

P. David Polly

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Education

- PhD 1993, Paleontology (via department of Integrative Biology), University of California, Berkeley (committee: William A. Clemens, F. Clark Howell, James L. Patton, and Kevin Padian)
- BA 1987, Plan II Honors Program, University of Texas, Austin (thesis advisor: Timothy B. Rowe)

Academic Appointments

- 2013-Present Professor, Department of Earth & Atmospheric Sciences, Indiana University, Bloomington (with affiliated faculty appointments in Biological Sciences and Anthropology)
- 2017-2020 Robert R. Shrock Professor, Indiana University, Bloomington
- 2018-2019 Edward P. Bass Distinguished Visiting Environmental Scholar, Yale Institute for Biospheric Studies, Yale University
- 2006-2013 Associate Professor, Department of Geological Sciences, Indiana University, Bloomington. (with affiliated faculty appointments in Biological Sciences and Anthropology)
- 2001-2006 Lecturer, British usage (Tenured), School of Biological Sciences, Queen Mary, University of London
- 1997-2001 Lecturer, British usage (Tenured from 2000 onwards) Division of Biomedical Sciences, St. Bartholomew's and the Royal London School of Medicine and Dentistry, Queen Mary and Westfield College, University of London
- 1994-1996 Postdoctoral Fellow and Visiting Assistant Professor, The Michigan Society of Fellows and Department of Geology, University of Michigan—Ann Arbor
- 1994 Lecturer, US usage, Department of Integrative Biology, University of California—Berkeley

Scientific Appointments

- 2006-Present Research Curator, IU Paleontological Collection
- 2009-Present Research Associate, Department of Zoology, Field Museum of Natural History, Chicago
- 1996-2006 Research Associate, Department of Palaeontology, The Natural History Museum, London
- 1996-1997 Research Fellow, Department of Anatomy & Developmental Biology, University College London
- 1996-1997 Internet and Database Coordinator, The Natural History Museum, London

- 1994-1996 Visiting Research Scientist, Museum of Paleontology, University of Michigan–Ann Arbor
- 1991 Visiting Scholar, Staatliches Museum für Naturkunde, Stuttgart

Administrative Appointments

- 2020-Present Department Chair, Earth & Atmospheric Sciences, Indiana University, Bloomington
- 2018-2020 Immediate Past President, Society of Vertebrate Paleontology
- 2016-2018 President, Society of Vertebrate Paleontology
- 2017-2018 Associate Director, Environmental Resilience Institute at Indiana University and Prepared for Environmental Change grand challenge initiative
- 2014-2016 Vice President, Society of Vertebrate Paleontology
- 2013-2019 Director, Center for Biological Research Collections, Indiana University, Bloomington
- 2005-2008 Executive Committee Member, Society of Vertebrate Paleontology, Member-at-Large
- 2002-2007 Member of Council, Palaeontological Association

Qualifications in Teaching & Learning

- 2002 Postgraduate Certificate in Academic Practice (PGCAP), Queen Mary, University of London
- 1999-2000 Problem-Based Learning (PBL) training workshops, Centre for Medical and Dental Education, St Bart's and The Royal London School of Medicine and Dentistry
- 1988-1993 Annual teaching training, University of California Berkeley

Selected Publications (see complete list in *Lifetime Publication List* below)

Totals: 135 research articles, 3 edited books or volumes, 5 software packages, 2 scientific reports, 75 book reviews and encyclopedia articles. H-index 48; i10-index 98 (from [GoogleScholar](#)).

Five highest cited papers

- Caumul, R. and **P. D. Polly. 2005.** Phylogenetic and environmental components of morphological variation: skull, mandible and molar shape in marmots (*Marmota*, Rodentia). *Evolution*, **59**: 2460-2472.
- Goswami, A., J. B. Smaers, C. Soligo, and **P. D. Polly. 2014.** The macroevolutionary consequences of phenotypic integration: from development to deep time. *Philosophical Transactions of the Royal Society B*, **369**: 20130254.
- Barnosky, A. D., E. A. Hadly, P. Gonzalez, J. J. Head, **P. D. Polly**, and 36 additional authors. **2017.** Merging paleontology with conservation biology to guide the future of terrestrial ecosystems. *Science*, **355**: eaah4787 (10.1126/science.aah4787).

- Head, J.J., J.I. Bloch, A.K. Hastings, J.R. Bourque, E. Cadena, F. Herrera, **P.D. Polly**, and C.A. Jaramillo. **2009**. Giant boid snake from a Paleocene Neotropical rainforest indicates hotter past equatorial temperatures. *Nature*, **457**: 715-718.
- Lawing, A. M. and **P. D. Polly**. **2010**. Geometric morphometrics: recent applications to the study of evolution and development. *Journal of Zoology*, **280**: 1-7.

Five high profile papers

- Short, R. A., J. L. McGuire, **P. D. Polly**, and A. M. Lawing. **2023**. Trophically integrated ecometric models as tools for demonstrating spatial and temporal functional changes in mammalian communities. *PNAS*, **120(7)**: e2201947120.
- Jones, K. E., K. D. Angielczyk, **P. D. Polly**, J. J. Head, V. Fernandez, J. Lungmus, S. Tulga, and S. E. Pierce. **2018**. Fossils reveal the complex evolutionary history of the mammalian regionalized spine. *Science*, **361**: 1249-1252.
- Head, J. J. and **P. D. Polly**. **2015**. Evolution of the snake body form reveals homoplasy in amniote *Hox* gene function. *Nature*, **520**: 86-89 (10.1038/nature14042).
- Gómez-Robles, A., J. M. Bermúdez de Castro, J.-L. Arsuaga, E. Carbonell, and **P. D. Polly**. **2013**. No known hominin species matches the expected dental morphology of the last common ancestor of Neanderthals and modern humans. *PNAS*, **110**: 18196-18201.
- Polly P. D.**, J.T. Eronen, M. Fred, G. P. Dietl, V. Mosbrugger, C. Scheidegger, D.C. Frank, J. Damuth, N.C. Stenseth, and M. Fortelius. **2011**. History matters: Ecometrics and Integrative Climate Change Biology. *Proceedings of the Royal Society, B*, **278**: 1121-1130.

Favorite first-authored papers

- Polly, P. D. 2020**. Functional tradeoffs carry phenotypes across the valley of the shadow of death. *Integrative and Comparative Biology*, **60**: 1268-1282 (10.1093/icb/icaa092).
- Polly, P. D. 2019**. Spatial processes and evolutionary models: a critical review. *Palaeontology*, **62**: 175-195 (10.1111/pala.12410).
- Polly, P. D. 2017**. Morphometrics and evolution: the challenge of crossing rugged phenotypic landscapes with straight paths. *Vavilov Journal of Genetics and Selection*, **21**: 452-461 (10.18699/VJ17.264).
- Polly, P. D.**, C. T. Stayton, E. R. Dumont, S. E. Pierce, E. J. Rayfield, and K. Angielczyk. **2016**. Combining geometric morphometrics and finite element analysis with evolutionary modeling: towards a synthesis. *Journal of Vertebrate Paleontology*, **e1111225**: 1-29 (10.1080/02724634.2016.1111225).
- Polly, P. D. 2010**. Tiptoeing through the trophics: geographic variation in carnivoran locomotor ecomorphology in relation to environment. Pp. 347-410 in A. Goswami and A. Friscia (eds.), *Carnivoran Evolution: New Views on Phylogeny, Form, and Function*. Cambridge University Press, Cambridge, UK.
- Polly, P. D. 2008**. Adaptive zones and the pinniped ankle: a 3D quantitative analysis of carnivoran tarsal evolution. Pp. 165-194 in E. Sargis and M. Dagosto (eds.), *Mammalian Evolutionary Morphology: A Tribute to Frederick S. Szalay*. Springer: Dordrecht, The Netherlands.
- Polly, P. D. 2001**. Paleontology and the comparative method: Ancestral node reconstructions versus observed node values. *American Naturalist*, **157**: 596-609.

Honors, Awards, and Fellowships

McCormick Science Grant with Anne E. Kort, for faculty/graduate student team whose research is judged most creative, visionary, and innovative. College of Arts & Sciences, Indiana University—Bloomington, 2022

Fellow, American Association for the Advancement of Science (AAAS) for “*for distinguished contributions to the field of vertebrate paleontology, particularly for original studies in morphometrics, for quantitative analyses in paleobiology, and for innovative studies on mammalian evolution*”, November 2021

Clara Jones Langston Centennial Lecturer in Vertebrate Paleontology, Jackson School of Geosciences, December 2019

University of California Museum of Paleontology Award Lecture, 2 April 2019

Edward P. Bass Distinguished Visiting Environmental Scholar, Yale Institute for Biospheric Studies, Yale University, 2018-19

President, Society of Vertebrate Paleontology, 2016-2018

James Philip Holland Award for Exemplary Teaching and Service to Students, Indiana University, 2011

McCormick Science Grant with A. Michelle Lawing, for faculty/graduate student team whose research is judged most creative, visionary, and innovative. College of Arts & Sciences, Indiana University—Bloomington, 2011

Drapers' Prize for Excellence in Teaching, Queen Mary, University of London, 2004

Joseph T. Gregory Award, for outstanding service to the welfare of the Society of Vertebrate Paleontology, 2001

Best Teacher of Biomedical Science (Dentistry), Bart's and the London Medical and Dental Students Association. Queen Mary, University of London, 2001

Michigan Society Fellowship, Michigan Society of Fellows, University of Michigan, Ann Arbor, 1994-1996

Best of the Net Award, for work on the University of California Museum of Paleontology website. O'Reilly and Associates and Global Network Navigator, 1994

Graduate Student Instructor Teaching Excellence Award, University of California—Berkeley, 1992

NSF Graduate Fellowship, U.S. National Science Foundation, 1988-1993

Plan II Honors Program, University of Texas—Austin, 1984-87

National Merit Scholarship, 1984-1987

Grants

Dovetail Genomics “Tree of Life” award. 2020-2022. Sequencing the genome of *Poecilozonites bermudensis*, the Bermudian land snail. A.C. Stone (PI), P.D. Polly (co-PI), S. Winingear, M. Outerbridge (\$35,000).

National Science Foundation Research Grant EAR-1338298. 2013-2019. ELT Collaborative Research: Bayesian Paleoclimate Proxies – Transforming the Vertebrate Fossil Record. P.D. Polly (PI), K. M. Johnson, S. C. Brassell, and A. Schimmelmann (co-PIs), J. J. Head (Collaborative PI, U. Nebraska) (\$168,394).

- National Science Foundation Research Grant. DBI-1702289. 2017-2019. Digitization PEN: Paleoniches on the western Cincinnati arch, the Ordovician of Indiana. G. Motz (PI), C. Johnson, and P. D. Polly (co-PIs). (\$101,388).
- Institute of Museum and Library Services Grant MA-30-16-0458-16. 2016-2018. ACCESSioning at Indiana University: promoting digital access and (re-)discovery of the IU Paleontology Collection. Gary Motz (PI), P. D. Polly, C. C. Johnson (co-PIs) (\$112,505).
- National Science Foundation Research Grant EAR-0843935. 2009-2014. Environmental Sorting of Vertebrate Faunas: Are Guild-Level Locomotor and Dietary Ecomorphology Indicators of Paleoclimate? P.D. Polly (PI) (\$274,974).
- National Science Foundation Grant DBI-0 0846697. 2009-2013. Infrastructure upgrade, curation and data basing of Indiana University Collections. L. L. Scheiber (PI), P. D. Polly, C. Johnson, and E. Elswick (Co-PIs). (\$475,302).
- IU Collaborative Research and Creative Activity Fund. 2011. The White River Project: A Collaborative Research Proposal between the Department of Geological Sciences and the Glenn A. Black Laboratory for Archaeology. G. William Monaghan (PI), E. Herrmann, P.D. Polly, and P. Sauer (Co-PIs). (\$10,000).
- Leverhulme Trust Multi-Institution Exceptional Grant F/00 696/Q. 2009-2012. Dispersals of early humans: adaptations, frontiers and new territories (AHOB3). Co-PIs: C.B. Stringer, N. Ashton, I. Candy, A.P. Currant, T. Higham, S. Lewis, K. Penkman, P.D. Polly, R.C. Preece, W. Roebroeks, and D. Schreve. Programme Directors: C.B. Stringer and N. Ashton. (£1,133,815).
- IU Multidisciplinary Ventures and Seminars Fund. 2008. Natural History Collections in 21st Century Scholarship, Education, and Outreach: An Integrative Seminar across Time and Space. L. L. Schieber, P. D. Polly, C. Johnson, E. Elswick (Co-PIs). (\$6,250).
- Leverhulme Trust Multi-Institution Research Programme Grant. 2006-2009. Ancient Britain and its European Context: AHOB2. Chris Stringer, Programme Director. C. B. Stringer, N. Ashton, I. Candy, A. Currant, R. Jacobi, S. Lewis, S. Parfitt, P. D. Polly, J. Rose, D. Schreve, and M. White (co-PIs). (£999,000).
- Leverhulme Research Project Grant F/07476/Q. 2003-2007. Molecular and Fossil Evidence for the Effect of Migration on Bat Evolution. P.D. Polly (PI) (£144,404).
- Leverhulme Trust Multi-Institution Research Programme Grant. 2001-2006. Ancient Human Occupation of Britain. Chris Stringer, Programme Director. C. B. Stringer, N. Ashton, A. Currant, R. Jacobi, S. Lewis, S. Parfitt, P. D. Polly, D. Schreve, M. White (co-PIs). (£1,210,000).
- NERC Research Grant NER/A/S/1999/00049. 2000-2003. Morphological markers for mammal populations? Variation in molar shape, its correlation with population structure, and comparative post-glacial recolonization in *Sorex* shrews and marmots. P. D. Polly (PI) (£51,149).
- NERC Small Research Grant GR8/03692. 1998-2001. Development, variability, and evolution. P. D. Polly (PI) (£11,351).
- University of London Central Research Fund. 1999. An eigenshape analysis of snake axial skeletons: evolution, development, and locomotion. P. D. Polly (PI) (£1,000).
- A.G. Side Grant, Linnean Society of London. 1998-1999. Phylogeny of early carnivorans: basicranial anatomy revealed by CT-scanning. P. D. Polly (PI) (£1,200).

Research Investigator Award. 1995-96. University of Michigan International Institute. P. D. Polly (PI) (\$14,500).
Project Seed Grant. 1995. (for field research in the North Aral Sea region of Kazakhstan), University of Michigan Office of the Vice President for Research. P. D. Polly (PI) (\$2,000).
Collections Study Grant. 1993. American Museum of Natural History. (\$400).
National Science Foundation DIG (DEB-9100925). 1991-1993. The phylogeny of the Creodonta and a study of their carnivorous adaptations. (\$13,092).
NSF International Research Travel Grant. 1991. U.S. National Science Foundation. (\$1,000).
Research Grant, 1991. Deutscher Akademischer Austauschdienst. (DM 3,980).
Grant-in-Aid of Research. 1991. Sigma-Xi: the Research Society. (\$567).

Invited Lectures (since 2010)

Phylogenetic Symposium 2022, Institute of Evolutionary Biology and Ecology, University of Bonn, Keynote address “Functional tradeoffs carry phenotypes across the valley of the shadow of death: why performance trade-offs may not equate to multiple adaptive peaks,” 18-20 November 2022.

Partnership for Higher Education Reform (PHER), “The Research Support System from the Departmental Perspective”, 26 September 2022.

Royal Tyrrell Museum, “Paleontology and US National Monuments: Implications for Science and Public Lands,” 24 Feb 2022 (online talk).

Université Claude Bernard Lyon 1, “Macroevolution in Paleontology”, Biology and Paleontology MSc program, 24 September 2021 (online talk).

Pennsylvania State University, Department of Geosciences seminar series, “Punctuated equilibrium, Earth systems, and the Common Cause hypothesis extended: A new look at Gould’s Pleistocene snails from Bermuda”, 21 September 2021.

Indiana University Institute for Advanced Study, “Resilience, climate, and species: perspectives from deep time”, Resilience & Memory in Archives, Libraries, and Museums, a Research in Repositories webinar, 16 September 2021 (online talk).

American Society of Mammalogists Annual Meeting, Anchorage, Alaska (virtual), “Ecometric frameworks for studying functional trait change in mammalian communities through space and time”, 18 June 2021.

Virtual symposium: Macroevolution of form and function in the mammalian locomotor system, Humboldt Universität, Berlin, “The landscape of adaptive landscapes: trade-offs between performance surfaces in space and time”, 27 March 2021 (online talk).

Turkana University College, Lodwar, Kenya, “The vertebrate body plan: an overview of vertebrate anatomy”, Vertebrate Paleontology Module. 24 Feb 2021 (online talk).

Integrative Anatomy Program, University of Missouri, “Functional traits, environments, and clades: at the interface of climate, ecology, and evolution”, 28 February 2020.

Society of Integrative and Comparative Biology, Keynote Presentation in the Melding Modeling and Morphology Symposium, Austin, Texas, “The landscape of adaptive landscapes: trade-offs between performance surfaces in space and time”, 7 January 2020.

Clara Jones Langston Centennial Lecture in Vertebrate Paleontology, Jackson School of Geosciences, University of Texas, Austin, “Hip deep in giant snakes climate, environment, and the evolution of the vertebrate body plan”, 5 December 2019.

North American Paleontological Convention, Keynote Presentation in the Environmental Change and Evolution of Form and Function Symposium, University of California, Riverside, "Assessing form-function-environment interactions using ecometric analysis of functional traits", 22 June 2019.

North American Paleontological Convention, University of California, Riverside, "Paleontology and US National Monuments: Why downsizing Grand Staircase Escalante and Bears Ears is bad for science", 22 June 2019.

University of California Museum of Paleontology Award Lecture, "Spatial processes and evolutionary models: re-examining Gould's Pleistocene snail from Bermuda", 2 April 2019.

New York Regional Primatology Colloquium, New York City University of New York, "Cycles and space: Interactions between evolutionary processes, trait sorting, and environmental change", 7 March 2019.

Guy F. Atkinson Distinguished Lecture, Geology and Geophysics, University of Utah, "Spatial processes and evolutionary models: re-examining Gould's Pleistocene snail from Bermuda", 31 January 2019.

Yale Institute for Biospheric Studies, Yale University, New Haven, CT, "Cycles and space: interactions between evolutionary processes, trait sorting, and environmental change", 25 January 2019.

Natural Resources Law, Maurer Law School, Indiana University, Bloomington, IN, "Paleontology and US National Monuments: Why downsizing Grand Staircase Escalante and Bears Ears is bad for science", 7 November 2018

Earth-Life Transitions Symposium, Geological Society of America Annual Meeting, Indianapolis, IN, "Earth-life transitions, organismal-environmental interactions, and the key role of functional traits", 5 November 2018

Geosciences and Ecology and Evolutionary Biology Department, University of Connecticut, "Spatial processes and evolutionary models: re-examining Gould's Pleistocene snail from Bermuda", 25 September 2018

Keynote Symposium, Palaeontological Association Annual Meeting, Imperial College, London, "Evolution and Earth Systems: modelling population level processes on palaeontological scales", 17 December, 2017

Department of Biological Sciences, Ohio University, "Functional traits, environments, and clades: at the interface of climate, ecology, and evolution", 27 November 2017

Museum of Comparative Zoology, Harvard University. "Functional traits, environments, and clades: at the interface of climate, ecology, and evolution", 7 September 2017

Limb Symposium, Society of Vertebrate Paleontology Annual Meeting, Calgary, Alberta. "Macroecology of limbs: ecometrics, community assembly, and clade sorting in limb traits in Neogene Carnivora". 23 August 2017.

Belyaev Symposium, Russian Academy of Sciences, Novosibirsk, Russia. "Morphometrics and evolution: the challenge of crossing rugged phenotypic landscapes with straight paths". 7 August 2017.

Florida Museum of Natural History, University of Florida-Gainesville. "Functional traits, environments, and clades: at the interface of climate, ecology, and evolution". 9 December 2016.

Paleontological Society Short Course, Geological Society of America Annual Meeting, Denver, Colorado. "Patterns and processes in morphospace: geometric morphometrics of three-dimensional objects". 24 September 2016.

International Congress of Vertebrate Morphology, Washington, DC. "Ecometric patterning in hind limb morphology of North American carnivores (Carnivora, Mammalia): community-level functional morphology and evolutionary ecology". 29 June-3 July, 2016.

Paleobiology Seminar Series, Stony Brook University. "Functional traits, environments, and clades: at the interface of climate, ecology, and evolution". 5 May 2016.

Anthropological, Environmental, and Geological Interdisciplinary Sciences (AEGIS) seminar series, University of Minnesota, Minneapolis, "Functional traits, environments, and clades: at the interface of climate, ecology, and evolution". 26 February 2016.

Department of Earth & Atmospheric Sciences, University of Nebraska-Lincoln. "Functional traits and environments". 3 September 2015.

Comparative Biology Symposium Series, American Museum of Natural History, New York, NY. "Cusps, chromosomes, and clades: micro- and macroevolutionary processes in the geography of morphology". 8 June 2015

University of California Museum of Paleontology, Department of Integrative Biology, University of California, Berkeley. "Functional traits, environments, and clade dynamics in deep time". 10 April 2015.

Evolutionary, Ecology, and Behavior Seminar, Department of Biological Sciences, Indiana University. "Functional traits, environments, and clade dynamics in deep time". 6 March 2015.

AAAS Annual Meeting, "Vertebrate Functional Traits as Proxies for Paleoclimate and Paleoenvironment". San Jose, California, 13 February 2015.

Linnean Society of London, Day Meeting on Radiation and Extinction – Investigating clade dynamics in deep time, "Functional traits, environments, and clade dynamics in deep time", 10 November 2014.

Department of Geography, Indiana University Bloomington, "Changing organisms, changing climate: the dynamics of evolution, geography, and traits", 24 October 2014.

Department of Geology and Geophysics, Yale University, "Clasts with minds of their own: new approaches to interactions between organisms and Earth systems", 8 October 2014.

Department of Evolution, Ecology, and Organismal Biology, Ohio State University, Columbus, Ohio, "Changing organisms, changing climate: the dynamics of evolution, geography, and traits", 11 September 2014.

School of Integrative Biology, University of Illinois at Urbana-Champaign, "Changing organisms, changing climate: the dynamics of geography, evolution and traits", 4 March 2014.

Symposium on Digitization in Vertebrate Paleontology, 10th Annual North American Paleontological Convention, University of Florida at Gainesville, "Transforming morphology with mathematics: can morphometric methods model the evolution of complex morphology?" 18 February 2014.

Department of Geophysical Sciences, University of Chicago, "Clasts with minds of their own: new approaches to interactions between organisms and Earth systems", 7 February 2014.

Helsinki University and the Finnish Museum of Natural History, "The Enamel Knot Gets Old: Tooth Development and Evolution on Geological Timescales", presentation in the Enamel Knot at 100 Symposium at the Economicum, Helsinki, Finland, 4 December 2013.

Department of Earth Sciences, University of Minnesota-Minneapolis. "Paleoclimate, paleoenvironment, and paleontology: new approaches to fossil vertebrates and Earth systems". 19 September 2013.

Department of Earth Sciences, University of Minnesota-Minneapolis. "Quaternary climate cycles and speciation: a case study of the *Sorex araneus* group". 20 September 2013.

Center for the Advanced Study of Hominin Paleobiology, George Washington University, Washington, DC. "Mammals and climate: new statistical approaches". 6 February 2013.

Department of Ecology and Evolutionary Biology, University of Michigan-Ann Arbor. "Changing organisms, changing climate: the dynamics of geography, evolution, and traits". 27 September 2012.

Museum of Paleontology, University of Michigan-Ann Arbor. "Quaternary climate cycles and speciation: a case study of the *Sorex araneus* group". 28 September 2012.

Department of Geosciences, University of Iowa. "Changing organisms, changing climate: the dynamics of geography, evolution, and traits". 24 February 2012.

Society of Systematic Biology Symposium: Unified Approaches for Understanding Patterns of Character Evolution and Diversification. Evolution Meeting, Norman, Oklahoma. "On Morphological Clocks: Why the Phenotype is a Poor Predictor of Time Since Common Ancestry". 18 June 2011.

Centro de Investigación en Biodiversidad y Conservación, Universidad Autónoma del Estado de Morelos, Cuernavaca, Mexico. "Feet, Ferrets and Phylogeny: Evolution and Ecology of Quantitative Morphological Traits". 13 May 2011.

Center for Functional Anatomy & Evolution, Johns Hopkins University School of Medicine, Baltimore, Maryland. "Ecometrics of carnivores". 29 April 2011.

Paleontological Society Short Course, GSA Annual Meeting, Denver, Colorado. "Methods for studying morphological integration and modularity" (with Anjali Goswami). 30 October 2010.

Keynote presentation at 3rd International Paleontology Conference, Palaeontological Data Analysis Symposium, Imperial College, London. "Quantitative approaches to geographic variation: environment, palaeophylogeography, and ecometrics". 28 June, 2010.

Centro Nacional de Investigación sobre la Evolución Humana, Burgos, Spain. "Quantitative approaches to geographic variation: Environment, palaeophylogeography, and ecometrics". 17 June 2010.

Department of Theoretical Biology, University of Vienna, Austria. "Feet, Ferrets, and Phylogeny: the Evolution and Ecology of Simple and Complicated Morphometric Traits". 14 June 2010.

The Neandertal Museum, Mettmann, Germany. Workshop on Pleistocene Databases – Acquisition, Storing, Sharing. "The Ancient Human Occupation of Britain (AHOB) Database". 11 June 2010.

Department of Ecology and Evolutionary Biology, Brown University, Providence, Rhode Island. "Mammals, Morphology, and Meteorology: Ecometric Approaches to Paleoenvironmental Reconstruction". 8 February 2010.

Public Outreach Talks (since 2011)

- “Conservation Science of Park Paleontology”, Workshop Panel with the National Parks Conservation Association (NPCA). 1 November 2022.
- “National Monuments in Utah: Dinosaurs, Science, and Politics”, IU Mini University, Bloomington. 14 June 2022 (online presentation).
- “Public lands, repositories, and paleontology”, 500 Earth Sciences Club, Indianapolis. 12 June 2022 (online presentation).
- “Science denial and the role of the humanities: a Transatlantic conversation”, a conversation with Christoph Irmscher and Kirsten Twelbeck, part of the IU-Bavarian Talk series sponsored by the Indiana University Europe Gateway in Berlin. 30 November 2021 (online event).
- “Resilience, climate, and species: perspectives from deep time”, talk in the Resilience & Memory in Archives, Libraries, and Museums, a Research in Repositories webinar sponsored by the Indiana University Institute for Advanced Studies. 15 September 2021 (online presentation).
- “Shrews and marmots”, Colorado State University video series on scientific research on small mammals by Tanya Dewey. 1 September 2021 (online recorded talk).
- “Tetrapods of the Late Paleozoic: Pioneers of the Land”, 500 Earth Sciences Club, Indianapolis, Indiana. 13 June 2021 (online talk).
- “A research strategy to examine the taxonomy of the Red Wolf”, committee presentation to US Fish & Wildlife. 13 Oct 2020.
- “Hip-Deep in giant snakes: *Titanoboa* and temperature in the Paleocene”. Saturday Morning Science, Dinosaurs and Cavemen Open House, University of Missouri. 29 February 2020.
- “Paleontology and US National Monuments”. Shop Talk, Old Professor’s Bookshop, Belfast, Maine. 15 June, 2019.
- “Prepared for Environmental Change”. Kokomo Creation Care, Kokomo, Indiana. 11 November, 2017.
- “Prepared for Environmental Change: a Grand Challenges initiative from Indiana University”. Climate Change Leadership Summit, Earth Charter Indiana, Indianapolis, Indiana. 13 September 2017.
- “Hip deep in giant snakes: *Titanoboa* and temperature in the Paleocene”. Blatchley Nature Study Club, Noblesville, Indiana. 22 January 2015.
- “Ectotherms in a changing world: reptiles and climate in the past, present, and future”. 29th Midwest Herpetological Symposium, Indianapolis, Indiana. 18 October 2014.
- “Hip deep in giant snakes: *Titanoboa* and temperature in the Paleocene”. Indiana Society of Paleontology, Greenfield, Indiana. 6 September 2014.
- “How to be a paleontologist”, National Fossil Day Talk, Monroe County History Society. 15 October 2013.
- “How to be a paleontologist”, National Fossil Day Talk, Indiana Geological Survey and Department of Geological Sciences, Indiana University. 24 October 2012.
- “Mapping rattlesnakes and climate change”, Open Data Visualization Brownbag, Wells Library, Indiana University. 24 October 2012.
- “Prehistoric climate and life in southern Indiana: 500 million years of Hoosier history”, Lawrence County History Museum, Bedford, Indiana. 8 October 2012.

- "Hip deep in giant snakes: Titanoboa and temperature in the Paleocene". Hoosier Herpetological Society, Indianapolis, Indiana. 19 September 2012.
- "Paleontology of Indiana: 500 Million Years of Hoosier History". Mini-course to alumni at IU Mini University. 21 June 2012.
- "Hip deep in giant snakes: Titanoboa and temperature in the Paleocene". Invited talk in the Night at the Museum series, University of Iowa Museum of Natural History, Iowa City, Iowa. 23 February 2012.
- "Crinoids: from Cambrian to Crawfordsville". 12 February 2012, invited talk to the 500 Earth Sciences Club, Indianapolis, Indiana.
- "Climate through time at the Falls", 17 August 2011, invited presentation at the annual Falls Fossil Festival, sponsored by the Falls of the Ohio Foundation and hosted by the Falls of the Ohio State Park, Clarksville, Indiana.
- "The Radiation of Mammals", 23 October 2011, presentation in the "Origins: the evolution of the universe, the earth, life, and the human species" symposium. Co-sponsored by the Stone Age Institute, Office of the Provost, Office of the Vice Provost for Research, College of Arts and Sciences, and the CRAFT research center.
- "Mammals, Evolution and Climate". Talk and discussion at Café Inquiry. 1 March 2011, Center for Inquiry, Indianapolis, Indiana.

University Courses Taught

2007-Present	Geometric Morphometrics (EAS-E562)
2008-Present	Quantitative Paleontology (EAS-E563)
2015-Present	Dinosaurs and their Relatives (EAS-E114)
2015-Present	Vertebrate Paleontology (EAS-E412/E512)
2011-Present	Paleontology and Geology of Indiana (EAS-E308)
2022	Readings in Species Modeling (EAS-E690)
2019	Relational Databases for Paleobiologists (EAS-E690)
2018	Phylogenetics and Morphometrics (GEOL-G490/G690)
2012	Regional Geology Field Trip, Cenozoic of North America (GEOL-G420)
2011-2013	Geobiology (GEOL-G404)
2007-2011	Practical Geobiology (GEOL-G600)
2007-2008	Sedimentology and Stratigraphy (GEOL-G334) (co-taught)
2007-2008	Historical Geology (GEOL-G112)
2001-2006	Dental Oral Biology, QM, Univ. London
2001-2006	Anatomy, Development, and Cell Biology, QM, Univ. London
2003-2006	Biomedical Sciences Case Approach to Problem Solving. QM, Univ. London
2001-2003	Integrative Studies in Biological Sciences tutorials, QM, Univ. London
2000-2001	The Skeleton: a functional and comparative view, QM, Univ. London
2000	Human Growth and Development, PBL Tutor, QM, Univ. London
2000	Locomotion, PBL Tutor, QM, Univ. London
1999-2000	Medical Imaging, Fundamentals of Medicine, QM, Univ. London
1999-2006	Occlusion Module, co-convener, QM, Univ. London

1998	Introductory Anatomy and Physiology for MSc., QM, Univ. London
1998-1999	Developmental Biology for BSc., QM, Univ. London
1998-1999	Head and Neck Neuroanatomy, QM, Univ. London
1998-1999	Reproduction and Development, QM, Univ. London
1998-1999	Alimentary and Renal Anatomy, QM, Univ. London
1998	Patients as Partners: Communication and Clinical Skills, QM, Univ. London
1998-1999	Musculoskeletal Anatomy, QM, Univ. London
1998-1999	Head and Neck Anatomy for Dental Students, QM, Univ. London
1997-1999	Respiratory and Cardiovascular Anatomy, QM, Univ. London
1996	Structural and Developmental Human Anatomy, University College London
1995-1996	Evolution and Extinction, UM Ann Arbor
1995	Fossil Record and Evolution of Mammals, UM Ann Arbor
1992-1994	Functional and Evolutionary Anatomy of the Vertebrates. UC Berkeley

Professional Courses Taught

- Geometric Morphometrics Workshop, Yale University, 20 graduate students, post-docs, and faculty. Spring 2019
- Geometric Morphometrics, Analytical Paleobiology Workshop, Gainesville, Florida, 15 international students, 6-8 August 2018 (co-taught with Katrina E. Jones)
- Geometric Morphometrics, Paleobiology Database Intensive Summer Course in Analytical Paleobiology, Macquarie University, Sydney Australia. 13 students from Europe, US, Canada, and Australia. 20-24 June 2013.
- Geometric Morphometrics, Paleobiology Database Intensive Summer Course in Analytical Paleobiology, Macquarie University, Sydney Australia. 12 students from Europe, Mexico, US, Canada, and South America. 11-15 July 2012.
- Geometric Morphometrics, Paleobiology Database Intensive Summer Course in Analytical Paleobiology, Macquarie University, Sydney Australia. 12 students from US, New Zealand, Australia, Europe, and Mexico. 27-31 July 2011.
- Geometric Morphometrics Intensive Short Course, Departamento de Sistemática y Evolución and the Centro de Investigación en Biodiversidad y Conservación, Universidad Autónoma del Estado Morelos, Cuernavaca, Mexico. 11 students at UAEM and elsewhere in Mexico. 9-12 May 2011.
- Geometric Morphometrics, Paleobiology Database Intensive Summer Course in Analytical Paleobiology, NCEAS, Santa Barbara. 29 June-3 July, 2007.
- Landmark Morphometrics, MSc in Systematics, The Natural History Museum, London. 1999-2003.

Research Advising

Post-doctoral Fellows

5. Pineda Muñoz, Sílvia. 2020-present. Paleoecology and evolution of mammals. College of Arts and Sciences, Indiana University.
4. Goswami, Anjali. 2005-2007. Ontogenetic and evolutionary shape variation and integration in the mammalian skull. NSF International Postdoctoral Fellowship.

3. Head, Jason J. 2002-2005. Morphological phylogeography of ericine snakes: Recovering the historical relationship between fauna and environment. NSF Postdoctoral Fellowship in Biological Informatics.
2. Le Comber, Steven C. 2004-2006. Molecular and Fossil Evidence for the Effect of Migration on Bat Evolution. Leverhulme Trust Research Grant.
1. Burland, Tamsin. 2003-2004. Molecular and Fossil Evidence for the Effect of Migration on Bat Evolution. Leverhulme Trust Research Grant.

Graduate Students

Chair, Research Committee

20. Lopezalles, Sierra, Indiana University, Biological Sciences, PhD, 2020-present.
19. Salcido, Charles, Indiana University, Earth & Atmospheric Sciences, PhD, 2019-present.
18. Ely, Ricardo. Indiana University, Earth & Atmospheric Sciences, PhD, 2019-present.
17. Bormet, Allison K. Indiana University, Earth & Atmospheric Sciences, PhD. 2010-present. Dissertation title: "Form, function, and ungual variation in the Ruminantia (Class Mammalia, Order Artiodactyla): a quantitative ecomorphological approach".
16. Kort, Anne E. Indiana University, Earth & Atmospheric Sciences, PhD, 2019-present. Dissertation title: "Lumbar vertebrae and diversification of locomotion in Paleogene mammals".
15. Fulghum, Henry, Indiana University, Earth & Atmospheric Sciences, Masters, 2021-present.
14. Nelson, Allison, Indiana University, Earth & Atmospheric Sciences, Masters, 2020-2023. Thesis title: "An exploration of the *Canis lupus* and *Canis rufus* species boundary via morphometrics."
13. Ascari, Silvia. Indiana University, Earth & Atmospheric Sciences, PhD, 2015-2021. Dissertation title: "Functional morphology of extinct organisms: using shape analyses to decode the function of deinonychosaurid killer claw".
12. Hellert, Spencer M. Indiana University, Earth & Atmospheric Sciences, PhD, 2014-2019. Dissertation title: "Locomotion transitions and sexual dimorphism: Understanding the sources of phenotypic integration patterns".
11. Kort, Anne E. Indiana University, Earth & Atmospheric Sciences, Masters, 2017-2019. Thesis title: "The paleoecology of *Patriofelis ulta* (Mammalia, Creodonta)".
10. Ely, Ricardo. Indiana University, Earth & Atmospheric Sciences, Masters, 2017-2019. Thesis title: "Dietary Ecomorphological Dispersion and Phenotypic Integration in Felidae and Mustelidae (Mammalia; Carnivora)".
9. Smith, Michael R. Indiana University, Geological Sciences, PhD, 2009-2017. Dissertation title: "Faunal dynamics in response to Quaternary climate cycling: a physiographic regional approach".
8. Hensley-Marschand, Blaire. Indiana University, Geological Sciences, PhD, 2007-2017 (dual major: Anthropology-Geology, expected completion May 2017). Dissertation title: "*Homo erectus* in China: paleoclimate, paleoenvironment, and subsistence near their northeastern range limit".

7. Vermillion, Wesley. Indiana University, Geological Sciences, Masters, 2011-2016. Thesis title: "The effects of climate change of the evolution of members of the *Chrysemys* complex".
6. Bykowski, Richard J. D. Indiana University, Geological Sciences, PhD, 2009-2014. Dissertation title: "Using trait-based approaches to analyze the factors affecting theropod paleoecology in the Mesozoic".
5. Grossnickle, David M. Indiana University, Geological Sciences, Masters, 2012 2013 (co-advised with Jackson Njau). Thesis title: "Implications of the angiosperm radiation on morphological disparity and taxonomic diversity of Mesozoic mammals".
4. Lawing, A. Michelle. Indiana University, Geological Sciences, PhD, 2007-2012. Dissertation title: "The geographic and morphologic response of species and communities to their climate and environment".
3. Bose, Rituparna. Indiana University, Geological Sciences, PhD, 2006-2011. Dissertation title: "Evolution of Paleozoic brachiopods: a geometric morphometric approach".
2. Smith, Michael. Indiana University, Geological Sciences, Masters, 2007-2010. Thesis title: "The Harrodsburg crevice fauna: reanalysis and synthesis".
1. Gabriel, Stefan N. Queen Mary, University of London, PhD, 2002-2007. Thesis title: "Morphological integration and phylogenetic signal in morphometric data: a case study using geometric morphometrics of the skull of *Lipotyphla sensu lato*".

Member, Research Committee

36. Bogner, Emily. University of California Berkeley, Integrative Biology, Ph.D., 2022-present.
37. LaBarge, Thomas. Indiana University, Earth & Atmospheric Sciences, Ph.D., 2022-present.
35. Chandroth, Anupama. Indiana University, Earth & Atmospheric Sciences, Ph.D., 2021-present.
34. Reed, Susan. Indiana University, Biological Sciences, MS, 2022-present.
33. LaBarge, Thomas. Indiana University, Earth & Atmospheric Sciences, MS, 2020-2022. Thesis title: Taphonomy and ichnology of Nile Crocodile feeding behavior.
32. Peltier-Thompson, Danielle. Indiana University, Earth & Atmospheric Sciences, PhD, 2018-present.
31. Pearson, Alannah. Australian National University, School of Archaeology and Anthropology, PhD, 2014-Present. Dissertation title: "Inside and Out: Using virtual imaging to investigate the evolution of the cranial and cerebral temporal region in fossil and living primates".
30. Valenza, Jeffery. Indiana University, Earth & Atmospheric Sciences, PhD, 2018-2021. Thesis title: "Controls on river avulsion style and stratigraphy in foreland basins".
20. Burt, Amanda. Indiana University, Anthropology, PhD, 2013-2021.
28. Thorpe, Emily. Indiana University, Earth & Atmospheric Sciences, Masters, 2018-2020. Thesis title: "Taxonomy and Paleoecology of Rudist Bivalves from the Barrancas, Río Matón, and Aguas Buenas Limestone Members, middle Cretaceous, Puerto Rico".
27. Camargo-Perez, Issac. Centro de Investigaciones Biológicas del Noroeste, La Paz, Baja California Sur, Mexico, PhD, 2017-2021. Dissertation title: "Filogenia y filogeografía de las musarañas desérticas del genero *Notiosorex* (Mammalia: Soricomorpha)".

26. Zimmerman, Alex. Indiana University, Department of Earth & Atmospheric Sciences, PhD, 2014-2020. Dissertation title: "The importance of biodiversity in understanding evolutionary paleoecology".
25. Farrugia, Paul. Indiana University, Department of Earth & Atmospheric Sciences, PhD, 2012-Present. Dissertation title: "Crocodylian craniodental ecomorphology and ecological niche modeling: a new approach for reconstructing hominin paleoecology in the East African rift system".
24. Mirza, Ali. Indiana University, Department of History and Philosophy of Science and Medicine, PhD, 2016-2020. Dissertation title: "Living in Stone: The History and Philosophy of Behavior, Morphology, and Traces in the Fossil Record".
23. Dickson, Blake V. Harvard University, Museum of Comparative Zoology, PhD, 2016-2020. Dissertation title: "A three-dimensional analysis of tetrapod humerus shape and function across water-land transitions: an evolutionary and ontogenetic perspective".
22. Kearney, John. Indiana University, Earth & Atmospheric Sciences, PhD, 2018-2020. Thesis title: "Using phenocryst compositions from reworked tephra to enhance chronostratigraphic resolution of Bed III and Bed IV, Olduvai Gorge, Tanzania".
21. Fuentes Gonzales, Jesualdo. Indiana University, Department of Biology, PhD, 2011-2018. Dissertation title: "Phylogenies and the comparative method in morphometrics".
20. Sacks, Lita. Indiana University, Department of Anthropology, PhD, 2014-2019. Dissertation title: "Temporal use of Koster Mounds: functional morphology, mortuary practices, and paleopathology in the prehistoric lower Illinois River valley".
19. Nold, Katie. Indiana University, Department of Earth & Atmospheric Sciences, PhD, 2009-2018. Dissertation title: "Caribbean coastal ecosystems and the people who utilized them: A geoarchaeological approach to the Caribbean past".
18. Mongle, Carrie. Stony Brook University, Interdepartmental Doctoral Program in Anthropological Sciences, PhD, 2015-2019. Dissertation title: "Modeling hominin variability: the alpha taxonomy of '*Australopithecus africanus*'"
17. Smits, Peter. University of Chicago, Committee on Evolutionary Biology, PhD, 2012-2017. Dissertation title: "Bayesian approaches to trait evolution in the fossil record".
16. Kufeldt, Chrisandra. George Washington University, Center for Advanced Study of Human Paleobiology, PhD, 2011-2017. Dissertation title: "Trees from teeth? Exploring the role of dental microstructure in the reconstruction of hominin relationships".
15. Kuhn, William. Rutgers University, Department of Biological Sciences, PhD, 2011-2016. Dissertation title: "Three approaches to automating taxonomy, with emphasis on the Odonata (dragonflies and damselflies)".
14. Topalov, Katarina. Indiana University, Department of Geological Sciences, PhD, 2008-2016. Dissertation title: "Environmental, trophic, and ecological factors influencing bone collagen δ^{2H} values".
13. Nava Garcia, Elizabeth. Universidad Autónoma del Estado de Morelos, PhD, 2010-2015. Dissertation title: "Sistemática de *Reithrodontomys megalotis* con base en datos moleculares y morfológicos".
12. Kirchner-Smith, Mackenzie. Hays State University, Kansas MS, 2015. Thesis title: "3D geometric morphometrics in modern and extinct foot-propelled diving birds: an evaluation of the tarsometatarsus for species identification".

11. Rudolf, Katie J. Indiana University, Department of Anthropology, PhD, 2015. Dissertation title: “an investigation of late woodland and mississippian biological relationships using odontometric and discrete trait analyses”.
10. Ascari, Silvia. Indiana University, Department of Geological Sciences, Masters, 2015. Thesis title: “isotopic analyses of fossil bones and teeth of herbivores and crocodiles from upper bed I, lower bed II, and upper bed II of the Olduvai Gorge, Tanzania”.
9. Parzer, Harald F. Indiana University, Department of Biology, PhD, 2013.
8. Herrmann, Edward. Indiana University, Department of Anthropology, PhD, 2013.
7. Muir, Chris. Indiana University, Department of Biology, PhD, 2013.
6. Green, Robin. Indiana University, Department of Geological Sciences, MS, 2013.
5. Costa, August. Indiana University, Department of Anthropology, PhD, 2012.
4. Puchalski, Stephaney. Indiana University, Department of Geological Sciences, PhD, 2011.
3. Morgenthien, James N. Indiana University, Department of Geological Sciences, Masters, 2011.
2. Uhen, Mark D. University of Michigan–Ann Arbor, Department of Geological Sciences, PhD, 1996.
1. Bloch, Jonathan I. University of Michigan–Ann Arbor, Department of Geological Sciences, MS, 1995.

Examiner, Graduate Dissertations and Theses

24. Inessa Voet, Muséum national d’Histoire naturelle, PhD, 2022 (Rapporteur). Dissertation title: “The evolution and phylogeography of crocidurine shrews”.
23. Lisandro Milocco, Helsinki University, PhD, 2022 (external examiner). Dissertation title: “Quantitative genetics in nonlinear genotype-phenotype maps”.
22. Abigail Parker, Cambridge University, PhD, 2022 (external examiner). Thesis title: “Body size histories in Cenozoic reptiles from global to community scales”.
21. Amy Tims, Macquarie University, Department of Biological Sciences, PhD, 2021 (external examiner). Thesis title: “Macroecology and conservation biology of Australian freshwater fishes: a big data approach”.
20. Thomas Clarke, Macquarie University, Department of Biological Sciences, MSc, 2017 (external examiner). Thesis title: “Drivers of spider body plans: time, geography, or climate?”
19. Heather Ahrens, Johns Hopkins University, School of Medicine, PhD, 2017 (external examiner). Dissertation title: “Phylogeny and locomotor ecomorphology of Oxyaenidae and macroevolutionary patterns in North American “Creodonta” (Mammalia, Placentalia)”.
18. Aidan Couzens, Flinders University, School of Biological Sciences, PhD, 2011-2017 (external examiner). Dissertation title: “Late Cenozoic evolution of the macropodoid dentition”.
17. Silvia Pineda-Muñoz, Macquarie University, PhD, 2011-2016 (external examiner). Dissertation title: “Diet, ecology and dental morphology in terrestrial mammals”.
16. Juha Saarinen, Helsinki University, PhD 2014 (external pre-examiner). Thesis title: “Ecometrics of large herbivorous land mammals in relation to climatic and environmental changes during the Pleistocene”.

15. Francois Gould, Johns Hopkins University, PhD 2012 (external reader). Dissertation title: "The morphology of the distal femoral articular surface and the evolution of cursoriality in ungulates".
14. Pedro Cordeiro Estrela de Andrade Pinto, Université Paris VI-Pierre et Marie Curie, PhD. 2005 (Rapporteur). Thesis title: "Systématique et evolution morphologique du genre *Calomys* Waterhouse 1837 (Rodentia, Cricetidae, Sigmodontidae, Phyllotini): Applications de methods de morphométrie géométrique, de reconnaissances de patrons et de reconstructions phylogénétiques en systématique évolutive".
13. Annette Mahon, Cambridge University, PhD, 2004 (external examiner).
12. Simon Harris, Bristol University, PhD, 2004 (external examiner).
11. Amal M. Al-Hassawi, University College London, PhD, 2004 (internal examiner).
10. Hilary Markham, Guy's Hospital, PhD, 2002 (internal examiner).
9. Julia Boughner, University College London, PhD, 2002 (internal examiner).
8. Will Harcourt-Smith, University College London, PhD, 2002 (internal examiner).
7. Dilshat Hewzulla, University of East London, PhD, 2001 (external examiner).
6. Sam Cobb, University College London, PhD, 2001 (internal examiner).
5. Andrea Webster, Imperial College London, PhD, 2001 (internal examiner).
4. Helen J. Chatterjee, University College London, PhD, 2000 (internal examiner).
3. Julia J. Day, University College London, PhD, 2000 (internal examiner).
2. Naoko Egi, Johns Hopkins University, PhD, 1998 (external reader).
1. Bryony Green, University College London, PhD, 1998 (internal examiner).

Undergraduate Students

Advisor, Research Programs

2. Deutsch, Michol. Individualized Major in "Paleontology", Indiana University, 2017-2019.
1. Reinke, Beth. Individualized Major in "Zoology", Indiana University, 2009-2012.

Advisor, Undergraduate Research Projects

43. Jessica Mo, Vanderbilt University, 2020-current
42. Daniel Rhoda, Indiana University, 2017-2020
41. Michol Deutsch, Indiana University, 2017-19
40. Andrew Reese, Indiana University, 2015-17
39. Kimberly Cook, Indiana University, 2015-17
38. Alexander Beyl, Indiana University, 2015-17
37. Charisse Mitchell, Charles Tindley School, Indianapolis, 2014-15
36. Alyssa Ruthkay, Indiana University, 2013-14
35. Mackenzie Kirchner-Smith, Indiana University, 2012-13
34. Beth Reinke, Indiana University, 2009-11
33. Georgina Adams, Queen Mary, University of London, 2005-6
32. Anup Gupta, Queen Mary, University of London, 2005-6
31. Shruti Karia, Queen Mary, University of London, 2005-6

30. Komal Khan, Queen Mary, University of London, 2005-6
29. Nicola MacGregor, Queen Mary, University of London, 2005-6
28. Rekha Sharma, Queen Mary, University of London, 2005-6
27. Lisa Wilson, Queen Mary, University of London, 2005-6
26. Rayhana Yasmin, Queen Mary, University of London, 2005-6
25. Angelina Ansah, Queen Mary, University of London, 2004-5
24. Kamaljit Attariwala, Queen Mary, University of London, 2004-5
23. Sabrina Campbell, Queen Mary, University of London, 2004-5
22. Simon Cyrus, Queen Mary, University of London, 2004-5
21. Kirran Khalid, Queen Mary, University of London, 2004-5
20. Lauren Morris, Queen Mary, University of London, 2004-5
19. David O'Milegan, Queen Mary, University of London, 2004-5
18. Elaine Wong, Queen Mary, University of London, 2004-5
17. Radhekshmi Caumul, Queen Mary, University of London, 2003-4
16. Alana George, Queen Mary, University of London, 2003-4
15. Cynthia Kanagasundaram, Queen Mary, University of London, 2003-4
14. Naz Qureshi, Queen Mary, University of London, 2003-4
13. Mohammed Ajmal, Queen Mary, University of London, 2002-3
12. Adwoa Asare, Queen Mary, University of London, 2002-3
11. Neha Bhardwaj, Queen Mary, University of London, 2002-3
10. Linh Hy, Queen Mary, University of London, 2002-3
9. Gengiz Gursoy, Queen Mary, University of London, 2001-2
8. Cherry Smith, Queen Mary, University of London, 2001-2
7. Christopher Strowbridge, Queen Mary, University of London, 2001-2
6. Helen Melvill, Queen Mary, University of London, 1999-2000
5. Ebitare Sawacha, Queen Mary, University of London, 1999-2000
4. Claire Sutton, Queen Mary, University of London, 1999-2000
3. Ajay K. Mathur, Queen Mary, University of London, 1998-9
2. Georgina E. Hirschler, University of Michigan, 1995-6
1. David T. Cohen, University of Michigan, 1995-6

Professional Society Memberships

American Association for the Advancement of Science (AAAS), American Geophysical Union (AGU), American Society of Mammalogists, American Society of Naturalists, Center for the Integrative Study of Animal Behavior (CISAB, IU), Indiana Academy of Sciences, Palaeontological Association, Paleontological Society, Sigma Xi, Society for the Study of Evolution, Society of Systematic Biology, Society of Vertebrate Paleontology

Professional Service

Editorships

2023-Present Associate Editor, *Evolutionary Journal of the Linnean Society*

2017-Present Editorial Board, *Peer Community in Paleontology*
 2013-Present Associate Editor, *Rocky Mountain Geology*
 2004-Present Editorial Board, *Systematic Biology*
 2007-Present Editorial Board, "Cambridge Studies in Morphology and Molecules: New Paradigms in Evolutionary Biology", Russell Ciochon and Gregg Gunnell, editors
 2017-2018 Guest Editor, *Historical Biology*, special issue in honor of Percy M. Butler
 2015-2016 Special Handling Editor, *Proceedings of the National Academy of Sciences (PNAS)*
 2012-2015 Editorial Board, *Palaeontology*
 2012-2015 Associate Editor, *Evolution*
 2003-2015 Executive Editor, *Palaeontologia Electronica*
 2002-2012 Associate Editor, *Palaeontology*
 2007 Associate Editor, *Acta Theriologica*
 2005 Guest Editor, *Journal of Mammalian Evolution*, special issue on mammalian paleobiology in honor of William Clemens.
 2001-2003 Associate Editor, *Journal of Paleontology*
 1999-2003 Senior Editor, *SVP Online*, Society of Vertebrate Paleontology
 1996-2003 Associate Editor, *Palaeontologia Electronica*
 1992-93 Senior Editor, *PaleoBios*, UC Berkeley
 1991-92 Assistant Editor, *PaleoBios*, UC Berkeley

Consultations

2018-2019 Exhibit consultant, Museum at Prairiefire, Overland Park, KS
 2007 Organizing group, PaleoAnthPortal (paleoanthportal.org)
 2007 External member, Vertebrate Paleontology Search Committee, Department of Paleobiology, Smithsonian Institution, Washington, DC
 2001-2006 Hunterian Museum Project Consultation Group, The Hunterian Museum, The Royal College of Surgeons of England, London
 2003 External member, Evolutionary Developmental Biology Search Committee, Department of Palaeontology, The Natural History Museum, London
 1996-1997 Advisory Committee, UK Web Focus, UK Office for Library and Information Networking, Joint Information Systems Committee, Higher Education Funding Councils
 1994 Consultant for GenenTech, Inc., South San Francisco, CA
 1992 Consultant for Bay Area Prep/Dinocards, San Francisco, CA
 1991 Consultant for California Academy of Sciences, San Francisco
 1990 Consultant for Marine World Africa USA, Vallejo, CA

Professional Committee Service

2021-present Chair, Nominating Committee, Society of Vertebrate Paleontology
 2020-present Member, Government Affairs Committee, Society of Vertebrate Paleontology

- 2021 Member, NSF Panel, Division of Biological Infrastructure, “Capacity: Biological Collections”
- 2019-2020 Member, US National Academy of Sciences Committee on “Assistance to the US Fish and Wildlife Service on Taxonomic Studies of the Red Wolf: A Review of Applications to Carry Out Research and Development of a Research Strategy.”
- 2018-2020 Immediate Past President, Society of Vertebrate Paleontology
- 2019 Witness, US House of Representatives Natural Resources Committee hearing on “Forgotten Voices: The Inadequate Review and Improper Alteration of Our National Monuments”, 13 March 2019.
- 2019 Member, AGI Ian Campbell Medal Nominating Committee, American Geosciences Institute
- 2016-2019 Panel Member, Ecosystems Working Group, Indiana Climate Change Impact Assessment
- 2016-2018 President, Society of Vertebrate Paleontology
- 2015-2017 Board Member, STEPPE (Sedimentary Geology, Time, Environment, Paleontology, Paleoclimatology, Energy) consortium to promote research and education on Earth’s deep-time sedimentary crust
- 2014-2016 President Elect, Society of Vertebrate Paleontology
- 2012-2015 Co-chair, iCCB (Integrative Climate Change Biology) program, International Union of Biological Sciences
- 2007-2014 Evaluation Committee, Paleobiology Database Summer Intensive Course
- 2001-2013 Member of the International *Sorex araneus* Cytogenetics Committee (ISACC) (chair 2008-2013)
- 2011-2013 Member, Paleontology Society Medal Committee, the Paleontological Society
- 2008-2012 Steering Group, iCCB (Integrative Climate Change Biology) program, International Union of Biological Sciences
- 2012 Proposal Reviewer, American Philosophical Society Lewis and Clark Fund for Exploration and Field Research and Franklin Research Grant programs
- 2009-2011 Student Grant Committee, The Paleontological Society.
- 2008-2011 Member, Advisory Board of Acta Theriologica. Polish Academy of Sciences, Białowieża
- 1994-2011 Member, Information Management Committee, Society of Vertebrate Paleontology
- 2005-2008 Executive Committee Member, Society of Vertebrate Paleontology, Member-at-Large
- 2002-2007 Member of Council, Palaeontological Association
- 2005 International Scientific Advisor. Centre of Excellence in Biodiversity Conservation and Mammal Research in European Terrestrial Ecosystems – BIOTER. Polish Academy of Sciences, Białowieża, Poland. EVK2-2002-00505-BIOTER
- 2002-2003 Treasurer, Coquina Press (publisher of Palaeontologia Electronica)

- 1998-2002 Chair, Information Management Committee, Society of Vertebrate Paleontology
- 1998-2002 Publications Committee (ex officio member), Society of Vertebrate Paleontology
- 1998-2002 Program Committee (ex officio member), Society of Vertebrate Paleontology
- 1996-1997 Web administrator, The Natural History Museum (London)
- 1993-1994 Web administrator, University of California Museum of Paleontology

Campus and University Service

- 2022-2023 Member, Research (Improving Technological and Physical Infrastructure for Research) Working Group, IUB 2030 Strategic Planning Commission, Indiana University
- 2022-Present Advisory Board Member, Institute of Advanced Study, Indiana University
- 2021-Present Member, University Faculty Council Budgetary Affairs Committee, Indiana University
- 2021-Present Member, Standing Committee for Research Misconduct, Indiana University, Bloomington
- 2020-Present Space committee, Multidisciplinary Sciences Building II, Indiana University, Bloomington
- 2020-Present Association of American Universities (AAU) PhD Education Initiative working group, Indiana University, Bloomington
- 2020-Present Advisory Board Member, Indiana Geological and Water Survey, Indiana University, Bloomington
- 2014-present Member, Wells Scholarship Evaluation Panel, Indiana University
- 2022 Member (ad hoc), Faculty Board of Review, Indiana University, Bloomington
- 2021 Member, search committee for Zooarchaeology, Anthropology, Indiana University, Bloomington
- 2021 Member, search committee for Multidisciplinary Sciences Building II building manager, College of Arts & Sciences, Indiana University, Bloomington
- 2019-2020 Steering Committee, Environmental Resilience Institute at Indiana University and Prepared for Environmental Change grand challenges initiative
- 2019 Interim Director, Center for Biological Research Collections, College of Arts and Sciences and Office for the Vice President for Research, Indiana University, Bloomington
- 2013-2019 Director, College Center for Biological Research Collections, College of Arts and Sciences and Office for the Vice President for Research, Indiana University, Bloomington
- 2017-2018 Member, Mather's Museum advisory committee for "800 Seasons: Bloomington through Continuity and Change" exhibit, Indiana University
- 2016-2018 Advisory Board Member, Glenn Black Laboratory for Archaeology. Office of the Vice Provost for Research, Indiana University
- 2018 Chair, McCalla Museum Committee, Indiana University
- 2017-2018 Associate Director, Environmental Resilience Institute at Indiana University and Prepared for Environmental Change grand challenges initiative

2017-2018 Chair, Faculty Misconduct Review Committee, Bloomington Faculty Council, Indiana University

2017-2018 Chair, search committees for Environmental Resilience Institute Fellows in stable isotope ecology and species distribution modeling, Indiana University

2017-2018 Member, search committees for Environmental Resilience Institute Fellows in migration patterns and migration processes, Indiana University

2017-2018 Member, search committees for implementation manager, administrative and project coordinator, and finance manager, Environmental Resilience Institute, Indiana University

2015-2017 Chair, Faculty Board of Review, Bloomington Faculty Council, Indiana University

2015-2016 Member, Dean of Students Advisory Committee, Indiana University

2013-2016 Chair, Advisory Board, Glenn Black Laboratory for Archaeology. Office of the Vice Provost for Research, Indiana University

2013-2014 Member, Faculty Board of Review, Bloomington Faculty Council, Indiana University

2011-2014 Member, Patten Foundation Committee, Indiana University

2013 Member, Task Force on the Future of Graduate Science Education at Indiana University, College of Arts and Sciences

2012-2013 Member, OVPR Search Committee for NAGPRA Project Director, Office of the Vice Provost for Research, Indiana University

2012-2013 Member, James Holland Teaching Award review committee, College of Arts and Sciences, Indiana University

2012 Member, OVPR Center and Institute Pooled Fund for Excellence proposal review committee, Office of the Vice Provost for Research, Indiana University

2011-2012 Member, Research Activities Committee, Bloomington Faculty Council, Indiana University

2011 Member, Indiana University, Bloomington Advisory Committee on Human Remains, Office of the Vice Provost for Research, Indiana University

2010-2011 Member, Dissertation Year Fellowships Committee, College of Arts and Sciences, Indiana University

2010-2011 Search Committee Member, Evolution of Human Behavior, College of Arts and Sciences, Indiana University

2001-2006 Licensed Instructor of Anatomy, under the UK Anatomy Act, University of London

2005-2006 Student Development Committee, Queen Mary, University of London

2003-2006 External Examiner, Anatomy and Developmental Biology, UCL

2002-2005 College Academic Board, Member, Queen Mary, University of London

2002-2003 External Examiner, Human Biology, Science and Engineering Foundation Course, The London College, University College Kensington

2000 Team member, Teaching Quality Assessment of Learning Resources, Queen Mary, University of London

1990 Dean's Academic Advisory Committee, UC Berkeley

Department Service

2020-Present	Department Chair, Earth & Atmospheric Sciences, Indiana University, Bloomington
2006-Present	Research Curator, IU Paleontological Collection, Dept. of Earth & Atmospheric Sciences
2021	Chair, conversion committee for Assistant Professor in Metal Isotopes, Earth & Atmospheric Sciences, Indiana University, Bloomington
2021	Chair, search committee for Lecturer in Earth Sciences, Earth & Atmospheric Sciences, Indiana University, Bloomington
2019-2020	Chair, tenure and promotion committee, Department of Earth & Atmospheric Sciences, Indiana University, Bloomington
2019-2020	Member, promotion committee Department of Earth & Atmospheric Sciences, Indiana University, Bloomington
2019-2020	Chair, Tenure and Promotion Committee, Dept. of Earth & Atmospheric Sciences
2019-2020	Member, Promotion Committee, Dept. of Earth & Atmospheric Sciences
2017-2018	Elected Member, Policy/Executive Committee, Dept. of Earth & Atmospheric Sciences, Indiana University
2017-2018	Member, IU Geological Field Station faculty oversight committee, Dept. of Earth & Atmospheric Sciences, Indiana University
2017-2018	Chair, IU Paleontology Collection Manager / CBRC project coordinator search, Dept. of Earth & Atmospheric Sciences
2017-2018	Chair, Atmospheric Sciences Search, Dept. of Earth & Atmospheric Sciences
2017-2018	Member, Geography Search Committee, Dept. Geography
2016-2018	Member, Undergraduate Committee, Dept. of Earth & Atmospheric Sciences
2017	Chair, Promotion Committee, Department of Earth & Atmospheric Sciences, Indiana University
2016-2017	Owen Award Committee, Dept. of Geol. Sciences
2011-2016	Computing Committee, Dept. of Geol. Sciences
2011-2016	Elected Member, Policy/Executive Committee, Dept. of Geol. Sciences
2014-2016	Member, Curriculum Revision Committee, Dept. of Geol. Sciences
2013-2015	Member, College Undergraduate Curriculum Assessment Committee, Indiana University
2011-2015	Member, IT Committee, Dept. of Geol. Sciences
2013-2014	Member, IU Geologic Field Station Advisory Committee, Dept. of Geol. Sciences
2011-2012	News Coordinator, Dept. of Geol. Sciences
2011-2012	Chair, Search Committee, Shrock Professorship in Sedimentary Geology, Dept. of Geol. Sciences
2011	Chair, Search Committee, Visiting Assistant Professor in Sedimentary Geology, Dept. of Geol. Sciences
2010-2011	Undergraduate Committee, Dept. of Geol. Sciences

2008-2010 Space Committee, Dept. of Geol. Sciences
2006-2007 Honors Undergraduate Co-advisor, Dept. of Geol. Sciences
2003-2006 Admissions Tutor for Biomedical Science and Bioinformatics, Queen Mary, University of London
2001-2003 Admissions Tutor for Molecular Biology and Biochemistry, Queen Mary, University of London
2000-2006 Board of Examiners, Bachelor of Dental Science Part 1, Queen Mary, University of London
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1998-2001 Fire Marshall, 2nd Floor BMS Building, Queen Mary, University of London

Other

Languages. Reading and Speaking: Russian, Spanish. Translation: French, German, Arabic, Old English, Middle Welsh. Computer: Mathematica, PERL, (Visual)Basic, C++, Pascal, php, R, SQL

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P. David Polly

Lifetime Publication List

⊕ undergraduate student coauthor; ✧ graduate student coauthor; ✕ postdoc coauthor

PDFs of publications available at: <https://pollylab.indiana.edu/publications/>

Citation data available at: <http://scholar.google.com/citations?hl=en&user=aPOrK60AAAAJ>

Peer-Reviewed Articles

141. ✧ Ascari, S. H. and **P. D. Polly**. **In revision**. Geometric morphometric analysis of the enlarged second claws of deinonychosaurs (Dinosauria, Deinonychosauridae) suggests they were used for pinning prey, not climbing. *PLoS One*.
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