

JOHN (JACK) W. WILLIAMS
CURRICULUM VITAE

1. PERSONAL INFORMATION

Professor, Department of Geography
Director, Nelson Institute Center for Climatic Research
University of Wisconsin - Madison

Research Interests

Vegetation Dynamics, Quaternary Paleoecology & Paleoclimatology,
Paleoecoinformatics, Novel Ecosystems & the Anthropocene, Climate Change, Earth
System Science

2. CONTACT INFORMATION

WORK

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3. EDUCATION

PH.D. Geology	Brown University	August, 1999
M.Sc. Geology	Brown University	May, 1996
B.A. Geology, High Honors	Oberlin College	May, 1993

4. PROFESSIONAL EXPERIENCE

Director, Center for Climatic Research University of Wisconsin - Madison	2011-2016
Professor Department of Geography University of Wisconsin - Madison	2011-present
Associate Professor Department of Geography University of Wisconsin - Madison	2008-2011
Assistant Professor Department of Geography University of Wisconsin - Madison	2004-2008
Research Associate Limnological Research Center Department of Geology and Geophysics University of Minnesota Twin Cities Campus	2003-2004
Postdoctoral Fellow National Center for Ecological Analysis and Synthesis University of California, Santa Barbara	1999-2003

5. HONORS, AWARDS, & METRICS

1. H-Factor: 40 (Google Scholar, last updated 2016/8/29)
2. Institute for Advanced Study Fellowship (2017), Durham University *Visiting Scholar Fellowship*
3. Cozzarelli Prize (2016), National Academy of Sciences. *Awarded to Graham et al. 2016 PNAS for its outstanding scientific excellence and originality. One of six papers published in 2016 to earn this distinction.*
4. ESA Centennial (2015): 100 Most-Cited Papers of this Century, for Williams and Jackson (2007) <http://www.esajournals.org/page/centennial-frontiers>
5. Vilas Mid-Career Award (2015) *UW-Madison Mid-Career Award* <http://news.wisc.edu/vilas-professors-and-investigators-honored/>
6. Romnes Faculty Fellowship (2014) *UW-Madison Mid-Career Award, awarded to 6 professors* <http://www.news.wisc.edu/22884>
7. Aldo Leopold Leadership Program Fellow (2011)
8. Bullard Fellow, Harvard University (2010-2011) *Sabbatical fellowship.*
9. Honored Instructor Award, UW University Housing (2010, 2013, 2015)
10. Kavli Fellow, National Academy of Sciences (2009)
11. Pickard Mid-Career Award, Department of Geography (2009)
12. Phillip Certain College of Letters & Science Dean's Distinguished Faculty Award (2008) *Awarded to a single representative from each year's set of newly-tenured faculty within the UW College of Letters and Science.*
13. Reid Bryson Distinguished Professor of the Climate, People, and Environment Program (2008-2011) *"The Bryson Professor carries out research, teaching, and public service in the socially relevant environmental and climate sciences in the spirit of the integrative approach pioneered by Reid A. Bryson."*
14. William Skinner Cooper Award, Ecological Society of America (2004) *Awarded to "an outstanding contributor to the fields of geobotany, physiographic ecology, plant succession, or the distribution of plants along environmental gradients"*
15. Corinna Borden Keen Dissertation Fellowship, Brown University (1999)
16. Paper of the Year, Ohio Journal of Sciences (1995)
17. Brown University Fellowship (1994-1995)
18. Oberlin Geology Wharton Award (1993)
19. Phi Beta Kappa (1992)

6. PUBLICATIONS

PEER-REVIEWED JOURNAL ARTICLES (* INDICATES STUDENTS OR POSTDOCS IN LAB)

1. Nieto-Lugilde, D., Maguire, K. C., Blois, J. L., **Williams, J. W.**, and Fitzpatrick, M. C. (in review) Community-level modeling: Theory, recent advances, and applications. *Methods in Ecology and Evolution*.
2. Goring, S. J., and **Williams, J. W.** (in press) Effect of historic land-use and climate change on tree-climate relationships in the upper Midwestern United States. *Ecology Letters*.
3. Wang, Y., Heintzman, P. D., Newsom, L., Bigelow, N. H., Wooller, M. J., Shapiro, B., and (in press) The southern coastal Beringian land bridge: cryptic refugium or pseudorefugium for woody plants during the Last Glacial Maximum? *Journal of Biogeography*.
4. Noguez-Bravo, D., Veloz, S., Holt, B.G., Singarayer, J.S., Valdes, P.J., Davis, B., **Williams, J.W.**, & Rahbek, C. (2016) Late-Quaternary records forecast amplified plant turnover to climate change. *Nature Climate Change*: 6: 1115-1119.
5. Goring, S. J.*, **Williams, J. W.**, Mladenoff, D. J., Cogbill, C. V., Record, S., Paciorek, C. J., Jackson, S. J., Dietze, M. C., and McLachlan, J. S. (2016) Novel and lost forests in the upper Midwestern United States, from new estimates of settlement-era composition, stem density, and biomass. *PLoS One* 11: e0151935.
6. Ordonez, A., Williams, J. W., and Svenning, J. C. (2016) Climatic novelty, displacement, and divergence: implications for the emergence of novel communities *Nature Climate*

- Change* 10.1038/nclimate3127 Coverage in *Pacific Standard Magazine* ([link](#)), *Science Nordic* ([link](#)), and *Wisconsin Public Radio* ([link](#)).
7. Graham, R. W., Belmecheri, S., Choy, K., Culleton, B., Davies, L. J., Froese, D., Heintzman, P. D., Hritz, C., Kapp, J. D., Newsom, L. A., Rawcliffe, R., Saulnier-Talbot, E., Shapiro, B., Wang, Y., **Williams, J. W.**, and Wooller, M. J. (2016) Timing and causes of a middle Holocene mammoth extinction on St. Paul Island, Alaska. *Proceedings of the National Academy of Sciences* 113: 9310-9314. Coverage in *New York Times* ([link](#)), *Atlantic* ([link](#)), *Guardian* ([link](#)), *AP* ([link](#)), *BBC* ([link](#)), *Washington Post* ([link](#)), and cover article in Nov 2016 issue of *Discover Magazine* ([link](#)). Winner of PNAS 2016 Cozzarelli Prize.
 8. Paciorek, C. J., Goring, S. J., Thurman, A., Cogbill, C. V., **Williams, J. W.**, Mladenoff, D. J., Peters, J. A., Zhu, J., and McLachlan, J. S. (2016) Statistically-estimated tree composition for the northeastern United States at the time of Euro-American settlement. *PLoS* 11:e0150087.
 9. Lorenz, D. J., Nieto-Lugilde, D., Blois, J. L., Fitzpatrick, M. C., and **Williams, J. W.** (2016) Downscaled and debiased climate simulations for North America from 21,000 years ago to 2100AD. *Scientific Data* 3:160048.
 10. Maguire, K. C., Nieto-Lugilde, D., Blois, J. L., Fitzpatrick, M. C., **Williams, J. W.**, Ferrier, S., and Lorenz, D. J. (2016) A controlled comparison of species- and community-level models across novel climates and communities. *Proceedings of the Royal Society B*. 283: 20152817.
 11. Dawson, A., Paciorek, C. J., McLachlan, J. S., Goring, S.* , **Williams, J. W.**, and Jackson, S. T. (2016) Quantifying pollen-vegetation relationships to reconstruct forests using 19th-century forest composition and pollen data. *Quaternary Science Reviews*. 137: 156-175
 12. Matthes J. H., Goring S.* , **Williams J. W.**, and Dietze M. C. (2016) Benchmarking historical CMIP5 land-climate feedbacks across the Upper Midwest and Northeastern United States *Journal of Geophysical Research*. DOI: 10.1002/2015JG003175
 13. Radeloff V. C.[†], **Williams J. W.**[†], Bateman B. L., Burke K. D.* , Carter S. K., Childress E. S., Cromwell K., Gratton C., Hasley A. O., Kraemer B. M., Latzka A. W., Marin-Spiotta E., Meine C. D., Munoz S. E.* , Neeson T. M., Pidgeon A. M., Rissman A. R., Rivera R. J., Szymanski L. M., and Usinowicz J. (2015) The rise of novelty in ecosystems. *Ecological Applications*. 25: 2051-2068. [†] these authors contributed equally to the paper. Invited paper for 100th anniversary issue of *Ecological Applications*
 14. Wang, Y.* , Gill, J., Marsicek, J.P., Dierking, A.* , Shuman, B., & **Williams, J.W.** (2015) Pronounced variations in *Fagus grandifolia* abundances in the Great Lakes region during the Holocene. *The Holocene*. DOI: 10.1177/0959683615612586
 15. Maguire, K.C., Nieto-Lugilde, D., Fitzpatrick, M.C., **Williams, J.W.**, & Blois, J.L. (2015) Modeling species and community responses to past, present, and future episodes of climatic and ecological change. *Annual Review of Ecology and Evolutionary Systematics*. 46: 343-368
 16. Nieto-Lugilde, D., Maguire, K.C., Blois, J., **Williams, J.W.**, & Fitzpatrick, M.C. (2015) Close agreement between pollen-based and forest inventory-based models of vegetation turnover. *Global Ecology & Biogeography* 24: 905-916.
 17. Munoz, S.E.* , Gruley, K.E., Massie, A., Fike, D.A., Schroeder, S., & **Williams, J.W.** (2015) Cahokia's emergence and decline coincided with shifts of flood frequency on the Mississippi River. *Proceedings of the National Academy of Sciences* 112: 6319-6324. Coverage in *Nature News* <http://www.nature.com/news/floods-might-have-doomed-prehistoric-american-city-1.17470>, *St. Louis Public Radio* <http://news.stlpublicradio.org/post/new-insights-curious-disappearance-cahokia-mounds-builders>, National Geographic <http://news.nationalgeographic.com/2015/05/150518-cahokia-ancient-America-prehistoric-floods-mystery-Mississippi/>
 18. Goring, S., Dawson, A., Simpson, G., Ram, K., Graham, R. W., Grimm, E. C., and Williams, J. W. (2015) *neotoma*: A Programmatic Interface to the Neotoma Paleocological Database. *Open Quaternary* 1:1-17.

19. Pederson, N., D'Amato, A.W., Dyer, J.M., Foster, D.R., Goldblum, D., Hart, J.L., Hessler, A.E., Iverson, L.R., Jackson, S.T., Martin-Benito, D., McCarthy, B.C., McEwan, R.W., Mladenoff, D.J., Parker, A.J., Shuman, B., & **Williams, J.W.** (2014) Climate remains an important driver of post-European vegetation change in the eastern United States. *Global Change Biology*, doi: 10.1111/gcb.12779.
20. Ordonez A.*, Martinuzzi S., Radeloff V. C., and **Williams J. W.** (2014) Combined speeds of climate and land-use change of the conterminous US until 2050. *Nature Climate Change* 4: 811-816. *Coverage in Climate Wire* (<http://www.eenews.net/climatewire/2014/08/20/stories/1060004701>) and *Wisconsin Public Radio* (<http://www.wpr.org/new-uw-experiment-models-effects-climate-change-land-use-change-ecosystem>)
21. Munoz S. E.*, Schroeder S., Fike D. A., and **Williams J. W.** (2014) A record of sustained prehistoric and historic land use from the Cahokia region, Illinois, USA. *Geology* 42: 499-502.
22. Munoz S. E.*, Mladenoff D. J., Schroeder S., and **Williams J. W.** (2014) Defining the spatial patterns of historical land use associated with the indigenous societies of eastern North America. *Journal of Biogeography* DOI: 10.1111/jbi.12386.
23. Gavin D. G., Fitzpatrick M. C., Gugger P. F., Heath K. D., Rodríguez-Sánchez F., Dobrowski S. Z., Hampe A., Hu F. S., Ashcroft M. B., Bartlein P. J., Blois J. L.*, Carstens B. C., Davis E. B., de Lafontaine G., Edwards M. E., Fernandez M., Henne P. D., Herring E. M., Holden Z. A., Kong W.-s., Liu J., Magri D., Matzke N. J., McGlone M. S., Saltré F., Stigall A. L., Tsai Y.-H. E., and **Williams J. W.** (2014) Climate refugia: joint inference from fossil records, species distribution models and phylogeography. *New Phytologist* 204: 37-54.
24. Levy O., Ball B. A., Bond-Lamberty B., Cheruvilil K. S., Finley A. O., Lottig N. R., Punyasena S. W., Xiao J., Zhou J., Buckley L. B., Filstrup C. T., Keitt T. H., Kellner J. R., Knapp A. K., Richardson A. D., Tchong D., Toomey M., Vargas R., Voordeckers J. W., Wagner T., and **Williams J. W.** (2014) Approaches to advance scientific understanding of macrosystems ecology. *Frontiers in Ecology and the Environment* 12: 15-23.
25. Seddon A. W. R., Mackay A. W., Baker A. G., Birks H. J. B., Breman E., Buck C. E., Ellis E. C., Froyd C. A., Gill J. L., Gillson L., Johnson E. A., Jones V. J., Juggins S., Macias-Fauria M., Mills K., Morris J. L., Nogués-Bravo D., Punyasena S. W., Roland T. P., Tanentzap A. J., Willis K. J., Aberhan M., van Asperen E. N., Austin W. E. N., Battarbee R. W., Bhagwat S., Belanger C. L., Bennett K. D., Birks H. H., Bronk Ramsey C., Brooks S. J., de Bruyn M., Butler P. G., Chambers F. M., Clarke S. J., Davies A. L., Dearing J. A., Ezard T. H. G., Feurdean A., Flower R. J., Gell P., Hausmann S., Hogan E. J., Hopkins M. J., Jeffers E. S., Korhola A. A., Marchant R., Kiefer T., Lamentowicz M., Larocque-Tobler I., López-Merino L., Liow L. H., McGowan S., Miller J. H., Montoya E., Morton O., Nogué S., Onoufriou C., Boush L. P., Rodriguez-Sanchez F., Rose N. L., Sayer C. D., Shaw H. E., Payne R., Simpson G., Sohar K., Whitehouse N. J., **Williams J. W.**, and Witkowski A. (2014) Looking forward through the past: identification of 50 priority research questions in palaeoecology. *Journal of Ecology* 102: 256-267.
26. Blois J. L., Gotelli N. J., Behrensmeier A. K., Faith J. T., Lyons S. K., **Williams J. W.**, Amatangelo K. L., Bercovici A., Du A., Eronen J. T., Graves G. R., Jud N., Labandeira C., Looy C. V., McGill B., Patterson D., Potts R., Riddle B., Terry R., Tóth A., Villaseñor A., and Wing S. (2014) A framework for evaluating the influence of climate, dispersal limitation, and biotic interactions using fossil pollen associations across the late Quaternary. *Ecography* 37: DOI: 10.1111/ecog.00779.
27. Reu B., Zaehle S., Bohn K., Kleidon A., Pavlick R., Schmidtlein S., and **Williams J. W.** (2013) Ecophysiology of novel vegetation types under scenarios of global warming. *Global Ecology and Biogeography* 23: 156-167.
28. Blois J. L.*, **Williams J. W.**, Fitzpatrick M. C., Jackson S. T., and Ferrier S. (2013) Can space substitute for time in predicting climate-change effects on biodiversity? *Proceedings of the National Academy of Sciences* 110, 9374-9379. DOI: www.pnas.org/cgi/doi/10.1073/pnas.1220228110

29. **Williams J. W.**, Blois J. L.*, Gill J. L.*, Gonzales L. M.*, Grimm E. C., Ordonez A.*, Shuman B., and Veloz S.* (2013) Model systems for a no-analog future: Species associations and climates during the last deglaciation. *Annals of the New York Academy of Sciences* DOI: 10.1111/nyas.12226
30. Gill J. L.*, McLauchlan K. K., Skibbe A. M., Goring S.*, Zirbel C. R.*, and **Williams J. W.** (2013) Linking abundances of the dung fungus *Sporormiella* to the density of American bison (*Bison bison*): implications for assessing grazing by megaherbivores in paleorecords. *Journal of Ecology* 101, 1125–1136. DOI: 10.1111/1365-2745.12130.
31. Ordonez A.* and **Williams J. W.** (2013) Climatic and biotic velocities for woody taxa distributions over the last 16,000 years in eastern North America. *Ecology Letters* 16, 773-781. doi:10.1111/ele.12110.
32. Ordonez A.* and **Williams J. W.** (2013) Projected climate reshuffling based on multivariate climate-availability, climate-analog, and climate-velocity analyses: implications for community disaggregation. *Climatic Change* 119, 659-675. DOI 10.1007/s10584-013-0752-1.
33. Liu Y., Andersen J. J., **Williams J. W.**, and Jackson S. T. (2013) Vegetation history in central Kentucky and Tennessee (USA) during the last glacial and deglacial periods. *Quaternary Research* 79: 189-198.
34. Blois J. L.*, **Williams J. W.**, Fitzpatrick M. C., Ferrier S., Veloz S.*, He F., Liu Z., Manion G., and Otto-Bliesner B. (2012) Modeling the climatic drivers of spatial patterns in vegetation composition since the Last Glacial Maximum. *Ecography* 36, 460-473. DOI: 10.1111/j.1600-0587.2012.07852.x.
35. Veloz S.*, **Williams J. W.**, He F., Liu Z., and Otto-Bliesner B. (2012) No-analog climates and shifting realized niches during the late Quaternary: Implications for species distribution models. *Global Change Biology* 18, 1698-1713. DOI: 10.1111/j.1365-2486.2011.02635.x.
36. **Williams J. W.**, Kharouba H. M., Veloz S.*, Vellend M., McLachlan J. S., Liu Z., Otto-Bliesner B., and He F. (2012) The Ice Age Ecologist: Testing methods for reserve prioritization during the last global warming. *Global Ecology & Biogeography* 22, 289-301. DOI: 10.1111/j.1466-8238.2012.00760.x
37. Goring S. J.*, **Williams J. W.**, Blois J. L., Jackson S. T., Paciorek C. J., Booth R. K., Marlon J. R., Blaauw M., and Christen J. A. (2012) Deposition times in the northeastern United States during the Holocene: establishing valid priors for Bayesian age models. *Quaternary Science Reviews* 48: 54-60.
38. Gill J. L.*, **Williams J. W.**, Jackson S. T., Donnelly J. P., and Schellinger G. C.* (2012) Climatic and megaherbivory controls on late-glacial vegetation dynamics: A new, high-resolution, multi-proxy record from Silver Lake, Ohio *Quaternary Science Reviews* 34: 66-80.
39. Notaro M., Mauss A., and **Williams J. W.** (2012) Projected vegetation changes for the American southwest: Combined dynamical modeling and bioclimatic envelope approach. *Ecological Applications* 22: 1365-1388.
40. Notaro M., Williams J. W., and Lorenz D. J. (2012) Vegetation and land carbon projections for Wisconsin, USA, in the 21st century. *Climate Research* 54: 149-165.
41. Brewer S., Jackson S. T., and **Williams J. W.** (2012) Paleoecoinformatics: Applying geohistorical data to ecological questions. *Trends in Ecology & Evolution* 27: 104-112.
42. Barnosky A. D., Hadly E. A., Bascombe J., Berlow E. L., Brown J. H., Fortelius M., Getz W. M., Harte J., Hastings A., Marquet P. A., Martinez N. D., Mooers A., Roopnarine P., Vermeij G., **Williams J. W.**, Gillespie R., Kitzes J., Marshall C., Matzke N., Mindell D. P., Revilla E., and Smith A. B. (2012) Approaching a state-shift in Earth's biosphere. *Nature* 486:52-58.
43. Schwartz M. W., Hellman J. J., McLachlan J. S., Sax D. F., Borevitz J. O., Brennan J., Camacho A. E., Ceballos G., Clark J. R., Doremus H., Early R. I., Etterson J. R., Fielder D., Gill J. L., Gonzalez P., Green N., Hannah L., Jamieson D. W., Javeline D., Minter B. A., Odenbaugh J., Polasky S., Richardson D. M., Root T. L., Safford H. D., Sala O., Schneider S. H., Thompson A. R., **Williams J. W.**, Vellend M., Vitt P., and Zellmer S. (2012) Managed relocation: Integrating the scientific, regulatory, and ethical challenges. *Bioscience* 62: 732-743.

44. Clark P. U., Shakun J. D., Baker P. A., Bartlein P. J., Brewer S., Brook E. J., Carlson A. E., Cheng H., Kaufman D. S., Liu Z., Marchitto T. M., Mix A. C., Morrill C., Otto-Bliesner B. L., Pahnke K., Russell J. M., Whitlock C., Adkins J. F., Blois J. L.*, Clark J., Colman S. M., Curry W. B., Flower B. P., He F., Johnson T. C., Lynch-Stieglitz J., Markgraf V., McManus J. F., Mitrovica J. X., Moreno P. I., and **Williams J. W.** (2012) Global climate evolution during the last deglaciation. *Proceedings of the National Academy of Sciences* 109: E1134-E1142.
45. Veloz S.*, **Williams J. W.**, Vimont D. J., Vavrus S., Lorenz D. J., and Notaro M. (2011) Identifying climatic analogs for Wisconsin under 21st-century climate-change scenarios. *Climatic Change* DOI 10.1007/s10584-011-0261-z.
46. Parker N. E.* and **Williams J. W.** (2011) Influences of climate, cattle density, and lake morphology on *Sporormiella* abundances in modern lake sediments in the US Great Plains. *The Holocene* 10.1177/0959683611425550.
47. Bartlein P. J., Harrison S. P., Brewer S., Connor S., Davis B. A. S., Gajewski K., Guiot J., Harrison-Prentice T. I., Henderson A., Peyron O., Prentice I. C., Scholze M., Seppä H., Shuman B., Sugita S., Thompson R. S., Viau A. E., **Williams J.**, and Wu H. (2011) Pollen-based continental climate reconstructions at 6 and 21 ka: a global synthesis. *Climate Dynamics* 37: 775-802.
48. Blois, J. L.*, **Williams, J. W.**, Grimm, E. C., Jackson, S. T., and Graham, R. W. (2011) A methodological framework for improved paleovegetation mapping from late-Quaternary pollen records. *Quaternary Science Reviews* 30: 1926-1939.
49. **Williams, J. W.**, Blois, J. L.*, and Shuman, B. N. (2011) Extrinsic and intrinsic forcing of abrupt ecological change: Case studies from the late Quaternary, *Journal of Ecology* 99: 667-677.
50. **Williams, J. W.**, Tarasov, P. A., Brewer, S., and Notaro, M. (2011) Late-Quaternary variations in tree cover at the northern forest-tundra ecotone. *Journal of Geophysical Research – Biogeosciences* 116: G01017.
51. Notaro, M., Liu, Z., Gallimore, R. G., **Williams, J. W.**, Gutzler, D., and Collins, S. (2010). The complex seasonal cycle of ecohydrology in the southwest United States. *Journal of Geophysical Research – Biogeosciences* 115: G04034.
52. Henderson, A. K., Nelson, D. M., Hu, F. S., Huang, Y., Shuman, B. N., and **Williams, J. W.** (2010). Holocene precipitation seasonality captured by a dual hydrogen and oxygen isotope approach at Steel Lake, Minnesota. *Earth and Planetary Science Letters* 300: 205-214.
53. Liu, Y., Jackson, S. T., Brewer, S., and **Williams, J. W.** (2010). Assessing antiquity and turnover of terrestrial ecosystems in eastern North America using fossil pollen data: A preliminary study. Pages doi:10.1088/1755-1315/1089/1081/012005 in IOP Conference Series: Earth and Environmental Science.
54. Elias, P. M., Menon, G., Wetzell, B. K., and **Williams, J. W.** (2010). Barrier requirements as the evolutionary "driver" of epidermal pigmentation in humans. *American Journal of Human Biology* 22: 526-537.
55. Tabor, K., and **Williams, J. W.** (2010). Globally downscaled climate projections for assessing the conservation impacts of climate change. *Ecological Applications* 20: 554-565.
56. **Williams, J.W.**, Shuman, B., Bartlein, P.J., Diffenbaugh, N.S. and Webb, T., III (2010) Rapid, time-transgressive, and variable responses to early-Holocene midcontinental drying in North America. *Geology* 38: 135-138.
57. Wahl E., Schoelzel C., **Williams J.**, and Tigrek S. (2010) Comment. *Journal of the American Statistical Association* 105: 900-905.
58. Gill, J. L.*, **Williams, J. W.**, Jackson, S. T., Lininger, K.*, and Robinson, G. S. (2009). Pleistocene megafaunal collapse preceded novel plant communities and enhanced fire regimes. *Science* 326: 1100-1103. DOI: 10.1126/science.1179504 Winner of *Ecological Society of America's Cooper Award*. Media attention included interviews with *NPR and BBC* and articles in the *New York Times*, the *Economist*, and *Science News*.
59. Gonzales, L. M.*, **Williams, J. W.**, and Grimm, E. C. (2009). Expanded response-surfaces: A new method to reconstruct paleoclimates from fossil pollen assemblages that lack modern analogues. *Quaternary Science Reviews* 28: 3315-3332.

60. Gonzales, L.M.*, Grimm, E.C., **Williams, J.W.** and Nordheim, E. (2009) A modern plant-climate research dataset for modelling eastern North American plant taxa. *Grana* 48: 1-18.
61. **Williams, J.W.**, Shuman, B. and Bartlein, P.J. (2009) Rapid responses of the Midwestern prairie-forest ecotone to early Holocene aridity. *Global and Planetary Change* 66: 195-207.
62. Elias, P. M., Menon, G., Wetzel, B. K., and **Williams, J. W.** (2009). Evidence that stress to the epidermal barrier influenced the development of pigmentation in humans. *Pigment Cell and Melanoma Research* 22:420-434.
63. **Williams, J. W.**, and Shuman, B. (2008). Obtaining accurate and precise environmental reconstructions from the modern analog technique and North American surface pollen dataset. *Quaternary Science Reviews* 27: 669-687.
64. **Williams, J. W.**, Gonzales, L.*, Kaplan, J. O. (2008) Leaf area index for northern and eastern North America at the Last Glacial Maximum: A data-model comparison. *Global Ecology and Biogeography* 17: 122-134.
65. Gonzales, L.*, **Williams, J. W.**, Kaplan, J. O. (2008) Variations in leaf area index in northern and eastern North America over the past 21,000 years: A data-model comparison. *Quaternary Science Reviews* 27: 1453-1466.
66. Thomas, C.D. Ohlemüller, R., Anderson, B., Hickler, T., Miller, P. A., Sykes, M. T., **Williams, J. W.** (2008) Exporting the ecological effects of climate change. *EMBO Reports*, 9 S1: S28-S33.
67. Minckley, T.A. Bartlein, P. J., Whitlock, C., Shuman, B. N., **Williams, J. W.**, Davis, O. K. (2008) Associations among modern pollen, vegetation, and climate in western North America. *Quaternary Science Reviews*, 27: 1939-2094.
68. **Williams, J. W.** and Jackson, S. T. (2007) Novel Climates, No-Analog Plant Communities, and Ecological Surprises: Past and Future. *Frontiers in Ecology and the Environment* 5: 475-482. Winner of ESA 100 Notable Papers award
<http://www.esajournals.org/page/centennial-frontiers>
69. **Williams, J. W.**, Jackson, S. T., Kutzbach, J. E. (2007) Projected distributions of novel and disappearing climates by 2100AD. *Proceedings of the National Academy of Sciences* 104: 5738-5742. doi: 10.1073/pnas.0606292104 Media reporting included interviews with *NBC Nightly News*, *NPR All Things Considered*, and *BBC World News*, and articles in *Discover Magazine* and *Science*.
70. Tarasov, P.E., **Williams, J.W.**, Andreev, A.A., Nakagawa, T., Bezrukova, E., Herzschuh, U., Igarashi, Y., Müller, H. (2007) Satellite- and pollen-based quantitative woody cover reconstructions for northern Asia: verification and application to late-Quaternary pollen data. *Earth and Planetary Science Letters*. 264: 284-298.
71. Diffenbaugh, N. S., Ashfaq, M., Shuman, B., **Williams, J. W.**, Bartlein, P. J. (2006). Summer aridity in the United States: Response to Mid-Holocene changes in insolation and sea surface temperature. *Geophysical Research Letters* 33, DOI: 10.1029/2006GL028012
72. Seabloom, E. W., **Williams, J. W.**, Slayback, D., Stoms, D. M., Viers, J. H., Dobson, A. P. (2006) Human impacts, plant invasion, and imperiled species in California. *Ecological Applications* 16: 1338-1350.
73. Notaro, M., Liu, Z., and **Williams, J. W.** (2006) Observed vegetation-climate feedbacks in the United States. *Journal of Climate* 19: 763-786.
74. Kutzbach, J. E., **Williams, J. W.**, and Vavrus, S. J. (2005) Simulated 21st century changes in regional water balance of the Great Lakes region and links to changes in global temperature and poleward moisture transport. *Geophysical Research Letters* 32, doi:10.1029/2005GL023506.
75. Jennings, M. D., **Williams, J. W.**, Stromberg, M. R. (2005) Diversity and productivity across plant communities of the inland northwest, USA. *Oecologia* 143/144: 607-618.
76. **Williams, J. W.**, Seabloom, E. W., Slayback, D., Stoms, D. M., Viers, J. H. (2005) Anthropogenic impacts upon plant species richness and net primary productivity in California. *Ecology Letters* 8: 127-137.
77. Whitmore, J., Gajewski, K., Sawada, M., **Williams, J. W.**, Shuman, B., Bartlein, P. J., Minckley, T., Viau, A. E., Webb, T., III, Anderson, P. M., and Brubaker, L. B. (2005).

- North American and Greenland modern pollen data for multi-scale paleoecological and paleoclimatic applications. *Quaternary Science Reviews* **24**, 1828-1848.
78. Chalcraft, D. R., **Williams, J. W.**, Smith, M. D., Willig, M. R. (2004) Scale dependence in the species-richness-productivity relationship: The role of species turnover. *Ecology* **85**: 2701-2708.
 79. Jackson, S. T. and **Williams, J. W.** (2004) Modern analogs in Quaternary paleoecology: Here today, gone yesterday, gone tomorrow? *Annual Review of Earth and Planetary Sciences* **32**: 495-537.
 80. **Williams, J. W.**, Shuman, B. N., Webb, T., III, Bartlein, P. J., Leduc, P. (2004) Late Quaternary vegetation dynamics in North America: Scaling from taxa to biomes. *Ecological Monographs* **74**: 309-334. (*Editor's Choice in Science, May 21, 2004*)
 81. Gavin, D. G., Oswald, W. W., Wahl, E. R., **Williams, J. W.** (2003) A statistical approach to evaluating distance metrics and analog assignments for pollen records. *Quaternary Research* **60**: 356-367.
 82. **Williams, J. W.** and Jackson, S. T. (2003) Palynological and AVHRR observations of modern vegetational gradients in eastern North America. *The Holocene* **13**: 485-497.
 83. **Williams, J. W.** (2003) Variations in tree cover in North America since the Last Glacial Maximum. *Global and Planetary Change* **35**: 1-23.
 84. **Williams, J. W.**, Post, D. M., Cwynar, L. C., Lotter, A. F., Levesque, A. J. (2002) Rapid and widespread vegetation responses to past climate change in the North Atlantic region. *Geology* **30**: 971-974. *Featured in Post (2003) TREE commentary.*
 85. Shuman, B. N., Webb III, T., Bartlein, P. J., **Williams, J. W.** (2002) The anatomy of a climatic oscillation: Vegetation change in eastern North America during the Younger Dryas chronozone. *Quaternary Science Reviews*. **21**: 1777-1791.
 86. **Williams, J. W.**, Shuman, B. N., Webb III, T. (2001) Dissimilarity analyses of late-Quaternary vegetation and climate in eastern North America. *Ecology*. **82**: 3346-3362. (*Editor's Choice in Science (2002) 295: 409. Winner of Ecological Society of America's Cooper Award.*)
 87. **Williams, J. W.**, Webb III, T., Richard, P. J. H., Newby, P. (2000) Late Quaternary biomes of Canada and the eastern United States. *Journal of Biogeography* **27**: 585-607.
 88. Edwards, M. E., Anderson, P. M., Brubaker, L. B., Ager, T., Andreev, A. A., Bigelow, N. H., Cwynar, L. C., Eisner, W. R., Harrison, S. P., Hu, F.-S., Jolly, D., Lozhkin, A. V., McDonald, G. M., Mock, C. J., Ritchie, J. C., Sher, A. V., Spear, R. W., **Williams, J. W.**, and Yu, G. (2000) Pollen-based biomes for Beringia 18,000, 6000, and 0 14C yr. B.P. *Journal of Biogeography* **27**: 521-554.
 89. **Williams, J. W.**, Bartlein, P. J., and Webb III, T. (2000) Data-model comparisons for eastern North America - inferred biomes and climate values from pollen data. *Proceedings of the 3rd Paleoclimate Modeling Intercomparison Project Workshop*, Oct. 4-8, 1999. Montreal, Canada. Edited by P. Braconnot. WCRP-111, WMO/TD-No. 1007, pp. 77-86.
 90. **Williams, J. W.**, Webb III, T., Shuman, B. N., and Bartlein, P. J. (2000) Do low CO₂ concentrations affect pollen-based reconstructions of LGM climates? A response to 'Physiological significance of low atmospheric CO₂ for plant-climate interactions' by Cowling and Sykes. *Quaternary Research* **53**: 402-404.
 91. Jackson, S. T., Webb, R. S., Anderson, K. H., Overpeck, J. T., Webb III, T., **Williams, J. W.**, and Hansen, B. C. S. (2000) Vegetation and environments in eastern North America during the last glacial maximum. *Quaternary Science Reviews* **19**: 489-508.
 92. **Williams, J. W.**, Summers, R., and Webb III, T. (1998) Applying plant functional types to construct biome maps from eastern North American pollen data: comparisons with model results. *Quaternary Science Reviews* **17**: 607-627.
 93. **Williams, J. W.** (1995) Factors controlling the formation of fossiliferous beds in the Devonian Columbus limestone at Marblehead Quarry, Marblehead, Ohio. *Ohio Journal of Sciences* **95**: 325-330. (*OJS Paper of the Year*)

1. Munoz, S. E. *, Gruley, K. E., Fike, D. A., Schroeder, S., and Williams, J. W. (2015) Reply to Baires et al.: Shifts in Mississippi River flood regime remain a contributing factor to Cahokia's emergence and decline. *Proceedings of the National Academy of Sciences* 112:E3754-E3754.
2. Grimm, E.C., Blaauw, M., Buck, C.E., & **Williams, J.W.** (2014) Age models, chronologies, and databases workshop: Complete report and recommendations. *PAGES Workshop Report*, **22**.
3. **Williams, J. W.** (2011) Old droughts in New Mexico. *Nature* **470**, 473-474.
4. Sax, D. F. and **Williams, J. W.** (2007) Assisted migration – evaluating the merits of a newly proposed conservation strategy. *International Biogeography Society Newsletter* 5: 2-5.
5. Mode, W. M., Panyushkina, I. P., Leavitt, S. W., **Williams, J. W.**, Santiago, A., Gill, J., Edwards, C., Gertz, H. (2007) Stop 9: Late-glacial and early Holocene paleoecology: Schneider Farm, Calumet County in *Guide Book for the 53rd Midwest Friends of the Pleistocene Field Conference: Late-Glacial History of East-Central Wisconsin*. (ed. by Hooyer, T. S.) May 18-20, 2007. Oshkosh, WI.
6. Shurin, J., Gergel, S., Kaufman, D., Post, D., Seabloom, E., **Williams, J.** (2001) In Defense of Ecology. *The Scientist* 15: 6.
7. Leduc, P. L., **Williams, J. W.**, and Webb III, T. (1998) Programs for site selection, tabular display, and interpolation of data from Paradox-based pollen databases. *INQUA Newsletter* **17**

BOOK CHAPTERS

1. **Williams, J.W.** & Burke, K. (in press). Past abrupt changes in climate and terrestrial ecosystems. In *Climate Change and Biodiversity* (eds T. Lovejoy & L. Hannah).
2. **Williams, J.W.** & Shuman, B.N. (2013). Pollen records, postglacial: Northeastern North America. In *Encyclopedia of Quaternary Science* (eds S.A. Elias & C.J. Mock). Elsevier, Amsterdam.
3. Grimm, E.C., Keltner, J., Cheddadi, R., Hicks, S., Lézine, A.-M., Berrio, J.C., & **Williams, J.W.** (2013). Pollen databases and their application. In *Encyclopedia of Quaternary Science* (eds S.A. Elias & C.J. Mock), pp. 831-838. Elsevier.
4. Lorenz, D. J., Vavrus, S. J., Vimont, D. J., **Williams, J. W.**, Notaro, M., Young, J. A., DeWeaver, E. T., and Hopkins, E. J. (2009). Wisconsin's changing climate: temperature. *Understanding Climate Change: Climate Variability, Predictability, and Change in the Midwestern United States*. Edited by S. C. Pryor. Indiana University Press, Bloomington, IN, pp. 76-87.
5. Lorenz, D. J., Vavrus, S. J., Vimont, D. J., **Williams, J. W.**, Notaro, M., Young, J. A., DeWeaver, E. T., and Hopkins, E. J. (2009). Wisconsin's changing climate: hydrologic cycle. *Understanding Climate Change: Climate Variability, Predictability, and Change in the Midwestern United States*. Edited by S. C. Pryor. Indiana University Press, Bloomington, IN, pp. 135-144.
6. **Williams, J. W.** (2009) Quaternary Vegetation Distributions. *Encyclopedia of Paleoclimatology and Ancient Environments*. Edited by V. Gornitz. Springer-Verlag.
7. Cook, E.R. Bartlein, P. J., Diffenbaugh, N. S., Seager, R., Shuman, B., Webb, R. S., **Williams, J. W.**, Woodhouse, C. A. (2008) Hydrological variability and change, *Abrupt Climate Change, A Report by the U.S. Climate Change Science Program and the Subcommittee on Global Change Research*, Washington, DC.
8. **Williams, J. W.** (2006) Postglacial pollen records of northeastern North America. *Encyclopedia of Quaternary Science*. Edited by S. A. Elias. Elsevier, Amsterdam.
9. Grimm, E. C., Keltner, J., Cheddadi, R., Hicks, S., Lézine, A.-M., Berrio, J. C., and **Williams, J. W.** (2006) Pollen databases and their application. *Encyclopedia of Quaternary Science*. Edited by S. A. Elias. Elsevier, Amsterdam.
10. Webb, T., Shuman, B. N., **Williams, J. W.** (2004) Climatically forced vegetation dynamics in North America during the late Quaternary period. *The Quaternary Period in the United States*. Edited by Gillespie, A. R., Porter, S. C., Atwater, B. F. Elsevier, pp. 459-478.

BOOKS

Williams, J. W., B. Shuman, P. J. Bartlein, J. Whitmore, K. Gajewski, M. Sawada, T. Minckley, S. Shafer, A. E. Viau, T. Webb, III, P. M. Anderson, L. B. Brubaker, C. Whitlock, and O. K. Davis. (2006) *An Atlas of Pollen-Vegetation-Climate Relationships for the United States and Canada*. American Association of Stratigraphic Palynologists Foundation, Dallas, TX. 273p.

BOOK REVIEWS

“Old Forests and Fire” Review of *America’s Ancient Forests: From the Ice Age to the Age of Discovery* by T. M. Bonnicksen. *Conservation Ecology*, 2000

WEBSITES, PUBLICLY AVAILABLE DATASETS, AND OTHER ELECTRONIC RESOURCES1. *Neotoma Paleoecology Database*

URL: www.neotomadb.org

Leaders & Developers: Grimm, Graham, Bills, Anderson, Goring, **Williams**, et al.

Year of Initial Development: 2009

Last Updated: on-going

Description: The Neotoma Paleoecology Database is the primary community repository for fossil records and other paleoecological data from the last 2 million years.

2. *FigShare*.

URL: <http://www.ncdc.noaa.gov/paleo/pollen/viewer/webviewer.html>

Leaders & Developers: **Williams, J. W.** et al.

Year of Initial Development: 2015

Last Updated: on-going

Description: I use FigShare to post copies of powerpoint presentations and other public resources. Example: <https://dx.doi.org/10.6084/m9.figshare.1597629>

3. *Climate-Analog Webtool: Future Climates of Wisconsin*

URL: <http://www.wicci.wisc.edu/climate-map.php>

Leaders & Developers: White, J., Veloz, S.*, **Williams, J. W.**

Year of Initial Development: 2010

Last Updated: 2011

Description: In collaboration with the UW Cartography Lab and with support from the UW Center for Climate Research, UW Climate, People, and Environment Program, and the Wisconsin Focus on Energy Program, we have developed a climate-analog webtool that allows users to find places in the US today that have climates similar to the climates projected for Wisconsin. This webtool is intended to help communicate climate impacts to the citizens, stakeholders, and decision-makers of Wisconsin.

4. *Globally Downscaled Future Climate Projections*.

URL: <http://ccr.aos.wisc.edu/model/ipcc10min/>

Leaders & Developers: Tabor, K., **Williams, J. W.**

Year of Initial Development: 2008

Last Updated: 2009

Description: In a collaboration with the Land Tenure Center, Center for Climate Research, Dept. of Geography, and Conservation International, we generated 10-minute gridded climate projections for 2050 AD (2041-2060) and 2090 AD(2081-2100) for all 23 climate models and 3 scenarios in the IPCC Fourth Assessment Report and have made these debiased and downscaled projections publicly available.

5. *North American Modern Pollen Dataset*.

URL: <http://www.geography.wisc.edu/faculty/williams/lab/Downloads.html> (mirrored at the University of Ottawa)

Leaders & Developers: Whitmore, J., Gajewski, K., Sawada, M., **Williams, J. W.**, Shuman, B., Bartlein, P. J., Minckley, T., Viau, A. E., Webb, T., III, Anderson, P. M., and Brubaker, L. B.

Year of Initial Development: 2006

Last Updated: 2008

Description: This dataset archives pollen surface samples from North America, along with attributed climatic and vegetational data for each location. A full description of the dataset and its compilation is provided by Whitmore et al. (2005). This data is the foundation for a new atlas of modern pollen-climate and pollen-vegetation relationships (Williams et al., 2006).

6. Pollen Viewer.

URL: <http://www.ncdc.noaa.gov/paleo/pollen/viewer/webviewer.html>

Developers: Leduc, P., **Williams, J. W.**, Shuman, B., Bartlein, P. J., Webb, T.

Year of Initial Development: 2003

Last Updated: 2003

Description: Pollen Viewer presents animated maps of pollen distributions in North America since the last glacial maximum, which can be used to study how plant distributions responded to late-Quaternary environmental change. Pollen Viewer was created by Phil Leduc of Brown University. The data and maps underlying Pollen Viewer are described by Williams et al. (2004). Pollen Viewer has become a widely used tool in classrooms and public presentations on ecological responses to climate change.

7. CONTRACTS AND GRANTS

From 2004 to present: PI or Co-PI on grants totaling \$19,749,000, including \$7,600,000 for home institution

ACTIVE

1. NSF-Geoinformatics (2016-2020) "Collaborative Research: Neotoma Paleocology Database, Community-led Cyberinfrastructure for Global Change Research" (PI: Williams, Goring, Roth, Ashworth, Grimm, Widga, Charles, Hausmann, Purdum, Booth, Blois, Curry, Smith, Graham, Bills) **\$1,300,229** (UW portion: \$353,394)
2. NSF-DEB (2014-2017) "Collaborative Research: Megaherbivore and climatic controls on fire and vegetation dynamics during the last deglaciation" (PI: Williams, Jackson, Russell) **\$800,000** (UW portion: \$720,000)
3. NSF-ECIA (2015-2017) "EarthCube IA: Collaborative Proposal: Building Interoperable Cyberinfrastructure (CI) at the Interface between Paleogeoinformatics and Bioinformatics" (PI: Uhen, Williams, Bills, Blois, Davis, Goring, Graham, Peters, Smith) **\$900,000** (UW portion: \$228,770).
4. NSF-OCE (2013-2015) "EarthCube RCN: C4P: Collaboration and Cyberinfrastructure for Paleogeosciences" (Lehnert, Jenkins, Williams, Uhen) **\$299,880** (UW portion: \$0)
5. NSF-EF-Macrosystems (2013-2018) "Collaborative Research and NEON: MSB Category 2: PalEON – a PaleoEcological Observatory Network to assess terrestrial ecosystem models." (PI: McLachlan, Dietze, Jackson, Williams, Duffy, Finley, Higuera, Hooten, Marlon, Moore, Pederson, Zhu) **\$5,100,000** (UW portion: \$793,161)
6. NSF-DEB (2013-2016) "Collaborative Research: Incorporating biotic interactions into models of species assemblages under climate change: A comparison of single-species and community-level approaches." (PI: Fitzpatrick, Williams, Blois) **\$780,557** (UW portion: \$113,898)
7. NSF-IGERT (2013-2018): "Novel ecosystems, rapid change, and no-analog conditions: the future of biodiversity conservation in human-dominated landscapes." (PI: Radeloff and 19 other UW-Madison faculty) **\$3,000,000** (all UW)
8. NSF Office Polar Programs (2013-2016) "Collaborative Research: Paleoclimate, paleoenvironment and other potential drivers of extinction of *Mammuthus primigenius*, St. Paul Island, Pribilof Islands, Alaska." (PI: Graham, Belmecheri, Hritz, Newsom, Wooller, Shapiro, Williams) **\$1,274,139** (UW portion: \$151,521)
9. NSF Geoinformatics (2010-2015) "Collaborative Research: Neotoma Paleocology Database,

Pliocene-Quaternary" (PI: Graham, Grimm, Ashworth, Jackson, Williams, Booth, Charles, Miller, Smith, Thompson). **\$1,511,707** (UW portion: \$0)

PREVIOUSLY FUNDED

- 1.NSF-Macrosystems (2011-2013) "Collaborative Research and NEON: PaleON – a PaleoEcological Observatory Network to assess terrestrial ecosystem models" (PI: McLachlan, Williams, Dietze, Jackson, Paciorek, Foster) **\$857,156** (UW portion: \$ 211,855)
- 2.National Park Service (2012-2013) "Historical and projected climate trends in U.S. National Parks for vulnerability analyses and resource management under climate change." (PI: Williams, Gonzales, Notaro, Vimont) **\$114,000** (all UW)
- 3.NSF Sedimentary Geology and Paleobiology Program (2009-2012) "Collaborative Research: Floral and faunal community responses to late-Quaternary climate change." (PI: Williams, Grimm, Graham, Jackson). **\$743,229** (UW portion: \$339,719)
- 4.NSF REU Supplement (Summer, 2011, 2012) (PI: Williams) ~**\$8,000/award**
- 5.Wisconsin Focus on Energy Environmental Research Program (2009-2011) "Identifying climatic analogs and potential shifts in forest composition and extent for southern Wisconsin under 21st-century climate-change scenarios." (PI: Williams, Notaro, Lorenz) **\$196,447** (all UW)
- 6.NSF Ecology Program (2007-2011) "Collaborative Research: Integrated analysis of late-glacial vegetation and environments in eastern North America: How do novel plant associations arise?" (PI: Williams, Jackson) **\$682,235** (UW portion: \$424,381)
- 7.World University Network (2010) "NEOTOMA: A community database for ecological responses to climate changes of the recent past." (PI: Williams, Graham, Edwards) **\$16,000** (all UW)
- 8.DOE National Center for Climate Change Research (2007-2010) "Ecosystem response to future climate change and the impact of vegetation feedbacks in the Southwest United States" (PI: Notaro, Huxman, Thompson, Vimont, Williams) **\$349,075**. (all UW)
- 9.International Biogeographical Society (2009-2010) "Membership and Meetings Coordinator" (PI: Williams) **\$18,327**
10. NSF Ecology Program (2006-2009) "Collaborative Research: A Late-Glacial Model System for Studying Fine-Scale Vegetational Responses to Abrupt Climate Change" (PI: Grimm, Curry, Williams) **\$748,417** (UW portion: \$132,153)
11. NSF Division of Environmental Biology (2009) "U.S. Graduate Student Travel to International Biogeography Society Meeting" (PI: Williams) **\$66,200** (all UW)
12. Conservation International (2008) Assessing Climate Change Impacts for the Tropical Andes (PI: Williams). **\$15,000**
13. NSF REU Supplement (Summer, 2008) (PI: Williams) **\$7,000**
14. NSF Geoinformatics (2006-2008) "Collaborative Research: Late Neogene Terrestrial Database" (PI: Grimm, Graham, Jackson, Ashworth, Williams) **\$435,010**
15. NSF Paleoclimate Program (2003-2007) "Collaborative Research: Surface-Atmosphere Feedbacks and Holocene Climate Variations in Eastern North America: Linkages, Impacts, and Governing Mechanisms" (PI: Williams, Diffenbaugh, Shuman, Bartlein, Sloan) **\$745,902**
16. National Center for Ecological Analysis and Synthesis, Postdoctoral Fellowship (1999-2001) "Integrating satellite and pollen data with biogeochemical modeling to reconstruct long-term trends in the productivity and carbon sequestration of terrestrial ecosystems" **\$86,000**
17. NSF Bioinformatics, Postdoctoral Fellowship (1999-2001) "Reconstructing millennial-scale trends in terrestrial productivity and carbon sequestration" **\$100,000** (*declined by investigator*)

8. TEACHING EXPERIENCE

Assistant/Associate/Full Professor, University of Wisconsin

2004-present

Courses taught:

- 120 Introduction to Physical Geography.
- 331 Environments of the Past.
- 332 The Global Warming Debate.
- 523 Quaternary Vegetation Dynamics.

920 Quaternary Environments Seminar.
980 Earth System Science Seminar.

Lecturer, University of Minnesota Twin Cities. 2003-2004
Earth System Science and History 431

Individual Teaching Consultant, Brown University. 1998-1999
At the Center for the Advancement of College Teaching, observed other graduate students' lectures, labs, or discussion sessions, and provided feedback. Covered disciplines ranging from the sciences and humanities.

Departmental Teaching Liaison, Brown University 1997-1998
Organized teaching orientation sessions for department, and served as information conduit between the Geology Department and the Center. Led follow-up discussions to university-wide teaching seminars

Teaching Assistant, Brown University. 1996-1998

- a. Advanced sedimentology class. Raised funds, organized, and led 15-person field trip to Florida Keys to study modern carbonate platform sedimentary systems.
- b. Introductory geology class. Ran labs and graded homework and tests.

9. MENTORING ACTIVITIES

Postdoctoral Researchers

1. Andria Dawson (2016-present)
2. Allison Stegner (2016-present)
3. Sarah Supp (2014-present)
4. Simon Goring (2011-2015)
5. Fuyao Wang (2012-2015)
6. Alejandro Ordonez (2011-2013)
7. Jennifer Marlon (2010-2012)
8. Jessica Blois (2009-2013)
9. Sam Veloz (2009-2010)

PhD Students

1. Kevin Burke (2015-present)
2. Yue Wang (2013-present)
3. Sam Muñoz (2010-2015)
4. Jacquelyn Gill (2007-2012) *The Biogeography of Biotic Upheaval: No-analog Plant Associations and the End-Pleistocene Megafaunal Extinctions.*
5. Karen Russ (2005-2011)
6. Leila Gonzales (PhD 2009) *Reconstructing late-glacial no-analogue climates in northeastern Illinois with expanded pollen-climate relationships: A case study at Crystal Lake, McHenry County, Illinois.*

Master's Students

1. Scott Farley (2015-present)
2. Ben Watson (2014-present)
3. Kevin Burke (2013-2015)
4. Ellen Kujawa (2014-2015)
5. Yue Wang (2011-2013) *Vegetation and climate changes at Spicer Lake, Indiana, during the Holocene.*
6. Nancy Parker (2009-2011) *The Influence of Climate, Cattle Density, and Lake Morphology on Sporormiella Abundances in Modern Lake Sediments in the U.S. Great Plains.*
7. Jacquelyn Gill (MSc 2007) *Investigating biotic drivers of Quaternary landscape change: Late-glacial no-analog communities and the North American megafaunal*

extinction.

8. Ben Johnson (2005-2006; did not finish)
9. Sherry Stuart (MSc 2006) *The relationship between SOI index and QBO phase to precipitation variability for the Mississippi River basin for 1898 through 1938 and 1958 through 1999.*

External Examiner on PhD Defenses

- | | |
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| 1. Veronique Boucher-Lalonde (U. Ottawa, Canada) | 2016 |
| 2. Vincent Garreta (CEREGE, France) | 2010 |

Graduate Student Committees

- | | |
|--|-----------|
| 3. Akshay Sarathi (Anthropology) | 2015- |
| 4. Kevin Barrett (Botany) | 2014- |
| 5. Alfonso Doucette (Botany) | 2014- |
| 6. Kristy Gruley (Geography) | 2013-2014 |
| 7. Kristen Michels (Botany) | 2013- |
| 8. Jeremy Ash (Botany) | 2013- |
| 9. Soo Kim (Botany) | 2012- |
| 10. Miao Du (Geology) | 2012-2013 |
| 11. Emily Atkinson (Geography) | 2011-2014 |
| 12. Brian Harvey (Zoology) | 2011-2015 |
| 13. Henry Loope (Geography) | 2011-2013 |
| 14. Mark Wehrenberg (AOS) | 2011-2012 |
| 15. Melissa Motew (Nelson Institute) | 2010-2012 |
| 16. Fei Ma (Geography) | 2010- |
| 17. Ian Orland (Geology) | 2009-2012 |
| 18. Michelle Gooch (Botany) | 2009-2012 |
| 19. Alvin Rentsch (Geography) | 2009-2010 |
| 20. David Toland (Geography) | 2008-2010 |
| 21. Feng He (Atmospheric and Oceanic Sciences) | 2008-2010 |
| 22. Brad Brewster (Rural Sociology) | 2008-2009 |
| 23. Libby Obbink (Geology) | 2008-2009 |
| 24. David Ullman (AOS & Geology) | 2007- |
| 25. Colin Walling (Geology) | 2007-2010 |
| 26. John-Paul Argenti (Atmospheric and Oceanic Sciences) | 2007-2008 |
| 27. Paul Reyerson (Geography) | 2006-2012 |
| 28. Shelley Crausbay (Botany) | 2006-2011 |
| 29. Colin Belby (Geography) | 2006-2009 |
| 30. Feihua Yang (Geography) | 2006-2009 |
| 31. Donna Lee (Atmospheric and Oceanic Sciences) | 2005-2006 |
| 32. Kendra Millam (Botany) | 2005-2006 |
| 33. Lucas Moyer-Horner (Zoology) | 2004-2011 |
| 34. Aaron Feggstad (Geography) | 2004-2005 |
| 35. Gordon Robertson (Geography) | 2004-2006 |
| 36. Devon Liss (Geography) | 2004-2005 |
| 37. Kevin Spigel (Geography) | 2004-2006 |
| 38. Xiaodong Miao (Geography) | 2004-2006 |

Undergraduate Honors Theses

1. Kate Hayes (2016) *The importance of paleofire records in reconstructing climate since the Last Glacial Maximum: A study of two charcoal records from central Ohio.*
2. Madeline Ruid (2015) *Assessing the effect of historic land use on eastern hemlock (Tsuga canadensis) and on climate-driven species distribution model predictions of hemlock in the upper Midwestern U.S.*
3. Brigitta Rongstad (2013) *A methodology for cryptotephra detection in a lacustrine sediment core from Spicer Lake, IN.*

4. Chad Zirbel (2012) *A multi-proxy approach to understanding the effect of paleoclimate on vegetation since the Last Glacial Maximum.*
5. Katie Lininger (2007) *A late Pleistocene/early Holocene fire record from Appleman Lake, Indiana: The use of charcoal analysis in investigating landscape change.*
6. Susanne Ehlers (2007) *The contribution of global transport on North American carbon monoxide concentrations.* (co-advised with Tracey Holloway, Dept. Civil Engineering)

Undergraduate Students

1. Bailey Zak	2016-present
2. Kate Hayes	2015-2016
3. Joe Bevington	2015-present
4. Glenda Valdez (NSF-REU)	Summer 2015
5. Kirsten Mayer	2015
6. Anna Dierking	2014-2015
7. Daniel Handel	2013-2014
8. Morgan Ripp	2013-2015
9. Ashtin Massie	2013-present
10. Chris Morgan (Honors Thesis)	2014-present
11. Angela Ingrassia (Undergraduate Research Scholar)	2013-2014
12. Dimitar Vassilev (Undergraduate Research Scholar)	2013
13. Ben Seliger (NSF-REU)	Summer 2013
14. Madeleine Ruid (NSF-REU, Honors Thesis)	2012-
15. Brigitta Rongstad (Hilldale Fellowship, Honors Thesis)	2011-2013
16. Kelly Kohrs	2011-2012
17. Emilie McKain	2010-2011
18. Chad Zirbel (NSF-REU, Honors Thesis)	2009-2012
19. Grace Schellinger	2008-2012
20. Jenna Bonavia (Undergraduate Research Scholar)	2008-2011
21. Luming (Lucy) Xue (Undergraduate Research Scholar)	2008-2009
22. Luke Straka	2008-2009
23. David Silverman	2008
24. Maria A. Rosario Mejias (IBS Summer Research Program)	Summer 2008
25. Jeremiah Marsicek (Pathways Scholars Program)	2007-2009
26. Susanne Ehlers (Honors)	2006-2007
27. Katherine Lininger (Honors)	2006-2007
28. Dominique Alhambra	2006-2007
29. Shannon Hernandez	2006-2007
30. Adianez Santiago (IBS Summer Research Program)	Summer 2006
31. Samuel Lucas (IBS Summer Research Program)	Summer 2006
32. Tenley Banik	2005-2006
33. Rebecca Wolff	2004-2005

High School Interns

1. Mason Martinez (Science Research Internship Program) Summer 2013

10. MEDIA, EDUCATION, AND OUTREACH

SOCIAL MEDIA

Twitter (@IceAgeEcologist) 2,530 followers, 2,433 tweets as of Oct 19, 2016

ESSAYS, LETTERS, & OPEDS

Milwaukee Journal Sentinel (Oct 6, 2016) Sticking with the University of Wisconsin. OpEd <http://bit.ly/2dAxAuv>

Milwaukee Journal Sentinel (Dec 4, 2015) *Nuclear Energy: Climate-Safe and Business-Friendly.* OpEd <http://ow.ly/Vv9MA>

Wisconsin State Journal. (June 22, 2005) Letter to editor

Santa-Barbara News-Press (July 23, 2000) *Global warming: Not if, how*

much? OpEd

INTERVIEWS & ARTICLES

- Wisconsin Public Radio (Aug 26, 2016) Aldo Leopold Center launches smartphone tour about climate change <http://www.wpr.org/aldo-leopold-nature-center-launches-smartphone-tour-climate-change>
- WORT (Aug 22, 2016) Woolly Mammoths: Where did they go? <http://www.wortfm.org/woolly-mammoths-where-did-they-go/>
- WORT (May 16, 2016) Ecomodernists: Have our cake and eat it too. <http://www.wortfm.org/ecomodernists-want-us-to-have-our-cake-and-eat-it-too/>
- Why Files (April 7, 2014) Who is a Climate Scientist? <http://whyfiles.org/2015/climate-change-who-is-a-climate-scientist/>
- WKOW Interview (Nov 12, 2014)
- Nature News (Oct 10, 2013) Climate Change Gets Clocked <http://www.nature.com/news/climate-change-gets-locked-1.13922>
- Discover Magazine (June 5, 2013) Hunting for Clues to Why the Last Mammoths Disappeared http://blogs.discovermagazine.com/fieldnotes/2013/06/05/hunting-for-clues-to-why-the-last-mammoths-disappeared/#.Ua_oMhbLCa4
- Capitol Times (May 15, 2012) Response to Wall Street Journal OpEd
- Atlantic Magazine (Oct, 2011) 9.5 Questions
- Big 10 Network 2008
Gave a 5-minute lecture on climate change for airing on the Big 10 Network.
- Letter to Capital Times. In reply to article 'Is Global Warming a bunch of hokey?' June 18, 2007. 2007
- Media Interviews for the PNAS Paper. 2007
On Air Interviews: NBC Nightly News, NPR All Things Considered, BBC World News, German Public Radio, WORT News.
Science Magazines: Discover Magazine, Science Magazine
Wire Services: AP, Reuters (picked up by newspapers worldwide)

EDUCATION

- SERC, Exploring the Neotoma Database (2015) Online teaching resource for college-level course. <http://serc.carleton.edu/neotoma/activities.html> 2013
- Mentor, High School Science Research Internship 2013
Mentored Mason Martinez, sophomore at Madison East High School.
- Science Saturday, Wisconsin Institute for Discovery 1/4/2014
Species responses to past climate change
- Speaker, Symposium: Teaching Climate Change from the Geologic Record 2010
One of four guest speakers to an audience of high-school and college-level teachers about late-Quaternary records of climate change and ecological response. This symposium was organized by Carleton College and supported by the National Academy of Science, the American Quaternary Association, and the International Quaternary Association.
- Mentor, Undergraduate Research Scholars. URS at the University of Wisconsin provides research experiences for freshman and sophomores interested in exploring a career in the sciences. 2008-
- EdGCM: Classroom Applications. Presentation to the Play@Pyle group at the University of Wisconsin on recent work adapting the EdGCM climate model for use by undergraduate students studying paleoclimatology. Includes examples of classroom exercises and term paper project. 2006
- Mentor, Summer Research Program. SRP at the University of Wisconsin provides research experiences for minority, first-generation college students, women 2006-

and other underrepresented populations.

Teacher, Kids Do Ecology, National Center for Ecological Analysis and Synthesis. 1999-2000

Introduced 5th grade students to basic ecological concepts and helped them design and perform their own scientific experiment.

ScienceLine, National Center for Ecological Analysis and Synthesis. 2000-2003

Served as an on-line expert who responded to questions posted by K-12 students.

EVENTS AND SYMPOSIA ORGANIZED

Center for Climatic Research 50th Anniversary. October, 2013 Madison, WI
Williams, J. W. (2013) Species and community responses to a no-analog future: Lessons from the past, planning for the future. *Earth Day*, Madison, WI.

PUBLIC LECTURES & TOWNHALLS

Earth Day Panel (April 25, 2016) Ecomodernism and the Anthropocene
Climate Change Lobby, Stevens Point Chapter (April 17, 2016) Ecological responses to climate changes since the last ice age.
National Park Service Webinar (April 14, 2016) No-analog climates and communities: Mapping, metrics, and modeling
UW Arboretum (March 10, 2016) Ecological responses to climate change since the last ice age
American Society of Landscape Architects, Wisconsin Chapter (February 29, 2016) Plant and community responses to climate change: lessons from the last deglaciation
Viterbo University (November 8, 2015) Understanding Climate Change: Good News, Bad News, and Solutions
Oakwood Senior Center (March 7, 2015) Climate Change and Novel Ecosystems: Using the Past to Understand the Future.
PLATO Group (Nov 24, 2014). Novel climates and no-analog ecosystems
UW-Madison Climate Change Panel (Nov 11, 2013). Focusing on question of whether UW-Madison should divest from fossil fuel companies.
Nerd Nite at the High Noon Saloon. Madison, WI. June 27, 2012
Webinar to Fish and Wildlife Service. October, 2012.
Citizen's group meeting hosted by Clean Wisconsin. Viroqua, WI. June 29, 2010
Earth Day 40th Anniversary. Monona Terrace, Madison, WI. April 20, 2010
Wisconsin Department of Natural Resources – Staff Training on Climate Change and Impacts. February, 2010
Green Day Expo, Madison, WI. May 3, 2009
Wisconsin Initiative on Climate Change Impacts (WICCI) seminar series: “Bracing for Impact: Climate Change Adaptation in Wisconsin.” This talk and others were televised on Wisconsin Public television. April 9, 2009
Joint Seminar on the Effects of Global Climate Change on Fish and Wildlife Resources in the Midwest. Co-Sponsored by Indiana University and U.S. Fish and Wildlife Service. Bloomington, IN (Virtual attendee). September, 2008.
Verona Senior Center. Verona, WI. Arbor Day, April, 2008.
Wisconsin Energy Conservation Corporation. Madison, WI. January, 2008.

OTHER OUTREACH

Video Consultant. Conservation International, Washington DC.
Summer/Fall, 2008. Provided data and advice for a video on climate change impacts on biodiversity.
Museum Exhibition Consultant, Field Museum, Chicago. January, 2007
Provided data, images, and advice for ‘Ancient Americas’ exhibit.

11. PROFESSIONAL AFFILIATIONS, ACTIVITIES, AND SERVICE

MEMBERSHIPS IN PROFESSIONAL SOCIETIES

American Geophysical Union
 American Quaternary Association
 Association of American Geographers
 Ecological Society of America
 Geological Society of America
 International Biogeography Society

EDITING AND REVIEWING

Associate Editor, Ecology Letters, 2015-present
Associate Editor, Journal of Biogeography, 2008-present
Associate Editor, Ecography, 2014-2015
Guest Editor: Proceedings of the National Academy of Sciences
Journal Reviewing (157 as of Dec 31, 2014): Arctic & Alpine Research, Biosciences, Boreas, Climate Dynamics, Climates of the Past, Diversity and Distributions, Ecography, Ecological Complexity, Ecological Indicators, Ecology, Ecology Letters, Ecosystems, EOS, Frontiers of Biogeography, Frontiers in Ecology & Environment, Geophysical Research Letters, Geology, Global Change Biology, Global Ecology & Biogeography, Global & Planetary Change, Holocene, Journal of Biogeography, Journal of Climate, Journal of Ecology, Journal of Quaternary Science, Nature, Nature Climate Change, The Open Ecology Journal, Physical Geography, PLoS One, PNAS, Proceedings of the Royal Society, Quaternary Research, Quaternary Science Reviews, Science, TREE.
Grant Proposal Reviewing: National Science Foundation (Ecosystems, Geography, Hydrology, Population & Community Ecology, RCN, Sedimentary Geology & Paleobiology), Department of Energy, National Geographic Society, Research Council of Norway. German Science Foundation, Netherlands Science Foundation, Keck Foundation
Grant Panels: NSF-Pop. & Comm. Ecology, NSF-Ecosystems.

SERVICE - EXTERNAL

Advisory Board, Aldo Leopold Nature Center	2015-
Advisory Board, NOAA-Paleoclimatology	2014-
Paleobiology Councilor, American Quaternary Association	2010-2014
Secretary, International Biogeographical Society	2007-2010
Cooper Awards Committee, Ecological Society of America (Chair 2009-2011)	2006-2011
North American Pollen Database Advisory Board	2004-2009
Chair, Paleoecology Section, Ecological Society of America	2001-2002
Vice-Chair, Paleoecology Section, Ecological Society of America	2000-2001
NCEAS Open House Coordinator	2000-2001
Departmental Student Representative, Brown University	1998-1999
Geoclub President, Brown University	1995-1996

SERVICE - UNIVERSITY

AOS Review Committee	2014-2015
L&S Student Appeals Committee	2008-
L&S Scholarship Committee	2008-
Wisconsin Ecology Executive Committee	2008-2010, 2011-

SERVICE - DEPARTMENTAL

Chair, Finance Committee	2014-
Faculty Development Committee	2013-

Chair, Faculty Development Committee	2011-2013
Graduate Studies Committee	2008-
Budget Committee	2008-2010
Advisory Committee (Advises Chair regarding departmental policy)	'08-'09, 2012-2013
Ad-Hoc Committee on 2-1 Teaching	2008-2009
Co-Chair, Speakers Committee	2005-2008
Undergraduate Advisor (and Honors Advisor for Dept.)	2005-2009
Undergraduate Committee	2005-2009
Future Directions Committee	2006-2007
Student Paper Committee	2005-2006
Science Hall Open House Committee	Fall 2006

SERVICE – NELSON INSTITUTE FOR ENVIRONMENTAL STUDIES

Director, Center for Climatic Research	2011-present
Center for Climatic Research: Endowment Committee	2005-2006
Climate, People, and Environment: Seminar Organizer	2004-2005, 2008-

SYMPOSIA, WORKSHOPS, AND MEETINGS ORGANIZED

- Williams, J. W., Uhen, M., Lehnert, K. et al. (2016) *Paleodata Hackathon*. Denver, CO.
- Williams, J. W. and Grimm, E. G. (2016) *Neotoma Users Workshop*. Santa Fe, NM.
- Ellis, E., Goldewijk, K. K., and Williams, J. W. (2015) Dating the Anthropocene: Early Land Use and Earth System Change. *American Geophysical Union*. San Francisco, CA.
- Graham, R. G., Williams, J. W., and Grimm, E. C. (2015) *Neotoma All Hands Workshop*. San Francisco, CA.
- Goring, S., Dawson, A. and Williams J. W. (2015) Paleoeological patterns, ecological processes, modeled scenarios: Crossing scales to understand an uncertain future. *Ecological Society of America*. Baltimore, MD.
- Williams, J. W. and Uhen, M. (2014) Paleobiological Cyberinfrastructure. *Geological Society of America*. Vancouver, Canada.
- Williams, Uhen, M., Lehnert, K. et al. (2014) Cyberinfrastructure for the Paleobiological Sciences. *2-day Workshop in Washington, DC*
- Ordóñez, A. and Williams, J. W. (2013) Rapid Climate Change and Species Range Shifts: observations, predictions, and policies. *Ecological Society of America*, Minneapolis, MN.
- Williams, J. W. (2013) Species and community responses to a no-analog future: Lessons from the past, planning for the future. *Earth Day*, Madison, WI.
- Williams, J. W., Jackson, S. T., Smith, F. A. (2009) The Biogeography of Extinction. *International Biogeography Society*. Mérida, Mexico.
- Williams, J. W. (2009) *Global Change and Paleoecology: Assessing Ecological Responses to Environmental Change*. American Association for the Advancement of Science (AAAS) Annual Meeting. Chicago, IL.
- Gill, J. L. and Williams, J. W. (2007) Ancient Extinctions & Modern Experiments: The Ecological Effects of Adding & Removing Megaherbivores from the Landscape. *Ecological Society of America Annual Meeting*. San Jose, CA.
- McLachlan, J. and Williams, J. W. (2005) Species range dynamics: past, present, and future. *Ecological Society of America Annual Meeting*. Tucson, AZ.
- Williams, J. W. and Shuman B. (2004) World Pollen Databases: Applications. *XI Meeting of International Palynological Congress*. Granada, Spain.
- Williams, J. W. and Cowling, S. (2002) Gasping for CO₂: Ecological impacts of past variations in atmospheric carbon dioxide. *Ecological*

Society of America Annual Meeting. Tucson, AZ.

12. MEETINGS, SEMINARS, AND CONFERENCES

PLENARY SYMPOSIA

1. Ecological Society of America, *Recent advances at the intersection of paleoecology, ecoinformatics, and global change ecology*. Ft. Lauderdale, FL. August, 2016 (*Keynote Lecture*)
2. Cary Institute, *Species Interactions and Climate Change*. Milbrook, New York. November, 2012.
3. Colloquium: 2010, International Year of Biodiversity, Instituto de Ecologia A. C. Xalapa, Mexico. October, 2010.
4. Chinese-American Kavli Frontiers of Science. Kunming, China. September, 2009.
5. Danish Biodiversity Informatics Forum (DanBIF), University of Aarhus. Aarhus, Denmark. April, 2008. (*Keynote Lecture*)
6. University of Milwaukee Conference on Climate Change and Sustainable Development. Milwaukee, WI. April, 2008.

DEPARTMENTAL SEMINARS

1. University of Wisconsin, Westin Seminar Series, Madison, WI, April, 2016
2. University of Wisconsin, Holtz Research Data Series, Madison, WI, February, 2016
3. Brown University, Institute for Brown, Environment, and Society. Providence, RI, December, 2015
4. Northern Illinois University, Department of Geosciences, DeKalb, IL, October, 2015
5. University of Durham, Department of Geography, Durham, UK, March, 2015
6. University of Texas, Program in Ecology, Austin, TX, April, 2014
7. University of Illinois, Department of Biological Sciences, Urbana-Champaign, IL, April, 2014
8. University of Chicago, Department of the Geophysical Sciences, Chicago, IL, January, 2014
9. American Museum of Natural History, New York, NY, September, 2013.
10. City College of New York, Department of Biology. New York, NY, September, 2013.
11. Northwestern University, Department of Earth and Planetary Sciences. Evanston, IL, May, 2013.
12. Penn State, Ecology Program, State College, PA. May, 2013
13. University of Vermont, Department of Biology, Burlington, VT. May, 2012
14. University of Wisconsin, Department of Forest & Wildlife Ecology, Madison, WI. February, 2012
15. University of Wisconsin, Dept. of Atmospheric and Ocean Sciences. Madison, WI. February, 2012
16. University of Wyoming, Program in Ecology, Laramie, WY. January, 2012
17. Brown University, Department of Ecology & Evolutionary Biology, Providence, RI. February, 2011.
18. University of Connecticut, Department of Ecology & Evolutionary Biology, Storrs, CT. February, 2011.
19. Yale University, Department of Ecology & Evolutionary Biology, New Haven, CT. January, 2011
20. University of Melbourne, Melbourne, Australia. November, 2010.
21. Commonwealth Scientific and Research Organization (CSIRO), Canberra, Australia. November, 2010.
22. University of Copenhagen, Center for Macroecology, Evolution and Climate, Copenhagen, Denmark. May, 2010
23. Washington University, Dept. of Earth and Planetary Sciences. St. Louis, MO. February, 2010
24. Columbia University, Lamont-Doherty Earth Observatory. Palisades, NJ. January, 2010
25. Wisconsin Initiative on Climate Change Impacts Seminar Series. Madison, WI. April, 2009
26. Northern Illinois University, Dept. of Geography. DeKalb, IL. January, 2009.

27. University of Wisconsin, Dept. of Atmospheric and Ocean Sciences. Madison, WI. October, 2008
28. University of Wisconsin, Dept. of Zoology. Madison, WI. October, 2008
29. Duke University, Dept. of Biology. Durham, NC. April, 2008
30. University of British Columbia, Department of Geography. Vancouver, British Columbia, Canada. March, 2008.
31. University of Wisconsin, Dept. of Geography. Madison, WI. November, 2007
32. Institute of Ecosystem Studies. Millbrook, NY. September, 2007
33. University of Wisconsin, SAGE. Madison, WI. February, 2007
34. University of Illinois, Urbana-Champaign, Department of Plant Biology and Department of Atmospheric Sciences. Urbana-Champaign, IL. October, 2006
35. University of Wisconsin, Chaos Seminar. Madison, WI. September, 2006
36. Wake Forest University, Winston-Salem, NC. March, 2006
37. University of Wisconsin, Department of Soil Science. Madison, WI. February, 2006
38. University of Wisconsin, Madison Ecology Group. Madison, WI. August, 2005
39. University of Illinois at Chicago, Dept. of Biological Sciences, Chicago, IL. October, 2005
40. Indiana State University, Department of Geography, Geology, and Anthropology, Terre Haute, IN. January, 2005.
41. University of Wisconsin, Center for Limnology. Madison, WI. October, 2004
42. University of Wisconsin, Turner Lab. Madison, WI. November, 2004
43. University of Wisconsin, SAGE. Madison, WI. November, 2004
44. University of Minnesota, Department of Geology and Geophysics, Minneapolis, MN. February, 2004.
45. University of Chicago, Department of Geophysical Sciences, Chicago, IL. January, 2004.
46. University of Iowa, Department of Geoscience, Iowa City, IA. January, 2004.
47. University of Wisconsin, Department of Geography, Madison, WI. December, 2003.
48. Antioch University, Environmental Studies Department, Keene, NH. May, 2003.
49. University of California Santa Barbara, Department of Geography, Santa Barbara, CA. January, 2003.
50. University of Utah, Department of Geography, Salt Lake City, CA. January, 2003.
51. University of California Santa Cruz, Department of Earth Sciences, Santa Cruz, CA. May, 2002.
52. American Meteorological Society, Central Coast Chapter, Santa Barbara, CA. April, 2002.
53. DePaul University, Department of Geography, Chicago, IL. January, 2002.
54. Washington State University, Environmental Science and Regional Planning Program, Pullman, WA. March, 2001.
55. Denver University, Department of Geography, Denver, CO. February, 2001.
56. Lehigh University, Department of Earth and Environmental Sciences, Lehigh, PA. January, 2001.
57. University of Alberta, Department of Earth and Atmospheric Sciences, Edmonton, AB. January, 2001.
58. University of South Carolina, Department of Geological Sciences, Charleston, SC. January, 2001.
59. University of Minnesota, Department of Ecology, Evolution, and Behavior, Minneapolis, MN. November, 2000.
60. University of Chicago, Department of Geophysical Sciences, Chicago, IL. October, 2000.
61. University of California Santa Barbara, Department of Ecology, Evolution, and Marine Biology, Santa Barbara, CA. October, 2000.
62. Brown University, Department of Ecology and Evolutionary Biology, Providence, RI. March, 1997.

WORKSHOPS

1. Tipping Points. Durham, UK. Mar. 19-20, 2015
2. LandCover 6k. Paris, France. Feb. 18-20, 2015
3. EarthCube Cyberinfrastructure for Paleogeoscience – Geochronology. Oct 1-3, 2014.
4. EarthCube Cyberinfrastructure for Paleogeoscience – Paleobiology. May 21-23, 2014.

5. Age Models and Databases Workshop. Belfast, UK. Jan 13-17, 2014.
6. Norway No-Analogs Workshop. Bergen, Norway. Oct 23-24, 2013.
7. EarthCube Geochronology Workshop. Madison, WI. Sept 30, 2013.
8. PaleoBiology Database. Madison, WI. Aug 20, 2013.
9. NCEAS Grand Challenges in Software Design. Mar 11-13, 2013.
10. EarthCube: Community Workshop for the Paleogeosciences. Minneapolis, MN. Feb 3-4, 2013.
11. PAGES: Climate Refugia Workshop. Aug 1-3, 2012.
12. Late-Pleistocene Megafaunal Extinctions and Community Dynamics in the Northern Hemisphere. Durham University, United Kingdom. Nov. 3-5, 2011.
13. Biodiversity Theory to Inform Global Change Strategies. University of California Berkeley. Berkeley, CA. December 5-7, 2010.
14. Neotoma Database: Phase 2 All-Hands Meeting. University of Wisconsin, Madison. Madison, WI. September 23-27, 2010.
15. Quaternary Megafaunal Extinctions. National Evolutionary Synthesis Center (NESCent), Duke University, Durham, NC. May 26-29, 2010.
16. Adapting to Climate Change. World Universities Network. Pennsylvania State University. State College, PA. May 22-24, 2010.
17. Climate Adaptation Strategies for National Forests. US Forest Service. Madison, WI. April 27-28, 2010.
18. Future Landscapes. US Fish and Wildlife Service. Madison, WI. April 5-7, 2010.
19. Paleoecological Database Visualization and Analysis Tools. Umea, Sweden. October 5-11, 2009.
20. Paleoclimate Modeling and Intercomparison Project (PMIP). Estes Park, CO. Sept 15-17, 2008.
21. National Phenology Network. Aug 28-30, 2007. Milwaukee WI.
22. European Pollen Database. May 9-11, 2007. Aix-en-Provence, France.
23. Geophysical and statistical challenges in detection/attribution of regional climate change. National Center for Atmospheric Research, Junior Faculty Forum. July 9-11, 2007. Boulder, CO.
24. Wisconsin Climate Change Assessment Project. June 12, 2007. Madison WI.
25. Integrated Late Neogene Database Workshop. Feb 17-20, 2007. State College PA.
26. World University Network – Arctic Climates and Environments. May 15-18, 2005. Bristol, UK

INVITED CONFERENCE PAPERS

1. **Williams, J. W.** (2015) Data Management for Early Career Scientists. Geological Society of America, Vancouver, CA.
2. **Williams, J.W.** and Cyberinfrastructure For Paleogeosciences Steering Committee (2013) EarthCube RCN: Cyberinfrastructure for Paleobioscience (C4P). *Geological Society of America*, Denver, CO.
3. **Williams, J.W.** and McLachlan, J. S. (2013) Large-Scale Data-Model Syntheses in Paleoecology and Paleoclimatology: The Children of COHMAP. *Ecological Society of America*, Minneapolis, MN.
4. **Williams, J.W.** (2012) Novel Climates and Shifting Realized Niches During the Late Quaternary: Implications for 21st-Century Species Distributional Modeling. *The Wildlife Society*, Portland, OR.
5. **Williams, J. W.**, Blois, J., Ferrier, S., Manion, G., Fitzpatrick, M., Veloz, S., Jackson, J., Liu, Z., Otto-Bliesner, B., He, F. (2012) Generalized Dissimilarity Modeling (GDM) of Late-Quaternary Variations in Palynological Compositional Dissimilarity. *International Palynological Congress*, Tokyo, Japan.
6. **Williams, J. W.**, Goring, S., Shang, Z., Thurman, A., Paciorek, C., Zhu, J., Charlie Cogbill, C., Mladenoff, D., Jackson, S. T., Dietze, M., McLachlan, J. PalEON Participants (2012) Developing data and models for Bayesian-based inferences of late-Holocene variations in forest composition and density in the northeastern US *International Palynological Congress*, Tokyo, Japan.
7. **Williams, J.W.** (2012) Novel Climates, no-analog communities, and truncated niches. *American Association for the Advancement of Science*, Vancouver, BC.

8. **Williams, J.W.** (2011) Novel Climates, no-analog communities, and truncated niches. *American Ornithology Union*, Gainesville, FL.
9. **Williams, J.W.**, Blois, J., Shuman, B. N. (2010) Extrinsic and intrinsic drivers of past ecological regime shifts. *Ecological Society of America*, Pittsburgh, PA.
10. **Williams, J. W.** (2008) One of three panelists and presenters at a special Climate Forum. *Society for Vertebrate Paleontologists*, Cleveland, OH.
11. **Williams, J. W.**, Shuman, B. N., Bartlein, P. J., and Diffenbaugh, N. S. (2008) Rapid and Time-Transgressive Responses to Early Holocene Drying in the North American Mid-Continent. *American Geophysical Union Fall Meeting*, San Francisco, CA.
12. **Williams, J. W.**, Shuman, B. N., Bartlein, P. J., and Diffenbaugh, N. S. (2008) Abrupt but non-synchronous responses to early Holocene mid-continental drying in North America. *Association of American Geographers*, Boston, MA.
13. Kaufman, D. M., **Williams, J. W.** (2007) Geographic gradients in space and time: latitude, plants, and the late Pleistocene-Holocene of eastern North America. *International Biogeographical Society*, Tenerife, Spain.
14. **Williams, J. W.** (2005) Vegetational responses to novel climate regimes. *Workshop on Ecological Response to Climate Change: Scales of change, scales of observation*. Helsinki, Finland.
15. **Williams, J. W.**, Shuman, B., Bartlein, P. J., Whitmore, J., Gajewski, K., Sawada, M., Minckley, T., Shafer, S., Viau, A. E., Webb, T., Anderson, P. M., Brubaker, L. B., Whitlock, C., and Davis, O. K. (2005) Modern Pollen-Climate-Vegetation Relationships in the US and Canada. *Association of American Geographers*, Denver, CO.
16. **Williams, J. W.** (2004) No-analog communities in the upper Midwest. *Northwoods Ecology Meeting*, Minocqua, WI.
17. **Williams, J. W.**, Post, D. M., Cwynar, L. C., Lotter, A. F., Levesque, A. J. (2004) Rapid and widespread vegetation responses to late-glacial climate change in the North Atlantic region. *XI International Palynological Congress*, Granada, Spain.
18. **Williams, J. W.**, Shuman, B., Bartlein, P. J. (2004) Holocene variations in tree cover and moisture availability in central North America. *American Quaternary Association Biennial Meeting*, Lawrence, KS.
19. **Williams, J. W.** and Jackson, S. T. (2003) Quantitative reconstructions of late Quaternary tree cover from modern pollen-AVHRR calibrations. *International Union for Quaternary Research (INQUA)*, Reno, NV.
20. **Williams, J. W.** (2002) Vegetation-Atmosphere Interactions During the Late Quaternary: Current Advances and Future Directions. *American Geophysical Union Fall Meeting*, San Francisco, CA.
21. **Williams, J. W.** (2000) Land Cover Change in Boreal and Eastern North America Since the Last Glacial Maximum. *American Geophysical Union Fall Meeting*, San Francisco, CA.
22. **Williams, J. W.**, Shuman, B. N., Webb III, T. (2000) No-Analog Biomes and Climate in Eastern North America. *American Geophysical Union Spring Meeting*, Washington, DC.
23. **Williams, J.W.**, Bartlein, P. J., and Webb III, T. (1999) Data-model comparisons for eastern North America: Inferred biomes and climate values from pollen data. *3rd Paleoclimate Modeling Intercomparison Project Workshop*, Montreal, Canada.
24. **Williams, J. W.** (1998) Past biome distributions in boreal and eastern North America: observations and simulations. *Biome 6000 Workshop*, Jena, Germany.
25. Killilea, M., **Williams, J. W.**, Webb III, T., Hall, C., and Leopold, D. (1998) Community reconstruction and gradient analysis at varying spatial, temporal, and taxonomic resolutions: pollen and tree inventory data from New York State. *Geological Society of America Penrose Conference: Linking spatial and temporal scales in ecology and paleoecology*, Solomons Island, MD.
26. **Williams, J. W.**, and Webb III, T. (1997) Reconstructing eastern North American biomes from pollen data for today and 6 kya. *European Science Foundation Conference*, II Ciocco, Italy.

WORKSHOPS

1. Geosamples Town Hall, American Geophysical Union. San Francisco, CA. Dec. 9, 2013

PANELS

1. Ecomodernism Panel (April 20, 2016) Earth Day, Nelson Institute, April 25, 2016 (<https://nelson.wisc.edu/events/earth-day/2016/ecomodernism.php>)
2. UW-Madison Climate Change Panel (Nov 11, 2013). Focusing on question of whether UW-Madison should divest from fossil fuel companies.
3. Wisconsin Climate Forum (Oct. 28, 2007) The panel discussion followed a keynote address by Dr. Susan Solomon, co-chair of IPCC Working Group I.
4. Climate Change and Wisconsin's Future: Issues and Opportunities. (April 10, 2007) *Nelson Institute for Environmental Studies, University of Wisconsin, Madison, WI*. This panel included WI state senators, industry and agricultural representatives, scientists, and environmental advocates, and was open to the public.
5. Labors of Love: Perspectives on Gender and Reproduction in the Academy. (2007) *Association of American Geographers, San Francisco, CA*.
6. How to Succeed in Ecology: Advice from Current and Aspiring Eminent Ecologists. (2005) *Ecological Society of America, Montreal, Canada*. This two-hour session was sort of a 'speed-dating' for ecologists, in which professional ecologists rotated through tables and discussed career advice and options with sets of graduate students.