

Peter David Smits

CONTACT INFORMATION	Valley Life Sciences Building, Office 5151 Berkeley, CA 94720	609-933-7042 psmits@berkeley.edu
RESEARCH INTERESTS	Macroevolution, macroecology, paleobiology, Bayesian modeling, extinction, mammals, brachiopods, survival analysis, time-series analysis, longitudinal and cross-sectional data analysis	
EDUCATION	University of Chicago , Chicago, IL Ph.D., Committee on Evolutionary Biology, June 2017 <ul style="list-style-type: none">• Advisors: Michael Foote and Kenneth Angielczyk Monash University , Melbourne, AUS M.S., Biological Sciences, Aug 2012 <ul style="list-style-type: none">• <i>First Class Honours</i>• Advisor: Alistair Evans University of Washington , Seattle, WA B.S., Biology: Ecology and Evolution, June 2010	
PUBLICATIONS	<ol style="list-style-type: none">1. Peter D Smits. How macroecology affects macroevolution: the interplay between extinction intensity and trait-dependent extinction in brachiopods. <i>bioRxiv</i>, doi: https://doi.org/10.1101/523811, 2019.2. Stewart M Edie, Peter D Smits, David Jablonski. Probabilistic models of species discovery and biodiversity comparisons. <i>Proceedings of the National Academy of Sciences</i>, 114(14):3666-3671, 2017.3. Peter D Smits. Expected time-invariant effects of biological traits on mammal species duration. <i>Proceedings of the National Academy of Sciences</i>, 112(42):1301513020, 2015.4. Liliana M Davalos, Paul M Velazco, Omar M Warsi, Peter D Smits, Nancy B Simmons. Integrating Incomplete Fossils by Isolating Conflicting Signal in Saturated and Non-Independent Morphological Characters. <i>Systematic Biology</i>, 63(4):582-600, 2014.5. Christopher W Walmsley, Peter D Smits, Michelle R Quayle, Matthew R McCurry, Heather S Richard, Christopher C Oldfield, Stephen Wroe, Phillip D Clausen, and Colin R McHenry. Why the fong face? The mechanics of mandibular symphysis proportions in crocodiles. <i>PLoS ONE</i>, 8(1):e53873, 2013.6. Peter D Smits, Alistair R Evans. Functional constraints on tooth morphology in carnivorous mammals. <i>BMC Evolutionary Biology</i>, 12(1):146, 2012.7. Gregory P Wilson, Alistair R Evans, Ian J Corfe, Peter D Smits, Mikael Fortelius, and Jukka Jernvall. Adaptive radiation of multituberculate mammals before the extinction of dinosaurs. <i>Nature</i>, 483:457-460, 2012.	
PAPERS IN PREPARATION	<ol style="list-style-type: none">1. Peter D Smits, Kenneth D Angielczyk, James F Parham, Bryan Stuart. Supervised learning approaches to classifying morphological variation: assessing taxonomic hypotheses for the Pacific Pond Turtle (<i>Emys marmorata</i>).	

AWARDS	Student Awards — University of Chicago	
	<ul style="list-style-type: none"> • Hinds Fund Grant 	
	Student Awards — Monash University	
	<ul style="list-style-type: none"> • Vice-Chancellor's Commendation for Master's Thesis Excellence, 2012. <ul style="list-style-type: none"> • The Vice-Chancellor's Commendation is give out to the best thesis submitted that year across all divisions at the university; between 0 and 5 are awarded per year. 	
	Student Awards — University of Washington, Department of Biology	
	<ul style="list-style-type: none"> • Casey Award for Research, 2008. 	
	Travel Awards	
	<ul style="list-style-type: none"> • Summer Travel Award, Committee on Evolutionary Biology, 2013, 2014, 2015, 2016. • Student Travel Stipend, Society for the Study of Evolutionary Biology, 2015. • Faculty of Science Travel Grant, Monash University, 2011. 	
PRESENTATIONS	Professional Meetings (last 5 years)	
	• Geological Society of America Annual Meeting, Indianapolis, IN	November 2018
	• Geological Society of America Annual Meeting, Seattle, WA	Sept 2017
	• Geological Society of America Annual Meeting, Denver, CO	Sept 2016
	• Evolution Meetings, Austin, TX	June 2016
	• Geological Society of America Annual Meeting, Baltimore, MD	Nov 2015
	• Evolution Meetings, Guarujá, Brazil	June 2015
	• Geological Society of America Annual Meeting, Vancouver, BC	Oct 2016
	• Evolution Meetings, Raleigh, NC	June 2014
	• Society for Vertebrate Paleontology, Los Angeles, LA	Oct 2013
	• Evolution Meetings, Snowbird, UT	June 2013
TEACHING EXPERIENCE	Co-Instructor	
	Fall 2018	
	Analytical Paleobiology	
	with Seth Finnegan, Charles Marshall	
	Department of Integrative Biology,	
	Univeristy of California Berkeley	
	Co-instructor	
	Falls 2015–16	
	BSDG 5000 - Teaching Assistant Training	
	with Alicja Santos	
	Division of Biological Sciences,	
	University of Chicago	
	Teaching Assistant	
	Spring 2016	
	BIOS 20151 - Introduction to Quantitative Modeling in Biology	
	Instructor: Dmitry Kondrashov	
	Division of Biological Sciences,	
	University of Chicago	
	Teaching Assistant	
	Winter 2015	
	BIOS 13107 - Environmental Ecology	
	Instructor: Trevor Price	
	Division of Biological Sciences,	
	University of Chicago	
	Teaching Assistant	
	Spring 2012	
	BIO2011 - Research Methods	
	Instructor: Ross Thompson, Patrick Baker	
	School of Biological Sciences,	
	Monash University	
	Peer Teaching Assistant	
	Fall 2009	

SERVICE

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