

## Peter David Smits

---

CONTACT INFORMATION	Valley Life Sciences Building, Office 5151 Berkeley, CA 94720	609-933-7042 <a href="mailto:psmits@berkeley.edu">psmits@berkeley.edu</a>
RESEARCH INTERESTS	Macroevolution, macroecology, paleobiology, Bayesian modeling, extinction, mammals, brachiopods, survival analysis, time-series analysis, longitudinal and cross-sectional data analysis	
EDUCATION	<b>University of Chicago</b> , Chicago, IL  Ph.D., Committee on Evolutionary Biology, June 2017 <ul style="list-style-type: none"><li>• Advisors: Michael Foote and Kenneth Angielczyk</li></ul> <b>Monash University</b> , Melbourne, AUS  M.S., Biological Sciences, Aug 2012 <ul style="list-style-type: none"><li>• <i>First Class Honours</i></li><li>• Advisor: Alistair Evans</li></ul> <b>University of Washington</b> , Seattle, WA  B.S., Biology: Ecology and Evolution, June 2010	
PUBLICATIONS	<ol style="list-style-type: none"><li>1. <b>Peter D Smits</b>. How macroecology affects macroevolution: the interplay between extinction intensity and trait-dependent extinction in brachiopods. <i>bioRxiv</i>, doi: <a href="https://doi.org/10.1101/523811">https://doi.org/10.1101/523811</a>, 2019.</li><li>2. Stewart M Edie, <b>Peter D Smits</b>, David Jablonski. Probabilistic models of species discovery and biodiversity comparisons. <i>Proceedings of the National Academy of Sciences</i>, 114(14):3666-3671, 2017.</li><li>3. <b>Peter D Smits</b>. Expected time-invariant effects of biological traits on mammal species duration. <i>Proceedings of the National Academy of Sciences</i>, 112(42):1301513020, 2015.</li><li>4. Liliana M Davalos, Paul M Velazco, Omar M Warsi, <b>Peter D Smits</b>, 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.</li><li>5. Christopher W Walmsley, <b>Peter D Smits</b>, 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.</li><li>6. <b>Peter D Smits</b>, Alistair R Evans. Functional constraints on tooth morphology in carnivorous mammals. <i>BMC Evolutionary Biology</i>, 12(1):146, 2012.</li><li>7. Gregory P Wilson, Alistair R Evans, Ian J Corfe, <b>Peter D Smits</b>, Mikael Fortelius, and Jukka Jernvall. Adaptive radiation of multituberculate mammals before the extinction of dinosaurs. <i>Nature</i>, 483:457-460, 2012.</li></ol>	
PAPERS IN PREPARATION	<ol style="list-style-type: none"><li>1. <b>Peter D Smits</b>, 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>).</li></ol>	

AWARDS	Student Awards — University of Chicago	
	<ul style="list-style-type: none"> <li>• Hinds Fund Grant <ul style="list-style-type: none"> <li>• The Hinds Fund Grant's purpose is to help early graduate students fund their initial research in order to develop pilot projects, and obtain preliminary results for their dissertation.</li> </ul> </li> </ul>	
	Student Awards — Monash University	
	<ul style="list-style-type: none"> <li>• Vice-Chancellor's Commendation for Master's Thesis Excellence, 2012. <ul style="list-style-type: none"> <li>• The Vice-Chancellor's Commendation is given out to the best thesis submitted that year across all divisions at the university; between 0 and 5 are awarded per year.</li> </ul> </li> </ul>	
	Student Awards — University of Washington, Department of Biology	
	<ul style="list-style-type: none"> <li>• Casey Award for Research, 2008.</li> </ul>	
	Travel Awards	
	<ul style="list-style-type: none"> <li>• Summer Travel Award, Committee on Evolutionary Biology, 2013, 2014, 2015, 2016.</li> <li>• Student Travel Stipend, Society for the Study of Evolutionary Biology, 2015.</li> <li>• Faculty of Science Travel Grant, Monash University, 2011.</li> </ul>	
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, University 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  
Biol 443 - Evolution of Mammals and their Ancestors  
Instructor: Gregory Wilson  
Department of Biology  
University of Washington

Fall 2009

SERVICE      Recording Secretary for UC Berkeley, University of California Postdoctoral Union, UAW  
5180      December 2018 – Present

REFERENCES      Michael Foote  
                         Professor      Phone: 773-702-4320  
                         Department of Geophysical Sciences      E-mail: mfoote@uchicago.edu  
                         University of Chicago  
  
                         Kenneth Angielczyk  
                         Associate Curator      Phone: 312-665-7639  
                         Integrative Research Center      E-mail: kangelczyk@fieldmuseum.org  
                         Field Museum of Natural History  
  
                         P. David Polly  
                         Professor      Phone: 612-626-9070  
                         Department of Earth and Atmospheric Sciences      E-mail: pdpolly@indiana.edu  
                         Indiana University  
  
                         Seth Finnegan  
                         Associate Professor      Phone: 510-664-9916  
                         Department of Integrative Biology      E-mail: sethf@berkeley.edu  
                         University of California Berkeley