PETER DANIEL WILF

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**EMPLOYMENT**

Professor of Geosciences, Pennsylvania State University, July 2013–.

**OTHER APPOINTMENTS**

National Museum of Natural History, Smithsonian Institution, Research Associate from 2001.

Faculty associate: Institutes of Energy and the Environment (co-funded faculty), Department of Biology (adjunct faculty), Earth and Environmental Systems Institute (faculty associate), and Plant Institute of the Huck Institutes of the Life Sciences, Pennsylvania State University.

Member of the IUCN Species Survival Commission Global Tree Specialist Group, 2020–.

Associate Professor of Geosciences, Pennsylvania State University 2007–2013.

Assistant Professor of Geosciences, Pennsylvania State University 2002–2007.

Denver Museum of Nature & Science, Research Associate 2002–2014.

**EDUCATION AND PRINCIPAL EXPERIENCE**

1999–2002: Michigan Fellow and Visiting Assistant Professor, Museum of Paleontology, Department of Geological Sciences, and Michigan Society of Fellows, University of Michigan, Ann Arbor.

1998–1999: Postdoctoral Fellow, Department of Paleobiology, National Museum of Natural History, Smithsonian Institution, Washington, DC.

1998: Ph.D., Department of Geology, University of Pennsylvania.

1988–1993: Performing musician, Philadelphia and New York City. Major band: *Intuitive Music Unit* (IMU), original, instrumental music, avant-blues-jazz-fusion.

1987: Pushkin Institute, Moscow. Russian language summer training program, American Council of Teachers of Russian.

1985–1988: Teacher of 7th and 8th grade mathematics, life science, and physical science, Westfield Friends School, Cinnaminson, NJ (full-time).

1985: B.A. Cum Laude, University of Pennsylvania: Russian History, Music and Mathematical Science. Benjamin Franklin Scholar.

1981: Friends’ Central School. National Merit Scholar, Cum Laude, Foreign Language Award, Top Male Student Award.

**MAJOR RESEARCH INTERESTS**

I am a paleobotanist who uses fossil plants to investigate ancient ecosystems, biogeography, past environmental change, and the evolution and extinction of plants and plant-insect associations. I emphasize questions with relevance for modern climate change, biodiversity, biogeography, conservation, and ecology. Principal field areas include southern Argentina, several countries in SE Asia, and the Western Interior USA.

**HONORS AND FELLOWSHIPS**

2022: Fellow, American Association for the Advancement of Science (AAAS).

2022: Wilson Award for Excellence in Research, Penn State College of Earth & Mineral Sciences.

2017: Fellow, Paleontological Society.

2016: Fellow, Geological Society of America.

2016: Paul F. Robertson Breakthrough of the Year Award, Penn State College of Earth & Mineral Sciences.

2015: Visiting Researcher, Faculty of Science, Universiti Brunei Darussalam, Brunei.

2014: Distinguished Member, National Society of Collegiate Scholars.

2013: George W. Atherton Award for Excellence in Teaching, Pennsylvania State University.

2011: Kavli Fellow, National Academy of Sciences and Alexander von Humboldt Foundation, 2011 German-American Frontiers of Science Symposium.

2011: Faculty honoree, First Year Experience Faculty Appreciation Luncheon.

2009–2012 Distinguished Lecturer, The Paleontological Society.

2005–2010: David and Lucile Packard Fellow in Science and Engineering.

2005–2008: John T. Ryan Jr. Faculty Fellow, Penn State College of Earth and Mineral Sciences.

1999–2002: Michigan Fellow, University of Michigan.

1998–1999: Postdoctoral Fellow, Department of Paleobiology, National Museum of Natural History, Smithsonian Institution.

1997: Predoctoral Fellow, National Museum of Natural History, Smithsonian Institution.

1996–1997: Dissertation Fellow, University of Pennsylvania School of Arts and Sciences.

1996: Dean's Scholar, University of Pennsylvania.

1990: Band (I.M.U.) nominated for "Best New Jazz Artist" category of Philadelphia Music Awards by Philadelphia Music Foundation, June, 1990.

**RESEARCH GRANTS**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ***In progress*** | **Role** | **Dates** | **Title** | **Source** | **Amount** |
| P. Wilf, T. Serre, M.A. Gandolfo | Lead  PI | 7/15/2019-6/30/2024  (ext. to 6/30/2025) | Collaborative Research: Origins of Southeast Asian Rainforests from Paleobotany and Machine Learning | NSF, EAR-FRES (Frontier Research in Earth Sciences) EAR 1925755 / 1925481 / 1925552 | $2,700,000 ($1,560,000 to PSU, rest to Brown and Cornell) |
| P. Wilf, M.A. Gandolfo, N.R. Cúneo, E.A. Hajek | Lead  PI | 4/1/2016-3/31/2020 (final ext. to 8/31/2024) | Collaborative  Research: Patagonian Fossil Floras, the Keys to the Origins, Biogeography, Biodiversity, and  Survival of the Gondwanan Rainforest Biome | NSF, DEB-SBS (Systematics and Biodiversity Sciences) DEB-1556666 / 1556136 | $1,429,024  ($992,847  to PSU, rest to Cornell; plus $36,720 covid supplement to PSU) |
| ***Completed*** | | | | | |
| P. Wilf | PI | 3/15/15-6/30/16 | Travel Grant: First paleobotanical reconnaissance of Brunei | Penn State Institutes of Energy and Environment | $12,500 |
| P. Wilf, M.A. Gandolfo, N.R. Cúneo, R.L. Slingerland, A. Iglesias | Lead  PI | 8/15/2009-7/31/2015 [w/ 1 yr. ext.] | Collaborative Research: Ancient Biodiversity Hotspot in Southern South America: Evolution of Speciose Floras in Patagonia from Latest Cretaceous to Middle Eocene | NSF, DEB-Biodiversity Surveys and Inventories:  DEB-0919071 / 0918932 | $1,572,746  ($1,081,496  to PSU, rest to Cornell) |
| P. Wilf | PI | 10/15/2005-10/14/2010 (ext. 10/31/2015) | David and Lucile Packard Fellowship for Science and Engineering | The David and Lucile Packard Foundation | $725,000 |
| P. Wilf, M.A. Gandolfo, N.R. Cúneo, C.C. Labandeira, K.R. Johnson | PI | 2004-2009 | Extremely diverse fossil floras from the Paleogene of Patagonia, Argentina: Implications for origins of high plant and insect diversity in South America | NSF, DEB-Biodiversity Surveys and Inventories and EAR-Geology and Paleontology | $525,000 |
| P. Wilf | PI | 2005-2008 | John T. Ryan, Jr. Faculty Fellowship | Penn State College of Earth and Mineral Sciences | $33,000 |
| P. Wilf, D. Royer | PI | 2004-2007 | Why do leaves have teeth? Breakthroughs in paleoclimate analysis from biological understanding of leaf shape | ACS-PRF Type AC | $80,000 |
| P. Wilf | PI | 2003-2006 | Acquisition of equipment for a paleobotany laboratory at Penn State | NSF, EAR GEO-Instrumentation and Facilities | $42,130 |
| P. Wilf, M.A. Gandolfo, N.R. Cúneo, K.R. Johnson | PI | 2002-2004 | Investigations of exceptionally diverse floras from the Paleogene of Patagonia | National Geographic Society Committee for Research and Exploration | $20,600 |
| P. Wilf | PI | 2004 | Recovery of plant-insect associations from the end-Cretaceous extinction, Great Plains region, USA | American Philosophical Society | $4,000 |
| P. Wilf | PI | 2003 | Terrestrial paleobiology of South America, Cretaceous through Neogene | ACS-PRF Type SE | $2,400 |
| P. Wilf, D. Uhl | PI | 2003-2004 | Leaf venation density as a tool for understanding ancient vegetation, plant-animal interactions, and climate changes | Wilson Research Initiation Grant (from Penn State EMS College) | $6,266 |
| C.C. Labandeira, P. Wilf, K.R. Johnson | Co-PI | 2001-2003 | From the latest Cretaceous to the early Eocene: Role of temporal scale for understanding change in plant-insect associations | Smithsonian Scholarly Studies | $46,000 |
| P. Wilf | PI | 2001 | A new look at leaves as climate indicators | Univ. Michigan Undergraduate Research Opportunities Program, Faculty Mini-Grant | $2,300 |
| C.C. Labandeira, P. Wilf, K.R. Johnson | Co-PI | 2001 | Insect herbivore response to the early Cenozoic thermal interval | National Geographic Society Committee for Research and Exploration | $3,400 |
| P. Wilf | PI | 2000-2003 | A new look at leaves as climate indicators | ACS-PRF Type G | $25,000 |
| P. Wilf | PI | 1997 | Global warming 55 million years ago: How was the vegetation of South America affected? | University of Pennsylvania Research Foundation and Andrew W. Mellon Foundation | $10,000 |
| P. Wilf | “PI” | 1994, 1995 | Student grants from the societies (5 total) | Geological Society of America (2), Sigma Xi (2), Paleontological Society | $5,050 |

**INVITED PROFESSIONAL TALKS** (103)

2023, October. Pennsylvania Botany Symposium workshop, *Introduction to Plant Fossils and Paleobotany*.

2023, May. Stanford University, Department of Geological Sciences (in-person).

2022, August. Penn State University, Department of Geosciences (in-person).

2022, June. 11th European Palaeobotany and Palynology Conference, Sweden (in-person), for symposium *Palaeozoic and Mesozoic plant extinctions, hyperthermals and anoxia events*.

2022, April. New England Botanical Society (virtual, youtube [link](https://youtu.be/QZcnZc9qupA)).

2022, February. SOL Seminar Online, *Lantern Fruits of Gondwana* (virtual, youtube [link](https://youtu.be/CgPIGlHdcWw)).

2022, February. Harvard University, Department of Organismic and Evolutionary Biology (virtual).

2021, March. Keynote, *Milestones of Palaeontology and Quaternary Geology in Indonesia,*

*a conference in honor of the retirement of Prof. Yahdi Zaim.* Bandung Institute of Technology (virtual).

2020, February. Harvard University, Department of Organismic and Evolutionary Biology.

2019, November. Keynote, Lock Haven University Natural Science Convocation.

2019, July. Keynote, *Flora Malesiana Symposium 11*, Universiti Brunei Darussalam.

2019, April. Univ. Colorado Boulder, Department of Geological Sciences.

2018, November. Keynote, Entomological Societies of America and Canada Meeting, Vancouver, for symposium *Climate change: shifts in the geographical ranges and outbreak dynamics of forest insect pests and impacts on forest health*.

2018, November. University of British Columbia, Department of Forest & Conservation Sciences.

2018, November. Pennsylvania Botany Symposium, Penn State University.

2018 October. Boise State University Symposium: Forum on Biodiversity of Global Hotspots.

2018, July, Singapore Botanic Gardens Speaker Series.

2018, July. *Botany 2018*, Rochester, Minnesota, for colloquium *Plants at the Cretaceous-Paleogene boundary.*

2018, July. *Botany 2018*, Rochester, Minnesota, for colloquium *Fossil plants at the intersection of evo-devo and phylogeny: celebrating the contributions of Gar W. Rothwell to biodiversity and evolution.*

2018, July. Association for Tropical Biology and Conservation 55th Annual Meeting, Kuching, Malaysia, for symposium *Origins, assembly and evolution of the South and SE Asian biota: insights from rocks, fossils, genes and plots.*

2018, June. Xishuangbanna Tropical Botanical Garden, Yunnan (Paleoecology Group).

2018, May. For 13th Harvard Plant Biology Symposium, *Natural History Collections in the Anthropocene*.

2017, October, “Lightning Talk” for EdTech Engage Symposium, *AI and Machine Learning in Higher Ed*, Penn State.

2017, August. 3rd Southeast Asian Gateway Evolution Meeting, Bogor, Indonesia, for symposium *Origins of the Southeast Asian Rainforest,*

2017, June. For symposium *The Role of Boundaries in Plant Diversification*, *Botany 2017*, *Fort Worth*.

2017, May. The Holden Arboretum, Scientist Lecture Series.

2016, June. Museo Egidio Feruglio, Trelew, Argentina.

2016, January. Steinmann Institut für Geologie, Mineralogie und Paläontologie, Universität Bonn.

2016, January. Max Planck Institute for Plant Breeding Research, Cologne, Germany.

2015, September. Arizona State University, School of Life Sciences.

2015, July. For *Botany 2015* (Edmonton) Colloquium, *Mesozoic and Cenozoic plant evolution and biotic change: A symposium in honor of Ruth Stockey*.

2015, May. Universiti Brunei Darussalam, Dept. of Petroleum Geoscience.

2015, February. Bucknell University, Dept. of Geology.

2015, January, Penn State University, Dept. of Geography.

2014, November, Plenary Lecture for *Plants 2014, International Conference on Advances in Plant Sciences*, Kuching, Malaysia.

2014, October, Penn State University, Dept. of Biology.

2014, August. Herbarium Bogoriense, West Java, Indonesia.

2014, May, Polar Center, Penn State University.

2014, March, 59th Ermine Cowles Case Memorial Lecture, University of Michigan, Museum of Paleontology.

2014, February, 10th North American Paleontological Conference, Gainesville, for session: *The Cretaceous-Paleogene Gondwanan Expressway*.

2014, January, University of Chicago, Department of Geophysical Sciences.

2013, February, Michigan State University, Department of Geological Sciences.

2012, November, University of Illinois at Urbana-Champaign, Program in Ecology, Evolution, and Conservation Biology.

2012, November, Pittsburgh Geological Society.

2012, October, Swarthmore College, Department of Biology, *The Challenges of Climate Change* series.

2012, February, University of Wisconsin-Madison, Department of Geoscience.

2011, November, Swarthmore College, Department of Mathematics and Statistics.

2011, October, University of North Carolina, Wilmington, for National Fossil Day.

2011, October, Pennsylvania State University, School of Forest Resources.

2011, September, Packard Fellows 23rd Annual Meeting, Monterey.

2011, July, International Botanical Congress, Melbourne, Australia, for Session: *Cenozoic Paleofloras of the Southern Hemisphere: Analyzing Ancient Floras Using Modern Techniques.*

2011, May, University of Buenos Aires, Argentina: Instituto de Geociencias Básicas, Aplicadas y Ambientales de Buenos Aires, Departamento de Ciencias Geológicas, y la Asociación Argentina de Sedimentología.

2011, April, University of California Riverside, Department of Earth Sciences.

2011, April, NAS / Humboldt Foundation 17th Annual German-American Kavli Frontiers of Science symposium, Irvine, CA, for Session: *Climate Change and Biodiversity: Paradise Lost or Found?* Online at http://www.nasonline.org/programs/kavli-frontiers-of-science/multimedia-gallery/peter-wilf.html.

2011, February, University of Indiana, Bloomington, Department of Geological Sciences.

2011, January, University of Washington, Department of Biology.

2010, December, Lafayette College, Department of Geology & Environmental Geosciences.

2010, November, University of Illinois at Chicago, Department of Earth and Environmental Sciences.

2010, October, University of North Carolina, Distinguished Seminar in Ecology and Evolutionary Biology, Department of Biology.

2010, September, Yale University, Department of Geology and Geophysics.

2010, July, Genes to Geosciences Outlook, Macquarie University, Australia.

2010, March. University of Kansas, Charles D. Michener Lecture, Department of Ecology and Evolutionary Biology and Department of Geology.

2010, February, VI Southern Connection Congress, Bariloche, Argentina.

2009, October. Penn State University, Earth Talks series.

2009, January. Penn State University, Department of Biology.

2008, November. Keynote speaker, XII Simpósio Brasileiro de Paleobotânica e Palinologia, Florianópolis, Santa Catarina, Brazil.

2008, October. Drexel University, Department of Bioscience and Biotechnology.

2008, October. For Paleontological Society Centennial Short Course, *From Evolution to Geobiology: Research Questions Driving Paleontology at the Start of a New Century.* In conjunction with the Centennial Meeting of the Paleontological Society, at GSA, Houston.

2008, February. Wesleyan University, Department of Earth and Environmental Sciences.

2007, September. Penn State University, Ecology Program.

2007, April. University of California, Santa Cruz, Department of Earth Sciences (two talks).

2007, April. University of California, Berkeley, Department of Integrative Biology.

2007, April. Stanford University, Department of Geological & Environmental Sciences.

2007, March. University of New Mexico, Department of Biology (two talks).

2006, November. Museo Paleontológico Egidio Feruglio, Trelew, Argentina.

2006, October. Harvard University, Earth History and Paleobiology Seminar Series.

2006, September. Packard Fellows 18th Annual Meeting, Monterey.

2006, August. Smithsonian Tropical Research Institute, Republic of Panama (2 talks).

2006, June. Second International Paleontological Congress, Beijing. For Special Session, *Geo-biodiversity: Taxa, Morphology, and Ecology*.

2006, January. Yale University, Department of Geology and Geophysics.

2004, February. Penn State University, Department of Entomology.

2003, June. National Museum of La Plata, Argentina.

2003, September. Syracuse University, Department of Earth Sciences.

2003, February. For AAAS Annual Meeting symposium, *Lessons from disturbed land ecosystems in the fossil record,* Denver.

2003, February. University of Pennsylvania, Department of Earth and Environmental Science.

2002, November. Paleontological Association of Argentina, Buenos Aires.

2002, November. For *Insect extinction: historical and ecological patterns*, symposium for Entomological Society of America Annual Meeting, Fort Lauderdale.

2002, July. *Workshop on Cretaceous climate and ocean dynamics*, Florissant, Colorado, sponsored by JOI/USSP.

2001, April. Department of Geosciences, Pennsylvania State University.

2001, March. Virginia Polytechnic Institute, Department of Geological Sciences,.

2001, January. University of Michigan, Department of Biology.

2000, December. Smithsonian Institution, Department of Paleobiology, National Museum of Natural History.

2000, September. Yale University, *Topics in Global Change* seminar series, Department of Geology and Geophysics.

2000, September. Carnegie Museum of Natural History.

2000, May. University of Balochistan and Geological Survey of Pakistan, Quetta, Pakistan.

1999, October. Pardee Keynote Symposium, *Globally warm climates of the early Cenozoic: Evidence, causes and biotic consequences*, Geological Society of America Annual Meeting, Denver.

1999, October. University of Michigan, Turner Lecture, Department of Geological Sciences.

1999, October. Field Museum of Natural History, Department of Geology.

1999, January. Florida Museum of Natural History, Department of Natural Sciences.

1998, December. Smithsonian Institution, Department of Paleobiology, National Museum of Natural History.

1998, October. University of Chicago, Department of Geophysical Sciences.

1997, October. George Washington University, Department of Geology.

1997, September. Field Museum of Natural History, Department of Geology.

1996, April. Geological Society of America Penrose Conference, *Paleocene-Eocene boundary events in time and space*, Albuquerque.

**PUBLICATIONS**

key: \*Undergraduate; †Graduate Student; ‡Postdoc; °Visiting Scholar at time principal work was done, at Penn State or lab of close collaborator.

Includes 7 *Science*, 1 *Nature*, 7 *PNAS*.

***Peer reviewed***

(113) Zonneveld, J-P, Y. Zaim, Y. Rizal, Aswan, DM Boyer, RL Ciochon, T Smith, J Head, P Wilf, JI Bloch. Avian foraging on an intertidal mudflat succession in the Eocene Tanjung Formation, Asem Asem Basin, South Kalimantan, Indonesia. Accepted pending revisions, *Palaios*.

(112) Zonneveld, J-P, N Adani, Aswan, JI Bloch, A Briguglio, RL Ciochon, LJ Cotton, A Hascaryo, J Head, J Luque, N Santodomingo, T Smith, J Todd, P Wilf, Y Rizal, Y Zaim. Stratigraphy, paleontology and depositional setting of the Upper Eocene (Priabonian) Lower Pagat Member, Tanjung Formation, in the Asem Asem Basin, South Kalimantan, Indonesia. *Journal of Paleontology*, in press.

(111) Wilf P, RM Kooyman. 2023. Do Southeast Asia's paleo-Antarctic trees cool the planet? *New Phytologist* 239, 1556–1566 (Viewpoint; cover article).

(110) Wilf P, MR Carvalho, E Stiles. 2023. The end-Cretaceous plant extinction: heterogeneity, ecosystem transformation, and insights for the future. *Cambridge Prisms: Extinction* 1, e14. (invited review).

(109) Andruchow-Colombo‡ A, G Rossetto-Harris†, TJ Brodribb, MA Gandolfo, P Wilf. 2023. A new fossil *Acmopyle* with accessory transfusion tissue and potential reproductive buds: direct evidence for ever-wet rainforests in Eocene Patagonia. *American Journal of Botany* 110, e16221.

(108) Donovan† MP, P Wilf, A Iglesias, NR Cúneo, CC Labandeira. 2023. Insect herbivore and fungal communities on *Agathis* (Araucariaceae) from the latest Cretaceous to Recent. *PhytoKeys* 226, 109–158.

(107) Deanna R, C Martínez, S Manchester, P Wilf, A Campos, S Knapp, FE Chiarini, GE Barboza, G Bernardello, H Sauquet, E Dean, A Orejuela, SD Smith. 2023. Fossil berries reveal global radiation of the nightshade family by the early Cenozoic. *New Phytologist* 238: 2685–2697.

(106) Wilf P, A Iglesias, MA Gandolfo. 2023. The first Gondwanan Euphorbiaceae fossils reset the biogeographic history of the *Macaranga-Mallotus* clade. *American Journal of Botany* 110, e16169.

(105) Rossetto-Harris† G, E Stiles†, P Wilf, MP Donovan, X Zou\*. 2022. Rapid character scoring and tabulation of large leaf-image libraries using Adobe Bridge. *Applications in Plant Sciences* 10, e11500.

(104) Matel\* TP, MA Gandolfo, EJ Hermsen, P Wilf. 2022. Cunoniaceae infructescences from the early Eocene Laguna del Hunco flora, Patagonia, Argentina. *American Journal of Botany* 109, 986–1003.

(103) Spagnuolo\* EJ, P Wilf, T Serre. 2022. Decoding family-level features for modern and fossil leaves from computer-vision heat maps. *American Journal of Botany* 109, 768–788.

(102) Kooyman RM, SJ Ivory, AJ Benfield†, P Wilf. 2022. Gondwanan survivor lineages and the high-risk biogeography of Anthropocene Southeast Asia. *Journal of Systematics and Evolution* 60, 715–727. (invited cover article)

(101) Wilf P, X Zou\*, MP Donovan†, L Kocsis, A Briguglio, D Shaw, JWF Slik, JJ Lambiase. 2022. First fossil-leaf floras from Brunei Darussalam show dipterocarp dominance in Borneo by the Pliocene. *PeerJ* 10, e12949. doi:10.7717/peerj.12949.

(100) Benton MJ, P Wilf, H. Sauquet. 2022. The Angiosperm Terrestrial Revolution and the origins of modern biodiversity. *New Phytologist* 233, 2017–2035 (Tansley Review).

(99) Wilf P, SL Wing, HW Meyer, J Rose†, R Saha†, T Serre, NR Cúneo, MP Donovan, DM Erwin, MA Gandolfo, E González-Akre, F Herrera, S Hu, A Iglesias, KR Johnson, TS Karim, X Zou\*. 2021. An image dataset of cleared, x-rayed, and fossil leaves vetted to plant family for human and machine learning. *PhytoKeys* 187, 93–128.

(98) Andruchow-Colombo† A, P Wilf, IH Escapa. 2021. Reaffirming the phyllocladoid affinities of *Huncocladus laubenfelsii* (Podocarpaceae) from the early Eocene of Patagonia – a comment on Dörken et al. (2021). *Botanical Journal of the Linnean Society* 197, 554–557.

(97) Brea M, A Iglesias, P Wilf, E Moya, MA Gandolfo. 2021. First South American record of *Winteroxylon*, Eocene of Laguna del Hunco (Chubut, Patagonia, Argentina): new link to Australasia and Malesia. *International Journal of Plant Sciences* 182, 185–197.

(96) Iglesias A, P Wilf, E Stiles†, R Wilf. 2021. Patagonia’s diverse but homogeneous early Paleocene forests: angiosperm leaves from the Danian Salamanca and Peñas Coloradas formations, San Jorge Basin, Chubut, Argentina. *Palaeontologia Electronica* 24, art. 2a, doi:10.26879/1124.

(95) DeGrange FJ, D Pol, P Puerta, P Wilf. 2021. Unexpected larger distribution of Paleogene stem-rollers (Aves, Coracii): new evidence from the Eocene of Patagonia, Argentina. *Scientific Reports* 11, art. 1363 doi: 10.1038/s41598-020-80479-8.

(94) Gosses† J, A Carroll, B Bruck, B Singer, B Jicha, E Aragón, A Walters, P Wilf. 2021. Facies interpretation and geochronology of diverse Eocene floras and faunas, northwest Chubut Province, Patagonia, Argentina. *Geological Society of America Bulletin* 133, p. 740–752.

(93) Donovan† MP, P Wilf, A Iglesias, NR Cúneo, CC Labandeira. 2020. Persistent biotic interactions of a Gondwanan conifer from Cretaceous Patagonia to modern Malesia. *Communications Biology* 3, 708 doi:10.1038/s42003-020-01428-9.

(92) Stiles† E, P Wilf, A Iglesias, MA Gandolfo, NR Cúneo. 2020. Cretaceous-Paleogene plant extinction and recovery in Patagonia. *Paleobiology* 46, 445–469 (Featured Article).

(91) Deanna R, P Wilf, MA Gandolfo. 2020. New physaloid fruit-fossil species from early Eocene South America. *American Journal of Botany* 107, 1749–1762.

(90) Pujana RR, P Wilf, MA Gandolfo. 2020. Conifer wood assemblage dominated by Podocarpaceae, early Eocene of Laguna del Hunco, central Argentinean Patagonia. *PhytoKeys* 156, 81–102.

(89) Rossetto-Harris† G, P Wilf, IH Escapa, A Andruchow-Colombo†. 2020. Eocene *Araucaria* Sect. *Eutacta* from Patagonia and floristic turnover during the initial isolation of South America. *American Journal of Botany* 107, 806–832.

(88) Barreda VD, MC Zamaloa, MA Gandolfo, C Jaramillo, P Wilf. 2020. Early Eocene spore and pollen assemblages from the Laguna del Hunco fossil-lake beds, Patagonia, Argentina. *International Journal of Plant Sciences* 181, 594–615.

(87) Wilf P. 2020. Eocene “*Chusquea*” fossil from Patagonia is a conifer, not a bamboo. *PhytoKeys* 139: 77–89.

(86) Bippus† AC, IH Escapa, P Wilf, AMF Tomescu. 2019. Fossil fern rhizomes as a model system for biotic interactions across geologic time: Evidence from Patagonia. *PeerJ* 7, e8244.

(85) Wilf P, KC Nixon, MA Gandolfo, NR Cúneo. 2019. Eocene Fagaceae from Patagonia and Gondwanan legacy in Asian rainforests. *Science* 364, eaaw5139 (Research Article).

(84) Kooyman RM, RJ Morley, DM. Crayn, EM. Joyce, M Rossetto, JWF Slik, JS Strijk, T Su, J-YS Yap, P Wilf. 2019. Origins and assembly of Malesian rainforests. *Annual Review of Ecology, Evolution and Systematics*, v.50, p. 119–143.

(83) Andruchow-Colombo† A, P Wilf, IH Escapa. 2019. A South American fossil relative of *Phyllocladus*: *Huncocladus laubenfelsii* gen. et sp. nov. (Podocarpaceae), from the early Eocene of Laguna del Hunco, Patagonia, Argentina. *Australian Systematic Botany*, v. 32, p. 290–309*.*

(82) Andruchow-Colombo† A, IH Escapa, RJ Carpenter, RS Hill, A Iglesias, A Abarzua, P Wilf. 2019. Oldest record of scale-leaved Podocarpaceae, early Paleocene of Patagonia, Argentina. *Alcheringa*, v. 43, p. 127–145.

(81) Jud‡ NA, A Iglesias, P Wilf, MA Gandolfo. 2018. Fossil moonseeds from the Paleogene of West Gondwana (Patagonia, Argentina). *American Journal of Botany,* v. 105, p. 927–942.

(80) Donovan† MP, A Iglesias, P Wilf, CC Labandeira, NR Cúneo. 2018. Diverse plant-insect associations from the latest Cretaceous and early Paleocene of Patagonia, Argentina. *Ameghiniana*, v. 55, p. 303–338.

(79) Escapa IH, A Iglesias, P Wilf, SA Catalano, MA Caraballo-Ortiz, NR Cúneo. 2018. *Agathis* trees of Patagonia’s Cretaceous-Paleogene death landscapes and their evolutionary significance. *American Journal of Botany*, v. 108, p. 1345–1368.

(78) Carpenter RJ, A Iglesias, P Wilf. 2018. Early Cenozoic vegetation in Patagonia: new insights from organically preserved plant fossils (Ligorio Márquez Formation, Argentina). *International Journal of Plant Sciences*, v. 179, p. 115–135.

(77) Wilf P, MP Donovan†, NR Cúneo, MA Gandolfo. 2017. The fossil flip-leaves (*Retrophyllum*, Podocarpaceae) of southern South America. *American Journal of Botany*, v. 104, p. 1344–1369.

(76) Jud‡ NA, MA Gandolfo, A Iglesias, P Wilf. 2018. Fossil flowers from the early Palaeocene of Patagonia, Argentina with affinity to Schizomerieae (Cunoniaceae). *Annals of Botany*, v. 121, p. 431–442.

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(74) Wu° J-Y, Wilf P, Ding S-T, An P-C, Dai J. 2017. Late Miocene *Cyclocarya* (Juglandaceae) from southwest China and its biogeographic implications. *International Journal of Plant Sciences*, v. 178, p. 580–591.

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And numerous musical compositions (see Music).

***Recent abstracts*** (oral unless poster indicated; see Addendum for older abstracts)

key: \*undergraduate author; †graduate student; ‡postdoc at time work was done, at PSU or close collaborator lab.

**2023**

Andruchow-Colombo A, G Rossetto-Harris†, TJ Brodribb, MA Gandolfo, P Wilf. 2023. A new species of *Acmopyle* (Podocarpaceae) with preserved accessory transfusion tissue from the early Eocene of Argentinean Patagonia. *Botany 2023, Boise, Idaho.*

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Przybylski\*, PJ, EJ Spagnuolo†, LA Giraldo†, P Wilf, M Ul-Haq, SL Wing, WC Clyde. 2023. Insect damage on the Indo-Pakistan collision front (Ghazij Fm., Balochistan, Pakistan): first tropical insect damage for the early Eocene climatic optimum. *Geological Society of America Annual Meeting, Pittsburgh*. [poster]

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Spagnuolo†, EJ, D Shaw, P Wilf, PJ Przybylski\*, M Ul-Haq, SL Wing, WC Clyde. 2023. Into- or out-of-India? Early Eocene pollen and macrofossils from the Ghazij Formation in Balochistan, Pakistan test long-standing biogeographic hypotheses. *Geological Society of America Annual Meeting, Pittsburgh*.

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**2022**

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Patagonia. *Geological Society of America Annual Meeting, Denver*. [poster]

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Rodriguez† IF, T Fel†, M Vaishnav, P Wilf, T Serre. 2022. Using artificial intelligence to identify fossil angiosperm leaves at family level. *Geological Society of America Annual Meeting, Denver*.

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Wang†, T-X, J Huang, J Liu, T Van Do, HB Nguyen, T Su, P Wilf. 2022. Fossil leaves of figs (*Ficus* L., Moraceae) with in-situ cuticles from the Pliocene of central Vietnam. *Botany 2022, Anchorage.*

Wang†, T-X, J Huang, J Liu, S-T Zhang, T Van Do, HB Nguyen, T Su, P Wilf. 2022. New Pliocene flora from central Vietnam — an ancient analog of mainland Southeast Asia’s tropical seasonal forests. *Geological Society of America Annual Meeting, Denver*. [poster]

Wilf P, MR Carvalho, E Stiles. 2022. Was the end-Cretaceous plant extinction geographically heterogeneous? 11th European Palaeobotany and Palynology Conference, June 2022, Stockholm, Sweden (invited).

Wilf P, A Iglesias, MA Gandolfo. 2022. The first Gondwanan Euphorbiaceae fossils reset the biogeographic history of the diverse, paleotropical *Macaranga-Mallotus* clade. *Geological Society of America Annual Meeting, Denver.*

Wilf P, X Zou\*, MP Donovan†, L Kocsis, A Briguglio, D Shaw, JWF Slik, JJ Lambiase. 2022. First fossil-leaf floras from Brunei Darussalam show dipterocarp dominance in Borneo by the Pliocene. 11th European Palaeobotany and Palynology Conference, June 2022, Stockholm, Sweden.

Zonneveld J-P, Y Zaim, Y Rizal, Aswan, A Hascaryo, J Luque, N Santodomingo Aguilar, J Todd, P Wilf, JI Bloch. 2022. Stratigraphy, paleontology and depositional setting of the upper Eocene (Priabonian) Pagat Member, Tanjung Formation in the Satui area, Asem Asem Basin, South Kalimantan, Indonesia. *Geological Society of America Annual Meeting, Denver.*

**2021**

Matel\* TP, MA Gandolfo, EJ Hermsen, P Wilf. 2021. New reproductive structures of Cunoniaceae tribe Cunonieae from the early Eocene Laguna del Hunco flora, Chubut, Patagonia, Argentina. *Botany 2021* (virtual).

Matel\* TP, MA Gandolfo, EJ Hermsen, P Wilf. 2021. New reproductive structures of Cunoniaceae tribe Cunonieae from the early Eocene Laguna del Hunco flora, Chubut, Patagonia, Argentina. *38th Mid-Continent Paleobotanical Colloquium, hosted by University of Washington, Seattle* (virtual).

Kooyman RM, SJ Ivory, AJ Benfield†, P Wilf, 2021. Living paleo-Antarctic rainforest genera in Southeast Asia: community assembly, potential future ranges, and paleo-conservation. *Botany 2021* (virtual).

Rodríguez† IF, T Fel†, J Rose†, M Vaishnav†, P Wilf, T Serre. 2021. A deep-learning-based approach for automated fossil leaf identification. *Botany 2021* (virtual).

Rossetto-Harris† G, P Wilf. 2021. Which plants survived initial post-EECO cooling, drying, and isolation in Patagonia? *Botany 2021* (virtual).

Rossetto-Harris† G, P Wilf, E Stiles†, X Zou\*. 2021. Rapid scoring and morphotyping of fossil leaf floras from large image libraries using Adobe Bridge. *38th Mid-Continent Paleobotanical Colloquium, hosted by University of Washington, Seattle* (virtual poster).

Spagnuolo\* E, P Wilf, RM Kooyman. 2021. An open vegetation-plot database for Southeast Asia: tool for ecology, conservation, and paleo-conservation. *Botany 2021* (virtual poster).

Spagnuolo\* E, P Wilf, RM Kooyman. 2021. An open vegetation-plot database for Southeast Asia: tool for ecology, conservation, and paleo-conservation. *38th Mid-Continent Paleobotanical Colloquium, hosted by University of Washington, Seattle* (virtual poster).

Spagnuolo\* E, P Wilf, T Serre. 2021. Decoding family-level features for modern and fossil leaves from computer-vision heat maps. *Botany 2021* (virtual).

Vaishnav† M, T Fel†, JA Rose†, IF Rodriguez†, P Wilf, T Serre. Visualizing how deep neural networks categorize living and fossil leaves. *Botany 2021* (virtual).

Wilf P, SL Wing, HW Meyer, J Rose†, R Saha†, T Serre, NR Cúneo, MP Donovan, DM Erwin, MA Gandolfo, E González-Akre, F Herrera, S Hu, A Iglesias, KR Johnson, TS Karim, X Zou\*. 2021. An image dataset of cleared, x-rayed, and fossil leaves vetted to plant family for human and machine learning. *Botany 2021* (virtual).

Wilf P. 2021. From Patagonia to Indonesia: Plant fossils highlight West Gondwanan legacy in the Malesian flora. Keynote for *Milestones of Palaeontology and Quaternary Geology in Indonesia,*

*a conference in honor of the retirement of Prof. Yahdi Zaim,* *Bandung Institute of Technology* (virtual). *Berita Sedimentologi* 47, 81–82, <https://doi.org/10.51835/bsed.2021.47.3.367>

Zaim Y, RL Ciochon, AEA Bettis III, GF Gunnell, J-P Zonneveld, Y Rizal, Aswan, JI Bloch, DM Boyer, JJ Head, P Wilf, AT Hascaryo, WD Santoso. 2021. Paleogene vertebrate fossils from Ombilin Basin (West Sumatra) and Asem-Asem Basin (South Kalimantan), Indonesia: some evidence for Paleogene Sundaland connection. *AAPG Virtual Workshop (Singapore): The Stratigraphy of Sundaland: Current Perspectives and Future of the Science.*

**2020**

Deanna R, P Wilf, MA Gandolfo. 2020. A new physaloid fruit fossil from Patagonia and the evolutionary history of nightshades. *Botany 2020* (virtual conference), abstract 205.

Kooyman RM, P Wilf. 2020. Ancient forests and modern conservation: a living Australian Gondwana fossil heritage at risk. *37th* *Mid-Continent Paleobotanical Colloquium, University of Washington, Seattle (virtualized meeting).*

Spagnuolo\* E, P Wilf. 2020. Decoding leaf characters that drive family level identification through computer vision. *37th* *Mid-Continent Paleobotanical Colloquium, University of Washington, Seattle (virtualized meeting).*

Spagnuolo\* E, P Wilf. 2020. Decoding leaf characters that drive family level identification through computer vision. *Botany 2020* (virtual conference), abstract 310.

Wilf P, X Zou\*, MP Donovan, L Kocsis, A Briguglio, D Shaw, JJ Lambiase. 2020. Paleobotanical reconnaissance of Brunei. *Botany 2020* (virtual conference), abstract 227.

Zou\* X, P Wilf, MP Donovan, L Kocsis, A Briguglio. 2020. The first fossil leaf flora from Brunei Darussalam: a preliminary report. *Botany 2020* (virtual conference), abstract 306.

**PROFESSIONAL COMMENTARY ABOUT PW’S WORK**

Tosolini, A.M. 2017. Palaeoecology: north–south recovery divide. *Nature Ecology & Evolution* 1, Article [33](http://www.nature.com/articles/s41559-016-0033) (*News and Views* on Donovan et al. 2016).

Understanding what drives leaf size worldwide. *Nature Research Highlights*, 1 September 2017.

Sugden, A.M. 2015. Origins of the Southern Hemisphere flora. *Science* 347: 39-40 (*Editors’ Choice* on Wilf & Escapa 2014).

Zahn, L.M. 2014. Ancient leaves tattle on insects. *Science* 344: 985 (*Editors’ Choice* on Carvalho et al. 2014).

Keating, R.C. 2009. *Manual of Leaf Architecture* (Book Review). *Systematic Botany* 34: 825.

Cressler, W.L. III. 2009. *Manual of Leaf Architecture* (Book Review). *Choice* *Reviews Online*, American Library Association, November 2009 issue, article 47-1416.

Hadly, E. Faculty of 1000 Recommendation (on Crisp et al. 2009), Faculty of 1000 Biology, 27 April 2009.

Clarke, A. 2008. Faculty of 1000 Recommendation (on Wilf 2008), Faculty of 1000 Biology, 20 May 2008

DeLucia, E.H., C.L. Casteel, P.D. Nabity, B.F. O’Neill. 2008. Insects take a bigger bite out of plants in a warmer, higher carbon dioxide world. *PNAS* 105: 1781-1782. (Commentary on Currano et al. 2008).

Riddihough, G. 2007. Nasty, brutish, and short. *Science* 318: 1218 (*Editors’ Choice* on Royer et al. 2007).

Kitching, R.L., 2006. Crafting the pieces of the diversity jigsaw puzzle. *Science* 313: 1055-1057 (*Perspective* on Wilf et al. 2006).

Hanson, B. 2004. Turning over a new leaf. *Science* 305: 1534 (*Editors’ Choice* on Wilf and Johnson 2004).

Axsmith, B. 2004. Paleobotany Highlights. *Geotimes*, July, 2004.

Knapp, S., and Mallet, J. 2003. Refuting refugia? Science 2003 300: 71-72. (*Perspective* on Wilf et al. 2003)

Rowan, L.2002. **Leaving their mark. *Science* 295:1603 (*Editors' Choice* on Labandeira et al. 2002).**

DeVore, M., and Pigg, K. 2002. Paleobotany Highlights. *Geotimes*, July, 2002.

Huber, M. Global climate change: a glance in the rear view mirror. *Geotimes*, December 2001.

Coley, P. D., 1999. Hungry herbivores seek a warmer world. *Scienc*e 284:2098-2099 (*Perspective* on Wilf and Labandeira 1999).

**INVITED PARTICIPANT IN FUNDED WORKSHOPS**

2020. From buds to biomes and from ecology to evolution: Applications of machine learning to the analysis and interpretation of functional traits from digitized herbarium specimens. Yale University (e-workshop). PI: Susan Mazer (UCSB).

2007. *Evolution of Terrestrial Ecosystems Workshop: Ecological Change and the Fossil Record.* Smithsonian Institution.

2007. Bighorn Basin Coring Project (BBCP) Workshop, Powell, Wyoming, sponsored by NSF. PIs: Will Clyde (U. New Hampshire), Scott Wing (Smithsonian), Philip Gingerich (U. Mich.).

2007. *ARC-NZ Research Network in Vegetation Function* workshop, *Assembly of Southern Floras*; Adelaide, Australia, sponsored by Australian Research Council and Landcare Research, New Zealand. PI: Mark Westoby, Macquarie University.

2007. *ARC-NZ Research Network in Vegetation Function* workshop, *Leaves: size, shape, economics, palaeobiology and evolutionary radiations* *III*; Sydney, Australia, sponsored by Australian Research Council and Landcare Research, New Zealand. PI: Mark Westoby, Macquarie University.

2005. *ARC-NZ Research Network in Vegetation Function* workshop, *Leaves: size, shape, economics, palaeobiology and evolutionary radiations* *I*; Sydney, Australia, sponsored by Australian Research Council and Landcare Research, New Zealand. PI: Mark Westoby, Macquarie University.

2004. *Deep-Time Geosystems* Workshop, Arlington, VA. Sponsored by NSF. PIs: Lynn Soreghan, Univ. of Oklahoma, Tim Bralower, Penn State, and Chris Maples, Desert Research Institute.

2003. *EarthTime Calibration of Geologic Time-Scale Workshop*, Smithsonian Institution, Washington DC. Sponsored by NSF; PIs: Sam Bowring, MIT, and Doug Erwin, Smithsonian.

2002. *Workshop on Cretaceous climate and ocean dynamics*, Florissant, Colorado, sponsored by JOI/USSP. Head organizer: Tim Bralower, Univ. North Carolina.

2000-2002. *Paleobiology Database,* Paleobotany Working Group, National Center for Ecological Analysis and Synthesis, University of California, Santa Barbara (annual meetings). Sponsored by NSF; PIs: Charles Marshall, Harvard, Hallie Sims, Univ. Iowa.

**TEACHING**

**1. Teaching at Penn State**

**Courses**

*Note: “SRTE” is student evaluation, out of seven points possible.* Reported by university as averages before 2020 and then as median/mode.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Semester** | **Course No.** | **Course Title** | **Co-taught w/ (if appl.)** | **Type/credits** | **Final enrollment** | **SRTE/ 7: Course Quality** | **SRTE/ 7: Instructor Quality** |
| **2023** |  |  |  |  |  |  |  |
| Fall | Geosc 435 | Geoscience Scholarship |  | Elective/3 |  |  |  |
| Fall | Geosc/Biol 420 | Paleobotany |  | Elective/3 |  |  |  |
| (spring) | teaching release |  |  |  |  |  |  |
| **2022** |  |  |  |  |  |  |  |
| Fall | Geosc 435 | Geoscience Scholarship |  | Elective/3 | 9 | 7 mode, 7 median | 7 mode, 7 median |
| Fall | Earth 150 | Dinosaur Extinctions and Other Controversies |  | Gen. Ed./3 | 136 | 7 mode, 6 median | 7 mode, 6 median |
| (spring) | teaching release |  |  |  |  |  |  |
| **2021** |  |  |  |  |  |  |  |
| Fall | Geosc 435 | Geoscience Scholarship |  | Elective/3 | 9 | 7 mode, 7 median | 7 mode, 7 median |
| Fall | Geosc/Biol 420 | Paleobotany |  | Elective/3 | 20 | 7 mode, 7 median | 7 mode, 7 median |
| (spring) | teaching release |  |  |  |  |  |  |
| **2020** |  |  |  |  |  |  |  |
| Fall | Geosc 435 | Geoscience Scholarship |  | Elective/3 | 9 | 7 mode,  7 median | 7 mode,  7 median |
| Fall | Earth 150 | Dinosaur Extinctions and Other Controversies |  | Gen. Ed./3 | 175 | 7 mode,  7 median | 7 mode,  7 median |
| Spring | Geosc 204 | Geobiology |  | Core /4 | 19 | n/a (pandemic onset) | n/a |
| Spring | Geosc 597 | Paleobiology Seminar | Mark Patzkowsky | Grad. Seminar/1 | 7 | n/a | n/a |
| **2019** |  |  |  |  |  |  |  |
| Fall | Geosc 435 | Geoscience Scholarship |  | Elective/3 | 10 | 6.57 | 6.86 |
| Fall | Earth 150 | Dinosaur Extinctions and Other Controversies |  | Gen. Ed./3 | 156 | 5.61 | 6.26 |
| (spring) | (teaching release, no classes) |  |  |  |  |  |  |
| **2018** |  |  |  |  |  |  |  |
| Fall | Geosc 497 | Geoscience Scholarship |  | Elective/3 | 8 | 6.50 | 6.75 |
| Fall | Earth 150 | Dinosaur Extinctions and Other Controversies |  | Gen. Ed./3 | 155 | 5.84 | 6.36 |
| Spring | Geosc 204 | Geobiology |  | Core /4 | 47 | 5.92 | 6.08 |
| Spring | Geosc 597 | Paleobiology Seminar | Mark Patzkowsky | Grad. Seminar/1 | 10 | 5.50 | 5.50 (only 2 responses) |
| **2017** |  |  |  |  |  |  |  |
| Fall | Geosc/Biol 420 | Paleobotany |  | Elective/3 | 18 | 5.93 | 6.87 |
| Fall | Geosc 497 | Geoscholarship |  | Elective/3 | 11 | 6.29 | 6.86 |
| (spring) | (sabbatical leave) |  |  |  |  |  |  |
| **2016** |  |  |  |  |  |  |  |
| (fall) | (sabbatical leave) |  |  |  |  |  |  |
| Spring | Geosc 204 | Geobiology |  | Core /4 | 44 | 5.95 | 5.95 |
| Spring | Geosc 597 | Paleobiology Seminar | Mark Patzkowsky, Tim Bralower | Grad. Seminar/1 | 9 | 6.50 | 6.50 |
| **2015** |  |  |  |  |  |  |  |
| Fall | Geosc 497 | Geoscience Scholarship |  | Elective/3 | 5 | 6.40 | 6.60 |
| Fall | Earth 150 | Dinosaur Extinctions and Other Controversies |  | Gen. Ed./3 | 224 | 5.39 | 5.81 |
| Spring | Geosc/Biol 420 | Paleobotany |  | Elective/3 | 19 | 4.80 | 6.00 |
| Spring | Geosc 597 | Paleobiology Seminar | Mark Patzkowsky | Grad. Seminar/1 | 9 | 7.00 | 7.00 |
|  |  |  |  |  |  |  |  |
| **2014** |  |  |  |  |  |  |  |
| Fall | Geosc 497 | Geoscience Scholarship |  | Elective/3 | 7 | 6.60 | 7.00 |
| Fall | Earth 150 | Dinosaur Extinctions and Other Controversies |  | Gen. Ed./3 | 219 | 5.33 | 5.99 |
| Spring | Geosc 597 | Paleobiology Seminar | Mark Patzkowsky | Grad. Seminar/1 | 8 | 6.75 | 6.83 |
| Spring | Geosc 204 | Geobiology |  | Core /4 | 46 | 6.04 | 6.18 |
| **2013** |  |  |  |  |  |  |  |
| Fall | Geosc 497 | Geoscience Scholarship |  | Elective/3 | 10 | 6.43 | 6.86 |
| Fall | Earth 150 | Dinosaur Extinctions and Other Controversies |  | Gen. Ed./3 | 221 | 5.47 | 6.02 |
| Spring | Geosc/Biol 420 | Paleobotany |  | Elective/3 | 19 | 6.50 | 6.71 |
| Spring | Geosc 597 | Paleobiology Seminar | Mark Patzkowsky, Russ Graham | Grad. Seminar/1 | 6 | 6.67 | 6.80 |
| **2012** |  |  |  |  |  |  |  |
| [Fall | Teaching buyout, no classes] |  |  |  |  |  |  |
| Spring | Geosc 204 | Geobiology |  | Core /4 | 39 | 6.18 | 6.23 |
| Spring | Geosc 597 | Paleobiology Seminar | Mark Patzkowsky, Russ Graham | Grad. Seminar/1 | 10 | 6.60 | 6.80 |
| **2011** |  |  |  |  |  |  |  |
| Fall | Earth 150 | Dinosaur Extinctions and Other Controversies |  | Gen. Ed./3 | 225 | 5.22 | 5.70 |
| Fall | Geosc 497 | Geoscience Scholarship |  | Elective/3 | 8 | 6.00 | 6.29 |
| Spring | Geosc/Biol 420 | Paleobotany |  | Elective/3 | 19 | 5.94 | 6.44 |
| Spring | Geosc 597 | Paleobiology Seminar | Mark Patzkowsky, Russ Graham | Grad. Seminar/1 | 10 | 6.25 | 6.63 |
| **2010** |  |  |  |  |  |  |  |
| Fall | Earth 150 | Dinosaur Extinctions and Other Controversies |  | Gen. Ed./3 | 218 | 5.63 | 6.07 |
| Fall | Geosc 597 | Plant Paleobiology Seminar |  | Grad. Seminar/2 | 6 | insufficient response | insufficient response |
| Spring | Geosc 204 | Geobiology |  | Core /4 | 42 | 5.93 | 6.03 |
| Spring | Geosc 597 | Paleobiology Seminar | Russ Graham | Grad. Seminar/1 | 9 | 6.57 | 6.57 |
| **Spring** |  |  |  |  |  |  |  |
| **2009** |  |  |  |  |  |  |  |
| Fall | Geosc 597A | Earth Talks Seminar |  | Grad seminar/2 | 10 | 6.14 | 6.0 |
| Fall | Earth 150 | Dinosaur Extinctions and Other Controversies |  | Gen. Ed./3 | 206 | 5.10 | 5.65 |
| [Spring | Sabbatical, no classes.] |  |  |  |  |  |  |
| **2008** |  |  |  |  |  |  |  |
| [Fall | Sabbatical, no classes.] |  |  |  |  |  |  |
| Spring | Geosc 204 | Geobiology |  | Core /4 | 24 | 6.30 | 6.35 |
| Spring | Geosc 597 | Paleobiology Seminar | Mark Patzkowsky, Russ Graham | Grad. Seminar/1 | 8 | 5.50 | 5.88 |
| **2007** |  |  |  |  |  |  |  |
| Fall | Earth 150 | Dinosaur Extinctions and Other Controversies |  | Gen. Ed./3 | 222 | 5.36 | 5.96 |
| Fall | Geosc 597 | Paleobiology Seminar | Mark Patzkowsky, Russ Graham | Grad. Seminar/1 | 7 | 4.71 | 6.14 |
| Spring | Geosc/Biol 420 | Paleobotany |  | Elective/3 | 11 | 5.50 | 6.20 |
| Spring | Geosc 597 | Paleobiology Seminar | Mark Patzkowsky | Grad. Seminar/1 | 5 | 6.00 | 4.75 |
| **2006** |  |  |  |  |  |  |  |
| Fall | Earth 150 | Dinosaur Extinctions and Other Controversies |  | Gen. Ed./3 | 82 | 5.56 | 6.07 |
| Fall | PSU 010 | Fossils on the Cutting Edge |  | Fresh. Seminar/1 | 18 | 5.60 | 6.25 |
| Fall | Geosc 597 | Paleobiology Seminar | Mark Patzkowsky | Grad. Seminar/1 | 7 | 5.80 | 5.67 |
| Spring | Geosc 204 | Geobiology |  | Core /4 | 24 | 6.68 | 6.77 |
| Spring | Geosc 597 | Paleobiology Seminar | Mark Patzkowsky | Grad. Seminar/1 | 7 | 6.67 | 6.67 |
| **2005** | | | | | | | |
| Fall | Earth 150 | Dinosaur Extinctions and Other Controversies |  | Gen. Ed./3 | 83 | 5.37 | 5.80 |
| Fall | Geosc 597 | Paleobiology Seminar | Mark Patzkowsky | Grad. Seminar/1 | 7 | 5.40 | 6.40 |
| Spring | Geosc/Biol 420 | Paleobotany |  | Elective/3 | 18 | 6.18 | 6.59 |
| Spring | Geosc 597 | Paleobiology Seminar | Mark Patzkowsky | Grad. Seminar/1 | 8 | 5.88 | 6.38 |
| **2004** | | | | | | | |
| Fall | Geosc 597 | Terrestrial Paleoecology |  | Grad. Seminar/2 | 6 | 5.00 | 6.20 |
| Fall | Geosc 597 | Paleobiology Seminar | Mark Patzkowsky | Grad. Seminar/1 | 9 | 6.25 | 6.62 |
| Fall | Earth 150 | Dinosaur Extinctions and Other Controversies |  | Gen. Ed./3 | 88 | 5.05 | 5.79 |
| Spring | Geosc 204 | Geobiology |  | Core /4 | 19 | 6.36 | 6.57 |
| Spring | Geosc 597 | Paleobiology Seminar | Mark Patzkowsky | Grad. Seminar/1 | 10 | 6.86 | 7.00 |
| **2003** |  |  |  |  |  |  |  |
| Fall | Earth 297b | Dinosaur Extinctions and Other Controversies |  | Gen. Ed./3 | 34 | 6.00 | 6.55 |
| Fall | Geosc 597 | Paleoclimate Proxies | Dana Royer | Grad. Seminar/2 | 6 | 6.25 | 6.40 |
| Fall | Geosc 597 | Paleobiology Seminar | Mark Patzkowsky | Grad. Seminar/1 | 9 | 6.50 | 6.88 |
| Spring | Geosc 204 | Geobiology | Mark Patzkowsky | Core /4 | 21 | 6.17 | 6.17 |

**Top curriculum contributions.**

*Geosc 435, Geoscholarship.* **Course proposed and approved 2019** after several offerings as Geosc 497.

*Geosc 204, Geobiology.* Core course for Geoscience majors, co-taught and redesigned with Dr. Mark Patzkowsky in 2003 and taught solo every other year since 2004. Introduced capstone “Ancient Denvers” field trip to Denver.

*Earth150, Dinosaur Extinctions and Other Controversies.* General education **course proposed and approved, then re-certified 2019**. Taught nearly every year since first offering in Fall 2003.

**Supervision of student and postdoctoral research, and hosting Visiting Scholars**

*Visiting Scholars*

**Dr. Jingyu** **Wu** (2015-2016 full year), from Lanzhou University, Lanzhou, China.

**Dr. Tao** **Su** (Fall 2013), from Xishuangbanna Tropical Garden, Yunnan, China.

*Postdoctoral Research Scientist.*

**Dr.** **Ari Iglesias**, 2007-2008. Current- CO*NICET Adjunct Investigator*, Univ. Comahue.

**Dr.** **Stefan A. Little,** 2006-2009. Current- Research Associate, University of Victoria.

**Dr.** **Dana Royer,** 2002–2005. Current- Professor of Earth and Environmental Sciences, Wesleyan University. 2010 GSA Donath Medalist (Young Scientist Award).

*Ph.D.*

**L. Alejandro Giraldo**, 2023-.

**Edward Spagnuolo**, 2022-.

**Tengxiang Wang**, 2021-.

**Gabriella Rossetto Harris**, 2019-.

**Dr. Michael Donovan**, defended June 12, 2017. *Recovery of plant-insect associations in Patagonia, Argentina after the end-Cretaceous extinction.* Current–Paleobotany Collections Manager, The Field Museum.

**Dr. Ellen Currano**, defended June 11, 2008. *Variations in insect herbivory on angiosperm leaves through the late Paleocene and early Eocene in the Bighorn Basin, Wyoming, USA*.

Current–Professor of Biology and Geology, University of Wyoming.

*M.S.*

**L. Alejandro Giraldo**, defended 30 May 2023. *Unrecognized evolutionary history of herbivorous insects on Australia’s iconic gum trees revealed through fossil insect-feeding traces.*

**Elena Stiles Rosselli**, defended June 5, 2019. *Plant extinction and recovery dynamics across the Cretaceous-Paleogene transition in southern South America.*

**Gabriella Rossetto-Harris**, defended June 4, 2019. *Eocene fossils of* Araucaria *Sect.* Eutacta *from Patagonia and their implications for floral turnover during the initial isolation of South America*.

**Lisa Merkhofer**, defended June 2, 2014. *Sizing up the leaves of an Eocene Patagonian paleorainforest and its Australian analogs.*

**Dr. Michael Donovan**, defended June 14, 2013. *Evidence for a novel insect leaf-mining fauna after the end-Cretaceous extinction and the demise of Cretaceous leaf miners (Mexican Hat, early Paleocene, Montana, USA).*

**Sara Elliott**, defended July 5, 2012. *Subfossil leaves from Lancaster County, Pennsylvania reveal*

*a new upland floral component of the pre-European Piedmont landscape*.

**Cassandra Knight**, defended July 5, 2012, *Rare leaf fossils of Monimiaceae And Atherospermataceae (Laurales) from Eocene Patagonian rainforests and their biogeographic significance*.

**Dr. Mónica Ramírez Carvalho**, defended June 16, 2011, *Tropical canopy insects link leaf damage in fossil and living forests*. From 2023: Assistant Professor, University of Michigan, Earth and Environmental Sciences.

**Dr. Christen Grettenberger (Miller)**, defended Jun 8, 2011, *Lessons from soggy leaves: a pre-settlement flora from White Clay Creek, Chester County, Pennsylvania*.

**Dr. Bárbara Cariglino**, defended March 28, 2007, *Paleoclimatic analysis of the Eocene Laguna del Hunco, Green River, and Republic floras using digital leaf physiognomy*.

*Committee member for*

**Karen Pham** (PhD in progress)

**Adam Benfield** (PhD in progress)

**Caleb Norville** (PhD in progress)

**Dr. Judi Sclafani** (PhD, defended September 13, 2019)

**Ashley Grey** (MS, defended May 9, 2017)

**Dr. Max Christie** (PhD, defended June 8, 2017)

**Eriks Perkons** (MS, defended February 17, 2016)

**Dr. Heather Graham** (PhD, defended September 26, 2013)

**Travis Deptola** (MS, defended September 2012)

**Emily Comer** (MS, defended August 8, 2011)

**Dr. Jocelyn Sessa** (PhD, defended May, 2009)

**Dr. James Bonelli** (PhD, defended June, 2008)

**Dr. Andrew Krug** (PhD, defended March 2006)

*Senior thesis*

**Nicholas Hornicak,** 2023, (proxy advisor; main supervisor M. Lamanna, Carnegie Museum).

**Eddie Spagnuolo,** 2022, *Decoding family-level features for modern and fossil leaves from computer-vision heat maps.* (2022 Dean Edward Steidle Memorial Scholar, College of Earth & Mineral Sciences; NSF GRFP awardee).

**Xiaoyu Zou,** 2021. *The first fossil leaf flora from Brunei Darussalam: relationships with the living Borneo flora.* (2021 Dean Edward Steidle Memorial Scholar, College of Earth & Mineral Sciences).

**Tyler Haas**, 2014. *What’s hiding in plain sight in fossil leaf assemblages? Recovering large leaves from unidentified fossil leaf fragments.*

**Kaitlyn McMullen**, 2013. *Does leaf vein density predict species abundance?*

*A test from the fossil record.*

**Daniel Danehy,** 2006. *An early Eocene fossil leaf flora from the Red Hot Truck Stop*

*locality (Meridian, Mississippi) and its biogeographic and paleoenvironmental significance*.

**Crystal Kirby**, 2005. *Correlating climate and leaf economics to leaf physiognomy within a single California oak species (*Quercus kelloggii *Newberry)*, 22 p.

**David Janesko**, 2004, *Digital leaf physiognomy: calibration and testing of a new paleothermometer using modern floras*, 85 p.

*Undergraduate field and lab assistants at Penn State*

Current: PJ Przybylski (mentor: Edward Spagnuolo).

Previous: Edward Spagnuolo, Akira Regotti (mentor: Alejo Giraldo), Kevin Johansson (mentor: Edward Spagnuolo), Xiaoyu Zou, David Janesko, Lindsay Mathwick, Crystal Kirby (mentor: Dana Royer), Daniel Danehy, Eriks Perkons, Kevin Rega, Alysa Young, Dylan Frey, Jennifer Kissell, Katie McMullen, Tessie Menotti.

**2. Teaching prior to employment at Penn State**

**University-level courses taught**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **University** | **Role** | **Semester** | **Course Title** | **Type/hrs. per week** | **Enrollment** | **Student evaluation\* / possible points** |
| University of Michigan | Professor | Winter 2002 | Dinosaur Extinctions and Other Controversies | Freshman seminar/ 3.0 | 20 | 4.94/ 5 |
| University of Michigan | Professor | Winter 2001 | Dinosaur Extinctions and Other Controversies | Freshman seminar/ 3.0 | 20 | 4.73/ 5 |
| University of Michigan | Professor | Winter 2000 | Dinosaur Extinctions and Other Controversies | Freshman seminar/ 3.0 | 20 | 4.97/ 5 |
| University of Pennsylvania | Instructor\*\* | Fall 1995 | Introductory Geology Laboratory | Core majors/ 3.0 | 7-10 | 3.7/ 4 |
| University of Pennsylvania | Instructor\*\* | Spring 1995 | Introductory Geology Laboratory | Core majors/ 3.0 | 7-10 | 3.7/ 4 |
| University of Pennsylvania | Instructor\*\* | Fall 1994 | Introductory Geology Laboratory | Core majors/ 3.0 | 7-10 | 3.7/ 4 |
| University of Pennsylvania | Teaching assistant | Spring 1994 | Ideas in Mathematics | Gen. Ed./ 4.0 | 90-100 | 3.3/ 4 |
| University of Pennsylvania | Teaching assistant | Fall 1993 | Ideas in Mathematics | Gen. Ed./ 4.0 | 90-100 | 3.6/ 4\*\*\* |

\*of instructor or TA quality depending on role (col. 2).

\*\*Primary instructor for course as graduate student.

\*\*\*Received Math Department's Good Teaching Award.

**Other teaching and training activities**

*University of Michigan*

*Undergraduate research supervisor.*

2000-2002 academic years: research supervisor of two freshmen, **Peter Huff, Ebere Azumah**. Results published in *Palaios* with Huff as first author (Huff et al. 2003).

Ph.D. Committee Member, **Elizabeth Kowalski**, Museum of Paleontology; defended Jan., 2001.

1999-2001: Guest lecturer in the following courses: Plant-Animal Interactions, Paleoclimatic Methods, Paleontology Seminar, Biogeography.

*Smithsonian Institution*

Trained volunteers and staff in paleobotany collections methods; spent more than 200 hours preparing plant fossils in the public fossil lab and interacting with the public; manned paleobotany booth for Staff Day.

Undergraduate field assistants, southwestern Wyoming 1994-1996: Nate Smith, Carrie Morrill, Phil Wade, Dana Royer.

**Middle-school teacher**

1985-1988: **Full-time teacher** of 7th and 8th grade mathematics, science and current events, **Westfield Friends School**, Cinnaminson, NJ. Developed and implemented new curriculum in 7th grade life sciences and 8th grade physical sciences. Homeroom teacher for 8th grade.

**Freelance, other**

1989-1993: Taught ~20 private guitar lessons per week. Private tutor for grades 6-12 in math, chemistry, biology, Latin, and French, 5-12 hours/week. Instructor in Science and Art for inner-city summer camp, United Communities of Southeast Philadelphia, four locations.

**SERVICE**

***Editorial board / academic editor***

2019–, *PhytoKeys.*

2017–, *PeerJ*.

2014–, *Ameghiniana.*

2013–2016. *PloS One*.

2004–2006. *Geology.*

2002–2006. *Palaios.*

***Panels***

NSF, Spring 2012 Biodiversity Discovery and Analysis pre-proposal panel (DEB-BDA).

NSF, Fall 2009 Biodiversity Surveys and Inventories and Revisionary Systematics panel (DEB- BS&I/ REVSYS).

SENACYT, Panama. Proposal evaluator, Fall 2009.

***Reviewer of 311 manuscripts and proposals, for (no. if >1):***

funding proposals

*AAAS: Women’s International Scientific Cooperation (WISC) project*

*ACS- American Chemical Society (6)*

*American Philosophical Society*

*Czech Science Foundation (4)*

*DFG (Deutsche Forschungsgemeinschaft, German Research Foundation) (2)*

*DOE- Department of Energy*

*FONCyT (Argentina, 3)*

*Graduate Women in Science (3)*

*Israel Science Foundation (2)*

*John Simon Guggenheim Memorial Foundation (3)*

*Natural Environment Research Council (UK)*

*National Geographic Society Committee for Research and Exploration (9)*

*NSF- National Science Foundation (79)*

*NSERC- Natural Sciences and Engineering Research Council of Canada (2)*

*SENACYT, Panama (7)*

*Swiss National Science Foundation*

journal articles and book chapters

*Acta Palaeobotanica (3)*

*Alcheringa (2)*

*Ameghiniana (3)*

*American Journal of Botany (8)*

*American Naturalist*

*Annals of Botany (2)*

*Annals of the Missouri Botanical Garden*

*AoB Plants*

*Applications in Plant Sciences*

*Australian Journal of Earth Sciences*

*BMC Evolutionary Biology (3)*

*Botany*

*Canadian Journal of Earth Sciences (2)*

*Courier Forschungsinstitut Senckenberg (2)*

*Ecology*

*Ecology Letters (2)*

*Geological Society of America Bulletin (3)*

*Geological Society of America Special Publications (2)*

*Geological Society of London (2)*

*Geology (13)*

*Geophysical Research Letters*

*Global Ecology and Biogeography (3)*

*Grana*

*Indiana University Press*

*International Journal of Plant Sciences (7)*

*Journal of Biogeography (3)*

*Journal of Mammalian Evolution*

*Journal of Systematic Palaeontology*

*Journal of Systematics and Evolution*

*National Science Review*

*Nature (3)*

*Nature Communications (2)*

*Nature Ecology & Evolution (3)*

*Neues Jahrbuch für Geologie und Paläontologie (2)*

*New Phytologist (7)*

*Oecologia*

*Palaeontologia Electronica (3)*

*Paleontological Society Special Pubs.*

*Palaios (7)*

*Paleobiology (20)*

*Paläontologische Zeitschrift*

*Penn State Press*

*PeerJ (17)*

*PLoS One (22)*

*PNAS (6)*

*Proceedings of the Academy of Natural Sciences, Philadelphia*

*Proceedings B (3)*

*Rocky Mountain Geology*

*Science (11)*

*Science Advances*

*University of Michigan Papers in Paleontology*

full-length book manuscripts

*University of California Press*

*University of Chicago Press*

***Symposia, workshops, and conference field trips organized***

2018, Co-organizer for symposium, *Origins, assembly and evolution of the South and SE Asian biota: insights from rocks, fossils, genes and plots. Association for Tropical Biology and Conservation 55th Annual Meeting, Kuching, Malaysia.*

2014, May, Hosted 31st Midcontinent Paleobotanical Colloquium at Penn State.

2010, August, *ARC-NZ Research Network in Vegetation Function* workshop, Gondwanan Rainforests; Macquarie University, Sydney, Australia, sponsored by Australian Research Council and Landcare Research, New Zealand (competitively awarded, ~$10,000 AUS). Conveners: Peter Wilf, Penn State; Robert Kooyman and Mark Westoby, Macquarie University.

2009, July, with Steven Manchester, *Paleogene Floras of Southwestern Wyoming*. Post-conference field trip for Botanical Society of America Annual Meeting, Snowbird, Utah, 19 participants.

2008, June, *ARC-NZ Research Network in Vegetation Function* workshop, *Calibrating Evolutionary Dates*; Melbourne, Australia, sponsored by Australian Research Council and Landcare Research, New Zealand (competitively awarded, ~$15,000 AUS). Conveners: Maria Gandolfo, Cornell, David Cantrill, Royal Botanic Gardens Melbourne, Peter Wilf, Penn State .

2004, March: Main convener (with K.R. Johnson and S.L. Wing) of symposium for VIIth International Organization for Paleobotany meeting, Bariloche, Argentina, *Global view of Paleogene floras*, ~17 invited international speakers.

2004, March: Field trip leader (with K.R. Johnson and M.A. Gandolfo) for VIIth International Organization for Paleobotany meeting, Bariloche, Argentina, of Post-Meeting Field Trip, “Paleogene Floras of Patagonia.” Member of Field Trip Committee for the meeting.

2003, November: Main convener (with R.J. Burnham, M.A. Gandolfo, and K.R. Johnson) of Topical Symposium for Geological Society of America Annual Meeting, Seattle, *Terrestrial paleobiology of South America, Cretaceous through Neogene*; 12 speakers, incl. 2 invited foreign and 2 invited domestic speakers. Sponsors: PRF, Paleontological Society.

***Letters for promotion and tenure (11) and major award nominations (11).***

Some successful nominations: **Dr. Conrad C. Labandeira, 2017 GSA Fellow, 2022 Paleontological Society Medal.** **Dr. Dana Royer, 2010 GSA Donath Medalist (Young Scientist Award)**. **Dr. M. Alejandra Gandolfo, 2023 Paleontological Society Fellow.**

***Public research lectures/presentations/activities/videos***

2021. WPSU Virtual Summer Camp 2021: [Interview](https://wpsu.psu.edu/stem-thursdays-with-eberly-college-of-science-week-6/) for *STEM Thursdays with Eberly College of Science*.

2021. Westfield Friends School, Cinnaminson NJ, 5th-8th grade.

2016, 2017, 2020, 2021. Young Scholars of Central Pennsylvania Charter School (various paleo presentations for 2nd-8th grades).

2020, August. [*Ginkgo*: A Living Fossil in the Arboretum](https://www.youtube.com/watch?v=1Ck5vMICw3E). YouTube short for Arboretum at Penn State.

2020 May. [The oldest plant at the Arboretum](https://www.youtube.com/watch?time_continue=4&v=QwfbxjjnJQI&feature=emb_logo). YouTube short for Arboretum at Penn State.

2020, May, e-lecture for Penn State Master Gardeners.

2019, September. ​*Penn State's Living-Fossil Trees* activity for Penn State Arboretum volunteers.

2019, January, *Conversations with Colleagues* lecture series, The Village at Penn State.

2015, September. Presenter for Penn State Earth & Environmental Systems Institute: GEMS Showcase Event.

2015, 2017, 2018. Science Fair Judge, Young Scholars of Central Pennsylvania Charter School.

2011, January, University of Washington, Burke Museum of Natural History.2010, April. *Research Unplugged* talk, State College Theatre.

2009, July. After-dinner talk for *Paleogene Floras of Southwestern Wyoming*, co-led post-conference field trip for Botanical Society of America Annual Meeting, Snowbird, Utah.

2008, March. For Dino Day event, Penn State Earth and Mineral Sciences Museum.

2006, October. Pennsylvania Native Plant Society, main speaker for annual winter meeting (Shavers Creek, PA).

2006 and 2007, October, for Penn State Parents and Families Weekend.

2004, February, Nittany Mineralogical Society, University Park.

1996 and 1995, July. Western Wyoming Community College, Rock Springs (with several public field trips to collect fossils).

***Other external service***

2023–2025. Paleontological Society: Selection Committee member for the Harold Strimple Award (distinguished amateur paleontologist award).

2020–2023: Botanical Society of America: Development Committee.

2018–2020: Paleontological Society: Fellows Selection Committee. Committee Chair in 2020.

2016-2018: Botanical Society of America: Maynard Moseley Award Committee. Chair of Committee 2018.

2017: External reviewer for a faculty search at a major European university.

2016: Paleobotanical Section of Botanical Society of America: committee to select next Treasurer.

2015: Paleobotanical Section of Botanical Society of America: committee to select next Section Chair.

2012-2014: Paleontological Society: Councilor Unrestricted (by nomination and contested election).

2012. Botanical Society of America, Paleobotanical Section: committee on student travel awards.

2011. Botanical Society of America, Paleobotanical Section: committee for graduate training guidelines for paleobotanists.

2008–2011. Geological Society of America: Committee on Research Grants, Member-at-Large.

2010–2011. Paleontological Society: Selection Committee member for the Harold Strimple Award (distinguished amateur paleontologist award).

2006–2011. Paleobiology Database: Advisory Board.

2008–2010. *Nature*: Reader Advisory Panel (by invitation of Editor-in-Chief).

2007–2010, Paleontological Society: Committee on Nominations. Chair, 2009-2010.

2009. Botanical Society of America: Committee to select next Chair of Paleobotanical Section.

2006, organized Paleobotany Banquet for 54 paleobotanists attending GSA, Philadelphia.

2004. Carnegie Museum of Natural History: Exhibit advising, *Dinosaurs in their World*.

1999: The Jason Project: volunteer scientific consultant for "JASON X: Rainforests — A Wet & Wild Adventure;" http://www.jason.org. Advisor for online module on leaf-margin analysis, subsequently used in many classrooms.

1998–1999. President, Paleontological Society of Washington, DC.

1997–1998. Secretary, Paleontological Society of Washington, DC. Organized monthly seminar series.

Paleobiology Database: Contributor, >600 collections entered, www.paleobiodb.org

***Penn State***

*Active/Recent*

2023– Department of Geosciences: Rover (non-committee faculty member) for Doctoral Candidacy exams.

2022–2023. Department of Geosciences: Promotion & Tenure Committee.

2022– Faculty Advisory Committee, College of Earth and Mineral Sciences.

2022– Packard Fellows internal reviewer, Penn State University.

2021– Chair of Environmental Scholars Program, Earth & Environmental Systems Institute (EESI).

2021–2022. Department of Geosciences: planning committee for faculty hiring.

2020– Faculty mentor for one assistant professor.

2019–2023. Department of Geosciences: Undergraduate Program Committee.

2011– The Arboretum at Penn State: Collections Committee.

2010– Schreyer Honors College: Honors Advisor.

*Previous*

2021. Schreyer Honors College: applications reviewer.

2021. Teaching review committee for one assistant professor.

2020–2021. Earth & Environmental Systems Institute (EESI): Search Committee member, environmental data analytics faculty hire.

2020. Earth & Environmental Systems Institute (EESI): Newsletter Guest Editor.

2018–2020. Department of Geosciences, Graduate Admissions Committee.

2018–2019. College of EMS: Museum Director Search Committee.

2018. Department of Geosciences: Tenured and Tenure-Track Faculty Evaluation Committee.

2017–2018. Dept. of Geosciences: Search Committee for Department Head.

2011–2018. Department of Geosciences: Undergraduate Program Committee.

2015–2016. Penn State University: STEM Museum Committee.

2015. Penn State Institutes of Energy & the Environment: reviewer, PSIEE seed grant preproposals.

2015–2016. Department of Geosciences: Teaching review committee for a tenure-track professor.

2015. Department of Geosciences: Tenured and Tenure-Track Faculty Evaluation Committee.

2015. Penn State University: Undergraduate Teaching Awards, Review Committee.

2014–2016. Earth & Environmental Systems Institute (EESI): Advisory Committee.

2009–2016. Department of Geosciences: Rover (non-committee faculty member) for Doctoral Candidacy exams.

2009-2010. College of Earth and Mineral Sciences: Task Force on Fixed Term Faculty Promotions.

2009, Fall. Organized *Earth Talks* seminar series for Earth and Environmental Systems Institute, *Landscape Change, Climate Change, and Organisms: Ancient to the Future*, 11 invited speakers.

2007–2008. Department of Geosciences: Chair of Graduate Admissions Committee.

2007–2008. Department of Geosciences: Teaching review committee for a tenure-track professor.

2007 (spring). College of Earth and Mineral Sciences: Earth Systems Ecology Search Committee.

2005–2008, 2009–2010. Department of Geosciences: Undergraduate Program Committee.

2006–2017. Penn State University: Packard Fellowship Nomination Committee.

2005–2007. College of Earth and Mineral Sciences Museum: Exhibit Committee.

2003–2005. Department of Geosciences: Graduate Programs Committee.

2003–2004. Department of Geosciences: GeoEducation Search Committee.

2002–2003, 2005—2007. Department of Geosciences: Graduate Admissions Committee.

2002–2003. College of Earth and Mineral Sciences: Museum Revitalization Committee.

***University of Michigan***

2000–2002. Distinguished Dissertations Awards Committee, Rackham School of Graduate Studies, University of Michigan. Wrote formal citations for awardees in Physics and Biology.

1999–2001. Review committee, applications for Michigan Society of Fellows postdoctoral fellowships in several disciplines.

**SOCIETY MEMBERSHIPS**

AAAS

American Geophysical Union

American Society of Plant Taxonomists

Asociación Paleontológica Argentina

Botanical Society of America

Geological Society of America

International Organization for Paleobotany

Paleontological Society

**RESEARCH SUPERVISORS**

Scott L. Wing, Smithsonian National Museum of Natural History (Ph.D. thesis advisor); Peter Dodson and Hermann W. Pfefferkorn, University of Pennsylvania (committee members); Conrad C. Labandeira, Smithsonian National Museum of Natural History (postdoctoral supervisor).

**MEDIA COVERAGE:**

*see* [*http://www3.geosc.psu.edu/~pdw3/media.html*](http://www3.geosc.psu.edu/~pdw3/media.html) *for additional articles and links*

***News articles and highlights within peer-reviewed journals***

* [Sixty six million years of insects feeding on kauris](https://natureecoevocommunity.nature.com/posts/sixty-six-million-years-of-insects-feeding-on-kauris). *Communications Biology* “Behind the Paper” feature by lead author Michael Donovan, 25 November 2020.
* [Ancient insect bites provide mass extinction insight](http://www.natureasia.com/en/research/highlight/11106). *Nature Asia* Research Highlight, 8 November 2016
* [Evolution: peaches appear earlier than humans in southwest China](http://www.natureasia.com/zh-cn/research/highlight/10352). *Nature Asia* Research Highlight, 27 November 2015.
* Warm swarms. By Anna Barnett, *Nature Reports Climate Change*, 21 February 2008, doi:10.1038/climate.2008.17.
* The land that insects forgot. By Erik Ness, *Frontiers in Ecology and the Environment* (ESA publication), October 2006 issue, p. 397.
* Ancient Roots of South American plant-insect ecodiversity. *PNAS* 102: 8789 (“In this Issue” highlight on Wilf et al. 2005, *PNAS*).
* Lundmark, C., 2005. Floral diversity preserved in fossils. *Bioscience* 55: 544 (“BioBrief” on Wilf et al. 2005, *Am. Nat.*)
* Pennisi, E. Chewed leaves reveal ancient relationship. *Science*, News of the Week, July 14, 2000.
* Greensfelder, L., Warming climate made a buzz. *Science Now* (online, from *Science* Magazine), June 25, 1999.

***On the Air, broadcasts and videos:***

* [This Green Earth](https://www.kpcw.org/show/this-green-earth/2022-06-14/what-a-leaf-fossil-study-teaches-us-about-climate-change), KPCW (NPR: Park City, Utah), hosts Chris Cherniak and Nell Larson, 14 June 2022.
* talkSport radio: Extra Time with Paul Ross (London), [7 April 2021](https://talksport.com/radio/listen-again/1617753600/1617759000/). (starts 9:38 in)
* [Fossilized nuts on the wrong side of the world](https://abcmedia.akamaized.net/rn/podcast/2019/06/bst_20190607_0837.mp3). Science with Jonathan Webb, Radio National Breakfast (Australia), 6 June 2019.
* BBC 5 Live Breakfast, interview with Clare McDonnell, 6 January 2017.
* [Tomato ancestor evolved 50 million years ago near Antarctica](https://www.youtube.com/watch?v=r3X__rx2NwY&t=6s). Video by Science/AAAS, 05 Jan 2017.
* Peter Wilf - [Computer Vision Cracks the Leaf Code](https://www.youtube.com/watch?v=P8PAXoWlZdI). Video by Penn State College of Earth and Mineral Sciences. 6 June 2016.
* Radio New Zealand [interview](http://www.radionz.co.nz/audio/player/201797340) on *This Way Up* with Richard Scott, 16 April 2016.
* *People Behind the Science* ([podcast interview](http://www.peoplebehindthescience.com/dr-peter-wilf/)), 7 July 2014.
* *Academic Minute*, WAMC Northeast Public Radio, to air March 24, 2014, [Tracing the path of conifer fossils](http://wamc.org/post/dr-peter-wilf-penn-state-university-tracing-path-conifer-fossils).
* KPCC Los Angeles (NPR station), *Take Two*, interview with Megan Larson on fossil tomatillo from Laguna del Hunco, November 5, 2013.
* CNN, January 26, 2010, 10 AM. Interview on Argentina NSF stimulus grant by TJ Holmes and Kyra Phillips.
* National Public Radio, *All Things Considered*, interview by John Nielsen, June 26, 1999. Global warming’s effects on insect populations.
* Voice of America Radio, *Agriculture Today*, interview by Robert Sivak, June 25, 1999. Insects, plants, and climate change.

***Popular print and web media, etc.***

* [Fossil evidence confirms persistence of prehistoric forests in Brunei](https://news.mongabay.com/2022/05/fossil-evidence-confirms-persistence-of-prehistoric-forests-in-brunei/). By John Cannon, Mongabay, 31 May 2022.
* [Fossils of leaves in Borneo reveal an ancient 4 million-year-old forest](https://www.sciencealert.com/fossils-of-leaves-in-borneo-reveal-an-ancient-4-million-year-old-forest). By David Nield, ScienceAlert 1 May 2022.
* [Trace fossils, the most inconspicuous bite-sized window into ancient worlds](https://arstechnica.com/science/2021/06/trace-fossils-the-most-inconspicuous-bite-sized-window-into-ancient-worlds/). By Jeanne Timmons, Ars Technica 11 June 2021.
* [Australia, danneggiata la foresta pluviale ed alcuni esemplari unici di piante fossili](https://www.rinnovabili.it/ambiente/politiche-ambientali/australia-incendi-piante-fossili-viventi/). By Thomas Schoch, Rinnovabili.it, 8 April 2020.
* [A forest and its history, threatened](https://news.psu.edu/story/612204/2020/04/06/research/forest-and-its-history-threatened). By Kevin Sliman, Penn State News, 6 April 2020.
* [A forgotten forest of ancient trees was devastated by bushfires](https://www.theatlantic.com/science/archive/2020/02/australia-bushfires-ancient-trees/607039/). By Maddie Stone, The Atlantic, 25 February 2020.
* [Prehistoric tree is first of its kind found below the Equator](https://www.nationalgeographic.com/science/2019/06/prehistoric-tree-is-first-of-its-kind-found-below-the-equator/). By Catherine Zuckerman, National Geographic news, 6 June 2019.
* [Fossil nuts from ancient Gondwanan beech tree challenge plant evolution](https://www.abc.net.au/news/science/2019-06-07/fossil-nuts-from-gondwanan-beech-tree-challenges-plant-evolution/11184956). By Anna Salleh, ABC (Australia), 6 June 2019.
* [Encuentran restos de *Castanopsis* en la Patagonia de 52 millones de años](https://www.conicet.gov.ar/encuentran-restos-de-castanopsis-en-la-patagonia-de-52-millones-de-anos/). By Miguel Faigón, CONICET news, 6 June 2019.
* [Secrets of leaf size revealed](http://www.australiangeographic.com.au/news/2017/09/secrets-of-leaf-size-revealed). By Karl Gruber, Australian Geographic, 1 September 2017.
* [Interview: Scientists discover hidden mystery of leaf size in world's first study](http://www.xinhuanet.com/english/2017-09/01/c_136573362.htm). By Will Koulouris, Xinhua, 1 September 2017.
* [Why are leaves so big in the tropics?](https://cosmosmagazine.com/climate/why-are-leaves-so-big-in-the-tropics) By Tim Wallace, Cosmos, 1 September 2017.
* [Why some plants have huge leaves and others have tiny ones](https://www.atlasobscura.com/articles/leaf-size-air-temperature-model-overheating-freezing). By Kelsey Kennedy, Atlas Obscura, 31 August 2017.
* [Clues to why leaves come in many sizes](http://www.bbc.com/news/science-environment-41099030). By Helen Briggs, BBC News, 31 August 2017.
* [New research unlocks the mystery of leaf size](https://theconversation.com/new-research-unlocks-the-mystery-of-leaf-size-83294?utm_source=twitter&utm_medium=twitterbutton). By Ian Wright, The Conversation, 31 August 2017.
* [We may finally understand why tropical plants have huge leaves](https://www.newscientist.com/article/2145966-we-may-finally-understand-why-tropical-plants-have-huge-leaves/). By Alice Klein, New Scientist, 31 August 2017.
* [Prähistorische Knolle: Kartoffeln sind über 50 Millionen Jahre alt!](http://www.die-kartoffel.de/blog/aktuelles/kartoffeln-ueber-50-millionen-jahre-alt) Die Kartoffel, 2 February 2017.
* [El origen del tomate: hallan en Chubut restos fósiles de unos 52 millones de años](http://www.clarin.com/sociedad/origen-tomate-hallan-chubut-restos-fosiles-deunos-52-millones-anos_0_SJuaGINIl.html). By Carlos Guajardo, Clarin (Argentina), 11 January 2017.
* [Newly discovered 52-million-year-old fossil hints one fruit is a lot older than we thought](https://mic.com/articles/162517/newly-discovered-52-million-year-old-fossil-hints-one-fruit-is-a-lot-older-than-we-thought#.aV4GaSY5W). By Alex Orlov, Mic.com, 11 January 2017.
* [Salsa primeval: 52-million-year-old tomatillo found](https://www.scientificamerican.com/article/salsa-primeval-52-million-year-old-tomatillo-found/). By Lucas Viano, Scientific American, 11 January 2017.
* [52 million-year-old tomatillo fossils rewrite veggie history](http://wypr.org/post/52-million-year-old-tomatillo-fossil-rewrites-veggie-history). By Angus Chen, NPR Food, 10 January 2017.
* [Tomatillo fossils, 52 million years old, are discovered in Patagonia](http://www.nytimes.com/2017/01/09/science/tomatillo-fossils-nightshade.html?rref=collection%2Fsectioncollection%2Fscience&action=click&contentCollection=science&region=rank&module=package&version=highlights&contentPlacement=5&pgtype=sectionfront). By Nicholas St. Fleur, New York Times, 9 January 2017.
* [Ancient tomato ancestors found in 52-million-year-old Patagonian stone](https://www.washingtonpost.com/news/morning-mix/wp/2017/01/06/ancient-tomato-ancestors-found-in-52-million-year-old-patagonian-stone/?utm_term=.54f43dedcb33). By Ben Guarino, Washington Post, 6 Jan 2017
* ['Rare and exquisite' 52-million-year-old fossil fruits discovered with papery skins still intact](http://www.ibtimes.co.uk/rare-exquisite-52-million-year-old-fossil-fruits-discovered-papery-skins-still-intact-1599538). By Martha Henriques, International Business Times (UK), 5 Jan 2017.
* [Researchers uncover fossils of 52-million-year-old tomatillos](http://www.smithsonianmag.com/smart-news/new-fossils-reveal-tomatillos-are-older-scientists-thought-180961710/). By Danny Lewis, Smithsonian Magazine, 6 Jan 2017
* [When did tomatillos start wearing papery jackets?](http://www.csmonitor.com/Science/2017/0106/When-did-tomatillos-start-wearing-papery-jackets) By Josh Kenworthy, Christian Science Monitor, 6 Jan 2017.
* [Tomatillo fossil is oldest nightshade plant](https://www.sciencenews.org/article/tomatillo-fossil-oldest-nightshade-plant). By Meghan Rosen, Science News, 5 Jan 2017.
* [Deadly (and delicious!) nightshades much older than thought](http://blogs.discovermagazine.com/deadthings/2017/01/05/deadly-and-delicious-nightshades-much-older-than-thought/). By Gemma Tarlach, Discover Magazine, 05 Jan 2017.
* [How did potatoes, tomatoes evolve? Let a 52-million-year-old berry fossil explain](http://www.siasat.com/news/potatoes-tomatoes-evolve-let-52-million-year-old-berry-fossil-explain-1104827/)! Zee News (India), 9 Jan 2017.
* [How long did it take for life to rebound after the death of the dinosaurs](https://www.washingtonpost.com/news/speaking-of-science/wp/2016/11/07/how-long-did-it-take-for-life-to-rebound-after-the-death-of-the-dinosaurs/?utm_term=.a628db3f0b83)? By Sarah Kaplan, Washington Post, 7 November 2016.
* [Southern hemisphere faster to recover after killer asteroid, study suggests.](https://www.theguardian.com/science/2016/nov/07/southern-hemisphere-fastest-to-recover-after-dinosaur-killer-asteroid-study-suggests) By Nicola Davis, The Guardian, 7 November 2016.
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* [Eat a paleo peach: first fossil peaches discovered in southwest China.](http://news.psu.edu/story/382824/2015/11/30/research/eat-paleo-peach-first-fossil-peaches-discovered-southwest-china) 30 November 2015.
* [Turn back the molecular clock, say Argentina's plant fossils](http://news.psu.edu/story/336611/2014/12/02/research/turn-back-molecular-clock-say-argentinas-plant-fossils?utm_source=newswire&utm_medium=email&utm_term=336704_HTML&utm_content=12-02-2014-21-13&utm_campaign=Penn%20State%20Today). *December 2, 2014*.
* [Leaf-mining insects destroyed with the dinosaurs, others quickly appeared.](http://news.psu.edu/story/321434/2014/07/24/research/leaf-mining-insects-destroyed-dinosaurs-others-quickly-appeared) *July 24, 2014*.
* [Leaf chewing links insect diversity in modern and ancient forests](http://news.psu.edu/story/314397/2014/05/02/research/leaf-chewing-links-insect-diversity-modern-and-ancient-forests). *May 2, 2014.*
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* [Buried leaves reveal precolonial eastern forests and guide stream restoration](http://news.psu.edu/story/295212/2013/11/13/research/buried-leaves-reveal-precolonial-eastern-forests-and-guide-stream). *November 13, 2013*.
* [Four from EMS among those to receive 2013 University awards for teaching, research and service](http://www.eesi.psu.edu/news/archive-2013/staff-university-awards.shtml). April 3, 2013.
* [Six faculty members receive Atherton Award for Excellence in Teaching.](http://news.psu.edu/story/269773/2013/03/21/six-faculty-members-receive-atherton-award-excellence-teaching) *March 21, 2013*.
* [Grant to fund exploration of fossil plants in Patagonia](http://live.psu.edu/story/42549). *October 28, 2009.*
* Wilf named Distinguished Speaker by Paleontological Society. *August 3, 2009*.
* Ancient leaves point to climate change effect on insects. *February 5, 2008.*
* Insect predation sheds light on food web recovery after the dinosaur extinction*. August 24, 2006.*
* Wilf awarded Packard Fellowship for Science and Engineering. *November 8, 2005.*
* Fossil Patagonian plants show high insect feeding diversity 52 million years ago  
  Monday, June 20, 2005.
* Fossils show extreme plant diversity in South America 50 million years ago. April 4, 2003.
* Fossil Plant and Insect Communities Key to Understanding Global Change. February 18, 2003.
* Dinosaurs Experienced Climate Changes Before K-T Collision. January 15, 2003.

**MUSIC**

2003 (May 25), WKCR-FM NY (89.9 FM, Columbia University) *SunRadio* Program, airing of re-edited interview with Sun Ra from March 1985, by P. Wilf, originally aired on WXPN-FM Philadelphia.

1988-1993 (and 2016 reunion): Intuitive Music Unit (IMU, cofounder with R. Moskowitz), four pieces, original, instrumental music, avant-blues-jazz-fusion. Wrote and performed over 30 original compositions. Over 100 performances; most notable venues included: Knitting Factory, (New York City); Painted Bride Art Center, Nexus Art Gallery, Group Motion Studio (Philadelphia).

*Intuitive Music Unit* (P. Wilf, R. Moskowitz, E. Levin, S. Bergmann), 1992. ~45 minutes, ~300 copies distributed. Two tracks from this release also issued on *Manifestation III* CD, Awefull Records.

Original compositions for IMU Intuitive Music Unit including:

*Redemption for Corrupt Pit Bulls*

*EZ Funk*

*The Kandinsy Kilowatts Compress to the Great Seal*

*Underground Railroad*

*Noctural Leash Transmission*

*Faubus Variations*

*Like This*

*Syzygies and Orbit Spaces*

*Barbadian Hot Sauce*

1992: Sound for art installation, “*The Remembering Cave*,” University of Delaware, by MFA students Mary Ann Bucklin and Alyn Fenn.

1984-1987. Weekly program host for WXPN-FM, Philadelphia. Programs: *Blue Genesis Jazz*, *Jazz All Night*, *Aeolia* (20th century classical music). Included music programming, interviews with recording artists, and commentary.

**ADDENDUM: abstracts 1995-2019** (156)

key: \*undergraduate author; †graduate student; ‡postdoc at time work was done.

Andruchow-Colombo† A, IH Escapa, P Wilf. 2018. Primer registro del género australasiático *Phyllocladus* (familia Podocarpaceae) para Sudamérica (Eoceno temprano de Patagonia). *Reunión de Comunicaciones de la Asociación Paleontológica Argentina* (RCAPA), Puerto Madryn, Argentina.

Andruchow-Colombo† A, IH Escapa, RJ Carpenter, RS Hill, A Iglesias, A Abarzua, P Wilf. 2018. Primer registro fósil del clado de hojas escamosas (Podocarpaceae) en el Paleoceno inferior de la Formación Salamanca (Chubut, Argentina): implicancias en la evolución temprana del grupo. *XVII Simposio Argentino de Paleobotánica y Palinología, Paraná, Argentina.*

Andruchow-Colombo† A, P Wilf, IH Escapa. 2019. A South American fossil relative of *Phyllocladus* (Podocarpaceae), from the early Eocene of Laguna del Hunco, Patagonia, Argentina. *Botany 2019, Tucson*, abstract 319.

Barclay,R.S., P. Wilf, T. Lott, D.L. Dilcher. 2012. The Cuticle Database: An online visual library for the study of plant cuticle characters. Mid-Continent Paleobotanical Colloquium 29, Yale University, Abstracts: 23.

Brea M, A Iglesias, P Wilf. 2015. First South American record o*f Winteroxylon*, Eocene of Laguna del Hunco (Patagonia, Argentina). XVI Simposio Argentino de Paleobotánica y Palinología, La Plata, Argentina.

## Cariglino†, B., P. Wilf, D.L. Royer, K.R. Johnson. Paleoclimatic analysis of three Eocene lacustrine floras (Laguna del Hunco, Chubut, Argentina; Republic, Washington, USA; and Green River, Utah, USA) using digital leaf physiognomy. *2007* *Mid-Continent Paleobotanical Colloquium*, *Southern Methodist University*, abstract volume.

Cariglino†, B., Royer‡, D.L., and P. Wilf, 2005. Paleoclimate estimation from digital leaf physiognomy of fossil leaf floras: preliminary results. *Geological Society of America Annual Meeting, Salt Lake City, Abstracts with Programs*, v. 37, p. 137 [poster].

Carvalho†, M.R., P. Wilf, H. Barrios, E.D. Currano, C. Jaramillo, C.C. Labandeira, D.M. Windsor. 2009. Is insect damage diversity correlated with insect diversity? Preliminary results from the Panama canopy cranes and implications for plant-insect associational diversity in the fossil record. *Geological Society of America Annual Meeting, Portland, Abstracts with Programs*, abstract 51-7*.*

Carvalho†, M.R., P. Wilf, H. Barrios, E.D. Currano, D.M. Windsor, C.A. Jaramillo, C.C. Labandeira. 2011. Tropical canopy insects link leaf damage in fossil and living forests. Geological Society of America Annual Meeting, Minneapolis, Abstracts with Programs.

Carvalho†, M.R., P. Wilf, M.A. Gandolfo, N.R. Cúneo, K.R. Johnson. 2011. Fossil ferns from the Eocene of Argentina and the deep-time links between Southern Hemisphere rainforests. International Botanical Congress, Melbourne, Abstracts: 249.

Carvalho†, M.R., P. Wilf, M.A. Gandolfo, N.R. Cúneo, K.R. Johnson. 2010. Ferns from the Laguna del Hunco paleoflora (51.9 Ma), Patagonia, Argentina, reveal new biogeographic links to rainforest Gondwana*. Geological Society of America Annual Meeting, Denver*, Abstract 180454.

Carvalho†, M.R., P. Wilf, M.A. Gandolfo, N.R.Cúneo, K.R. Johnson. 2010. Primer registro de *Todea* Willd. ex Bernh. (Osmundaceae) en Suramerica, proveniente del Eoceno temprano (52 Ma) de Laguna del Hunco, Patagonia, Argentina. *X Latin American Botanical Congress*, La Serena, Chile.

Clyde WC, P Wilf, et al. (10 authors). New age constraints for the fossiliferous Salamanca Formation and lower Río Chico Group in the western San Jorge Basin, Patagonia, Argentina. *Geological Society of America Annual Meeting, Charlotte*.

Comer†, E., R.L. Slingerland, M. Kraus, A. Iglesias, H. Graham, P. Wilf. 2011. Shallow marine and meso-tidal paleo-environments of the westernmost outcrops of the late Danian Salamanca Formation in southern Chubut, Argentina. *AAPG Annual Meeting, Houston*.

Comer†, E., R.L. Slingerland, P. Wilf. 2010. Depositional environments of late Danian plant localities: Chubut Provice, Patagonia, Argentina. *AGU Fall Meeting* [poster].

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Cúneo, N.R., K.R. Johnson, R. Scasso, V. Barreda, H. Brinkhuis, W.C. Clyde, M.A. Gandolfo, P. Wilf. 2008. The K-T boundary and the associated floral event in South America. The case for Patagonia. *International Organization of Paleobotany, VIIIth Quadrennial Conference, Bonn, Germany*, abstracts*.*

Cúneo, N.R., L.V. Seoane, M.A. Gandolfo, P. Wilf. 2010. Last ginkgoalean record in South America. *Botanical Society of America Annual Meeting, Providence, Rhode Island*, abstract 507*.*

Currano†, E., P. Wilf, S.L. Wing, and C.C. Labandeira. 2006. Increased insect herbivory during the Paleocene-Eocene Thermal Maximum in the Bighorn Basin, Wyoming, USA. *Climate and Biota of the Early Paleogene* specialty conference, Bilbao, Spain June 2006, Abstract Volume p. 29.

Currano†, E.D., C.C. Labandeira, P. Wilf, S.L. Wing, 2008. Some like it hot: the correlation between temperature and insect herbivory during the Paleocene and Eocene in the Bighorn Basin, Wyoming, USA. *Geological Society of America Annual Meeting, Houston, Abstracts with Programs*, v. 40, paper 148801.

Currano†, E.D., C.C. Labandeira, P. Wilf, S.L. Wing, 2009. Dynamics of plant-insect herbivore interactions during the late Paleocene and early Eocene in the Bighorn Basin, Wyoming, USA. *Climate and Biota of the Early Paleogene* specialty conference, Wellington, New Zealand, abstracts, p. 54.

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## Currano†, E.D., P. Wilf, S.L. Wing, C.C. Labandeira. Hungry insect herbivores during the Paleocene-Eocene thermal maximum in the Bighorn Basin, Wyoming, USA. *2007* *Mid-Continent Paleobotanical Colloquium*, *Southern Methodist University*, Abstract volume.

## Danehy\*, D.R., and P. Wilf, 2006, An early Eocene fossil leaf flora from the Red Hot Truck Stop locality (Meridian, Mississippi) and its biogeographic and paleoenvironmental significance. *Geological Society of America Annual Meeting, Philadelphia, Abstracts with Programs,* v. 38, abstract 230-39*.* [poster]

Danehy\*, D.R., and P. Wilf, 2007. Early Eocene macroflora from the Red Hot Truck Stop locality (Meridian, Mississippi, USA). *Geological Society of America Annual Meeting, Denver, Abstracts with Programs*, v. 39.

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Donovan†, MP, P Wilf, CC Labandeira, KR Johnson. 2012. Anomalous insect-plant damage diversity at Mexican Hat, Montana linked to an influx of Paleocene insects. *Geological Society of America Annual Meeting, Charlotte*.

Elliott† SJ, P Wilf, RC Walter, DJ Merritts. 2013. Subfossil leaves reveal a new upland floral component of the pre-European Piedmont landscape, Lancaster County, Pennsylvania. *Geological Society of America Annual Meeting, Denver, paper 94-6*.

Escapa IH, A Iglesias, P Wilf, NR Cúneo. 2013. Oldest macrofossil record of *Agathis* (Araucariaceae), early Paleocene of Patagonia, Argentina, and its evolutionary significance. *Botany 2013, New Orleans*, abstract 378.

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Gandolfo, M.A, M.C. Zamaloa, C.C. Gonzalez†, N.R. Cúneo, P. Wilf, and E.J. Romero, 2004, Early history of Casuarinaceae in the Paleogene of Patagonia, Argentina. *International Organization of Paleobotany, VIIth Quadrennial Conference, Bariloche, Argentina, Abstracts*.

Gandolfo, M.A., C.C. González†, M. C. Zamaloa, R.N. Cúneo, P. Wilf, 2006. *Eucalyptus* (Myrtaceae) macrofossils from the early Eocene of Patagonia, Argentina. *Botanical Society of America Annual Meeting*, Chico, CA. abstract 473.

Gandolfo, M.A., C.C. González†, R.N. Cúneo, P. Wilf, K.R. Johnson, and M. C. Zamaloa. The austral and tropical components of the Eocene Laguna del Hunco and Río Pichileufú floras. *Climate and Biota of the Early Paleogene* specialty conference, Bilbao, Spain June 2006, Abstract Volume p. 49.

## Gandolfo, M.A., Gonzalez†, C.C., Zamaloa, M.C., Cuneo, N.R. & Wilf, P., 2007. *Eucalyptus* (Myrtaceae) macrofossils from the early Eocene of Patagonia, Argentina. *Southern Connection 5th International Conference*, January 2007, Adelaide, Australia.

Gandolfo, M.A., M.C. Zamaloa, C.C. González†, N.R. Cúneo, P. Wilf, K.R. Johnson, 2007. Bixaceae: a tropical component of the early Eocene Laguna del Hunco paleoflora, Chubut, Patagonia, Argentina. *Geological Society of America Annual Meeting, Denver, Abstracts with Programs*, v. 39, p. 585.

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Hermsen EJ, Gandolfo MA, P Wilf, MR Carvalho†. 2016.The utility of phylogenetic analyses for interpreting fossil floras: a case study. *XXXV Annual Meeting of the Willi Hennig Society, Buenos Aires, Argentina*.

Hermsen EJ, MA Gandolfo, P Wilf, NR Cúneo. 2014. Beyond the Gondwanan Expressway: Patagonian-Northern Hemisphere connections. *10th North American Paleontological Convention, Florida Museum of Natural History*.

Hermsen‡, E.J., M.A. Gandolfo, K.R. Johnson, P. Wilf, N.R. Cúneo. 2011. *Eucalyptus* from the early Eocene of Patagonia, Argentina: phylogenetic, biogeographic, and ecological implications for understanding eucalypt evolution. International Botanical Congress, Melbourne.

Hermsen‡, E.J., M.A. Gandolfo, P. Wilf, N.R. Cúneo, K.R. Johnson, A. Iglesias. 2010. New angiosperm reproductive structures from the early Eocene Laguna del Hunco flora, Chubut Province, Argentina. *Botanical Society of America Annual Meeting, Providence, Rhode Island.*

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Iglesias I, MA Gandolfo, P Wilf, RJ Carpenter. 2015. Registro de Cunoniaceae en el Paleógeno de Patagonia. XVI Simposio Argentino de Paleobotánica y Palinología, La Plata, Argentina.

Iglesias, A., P. Wilf, K.R. Johnson, R. Slingerland, M.A. Gandolfo. 2010. Early Paleocene macrofloras of Patagonia and their significance for Austral biogeography and biodiversity. VI Southern Connection Congress, Bariloche, Argentina.

Iglesias, A., P. Wilf, N.R. Cúneo, M.A. Gandolfo, M.C. Zamaloa, K.R. Johnson, R.L. Slingerland. 2010. Latest Cretaceous, Paleocene, and Eocene floras from Patagonia: a critical interval for Gondwana’s floral history comes into focus. *X Congreso Argentino de Paleontología y Bioestratigrafía y VII Congreso Latinoamericano de Paleontología*, La Plata, Argentina.

Iglesias, A., P. Wilf, S.A. Little‡. 2009. El uso de microscopia de fluorluminiscencia en el estudio de compresiones foliares y órganos reproductivos del Cretácico y Paleógeno de Patagonia. *XIII Simposio Argentino de Paleobotánica y Palinología, Mar del Plata, Argentina*, www.xivsapp.com.ar.

Iglesias† A, P. Wilf, C.C. Labandeira, K.R. Johnson, A.B. Zamuner, N.R. Cúneo, 2006. High diversity Paleocene macrofloras from the San Jorge Basin (Chubut, Argentina): implications for plant diversity during the early Paleogene. *XIII Simposio Argentino de Paleobotanica y Palinología, Bahia Blanca (Buenos Aires)*, May 2006.

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Iglesias‡, A., P. Wilf, M.A. Gandolfo, S.A. Little‡, K.R. Johnson, A.B. Zamuner, C.C. Labandeira, N.R. Cúneo, 2008. Paleocene Patagonian floras: *in situ* cuticles complement architectural data from leaf compressions of Podocarpaceae, Lauraceae, and Nothofagaceae. Botanical Society of America Annual Meeting, Vancouver.

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Iribarren, R., A. Iglesias, A. Zamuner, D. Poiré, S. Richiano, P. Wilf. 2012. Revision of “*Fitzroya*” *tertiaria* Berry based on holotype cuticle and new material with attached female cones, Cretaceous (Cenomanian), Austral Basin, Argentina. XV Simposio Argentino de Paleobotánica y Palinología, Corrientes, abstracts.

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Johnson, K.R., P. Wilf, and S.L. Wing, 2001. Morphotyping the Cretaceous and Paleogene leaf floras of the Rocky Mountain Region. invited for North American Paleontological Convention, Berkeley, CA, Paleobios, v. 21 (2 supp.), p. 75-76.

Johnson, K.R., P. Wilf, N.R. Cúneo, M.A. Gandolfo, A. Iglesias†, C.C. González†, C.C. Labandeira, 2006. Advances in the Paleogene paleobotany of Patagonia, Argentina. *Advances in Paleobotany Conference recognizing David Dilcher and Jack Wolfe*, Gainesville, Florida March 2006.

Jud NA, MA Gandolfo, P Wilf, A Iglesias. 2018. Remarkable diversity of fossil flowers from the early Paleocene (Danian) Salamanca Formation, Chubut, Argentina. *Botany 2018*, Rochester, Minnesota.

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Knight† CL, P Wilf. Rare leaf fossils of Monimiaceae and Atherospermataceae (Laurales) from Eocene Patagonian rainforests and their biogeographic significance. *Geological Society of America Annual Meeting, Charlotte.*

Knight†, C., P. Wilf. 2011. Rare leaf fossils of Monimiaceae and Atherospermataceae (Laurales) from Eocene Patagonia: biogeography of ancient southern rainforest lineages. Geological Society of America Annual Meeting, Minneapolis, Abstracts with Programs, paper #193873.

Krause JM, WC Clyde, M Ibañez-Mejía, MD Schmitz, ES Bellosi, P Wilf. 2017. New perspectives on the chronostratigraphy of lower Paleocene-middle Eocene sequences in the San Jorge Basin. *XX Congreso Geológico Argentino, Tucumán, Argentina*.

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Labandeira, C.C., A. Iglesias†, P. Wilf, K.R. Johnson, N.R. Cúneo. Elevated rates and richness of insect damage from Paleogene Argentina: implications for modern South American diversity. *Climate and Biota of the Early Paleogene* specialty conference, Bilbao, Spain June 2006, Abstract Volume p. 81.

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Labandeira, C.C., P. Wilf, and K.R. Johnson, 2003, Insect response to extraterrestrial impact, global warming, and vegetational change (65 and 55 m.y.a.). Invited for AAAS Annual Meeting symposium, *Lessons from disturbed land ecosystems in the fossil record,* Denver.

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