

Samantha S.B. Hopkins

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PROFESSIONAL EXPERIENCE

Associate Professor of Geology, **University of Oregon** Clark Honors College, 2014-present.

Assistant Professor of Geology, **University of Oregon** Clark Honors College, 2007-2014.

Curator, **University of Oregon** Museum of Natural and Cultural History, 2008-present.

Postdoctoral Fellow, **National Evolutionary Synthesis Center**, 2006-2007.

Temporary Faculty, **Sonoma State University** Department of Geology, 2006.

Graduate Student Instructor/Researcher, **University of California, Berkeley** Department of Integrative Biology, 1999-2005.

Undergraduate Research Assistant, **University of Tennessee, Knoxville** Division of Biology and Department of Geology, 1996-1999.

EDUCATION

Ph.D. **University of California, Berkeley**. Integrative Biology, 2005.

Evolution and paleoecology of aplodontoid rodents.

Anthony Barnosky (chair), James Patton, James Kirchner

B.S., Summa Cum Laude **University of Tennessee, Knoxville**. Biology and Geology, 1999.

PUBLICATIONS

PEER-REVIEWED PAPERS:

* co-first authors. ¹ undergraduate student author. ² graduate student author

Levering, D. ¹, **S.S.B. Hopkins**, and E.B. Davis. 2017. Decreasing Limb Inertia Among North American Ungulates across the Oligo-Miocene Boundary. *Palaeogeography, Palaeoclimatology, Palaeoecology* 466: 279-286.

Samuels, J.X and **S.S.B. Hopkins**. 2017. The impacts of Cenozoic climate and habitat changes on small mammal diversity of North America. *Global and Planetary Change* 149:36-52.

Orcutt, J.D. and **S.S.B. Hopkins**. 2016. Latitudinal body mass trends in Oligo-Miocene mammals. *Paleobiology* 42(4):643-658.

McLaughlin, W.N.F. ², **S.S.B. Hopkins**, and M.D. Schmitz. 2016. A new Late Hemingfordian vertebrate fauna from Hawk Rim, Oregon, with implications for biostratigraphy and geochronology. *Journal of Vertebrate Paleontology* 36(5): e1201095.

- Emery, M. M. ², E.B. Davis, and **S.S.B. Hopkins**. 2016. Reassessment of the agriochoerid oreodont from the Hancock Mammal Quarry, Clarno (Eocene: Duchesnean), Oregon. *Journal of Vertebrate Paleontology* 36(2): e1041970.
- Famoso, N.A. ², E.B. Davis, R.S. Feranec, **S.S.B. Hopkins**, and S.A. Price. 2016. Are hypsodonty and occlusal enamel complexity evolutionarily correlated in ungulates? *Journal of Mammalian Evolution* 23(1): 43-47.
- Stilson, K. ¹, S.S.B. Hopkins, and E.B. Davis. 2016. Osteopathology in Rhinocerotidae from 50 Million Years to the Present. *PLoS One*. 11(2): e0146221.
doi:10.1371/journal.pone.0146221
- Price, S.A. and **S.S.B. Hopkins**. 2015. The macroevolutionary relationship between diet and body mass across mammals. *Biological Journal of the Linnean Society*. 115(1): 173–184.
- Famoso, N. ² and **S.S.B. Hopkins**. 2014. Correction to the holotype (AMNH 9394) of *Merychippus proparvulus* Osborn, 1918. *Journal of Vertebrate Paleontology* 34(5):1249–1250.
- Orcutt, J. ² and **S.S.B. Hopkins**. 2013. Oligo-Miocene climate change and mammal body-size evolution in the northwest United States: a test of Bergmann’s Rule. *Paleobiology* 39(4):648-661.
- Price, S.A.*, **S.S.B. Hopkins***, V.L. Roth, and K.K. Smith. 2012. Tempo of trophic evolution and its impact on mammalian diversification. *Proceedings of the National Academy of Sciences, USA* 109(18): 7008-7012.
- Calede, J. ¹ and **S.S.B. Hopkins**. 2012. New material of *Alphagaulus pristinus* (Mammalia, Rodentia, Mylagaulidae) from the Deep River Formation (Montana, U.S.A.): Implications for ecology, ontogeny, and phylogeny, *Journal of Vertebrate Paleontology*, 32(1):151-165.
- Calede, J. ² and **S.S.B. Hopkins**. 2012. Intraspecific versus interspecific variation in Miocene Great Basin mylagaulids: implications for systematics and evolutionary history. *Zoological Journal of the Linnean Society* 164:427-450.
- Calede, J. ², **S.S.B. Hopkins**, and E.B. Davis. 2011. Turnover in burrowing rodents: the roles of competition and habitat change. *Palaeogeography, Palaeoclimatology, Palaeoecology* 311: 242-255.
- Orcutt, J.D. ² and **S.S.B. Hopkins** 2011. The canid fauna of the Juntura Formation (Late Clarendonian, Oregon). *Journal of Vertebrate Paleontology* 31(3):700-706.
- Hopkins, S.S.B.** and E.B. Davis. 2009. Quantitative morphological proxies for fossorial life habits in small mammals. *Journal of Mammalogy* 90(6):1449-1460.
- Hopkins, S.S.B.** 2008. Phylogeny and evolutionary history of the Aplodontioidea. *Zoological Journal of the Linnean Society* 153: 769–838.
- Hopkins, S.S.B.** 2008. Reassessing the Size of Exceptionally Large Rodents using Toothrow Length and Area as Proxies for Body Mass. *Journal of Mammalogy* 89(1):232-243.
- Hopkins, S.S.B.** 2007. Causes of lineage decline in the Aplodontidae: testing for the influence of physical and biological change. *Palaeogeography, Palaeoclimatology, Palaeoecology* 246: 331-353.

- Barnosky, A.D., F. Bibi¹, **S.S.B. Hopkins**, and R. Nichols. 2007. Biostratigraphy and magnetostratigraphy of the mid-Miocene Railroad Canyon Sequence, Montana and Idaho, and age of the Mid-Tertiary Unconformity west of the Continental Divide. *Journal of Vertebrate Paleontology* 27(1):204-224.
- Hopkins, S.S.B.** 2006. Morphology of the skull in *Meniscomys* from the John Day Formation of central Oregon. *PaleoBios* 26(1):1-9.
- Hopkins, S.S.B.** 2005. The evolution of fossoriality and the adaptive role of horns in the Mylagaulidae (Mammalia: Rodentia). *Proceedings of the Royal Society: Biological Sciences* 272: 1705-1713.
- Hopkins, S.S.B.** 2004. Phylogeny and biogeography of the genus *Ansomys* (Mammalia: Rodentia: Aplodontidae), and description of a new species from the Barstovian (mid-Miocene) of Montana. *Journal of Paleontology* 78(4): 731-740.

PEER-REVIEWED BOOK CHAPTERS

- Liter, M.¹, D. Prothero, and **S. Hopkins**. 2008. Magnetic stratigraphy of the late Hemingfordian-?Barstovian (lower to middle Miocene) Split Rock Formation, central Wyoming. In *Neogene Mammals, New Mexico Museum of Natural History and Science Bulletin* 44: 25-30.
- Prothero, D., E. B. Davis, and **S.S.B. Hopkins**. 2008. Magnetic stratigraphy of the Massacre Lake beds (late Hemingfordian, early Miocene) and the “Proboscidean Datum” in North America. In *Neogene Mammals, New Mexico Museum of Natural History and Science Bulletin* 44: 239-246.
- Barnosky, A.D. and **S.S.B. Hopkins**. 2004. Identification of miscellaneous mammals from the Pit Locality (Soricidae, Geomyoidea, Leporidae). p. 279-285 in A.D. Barnosky, ed. *Biodiversity Response to Environmental Change in the Middle Pleistocene: The Porcupine Cave Fauna from Colorado*. University of California Press, Berkeley, CA.

PAPERS IN PROGRESS:

- Badgley, C., T.M. Smiley², E.B. Davis, L.R.G. DeSantis, D.L. Fox, **S.S.B. Hopkins**, T. Jezkova, M.D. Matocq, N. Matzke, J.L. McGuire, A. Mulch, B.R. Riddle, V.L. Roth, J.X. Samuels, C.A.E. Strömberg, R. Terry, B.J. Yanites. In press. Biodiversity and Topographic Complexity: Modern and Geohistorical Perspectives. *Trends in Ecology and Evolution*.
- Hopkins, S.S.B.** Accepted. Estimation of body size in fossil mammals. To be published in D.A. Croft, S.W. Simpson, and D.F. Su (eds.), *Methods in Paleoecology: Reconstructing Cenozoic Terrestrial Environments and Ecological Communities*. Springer (Vertebrate Paleobiology and Paleoanthropology Series), Dordrecht.
- Jacisin, J.J. III² and **S.S.B. Hopkins**. Accepted. A redescription and phylogenetic analysis of the fossil newts *Taricha oligocenica* Van Frank, 1955 and *Taricha lindoei* Naylor, 1979 (Amphibia, Salamandridae) from the Oligocene of Oregon. *Journal of Paleontology*.
- Hopkins, S.S.B.** and S.A. Price. In revision. Turning the macroevolutionary ratchet: drivers of widespread convergence in the evolution of burrowing mammals. *American Naturalist*.

BOOKS:

S.S.B. Hopkins. Atlas of Mammalian Skeletal Morphology. In prep. Under contract with Taylor and Francis. Manuscript due July 2017.

MEETING ABSTRACTS:

Hopkins, S. S., Davis, E. B., Theodor, J. M., Famoso, N. A., McLaughlin, W. N., Reuter, D., Perdue, G., Oberg, D., Biedron, E., Walters, K. 2016. Application of quantitative biostratigraphic methods to the record of terrestrial vertebrates: can we gain new insights? Society of Vertebrate Paleontology Program and Abstracts 157.

Biedron, E., Hopkins, S. S. 2016. Surprising diversity in a mid-Miocene squirrel assemblage: The Sciuridae (Mammalia:Rodentia) of Cave Basin, Oregon. Society of Vertebrate Paleontology Program and Abstracts 97.

Chainey, A. R., Davis, E. B., McLaughlin, W. N., Hopkins, S. S. 2016. Bridging the gap between Asian and European fauna with the gazelles of the Chu Formation in the Kochkor Basin, Kyrgyzstan. Society of Vertebrate Paleontology Program and Abstracts 113.

Famoso, N. A., Samuels, J. X., Hopkins, S. S., Davis, E. B., Emery, M. 2016. Updated biostratigraphy of the Turtle Cove Member (John Day Formation) in the John Day Basin, Oregon. Society of Vertebrate Paleontology Program and Abstracts 133.

Flora, H. M., McLaughlin, W. N., Davis, E. B., Hopkins, S. S. A true leporid from the Tien Shan Mountains of Kyrgyzstan. Society of Vertebrate Paleontology Program and Abstracts 136.

McLaughlin, W. N., Hopkins, S. S., Davis, E. B. 2016. Taphonomy of newly discovered Neogene mass death assemblages in Kochkor Basin, Kyrgyzstan. Society of Vertebrate Paleontology Program and Abstracts 186-187.

Oberg, D., Hopkins, S. S. 2016. Reconstructing body mass from marsupial dental dimensions. Society of Vertebrate Paleontology Program and Abstracts 197.

Orcutt, J. D., Hopkins, S. S., Caledo, J. J. 2016. Testing the diagnostic potential of felid postcrania using geometric morphometrics. Society of Vertebrate Paleontology Program and Abstracts 199.

Perdue, G. V., Hopkins, S. S., Davis, E. B. 2016. Estimating body mass in fossil rodents: can log bias be removed by nonlinear regression? Society of Vertebrate Paleontology Program and Abstracts 204.

Reuter, D. M., Hopkins, S. S. 2016. Quantifying intraspecific variation across the tooth row in carnivorans (Mammalia, Carnivora). Society of Vertebrate Paleontology Program and Abstracts 212.

Robson, S. V., McLaughlin, W. N., Hopkins, S. S. 2016. New species of *Hyaenictitherium* recovered from the Late Miocene of Kyrgyzstan. Society of Vertebrate Paleontology Program and Abstracts 214.

Hopkins, S.S.B. and S.A. Price. 2016. Burrowing and the evolutionary ratchet among rodents: applications of phylogenetic comparative methods to understanding paleoecological problems. Geological Society of America Annual Meeting Abstracts with Programs 17-7.

McLaughlin, Win N.F. and S.S.B. Hopkins. 2016. Implementing tree building into large historical geology flipped classes. Geological Society of America Annual Meeting Abstracts with Programs 207-2.

Hopkins, S.S.B. Weldon II, R.J., Samuels, J.X., Zancanella, J. 2015. The Crooked River project: federal-university collaboration in pursuit of an integrated understanding of paleoecology, tectonic history, and critical paleontological resources. Geological Society of America Annual Meeting Abstracts with Programs 188-2.

Biedron, E. M., Hopkins, S. S. 2015. Comparison of ungulate and sciurid paleoecology suggests spatial averaging in Oregon localities. Society of Vertebrate Paleontology Program and Abstracts 90.

Hopkins, S. S., Chiono, A. J., Price, S. A. 2015. Carnassial tooth morphology is structured both by ecology and phylogeny among mammalian carnivores (Mammalia: Carnivora). Society of Vertebrate Paleontology Program and Abstracts 146.

Oberg, D., Hopkins, S. S., Whistler, D. 2015. New micromammals from the Mascall Formation of Oregon's Middle Miocene. Society of Vertebrate Paleontology Program and Abstracts 189.

Robson, S., McLaughlin, W., Walsh, T., Hopkins, S. S. 2015. *Ictitherium viverrinum*: first carnivore from the Miocene in Kyrgyzstan. Society of Vertebrate Paleontology Program and Abstracts 203.

- Chiono, A.J., S.S.B. Hopkins, and S.A. Price. 2015. Phylogeny and the inference of diet from carnassial shape across Carnivora. Society of Integrative and Comparative Biology Annual Meeting.
- McLaughlin, W., B. McHorse, E. Davis, and S. Hopkins. 2014. The utility of postcranial bones in distinguishing taxa and sexes in modern Artiodactyla and the implications for placement of Paleomerycidae within Artiodactyla. Society of Vertebrate Paleontology Program and Abstracts 185.
- McHorse, B., E. Davis, and S.S.B. Hopkins. 2014. Ecomorphological variation in camelid postcrania from Juntura (Clarendonian, ~9Ma). Society of Vertebrate Paleontology Program and Abstracts 184.
- Jacisin, J. and S.S.B. Hopkins. 2014. *Taricha* or *Palaeotaricha*? The evolutionary enigma of North American newts. Society of Vertebrate Paleontology Program and Abstracts 153.
- Hopkins, S.S.B. 2014. Fundamental Differences in tectonically-driven diversity dynamics and faunal connectivity between small and large mammal faunas during the North American Miocene. Geological Society of America Annual Meeting Abstracts and Programs 289-6.
- Samuels, J.X. and S.S.B. Hopkins. 2014. The impacts of Cenozoic climate and habitat changes on small mammal diversity of North America. Geological Society of America Annual Meeting Abstracts and Programs 289-4.
- Biedron, E.M. and S.S.B. Hopkins. 2014. Mandible morphology: a poor predictor of habitat use in the Sciuridae (Rodentia). Geological Society of America Annual Meeting Abstracts and Programs 47-3.
- Price, S.A. and S.S.B. Hopkins. 2014. Do fossils and extant phylogenies agree upon patterns of mammalian diversification? Evolution 2014 Annual Meeting.
- Price, S.A. and S.S.B. Hopkins. 2014. Macroevolutionary relationships between size and diet in mammals. Society of Integrative and Comparative Biology Annual Meeting.
- McLaughlin, W.N.F. and S.S.B. Hopkins. 2013. Quantitative biostratigraphic analysis of Central Asia with implications for the Tien Shan of Kyrgyzstan. American Geophysical Union Annual Meeting
- Hopkins, S.S.B. and S.A. Price. 2013. Phylogenetic constraint of the relationship between dental morphology and diet in extant Carnivora. Geological Society of America Annual Meeting Abstracts and Program. 194-7.
- McLaughlin, W.N.F. and S.S.B. Hopkins. 2013. Quantitative biostratigraphic analysis of Central Asia underscores the region's importance as a biogeographic province. Geological Society of America Annual Meeting Abstracts and Program. 89-9.
- Jacisin, J., Hopkins, S.S.B. 2013. Description, classification, and paleoecology of the Oligocene salamanders of Oregon. Geological Society of America Annual Meeting Abstracts and Program. 127-18.
- Mackenzie, K., Orcutt, J., Hopkins, S.S.B. 2013. The first record of *Osbornodon iamonensis* for Oregon and other canids of the Arikareean, from Coglan Buttes, Oregon. Journal of Vertebrate Paleontology 33(3 Supplement):167.
- Stilson, K., S.S.B Hopkins, and E. Davis. 2013. Using an evolutionary model to investigate the origins of widespread arthritis in Rhinocerotidae (Mammalia, Perissodactyla). Journal of Vertebrate Paleontology 33(3 Supplement):220.
- Olroyd, S. and S.S.B. Hopkins. 2013. Variation through tooth wear obscures the differential diagnoses of the Hemphillian castorids *Dipoides stirtoni* and *Dipoides smithi*. Journal of Vertebrate Paleontology 33(3 Supplement): 186.
- Biedron, E., S.S.B. Hopkins, and W. McLaughlin. 2013. Resolving morphological/molecular conflict in Marmotini (Mammalia, Rodentia, Sciuridae) through diagnostic dental characters. Journal of Vertebrate Paleontology 33(3 Supplement): 87.
- Emery, M., Davis, E., Hopkins, S.S.B. 2013. Character variation in modern camels and sheep highlights problems in the genus-level taxonomy of agriochoerid oreodonts. Journal of Vertebrate Paleontology 33(3 Supplement):122
- Jacisin, J., Hopkins, S.S.B. 2013. Description, classification, and paleoecology of the Oligocene salamander of Oregon. Journal of Vertebrate Paleontology 33(3 Supplement):147.
- McHorse, B., Scott, E., McLaughlin, W., Davis, E., Hopkins, S.S.B. 2013. Identifying isolated postcrania using discriminant Analysis. Journal of Vertebrate Paleontology 33(3 Supplement):175.
- Hopkins, S.S.B. 2013. Differential timing of hypsodonty evolution in large and small mammals indicates complex forcing of crown height evolution. Journal of Vertebrate Paleontology 33(3 Supplement): 144.

- Hopkins, S.S.B. 2013. Testing the strength of evolutionary correlations between dental morphology and diet in extant Carnivora. Society for the Study of Evolution Annual Meeting.
- Hopkins, S.S.B., J. Orcutt, and E.B. Davis. 2013. Body size reconstruction in a saber-toothed cat from the Late Miocene of North America. Society of Integrative and Comparative Biology Annual Meeting Abstract Book:164.
- McHorse, B.K., S.S.B. Hopkins, and E.B. Davis. 2013. Functional morphology in modern horses: natural vs. artificial selection. Society of Integrative and Comparative Biology Annual Meeting Abstract Book:244.
- Hopkins, S.S.B., K. Maguire, and W. McLaughlin. 2012. Faunal heterogeneity in Barstovian mammals of the Northwest: what does faunal diversity tell us about tectonics and habitat diversity? *Journal of Vertebrate Paleontology* 32(3 Supplement):113.
- MacKenzie, K., D. Whistler, and S.S.B. Hopkins. 2012. The geology and paleontology of Coglan Buttes, Oregon: The first discovered Arikareean vertebrate fossil locality in the Northwestern Great Basin. *Journal of Vertebrate Paleontology* 32(3 Supplement):132.
- McHorse, B., E. Davis, and S.S.B. Hopkins. 2012. Functional morphology in modern horses: natural vs. artificial selection. *Journal of Vertebrate Paleontology* 32(3 Supplement):139.
- McLaughlin, W. and S.S.B. Hopkins. 2012. Reconciling faunal and floral climatic interpretations across the early Barstovian of the Northwest U.S.A. *Journal of Vertebrate Paleontology* 32(3 Supplement):139.
- Orcutt, J., E. Davis, and S.S.B. Hopkins. 2012. Giant felid postcrania and the early evolution of North American cats. *Journal of Vertebrate Paleontology* 32(3 Supplement):152.
- Price, S., S.S.B. Hopkins, and C. Botero. 2012. Understanding mammalian dietary evolution using a phylogenetic and comparative approach. *Journal of Vertebrate Paleontology* 32(3 Supplement):158.
- Stilson, K. S.S.B. Hopkins, and E. Davis. 2012. The evolution of rhino arthritis in the Cenozoic. *Journal of Vertebrate Paleontology* 32(3 Supplement):179.
- Stilson, K.T., S.S.B. Hopkins, and E. Davis. 2012. The evolution of rhino arthritis in the Cenozoic. *Paleopathology Association 39th Annual Meeting Program and Abstracts*: 22-23.
- Hopkins, S.S.B. 2011. Role of volcanic activity in the evolution of hypselodonty in aplodontid rodents. *Journal of Vertebrate Paleontology* 31(3 Supplement): 128.
- Stilson, K., S.S.B. Hopkins, and E. Davis. 2011. Detecting and accounting for depositional bias in the Late Miocene McKay Reservoir fauna. *Journal of Vertebrate Paleontology* 31(3 Supplement):200.
- McHorse, B. S.S.B. Hopkins, and E. Davis. 2011. Taxonomy, paleoecology, and functional morphology of Miocene camelids in the Juntura Formation. *Journal of Vertebrate Paleontology* 31(3 Supplement):155.
- Levering, D., S.S.B. Hopkins, and E. Davis. 2011. Decreasing limb inertia among North American ungulates across the Paleogene-Neogene boundary. *Journal of Vertebrate Paleontology* 31(3 Supplement):142-143.
- McLaughlin, W. and S.S.B. Hopkins. 2011. Paleoecology, paleoenvironment, paleontology and paleopedology of Hawk Rim, Central Oregon, USA. *Journal of Vertebrate Paleontology* 31(3 Supplement): 156.
- Hopkins, S.S.B. 2011. Role of volcanic activity in the evolution of ever-growing cheek teeth in aplodontid rodents. *Geological Society of America Abstracts with Programs* 43(5):160.
- Calede, J., Hopkins, S. 2010. Microwear, diet and fossoriality in Miocene rodents from the Great Basin. *Journal of Vertebrate Paleontology* 30(3 Supplement): 68A.
- Orcutt, J., Hopkins, S. 2010. Body size, climate, and time: A paleontological test of Bergmann's Rule. *Journal of Vertebrate Paleontology* 30(3 Supplement): 142A.
- Hopkins, S., J. Calede, A. Gusey. 2010. Reconstructing habitat diversity from faunas of the Middle and Late Miocene of Eastern Oregon. *Journal of Vertebrate Paleontology* 30(3 Supplement): 107A-108A.
- Orcutt, J. D. and S. Hopkins. 2010. Mammal body size and paleoclimatic change: a new perspective on an old debate. Society for the Study of Evolution Annual Meeting.
- Hopkins, S. and J. Samuels. 2010. Turning the macroevolutionary ratchet: Pattern and process in morphological evolution of burrowing mammals. Society for the Study of Evolution Annual Meeting.
- Samuels, J. and S. Hopkins. 2010. Burrowing rodents of the Cenozoic: repeated convergence and ecological replacement. Society for the Study of Evolution Annual Meeting.

- Price, S.A., S. Hopkins, V.L. Roth, and K.K. Smith. 2010. You are what you eat: diet and body size evolution in mammals. Society for the Study of Evolution Annual Meeting.
- Hopkins, S.S.B. 2009. Science literacy in the teaching of lower division science: re-thinking the content of non-majors' science classes. Geological Society of America Abstracts with Programs 41(7): 157.
- Calede, J. and S.S.B. Hopkins. 2009. Changes in diet through time in the Mesogaulinae (Mammalia: Rodentia: Mylagaulidae) in the context of the spread of grasslands: microwear results using texture analysis at high magnification. Geological Society of America Abstracts with Programs 41(7): 391.
- Hopkins, S.S.B. 2008. Is there a scale mismatch between changing diet and changing dental morphology? Journal of Vertebrate Paleontology 28(3 Supplement): 93A.
- Levering, D. and S.S.B. Hopkins. 2008. Locomotor ecology and community structure of predator/prey relations in Oligocene and Recent large mammals. Journal of Vertebrate Paleontology 28(3 Supplement): 105A.
- Calede, J. and S.S.B. Hopkins. 2008. Skeletal morphology and ontogeny of *Alphagaulus pristinus* (Mammalia: Rodentia: Mylagaulidae), an early burrower from the Barstovian. Journal of Vertebrate Paleontology 28(3 Supplement): 59A.
- Hopkins, S.S.B. 2007. Influence of habitat and soil type on the evolution of burrowing in mammals. Geological Society of America Abstracts with Programs 39(6): 23.
- Hopkins, S.S.B. 2007. Evolution of burrowing in small mammals and the importance of fossil data in character reconstruction. Journal of Vertebrate Paleontology 27(3 Supplement): 91A.
- Hopkins, S.S.B. 2007. Evolution of fossoriality in mammals: does burrowing behavior drive an evolutionary ratchet? Integrative and Comparative Biology 46(Supplement 1): e207.
- Davis, E.B., Prothero, D., and Hopkins, S.S.B. 2006. Reexamination of the North American Proboscidean Datum using faunal similarity analysis. Journal of Vertebrate Paleontology 26(3 Supplement): 54A.
- Hopkins, S.S.B. 2006. Comparison of quantitative and qualitative proxies for fossoriality (digging) from the skeletal morphology of mammals. Journal of Vertebrate Paleontology 26(3 Supplement): 78A.
- Hopkins, S.S.B. 2005. Body mass estimation of rodents: Was there a rodent as big as a buffalo? Geological Society of America Abstracts with Programs 37(7): 87.
- Hopkins, S.S.B. 2005. Why are there so few kinds of aplodontids? The relative roles of climate, vegetation and competition in the decline of a lineage. Journal of Vertebrate Paleontology 25(3 Supplement): 72A.
- Hopkins, S.S.B. 2004. Testing adaptive hypotheses for hypsodonty in small mammals using phylogenetic and paleoecological data. Geological Society of America Abstracts with Programs 36(5): 20.
- Tseng, J. and S.S.B. Hopkins. 2004. Reciprocal illumination between quantitative and qualitative characters in understanding the systematics of fossil pocket mice. Geological Society of America Abstracts with Programs 36(5): 423.
- Hopkins, S.S.B. 2004. The mechanics and evolution of fossoriality in mylagaulid rodents: functional and ecological diversity in a clade of fossorial mammals. Journal of Vertebrate Paleontology 24(3 Supplement): 72A.
- Hopkins, S.S.B. 2004. Phylogenetic systematics of aplodontoid rodents. PaleoBios 24 (1 Supplement):4.
- Hopkins, S.S.B. 2003. Hypsodonty and niche partitioning in aplodontoid rodents: do small herbivores parallel ungulates during Miocene diversifications? Journal of Vertebrate Paleontology 23(3 Supplement):62A-63A.
- Hopkins, S.S.B. 2003. Parallel adaptive radiations in four lineages of aplodontoid rodents: a case study in the evolution of hypsodonty. Geological Society of America Abstracts with Programs 34(7):418.
- Liter, M., D. Prothero, and S. Hopkins. 2003. Magnetic stratigraphy of the middle Hemingfordian (Lower Miocene) Split Rock Formation, Central Wyoming. Geological Society of America Abstracts with Programs 34(7):428.
- Hopkins, S.S.B. 2002. Dynamics of mammalian community structure and taxonomic richness through a major climatic warming event inferred from the fauna of the Miocene Cabbage Patch Formation, Montana. Journal of Vertebrate Paleontology 22(3 Supplement): 67A.
- Hopkins, S.S.B. 2002. Influence of collection methods on assessments of paleocommunity ecology: a case study from the early Miocene of Wyoming. Geological Society of America Abstracts with Programs 34(6): 35.

Hopkins, S.S.B. 2001. Phylogeny of the Aplodontidae (Mammalia:Rodentia) and some implications for Oligo-Miocene Biogeography. *PaleoBios* 21(2 supplement): 67.

Hopkins, S.S.B. 2001. Preliminary phylogenetic analysis of aplodontid rodents reveals history of repeated holarctic immigrations. *Journal of Vertebrate Paleontology* 21(3 Supplement): 63A.

GRANTS, FELLOWSHIPS AND AWARDS

- National Science Foundation Award (topic: Integrating Fossil and Modern Evidence to Determine the Role of Diet in Mammalian Diversification) of \$389,667 (\$275,326 to UO) awarded 2013.
- Bureau of Land Management Award (co-PI with Edward Davis, for PFYC of Oregon) of \$65,000 awarded 2016.
- Evolving Earth Grant (with co-PI Win McLaughlin, Paleontological exploration of the fauna and flora of Hawk Rim, OR.) of \$2617.24 awarded 2012.
- National Evolutionary Synthesis Center, Short Term Visitor award (topic: Evolution of Mammalian Diets) awarded 2010.
- Lorrey Lokey Award (topic: Evolution of Scientific Rhetoric), Co-PI with Louise Bishop and Dan Rosenberg, \$24,000 awarded 2008
- Postdoctoral Fellowship, National Evolutionary Synthesis Center, Awarded 2006
- Outstanding Graduate Student Instructor, Awarded Spring 2005
- National Science Foundation Doctoral Dissertation Improvement Grant, Awarded June 2004
- Sigma Xi Berkeley Chapter Research Grant, Awarded April 2004
- Sigma Xi Grant-in-Aid of Research, Awarded December 2003
- Dept. of Integrative Biology Summer Research Grants, Awarded May 2001, 2002, 2003
- National Science Foundation Graduate Research Fellowship 1999-2003.
- Barry Goldwater Scholarship 1998-1999.
- Howard Hughes Medical Institute Threshold Scholarship 1995-1999.
- Phi Beta Kappa, initiated as a junior, 1997-present.
- Tennessee Scholar, University of Tennessee, Knoxville, 1994-1999.

TEACHING

Courses:

- Paleontology (Geology 413, Sonoma State University)
- The Age of Dinosaurs (Geology 105, Sonoma State University)
- Vertebrate Paleontology (Geology 434/534, University of Oregon)
- Principles of Paleontology (Geology 410, University of Oregon)
- Invertebrate Paleontology (Geology 431, University of Oregon)
- Field Geology (Geology 406/606, University of Oregon)
- Scientific Revolutions (Geology/Physics 156M, UO Science Literacy Program)
- Honors College Science (HC 207H/209H, University of Oregon)
 - Non-majors science taught on varying topics
 - Topics taught include:

- The Age of Mammals
- Paleobiology
- Evolution
- Climate Change
- Oregon Paleontology
- Honors College Science Colloquium (HC 441, University of Oregon)
 - Scientific Revolutions
 - Principles of Biodiversity
 - Biology and Geology of the Tibetan Plateau
 - Geology in the Field

Advising:

- Graduate students
 - Primary advisor
 - John Orcutt, Ph.D. 2011. *Bergmann's Rule and the evolution of Mammalian Body Size*. 2007-2011. Now an instructor at Gonzaga U.
 - Jonathan Calede, M.S. 2010. *Paleoecology and competition in fossil burrowing mammals of Oregon*. 2008-2010. Now an adjunct instructor at Bucknell U.
 - Win McLaughlin, Ph.D. student. 2010-present *Vertebrate Biostratigraphy of Kyrgyzstan's Kochkor Basin*. (M.S. on *Geology and Paleontology of Hawk Rim, OR*, in 2012), Fullbright Scholar, 2015.
 - Kristen MacKenzie, M.S. 2013. *Paleontology of the Cogan Buttes Fauna*. Now a collections manager at the Denver Museum of Nature and Science.
 - John Jacisin, M.S. 2014. *Rain shadow effects on salamander biogeography in the Early Oligocene of Oregon*. 2012-2014. Now a Ph.D. student at Texas A&M University.
 - Genevieve Perdue, M.S. student. 2015-present. *Effects of body size evolution on caviomorph rodent skull morphology*.
 - Dana Reuter, Ph.D. student 2015-present. *Trophic structure evolution in Oligo-Miocene terrestrial communities*.
 - Paul Barrett, Ph.D. student 2016-present. *Carnivoran phylogeny and paleoecology*.
 - Committee member
 - Meaghan Emery, Ph.D. 2016. Now Associate Director for Institutional Effectiveness at Central Washington University.
 - Nick Famoso, Ph.D. candidate, hired as head paleontologist at John Day Fossil Beds National Monument.
 - Monya Anderson, Ph.D. candidate, Anthropology
 - Ashley Daigle, M.S. 2010.
 - J.R. Giska, M.S. 2010.
 - Emily Henderson, Ph.D. 2011, Anthropology.
 - Kathryn Paulson, M.S. 2013.
 - Advisory committees
 - Jill Marshall, Ph.D. student.
 - Alex Handwerger, M.S. student.
 - Ben Heath, Ph.D. student.

- Ashleigh Boyd, Ph.D. student.
- Undergraduate and post-baccalaureate students
 - Primary advisor or project supervisor
 - Jack Tseng (completed Ph.D. at U. of Southern Cal., now assistant prof. at U at Buffalo)
 - Jonathan Calede (Ph.D. at U of Washington, now adjunct faculty at Bucknell U.)
 - David Levering (completed M.S. at Oklahoma State U., now education director at Sternberg Museum, Fort Hays, KS)
 - Brianna McHorse (Recipient of a Goldwater Scholarship and an NSF Graduate Research Fellowship, Marshall Scholarship Alternate, now a Ph.D. candidate at Harvard U.)
 - Christine Lowell (completed M.S. at U. of Oregon, now a high school teacher in Georgia)
 - Winifred Kehl (completed M.S. at U. of Washington, now a museum exhibit design contractor)
 - Kelsey Stilson (completed to M.S. at University of Texas, now Ph.D candidate at U of Chicago)
 - Christina Wilson (continued to M.S. at University of Bristol)
 - Spencer Kendall
 - Savannah Olroyd (continued to M.S. at U. of Washington)
 - Marti Maynard
 - Eva Biedron (continued to M.S. at Vanderbilt U.)
 - Mathew Beattie
 - Danielle Oberg (continued to M.S. at East Tennessee State U.)
 - Selina Robson (continued to M.S. at U. of Calgary)
 - Sarah Herring
 - Dylan Carlini
 - Caitlyn Boatman
 - Viekson Van Wie
 - Committee Member
 - 63 Clark Honors College theses through Fall 2016
 - 1 additional geology honors thesis committee

INVITED LECTURES AND WORKING GROUPS

University of Chicago, Department of Geology (2016)

University of New Mexico, Department of Biology and Program in Interdisciplinary Biological and Biomedical Sciences (2015)

Instructor, National Evolutionary Synthesis Center Academy for graduate students: “Phylogeny and paleobiology” (2014)

Oregon State University, Department of Biology (2014)

Oregon Museum of Science and Industry Science Pub (2013, 2014)

National Evolutionary Synthesis Center Catalysis Group, “Integrating approaches to macroevolution: combining fossils and phylogenies” (2013)

Oregon Institute of Marine Biology (2013)

National Evolutionary Synthesis Center Catalysis Group, “Integrating historical biogeography and phylogeography with the fossil record and landscape history” (2013)
University of Oregon Museum of Natural and Cultural History (2012)
National Evolutionary Synthesis Center, Duke University (2010)
Lecturer, Society of Vertebrate Paleontology John Day Basin Field Conference (2010)
University of Oregon Environmental Law Group (2008)
Eugene Natural History Society (2008)
University of California Museum of Paleontology (2007, 2011)
Sonoma State University Department of Biology (2006)
Duke University, Systematics Seminar (2006)

PROFESSIONAL SERVICE

Internal University Service:

3rd Year Review Committee, Kelly Sutherland, 2015.
Search Committee Chair, 2014-2015, Evolutionary Sciences.
Search Committee Member 2009-10, History of Science and of the Arts. 3 hires resulted.
Search Committee Member 2011-12, Biophysics or Computational Biology. 1 hire resulted.
Search Committee Member 2012-13, Dean of the Clark Honors College. 1 hire resulted.
College Life Committee Chair, 2014-15, Clark Honors College
Academic Petitions Committee 2008-11, Clark Honors College
Curriculum Committee 2011-2014, 2016-present, Clark Honors College
Executive Committee 2013-2014, Clark Honors College
Peer Review of Teaching Committee, 2013-2015, Department of Geological Sciences
Learning Management System Review Committee 2014, University-wide
Phi Beta Kappa, Alpha of Oregon, Executive Committee 2014-present
Science Literacy Program Advisory Committee 2014-present

Service to the Scientific Community:

Member, Committee on Diversity in the Geosciences, Geological Society of America, 2010-2013.
Member, Government Affairs Committee, Society of Vertebrate Paleontology, 2014-present.
Member, Program Committee, Society of Vertebrate Paleontology, 2015-present.
Session moderator, Society of Vertebrate Paleontology annual meeting, 2003, 2008, 2011, 2012, 2013, 2015, 2016
Symposium co-convenor, Geological Society of America annual meeting 2014, 2016
President, Oregon Academy of Sciences 2013-2014.
Panel Member 5 panels for National Science Foundation through 2016.
Associate Editor, Journal of Paleontology, 2016-present.
Associate Editor, Evolution, 2017-present

SPECIAL TRAINING

SERC Early Career Geoscience Faculty Workshop, 2011
SERC Workshop on Innovative Approaches to Teaching Sedimentary Geology, Geomorphology, and Paleontology, 2014
National Academy Summer Institute on Scientific Teaching, 2016.

RECENT REFEREE

Proceedings of the Royal Society B, Biological Sciences; Journal of Mammalian Evolution; Biology Letters; Palaeogeography, Palaeoclimatology, Palaeoecology; Paleobiology; PLoS One; Zoological Journal of the Linnean Society; Naturwissenschaften; Biological Journal of the Linnean Society; Journal of Vertebrate Paleontology; Palaeontology; Acta Paleontologica Polonica; Mammalia; Journal of Mammalogy; Mammal Study; Journal of Paleontology; Acta Theriologica; Annals of Carnegie Museum; Rocky Mountain Geology; Paludicola; Nature Geoscience; PeerJ; National Science Foundation Major Research Instrumentation Program; Scripta Geologica

PROFESSIONAL SOCIETIES

Geological Society of America
Paleontological Society
Society of Vertebrate Paleontology
American Society of Mammalogists
Society for the Study of Evolution
Sigma Xi