

## PETER DANIEL WILF

DEPARTMENT OF GEOSCIENCES, PENNSYLVANIA STATE UNIVERSITY, UNIVERSITY PARK, PA 16802

USA pwilf@psu.edu; <https://personal.ems.psu.edu/~pwilf>; +1-814-865-6721

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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.

## INVITED PROFESSIONAL TALKS

104 talks listed in Addendum 1.

## PUBLICATIONS

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

### **Peer reviewed**

- (###) Wang T-X<sup>†</sup>, J Liu, P Wilf, J Huang, T Van Do, HB Nguyen, S-T Zhang, T Su. New Plio-Pleistocene flora from central Vietnam—ancient analog of southern Indochina's tropical monsoon forests. In review, *Palaeontologia Electronica*.
- (125) Siegert<sup>‡</sup> C, MA Gandolfo, P Wilf. 2025. Oldest known Malpighiaceae fossils: early Eocene Patagonian fruits support a wide paleolatitudinal distribution. *International Journal of Plant Sciences* 186, <https://doi.org/10.1086/737467>.
- (124) Wilf P. 2025. *Osmoxylon*-like fossils from early Eocene South America: West Gondwana-Malesia connections in Araliaceae. *American Journal of Botany* 112, e70045.
- (123) Zonneveld J-P, Y Zaim, Aswan, Y Rizal, A Hascaryo, VD Barreda, RL Ciochon, J Head, A Murray, T Smith, P Wilf, JI Bloch. 2025. Depositional framework of the Sangkarewang and Sawahlunto formations, Ombilin Basin, West Sumatra, Indonesia. *Journal of Asian Earth Sciences* 287, 10611.
- (122) Wang T-X<sup>†</sup>, P Wilf, A Briguglio, L Kocsis, MP Donovan, X Zou\*, JWF Slik. 2025. Fossils of an endangered, endemic, giant dipterocarp species open a historical portal into Borneo's vanishing rainforests. *American Journal of Botany* 112, e70036 (cover article).
- (121) Hajek EA, JM Krause, P Wilf, MD Schmitz. 2025. Sedimentological controls on plant-fossil preservation in an Eocene caldera-lake fill: a high-resolution, age-constrained record from the Tufolitas Laguna del Hunco, Chubut Province, Argentina. *Palaeos* 40, 114-129.
- (120) Wilf P, RM Kooyman. 2025. Paleobotany reframes the fiery debate on Australia's rainforest edges. *New Phytologist* 245, 1355-1365.
- (119) Giraldo<sup>†</sup>, LA, P Wilf, MP Donovan, RM Kooyman, MA Gandolfo. 2025. Fossil insect-feeding traces indicate unrecognized evolutionary history and biodiversity on Australia's iconic *Eucalyptus*. *New Phytologist* 245, 1762-1773.
- (118) Zonneveld, J-P, N Adani, Aswan, JI Bloch, A Briguglio, RL Ciochon, LJ Cotton, A Hascaryo, J Head, J Luque, Y Rizal, N Santodomingo, T Smith, J Todd, P Wilf, Y Zaim. 2025. Stratigraphy, paleontology, and depositional setting of the late Eocene (Priabonian) lower Pagat Member, Tanjung Formation, in the Asem Asem Basin, South Kalimantan, Indonesia. *Journal of Paleontology* 98(S96), 1-37.
- (117) Pujana RR, NA Jud, P Wilf, MA Gandolfo. 2025. Lauraceous fossil woods from the early Eocene of Laguna del Hunco, Argentine Patagonia. *Alcheringa* 49, 85-98.

- (116) Rossetto-Harris<sup>†</sup> G, P Wilf. 2024. Reassessing floral diversity at Río Pichileufú, earliest middle Eocene of Río Negro, Argentina. *Palaeontologia Electronica* 27.3.a49.
- (115) Siegert<sup>†</sup> C, MA Gandolfo, P Wilf. 2024. Early Eocene infructescences from Patagonia, Argentina expand the biogeography of Malvoideae (Malvaceae, the mallow family). *American Journal of Botany* 111, e16384.
- (114) Wilf P, CC González, MA Gandolfo, MC Zamaloa. 2024. Putative *Celtis* leaves from Eocene Patagonia are allied with Asian Anacardiaceae. *Ameghiniana* 61, 73–92.
- (113) Spagnuolo EJ<sup>†</sup>, P Wilf, J-P Zonneveld, D Shaw, Aswan, Y Rizal, Y Zaim, JI Bloch, RL Ciochon. 2024. Giant seeds of an extant Australasian legume lineage discovered in Eocene Borneo (South Kalimantan, Indonesia). *International Journal of Plant Sciences* 185, 482–502.
- (112) Zonneveld, J-P, Y. Zaim, Y. Rizal, Aswan, DM Boyer, RL Ciochon, T Smith, J Head, P Wilf, JI Bloch. 2024. Avian foraging on an intertidal mudflat succession in the Eocene Tanjung Formation, Asem Asem Basin, South Kalimantan, Indonesia. *Palaios* 39, 67–96.
- (111) Wilf P, RM Kooyman. 2023. Do Southeast Asia's paleo-Antarctic trees cool the planet? *New Phytologist* 239, 1556–1566 (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<sup>‡</sup> A, G Rossetto-Harris<sup>†</sup>, 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<sup>†</sup> 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<sup>†</sup> G, E Stiles<sup>†</sup>, 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<sup>†</sup>, 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<sup>†</sup>, 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<sup>†</sup>, R Saha<sup>†</sup>, 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<sup>†</sup> 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<sup>†</sup>, 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<sup>†</sup> 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<sup>†</sup> 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<sup>†</sup> 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<sup>†</sup> G, P Wilf, IH Escapa, A Andruchow-Colombo<sup>†</sup>. 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 Zamalao, 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<sup>†</sup> 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<sup>†</sup> 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<sup>†</sup> 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<sup>‡</sup> 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<sup>†</sup> 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<sup>†</sup>, 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<sup>‡</sup> 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.
- (75) Wright I, Ning D, Maire V, Prentice IC, Westoby M, Diaz S, Gallagher RV, Jacobs BF, Kooyman R, Law EA, Leishman MR, Niinemets Ü, Reich PB, Sack L, Villar R, Wang H, Wilf P. 2017. Global climatic drivers of leaf size. *Science*, v. 357, p. 917–921.
- (74) Wu<sup>°</sup> 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.
- (73) Jud<sup>‡</sup> NA, MA Gandolfo, A Iglesias, P Wilf. 2017. Flowering after disaster: early Danian buckthorn (Rhamnaceae) flowers and leaves from Patagonia. *PLoS One*, 12: e0176164.
- (72) Krause JM, WC Clyde, M Ibañez-Mejía, MD Schmitz, T Barnum, ES Bellosi, P Wilf. 2017. New age constraints for early Paleogene strata of central Patagonia, Argentina: implications for the timing of South American land mammal ages. *GSA Bulletin*, v. 129, p. 886–903.
- (71) Wilf P, MR Carvalho<sup>†</sup>, MA Gandolfo, NR Cúneo. 2017. Eocene lantern fruits from Gondwanan Patagonia and the early origins of Solanaceae. *Science*, v. 355, p. 71–75.
- (70) Donovan<sup>†</sup> MP, A Iglesias, P Wilf, CC Labandeira, NR Cúneo. 2017. Rapid recovery of Patagonian plant-insect associations after the Cretaceous-Paleogene mass extinction. *Nature Ecology & Evolution*, v. 1, art. 12, doi:10.1038/s41559-016-0012.
- (69) Wilf P, DW Stevenson, NR Cúneo. 2016. The last Patagonian cycad, *Austrozamia stockeyi* gen. et sp. nov., early Eocene of Laguna del Hunco, Chubut, Argentina. *Botany*, v. 94, p. 817–829 (invited for Special Issue “Mesozoic and Cenozoic Plant Evolution and Biotic Change, a collection of research inspired by, and honouring, Ruth A. Stockey.”)
- (68) Wilf, P, S Zhang, S Chikkerur, SA Little<sup>‡</sup>, SL Wing, T Serre. 2016. Computer vision cracks the leaf code. *PNAS*, v. 113, p. 3305–3310.
- (67) Elliott<sup>†</sup> SJ, CL Grettenberger<sup>†</sup>, MP Donovan<sup>†</sup>, P Wilf, RC Walter, DJ Merritts. 2016. Riparian and valley-margin hardwood species of pre-colonial Piedmont forests: A preliminary study of subfossil leaves from White Clay Creek, southeastern Pennsylvania, USA. *Palaeontologia Electronica* 19.1.2A: 1–26.
- (66) Wilf P, Escapa IH. 2016. Molecular dates require geologic testing. Reply to Wang & Mao (2016). *New Phytologist*, v. 209, p. 1359–1362.
- (65) Su<sup>°</sup>, T, P Wilf, Y Huang, S Zhang, Z Zhou. 2015. Peaches preceded humans: fossil evidence from SW China. *Nature Scientific Reports* 5, art. 16794.

- (64) Wilf P, Labandeira CC. 2015. The fossil record of mutualisms. Pp. 39–41 in *Mutualism*, ed. JL Bronstein, Oxford University Press. Viewable on Google Books: <https://goo.gl/hMNeCQ>.
- (63) Merkhofer<sup>†</sup> L, P Wilf, MT Haas\*, RM Kooyman, L Sack, C. Scoffoni, NR Cúneo. 2015. Resolving Australian analogs for an Eocene Patagonian paleorainforest using leaf size and floristics. *American Journal of Botany*, v. 102, p. 1160–1173.
- (62) Comer<sup>†</sup> EE, RL Slingerland, JM Krause, A Iglesias, WC Clyde, MS Raigemborn, P Wilf. 2015. Sedimentary facies and depositional environments of diverse early Paleocene floras, north-central San Jorge Basin, Patagonia, Argentina. *Palaios*, v. 30, p. 553–573 (cover article). [corresponding author]
- (61) Villar de Seoane L, NR Cúneo, IH Escapa, P Wilf, MA Gandolfo. 2015. *Ginkgoites patagonica* (Berry) comb. nov. from the Eocene of Patagonia, last ginkgoalean record in South America. *International Journal of Plant Sciences*, v. 176, p. 346–363, with Erratum p. 364.
- (60) Wilf P, Escapa IH. 2015. Green Web or megabiased clock? Plant fossils from Gondwanan Patagonia speak on evolutionary radiations. *New Phytologist*, v. 207, p. 283–290 (invited *Tansley Insight* for Special Issue: *Evolutionary Plant Radiations*).
- (59) Kooyman RM, Wilf P, Barreda, VD, Carpenter RJ, Jordan GJ, Sniderman JMK, Allen A, Brodribb TJ, Crayn D, Feild TS, Laffan SW, Lusk CH, Rossetto M, Weston PH. 2014. Paleo-Antarctic rainforest into the modern Old World tropics: the rich past and threatened future of the 'southern wet forest survivors.' *American Journal of Botany*, v. 101, p. 2121–2135.
- (58) Su<sup>o</sup> T, P Wilf, H Xu, Z-K Zhou. 2014. Miocene leaves of *Elaeagnus* (Elaeagnaceae) from the Qinghai-Tibet Plateau, its modern center of diversity and endemism. *American Journal of Botany*, v. 101, p. 1350–1361.
- (57) Carpenter RJ, P Wilf, JG Conran, NR Cúneo. 2014. A Paleogene trans-Antarctic distribution for *Ripogonum* (Ripogonaceae: Liliales)? *Palaeontologia Electronica*, v. 17, article 17.3.39A, 9p.
- (56) Donovan<sup>†</sup> M, P Wilf, CC Labandeira, KR Johnson, DJ Peppe. 2014 Novel insect leaf-mining after the end-Cretaceous extinction and the demise of Cretaceous leaf miners, Great Plains, USA. *PLoS One*, v. 9: e103542.
- (55) Little<sup>‡</sup> SA, WA Green, SL Wing, P Wilf. 2014. Reinvestigation of leaf rank, an underappreciated component of Leo Hickey's legacy. *Bulletin of the Peabody Museum of Natural History*, v. 55, p. 79–87.
- (54) Carvalho<sup>†</sup> M.R., P. Wilf, H. Barrios, E.D. Currano, D.M. Windsor, C.A. Jaramillo, C.C. Labandeira. 2014. Insect leaf-chewing damage tracks herbivore richness in modern and ancient forests. *PLoS One*, v. 9: e94950, 9 p.
- (53) Wilf P, IH Escapa, NR Cúneo, RM Kooyman, KR Johnson, A Iglesias. 2014. First South American *Agathis* (Araucariaceae), Eocene of Patagonia. *American Journal of Botany*, v. 101, p. 156–179.
- (52) Clyde WC, P Wilf, A Iglesias, RL Slingerland, T Barnum, PK Bijl, TJ Bralower, H Brinkhuis, EE Comer<sup>†</sup>, BT Huber, M Ibañez-Mejía, BR Jicha, JM Krause, JD Schueth, BS Singer, MS Raigemborn, MD Schmitz, A Sluijs, MC Zamaloa. 2014. New age constraints for the Salamanca Formation and lower Río Chico Group in the western San Jorge Basin, Patagonia, Argentina: implications for K/Pg extinction recovery and land mammal age correlations. *Geological Society of America Bulletin*, v. 126, p. 289–306.
- (51) Cornwell WK, et al. (26 authors). 2014. Functional distinctiveness of major plant lineages. *Journal of Ecology*, v. 102, p. 345–356.
- (50) Elliott<sup>†</sup> 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. *PLoS One*, v. 8, e79317, 26 p.

- (49) Knight<sup>†</sup> CL, P Wilf. 2013. Rare leaf fossils of Monimiaceae and Atherospermataceae (Laurales) from Eocene Patagonian rainforests and their biogeographic significance. *Palaeontologia Electronica*, v. 16, article 16.3.26A, 39 p.
- (48) Macphail M, RJ Carpenter, A Iglesias, P Wilf. 2013. First fossil evidence for Wollemi Pine-type pollen (*Dilwynites*: Araucariaceae) in South America. *PloS One*, 8: e69281, 8 p.
- (47) Carvalho<sup>†</sup> MR, P Wilf, MA Gandolfo, EJ Hermsen<sup>‡</sup>, KR Johnson, NR Cúneo. 2013. First record of *Todea* (Osmundaceae) in South America, from the early Eocene paleorainforests of Laguna del Hunco (Patagonia, Argentina). *American Journal of Botany*, v. 100, p. 1831–1848.
- (46) Wilf P, NR Cúneo, IH Escapa, D Pol, MO Woodburne. 2013. Splendid and seldom isolated: the paleobiogeography of Patagonia. *Annual Review of Earth and Planetary Sciences*, v. 41, p. 561–603.
- (45) Barreda VD, NR Cúneo, P Wilf, ED Currano, RA Scasso, H Brinkhuis. 2012. Cretaceous/Paleogene floral turnover in Patagonia: drop in diversity, low extinction, and a *Classopollis* spike. *PLoS One*, v. 7, e52455 (8 p.).
- (44) Wilf P. 2012. Rainforest conifers of Eocene Patagonia: attached cones and foliage of the extant southeast-Asian and Australasian genus *Dacrycarpus* (Podocarpaceae). *American Journal of Botany*, v. 99, p. 562–584 (cover article).
- (43) Sauquet H, SYW Ho, MA Gandolfo, GJ Jordan, P Wilf, DJ Cantrill, M Bayly, L Bromham, G Brown, RJ Carpenter, DM Lee, D Murphy, JMK Sniderman, F Udovicic. 2012. Testing the impact of calibration on molecular divergence times using a fossil-rich group: the case of *Nothofagus* (Fagales). *Systematic Biology*, v. 61, p. 289–313 (cover article).
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### **Other publications**

- (16) 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, A Yabe Image collection and supporting data for: An image dataset of cleared, x-rayed, and fossil leaves vetted to plant family for human and machine learning. Version 2.0, published 23 May 2024.

Figshare+. Dataset. <https://doi.org/10.25452/figshare.plus.14980698.v2> [>34k open-access leaf images]

- (15) Wilf P. 2023. Presentation of the 2022 Paleontological Society Medal to Conrad C. Labandeira. *Journal of Paleontology* 97: 1155-1156.
  - (14) Oldfield S, P Wilf. 2021. Ancient tree survivors. In *State of the World's Trees*, Botanic Gardens Conservation International, Richmond, UK, p. 11.
  - (13) Kooyman RM, J Watson, P Wilf. 2020. Protect Australia's Gondwana rainforests. *Science* 367: 1083 (Letter).
  - (12) Wilf P, 2019. Commentary on Wolfe 1978. Ch. 28 in *Foundations of Paleoecology*, SK Lyons, AK Behrensmeyer, PJ Wagner, eds., University of Chicago Press.
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  - (10) Wilf, P., 2014, Commentary on K.J. Niklas, B.H. Tiffney, A.H. Knoll, 1983, *Patterns in vascular land plant diversification*, *Nature* 303:614-616, p. 36 in *Foundations of Macroecology*, F.A. Smith, J.L. Gittleman, J.H. Brown, eds., University of Chicago Press.
  - (9) Barclay, R.S., P. Wilf, D.L. Dilcher, J.C. McElwain. 2012. The Cuticle Database Project, version 1.1, The Earth and Environmental Systems Institute of Pennsylvania State University, <http://cuticledb.eesi.psu.edu>.
  - (8) Wilf, P., 2010. Citation for 2010 Donath Medal (Young Scientist Award) to Dana Royer, [www.geosociety.org/awards/10speeches/donath.htm](http://www.geosociety.org/awards/10speeches/donath.htm).
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  - (5) Wilf, P., M.A. Gandolfo, K.R. Johnson, N.R. Cúneo. 2004. Field trip guide: Paleogene floras of Patagonia. For Post-Meeting Field Trip 4 (March 27–31, 2004), International Organization of Paleobotany, VIIIth Quadrennial Conference, Bariloche, Argentina. 27 p.
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  - (3) Wilf, P., S.L. Wing, D.R. Greenwood, and C.L. Greenwood. 1999. Using fossil leaves as paleoprecipitation indicators: An Eocene example: Reply. *Geology*, v. 27, p. 92.
  - (2) Ash, A., B. Ellis, L.J. Hickey, K.R. Johnson, P. Wilf, and S.L. Wing. 1999. Manual of Leaf Architecture: Morphological description and categorization of dicotyledonous and net-veined monocotyledonous angiosperms. Smithsonian Institution, Washington, DC. 65 p.
  - (1) Wilf, P. 1998. Using fossil plants to understand global change: Evidence for Paleocene-Eocene warming in the greater Green River Basin of southwestern Wyoming. Doctoral dissertation, University of Pennsylvania, Philadelphia, 384 p.
- And numerous musical compositions (see Music).

### **Recent conference presentations**

Oral and presented by first author unless indicated. 189 older presentations not shown.

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

### **2025**

- Giraldo† LA, P Wilf, AS Miller\*, RJ Carpenter. 2025. Organically preserved leaves from the Eocene Anglesea flora reveal first early Paleogene records of four angiosperm families in Australia. *Botany 2025, Palm Springs*.
- Kooyman, RM, P Wilf. 2025. Deep-time history and contemporary Australian rainforest ecology: the fiery debate. Nature Conservation Council of New South Wales 14th Biennial Bushfire Conference, Sydney (Kooyman invited).
- Spagnuolo†, EJ, D Shaw, P Wilf, PJ Przybylski\*, LA Giraldo†, M Ul-Haq, SL Wing, WC Clyde, VA Korasidis. 2025. Into- or out-of-India? Early Eocene pollen and macrofossils from the Ghazij

Formation in Balochistan, Pakistan test long-standing biogeographic hypotheses. *Botany 2025, Palm Springs*.

Wang<sup>†</sup> T-X, P Wilf, T Van Do, T Su. 2025. Fossil leaves of *Sindora* (Fabaceae, Detarioideae, Detarieae) from the Plio-Pleistocene of central Vietnam. *Botany 2025, Palm Springs*.

Miller\*, A.S., Giraldo<sup>†</sup>, L.A., Wilf, P., Carpenter, R.J. 2025. Peltate leaf from Australia's Anglesea flora (middle Eocene, Victoria) supports an out-of-Gondwana history for the *Macaranga-Mallotus* clade (Euphorbiaceae). *42nd Mid-Continent Paleobotanical Colloquium, Wesleyan University*. [poster]

Giraldo<sup>†</sup>, L.A., Wilf, P., Miller\*, A.S., Carpenter, R.J. 2025. Organically preserved leaves from the Eocene Anglesea flora reveal first early Paleogene records of four angiosperm families in Australia. *42nd Mid-Continent Paleobotanical Colloquium, Wesleyan University*.

Przybylski\*, P.J., Giraldo<sup>†</sup>, L.A., Spagnuolo<sup>†</sup>, E.J., Wilf, P., ul-Haq, M., Wing, S.L., Clyde, W.C. 2025. Insect damage on the Indo-Pakistan collision front (Ghazij Formation, Balochistan, Pakistan): First tropical insect-feeding damage for the Early Eocene Climatic Optimum. *42nd Mid-Continent Paleobotanical Colloquium, Wesleyan University*.

Wang<sup>†</sup>, T.-X., Wilf, P., Van Do, T., Giraldo<sup>†</sup>, L.A., Spagnuolo<sup>†</sup>, E.J. 2025. Early Pleistocene flora from central Vietnam and its links to southern Indochina's extant tropical monsoonal forests. *42nd Mid-Continent Paleobotanical Colloquium, Wesleyan University*.

Wilf P. 2025. *Osmoxylon*-like fossils from early Eocene South America: West Gondwana-Malesia connections in Araliaceae. *Botany 2025, Palm Springs*.

## 2024

Giraldo<sup>†</sup> LA, P Wilf, MP Donovan, MA Gandolfo. 2024. Insect-feeding traces from Eocene Patagonia reveal unrecognized evolutionary history of herbivorous insects on Australia's iconic *Eucalyptus*, *NAPC 2024, Ann Arbor*.

Kooyman RM, P Wilf. 2024. Using paleobotany to inform conservation of the Australian rainforests. *NAPC 2024, Ann Arbor*. [Wilf presenting]

Kooyman RM, P Wilf. 2024. Origins and assembly of the Australian rainforests: deep-time history shapes contemporary ecological dynamics. *Rainforest Connections Conference, Ballina, NSW, Australia*. [Kooyman presenting, invited plenary].

Przybylski\*, PJ, EJ Spagnuolo<sup>†</sup>, LA Giraldo<sup>†</sup>, P Wilf, M Ul-Haq, SL Wing, WC Clyde. 2024. Insect damage on the Indo-Pakistan collision front (Ghazij Fm., Balochistan, Pakistan): first tropical insect-feeding damage for the early Eocene climatic optimum. *Mid-Continent Paleobotanical Colloquium, Field Museum, Chicago*. [poster]

Rodriguez I, T Fel, M Vaishnav, P Wilf, T. Serre. 2024. Identifying Florissant leaf fossils to family using deep neural networks. *NAPC 2024, Ann Arbor*. [Wilf presenting]

Rossetto-Harris<sup>†</sup> G, P Wilf. 2024. The Río Pichileufú flora and the early-middle Eocene transition in northern Patagonia: high diversity and turnover under increased seasonality and persistent warmth. *Mid-Continent Paleobotanical Colloquium, Field Museum, Chicago*.

Spagnuolo<sup>†</sup>, EJ, D Shaw, P Wilf, PJ Przybylski\*, M Ul-Haq, SL Wing, WC Clyde. 2024. Into- or out-of-India? Early Eocene pollen and macrofossils from the Ghazij Formation in Balochistan, Pakistan test long-standing biogeographic hypotheses. *NAPC 2024, Ann Arbor*.

Spagnuolo EJ<sup>†</sup>, P Wilf, J-P Zonneveld, D Shaw, Aswan, Y Rizal, Y Zaim, JI Bloch, RL Ciochon. Giant seeds of an extant Australasian legume lineage discovered in Eocene Borneo (South Kalimantan, Indonesia). *Mid-Continent Paleobotanical Colloquium, Field Museum, Chicago*.

Wang T-X<sup>†</sup>, P Wilf, A Briguglio, L Kocsis, MP Donovan, X Zou\*, JWF Slik. 2024. Fossils of an endangered, endemic, giant dipterocarp tree unlock a historical portal into Borneo's vanishing rainforests. *NAPC 2024, Ann Arbor*. [poster]

Wang T-X<sup>†</sup>, P Wilf, A Briguglio, L Kocsis, MP Donovan, X Zou\*, JWF Slik. 2024. Fossils of an endangered, endemic, giant dipterocarp tree unlock a historical portal into Borneo's vanishing rainforests. *Mid-Continent Paleobotanical Colloquium, Field Museum, Chicago*.

## 2023

Andruchow-Colombo A, G Rossetto-Harris<sup>†</sup>, 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*.

Giraldo<sup>†</sup> LA, P Wilf, MP Donovan, MA Gandolfo. 2023. Insect-feeding traces from Eocene Patagonia reveal unrecognized evolutionary history of herbivorous insects on Australia's iconic *Eucalyptus*. *Geological Society of America Annual Meeting, Pittsburgh*.

Iglesias A, MG Passalia, P Picca, P Quiroga, P Wilf. 2023. First *Nothofagus* fossil cupules and nuts from South America, earliest Oligocene of northern Patagonia. *Botany 2023, Boise, Idaho*.

Kooyman R, P Wilf. 2023. Origins and assembly of the Australian rainforests: protecting deep time World Heritage values in the contemporary world. *International Association for Vegetation Science 65th Annual Symposium, Coffs Harbour, NSW, Australia*. [Kooyman invited]

Przybylski\*, PJ, EJ Spagnuolo<sup>†</sup>, LA Giraldo<sup>†</sup>, 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]

Rossetto-Harris<sup>†</sup> G, IH Escapa, A Iglesias, MG Passalia, P Wilf. 2023. The first Patagonian icehouse conifers: new fossil species of *Austrocedrus* (Cupressaceae) and *Araucaria* (Araucariaceae) from the earliest Oligocene of Argentina. *Botany 2023, Boise, Idaho*.

Spagnuolo<sup>†</sup>, 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*.

Wang<sup>†</sup> T-X, J Huang, J Liu, T Van Do, HB Nguyen, T Su, P Wilf. 2023. Fossil *Syzygium* leaves with in-situ cuticle from the Pliocene of central Vietnam. *Botany 2023, Boise, Idaho*.

## RESEARCH GRANTS

<b>In progress</b>	<b>Role</b>	<b>Dates</b>	<b>Title</b>	<b>Source</b>	<b>Amount</b>
P. Wilf, T. Serre, M.A. Gandolfo	Lead PI	7/15/2019-6/30/2024 (ext. to 6/30/2026)	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)
<b>Completed</b>					
P. Wilf, M.A. Gandolfo, N.R. Cúneo, E.A. Hajek	Lead PI	4/1/2016-3/31/2020 (final extended to end of 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)
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	ACS-PRF Type AC	\$80,000

			shape		
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

## TEACHING

### 1. Teaching at Penn State

#### Courses

Semester	Course No.	Course Title	Co-taught w/ (if appl.)	Type/credits	Final enrollment
<b>2025</b>					
Fall					
Spring	Geosc 204	Geobiology		Core /4	19
Spring	Geosc 597	Paleobiology Seminar	Mark Patzkowsky, Sarah Ivory	Grad. Seminar/1	6
<b>2024</b>					
Fall	Geosc 435	Geoscience Scholarship		Elective/3	5
Fall	Earth 150	Dinosaur Extinctions and Other Controversies		Gen. Ed./3	139

(spring)	sabbatical				
<b>2023</b>					
Fall	Geosc 435	Geoscience Scholarship		Elective/3	12
Fall	Geosc/Biol 420	Paleobotany		Elective/3	17
(spring)	teaching release				
<b>2022</b>					
Fall	Geosc 435	Geoscience Scholarship		Elective/3	9
Fall	Earth 150	Dinosaur Extinctions and Other Controversies		Gen. Ed./3	136
(spring)	teaching release				
<b>2021</b>					
Fall	Geosc 435	Geoscience Scholarship		Elective/3	9
Fall	Geosc/Biol 420	Paleobotany		Elective/3	20
(spring)	teaching release				
<b>2020</b>					
Fall	Geosc 435	Geoscience Scholarship		Elective/3	9
Fall	Earth 150	Dinosaur Extinctions and Other Controversies		Gen. Ed./3	175
Spring	Geosc 204	Geobiology		Core /4	19
Spring	Geosc 597	Paleobiology Seminar	Mark Patzkowsky	Grad. Seminar/1	7
<b>2019</b>					
Fall	Geosc 435	Geoscience Scholarship		Elective/3	10
Fall	Earth 150	Dinosaur Extinctions and Other Controversies		Gen. Ed./3	156
(spring)	(teaching release, no classes)				
<b>2018</b>					
Fall	Geosc 497	Geoscience Scholarship		Elective/3	8
Fall	Earth 150	Dinosaur Extinctions and Other Controversies		Gen. Ed./3	155
Spring	Geosc 204	Geobiology		Core /4	47
Spring	Geosc 597	Paleobiology Seminar	Mark Patzkowsky	Grad. Seminar/1	10
<b>2017</b>					
Fall	Geosc/Biol 420	Paleobotany		Elective/3	18
Fall	Geosc 497	Geoscholarship		Elective/3	11
(spring)	(sabbatical leave)				
<b>2016</b>					
(fall)	(sabbatical leave)				
Spring	Geosc 204	Geobiology		Core /4	44
Spring	Geosc 597	Paleobiology Seminar	Mark Patzkowsky, Tim Bralower	Grad. Seminar/1	9
<b>2015</b>					

Fall	Geosc 497	Geoscience Scholarship		Elective/3	5
Fall	Earth 150	Dinosaur Extinctions and Other Controversies		Gen. Ed./3	224
Spring	Geosc/Biol 420	Paleobotany		Elective/3	19
Spring	Geosc 597	Paleobiology Seminar	Mark Patzkowsky	Grad. Seminar/1	9
<b>2014</b>					
Fall	Geosc 497	Geoscience Scholarship		Elective/3	7
Fall	Earth 150	Dinosaur Extinctions and Other Controversies		Gen. Ed./3	219
Spring	Geosc 597	Paleobiology Seminar	Mark Patzkowsky	Grad. Seminar/1	8
Spring	Geosc 204	Geobiology		Core /4	46
<b>2013</b>					
Fall	Geosc 497	Geoscience Scholarship		Elective/3	10
Fall	Earth 150	Dinosaur Extinctions and Other Controversies		Gen. Ed./3	221
Spring	Geosc/Biol 420	Paleobotany		Elective/3	19
Spring	Geosc 597	Paleobiology Seminar	Mark Patzkowsky, Russ Graham	Grad. Seminar/1	6
<b>2012</b>					
[Fall	Teaching buyout, no classes]				
Spring	Geosc 204	Geobiology		Core /4	39
Spring	Geosc 597	Paleobiology Seminar	Mark Patzkowsky, Russ Graham	Grad. Seminar/1	10
<b>2011</b>					
Fall	Earth 150	Dinosaur Extinctions and Other Controversies		Gen. Ed./3	225
Fall	Geosc 497	Geoscience Scholarship		Elective/3	8
Spring	Geosc/Biol 420	Paleobotany		Elective/3	19
Spring	Geosc 597	Paleobiology Seminar	Mark Patzkowsky, Russ Graham	Grad. Seminar/1	10
<b>2010</b>					
Fall	Earth 150	Dinosaur Extinctions and Other Controversies		Gen. Ed./3	218
Fall	Geosc 597	Plant Paleobiology Seminar		Grad. Seminar/2	6
Spring	Geosc 204	Geobiology		Core /4	42
Spring	Geosc 597	Paleobiology Seminar	Russ Graham	Grad. Seminar/1	9
<b>Spring 2009</b>					
Fall	Geosc 597A	Earth Talks Seminar		Grad seminar/2	10
Fall	Earth 150	Dinosaur Extinctions and Other Controversies		Gen. Ed./3	206

[Spring	Sabbatical, no classes.]				
<b>2008</b>					
[Fall	Sabbatical, no classes.]				
Spring	Geosc 204	Geobiology		Core /4	24
Spring	Geosc 597	Paleobiology Seminar	Mark Patzkowsky, Russ Graham	Grad. Seminar/1	8
<b>2007</b>					
Fall	Earth 150	Dinosaur Extinctions and Other Controversies		Gen. Ed./3	222
Fall	Geosc 597	Paleobiology Seminar	Mark Patzkowsky, Russ Graham	Grad. Seminar/1	7
Spring	Geosc/Biol 420	Paleobotany		Elective/3	11
Spring	Geosc 597	Paleobiology Seminar	Mark Patzkowsky	Grad. Seminar/1	5
<b>2006</b>					
Fall	Earth 150	Dinosaur Extinctions and Other Controversies		Gen. Ed./3	82
Fall	PSU 010	Fossils on the Cutting Edge		Fresh. Seminar/1	18
Fall	Geosc 597	Paleobiology Seminar	Mark Patzkowsky	Grad. Seminar/1	7
Spring	Geosc 204	Geobiology		Core /4	24
Spring	Geosc 597	Paleobiology Seminar	Mark Patzkowsky	Grad. Seminar/1	7
Fall	Earth 150	Dinosaur Extinctions and Other Controversies		Gen. Ed./3	83
Fall	Geosc 597	Paleobiology Seminar	Mark Patzkowsky	Grad. Seminar/1	7
Spring	Geosc/Biol 420	Paleobotany		Elective/3	18
Spring	Geosc 597	Paleobiology Seminar	Mark Patzkowsky	Grad. Seminar/1	8
Fall	Geosc 597	Terrestrial Paleoecology		Grad. Seminar/2	6
Fall	Geosc 597	Paleobiology Seminar	Mark Patzkowsky	Grad. Seminar/1	9
Fall	Earth 150	Dinosaur Extinctions and Other Controversies		Gen. Ed./3	88
Spring	Geosc 204	Geobiology		Core /4	19
Spring	Geosc 597	Paleobiology Seminar	Mark Patzkowsky	Grad. Seminar/1	10
<b>2003</b>					
Fall	Earth 297b	Dinosaur Extinctions and Other Controversies		Gen. Ed./3	34
Fall	Geosc 597	Paleoclimate Proxies	Dana Royer	Grad. Seminar/2	6
Fall	Geosc 597	Paleobiology Seminar	Mark Patzkowsky	Grad. Seminar/1	9
Spring	Geosc 204	Geobiology	Mark Patzkowsky	Core /4	21

## Supervision of student and postdoctoral research

### Postdoctoral Research Scientist.

- Dr. Ari Iglesias**, 2007-2008. Current- CONICET 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-.  
**Dr. Gabriella Rossetto Harris**, defended October 3, 2023. *Origins of icehouse vegetation in southern South America: climate change and turnover in Eocene and Oligocene Patagonian fossil floras*. Current–Park Paleontologist, Florissant Fossil Beds National Monument.  
**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)  
**Caleb Norville** (PhD in progress)  
**Dr. Adam Benfield** (PhD, defended May 3, 2024)  
**David Early** (MS, defended May 21, 2024)  
**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

**Alexandra Miller** (mentor L. Alejandro Giraldo).  
**PJ Przybylski** (mentor: Edward Spagnuolo). 2025. *Insect damage on the Indo-Pakistan collision front (Ghazij Formation, Balochistan, Pakistan): first tropical insect-feeding damage for the early Eocene climatic optimum*. (2025 Dean Edward Steidle Memorial Scholar, College of Earth & Mineral Sciences).  
**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.

#### 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 7<sup>th</sup> grade life sciences and 8<sup>th</sup> grade physical sciences. Homeroom teacher for 8<sup>th</sup> 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**

2024– *American Journal of Botany*.  
2019– *PhytoKeys*.  
2014– *Ameghiniana*.  
2017– 2025. *PeerJ*.  
2013–2016. *PloS One*.  
2004–2006. *Geology*.  
2002–2006. *Palaios*.

##### **Reviewer of 329 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 (82)  
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 (16)  
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 (9)  
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 (9)  
Oecologia  
Palaeontologia Electronica (3)  
Paleontological Society Special Pubs.  
Palaaios (7)  
Paleobiology (21)  
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 (13)  
Science Advances  
University of Michigan Papers in Paleontology

full-length book manuscripts  
University of California Press  
University of Chicago Press

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

2025, May, The Village at Penn State.  
2021. WPSU Virtual Summer Camp 2021: [Interview](#) for STEM Thursdays with Eberly College of Science.  
2021. Westfield Friends School, Cinnaminson NJ, 5<sup>th</sup>-8<sup>th</sup> grade.  
2016, 2017, 2020, 2021. Young Scholars of Central Pennsylvania Charter School (various paleo presentations for 2<sup>nd</sup>-8<sup>th</sup> grades).  
2020, August. [Ginkgo: A Living Fossil in the Arboretum](#). YouTube short for Arboretum at Penn State.  
2020 May. [The oldest plant at the Arboretum](#). 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](http://www.paleobiodb.org)

### **Penn State**

#### **Active/Recent**

2025. Schreyer Honors College: applications reviewer.

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

2023– Penn State Herbarium: Advisory 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).

2020– Faculty mentor for one assistant professor.

2019–2023, 2024–. Department of Geosciences: Undergraduate Program Committee.

2011– The Arboretum at Penn State: Collections Committee.

2010– Schreyer Honors College: Honors Advisor.

### *Previous*

2022–2023. Department of Geosciences: Promotion & Tenure Committee.  
2021–2022. Department of Geosciences: planning committee for faculty hiring.  
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	Botanical Society of America
American Geophysical Union	Geological Society of America
American Society of Plant Taxonomists	International Organization for Paleobotany
Asociación Paleontológica Argentina	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> for additional articles and links

### **Coverage in peer-reviewed journals**

- [Consistent interactions across epochs](#). By Bianca Lopez. *Science*, “In Other Journals” section, 31 January 2025 (on Giraldo et al. 2025).
- [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](#). *Nature Asia* Research Highlight, 8 November 2016
- [Evolution: peaches appear earlier than humans in southwest China](#). *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:**

- [Did plants go extinct alongside the dinosaurs?](#) *The Naked Scientists* (podcast interview), host Chris Smith, 30 November 2023.
- [This Green Earth](#), 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](#). (starts 9:38 in)
- [Fossilized nuts on the wrong side of the world](#). *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](#). Video by Science/AAAS, 05 Jan 2017.
- Peter Wilf - [Computer Vision Cracks the Leaf Code](#). Video by Penn State College of Earth and Mineral Sciences. 6 June 2016.
- Radio New Zealand [interview](#) on *This Way Up* with Richard Scott, 16 April 2016.
- *People Behind the Science* ([podcast interview](#)), 7 July 2014.
- *Academic Minute*, WAMC Northeast Public Radio, to air March 24, 2014, [Tracing the path of 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.**

- [Ancient seeds reveal plant migration path from Asia to Australia](#). By Rodielon Putol, Earth.com, 16 August 2024.
- [Semillas fósiles gigantes registran una antigua migración vegetal](#). Europe Press, 8 August 2024.
- [Giant seed fossil in Indonesia is one of the biggest beans ever](#). By Evrim Yazgin, Cosmos, 19 August 2024.
- [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](#). By David Nield, ScienceAlert 1 May 2022.
- [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](#). By Thomas Schoch, Rinnovabili.it, 8 April 2020.
- [A forest and its history, threatened](#). By Kevin Sliman, Penn State News, 6 April 2020.
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- [Q&A: What fossils reveal about ancient Australian forests and fire](#). 3 December 2024.
- [Giant fossil seeds from Borneo record ancient plant migration](#). 7 August 2024.
- [Fossils show widespread plant extinctions after asteroid wiped out dinosaurs](#). 22 September 2023.
- [Spurge purge: Plant fossils reveal ancient South America-to-Asia 'escape route.'](#) 24 July 2023.
- [Five Penn State faculty elected to 2022 cohort of AAAS Fellows](#). 31 January 2023.
- [A prehistoric forest grows in Brunei](#). 26 April 2022.
- [From museum to laptop: Visual leaf library a new tool for identifying plants](#). 15 March 2022.
- [Penn State undergraduate digs into the past through fossil leaves](#). (on Edward Spagnuolo) 14 April 2021.
- [Leaf fossils show severe end-Cretaceous plant extinction in southern Argentina](#). 4 January 2021.
- [New Argentine fossils uncover history of celebrated conifer group](#). 18 June 2020.
- [Argentine fossils take oak and beech family history far into Southern Hemisphere](#). 6 June 2019.
- [Wilf named Paleontological Society Fellow for commitment to research, students](#). 18 January 2018.
- [South American fossil tomatillos show nightshades evolved earlier than thought](#). 5 January 2017.
- [Patagonian fossil leaves reveal rapid recovery from dinosaur extinction event](#). 7 November 2016.
- [Leaf mysteries revealed through the computer's eye](#). 7 March 2016.
- [Eat a paleo peach: first fossil peaches discovered in southwest China](#). 30 November 2015.
- [Turn back the molecular clock, say Argentina's plant fossils](#). December 2, 2014.
- [Leaf-mining insects destroyed with the dinosaurs, others quickly appeared](#). July 24, 2014.
- [Leaf chewing links insect diversity in modern and ancient forests](#). May 2, 2014.
- [Iconic Australasian trees found as fossils in South America](#). January 9, 2014.
- [Buried leaves reveal precolonial eastern forests and guide stream restoration](#). November 13, 2013.
- [Four from EMS among those to receive 2013 University awards for teaching, research and service](#). April 3, 2013.
- [Six faculty members receive Atherton Award for Excellence in Teaching](#). March 21, 2013.
- [Grant to fund exploration of fossil plants in Patagonia](#). 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 WXPB-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. Wiif, 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 Kandinsky Kilowatts Compress to the Great Seal*  
*Underground Railroad*  
*Nocturnal 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 WXPB-FM, Philadelphia. Programs: *Blue Genesis Jazz*, *Jazz All Night*, *Aeolia* (20<sup>th</sup> century classical music). Included music programming, interviews with recording artists, and commentary.

#### **ADDENDUM 1: Invited professional talks (104).**

- 2025, February. Georgia Southern University, Darwin-Lyell Distinguished Lecture.  
 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](#)).  
 2022, February. SOL Seminar Online, *Lantern Fruits of Gondwana* (virtual, youtube [link](#)).  
 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 55<sup>th</sup> 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 13<sup>th</sup> 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. 3<sup>rd</sup> 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, 59<sup>th</sup> 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 23<sup>rd</sup> 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 17<sup>th</sup> 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 18<sup>th</sup> 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.