

# MARCUS JOHN HAMILTON, B.SC., M.S., PH.D.

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## EDUCATION

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**Doctor of Philosophy (distinction)**, Anthropology, University of New Mexico. 2002-2008  
**Master of Science (distinction)**, Anthropology, University of New Mexico. 2000-2002  
**Bachelor of Science (1st Class Hons.)**, Archaeology, University College London. 1995-1998

## PROFESSIONAL POSITIONS

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**Core Faculty, School of Data Science, UTSA.** 2022-present  
**Associate Professor, Department of Anthropology, UTSA.** 2018-present  
**Postdoctoral Fellow, Department of Anthropology, University of Missouri.** 2016-2018  
**Postdoctoral Fellow, Santa Fe Institute.** 2010-2016  
**Postdoctoral Fellow, Department of Biology, University of New Mexico.** 2008-2011

## AWARDS AND HONOURS

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Tenure, UTSA. 2022  
President's Distinguished Research Achievement Award, UTSA. 2020  
Distinction in the Ph.D., Department of Anthropology, UNM. 2008  
Visiting scholar, Institute of Ecology, National University of Mexico, Mexico City, MX. 2007  
Visiting scholar, Institute of Archaeology, University College London, UK. 2007  
Elected Phi Kappa Phi academic honors society. 2006  
Hibben Foundation Fellowship, Department of Anthropology, UNM. 2004  
Brolio-Basehart Award, Department of Anthropology, UNM. 2004  
High Pass in the Ph.D. comprehensive examinations, Department of Anthropology, UNM. 2002  
Brolio-Basehart Award, Department of Anthropology, UNM. 2001  
Lewis R. Binford Fellowship, Department of Anthropology, UNM. 2000-2003  
Roy Hodson Undergraduate Dissertation award, Institute of Archaeology, University College London. 1998

## PUBLICATIONS (H-INDEX = 34; TOTAL CITATIONS >5,000; APRIL 2024)

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98. O'Connor, M. C. Kempes, **M.J. Hamilton**, and M.E. Moses (in review). Scaling biological information. In: *Biological Scaling*, edited by M. Connor, C. Kempes, and B.J. Enquist. Santa Fe Institute Press.

97. Ritchie, M., **M.J. Hamilton**, M.E. Moses, and M. O'Connor (in review). Scaling of search, information value and learning in resource acquisition. In: *Biological Scaling*, edited by M. Connor, C. Kempes, and B.J. Enquist. Santa Fe Institute Press.
96. **Hamilton, M.J.** (In review). Scaling the human niche. In: *Biological Scaling*, edited by M. Connor, C. Kempes, and B.J. Enquist. Santa Fe Institute Press.
95. Ziang, J., C.P. Kempes, **M.J. Hamilton**, G.B. West, R. Tao, and V. Cappelli (In review). Scaling laws and the growth of companies.
94. Kim, H., **M.J. Hamilton**, W.S. Jung, Y. Berezkin, and H. Youn (In review). The deeply nested structure of mythological traditions worldwide.
93. Blasi, D.E., **M.J. Hamilton**, R.D. Gray and C.L. Bownern (In review). Linguistic diversity through the Holocene reveals the deep roots of language loss.
92. **Hamilton, M.J.** and B. Buchanan (In press). Reconstructing Clovis landscape use at multiple spatial scales from the Mockingbird Gap site, New Mexico. In *The Paleoindian Southwest*, edited by J.D. Kilby and B.B. Huckell. University of Utah Press, Salt Lake City.
91. **Hamilton, M.J.**, R.S. Walker and B. Buchanan. (In press) Institutional complexity emerges from ecological complexity in small-scale societies. *Proceedings of the Royal Society: Biological Sciences*.
90. **Hamilton, M.J.**, R.S. Walker and B. Buchanan. (In press). Data from: Institutional complexity emerges from socioecological complexity in small-scale human societies. Dryad. <https://doi.org/10.5061/dryad.gb5mkkwz3>
89. **Hamilton, M.J.** (In press). The macroecology of complex social networks in ethnohistoric hunter-gatherer societies. In: *Proceedings of The Centennial of The University of Michigan Museum of Anthropological Archaeology*. University of Michigan Press.
88. Kilby, J.D., **M.J. Hamilton**, and C.W. Ringstaff (2024). An overview of Bonfire Shelter archaeology in the context of Eagle Nest Canyon. *Journal of Texas Archaeology and History* 6(3), 155-174
87. **Hamilton, M.J.**, B. Buchanan, J. Lobo, and R.S. Walker (2024). Mobility costs and storage investments in the movement ecology of hunter-gatherers. *Journal of Archaeological Science: Reports* 13(1), 22448.
86. Buchanan, B. **M.J. Hamilton**, N. Gala, H. Smith, M. Wilson, M. Eren, and R.S. Walker (2024). Comparing Clovis and Folsom fluting via scaling analysis *Archaeometry* 66(2), 266-281.
85. **Hamilton, M.J.**, R.S. Walker, B. Buchanan, D.E. Blasi, and C.E. Bownern (2024). Reconstructing hunter-gatherers worlds using machine-learning. *BioRxiv*.
84. Walker, R.S, M.V. Flinn, and **M.J. Hamilton** (2023). Remote sensing evidence for demographic growth in isolated Amazonian indigenous tribes. *Scientific Reports* 13(1), 22448.
83. Buchanan, B. and **M.J. Hamilton** (2023). Networks and cultural transmission in hunter-gatherer societies. In *The Oxford Handbook of Archaeological Network Research*, edited by J.L. Munson. Oxford University Press, Oxford, 459-473.

82. Buchanan, B., **M.J. Hamilton**, D. Macdonald, J. Blinkhorn, H. Groucutt, M.I. Eren, and S.L. Kuhn (2023). Geometric morphometric analyses of Levallois points from the Levantine Middle Paleolithic do not support functional specialization. *Lithic Technology* 48(4), 437-451.
81. Walker, R.S, J.R. Ferguson, A. Olmeda, **M.J. Hamilton**, J. Elghammer, and B. Buchanan (2023). Predicting the geographic distribution of ancient Amazonian archaeological sites with machine learning. *PeerJ* 11, e15137.
80. Buchanan, B. and **M.J. Hamilton** (2022). Spatial scaling of Folsom Paleoindian hunter-gatherer camps in western North America. In *Spatial Analysis in Archaeology*, edited by Amy Clark and Joseph Gingerich. University of Utah Press, Salt Lake City.
79. Kilby, J.D., T. Surovell, B.B. Huckell, C. Ringstaff, and **M.J. Hamilton** (2022). Evidence supports the efficacy of Clovis points for hunting proboscideans. *Journal of Archaeological Science: Reports* 45:103600.
78. **Hamilton, M.J.** (2022). Collective computation and the emergence of hunter-gatherer small-worlds. *Journal of Social Computing* 3(1):18-37.
77. Buchanan, B., J.D. Kilby, J. LaBelle, T.A. Surovell, J. Holland-Lulewicz, and **M.J. Hamilton** (2022). Bayesian modeling of the Clovis and Folsom radiocarbon records indicates a 170-year multi-generational transition. *American Antiquity* 87(3):567-580.
76. Fernández-López de Pablo, J., V. Romano, M. Derex, E. Gjesfjeld, C. Gravel-Miguel, **M.J. Hamilton**, A. Migliano, F. Riede, and S. Lozano (2022). To understand cultural evolution in hunter-gatherers, we need to adopt 'Network Thinking'. *Trends in Ecology and Evolution* 37(8):632-636.
75. **Hamilton, M.J.** (2022). Invited commentary on "Scaling of hunter-gatherer camp size and human sociality" by J. Lobo, T. Whitelaw, L.M.A. Bettencourt, P. Weissner, M.E. Smith, and S. Ortman. *Current Anthropology* 63(1):82-83.
74. Buchanan, B., R.S. Walker, **M.J. Hamilton**, B. Story, M. Bebbler, D. Wilcox, and M.I. Eren. Experimental assessment of lanceolate projectile point and haft robustness (2022). *Journal of Anthropological Science: Reports* 42:103399.
73. **Hamilton, M.J.** and M. Tallavaara (2022). Statistical inference, scale, and noise in comparative anthropology (comment on Bliege Bird and Coddling). *Nature Ecology & Evolution* 5(12): <https://doi.org/10.1038/s41559-021-01637-3>.
72. Buchanan, B., J.D. Kilby, **M.J. Hamilton**, J. LaBelle, K. Meyer, B. Andrews, B.M. Morgan, V.T. Holliday, G.W.L. Hodgins, and T.A. Surovell (2021). Bayesian analysis of radiocarbon record shows the Folsom complex lasted ~ 700 years and originated on the Northern Plains. *PaleoAmerica*. <https://doi.org/10.1080/20555563.2021.1890401>.
71. Buchanan, B. and **M.J. Hamilton** (2020). Scaling laws of Paleoindian projectile point design. *Journal of Archaeological Method and Theory* 28(3): 1-23.
70. **Hamilton, M.J.**, R.S. Walker, and C. Kempes (2020). Diversity begets diversity in ethno-linguistic groups and mammal species. *Scientific Reports* 10: 19654.
69. Kilby, J.D., S. Farrell, and **M.J. Hamilton** (2020). New investigations at Bonfire Shelter, Texas re-examine controversial bison jumps and bone beds. *Plains Anthropologist*. DOI: 10.1080/00320447.2020.1812795.

68. Eren, M.I., B. Story, A. Perrone, M. Bebbler, **M.J. Hamilton**, R.S. Walker, and B. Buchanan (2020). North American Clovis point form and function: an experimental assessment of penetration depth. *Lithic Technology*. <https://doi.org/10.1007/s10816-020-09481-8>.
67. Lobo, J., Alberti, M., Allen-Dumas, M., Arcaute, E., Barthelemy, M., Bojorquez Tapia, L.A., Brail, S., Bettencourt, L., Beukes, A., Chen, W.-Q., Florida, R., Gonzalez, M., Grimm, N., **Hamilton, M.J.**, Kempes, C., Kontokosta, C.E., Mellander, C., Neal, Z.P., Ortman, S., Pfeiffer, D., Price, M., Revi, A., Rozenblat, C., Rybski, D., Siemiatycki, M., Shutters, S.T., Smith, M.E., Stokes, E.C., Strumsky, D., West, G., White, D., Wu, J., Yang, V.C., York, A., and Youn, H. (2020). Urban Science: Integrated Theory from the First Cities to Sustainable Metropolises (SSRN Scholarly Paper No. ID 3526992). *Social Science Research Network*, Rochester, NY.
66. Bettencourt, L.M, J. Lobo, S. Rybski, V. Chang, C. Kempes, and **M.J. Hamilton** (2020). The Interpretation of urban scaling analysis in time. *Journal of the Royal Society Interface* 17: 20190846.
65. **Hamilton, M.J.** and R.S. Walker (2020). Unique allometry of group size and collective brain mass in humans and primates relative to other mammals. *BioRxiv/2019/829366*.
64. **Hamilton, M.J.** R.S. Walker, Briggs Buchanan, and D.S. Sandeford (2020). Scaling human sociopolitical complexity. *PLOS ONE* 15(7): e0234615.
63. **Hamilton, M.J.** (2020). Book review of “The Acceleration of Cultural Change” by Alex Bentley and Michael O’Brien, *Journal of Anthropological Research* 76(1): 95-96.
62. Dunne, J. and **M.J. Hamilton** (2019). Are humans really unique? How do we know? In: Krakauer, D.C. (Ed.) *Hidden In Plain Sight: The Evolving Idea of Complexity at the Santa Fe Institute, 1984-2019*. Santa Fe Institute Press, pp. 249-256.
61. **Hamilton, M.J.** and R.S. Walker (2019). Nonlinear diversification rates of linguistic phylogenies over the Holocene. *PLOS ONE* 14(7): e0213126.
60. **Hamilton, M.J.**, B. Buchanan, and R.S. Walker (2019). Spatiotemporal diversification of projectile point types in western North America over 13,000 years. *Journal of Archaeological Science: Reports* 24:486-495.
59. **Hamilton, M.J.** (2019). Invited commentary on “Forager mobility in constructed environments” by R. Haas and S.A. Kuhn. *Current Anthropology* 60(4): 520-521.
58. **Hamilton, M.J.** (2019). Book review of Scott, James C. 2018. *Against the Grain: A Deep History of the Earliest States*. New Haven, CT: Yale University Press. 336 pp. ISBN: 978-0-300-24021-4. *Environment and Society: Advances in Research* 19(1):178-189.
57. Walker, R.S., and **M.J. Hamilton** (2019). Machine learning with remote sensing data to locate uncontacted indigenous villages in Amazonia. *PeerJ Computer Science* 5:e170
56. Buchanan, B., **M.J. Hamilton**, and J.D. Kilby (2019). The small world topology of Clovis lithic networks. *Anthropological and Archaeological Sciences*. <https://doi.org/10.1007/s12520-018-0767-7>.
55. **Hamilton, M.J.**, B. Buchanan, and R.S. Walker (2018). Scaling the size, structure, and dynamics of residentially mobile hunter-gatherer camps. *American Antiquity*. 83(4):701-720.

54. **Hamilton, M.J.**, and R. S. Walker (2018). A stochastic density-dependent model of the long-term dynamics of hunter-gatherer populations. *Evolutionary Ecology Research* 19(1): 19(1):85-102.
53. Buchanan, B., **M.J. Hamilton**, J. Hartley, and S.L. Kuhn (2017). Investigating the scale of prehistoric social networks using culture, language, and point types in western North America. *Archaeological and Anthropological Sciences* DOI 10.1007/s12520-017-0537-y.
52. **Hamilton, M.J.**, J. Lobo, H. Youn, E. Rupley, and G.B. West (2016). The ecological and evolutionary energetics of hunter-gatherer residential mobility. *Evolutionary Anthropology* 25:124-132.
51. Buchanan, B., **M.J. Hamilton**, J.D. Kilby, and J. Gingerich, and (2016). Network analysis of stone raw material use reveals early regionalization in late Pleistocene North America. *Journal of Archaeological Science* 65:114-121.
50. Andris, C., D. Lee, **M.J. Hamilton**, C.E. Gunning, and J.A. Selden (2015). The rise of partisanship and super-cooperators in the U.S. House of Representatives. *PLOS ONE* 10(4) e0123507.
49. Dunne, J.A. and **M.J. Hamilton**. (2015). The Science of Human Uniqueness. *Christian Science Monitor*.
48. Daepf, M., **M.J. Hamilton**, L.M.A. Bettencourt, and G.B. West (2015). The mortality of companies. *Journal of the Royal Society Interface* 12:20150120.
47. Walker, R.S., **M.J. Hamilton**, and A. Gross (2014). Remote sensing and conservation of isolated indigenous villages in Amazonia. *Royal Society Open Science* 1:140246.
46. Walker, R.S. and **M.J. Hamilton** (2014). Amazonian societies on the brink of extinction. *American Journal of Human Biology*. 26(4):570-572.
45. Saarinen, J. A.G. Boyer, J.H. Brown, D.P. Costa, S.K.M. Ernest, A.R. Evans, M. Fortelius, J.L. Gittleman, **M.J. Hamilton**, L.E. Harding, K. Lintulaakso, S.K. Lyons, J.G. Okie, F.A. Smith, P.R. Stephens, J. Theodor, M.D. Uhen, R.M. Sibly (2014). Macroevolution of body size in Cenozoic land mammals: intrinsic biological processes and extrinsic forcing. *Proceedings of the Royal Society: Biological Sciences* 281:20132049.
44. **Hamilton, M.J.**, R.S. Walker, and D. Kesler (2014). The crash and rebound of indigenous populations in lowland South America. *Scientific Reports* 4:4541.
43. Brown, J.H., J.R. Burger, W.R. Burnside, M. Changa, A.D. Davidson, T.S. Fristoe, **M.J. Hamilton**, S.T. Hammond, A. Kodric-Brown, N. Mercado-Silva, J.C. Nekola, J.G. Okie (2014). Macroecology meets macroeconomics: Resource scarcity and global sustainability. *Ecological Engineering* 65:24-32.
42. Okie, J.G., J.H. Brown, A. Boyer, M. Fortaleus, **M.J. Hamilton**, L.E. Harding, K. Lintulaakso, S.K. Lyons, C. McCain, J.J. Saarinen, R.M. Sibly, P.R. Stephens, J. Theodor, and M.D. Uhen (2013). Effects of allometry, productivity and lifestyle on rates and limits of body size evolution. *Proceedings of the Royal Society: Biological Sciences* 280:20131007.
41. Nekola, J., Brown, J.H., J.R. Burger, A.D. Davidson, T. Fristoe, **M.J. Hamilton**, N. Mercado Silva, , and J. Okie (2013). The Malthusian-Darwinian dynamic and human society. *Trends in Evolution and Ecology* 28(3):127-130.

40. DeLong, J.P., O. Burger, and **M.J. Hamilton** (2013). The UN medium population projection is an unstable equilibrium. *Frontiers in Ecology and the Environment* 11(2):66-67.
39. **Hamilton, M.J.** (2013). Commentary on “Networking Past and Present”, by R.I.M. Dunbar (2013). *Cliodynamics* 3(2):352-353.
38. **Hamilton, M.J.**, B. Buchanan, B. Huckell, V.T. Holliday, M. Steven Shackley, and M.E. Hill (2013). Clovis paleoecology and lithic technology in the central Rio Grande Rift Valley of New Mexico. *American Antiquity* 78(2):248-265.
37. Bailey, D.H., **M.J. Hamilton**, and R.S. Walker (2012). Latitude, population size, and the language-farming dispersal hypothesis. *Evolutionary Ecology Research* 14:1057-1067.
36. Burger, J.R., C. Allen, J.H. Brown, A.D. Davidson, T. Fristoe, **M.J. Hamilton**, N. Mercado Silva, J. Nekola, J. Okie, and W. Zuo (2012). The macroecology of sustainability. *PLoS Biology* 10(6) e1001345.
35. **Hamilton, M.J.**, L.M.A. Bettencourt, and G.B. West (2012). Scale, productivity, and life-expectancy of publicly traded companies in US markets, 1950-2009. *Santa Fe Institute Working Paper*.
34. Evans, A.R., D.O. Jones, A.G. Boyer, J.H. Brown, D.P. Costa, T. Dayan, S.K.M. Ernest, M. Fortelius, J.L. Gittleman, **M.J. Hamilton**, L.E. Harding, K. Lintulaakso, S.K. Lyons, C. McCain, J.G. Okie, J.J. Saarinen, R.M. Sibly, F.A. Smith, P.R. Stephens, J. Theodor, and M.D. Uhen (2012). Maximum rates of body size macroevolution in mammals. *Proceedings of the National Academy of Sciences, USA* 109(11):4187-4190.
33. **Hamilton, M.J.**, O. Burger, and R.S. Walker (2012). Human Ecology. In: Brown, J.H., R.M. Sibly, and A. Kodric-Brown, (eds.) *Metabolic Ecology: A Scaling Approach*. Oxford: Wiley-Blackwell, pp 235-247.
32. Davidson, A.D., A.G. Boyer, H. Kim, S. Pompa-Mansilla, **M.J. Hamilton**, D.P. Costa, G. Ceballos, and J.H. Brown (2012). Determinants of global extinction risk in marine mammals. *Proceedings of the National Academy of Sciences, USA*. 109(9):3395-3400.
31. Burnside, W., L.M.A. Bettencourt, O. Burger, **M.J. Hamilton**, M.E. Moses, and J.H. Brown (2011). Human macroecology: Linking pattern to process in big-picture human ecology. *Biological Reviews* 87(1):194-208.
30. Burger, O., J.P. DeLong, and **M.J. Hamilton** (2011). Industrial energy use and the human life history. *Scientific Reports* 1(56):DOI:10.1038/srep00056.
29. Buchanan, B., **M.J. Hamilton**, K. Edinborough, M.J. O’Brien, and M. Collard (2011). Response to Steele (2010), “Radiocarbon dates as data: quantitative strategies for estimating colonization front speeds and event densities”. *Journal of Archaeological Science* 38:2116-2122.
28. Walker, R.S. and **M.J. Hamilton** (2011). The dynamics of social complexity and linguistic diversity in the Bantu and Austronesian population expansions. *Proceedings of the Royal Society: Biological Sciences* 278:1399-1404.
27. Buchanan, B., M. Collard, **M.J. Hamilton**, and M. O’Brien (2011). Points and prey: An evaluation of the hypothesis that early Paleoindian projectile point form correlates with prey size. *Journal of Archaeological Science* 38: 852-864.

26. **Hamilton, M.J.**, A.D. Davidson, R.M. Sibly, and J.H. Brown (2011). Universal scaling of production rates across mammalian lineages. *Proceedings of the Royal Society: Biological Sciences* 278: 560-566.
25. Brown, J.H., W. Burnside, A.D. Davidson, J.P. DeLong, **M.J. Hamilton**, N. Mercado Silva, J. Okie, W. Woodruff, and W. Zuo (2011). Ecological limits to economic growth. *BioScience* 61(1):19-26 (Faculty of 1000).
24. Smith, F.A., A.G. Boyer, J. H. Brown, D. P. Costa, T. Dayan, S. K. M. Ernest, A.R. Evans, M. Fortelius, J. L. Gittleman, **M.J. Hamilton**, L.E. Harding, K. Lintulaakso, S.K. Lyons, C. McCain, J.G. Okie, J.J. Saarinen, R.M. Sibly, P.R. Stephens, J. Theodor, and M.D. Uhen (2010). The evolution of maximum body size of terrestrial mammals. *Science* 330:1216-1219.
23. DeLong, J.P., O. Burger, and **M.J. Hamilton** (2010). Current demographics suggest that future energy supplies will be inadequate to slow human population growth. *PLOS ONE* 5(10):e13206.
22. **Hamilton, M.J.** and B. Buchanan (2010). Archaeological support for the three-stage expansion of modern humans across northeastern Eurasia and into the Americas. *PLOS ONE* 5(8):e12472.
21. Collard, M., B. Buchanan, **M.J. Hamilton**, and M. O'Brien (2010). Spatiotemporal dynamics of the Clovis-Folsom transition. *Journal of Archaeological Science* 37:2513-2519.
20. Smith, F.A., **M.J., Hamilton**, and J.H. Brown (2010). On the size-selectivity of late Pleistocene megafaunal extinctions. *Evolutionary Ecology Research* 12:405-407.
19. Burger, O., R.S. Walker, and **M.J. Hamilton** (2010). Lifetime reproductive effort in humans. *Proceedings of the Royal Society B: Biological Sciences* 277(1682):773-777.
18. **Hamilton, M.J.** and B. Buchanan (2009). Archaeological and paleobiological problems with the case for the Younger Dryas extraterrestrial impact event. *Journal of Cosmology* 2:415-417.
17. **Hamilton, M.J.**, B.B. Huckell, and M.S. Shackley (2009). Clovis obsidian sources in the central Rio Grande Rift region of New Mexico. *Current Research in the Pleistocene* 26:62-65.
16. **Hamilton, M.J.**, O. Burger, J. DeLong, R.S. Walker, M.E. Moses, and J.H. Brown (2009). Population stability, cooperation, and the invasibility of the human species. *Proceedings of the National Academy of Sciences, USA* 106(30):12255-12260.
15. Davidson, A.D, **M.J. Hamilton**, A.D. Boyer, J.H. Brown, and G. Ceballos (2009). Multiple ecological pathways to extinction in mammals. *Proceedings of the National Academy of Sciences, USA* 106(26):1702-1705.
14. Buchanan, B. and **M.J. Hamilton** (2009). A formal test of the origin of variation in North American Early Paleoindian points. *American Antiquity* 74(2):279-298.
13. Holliday, V.T., B.B. Huckell, R.H. Weber, **M.J. Hamilton**, W.R. Reitze, and J.H. Mayer (2009). Geoarchaeology of the Mockingbird Gap (Clovis) Site, Jornada del Muerto, New Mexico. *Geoarchaeology* 24(3):348-370.
12. **Hamilton, M.J.** and B. Buchanan (2009). The accumulation of stochastic copying errors causes drift in culturally transmitted technologies. *Journal of Anthropological Archaeology* 28:55-69.

11. **Hamilton, M.J.** *Quantifying Clovis Dynamics: Confronting Theory with Models and Data Across Scales*. Ph.D. dissertation, Department of Anthropology, University of New Mexico.
10. Walker, R.S., M. Gurven, O. Burger, and **M.J. Hamilton** (2008). The trade-off between number and size of offspring in humans and other primates. *Proceedings of the Royal Society B: Biological Sciences* 275(1636):827-833.
9. Walker, R.S. and **M.J. Hamilton** (2008). Life history consequences of density-dependence and the evolution of human body size. *Current Anthropology* 49(1):115-122.
8. Huckell, B.B., V.T. Holliday, **M.J. Hamilton**, C. Sinkovec, C. Merriman, M. S. Shackley, and R.H. Weber (2008). The Mockingbird Gap Clovis Site: 2007 investigations. *Current Research in the Pleistocene* 25:95-97.
7. **Hamilton, M.J.** and B. Buchanan (2007). Spatial gradients in Clovis-age radiocarbon dates across North America suggest rapid colonization from the north. *Proceedings of the National Academy of Sciences, USA* 104(40):15629-15634.
6. **Hamilton, M.J.**, B.T. Milne, R.S. Walker, O. Burger, and J.H. Brown (2007). The complex structure of hunter-gatherer social networks. *Proceedings of the Royal Society B: Biological Sciences* 274 (1622):2195-2202.
5. **Hamilton, M.J.**, B.T. Milne, R.S. Walker and J.H. Brown (2007). Nonlinear scaling of space use in human hunter-gatherers. *Proceedings of the National Academy of Sciences, USA* 104(11):4765-4769.
4. Burger, O., **M.J. Hamilton**, and R.S. Walker (2005). The prey as patch model: Optimal handling of resources with diminishing returns. *Journal of Archaeological Science* 32(8):1147-1158.
3. Huckell, B.B., J.D. Kilby, and **M.J. Hamilton** (2003). 2002 excavations at Boca Negra Folsom site, north-central New Mexico. *Current Research in the Pleistocene* 20:33-34.
2. Huckell, B.B., J.D. Kilby, B. Buchanan, **M.J. Hamilton** and S. Ruth (2002). 2001 excavations at Boca Negra Folsom site, north-central New Mexico. *Current Research in the Pleistocene* 19:39-40.
1. **Hamilton, M.J.** *Broken Bison Bones: A Faunal Analysis of 41LUI Area 10, Lubbock Lake Landmark, Texas, USA*. B.Sc. dissertation, Institute of Archaeology, University College London.

## INVITED PRESENTATIONS

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61. 2024 **Hamilton, M.J.** Sale-dependent Theories in Human Macroecology. Unifying Ecology Across Scales Gordon Research Conference in Theoretical Ecology, University of Southern New Hampshire, NH, August.
60. 2024 **Hamilton, M.J.** Workshop participant “Ecological and Evolutionary Effects of Ecosystem Engineers”, NSF Research Coordination Network. UC Berkeley, CA, May.
59. 2024 **Hamilton, M.J.** We Need Effective Theories in Archaeology That Link Macroscopic Scales. Session titled “Big Ideas to Match Our Future: Big Data and Macroarchaeology”, Society for American Archaeology, 89th annual meetings, New Orleans, LA, April.



58. 2024 **Hamilton, M.J.** Managing Uncertainty. Senckenberg Centre for Human Evolution and Palaeoenvironment, University of Tübingen, Germany, February 16th.
57. 2024 **Hamilton, M.J.** Reconstructing Paleoindian Lifeways. American Institute of Archaeology. San Antonio, TX, Feb 29th.
56. 2024 **Hamilton, M.J.** What Anthropology Tells Us About the Dynamics of Small Groups of Humans Living Together Over the Long-Term. “Space Travel, Exploration, and Planetary Science” Research Interest Group UTSA, San Antonio, TX, Feb 23rd.
55. 2024 **Hamilton, M.J.** Workshop participant “Ecological and Evolutionary Effects of Ecosystem Engineers”, NSF Research Coordination Network. UC Berkeley, CA, January 17-20th.
54. 2023 **Hamilton, M.J.** What Do Hunter-Gatherers Compute and How Do They Do It? Workshop titled “Energy, Information, Culture: Growth in Human History.” Santa Fe Institute, Santa Fe, NM, December 12th.
53. 2023 **Hamilton, M.J.** The Computational Human Niche. Center for Computational and Integrative Biology, Rutgers University, Camden, NJ. November 14th.
52. 2023 **Hamilton, M.J.** Uncertainty, Risk, and Inference. Workshop titled “The Impact of Environmental Uncertainty on Human Evolution and Social Change.” Aarhus University, Denmark. September 25th.
51. 2023 **Hamilton, M.J.** So, How Much Agency Do We Really Have In Our Worlds? SFI and Darla Moore Institute Working Group titled “Sustainable Societies”. Lake City, SC. September 19th-23rd.
50. 2023 **Hamilton, M.J.** Human Ecosystem Engineering. NSF Research Collaboration Network Working Group “Ecological and Evolutionary Effects of Ecosystem Engineers”. University of California, Berkeley, CA, May 10th.
49. 2023 **Hamilton, M.J.** Toward a Bayesian Epistemology of Anthropological Archaeology. Society for American Archaeology, 88th annual meetings, Portland, OR. March 31st.
48. 2023 **Hamilton, M.J.** Towards an Informed Data Science of Anthropology. “1st Annual Los Datos Conference”, School of Data Science, UTSA, April 18th.
47. 2023 **Hamilton, M.J.** Resolving Uncertainty at Scale. Workshop titled “Information Processing in Human History”. Santa Fe Institute, Santa Fe, NM, March 17th.
46. 2022 **Hamilton, M.J.** The Deep Prehistory of Human Combinatorial Ingenuity. Workshop titled “Innovation, Obsolescence, and the Space of the Possible”. Complexity Science Hub, Vienna, Austria, December 12-14th.
45. 2022 **Hamilton, M.J.** Scaling in Anthropology and Archaeology. Workshop titled “Synthesizing Biological Scaling: Towards a Universal Theor”. Santa Fe Institute, Santa Fe, NM, November 14th.
44. 2022 **Hamilton, M.J.** The Macroecology of Complex Social Networks in Ethnohistoric Hunter-gatherers. University of Michigan Museum of Anthropological Archaeology, University of Michigan, October 2nd.
43. 2022 **Hamilton, M.J.** Panel discussant. Workshop titled “The Structure of Technology”. Santa Fe Institute, Santa Fe, NM, June 13th.

42. 2021 **Hamilton, M.J.** Scaling Sociopolitical Complexity in Human Societies. Centre for Complex Systems Studies, Utrecht University, Netherlands, April 8th.
41. 2021 **Hamilton, M.J.** Diversity Begets Diversity in Mammal Species and Human Cultures. Department of Ecology, Charles University, Prague, Czech Republic, March 25th.
40. 2021 **Hamilton, M.J.** The Emerging Science of Mythology. Brown bag presentation, Department of Anthropology, UTSA, Feb 17th.
39. 2020 **Hamilton, M.J.** Scaling Sociopolitical Complexity in Human Societies. SFI Working Group “Evolution of Collective Computational Abilities of (Pre)Historic Societies”, Santa Fe Institute, Santa Fe NM, Nov 4th.
38. 2020 **Hamilton, M.J.** The Complex Fluid Ecology of Hunter-Gatherer Societies. Keynote for PALEODEM webinar “Social Networks and Cultural Evolution in Prehistoric Hunter-Gatherers”, Alicante, Spain. University of Alicante, Nov 3rd.
37. 2020 **Hamilton, M.J.** and B, Buchanan. The Complex Diversification of North American Projectile Point Typologies over Time and Space. Session on “Beyond Settlement Scaling: Complex Systems in Archaeology”. Society for American Archaeology, 85th annual meetings, Austin, TX. April. Cancelled.
36. 2020 **Hamilton, M.J.** Machine learning the hunter-gatherer world. Modeling the Human Niche working group, Institute of the Environment, University of Arizona, AZ, Feb 29th.
35. 2019 **Hamilton, M.J.** The Mortality of Firms. The Complexity of Commerce, SFI Business Network Meeting, San Francisco, CA, September 12th.
34. 2019 **Hamilton, M.J.** Complex Human Social Networks. Reorganizing Social Organization: Building a Science of Human Societies Workshop. Max Planck Institute for Evolutionary Anthropology, Leipzig, June 16th.
33. 2019 **Hamilton, M.J.** The Future of a Science of Cities. Santa Fe Institute, May 25th.
32. 2018 **Hamilton, M.J.** The Evolution of the Human Niche. Texas State University, San Marcos, Texas, Nov 9th.
31. 2018 **Hamilton, M.J.** The Evolution of the Human Ecological Niche. Department of Anthropology, University of Texas at San Antonio, April 30th.
30. 2018 **Hamilton, M.J.** The Global Distribution of Biological and Cultural Diversity. Evolutionary Social Science Group, University of Missouri, April 25th.
- v2017 **Hamilton, M.J.** Scaling the Ecology and Demographics of Recently-Contacted and Uncontacted Amazonian Societies. Society for American Archaeology, 82nd annual meetings, Vancouver BC, Canada, April 1st.
29. 2017 **Hamilton, M.J.** The Peopling of the Americas: Ecology, Chronology, and Controversies. Saturday Morning Science, Bond Life Sciences Program, University of Missouri, Feb 11th.
28. 2016 **Hamilton, M.J.** The Clovis-Age Continent. Department of Anthropology, University of Missouri, Sept. 15th.
27. 2016 **Hamilton, M.J.** Convergence in Biogeographic Biocultural Diversity. “Convergent Evolution and Stone-Tool Technology” workshop, Konrad Lorenz Institute, Klosterneuburg, Austria, June 16-19th.

26. 2016 **Hamilton, M.J.** Human Macroecology in the Past, Present, and Future. Department of Anthropology, University of Missouri, Columbia, MO, February 4th.
25. 2016 **Hamilton, M.J.** Biological Scaling and the Evolution of Human Ecology. Department of Anthropology, UCLA, Los Angeles, CA. January 26th.
24. 2015 **Hamilton, M.J.** Human Uniqueness and the Antiquity of Economies of Scale. Institute for New Economic Thinking at the Oxford Martin School, University of Oxford, Oxford, UK, June 22nd.
23. 2015 **Hamilton, M.J.** Scaling the Structure and Function of Biological and Social Systems. 2015 Monsanto Science Fellows Symposium, St. Louis, MO, April 22nd.
22. 2015 **Hamilton, M.J.** The Biogeography of Human Biocultural Diversity. “Cities as Organisms: Scaling and Networks in Urban, Social, and Biological Systems”, University of Maribor, Slovenia, February 8th.
21. 2014 **Hamilton, M.J.** The Evolutionary Energetics of Hunter-Gatherer Ecology. Department of Anthropology, University of Tulsa, Tulsa, OK Nov 14th.
20. 2014 **Hamilton, M.J.** The Evolutionary Energetics of Human Ecology. School of Human Evolution and Social Change, Arizona State University, Tempe, AZ, October 24th.
19. 2014 **Hamilton, M.J.** Unsettled Landscapes? A View from Anthropology and Ecology. SITE Santa Fe, September, 23rd.
18. 2014 **Hamilton, M.J.** Scaling Social Systems. SFI Business Network (BNET) Meeting “Law and the Justice System in the Era of Big Data”. Mitre Corporation, Washington, D.C. June 2nd.
17. 2014 **Hamilton, M.J.** The Biogeography and Macroecology of Cultural Diversity. Program in Interdisciplinary Biological and Biomedical Sciences, Department of Biology, UNM, Feb 19th.
16. 2013 **Hamilton, M.J.** Corporate Longevity. SFI Business Network (BNET) Meeting “The Natural History of the Corporation”. Towers Watson, London, UK. September 30th.
15. 2013 **Hamilton, M.J.** The Macroecology of the Human Niche. Department of Human Evolutionary Biology, Harvard University, Cambridge, MA February 14th.
14. 2012 **Hamilton, M.J.** Latitudinal Gradients in Human Cultural Diversity. Gordon Research Conference: The Metabolic Basis of Ecology. University of New England, Biddeford, ME July 24th.
13. 2012 **Hamilton, M.J.** Toward a General Theory of Hunter-Gatherer Macroecology. Department of Anthropology, University of Michigan, Ann Arbor, MI March 15th.
12. 2011 **Hamilton, M.J.** Scaling Theory and the Evolution of the Human Metabolic Niche. Department of Anthropology, Washington State University, Pullman, WA, October 20th.
11. 2011 **Hamilton, M.J.** Universal Scaling of Production across Mammalian Lineages. Department of Biology, Simon Fraser University, Burnaby, BC September 16th.
10. 2011 **Hamilton, M.J.** The Evolution of the Human Metabolic Niche. Human Evolutionary Studies Program, Simon Fraser University, Burnaby BC September 15th.

9. 2011 **Hamilton, M.J.** Toward a Metabolic Theory of Human Ecology. Department of Anthropology, Yale University, New Haven, CT, March 29th.
8. 2011 **Hamilton, M.J.** Human Macroecology: The Energetics of Complex Human Systems. Department of Earth Systems
7. 2011 **Hamilton, M.J.** Human Macroecology: The Energetics of Complex Human Systems. Environment Institute, University of California, Irvine, CA, February 7th.
6. 2011 **Hamilton, M.J.** The Ecological Energetics of Hunter-Gatherer Decision-Making, Resource Use, and Mobility. Bristol Centre for Complexity Studies, University of Bristol, UK, January 20th.
5. 2010 **Hamilton, M.J.** The Ecological Energetics of Hunter-Gatherer Mobility. Brown Bag Series, Department of Biology, University of New Mexico, November 14th.
4. 2010 **Hamilton, M.J.** Origins of Human Subsistence: The Macroecology of Complex Human Systems. Max Planck Institute for Evolutionary Anthropology, Leipzig, Germany, February 10th.
3. 2008 **Hamilton, M.J.** Scaling the Metabolism of Human Systems from Hunter-Gatherers to Nation States. Consortium of the Americas for Interdisciplinary Science, Department of Physics, University of New Mexico, October 20th.
2. 2008 **Hamilton, M.J.** Human Macroecology: Scaling the Metabolism of Human Systems from Hunter-Gatherers to Nation States. Santa Fe Institute, Santa Fe, NM, March 3rd.
1. 2007 **Hamilton, M.J.** Quantifying Hunter-Gatherer Space Use: Macroecology and Metabolic Scaling Theory. Department of Anthropology, University College London, UK, October 16th.

## OTHER PRESENTATIONS

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50. 2023 **Hamilton, M.J.** Bayesian Thinking and Uncertainty Reduction. Society for American Archaeology, 88th annual meetings, Portland, OR. April.
49. 2022 **Hamilton, M.J.** Hunter-Gatherer Movement Ecology. Society for American Archaeology, 87th annual meetings, Chicago, IL. April.
48. 2018 Kilby, D., **M.J. Hamilton** and S. Farrell. Bonfire Shelter: New Fieldwork and Old Questions. 76th Plains anthropology Meetings. San Antonio, Texas, October 26th.
47. 2016 **Hamilton, M.J.** and B. Buchanan. Clovis Paleoecology in the Rio Grande Rift Valley, New Mexico. Society for American Archaeology 81st Annual Meetings, Orlando, Florida, April 7th.
46. 2014 **Hamilton, M.J.** Hunter-Gatherer Economies of Scale. John Templeton Foundation Meeting, SFI, August 23rd.
45. 2014 **Hamilton, M.J.** The Ecology of Hunter-Gatherer Residential Mobility. Organized session (S. Kuhn) "Moving on: Anthropological Perspectives on Human Mobility". Society for American Archaeology, Austin, TX (April).
44. 2013 **Hamilton, M.J.** The Macroecology of Human Biocultural Diversity. American Anthropological Association 112th annual meetings, Chicago, IL (November 21st).
43. 2013 **Hamilton, M.J.** A Slice of Science. SFI lunchtime Seminar series, November 12th.

42. 2013 **Hamilton, M.J.** Growth and Innovation in Small-Scale Societies. Getting Inside the Black Box: Technological Evolution and Economic Growth. Santa Fe Institute working group, August 20th.
41. 2013, **Hamilton, M.J.** Invited panel discussant. Getting Inside the Black Box: Technological Evolution and Economic Growth. Santa Fe Institute working group, August 7th.
40. 2013 **Hamilton, M.J.** Scaling the Size and Growth of Firms. John Templeton Foundation meeting, SFI, August 1st.
39. 2013 **Hamilton, M.J.** Human Macroecology. Santa Fe Institute Complex Systems Summer School, St. John's College, Santa Fe, NM June 17th.
38. 2013 **Hamilton, M.J.** and B. Buchanan. Using Radiocarbon Dates to Track the Biogeographic Expansion of Humans into the Americas. 78th meeting of the Society for American Archaeology, Honolulu, Hawai'i April 3-7th.
37. 2012 **Hamilton, M.J.** Structure and Scale of Hunter-Gatherer Societies. John Templeton Foundation Meeting "Complexity: Life, Scale, and Civilization", SFI August 8th.
36. 2012 **Hamilton, M.J.** The Structure and Scale of Hunter-Gatherer Societies. Rockefeller/SFI Workshop "Can There Be a Science of Cities?" July 14th.
35. 2012 Okie, J.G., A.G. Boyer, J.H. Brown, D.P. Costa, S.K.M. Ernest, Evans, A.R., M. Fortelius, J.L. Gittleman, **M.J. Hamilton**, L.E. Harding, K. Lintulaakso, S.K. Lyons, J.J. Saarinen, F.A. Smith, P.R. Stephens, J. Theodor, M.D. Uhen, and R.M. Sibly. Effects of Allometry, Production, and Lifestyle on the Tempo and Mode of Body Size Evolution. Gordon Research Conference: The Metabolic Basis of Ecology. University of New England, Biddeford, ME , July 24th (poster).
34. 2012 Allen, C., J.H. Brown, J.R. Burger, W. Burnside, A. Davidson, J. DeLong, W. Dunn, T. Fristoe, **M.J. Hamilton**, S. Hammond, A. Kodric-Brown, J. Nekola, J. Okie, N. Mercado-Silva, W. Woodruff, and W. Zuo. The Metabolic Ecology of the Contemporary Economy. Gordon Research Conference: The Metabolic Basis of Ecology. University of New England, Biddeford, ME , July 24th (poster).
33. 2012 Burger, J.R., A.D. Davidson, **M.J. Hamilton**, and J.H. Brown. Brain size allometry and lifestyles in mammals. American Society of Mammalogists 92nd annual meetings, Reno, NV (poster).
32. 2012 **Hamilton, M.J.**, L.M.A. Bettencourt, and G.B. West. Scaling the growth, size, and longevity of firms in US markets, 1950-2009. Santa Fe Institute Science Board Meeting, Santa Fe, NM (poster).
31. 2011 Davidson, A.D., A.G. Boyer, H. Kim, S. Pompa-Mansilla, **M.J. Hamilton**, D.P. Costa, G. Ceballos, and J.H. Brown. Determinants of global extinction risk in marine mammals. 25th International Congress for Conservation Biology (ICCB 2011), Auckland, New Zealand (December).
30. 2011 Woo, S., M.V. Flinn, K. Hill, **M.J. Hamilton**, and R.S. Walker. Socioecological conditions, polygyny, and marriage arrangements in hunter-gatherer societies. Human Behavior and Evolution Society, Montpellier, France (April).

29. 2011 Collard M., B. Buchanan, **M.J. Hamilton**, and M.J. O'Brien. Testing Hypotheses About Early Paleoindians with Radiocarbon Dates. 75th annual meetings of the SAA in San Diego, CA (April).
28. 2011 Buchanan, B., M. Collard, **M.J. Hamilton**, and M.J. O'Brien. Investigating the Relationship Between Early Paleoindian Point Form and Prey Body Size. 75th Annual Meetings of the SAA in San Diego, CA (April).
27. 2011 Burnside, W.R., J.H. Brown, J. R. Burger, A.D. Davidson, T. Fristoe, **M.J. Hamilton**, N. Mercado-Silva, J. Okie, J.C. Nekola, W. Zuo. Toward a Macroecology of Sustainability. AAAS, Washington, D.C., February 20th.
26. 2011 Davidson, A.D., A.G. Boyer, H. Kim, S. Pompa-Mansilla, **M.J. Hamilton**, D.P. Costa, G. Ceballos, and J.H. Brown. Determinants of Global Extinction Risk in Marine Mammals. 6th Meeting of the International Biogeography Association, Heraklion, Crete, January 10th.
25. 2011 Brown, J.H., R. Burger, A.D. Davidson, J.P. DeLong, W. Dunn, T. Fristoe, **M.J. Hamilton**, N. Mercado Silva, J. Nekola, J. Okie, and W. Zuo. The ecology of sustainability. 6th Meeting of the International Biogeography Association, Heraklion, Crete, January 8th.
24. 2010 Evans, A.R., D.O. Jones, A.G. Boyer, J. H. Brown, D. P. Costa, T. Dayan, S. K. M. Ernest, M. Fortelius, J. L. Gittleman, **M.J. Hamilton**, L.E. Harding, K. Lintulaakso, S.K. Lyons, C. McCain, J.G. Okie, J.J. Saarinen, R.M. Sibly, J. Theodor, and M.D. Uhen. Rapid Evolutionary Rates over Geological Timescales in Mammals. 70th Annual Meetings of the Society of Vertebrate Paleontology, Pittsburg, PA, Oct. 13th.
23. 2010 Davidson, A.D., M. J. Hamilton, A. G. Boyer, J. H. Brown, G. Ceballos. Multiple Ecological Pathways to Extinction in Terrestrial and Marine Mammals. Society for Conservation Biology, Edmonton, Alberta, Canada, July 7th.
22. 2009 **Hamilton, M.J.** Scaling Energy Use in Human Systems from Hunter-Gatherers to Nation States. Ecological Society of America, Albuquerque, NM, August 4th.
21. 2009 **Hamilton, M.J.** and B. Buchanan. Cultural Transmission as a Stochastic Process. 74th Annual Meetings of the Society of American Archaeology, Atlanta, GA, April 24th.
20. 2009 Baker, J., K. Hill, A.M. Hurtado, M. A. Frey, R.S. Walker, and M. J. Hamilton. An Evaluation of the Utility of Anthropological Demographic Studies for Estimating Hunter-Gatherer Populations and Implications for the Measurement of Health Disparities. 26th IUSSP International Population Conference, Marrakech, Morocco, October 2nd.
19. 2009 **Hamilton, M.J.** Scaling Complex Human Systems. Santa Fe Institute workshop, Santa Fe, NM, February 23rd.
18. 2009 Ceballos, G., A.D. Davidson, **M.J. Hamilton**, A. Boyer, and J.H. Brown. Multiple Ecological Pathways to Extinction in Mammals. Society for Conservation Biology, Beijing, China, July 17th.
17. 2009 Davidson, A.D., **M.J. Hamilton**, A. Boyer, J.H. Brown, and G. Ceballos. Ecological Pathways to Extinction in Mammals. International Society for Mammals, Mendoza, Argentina, February 22nd.
16. 2009 Davidson, A.D., **M.J. Hamilton**, A. Boyer, J.H. Brown, and G. Ceballos. Ecological Pathways to Extinction in Mammals. International Biogeography Society, Merida, MX,

January 9th.

15. 2008 **Hamilton, M.J.** Scaling the Metabolism of Human Socio-Economies from Hunter-Gatherers to Nation States. 83rd AAAS-SWARM meetings, Albuquerque, NM, April 10th.
14. 2008 **Hamilton, M.J.** Energy and Information Flows Form Complex Networks in Hunter-Gatherer Social Systems. Organized symposium, Connected Pasts: Current Network Approaches in Archaeology. 73rd Annual Meetings of the SAA, Vancouver, BC, Canada, March 29th.
13. 2008 Walker, R.S., M. Gurven, O. Burger, and **M.J. Hamilton.** The Trade-Off Between Number and Size of Offspring in Humans and Other Primates. 83rd AAAS-SWARM meetings, Albuquerque, NM, April 10th.
12. 2007 Buchanan, B. and **M.J. Hamilton.** A Formal Test of the Origin of Clovis Projectile Point Variation Across North America. Durham University, Durham, UK.
11. 2007 **Hamilton, M.J.** Metabolic Scaling and Social Network Structure: The Fractal Organization of Hunter-Gatherer Populations. NSF sponsored symposium at the American Association of Physical Anthropologists meetings, Philadelphia, PA, March 30th.
10. 2006 **Hamilton, M.J.** Scaling of Energy Use, Population Size, and Structure in Human Subsistence Populations. Paper presented at the Human Evolutionary Behavior Society, University of New Mexico, April 14th.
9. 2005 **Hamilton, M.J.** Cultural Innovations and Phenotypic Adaptations in Stochastic Environments: Some Quantitative Insights into the Evolutionary Dynamics of Foraging Societies. 1st annual meeting of the Society for Anthropological Sciences (SASci) in Santa Fe, NM.
8. 2005 **Hamilton, M.J.** and J.L. Boone. Epidemiological Approaches to Cultural Change: Evolutionary Models of Transmission, Fitness, and Demography. 70th annual meetings of the SAA in Salt Lake City, UT.
7. 2005 Burger, O., **M.J. Hamilton,** M.E. Moses, and J.H. Brown. Using Allometry to Investigate Energetic Constraints on Human Demography. 70th annual meetings of the SAA in Salt Lake City, UT.
6. 2005 **Hamilton, M.J.,** R. Holdaway, and S. Litvin. Statistical Self-Similarity in the Structural Organization of Human Hunter-Gatherer Populations. Santa Fe Institute Complex Systems Summer School, Santa Fe, NM.
5. 2004 **Hamilton, M.J.,** B. Buchanan, and J.D. Kilby. A Neutral Model of Technological Variation in the North American Late Pleistocene. 69th annual meetings of the SAA, Montreal, QC.
4. 2004 Kilby, J.D., B. Buchanan, and **M.J. Hamilton.** Deconstructing Clovis: The Independence of Critical Issues. 69th annual meetings of the SAA in Montreal, QC.
3. 2003 **Hamilton, M.J.** Paleoindian Cultural Transmission: The Evolutionary Processes of Cultural Change. 68th annual meetings of the SAA in Milwaukee, WI.
2. 2002 Buchanan, B., R. Walker and **M.J. Hamilton.** Patterns of Carcass Use Among the Ache. 75th Anniversary of the Department of Anthropology at University of New Mexico, Hibben Center/Maxwell Museum, University of New Mexico (poster).

1. 2000 Buchanan, B., R. Walker and **M.J. Hamilton**. Patterns of Carcass Use Among the Ache. 66th annual meetings of the SAA in New Orleans, LA, (poster).

## GRANTING ACTIVITY

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- 2022 Unifying scaling theory in the past and present from foraging to urban societies. Konrad Lorenz Institute of Ethology Workshop proposal. \$30,000; in review. 50% contribution.
- 2020 North American Projectile Point Database (NAPPD), an Integrated Informatics Database for Diagnostic Points: Phase I, the Southwestern United States. National Science Foundation Senior Archaeology (NSF PD 98-1391). \$133,235; declined with invitation to resubmit. 50% contribution.
- 2013 [www.rockethub.com/SciFund](http://www.rockethub.com/SciFund) online crowd-funding campaign, Shrinking Horizons. \$3,000; awarded. 100% contribution.
- 2012 National Geographic Society Research and Exploration Grant, Population Dynamics of Recently Contacted and Isolated Indigenous Populations in the Brazilian Amazon. \$19,900; awarded. 50% contribution.

## TEACHING

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- Fall 2024 ANT1013 *Introduction to Anthropology* (enrollment 100)
- Fall 2023 ANT3663 *Hunters and Gatherers* (enrollment 26)
- Fall 2023 ANT1013 *Introduction to Anthropology* (enrollment 75)
- Fall 2023 ANT1013 *Introduction to Anthropology* (enrollment 75)
- Spring 2023 ANT6993 *Statistical Computing in Anthropology* (enrollment 7)
- Spring 2023 ANT1013 *Introduction to Anthropology* (enrollment 115)
- Fall 2022 ANT3293/4053 *Research Methods in Archaeology: Lithic Analysis* (Enrollment 31)
- Fall 2022 ANT1013 *Introduction to Anthropology* (enrollment 86)
- Spring 2022 ANT1013 *Introduction to Anthropology* (enrollment 20)
- Spring 2022 ANT1013 *Introduction to Anthropology* (enrollment 86)
- Fall 2021 ANT3663 *Hunters and Gatherers* (enrollment 21)
- Fall 2021 ANT1013 *Introduction to Anthropology* (enrollment 80)
- Spring 2021 ANT6673 *Human Population Ecology* (enrollment 5)
- Spring 2021 ANT1013 *Introduction to Anthropology* (enrollment 56)
- Fall 2020 ANT6623 *Statistical Computing in Anthropology* (enrollment 9)
- Fall 2020 ANT1013 *Introduction to Anthropology* (enrollment 98)
- Spring 2020 ANT1013 *Introduction to Anthropology* (enrollment 39)
- Spring 2020 ANT3663 *Hunters and Gatherers* (enrollment 29)
- Fall 2019 ANT1013 *Introduction to Anthropology* (enrollment 59)



- Spring 2019 ANT3263 *Archaeology of North America* (enrollment 34)
- Spring 2019 ANT1013 *Introduction to Anthropology* (enrollment 46)
- Fall 2018 ANT1013 *Introduction to Anthropology* (enrollment 44)

## **MENTORING AND ADVISING**

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### COMMITTEE CHAIR

- Ph.D. students
  1. Kristin Korl (archaeology)
  2. Muttaki Kamal (cultural anthropology)
  3. Nicholas Gala (archaeology)
- M.A. students
  1. Shannon Lawn (cultural anthropology)(Graduated 2022)
  2. Matthew DeGraffenreid (archaeology)
  3. Alec Reavis (archaeology)
  4. Nathaniel Dunmayer (archaeology)

### COMMITTEE MEMBER

- Ph.D. students
  1. Miguel Duarte
  2. Daniel Rodriguez Rosario
  3. Anna Penna (Graduated 2023)
  4. Michelle Carpenter
  5. Kristina Solis (Graduated 2021)
- M.A. students
  1. Peggy Wall
  2. Robert Gardner
  3. Steven Wendell (Graduated 2023)
  4. June Burke (Graduated 2023)

### OTHER COMMITTEES

- Michaela Conway, M.A. Dept. of Anthropology, University of Tulsa (outside committee member; graduated 2021)
- William E. Burnside, Ph.D., Dept. of Biology, University of New Mexico (outside committee member; graduated 2012)

## **SERVICE**

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## SEARCH COMMITTEES

- School of Data Science, Chief Operating Officer 2022.
- School of Data Science, Director 2019-2021.
- School of Data Science, Chief Operating Officer 2019-2020.
- Center for Archaeological Research 2020 and 2021.
- Department of Modern Languages, Hispanic Linguistics 2018.
- Department of Modern Languages, Latin American Linguistics 2018.
- Many faculty and postdoc positions, Santa Fe Institute, 2010-2016.

## DEPARTMENTAL AND UNIVERSITY SERVICE

- UTSA University Service Award Committee 2023-present.
- UTSA Faculty Senate 2021 – present
  1. Research subcommittee, 2022-present
  2. SB18 subcommittee, 2023-present
- ANT 1013 evaluation committee 2020 (leadership role).
- COLFA computing committee, 2020-present.
- COLFA Posters Spring Research Conference coordinator, 2019 and 2020.
- Fixed tenure-track committee, 2018-present.
- Teaching Assistant committee, 2018-present.
- Graduate committee, 2018-present.

## COMMUNITY SERVICE

- 2023-present Associate Editor, *Frontiers in Ecology and Evolution* (Biogeography and Macroecology)
- 2013-2015 Elected board member, Dissertation Award Committee, Society for American Archaeology.

## JOURNAL/BOOK/GRANT REVIEWING ACTIVITIES:

1. *American Antiquity*
2. *American Journal of Human Biology*
3. *Animal Behaviour*
4. *Biology Letters*
5. *BioScience*
6. *Climodynamics*
7. *Cross-Cultural Research*
8. *Current Anthropology*

9. *Ecosystems*
10. *Environment and Planning B: Urban Analytics and City Science*
11. *Evolutionary Anthropology*
12. *Global Ecology and Biogeography*
13. *Holocene*
14. *Human Nature*
15. *Journal of Anthropological Archaeology*
16. *Journal of Anthropological and Archaeological Sciences*
17. *Journal of Archaeological Method and Theory*
18. *Journal of Archaeological Science*
19. *Journal of Human Evolution*
20. *Journal of the Royal Society Interface*
21. *Journal of Statistical Mechanics*
22. *Journal of Theoretical Biology*
23. *Lithic Technology*
24. *Nature Communications*
25. *Nature Ecology & Evolution*
26. *Nature Human Behavior*
27. *Nature Sustainability*
28. *PaleoAmerica*
29. *Philosophical Transactions of the Royal Society, B: Biological Sciences*
30. *PLoS Biology*
31. *PLoS ONE*
32. *Proceedings of the National Academy of Sciences* (reviewer and guest editor)
33. *Proceedings of the Royal Society, B: Biological Sciences*
34. *Royal Society Open Science*
35. *Science*
36. *Social Networks*
37. *Oxford University Press* (books)
38. *Springer* (book chapters)
39. *Wiley and Sons* (book chapters)
40. *National Geographic Society* (grants)

41. *National Science Foundation* (grants)