Symposium at Mesozoic Fishes and Secondarily Aquatic Tetrapods conference, Stuttgart, Germany		
2023	Keynote speaker: "Big data in Vertebrate Palaeontology and Comparative Anatomy" Symposium at SVPCA annual meeting, Lincoln, UK (declined, schedule clash)		
2023	Invited speaker: "Macroecology: Understanding the processes underlying biodiversity patterns and responses to global change" at annual conference of the Ecological Society of the Germanspeaking countries (GFÖ), Leipzig, Germany (declined, schedule clash)		
2023	Invited speaker: Bioscience Seminar Series, University of Turku, Finland		
2022	Invited panellist: BRIDGES 2022 (Bridges between Disciplines: Gender in STEM & Social Sciences) Decolonising Knowledge Roundtable, Valencia, Spain		
2022	Invited speaker: Cottonopolis Collective Seminar: Reframing Excellence Through the Histories of Environmental Science, University of Manchester, UK		
2022	Invited speaker: Lapworth Lecture Series public seminar, University of Birmingham, UK		
2022	Invited speaker: Widening Inclusivity in the (Geo)Sciences seminar series, Virginia Tech, USA		

Invited speaker: Paleo Seminar Series at FAU Erlangen-Nürnberg, Germany

Keynote speaker: "New Perspectives on Phanerozoic Mass Extinctions and Environmental Perturbations II" session at Geological Society of America annual meeting, Oregon, USA

2021 Keynote speaker: IGCP 653/735 Virtual Conference: The Ordovician of the World, Lille, France 2021 Invited speaker: University of Vigo Macroevolution Lab seminar, Vigo, Spain 2021 Invited speaker: University of Washington PaleoLunch seminar series, Seattle, WA, USA 2021 Invited speaker: GW4 Seminar Series, Universities of Bristol, Bath, Cardiff & Exeter, UK 2020 Invited speaker: Department of Geology seminar series, University of Ghent, Belgium 2020 Invited speaker: School of GeoSciences seminar, University of Edinburgh, UK 2020 Invited speaker: Pal(a)eoPERCS virtual seminar series 2020 Invited speaker: Lapworth Lecture Series public seminar, University of Birmingham, UK Invited speaker: "Big Data, Big Questions" Symposium at Society for Vertebrate Palaeontology 2018 annual meeting, Albuquerque, USA 2018 Invited speaker: Palaeobiological Modelling session at EGU General Assembly, Vienna, Austria

TEACHING ACTIVITIES

Classroom-based teaching

2022–current MSc Paleobiology Vertebrate Paleobiology (2.5 ECTS, lead)

Ethics and Law in Geoscience Research (5 ECTS, lead)

Paleoenvironmental Proxies (2.5 ECTS, co-lead) Methods in Biostratigraphy (2.5 ECTS, co-lead)

Macroevolution (2.5 ECTS, co-lead)

Research Project Design (2.5 ECTS, contributor)

Research Project Implementation (2.5 ECTS, contributor)

Phylogenetics (2.5 ECTS, contributor)

Science Communication (5 ECTS, contributor)

BSc Geosciences Paläobiodiversität [Paleobiodiversity] (5 ECTS, lead)

2020–22	Guest lectures on Science Communication (MSc), FAU Erlangen-Nürnberg
2020	Guest lecture on Mass Extinctions (BSc), Vassar College, New York, USA
2020–22	Lectures on fossil diversity & sampling biases at Uni. Birmingham (BSc/MSci)
2015–19	Teaching Associate (PhD demonstrator) at Uni. Birmingham (Facilitated lab practicals on
	data analysis, statistics, and research skills, and assisted on fieldwork courses)

Field teaching

2023–current	Northern Italy (7 days, 20-30 students, paleoecology, paleobiology, facies analysis, etc.)
2016–19	SW Wales, UK (10 days, 60-70 students, sedimentology, geological mapping, etc.)
2015–19	SW Spain (6 days, 30-50 students, paleoecology, basin analysis, etc.)

Workshops & courses

2024	Paleobiology Database Summer Workshop, George Mason University, Fairfax, VA, USA (contributor, with specific classes on: database functions, data exploration in R, fossil record structure)
2023-current	Integrated Record of Ancient Life (IRAL) workshop, including 3-part virtual seminar series
	on ' <u>Databases in Paleontology</u> ' (co-lead)
2022-current	Analytical Paleobiology Workshop, Erlangen, Germany (contributor with courses on
	community diversity, fossil record biases, and phylogenetic comparative methods)
2021	'Social Justice in Palaeontology: Case Studies & Future Actions' one-day virtual pre-
	conference workshop at Palaeontological Association Annual Meeting (co-lead)
2021	' <u>Diversity Dynamics and Crises in Paleontology</u> ' workshop, including 6-part virtual seminar
	series (co-lead)

2021–22	'Introduction to Analytical Paleobiology: Fossil Record Biases, Diversity, & Biogeography'
	5-day online workshop supported by Physalia Courses (co-lead)
2018	'Palaeodiversity Analyses using Sampling Standardisation', one-day workshop for
	postgraduate students at Imperial College London, UK (lead)

STUDENT SUPERVISION

Key: * in preparation for publication; † published

Thesis project supervision

Ongoing	MSc	J. Rodgers, FAU (ecomorphology of <i>Paratypothorax</i> , with SNMS Stuttgart)
	MSc	M. Gallaspy, FAU (climatic driver of whale evolution)
	MSc	M. Zenklussen, FAU (cave bear morphological disparity)
	MSc	V. Thiel, FAU (impacts of unethical research on palaeodiversity)
	MSc	M. Stammberger, FAU (theropod dinosaur palaeoecology)
	BSc	S. Nöth, FAU Geosciences (completeness of the penguin fossil record)
2025	MSc	C. Grether, FAU (climate impacts on pterosaur evolution) *
	MSci	L. Blincoe, Birmingham Palaeontology (commercial fossils in museums)
2024	MSc	J. Jalwar, FAU (mosasaur palaeopathology, with SNMS Stuttgart)
	BSc	M. Härpfer, FAU Biology (squamate diversity and Cenozoic hyperthermals)
	BSc	E. Tasimov, FAU Geosciences (evolution of herbivory in theropod dinosaurs) *
	BSc	K. Eckhert, FAU Geosciences (size biases in vertebrates of the Jehol Biota)
2023	BSc	M. Stammberger, FAU Geosciences (completeness of the synapsid fossil record)
	BSc	M. Müller, FAU Biology (BSc thesis, Mesozoic belemnoid diversity)
2021–22	MSci	B. Moss, Birmingham Geology (squamate climate niche evolution)
	BSc	D. Best, Birmingham Geology (pseudosuchian climate niche evolution)
2020–21	BSc	R. Hutton, Birmingham Geology (biogeography of coal ball flora)
	BSc	J. Mayer Wood, Birmingham Geology (Wuda tuft palaeoecology)
	BSc	L. Haller, Birmingham Geology (dinosaur footprints of the British Isles) †

Summer projects

2023	E. Tasimov, FAU (PalAss Undergraduate Bursary Project, herbivorous theropod diversity)
2022	L. Haller, Birmingham (Industry placement, Lapworth Museum, archives Birmingham)
2018	S. Webb, Birmingham (PalAss Undergraduate Bursary Project, early tetrapod diversity)

Mentorship & co-supervision

2023-current	J. Órfão, University of Lisbon (PhD, sauropod paleoecology) *
2023	L. Schnetz, FAU (Postdoctoral scholar, chondrichthyan macroevolution)
2020–22	R. Rayner, Birmingham (PhD, Permian-Triassic vertebrate diversity)
2020-22	S. Henderson, Birmingham (PhD, Actinopterygii macroevolution) †
2019–22	L. Schnetz, Birmingham (PhD, Paleozoic chondrichthyan macroevolution) †

LEADERSHIP & PROFESSIONAL SERVICE

Professional & academic service

2025-current Ethics editor and editorial board member at <u>Historical Biology</u>

2023–24	Palaeontological Association (PalAss), co-opted Council member
2021-current	Society of Vertebrate Paleontology (SVP) Colbert Prize judging committee
2020-current	Myanmar Advisory Group of the Society of Vertebrate Paleontology (SVP)
2020-current	Paleobiology Database Executive Committee member (Policy Lead from mid-2025)
2018–21	Society for Vertebrate Palaeontology & Comparative Anatomy (SVPCA) Steering Group
	(postgraduate student representative)

Policy and governance

Tolley and governance		
2023-current	<u>Irritator Repatriation Initiative</u> involving correspondence with Baden-Württemberg's	
	Minister for Science, Research and the Arts	
2021	Contribution to <u>editorial policies changes</u> at <i>Nature Ecology and Evolution</i> via my published research on the legal and ethical issues related to Myanmar amber	
2020-current	Myanmar Advisory Group of the Society of Vertebrate Paleontology (developing <u>guidelines</u> for authors, reviewers and editors on the ethical and legal issues surrounding Myanmar amber)	
2020-current	Co-founder and co-lead of <u>Pal(a)eoscientometrics</u> Research Collective (transdisciplinary international group of academics and allied workers that conducts quantitative research and delivers training on the impact of colonial history, (un)ethical research practices, and legal issues in palaeontology and the geosciences)	

University service

2024-curren	t Internationalisierungsbeauftragte (Internationalisation officer) for the GeoZentrum
	Nordbayern (duties include raising the international profile of the institute and coordinate international opportunities for students e.g. Erasmus+)
2023-curren	
2022-curren	t Coordinator of the International MSc in Paleobiology (tasks include handling queries from prospective and current students, coordinating applicant interviews, overseeing admissions, and coordinating updates to current curricula)
2022-curren	t Curator-in-charge, Paleobiology Teaching Collection, FAU
2017–19	Equality & Diversity Committee, School of GEES, University of Birmingham
2017–18	Organiser of Paleo Discussion Group at Uni. Birmingham, UK, weekly session for the discussion of recently published research and an informal knowledge-exchange forum
2016–18	Doctoral Researcher Representative for Earth Sciences, School of GEES, Uni. Birmingham

Conference service

2024	Lead organiser: Palaeontological Association Annual Meeting, Erlangen, Germany
2024	Student prize judge: North American Paleontological Convention (NAPC), Ann Arbor, USA
2023	Invited session co-chair (with Michael Benton): "Triassic Revolution" at GeoBerlin conference, Berlin, Germany
2022	Session co-chair: "Preserving the world's natural history: an ethical dilemma" at 6 th International Palaeontological Congress, Khon Kaen, Thailand (cancelled, lack of funds)
2022-current	Judge: Colbert Prize committee of the Society of Vertebrate Paleontology (SVP)
2019	Session chair: Technical Session XII: Dinosaurs at SVP, Brisbane, Australia
2019	Co-lead organiser: Progressive Palaeontology (ProgPal), Birmingham, UK
2017	Lead organiser: School of GEES Doctoral Researcher Conference, Uni. Birmingham, UK

Peer review

18 international journals including: Nature, Science, Nature Ecology & Evolution, Evolution, Biology Letters, Palaeontology, Paleobiology, Proceedings of the Royal Society B., Systematic Biology, Current Biology, Historical Biology, Journal of Vertebrate Paleontology, Scientific Reports, Lethaia, Frontiers in Earth Sciences, Oxford Bibliographies, Ecology and Evolution, Revista Brasileira de Paleontologia

Grant reviews & panels

- 2024 National Science Centre Poland, SONATA 20, invited fellowship reviewer
- 2023 LIFT_C Transdisciplinary Research call Johannes Kepler University Linz, invited panel reviewer
- 2020 Leverhulme Trust (Research Grant), invited expert reviewer
- 2021 Natural Environment Research Council (NERC) UK 'Hidden Histories' interdisciplinary funding call, invited review panel member

Thesis examiner

University of the Witwatersrand, Johannesburg, South Africa (MSc and PhD)

Recruitment & admissions

2022–25	International MSc in Paleobiology at FAU, coordinator of admissions (and interviews)
2022	Recruitment panel for postdoctoral researcher and research assistant at Uni. Birmingham
	(positions funded by Royal Society grant to S. Giles)
2021	CENTA DTP PhD student admissions interview panel, School of GEES, Uni. Birmingham

OUTREACH & PUBLIC ENGAGEMENT

Media consultation

My research has been featured in, and I have provided comments to, several media outlets, including:

The New York Times, National Geographic, The Economist, New Scientist, Science, Nature News and Views, Phys.org, Slate, Gizmodo, BBC Studios (documentary), BBC Newsround, BBC Radio, BBC Futures, MailOnline, Der Tagesspiegel, Seeker, Discover Magazine, Stellar Magazine, The Wire, I Wish You Were Dead (podcast), The Backpacker's Guide to Prehistory (UK-based podcast), CBC Quirks and Quarks (Canada-based podcast), Tiny Matters (US-based podcast), Palaeocast (UK-based podcast), PBS Eons (US-based YouTube channel)

Book features

2022	Research feature (amniote evolution and diversification) in ' <u>The Rise and Reign of the</u>
	Mammals' by Steve Brusatte
2021	Research feature (Carboniferous rainforest diversity) in 'Jungle: how tropical forests
	shaped the world - and us' by Patrick Roberts
2021	Featured scientist in 'Everything You Know About Dinosaurs is Wrong!' by Nick Crumpton

TV documentaries

2022–24	Scientific consultant, Surviving Earth' (Carboniferous episode by Loud Minds/NBC
2022–23	On-screen expert, "Ancient Earth" docuseries (Episode 4: Inferno) by BBC Earth/PBS
2020–23	Scientific consultant for "Life on Our Planet" (dinosaur evolution)

Public engagement and outreach (selected)

2023	Lange Nacht der Wissenschaften [Long Night of Science] outreach event volunteer (fossils and fossilisation)
2021	Tutor on the National Tutoring Programme to support secondary school students who have been adversely affected by school closures due to the COVID-19 pandemic
2020–	Co-host of <u>PalaeoParty!</u> Twitch live stream and podcast
2016–	Advanced Skills Tutor, The Brilliant Club - I regularly design and deliver university-style tutorials to pupils over approximately 6 weeks in local state schools where there is a low rate of progression to highly selective universities – this work was recognised by the Paleontological Association when I was awarded the Gertude Elles Award in 2018
2016–	Founder, PubhD Birmingham – co-ordinated monthly "pub-level" talks given by local PhD researchers in local pubs
2015–	19 Events volunteer, Lapworth Museum of Geology, University of Birmingham

FIELDWORK

Since 2022	Buttenheim Quarry, Bavaria, Germany (Early Jurassic invertebrate fauna)
Since 2017	Sites near Qhemegha village, Eastern Cape, South Africa (prospecting and excavation of Late
	Triassic–Early Jurassic vertebrates)

CONFERENCE CONTRIBUTIONS (selected lead-author presentations)

2025	Crossing the Palaeontological-Ecological Gap (CPEG), Zurich, Switzerland (upcoming) "Climate impacts on terrestrial tetrapods in deep time" - <u>Invited keynote</u>
2024	North American Paleontological Congress, Ann Arbor, Michigan, USA "Climatic controls on dinosaur evolution, diversity and biogeography"
2024	European Geosciences Union General Assembly, Vienna, Austria "Climatic controls on dinosaur evolution, diversity and biogeography" (talk)
2024	200 Years of Dinosaurs: New Perspectives on an Ancient World (London, UK) "Climatic controls on dinosaur diversity and evolution" (talk)
2023	Tilly Edinger Prize for Young Researchers Symposium, Paläontologische Gesellschaft annual meeting (Jena, Germany) "Environmental, Physical, and Historical Drivers of Biodiversity in the Fossil Record" (invited talk)
2023	Palaeontological Association (PalAss) Annual Meeting (Cambridge, UK): "Entitlement: The naming and claiming of dinosaurs" (poster)
2023	GeoBerlin: Geosciences Beyond Boundaries - Research, Society, Future (Berlin, Germany) "Climatic controls on the ascendency of dinosaurs" (talk)
2022	Palaeontological Association (PalAss) Annual Meeting (Cork, Ireland): "Climatic drivers of pterosaur origins" (talk)
2021	Geological Society of America Annual Meeting, Oregon, USA "Climate and competition as controls on early dinosaur evolution" - <u>Invited keynote</u>
2021	The Triassic Vertebrate Paleontology Meetup (online) "Climate and competition as controls on early dinosaur evolution" (lightening talk)
2020	Palaeontological Association (PalAss) Annual Meeting (virtual) "Scientometric trends in Myanmar amber research" - Council Flash Talk Prize
2019	Palaeontological Association (PalAss) Annual Meeting, Valencia, Spain "The role of climate in the ecological rise of dinosaurs" - <u>Council Poster Prize</u>
2019	Society for Vertebrate Palaeontology (SVP) Annual Meeting - Brisbane, Australia

	"Climate as a major control on early dinosaur global distribution" (talk & session chair)
2018	Society for Vertebrate Palaeontology (SVP) Annual Meeting - Albuquerque, NM, USA "The rise of dinosaurs: Diversity and climate during the Late Triassic" - <u>Invited talk</u> (Podium Symposium: "Big Questions, Big Data")
2018	Society for Vertebrate Palaeontology & Comparative Anatomy (SVPCA), Manchester, UK "The rise of dinosaurs: Diversity and climate during the Late Triassic" – <u>Highly commended</u> (poster)
2018	Crossing the Palaeontological Ecological Gap (CPEG), Leeds, UK - "The rise of dinosaurs: Diversity and climate during the Late Triassic" - <u>Highly commended</u> (talk)
2018	BES Macroecology & Macroevolution meeting, St. Andrews, Scotland "The rise of dinosaurs: Diversity and climate during the Late Triassic" (talk)
2018	European Geosciences Union General Assembly, Vienna, Austria "The Late Triassic Latitudinal Biodiversity Gradient" - <u>Outstanding Student Poster Prize</u>
2017	Society for Vertebrate Palaeontology & Comparative Anatomy (SVPCA) meeting, Birmingham, UK - "Testing Terrestrial Tetrapod Diversity During the Carboniferous–Early Permian" - <u>Best Poster</u>
2017	Society for Vertebrate Palaeontology (SVP) Annual Meeting, Calgary, Canada "Terrestrial Tetrapod Diversity: The First 100 Million Years on Land" (talk)
2016	Palaeontological Association (PalAss) Annual Meeting, Lyon, France "Testing Terrestrial Tetrapod Diversity Across the Carboniferous/Permian Boundary" - <u>Highly commended</u> (poster)
2016	Progressive Palaeontology (ProgPal) conference, Oxford, UK "Quantifying Biodiversity During the Rise of Tetrapods" - <u>Highly commended</u> (lightening talk)

OTHER QUALIFICATIONS

Driving European driving license with experience driving passenger vans and off-roading

First aid Qualified in wilderness first aid

Languages English (native), Irish (working proficiency), German (B2), Spanish (A2)