

The Eighth Rohlf Medal for Excellence in Morphometric Methods and Applications

LECTURE

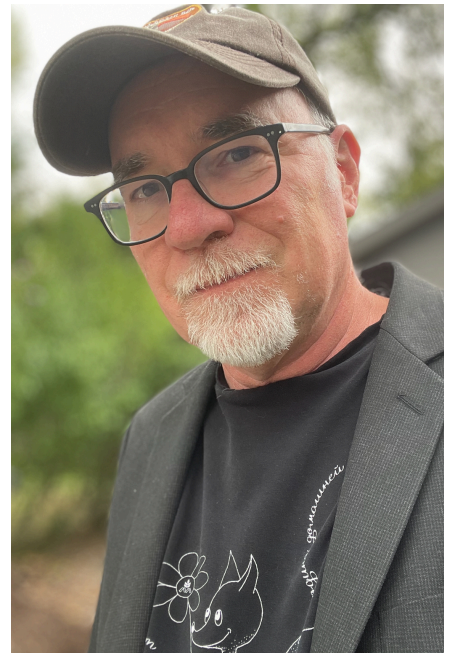
Paths through morphospace: morphometrics, phylogenetics, and evolution

WEDNESDAY, OCTOBER 22, 2025

5:00 pm • Charles B. Wang Center Lecture Hall 1
Reception to follow | Wang Center Zodiac Lobby

P. David Polly

Professor and Chair
Department of Earth and Atmospheric Sciences
Indiana University, Bloomington



In this talk, Polly, professor and chair in the Department of Earth and Atmospheric Sciences at Indiana University, Bloomington and a visiting professor at the University of Helsinki, will explore examples of contradictions he has encountered in his own morphometric research on evolution. He'll provide examples in which ancestral reconstructions are not biologically plausible, where "straight" evolutionary paths predicted from developmental genetics are not straight or even continuous in morphospace, and where mathematically real parts of morphospace are not biologically real.

Polly does not believe there is any easy fix to these problems, nor that the problems invalidate current approaches, but does believe that they can lead to incorrect interpretations in some situations and that they deserve deeper thought.



Stony Brook University
College of Arts and Sciences