

# *Curriculum Vitae*

## **José M. Capriles Flores, Ph.D.**

*Assistant Professor*  
Department of Anthropology  
The Pennsylvania State University  
314 Carpenter Building  
University Park, PA 16802  
Email: [juc555@psu.edu](mailto:juc555@psu.edu)  
Cell Phone: 1-814-880-3327

### **Research Statement**

I am an anthropological archaeologist specializing in environmental archaeology, human ecology, and zooarchaeology. Before joining Penn State University, I was a Visiting Scholar at the University of Pittsburgh (2012-2013), a Chilean FONDECYT Postdoctoral Researcher (2013-2015) and an Assistant Professor at Universidad de Tarapacá (2015-2016). My research focuses on three sets of questions: (1) how did humans peopled and adapted to the changing environmental conditions of the South American Atacama desert, Andean highlands, and Amazonian tropical lowlands over time? (2) what social and ecological dynamics featured animal and plant domestication, the spread of early food production, and increasingly unequal institutions and organizations in these regions? and (3) what socio-environmental factors were involved in the emergence and disintegration of increasingly complex polities such as the Tiwanaku and Inca states as well as in other multi-scalar population and cultural continuities and discontinuities? To address these problems, I conduct research in Bolivia and Chile in collaboration with a broad network of international and interdisciplinary research teams. I am also engaged in the preservation of cultural heritage through public outreach and the active participation of indigenous and local communities in archaeological research.

### **Education**

- 2011 Ph.D. in Anthropology, Washington University in St. Louis.
- 2006 M.A. in Anthropology, Washington University in St. Louis.
- 2004 Licenciate in Archaeology, Universidad Mayor de San Andrés, La Paz.

### **Employment History**

- Aug 2016 – Present, Assistant Professor, Department of Anthropology, The Pennsylvania State University, University Park, USA.
- Feb 2015 – Aug 2016, Assistant Professor, Departamento de Antropología, Universidad de Tarapacá, Arica, Chile.
- Nov 2013 – Jan 2015, FONDECYT Postdoctoral Researcher, Instituto de Alta Investigación, Universidad de Tarapacá, Arica, Chile.
- Sept 2012 – Aug 2013, Visiting Scholar, Center for Comparative Archaeology, Department of Anthropology, University of Pittsburgh, Pittsburgh, USA.
- Sept 2011 – May 2012, Instructor, University College, Washington University in St. Louis, USA.

## List of Publications

### Peer-Reviewed Books

Capriles, José M.

2017 *Arqueología del Pastoralismo Temprano de Camélidos en el Altiplano Central de Bolivia*. Travaux de l’Institut Français d’Études Andines Vol. 346. Instituto Francés de Estudios Andinos (IFEA), Plural Editores, La Paz.

Capriles, José M. and Nicholas Tripcevich (Editors)

2016 *The Archaeology of Andean Pastoralism*. University of New Mexico Press, Albuquerque.

Capriles, José M.

2014 *The Economic Organization of Early Camelid Pastoralism in the Andean Highlands of Bolivia*. BAR International Series 2597. British Archaeological Reports, Archaeopress, Oxford.

### Peer-Reviewed Journal Articles

Domic, Alejandra I. and José M. Capriles

2021 Distribution shifts in habitat suitability and hotspot refugia of Andean tree species from the last glacial maximum to the Anthropocene. *Neotropical Biodiversity* 7(1):297-309. <https://doi.org/10.1080/23766808.2021.1957652>

Langlie, BrieAnna S. and José M. Capriles

2021 Paleoethnobotanical evidence points to agricultural mutualism among early camelid pastoralists of the Andean Central Altiplano. *Archaeological and Anthropological Sciences* 13(107):1-14. <https://doi.org/10.1007/s12520-021-01343-y>

Kristina Hippe, John D Jansen, Daniel Søndergaard Skov, Maarten Lupker, Susan Ivy-Ochs, Florian Kober, Gerold Zeilinger, José Mariano Capriles, Marcus Christl, Colin Maden, Christof Vockenhuber, and David Lundbek Egholm

2021 Cosmogenic in situ  $^{14}\text{C}$ - $^{10}\text{Be}$  reveals abrupt Late Holocene soil loss in the Andean Altiplano. *Nature Communications* 12(1):2546.

Capriles, José M., Calogero M. Santoro, Richard J. George, Eliana Flores Bedregal, Douglas J. Kennett, Logan Kistler, and Francisco Rothhammer

2021 Pre-Columbian transregional captive rearing of Amazonian parrots in the Atacama Desert. *Proceedings of the National Academy of Sciences USA* 118(15):e2020020118. <https://doi.org/10.1073/pnas.2020020118>

Bruno, Maria C., José M. Capriles, Christine A. Hastorf, Sherilyn C. Fritz, D. Marie Weide, Alejandra I. Domic, and Paul A. Baker

2021 The rise and fall of Wiñaymarka: Rethinking cultural and environmental interactions in the southern basin of Lake Titicaca. *Human Ecology* 49(2):131-145. <https://doi.org/10.1007/s10745-021-00222-3>

Labarca, Rafael, Francisco J. Caro, Natalia A. Villavicencio, José M. Capriles, Esteban Briones, Claudio Latorre, and Calogero M. Santoro

2021 A partially complete skeleton of *Hippidion saldiasi* Roth, 1899 (Mammalia: Perissodactyla) from the Late Pleistocene of the high Andes in northern Chile. *Journal of Vertebrate Paleontology* 40(6):e1862132. <https://doi.org/10.1080/02724634.2020.1862132>

Domic, Alejandra I., José M Capriles, Rosa Isela Meneses, and Paula Pacheco

2021 Plant community assembly is predicted by an environmental gradient in high-altitude wetlands in the semiarid western Bolivian Andes. *Mires and Peat* 27(01):1-12. <https://doi.org/10.19189/MaP.2019.JSP.StA.1916>

- Lombardo, Umberto, José Iriarte, Lautaro Hilbert, Javier Ruiz-Pérez, José M. Capriles, and Heinz Veit  
 2020 Early Holocene crop cultivation and landscape modification in Amazonia. *Nature* 581(7807):190-193. <https://doi.org/10.1038/s41586-020-2162-7>
- Delaere, Christophe and José M. Capriles  
 2020 The context and meaning of an intact Inca underwater offering from Lake Titicaca. *Antiquity* 94(376):1030-1041. <https://doi.org/10.15184/aky.2020.121>
- Workman, T. Race, Jason A. Rech, Eugenia M. Gayó, Calogero M. Santoro, Paula C. Ugalde, Ricardo De Pol-Holz, Jose M. Capriles, and Claudio Latorre  
 2020 Landscape evolution and the environmental context of human occupation of the southern Pampa del Tamarugal, Atacama Desert, Chile. *Quaternary Science Reviews* 243:106502. <https://doi.org/10.1016/j.quascirev.2020.106502>
- Nakatsuka, N., I. Lazaridis, C. Barbieri, P. Skoglund, N. Rohland, S. Mallick, C. Posth, K. Harkins-Kinkaid, M. Ferry, É. Harney, M. Michel, K. Stewardson, J. Novak-Forst, J. M. Capriles, M. A. Durruty, K. A. Álvarez, D. Beresford-Jones, R. Burger, L. Cadwallader, R. Fujita, J. Isla, G. Lau, C. L. Aguirre, S. LeBlanc, S. C. Maldonado, F. Meddents, P. G. Messineo, B. J. Culleton, T. K. Harper, J. Quilter, G. Politis, K. Rademaker, M. Reindel, M. Rivera, L. Salazar, J. R. Sandoval, C. M. Santoro, N. Scheifler, V. Standen, M. I. Barreto, I. F. Espinoza, E. Tomasto-Cagigao, G. Valverde, D. J. Kennett, A. Cooper, J. Krause, W. Haak, B. Llamas, D. Reich, and L. Fehren-Schmitz  
 2020 A paleogenomic reconstruction of the deep population history of the Andes. *Cell* 181(5):1131-1145.e1121. <https://doi.org/10.1016/j.cell.2020.04.015>
- Uribe, Mauricio, Dante Angelo, José Capriles, Victoria Castro, María Eugenia de Porras, Magdalena García, Eugenia Gayo, Josefina González, María José Herrera, Roberto Izaurieta, Antonio Maldonado, Valentina Mandakovic, Virginia McRostie, Jorge Razeto, Francisca Santana, Calogero Santoro, Jimena Valenzuela, and Alejandra Vidal  
 2020 El Formativo en Tarapacá (3000-1000 aP): Arqueología, naturaleza y cultura en la Pampa del Tamarugal, Desierto de Atacama, norte de Chile. *Latin American Antiquity* 31(1):81-102. <https://doi.org/10.1038/s41586-020-2162-710.1017/laq.2019.92>
- Domic, Alejandra I., José M. Capriles, and Gerardo R. Camilo  
 2020 Evaluating the fitness effects of seed size and maternal tree size on *Polyplepis tomentella* (Rosaceae) seed germination and seedling performance. *Journal of Tropical Ecology* 36(3):115-122. <https://doi.org/10.1017/S0266467420000061>
- ArchaeoGLOBE Project (Stephens, Lucas and 119 co-authors)  
 2019 Archaeological assessment reveals Earth's early transformation through land use. *Science* 365(6456):897-902. <https://doi.org/10.1126/science.aax1192>
- Capriles, José M., Umberto Lombardo, Blaine Maley, Carlos Zuna, Heinz Veit, and Douglas J. Kennett  
 2019 Persistent Early to Middle Holocene tropical foraging in southwestern Amazonia. *Science Advances* 5(4):eaav5449. <https://doi.org/10.1126/sciadv.aav5449>
- Prufer, Keith M., Asia V. Alsgaard, Mark Robinson, Clayton R. Meredith, Brendan J. Culleton, Timothy Dennehy, Shelby Magee, Bruce B. Huckell, W. James Stemp, Jaime J. Awe, Jose M. Capriles, and Douglas J. Kennett  
 2019 Linking late Paleoindian stone tool technologies and populations in North, Central and South America. *Plos One* 14(7):e0219812. <https://doi.org/10.1371/journal.pone.0219812>
- De Souza, Jonas Gregorio, Mark Robinson, S. Yoshi Maezumi, José Capriles, Julie A. Hoggarth, Umberto Lombardo, Valdir Felipe Novello, James Apaéstegui, Bronwen Whitney, Dunia Urrego, Daiana Travassos Alves, Stephen Rostain, Mitchell J. Power, Francis E. Mayle, Francisco William da Cruz, Henry Hooghiemstra, and José Iriarte

2019 Climate change and cultural resilience in late pre-Columbian Amazonia. *Nature Ecology & Evolution* 3(7):1007-1017. <https://doi.org/10.1038/s41559-019-0924-0>

Miller, Melanie J., Juan Albarracín-Jordan, Christine Moore, and José M. Capriles

2019 Chemical evidence for the use of multiple psychotropic plants in a 1,000-year-old ritual bundle from South America. *Proceedings of the National Academy of Sciences USA* 116(23):11207-11212. <https://doi.org/10.1073/pnas.1902174116>

Delaere, Christophe, José M. Capriles, and Charles Stanish

2019 Underwater ritual offerings in the Island of the Sun and the formation of the Tiwanaku State. *Proceedings of the National Academy of Sciences USA* 116(17):8233-8238. <https://doi.org/10.1073/pnas.1820749116>

Juengst, Sara L., José M. Capriles, Daniela Velasco Arzabe, and Sergio Calla Maldonado

2019 The first documented case of trepanation from Tarija, Bolivia, ca. 650 C.E. *International Journal of Osteoarchaeology* 29(1):149-154. <https://doi.org/10.1002/oa.2705>

Santoro, Calogero M., Eugenia M. Gayo, José M. Capriles, Marcelo M. Rivadeneira, Katherine A. Herrera, Valentina Mandakovic, Monica Rallo, Jason A. Rech, Barbara Cases, Luis Briones, Laura Olguin, Daniela Valenzuela, Luis A. Borrero, Paula C. Ugalde, Francisco Rothhammer, Claudio Latorre, and Paul Szpak

2019 From the pacific to the tropical forests: networks of social interaction in the Atacama Desert, late in the Pleistocene. *Chungara Revista de Antropología Chilena* 51(1):5-25. <http://doi.org/10.4067/S0717-73562019005000602>

Tully, Craig D., Jason A. Rech, T. Race Workman, Calogero M. Santoro, José M. Capriles, Eugenia M. Gayo, and Claudio Latorre

2019 In-stream wetland deposits, megadroughts, and cultural change in the northern Atacama Desert, Chile. *Quaternary Research* 91(1):63-80. <https://doi.org/10.1017/qua.2018.122>

Domic, Alejandra I., José M. Capriles, Katerine Escobar-Torrez, Calogero M. Santoro, and Antonio Maldonado

2018 Two thousand years of land-use and vegetation evolution in the Andean highlands of Northern Chile inferred from pollen and charcoal analyses. *Quaternary* 1(3):32. <https://doi.org/10.3390/quat1030032>

Santoro, C. M., V. Castro, J. M. Capriles, J. Barraza, J. Correa, P. A. Marquet, V. McRostie, E. M. Gayo, C. Latorre and D. Valenzuela

2018 Acta de Tarapacá: “Pueblo Sin Agua, Pueblo Muerto”. *Chungara Revista de Antropología Chilena* 50(2):169-174. <http://doi.org/10.4067/S0717-73562018000200169>

Capriles, J. M., N. Tripcevich, A. E. Nielsen, M. D. Glascock, J. Albarracín-Jordan, and C. M. Santoro

2018 Late Pleistocene lithic procurement and geochemical characterization of the Cerro Kaskio obsidian source in southwestern Bolivia. *Archaeometry* 60(5):898-914. <https://doi.org/10.1111/arcm.12363>

González-Guarda, Erwin, Alia Petermann-Pichincura, Carlos Tornero, Laura Domingo, Jordi Agustí, Mario Pino, Ana M. Abarzúa, José M. Capriles, Natalia A. Villavicencio, Rafael Labarca, Violeta Tolorza, Paloma Sevilla, and Florent Rivals

2018 Multiproxy evidence for leaf-browsing and closed habitats in extinct proboscideans (Mammalia, Proboscidea) from Central Chile. *Proceedings of the National Academy of Sciences USA* 115:(37)9258-9263. <https://doi.org/10.1073/pnas.1804642115>

Marsh, Erik J., Maria C. Bruno, Sherilyn C. Fritz, Paul Baker, José M. Capriles, and Christine A. Hastorf

2018 IntCal, SHCal, or a Mixed Curve? Choosing a <sup>14</sup>C calibration curve for archaeological and paleoenvironmental records from tropical South America. *Radiocarbon* 60(3):925-940. <https://doi.org/10.1017/RDC.2018.16>

Capriles, José M., Juan Albarracín-Jordan, Douglas W. Bird, Steven T. Goldstein, Gabriela M. Jarpa, Sergio Calla Maldonado, and Calogero M. Santoro

2018 Mobility, subsistence, and technological strategies of early Holocene hunter-gatherers in the Bolivian Altiplano. *Quaternary International* 473:190-205.

<https://doi.org/10.1016/j.quaint.2017.08.070>

Rothhammer, Francisco, Lars Fehren-Schmitz, Giannina Puddu, and José Capriles

2017 Mitochondrial DNA haplogroup variation of contemporary mixed South Americans reveals prehistoric displacements linked to archaeologically-derived culture history. *American Journal of Human Biology* 29(6):e23029. <https://doi.org/10.1002/ajhb.23029>

Osorio, Daniela, James Steele, Marcela Sepúlveda, Eugenia M. Gayo, José M. Capriles, Katherine Herrera, Paula Ugalde, Ricardo De Pol-Holz, Claudio Latorre, and Calogero M. Santoro

2017 The Dry Puna as an ecological megapatch and the peopling of South America: Technology, mobility, and the development of a Late Pleistocene/Early Holocene Andean hunter-gatherer tradition in northern Chile. *Quaternary International* 461:41-53. <https://doi.org/10.1016/j.quaint.2017.07.010>

Capriles, José M. and Alejandra I. Domic

2017 Eliana Flores Bedregal (1954-2017): Ornitóloga y conservacionista boliviana. *Ecología en Bolivia* 52(2):63-64. [http://www.scielo.org.bo/pdf/reb/v52n2/v52n2\\_a01.pdf](http://www.scielo.org.bo/pdf/reb/v52n2/v52n2_a01.pdf)

Freeman, Jacob, A. Gil, M.L. Cárdenas, D.A. Byers, M.B. Cannon, J.M. Capriles, and C. Latorre

2017 Coevolution of climate, demography and food systems in North and South America. *PAGES Magazine* 25(2):127. <https://doi.org/10.22498/pages.25.2.127>

Osorio, Daniela, José M. Capriles, Paula C. Ugalde, Katherine A. Herrera, Marcela Sepúlveda, Eugenia M. Gayo, Claudio Latorre, Donald Jackson, Ricardo De Pol-Holz, and Calogero M. Santoro

2017 Hunter-gatherer mobility strategies in the high Andes of northern Chile during the Late Pleistocene-Early Holocene transition (ca. 11,500-9,500 cal B.P.). *Journal of Field Archaeology* 42(3):228-240. <https://doi.org/10.1080/00934690.2017.1322874>

Clarkson, P. B., C. M. Santoro, T. E. Levy, L. Núñez, A. Nielsen, S. Rosen, F. Förster, J. M. Capriles, A. M. Khazanov, M. Frachetti, D. Valenzuela, V. G. Standen, B. Cases, G. Pimentel, P. Lecoq, X. Medinaceli, L. Briones, A. Wink, N. Tripcevich, H. Riemer, E. O’Ryan, X. Loayza, T. F. Lynch, and H. Woldekiros

2017 A worldwide network for comparative studies on caravans: past, present and future. *Chungara, Revista de Antropología Chilena* 49(3):297-307. <http://doi.org/10.4067/S0717-7356201700030000>

Ogalde, Juan Pablo, Bernardo T. Arriaza, Calogero M. Santoro, José M. Capriles, Giannina Puddu, Paula C. Ugalde, and Francisco Rothhammer

2017 Consumo prehispánico de sustancias psicoactivas en el norte de Chile sugiere redes tempranas de intercambio con el Altiplano Central y la Amazonía. *Interciencia* 42(3):459-463. <https://www.interciencia.net/wp-content/uploads/2017/08/459-5895-ROTHAMMER-42-7.pdf>

Domic, Alejandra I., Peter Bernhardt, Retha Edens-Meier, Gerardo R. Camilo, and José M. Capriles

2017 Pollination ecology of *Polylepis tomentella* (Rosaceae), an Andean anemophilous tree presenting a potential floral fungal infection. *International Journal of Plant Sciences* 178(7):512–521. <https://doi.org/10.1086/692504>

Santoro, Calogero M., José M. Capriles, Eugenia M. Gayo, María Eugenia de Porras, Antonio Maldonado, Vivien G. Standen, Claudio Latorre, Victoria Castro, Dante Angelo, Virginia McRostie, Mauricio Uribe, Daniela Valenzuela, Paula Ugalde, and Pablo A. Marquet

2017 Continuities and discontinuities in the socio-environmental systems of the Atacama Desert during the last 13,000 years. *Journal of Anthropological Archaeology* 46:28-39. <https://doi.org/10.1016/j.jaa.2016.08.006>

Capriles, José M., Juan Albarracín-Jordan, Umberto Lombardo, Daniela Osorio, Blaine Maley, Steven T. Goldstein, Katherine A. Herrera, Alejandra I. Domic, Michael D. Glascock, Heinz Veit, and Calogero M. Santoro

2016 High-altitude adaptation and Late Pleistocene foraging in the Bolivian Andes. *Journal of Archaeological Science: Reports* 6:463-474. <https://doi.org/10.1016/j.jasrep.2016.03.006>

Veit, Heinz, Jan-Hendrik May, Andrea Madella, Romain Delunel, Fritz Schlunegger, Sönke Szidat, and José M. Capriles

2016 Paleo-geoecological significance of Pleistocene trees in the Lluta Valley, Atacama Desert. *Journal of Quaternary Science* 31(3):203-213. <https://doi.org/10.1002/jqs.2857>

Capriles, José M., Calogero M. Santoro, and Tom D. Dillehay

2016 Harsh environments and the Terminal Pleistocene peopling of the Andean highlands. *Current Anthropology* 57(1):99-100. <https://doi.org/10.1086/684694>

Valenzuela, Daniela, Calogero M. Santoro, José M. Capriles, María José Quinteros, Ronny Peredo, Eugenia M. Gayo, Indira Montt, and Marcela Sepúlveda

2015 Consumption of animals beyond diet in the Atacama Desert, northern Chile (13,000-410 BP): Comparing rock art motifs and archaeofaunal records. *Journal of Anthropological Archaeology* 40:250-265. <https://doi.org/10.1016/j.jaa.2015.09.004>

Herrera, Katherine A., Paula C. Ugalde, Daniela Osorio, José M. Capriles, Salomón Hocsman, and Calogero M. Santoro

2015 Análisis tecno-tipológico de instrumentos líticos del sitio Arcaico Temprano Ipilla 2 en los Andes de Arica, Chile. *Chungara, Revista de Antropología Chilena* 47(1):41-52. <http://doi.org/10.4067/S0717-73562015005000010>

Capriles, José M., Katherine M. Moore, Alejandra I. Domic, and Christine A. Hastorf

2014 Fishing and environmental change during the emergence of social complexity in the Lake Titicaca Basin. *Journal of Anthropological Archaeology* 34:66-77. <https://doi.org/10.1016/j.jaa.2014.02.001>

Marshall, Fiona B., Keith Dobney, Tim Denham, and José M. Capriles

2014 Evaluating the roles of directed breeding and gene flow in animal domestication. *Proceedings of the National Academy of Sciences USA* 111(17):6153-6158. <https://doi.org/10.1073/pnas.1312984110>

Capriles, José M.

2014 Mobile communities and pastoralist landscapes during the Formative Period in the central Altiplano of Bolivia. *Latin American Antiquity* 25(1):3-26. <https://doi.org/10.7183/1045-6635.25.1.3>

Albarracín-Jordan, Juan, José M. Capriles, and Melanie J. Miller

2014 Transformations in ritual practice and social interaction in Tiwanaku's periphery. *Antiquity* 88(341):851-862. <https://doi.org/10.1017/S0003598X00050730>

Villarroel, Elena, Paula Pacheco Mollinedo, Alejandra I. Domic, José M. Capriles, and Carlos Espinoza

2014 Local management of Andean wetlands in Sajama National Park, Bolivia. *Mountain, Research and Development* 34(4):356-368. <https://doi.org/10.1659/MRD-JOURNAL-D-14-00024.1>

Orellana Halkyer, Nancy, Macarena Fuentes-Guajardo, José M. Capriles, and Francisco Rothhammer

- 2014 En torno al poblamiento de los Andes Sur-Centrales y su vinculación con la Amazonía. *Interciencia* 39(8):586-590. <https://www.interciencia.net/wp-content/uploads/2017/11/586-c-1%C2%B0-Rothhammer-5.pdf>
- Domic, Alejandra I., Gerardo R. Camilo, and José M. Capriles  
 2014 Small-scale farming and grazing reduce regeneration of *Polylepis tomentella* (Rosaceae) in the semiarid Andes of Bolivia. *Biotropica* 46(1):106-113. <https://doi.org/10.1111/btp.12075>
- Lombardo, Umberto, Katherine Szabo, José M. Capriles, Jan-Hendrik May, Wulf Amelung, Rainer Hutterer, Eva Lehndorff, Ana Plotzki, and Heinz Veit  
 2013 Early and middle Holocene hunter-gatherer occupations in Western Amazonia: The hidden shell middens. *Plos One* 8(8)E72746:1-14. <https://doi.org/10.1371/journal.pone.0072746>
- Capriles, José M. and Juan Albarracín-Jordan  
 2013 The earliest human occupations in Bolivia: A review of the archaeological evidence. *Quaternary International* 301:46-59. <https://doi.org/10.1016/j.quaint.2012.06.012>
- Capriles, José M., Sergio Calla Maldonado, and Juan Albarracín-Jordan  
 2011 Tecnología lítica y estrategias de subsistencia durante los períodos Arcaico y Formativo en el altiplano central, Bolivia. *Chungara, Revista de Antropología Chilena* 43:455-468. <http://doi.org/10.4067/S0717-73562011000300008>
- Capriles, José M.  
 2011 Zooarqueología en Bolivia: Una disciplina emergente. *Textos Antropológicos* 16(1):155-167. [http://www.revistasbolivianas.org.bo/scielo.php?script=sci\\_arttext&pid=S1025-31812011000100009](http://www.revistasbolivianas.org.bo/scielo.php?script=sci_arttext&pid=S1025-31812011000100009)
- Albarracín-Jordan, Juan and José M. Capriles  
 2011 The Paleoamerican occupation of Cueva Bautista: Late-Pleistocene human evidence from the Bolivian highlands. *Current Research in the Pleistocene* 28:95-98.
- Miller, Melanie J., José M. Capriles, and Christine A. Hastorf  
 2010 The fish of Lake Titicaca: Implications for archaeology and changing ecology through stable isotope analysis. *Journal of Archaeological Science* 37(2):317-327. <https://doi.org/10.1016/j.jas.2009.09.043>
- Domic, Alejandra I. and José M. Capriles  
 2009 Allometry and effects of extreme elevation on growth velocity of the Andean tree *Polylepis tarapacana* Philippi (Rosaceae). *Plant Ecology* 205(2):223-234. <https://doi.org/10.1007/s11258-009-9612-5>
- Capriles, José M., Alejandra I. Domic, and Katherine M. Moore  
 2008 Fish remains from the Formative Period (1000 BC–AD 400) of Lake Titicaca, Bolivia: Zooarchaeology and taphonomy. *Quaternary International* 180(1):115-126. <https://doi.org/10.1016/j.quaint.2007.08.022>
- Capriles, José M., Katherine M. Moore, and Alejandra I. Domic  
 2007 Recuperación diferencial de conjuntos arqueofaunísticos: Implicancias para el análisis de restos de peces en la cuenca del Lago Titicaca. *Archaeobios* 1:15-21.
- Capriles, José M. and Carlos Revilla Herrero  
 2006 Ocupación Inka en la región Kallawaya: Oralidad, etnohistoria y arqueología de Camata, Bolivia. *Chungara, Revista de Antropología Chilena* 38(2):223-238. <http://doi.org/10.4067/S0717-73562006000200006>
- Angelo, Dante and José M. Capriles

2004 La importancia de las plantas psicotrópicas para la economía de intercambio y relaciones de interacción en el altiplano sur andino. *Chungara, Revista de Antropología Chilena* 36(2):1023-1035. <http://doi.org/10.4067/S0717-73562004000400038>

Capriles, José M.

2003 Arqueología e identidad étnica: El caso de Bolivia. *Chungara, Revista de Antropología Chilena* 35(2):347-353. <http://doi.org/10.4067/S0717-73562003000200015>

Capriles, José M.

2002 Intercambio y uso ritual de fauna por Tiwanaku: Análisis de pelos y fibras de los conjuntos arqueológicos de Amaguaya, Bolivia. *Estudios Atacameños* 23:33-51. <http://doi.org/10.4067/S0718-10432002002300004>

Capriles, José M. and Eliana Flores Bedregal

2002 The economic, symbolic, and social importance of the keñua (*Polylepis* spp.) during Prehispanic times in the Andean highlands of Bolivia. *Ecotropica* 8(2):225-231. [http://www.socstropecol.eu/publications/pdf/8-2/Capriles%20JM%202002,%20Ecotropica%208\\_225-231.pdf](http://www.socstropecol.eu/publications/pdf/8-2/Capriles%20JM%202002,%20Ecotropica%208_225-231.pdf)

### **Book Chapters**

Capriles, José M.

2020 Chiripa and the emergence of social complexity in the Lake Titicaca basin. In *Encyclopedia of Global Archaeology*, 2<sup>nd</sup> Edition, edited by Claire Smith, pp. 2326-2332. Springer, New York.

Capriles, José M.

2020 Hastorf, Christine. In *Encyclopedia of Global Archaeology*, 2<sup>nd</sup> Edition, edited by Claire Smith, pp. 4858-4859. Springer, New York.

Santoro, Calogero M., Claudio Latorre, and José M. Capriles

2020 Early Peopling of the Atacama Desert. In *Encyclopedia of Global Archaeology*, 2<sup>nd</sup> Edition, edited by Claire Smith, 3455-3460. Springer, New York.

Lombardo, Umberto and José M. Capriles

2020 The archaeological significance of shell middens in the Llanos de Moxos: Between the Andes and Amazonia. In *Rethinking the Andes-Amazonia Divide: A Cross Disciplinary Exploration*, edited by Adrian J. Pearce, David Beresford-Jones and Paul Heggarty, pp. 273-282. UCL Press, London. <https://doi.org/10.14324/111.9781787357358>

Capriles, José M.

2019 Patrones de consumo de fauna en el Chaco sudamericano: Los restos arqueofaunísticos del sitio Incahuasi 1, Santa Cruz, Bolivia. In *El Cementerio Prehispánico de Incahuasi: Una Mirada desde la Vertiente Oriental de los Andes del Sur*, edited by Sonia Alconini, pp. 241-271. Grupo Editorial La Hoguera, Santa Cruz de la Sierra.

Politis, Gustavo, Alejandra I. Domic, Mariano Bonomo, and José M. Capriles

2018 Modelamiento de los parámetros ambientales de la distribución de sitios Goya-Malabriga mediante Maxent. In *Goya-Malabriga: Arqueología de una Sociedad Indígena del Noreste Argentino*, edited by Gustavo G. Politis and Mariano Bonomo, pp. 289-305. Editorial UNICEN, Tandil.

Tapia Matamala, Orlando and José M. Capriles

2016 Interacción y dinámica cultural en Mojocoya durante tiempos prehispánicos. In *Entre la vertiente tropical y los valles: Sociedades regionales e interacción prehispánicas en los Andes Centro-Sur*, edited by Sonia Alconini, pp. 217-240. Plural Editores, La Paz.

Capriles, José M.

- 2016 The subsistence economy of early Andean pastoralists: zooarchaeological insights from a Formative Period Wankarani house. In *The Archaeology of Andean Pastoralism*, edited by José M. Capriles and Nicholas Tripcevich, pp. 39-54. University of New Mexico Press, Albuquerque.
- Tripcevich, Nicholas and José M. Capriles  
 2016 Introduction: advances in the archaeology of Andean pastoralism. In *The Archaeology of Andean Pastoralism*, edited by José M. Capriles and Nicholas Tripcevich, pp. 1-10. University of New Mexico Press, Albuquerque.
- Marshall, Fiona and José M. Capriles  
 2014 Animal domestication and pastoralism: Socio-environmental contexts. In *Encyclopedia of Global Archaeology*, edited by Claire Smith, pp. 249-258. Springer, New York.
- Capriles, José M.  
 2013 State of the fish: Changing patterns in fish exploitation and consumption during Tiwanaku (AD 500-1100) in Iwawi, Bolivia. In *Advances in Titicaca Basin Archaeology-2*, edited by Alexei Vranich and Abigail R. Levine, pp. 105-116. Monograph 77, Cotsen Institute of Archaeology, University of California, Los Angeles.
- Capriles, José M. and Juan Albarracín-Jordan  
 2013 Pastoralismo y diversidad económica durante el Período Formativo en el altiplano central de Bolivia: evidencia zooarqueológica de Irucirca, Bolivia. In *De la Puna a las Sierras: Avances y Perspectivas en Zooarqueología Andina*, edited by Andrés D. Izeta and Guillermo L. Mengoni Goñalons, pp. 145-156. BAR International Series 2564, South American Archaeology Series No. 19. British Archaeological Reports, Archaeopress, Oxford.
- Capriles, José M., Alejandra I. Domic, and Sonia Alconini  
 2010 Continuity and change in faunal consumption patterns at the Pre-Inka and Inka site of Yoroma, Bolivia. In *Anthropological Approaches to Zooarchaeology: Complexity, Colonialism, and Animal Transformations*, edited by Doug Campana, Pam Crabtree, Susan D. deFrance, Justin Lev-Tov, and Alice Choyke, pp. 105-112. Oxbow Books, Oxford.
- Moore, Katherine, María Bruno, José M. Capriles, and Christine Hastorf  
 2010 Integrated contextual approaches to understanding past activities using plant and animal remains from Kala Uyuni, Lake Titicaca, Bolivia. In *Integrating Zooarchaeology and Paleoethnobotany: A Consideration of Issues, Methods, and Cases*, edited by Amber M. VanDerwarker and Tanya M. Peres, pp. 173-203. Springer, New York.
- Capriles, José M., Claudia Rivera Casanovas, and Timothy L. McAndrews  
 2010 Análisis zooarqueológico de Pirque Alto: aprovechamiento de recursos faunísticos durante los períodos Formativo y Tiwanaku en Cochabamba, Bolivia. In *Zooarqueología a Principios del Siglo XXI. Aportes Teóricos, Metodológicos y Casos de Estudio*, edited by María Gutiérrez, Mariana De Nigris, Pablo Fernández, Miguel Giardina, Adolfo Gil, Andrés Izeta, Gustavo Neme, and Hugo Yacobaccio, pp. 199-208. Ediciones del Espinillo, Buenos Aires.
- Capriles, José M.  
 2010 Zooarchaeology in Bolivia: background, present situation, and future projections. In *Current Advances in Latin American Archaeozoology*, edited by Guillermo Mengoni-Goñalons, Joaquín Arroyo-Cabralles, Oscar J. Polaco, and Felisa J. Aguilar, pp. 35-45. Instituto Nacional de Antropología e Historia, International Council for Archaeozoology, Mexico City.
- Capriles, José M., Alejandra I. Domic, and Sonia Alconini  
 2008 Zooarqueología Yampara: Aprovechamiento de recursos faunísticos en Oroncota, Bolivia. In *El Inkario en los Valles del Sur Andino Boliviano: Los Yamparas entre la Arqueología y la*

*Etnohistoria*, edited by Sonia Alconini, pp. 107-113. British Archaeological Reports, International Series S1868, Oxford.

Capriles, José M. and Alejandra I. Domic

2008 Explotación y consumo de peces durante Tiwanaku (400-1100 d.C.) en el sitio de Iwawi, Bolivia. In *Arqueología de las Tierras Altas, Valles Interandinos y Tierras Bajas de Bolivia*, edited by Claudia Rivera Casanovas, pp. 77-88. Universidad Mayor de San Andrés, Programa de Investigación Estratégica en Bolivia, La Paz.

Capriles, José M. and Alejandra I. Domic

2008 Un estudio preliminar de los restos de fauna hallados en el sitio Pucunayoj, Reserva Biológica de la Cordillera de Sama, Tarija, Bolivia. In *Arqueología de las Tierras Altas, Valles Interandinos y Tierras Bajas de Bolivia. Memorias del I Congreso de Arqueología de Bolivia*, edited by Claudia Rivera Casanovas, pp. 323-332. Universidad Mayor de San Andrés, Programa de Investigación Estratégica en Bolivia, La Paz.

Angelo, Dante and José M. Capriles

2001 Rutas de tránsito y representaciones rupestres en las relaciones de interacción en el altiplano sur andino. In *Arte Rupestre y Región. Arte Rupestre y Menhires del Sur de Bolivia, NO de Argentina y Norte de Chile*, edited by Alicia Fernández-Distel, pp. 17-34. Editorial Universidad Nacional de Jujuy, Jujuy.

**Book Reviews**

Capriles, José M. 2020. Fitzpatrick, Scott M. (ed.). Ancient psychoactive substances. xii, 328 pp., maps, tables, illus., bibliogr. Gainesville: Univ. Press of Florida, 2018. £90.50 (cloth). *Journal of the Royal Anthropological Institute* 26(4):883-884.

Capriles, José M. 2016. The Northern Titicaca Basin Survey: Huancané-Putina by Charles Stanish, Cecilia Chávez Justo, Karl Lafavre, and Aimée Plourde. *Latin American Antiquity* 27(2):268-269.

Capriles, José M. 2015. New outlooks on ancient Tiwanaku. Book review essay of “The Stones of Tiahuanaco: A Study of Architecture and Construction” by Jean-Pierre Protzen and Stella Nair and “Visions of Tiwanaku” edited by Alexei Vranich and Charles Stanish. *Latin American Antiquity* 26(4):570-572.

Capriles, José M. 2009. De Memorias e Identidades: Los Aymaras y Urus del Sur de Oruro por Ramiro Molina Rivero. *Journal of Latin American and Caribbean Anthropology* 14(1):213-214.

Capriles, José M. 2003. Tras las huellas del Tambo Real de Paria por Carola Condarco, Edgar Huarachi y Mile Vargas. *Tinkazos, Revista Boliviana de Ciencias Sociales* 14:173-176.

Capriles, José M. 2002. Tiwanaku: Señores del Lago Sagrado por José Berenguer Rodríguez. *Tinkazos, Revista Boliviana de Ciencias Sociales* 13:139-141.

Capriles, José M., Rubén Darío Chambi, and María Soledad Fernández. 2002. Arqueología de Lípez: Altiplano Sur de Bolivia por Jorge Arellano López. *Tinkazos, Revista Boliviana de Ciencias Sociales* 12:165-169.

**External Fellowships and Grants**

2021-2022 PI – National Science Foundation Arctic Doctoral Dissertation Research Improvement Grant # 2113667 “Investigating Community Resilience across Repeated Volcanic Events in Katmai, Alaska” Laura F. Stelson (Co-PI). \$50,400.

2020-2024 PI – National Science Foundation Senior Archaeology Grant BCS# 2015924 “Status Differentiation within the Context of Subsistence Change: Exploring the Emergence of Social

Inequality during the Late Archaic to Formative Period Transition in the Eastern Andes of Tarija”. \$118,178.

2020-2022 PI – National Science Foundation REU Supplement # 2023783 “Collaborative Research: Reconstructing Domestication and Landscape Management”. \$10,840.

2020-2023 Co-PI – FONDECYT Regular Grant N° 1201687 “Camélidos en las Tierras Bajas del Desierto de Atacama: Producción, Distribución y Consumo de Productos Primarios, Secundarios e Imágenes a través del Tiempo” Dr. Daniela Valenzuela (PI). ~\$174,740.

2020-2023 Co-PI – FONDECYT Regular Grant N° 1201786 “Reconstructing Mobility, Settlement, Technology and Ecosystem Services-use in the Atacama Desert by the end of the Pleistocene” Dr. Calogero Santoro (PI). ~\$232.000.

2019-2022 PI – National Science Foundation Senior Archaeology Grant BCS# 1920904 “Collaborative Research: Reconstructing Domestication and Landscape Management Processes at the Onset of Agriculture in the Lake Titicaca Basin” Dr. Maria Bruno (PI) and Dr. Christine Hastorf (PI). \$49,038.

2019-2021 PI – Wenner-Gren Foundation Post-Ph.D. Research Grant Gr. 9778 “Emergent Social Inequality among Terminal Archaic Period (4,500-3,600 BP) Hunter-Gatherers in the Bolivian Eastern Andes”. \$15,000.

2019-2020 PI – Curtiss T. and Mary G. Brennan Foundation Grant for Archaeological Field Research in South America “Exploring the Emergence of Social Inequality and Interregional Networks in the Late Archaic Period of the Eastern Andes of Tarija, Bolivia”. \$5,000.

2017-2018 PI – National Geographic Society Committee for Research & Exploration Grant #HJ-052R-17 “Exploring Human-Megafauna Interactions in the Tarija Basin of the Bolivian Eastern Andes”. \$15,000.

2017-2018 Co-Recipient – Teleféricos Doppelmayr Bolivia S.A. Social Responsibility Project “Miraflores Archaeological Project” Carlos Lémuz Aguirre (PI) \$4,000.

2016-2019 PI – CONICYT PCI PII20150081 “Reconstructing Landscapes, Climate and Human Ecology during the Late Pleistocene in the Atacama Desert of Northern Chile” Dr. Calogero Santoro (Co-PI). ~\$153,480.

2016-2020 Co-PI – FONDECYT Regular Grant N° 1160744 “Cultural landscapes and paleoenvironmental change at the end of the Pleistocene: exploring and explaining the earliest peopling of the Atacama Desert” Dr. Calogero Santoro (PI). ~\$325,000.

2015-2016 Co-PI – Conference Grant CONF-696 from the The Wenner-Gren Foundation to assist in the “8th Meeting of Archaeological Theory in South America (TAAS)” Dr. Dante Angelo (PI). \$20,000.

2015-2018 Research Associate – CONICYT PIA Anillo Soc N° 1405 for the Project “Long Term Social Change and Climatic Variability in the Atacama Desert” Dr. Calogero Santoro (PI). ~\$335,000.

2015 Recipient – Travel Grant from the Organizing Committee to participate in the XIX Congress of the International Union for Quaternary Research (INQUA) in Nagoya, Japan. €2,500 + ¥60,000.

2015-2018 Co-PI – FONDECYT Regular Grant N° 1150031 for the Project “Ancient DNA, population dynamics and social change during the Late Archaic/Early Formative transition in Northern Chile” Dr. Francisco Rothhammer (PI). ~\$180,000.

2013-2016 PI – FONDECYT Postdoctoral Grant N° 3140008 for the Project “Human Peopling of the North Chilean Andes: Foraging, Mobility, and Subsistence Strategies during the Late Pleistocene in the Highlands of Arica and Iquique”. ~\$143,000.

- 2013 Recipient – University of Missouri Research Reactor Center - Archaeometry Laboratory Support for the Project “Sourcing Obsidian Samples from the Late Pleistocene Site of Cueva Bautista, Southwestern Bolivia.” NAA and XRF analysis of a suite archaeological and source samples.
- 2012 Recipient – GeoEye Foundation Satellite Imagery Grant “Lípez Archaeological Project: Survey of the Sora River Valley.” 1,500 km<sup>2</sup> of high-resolution multi-spectral satellite images.
- 2012-2015 Co-Director – Swiss National Science Foundation Grant No. 200020-141277/1 “Human Presence, Anthropogenic Landscape Modifications and Environmental Change during the Holocene in the Llanos de Moxos (LM) - Bolivian Amazon.” Dr. Heinz Veit (PI) and Dr. Umberto Lombardo (Co-PI).
- 2012-2015 Specialist – National Science Foundation Grant EAR# 1148181 “South American Megafauna Extinction: A Test of Synergistic Effects of Climate Change and Human Population Growth in Magnifying Extinction Intensity.” Dr. Anthony Barnosky (PI).
- 2010-2011 Co-Recipient – National Geographic Society Committee for Research and Exploration Grant # 8742-10 awarded for the project “Early Human Settlement, Shamanism, and Caravan Trade in the Southern Andes: Archeological Excavations at Caves with Excellent Preservation in Lípez, Bolivia.” Dr. Juan Albarracín-Jordan (PI). \$20,000.
- 2007-2009 Co-PI – National Science Foundation Doctoral Dissertation Improvement Grant BCS# 0737793 awarded for the Project “A Zooarchaeological Perspective on the Development of Camelid Pastoralism in the South Central Andes of Bolivia.” \$14,967. David Browman (PI).
- 2008 Recipient – Lambda Alpha, National Collegiate Honor Society for Anthropology, Graduate Overseas Research Charles R. Jenkins Award given for the Project “Exploring the Economic Organization of Early Camelid Pastoralism in the South Central Andes of Bolivia.” \$2,500.

## **Fieldwork Experience**

- 2019 (July-August) Survey and excavations in the Cordillera de Sama National Reserve, Tarija, Bolivia. Emergent Social Inequality among Terminal Archaic Period Hunter-Gatherers.
- 2018 (December) Mapping and excavations in the Pampa del Tamarugal basin, northern Chile. Archaeology and Paleoecology of Northern Chile Project.
- 2018 (June) Survey and excavations in the Cordillera de Sama National Reserve, Tarija, Bolivia. Human-Megafauna Interactions in Southern Bolivia Archaeological Project.
- 2017 (August) Survey and excavations in the Cordillera de Sama National Reserve, Tarija, Bolivia. Human-Megafauna Interactions in Southern Bolivia Archaeological Project.
- 2017 (July) Mapping the site of Chiripa and its vicinity using an unmanned aerial vehicle, La Paz, Bolivia. Taraco Archaeological Project.
- 2017 (June) Mapping and excavations in the Pampa del Tamarugal basin, northern Chile. Archaeology and Paleoecology of Northern Chile Project.
- 2016 (June-July) Mapping and survey in the Pampa del Tamarugal basin, northern Chile. Archaeology and Paleoecology of Northern Chile Project.
- 2015 (August-September) Excavations of shell middens and mound complexes in the Llanos de Moxos, Bolivia. Anthropogenic Landscapes in the Bolivian Amazon Project.
- 2015 (March) Excavations at the site of Ipilla-2 in the Precordillera of Arica, Chile. Archaeology and Paleoecology of Northern Chile Project.

- 2014 (May-July) Survey and excavations in the Pampa del Tamarugal Basin of the Atacama Desert, Chile. Archaeology and Paleoecology of Northern Chile Project.
- 2013 (October-November) Survey of obsidian and chert sources in the Bolivian altiplano. Lípez Archaeological Project.
- 2012 (July-August) Survey and excavations of shell middens in the Llanos de Moxos, Beni. Anthropogenic Landscapes in the Bolivian Amazon Project.
- 2010 (June-July) Survey and excavations of rock shelters in the Sora River valley, Potosí. Lípez Archaeological Project.
- 2009 (July-August) Excavations at Kala Uyuni, Taraco Peninsula, La Paz. Taraco Archaeological Project.
- 2009 (January) Survey of the Cintis Valley, Chuquisaca. Project Analysis and Protection of Archaeological Resources at Cintis.
- 2008 (December) Survey and excavations in the Sora River and Viscachillas River valleys, Potosí. Lípez Archaeological Project.
- 2008 (June-July) Survey at Iroco, Cochiraya and Chuzekery, Oruro. Iroco Archaeological Project.
- 2007 (June-October) Survey and excavations at Iroco and Cochiraya, Oruro. Iroco Archaeological Project.
- 2006 (July) Fieldwork assistant survey at Corque and Huachacalla, Oruro. Archaeological Impact Assessment of the Oruro-Pisiga Highway.
- 2005 (June-July) Fieldwork assistant excavations at Sonaji, Taraco Peninsula, La Paz. Taraco Archaeological Project.
- 2004 (June-August) Field lab assistant excavations at Sonaji, Kumi Kipa, and Kala Uyuni, Taraco Peninsula, La Paz. Taraco Archaeological Project.
- 2003 (May-August) Fieldwork assistant excavations at Kala Uyuni, Taraco Peninsula, La Paz. Taraco Archaeological Project.

## **Teaching Experience**

- Anth 222 Archaeology of Domesticated Animals.
- Anth 424 Andean Archaeology and Ethnology.
- Anth 428 Archaeological Method and Theory.
- Anth 432 Environmental Archaeology.
- Anth 508 Visualizing Anthropological Data.
- Anth 572 Advanced Anthropological Methods.
- Anth 588 Method and Theory in Archaeology.

## **Other Academic Affiliations**

- Latin American Studies Program, The Pennsylvania State University.
- Climate Science Program, The Pennsylvania State University.
- Center for Human Ecology, The Pennsylvania State University.
- Research Associate, Instituto de Investigaciones Antropológicas y Arqueológicas, Universidad Mayor de San Andrés, La Paz, Bolivia.
- Research Associate, Instituto de Alta Investigación, Universidad de Tarapacá, Arica, Chile.

## Service

- Editorial Board member of the journal *Latin American Antiquity* (2014-present).
- Editorial Board member of the journal *Chungara, Revista de Antropología Chilena* (2013-present).
- Scientific Advisory Committee member of the journal *Intersecciones en Antropología* (2018-present).
- Editorial Committee member of the proceedings *Anales de la Reunión de Etnología* (2014-present)
- Program Committee member of the 85<sup>th</sup> Annual Meeting of the Society for American Archaeology, Austin, Texas (2019-2020).
- Executive Planning Committee of the Annual Meeting of the American Society of Ethnohistory, University Park, PA (2017-2019).
- Organization Committee member of the 9<sup>th</sup> Meeting of Archaeological Theory in South America (TAAS) Ibarra, Ecuador (2016-2018).
- Program Committee member of the 81<sup>st</sup> Annual Meeting of the Society for American Archaeology, Orlando, Florida (2015-2016).
- Organization Committee member of the 8<sup>th</sup> Meeting of Archaeological Theory in South America (TAAS) La Paz, Bolivia (2014-2016).
- Organization Committee member of the Second Intercontinental Conference of the Society for American Archaeology, Lima, Peru (2013-2014).

University Park, PA, July 29<sup>th</sup>, 2021.