

JESSICA L. BLOIS

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EDUCATION

Ph.D., 2009 Biological Sciences, Stanford University

M.A., 2005 Biology, Humboldt State University

B.S., 2000 Ecology, Behavior, and Evolution, University of California, San Diego

PROFESSIONAL APPOINTMENTS

2013 – Assistant Professor, Life and Environmental Sciences, UC Merced

2014 – Research Associate, University of California Museum of Paleontology

2009 – 2012 Postdoctoral Research Associate, Center for Climatic Research, UW Madison

SELECTED PEER-REVIEWED PUBLICATIONS

†indicates member of Blois Paleocology Lab, *=Equal Authors

SK Lyons and 29 co-authors including JL Blois (2016). Holocene shifts in the assembly of terrestrial plant and animal communities implicate increasing human impacts. *Nature* 529: 80-83 ►

KC Maguire†*, D Nieto-Lugilde*, **JL Blois**, MC Fitzpatrick, JW Williams, S Ferrier, and DJ Lorenz (2016). Predict-then-assemble or assemble-and-predict-together? A controlled comparison of species- and community-level models across novel climates and communities. *Proceedings of the Royal Society Series B* 283: 20152817 ►

KC Maguire†, D Nieto-Lugilde, MC Fitzpatrick, JW Williams, and **JL Blois** (2015). Modeling species and community responses to past, present, and future episodes of climatic and ecological change. *Annual Review of Ecology, Evolution, and Systematics* 46.

D Nieto-Lugilde, KC Maguire†, **JL Blois**, JW Williams, and MC Fitzpatrick (2015). Close agreement between pollen-based and forest inventory-based models of vegetation turnover. *Global Ecology and Biogeography* 24(8): 905-916

JL Gill, **JL Blois**, B Benito, S Dobrowski, ML Hunter Jr., and JL McGuire (2015). Conserving the stage for 10,000 years: a paleoecological perspective on coarse-filter strategies. *Conservation Biology* 29: 640–648.

ST Jackson and **JL Blois** (2015). The ecological community in a changing environment. *Proceedings of the National Academy of Sciences* 112: 4915–4921.

JL Blois and 21 co-authors. (2014) A framework for evaluating the influence of climate, dispersal limitation, and biotic interactions using fossil pollen associations across the late Quaternary. *Ecography* 37: 1095–1108.

JL Blois, PL Zarnetske, MC Fitzpatrick, and S Finnegan (2013). Climate change and the past, present, and future of biotic interactions. *Science* 341: 499-504.

JL Blois, JW Williams, MC Fitzpatrick, ST Jackson, and S Ferrier (2013). Space can substitute for time in predicting climate-change effects on biodiversity *Proceedings of the National Academy of Sciences* 110: 9374-9379.

- JL Blois**, JW Williams, MC Fitzpatrick, S Ferrier, S Veloz, F He, Z Liu, G Manion, and B Otto-Bliesner (2013). Modeling the climatic drivers of spatial patterns in vegetation composition since the Last Glacial Maximum. *Ecography* **36**:460-473.
- JL Blois**, JW Williams, MC Fitzpatrick, S Ferrier, S Veloz, F He, Z Liu, G Manion, and B Otto-Bliesner (2013). Modeling the climatic drivers of spatial patterns in vegetation composition since the Last Glacial Maximum. *Ecography* **36**:460-473.
- JW Williams, **JL Blois**, and B Shuman (2011). Extrinsic and intrinsic forcing of abrupt ecological change: Case studies from the late Quaternary. *J. Ecology* **99**: 664-677.
- JL Blois**, JL McGuire, and EA Hadly (2010). Small mammal diversity loss in response to late-Pleistocene climatic change. *Nature* **465**: 771-774.
- JL Blois** and EA Hadly (2009). Mammalian response to Cenozoic climatic change. *Ann. Rev. Earth and Planetary Sci.* **37**: 181-208.

GRANTS

- 2016–18 NSF-EAR. Collaborative Research: Neotoma Paleoecology Database, Community-led Cyberinfrastructure for Global Change Research (recommended for funding)
- 2015–17 NSF-ICER. EarthCube IA: Collaborative Proposal: Building Interoperable Cyberinfrastructure (CI) at the Interface between Paleogeoinformatics and Bioinformatics, with members of Neotoma and Paleobiology Databases
- 2013–16 NSF-DEB. Collaborative Research: Incorporating Biotic Interactions into Models of Species Assemblages under Climate Change: A Comparison of Single-Species and Community-Level Approaches, with MC Fitzpatrick (UMCES) and JW Williams (UW Madison)
- 2014–15 UC Merced Faculty Research Grant: Sensitivity of northern California small mammals to past climate, habitat, and biotic change.
- 2013–17 NSF. Dimensions of Biodiversity: Do Parallel Patterns Arise from Parallel Processes? Senior Personnel with PIs M. Dawson (UC Merced), M. Beman (UC Merced), and J. Sachs (U. Washington)

SELECTED INVITED TALKS

- 2016 Invited Talk, Center for the Advanced Study of Human Paleobiology, George Washington University, March 23rd. Ecological Processes in a Changing Environment: Perspectives from the Late Quaternary.
- 2015 Invited Plenary Lecture, International Quaternary Association, July 27. Ecological Processes in a Changing Environment: Perspectives from the Quaternary
- 2015 Invited Talk, Understanding Temporal Trends of Biodiversity Symposium, Ecological Society of America Annual Meeting, August 11. Biodiversity across varying environments: Mechanisms of compositional stasis and change.
- 2014 Invited Talk, Climate and Beyond: Cumulative Impacts on Species Range Shifts Symposium, Ecological Society of America Annual Meeting, August 14. 21,000 years of shifting species, communities, and biotic associations in response to past climate change.
- 2014 Invited Talk, Unifying Ecology Across Scales Gordon Research Conference, July 24. Ecological Responses to Environmental Change: Using the Past to Understand the Future

CORE TEACHING EXPERIENCE

- Fall 2014, 2015 Community Ecology (ES/QSB 146)
Spring 2014, 2016 Ecosystems of California (ESS 50)
Spring 2013, 2015 Paleoecology (ESS 129 / Bio 129 /ES 229)

SELECTED PROFESSIONAL SERVICE

- 2015- Subject editor, *Ecography*
2014- Paleobiology Councilor, American Quaternary Association
2013- Steering committee, NMNH Evolution of Terrestrial Ecosystems RCN
2011- Associate editor, *Frontiers of Biogeography*

SELECTED UNIVERSITY SERVICE

- 2014- Secretary, Quantitative and Systems Biology Graduate Group Executive
 Committee
2013-16 Chair (2014-16) and Member (2013-14), Environmental Systems Graduate
 Group Admissions Committee
2014-15 Vice-Chair, Vernal Pools and Grassland Reserve Advisory Committee
2014 Search committee member, Global Change Evolutionary Biologist and Ecological
 Modeler cluster hire

SELECTED OUTREACH

- 2016 Guest speaker, “Down on the Farm” with Tom Willey, FM88.1, KFCE, February 5th,
 Fresno, CA
2015 Organizer and moderator, “Dodging Extinction” talk, Merced Theatre, April 14th,
 Merced, CA.
2014 Talk, Modesto Junior College Science Colloquium, Oct 22nd.
2013 Science Cafe presenter, May 12th.