

Awards and Citations

Response by Scott L. Wing for the presentation of the 2021 Paleontological Society Medal

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Dear friends, colleagues, and officers of the Society. I feel undeserving but nonetheless highly appreciative of the honor of receiving the Paleontological Society Medal. Previous recipients have shared how they became paleontologists, thanked those who supported them, and considered the direction of our field. I will follow their lead.

I was born in steamy, subtropical New Orleans, to parents who fostered my love of animals, plants, and fossils from the beginning. During high school in Durham, North Carolina,

I became interested in evolution, and the summer I graduated, a generous mentor recommended me for a field trip to Wyoming led by the paleoanthropologist Elwyn Simons, then at Yale. Six weeks of roaming badlands, digging cars out of the mud, living in a tent, finding fossils, and talking with older students about their research surely set the course of my life. Tom Bown, Ken Rose, Rich Kay, and Ian Tattersall were among those who lit the fire in me that summer.

Studying biology in college I learned vertebrate biology and systematics from John Kirsch and Keith Thomson, and insect evolution from Charles Remington. Margaret Davis taught a memorable course on paleoecology. Through college and the first year of grad school I leaned toward zoology, but then I “saw the green light”—plant fossils were a better way to answer the questions I had about changing climate and evolution. Bruce Tiffney kindly took me in as his advisee even though I had yet to get basic training in botany and paleobotany. Leo Hickey, then at the Smithsonian, became my guide to leaf fossils, paleoclimate, Cenozoic stratigraphy, and as much logic, rhetoric, and Latin as he could get into my head. I NEEDED two advisors, being too ignorant for just one. My formal education culminated in a postdoctoral fellowship with the formidable Jack Wolfe at the US Geological Survey, who despite his gruff manner was extraordinarily supportive.

Though I have named some of my mentors, I probably learned even more from the challenging and enthusiastic students in my cohort. I felt fortunate to have friends who knew so much more than I about so many things and yet were eager to help one another. Grad school was just the beginning of my great good luck because I have found brilliant and generous colleagues, postdoctoral fellows, grad students, and interns all along the way, at the Department of Paleobiology and elsewhere around the Smithsonian Museum of Natural History, during stays at UC Santa Cruz, University of Michigan, Colorado College, and more broadly in collaborations around the country and world. Every insight, every paper has come from an exchange of ideas and energy with these people. I wish I could name them all here because they are co-creators of everything this PS Medal honors.

If wonderful colleagues have been a constant, the field of paleontology itself has transformed—it is far more wide-ranging, more integrated with other sciences, and more quantitative than it was when I started. The biggest change, though, may be our motivation for studying the past. I don’t recall that as a student I was motivated by any reason beyond

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personal curiosity. That changed in the late 1980s when I encountered paleoclimate simulations of the Eocene performed with general circulation models. I knew the simulations were off because they conflicted with a century of paleoclimate reconstructions from fossil plants. Although the simulations were wrong in detail, paleoclimate modeling elevated my field to a new level. Fossils and paleoclimates suddenly mattered, not just because they were interesting, but because past states of climate and ecosystems were unique in providing information that could test processes operating at large spatial scales and over long temporal durations. To paraphrase a colleague: ‘Data about the past are hard to get. Data about the future...impossible.’

I will conclude with this thought: We are paleontologists at the beginning of a new epoch, call it the Anthropocene if you will. It is pretty clear that one of the grand challenges for science is to develop better predictions of how climate and other systems will change under sustained anthropogenic forcing. Models of how these processes work will have to be tested on data from the fossil record, and that means we paleontologists can help answer the most scientifically and societally important questions of our times. The crises we face are daunting, but many people in this room, and certainly our field at large, will contribute to anticipating what is to come. Who could ask for a greater opportunity than that?