

Curriculum Vitae
Jonathan Lee Dunnum
2017

Division of Mammals
Museum of Southwestern Biology
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Personal:

Born: 12/06/67, Married (Suzy Goetsch), 3 children (Somiya [18 yrs], Kira [15yrs], Quinn [7 yrs.]).

Education:

- Ph.D. - Zoology, Minor: Museum Science, 2009, Texas Tech University, Lubbock, TX.
Dissertation: Phylogeny, evolution, and systematics within the family Caviidae (Mammalia: Rodentia).
- M.S. - Biology, 2003, University of New Mexico, Albuquerque, New Mexico.
Thesis: Systematics of Bolivian *Cavia*, with biogeographic notes on the genus.
- B.S. - Biology, 1993, University of New Mexico, Albuquerque, New Mexico.

Professional Experience:

2006 - Present. Senior Collection Manager – Division of Mammals, Museum of Southwestern Biology

(MSB), University of New Mexico.

- Oversee the 3rd largest and fastest growing mammal research collection in the world.
- Train students in field and museum based mammalian sampling and archiving.
- Coordinate fieldwork originating in the MSB Division of Mammals.
- Facilitate specimen-based research worldwide in areas such as mammalian systematics, pathogen discovery and ecology, and phylogeography.

1994 - 2003. Field Research Associate –University of New Mexico. Mammal/Disease Ecology.
Directed field operations for CDC funded “Longitudinal Studies of Rodent Reservoirs of

- Hantaviruses in the Southwestern United States”. Terry L. Yates (P.I.).
- Directed long-term sampling regime for mammalian reservoirs and associated viruses.
 - Supervised all Field Research Associates employed by the project.
 - Identified mammalian hosts and curated voucher material for the MSB.
 - Submitted annual reports and provided data to the CDC.
 - Published scholarly works and presented results at scientific meetings.

Google Scholar profile:

<https://scholar.google.com/citations?user=7O5fxgYAAAAJ&hl=en>

Publications:

1. **Dunnum, J.L.**, Yanagihara, R., Johnson, K.M., Armien, B., Batsaikhan, N., Morgan, L., Cook, J. (2017). Biospecimen Repositories and Integrated Databases as Critical Infrastructure for Pathogen Discovery and Pathobiology Research. *Plos Neglected Tropical Diseases*, 11(1): e0005133. doi:10.1371/journal.pntd.0005133.

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2. Joseph Cook, Kurt Galbreath, Kayce Bell, Mariel Campbell, Suzanne Carrière, Jocelyn P Colella, Natalie G Dawson, **Jonathan L. Dunnum**, Ralph P Eckerlin, Stephen E Greiman, Vadim Fedorov, Genevieve M. S. Haas, Voitto Haukisalmi, Heikki Henttonen, Andrew G Hope, Donavan Jackson, Tom Jung, Anson V Koehler, John M Kinsella, Dianna Kresja, Susan J Kutz, Schuyler Liphardt, Stephen O MacDonald, Jason L Malaney, Arseny Makarikov, Jon Martin, Bryan S McLean, Robert Mulders, Batsaikhan Nyamsuren, Sandra L Talbot, Vasyl Tkach, Albina Tsvetkova, Heather Toman, Eric C Waltari, Jackson S Whitman, Eric P Hoberg. 2017. Arctic Museum Collections--Special Issue The Beringian Coevolution Project: Holistic Collections of Mammals and Associated Parasites Reveal Novel Perspectives on Evolutionary and Environmental Change in the North. *Arctic Science*, 10.1139/AS-2016-0042.
3. Cook, Joseph A. Stephen E. Greiman, Salvatore J. Agosta, Robert P. Anderson, Brian S. Arbogast, Robert J. Baker, Walter Boeger, Robert D. Bradley, Daniel R. Brooks, Rebecca Cole, John R. Demboski, Andrew P. Dobson, **Jonathan L. Dunnum**, Ralph P. Eckerlin, Jacob Esselstyn, Kurt E. Galbreath, John Hawdon, Hopi E. Hoekstra, Susan J. Kutz, Jessica E. Light, Link E. Olson, Bruce D. Patterson, James L. Patton, Anna J. Phillips, Eric Rickart, Duke S. Rogers, Mark E. Siddall, Vasyl V. Tkach, Eric P. Hoberg. 2016. Transformational Principles for NEON Sampling of Mammalian Parasites and Pathogens: A Response to Springer and Colleagues. *BioScience*, 66 (11): 917-919.
4. Cook, Joseph, Bryan McLean, Donavan Jackson, Jocelyn Colella, Stephen Greiman, Vasyl Tkach, Thomas Jung, and **Jonathan Dunnum**. 2016. First record of the Holarctic Least Shrew (*Sorex minutissimus*) and associated helminths from Canada: New light on northern Pleistocene refugia. *Canadian Journal of Zoology* 94(5):367-372.
5. McLean, Bryan S., Kayce C. Bell, **Jonathan L. Dunnum**, Bethany Abrahamson, Jocelyn P. Colella, Eleanor R. Deardorff, Jessica A. Weber, Amanda K. Jones, Fernando Salazar-Miralles, and Joseph A. Cook. 2016. Natural history collections-based research: progress, promise, and best practices. *Journal of Mammalogy* 97(1):287–297.
6. Kryštufek, B., and **J.L. Dunnum**. 2012. On the history of European mammalogy. *Mammalia* 76(4):351–353.
7. **Dunnum, J.L.** and J.A. Cook. 2012. Gerrit Smith Miller: his influence on the enduring legacy of natural history collections. *Mammalia* 76(4):365–373.
8. **Dunnum , J.L.**, and J. Salazar-Bravo. 2010. Molecular systematics, taxonomy and biogeography of the genus *Cavia* (Rodentia: Caviidae). *Journal of zoological systematics and evolutionary research* 48(4):376–388.
9. **Dunnum, J. L.**, and J. Salazar-Bravo. 2010. Phylogeny, evolution and systematics of the *Galea musteloides* complex (Rodentia: Caviidae). *Journal of Mammalogy* 91(1):243–259.
10. **Dunnum, J. L.**, and J. Salazar-Bravo. 2006. Karyotypes of some members of the genus *Cavia* (Rodentia: Caviidae) from Bolivia. *Journal of Mammalian Biology - Zeitschrift fur Saugetierkunde* 71(6):366-370.
11. **Dunnum, J.**, and J. Salazar-Bravo. 2004. *Dactylomys boliviensis*. *Mammalian Species No. 745*:1-4.
12. R. R. Parmenter, T. L. Yates, D. R. Anderson, K. P. Burnham, **J. L. Dunnum**, A. Franklin, M. T. Friggins, B. Lubow, M. Miller, G. S. Olson, C. A. Parmenter, J. Pollard, E. Rexstad, T. Shenk, T. R. Stanley, and G. C. White. 2003. Small mammal density estimation: a field comparison of grid-based vs. web-based density estimators. *Ecological Monographs* 73(1):1-26.
13. Tinnin, D., **Dunnum, J.**, Salazar-Bravo, J., Batsaikhan, N., Burt, M., and T. Yates. 2002. Contributions to the mammalogy of Mongolia, with a checklist of species for the country. Special Publications, Museum of Southwestern Biology no. 6. 38 pp.

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14. **Dunnum, J.L.**, Frey, J.K., Tinnin, D.S., Salazar-Bravo, J., and Yates, T.L. 2002. An elevational range extension for the hispid cotton rat, *Sigmodon hispidus*, (Rodentia: Muridae). *Southwestern Naturalist* 47(4):637-639.
15. Yates, T. L., J. N. Mills, C. A. Parmenter, T. G. Ksiazek, R. R. Parmenter, J. R. Vande Castle, C.H. Calisher, S. T. Nichol, K. D. Abbott, J. C. Young, M. L. Morrison, B. J. Beatty, **J. L. Dunnum**, J. Salazar-Bravo, R. J. Baker, and C. J. Peters. 2002. The ecology and evolutionary history of an emergent disease: Hantavirus Pulmonary Syndrome. *Bioscience* 52(11):989-998.
16. **Dunnum, J.L.**, Salazar-Bravo, J., and Yates, T.L. 2001. The Bolivian Bamboo Rat, *Dactylomys boliviensis* (Rodentia: Echimyidae), a new record for chromosome number in a mammal. *Mammalian Biology, Zeitschrift für Saügetierkunde* 66(2):121-126.
17. Parmenter, C. A., T. L. Yates, R. R. Parmenter, **J. L. Dunnum**. 1999. Statistical Sensitivity for Detection of Spatial and Temporal Patterns in Rodent Population Densities. *Journal of Emerging Infectious Diseases* 5(1):118-125.
18. Parmenter, C.A, R.R. Parmenter, T.L. Yates, J.N. Mills, J.E. Childs, M.L. Campbell, **J.L. Dunnum**, J. Milner. 1998. Small mammal survival and trapability in mark-recapture monitoring programs for Hantavirus. *Journal of Wildlife Diseases* 34(1):1-12.
19. Salazar Bravo, J., M.L. Campbell, S. Anderson, S.L. Gardner, **J.L. Dunnum**. 1994. New records of Bolivian mammals. *Mammalia* 58:125-130.

Book Chapters:

1. **Dunnum, J. L.** 2015. Family Caviidae, *In Mammals of South America*. Volume 2, Rodents, edited by J. L. Patton, U. F. J. Pardiñas, and G. D'Elía, Pp. 690-726. The University of Chicago Press, Chicago, IL.

Book Reviews:

1. **Dunnum, J.L.** 2009. Mammals of South America. Lord, R.D. 2007. Johns Hopkins University Press, Baltimore, Maryland, 198 pp. ISBN 0-8018-8494-2. *Journal of Mammalogy* 90(1):248-249.

Conservation Assessments:

In: IUCN 2012. IUCN Red List of Threatened Species. Version 2012.2. <www.iucnredlist.org>.

1. Dunnum, J., Vargas, J. & Bernal, N. 2008. *Abrocoma boliviensis*.
2. Dunnum, J., Bernal, N., Vivar, E., Jayat, J. & Ojeda, R. 2008. *Abrocoma cinerea*.
3. Dunnum, J., Vargas, J., Bernal, N., Zeballos, H., Vivar, E. & Patterson, B. 2008. *Akodon aerosus*.
4. Dunnum, J., Vargas, J., Bernal, N., Zeballos, H., Vivar, E. & Patterson, B., Pardinas, U. & Jayat, J.P 2008. *Akodon albiventer*.
5. Dunnum, J., Vargas, J., Bernal, N., Zeballos, H., Vivar, E., Patterson, B., Pardinas, U. & Jayat, J.P 2008. *Akodon boliviensis*.
6. Dunnum, J., Vargas, J. & Bernal, N. 2008. *Akodon dayi*.
7. Dunnum, J., Vargas, J., Bernal, N. & Pacheco, V. 2008. *Akodon fumeus*.
8. Dunnum, J., Vargas, J., Bernal, N., Pacheco, V., Zeballos, H. & Vivar, E. 2008. *Akodon kofordi*.
9. Dunnum, J., Vargas, J., Bernal, N., Zeballos, H., Vivar, E., Patterson, B., Jayat, J. & D'Elia, G. 2008. *Akodon lutescens*.
10. Dunnum, J., Vargas, J., Bernal, N., Pacheco, V., Zeballos, H. & Vivar, E. 2008. *Akodon mimus*.
11. Dunnum, J., Vargas, J. & Bernal, N. 2008. *Akodon pervalens*.
12. Dunnum, J., Vargas, J. & Bernal, N. 2008. *Akodon siberiae*.
14. Dunnum, J., Vargas, J., Bernal, N., Zeballos, H., Vivar, E. & Patterson, B. 2008. *Akodon subfuscus*.

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15. Dunnum, J., Vargas, J. & Bernal, N. 2008. *Akodon varius*.
16. Dunnum, J., Vargas, J. & Bernal, N., Pardinas, U. & D'Elia, G. 2008. *Andalgalomys pearsoni*.
17. Dunnum, J., Vargas, J., Bernal, N., Zeballos, H., Vivar, E. & D'Elia, G. 2008. *Auliscomys boliviensis*.
18. Dunnum, J., Vargas, J., Bernal, N., Zeballos, H. & Vivar, E. 2008. *Auliscomys pictus*.
19. Dunnum, J., Vargas, J., Bernal, N., Zeballos, H., Vivar, E., Patterson, B., Jayat, J.P. & Pardinas, U. 2008. *Auliscomys sublimis*.
20. Dunnum, J., Vargas, J., Bernal, N., D'Elia, G., Pardinas, U. & Teta., P. 2008. *Calomys callosus*.
21. Dunnum, J., Vargas, J., Bernal, N., Zeballos, H., Vivar, E., Patterson, B., Jayat, J.P. & Teta, P. 2008. *Calomys lepidus*.
22. Dunnum, J., Zeballos, H., Vargas, J., Bernal, N., Brito, D., Queirolo, D. Pardinas, U. & D'Elia, G. 2008. *Cavia aperea*.
23. Dunnum, J., Patterson, B. & Zeballos, H. & Teta, P. 2008. *Cavia tschudii*.
24. Dunnum, J. & Vargas, J. 2008. *Cerradomys andersoni*.
25. Dunnum, J., Vargas, J., Bernal, N., Zeballos, H., Vivar, E. & Patterson, B. 2008. *Chinchillula sahamae*.
26. Dunnum, J. & Delgado, C. 2008. *Coendou bicolor*.
27. Dunnum, J. & Delgado, C. 2008. *Coendou nycthemera*.
28. Dunnum, J. & Bernal, N. 2008. *Ctenomys boliviensis*.
29. Dunnum, J. & Bernal, N. 2008. *Ctenomys conoveri*.
30. Dunnum, J., Bernal, N. & Vivar, E. 2008. *Ctenomys frater*.
31. Dunnum, J. & Bernal, N. 2008. *Ctenomys goodfellowi*.
32. Dunnum, J., Bernal, N., Zeballos, H. & Vivar, E. 2008. *Ctenomys leucodon*.
33. Dunnum, J. & Bernal, N. 2008. *Ctenomys lewisi*.
34. Dunnum, J. & Bernal, N. 2008. *Ctenomys minutus*.
35. Dunnum, J., Vargas, J., Bernal, N., Zeballos, N., Vivar, E. & Patterson, B. 2008. *Ctenomys opimus*.
36. Dunnum, J. & Bernal, N. 2008. *Ctenomys steinbachi*.
37. Dunnum, J. & Vivar, E. 2008. *Dactylomys boliviensis*.
38. Dunnum, J., Vargas, J. & Zeballos, H. 2008. *Dactylomys peruanus*.
39. Dunnum, J., Vargas, J., Bernal, N., Pardinas, U. & Ojeda, R. 2008. *Dolichotis salinicola*.
40. Dunnum, J. & Vargas, J. 2008. *Galea monasteriensis*.
41. Dunnum, J., Pardina, U., Zeballos, H. & Ojeda, R. 2008. *Galea musteloides*.
42. Dunnum, J., Vargas, J., Bernal, N., Pacheco, V., Zeballos, H. & Vivar, E. 2008. *Galenomys garleppi*.
43. Dunnum, J., Vargas, J., Bernal, N., Diaz, M., Pardinas, U. & Jayat., J.P 2008. *Graomys domorum*.
44. Dunnum, J., Emmons, L., Vargas, J. & Bernal, N. 2008. *Juscelinomys guaporensis*.
45. Dunnum, J., Emmons, L., Vargas, J. & Bernal, N. 2008. *Juscelinomys huanchacae*.
46. Dunnum, J., Vargas, J., Bernal, N., Zeballos, H., Lessa, E., Ojeda, R. & Bidau, C. 2008. *Lagidium viscacia*.
47. Dunnum, J., Vargas, J., Bernal, N., Zeballos, H. & Vivar, E. 2008. *Lenoxus apicalis*.
48. Dunnum, J., Vargas, J. & Bernal, N., Ojeda, R. & Jayat, J.P. 2008. *Microcavia niata*.
49. Dunnum, J., Vargas, J., Bernal, N., Zeballos, H., Vivar, E., Patterson, B., Jayat, J. & Pardinas, U. 2008. *Necromys amoenus*.
50. Dunnum, J., Vargas, J., Bernal, N. & Jayat, J.P. 2008. *Necromys lactens*.
51. Dunnum, J., Vargas, J., Bernal, N., Zeballos, H. & Vivar, E. 2008. *Necromys lenguarum*.
52. Dunnum, J., Vargas, J., Bernal, N., Pardinas, U., Patterson, B. & Teta, P. 2008. *Oecomys mamorae*.

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53. Dunnum, J., Vargas, J., Bernal, N., Zeballos, H. & Vivar, E. 2008. *Oxymycterus hiska*.
54. Dunnum, J., Vargas, J. & Bernal, N. 2008. *Oxymycterus hucucha*.
55. Dunnum, J., Vargas, J., Vivar, E. & Patterson, B. 2008. *Oxymycterus inca*.
56. Dunnum, J., Vargas, J., Bernal, N., Patterson, B., Zeballos, H. & Vivar, E., Jayat, J.P. & Pardinas., U. 2008. *Oxymycterus paramensis*.
57. Dunnum, J., Vargas, J., Bernal, N., Jayat, J.P. & Pardinas, U. 2008. *Phyllotis caprinus*.
58. Dunnum, J., Vargas, J. & Bernal, N. 2008. *Phyllotis wolffsohni*.
59. Dunnum, J., Vargas, J. & Patterson, B. 2008. *Rhagomys longilingua*.
60. Dunnum, J., Bernal, N. & Patterson, B. 2008. *Tapecomys primus*.

Presentations:

1. **Jonathan Dunnum**, Robert Dowler, and the ASM Systematic Collections Committee. 2017. 2017 Resurvey of the Mammal Collections of the Western Hemisphere. American Society of Mammalogists, 97th Annual Meeting, June 22, Moscow Idaho.
2. **Jonathan L. Dunnum**, Richard Yanagihara, Karl M. Johnson, Blas Armien, Nyamsuren Batsaikhan, Laura Morgan and Joseph A. Cook. 2016. Biospecimen repositories and integrated databases as critical infrastructure for pathogen discovery and pathobiology research.
 - a. American Society of Mammalogists, 96th Annual Meeting, Minneapolis, June.
 - b. International Congress for Tropical Medicine and Malaria, Brisbane, Australia, September 18-22, 2016.
3. Weber, JA, J Edwards, **JL Dunnum**, and JA Cook. 2016. The molecular basis of high-elevation adaptation in wild Cavies. American Society of Mammalogists, 96th Annual Meeting, Minneapolis, June.
4. Dunnum, J.L. Connecting NH collection data. Invited talk - ASM/IDigBio Collections Digitization and Imaging Workshop. American Society of Mammalogists meeting. Jacksonville, FL. 12 June 2015.
5. Campbell, M.L., **J.L. Dunnum**, and J.A. Cook. 2015. The Role of Museum-Based Biorepositories and Biodiversity Databases in Infectious Disease Discovery and Epidemiology: An Example from the Division of Genomic Resources, Museum of Southwestern Biology. International Society for Biological and Environmental Repositories (ISBER) meeting. Phoenix, AZ.5-9 May.
6. Yanagihara, R., **J. L. Dunnum**, J. A. Cook. 2015. Mining archival tissue collections from shrews, moles and bats to gain insights into the spatial-temporal distribution and genetic diversity of hantaviruses. European Mammal Congress. August.
7. **J.L. Dunnum** and J.A. Cook. Emerging Pathogens and the Role of Natural History Archives: The Hantavirus Example. Invited Talk: AEON Workshop. University of New Mexico. 19 February 2015.
8. Cook, J.A., **J.L. Dunnum**, and R. Yanigahara. 2. “Hantavirus Emergence and Detection: A Case Study” at SciColl’s Engaging Scientific Collections in Emerging Infectious Disease Research. Smithsonian Institution, Washington DC, October 2014.
9. **Dunnum, J.L.** 2013. Expanding the reach of NH Research Collections and biodiversity data. Invited talk- Symposium, Using Online Tools to Make Accessible Museum Collections. Association of Science and Technology Centers annual meeting, Albuquerque, NM Oct 2013.
10. **Dunnum, J.L.**, and J.A. Cook. 2011. Gerrit Smith Miller – Contributions to European mammalogy and the value of natural history collections. Invited talk. - 6th European Mammal Congress. Paris, France, 19-24 July 2011.

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11. MacDonald, S.O., Yadéeh E. Sawyer, Natalie Dawson, **Jon Dunnum**, Brad Truett, and Joseph A. Cook. Island Surveys to Learn about Endemic Species (ISLES). 2011 Wildlife Society Meeting.
12. Mahadeshwar, H. S., **J. Dunnum**, and J. Salazar-Bravo. Phylogeny, evolution, and systematics of the south american genus *Microcavia* (Rodentia: Caviidae). 2010 Texas Society of Mammalogists meeting.
13. **Dunnum, J. L.**, and J. Salazar-Bravo. Molecular systematics of the *Galea musteloides* group: inferences from Cytochrome b sequence data. 2006 American Society of Mammalogists meeting.
14. **Dunnum, J. L.**, L. A. Ruedas, and J. Salazar-Bravo. Chromosomes of *Sylvilagus brasiliensis* from the Peninsula del Azuero, Panama. 2004 American Society of Mammalogists meeting.
15. **Dunnum, J. L.**, Salazar-Bravo, J., and T. L. Yates. Systematics of Bolivian *Cavia*, with biogeographic notes on the genus. 2003 American Society of Mammalogists meeting.
16. **Dunnum, J. L.**, Salazar-Bravo, J., and T. L. Yates. On the status of *Cavia tschudii* in Bolivia. 2002 American Society of Mammalogists meeting.
17. **Dunnum, J. L.**. Long-term Monitoring of Small Mammals and Zoonotic Disease agents. 2001. 4th East Asian Long-Term Ecological Research Network Meeting. Hovsgol, Mongolia.
18. **Dunnum, J. L.**, Yates, T. L., Beaty, B., Calisher, C., Douglass, R., and Mills, J. Temporal and spatial demographic patterns in *Peromyscus*. 2001 American Society of Mammalogists meeting.
19. **Dunnum, J. L.**, Yates, T. L., Abbott, K. H., Calisher, C. H., Frey, B. J., Lamke, K. K., Parmenter, C. A., Polechla, P. J., Tinnin, D. S. The Need for Long-Term Monitoring in Understanding Epizootic Events. 4th International Conference on HFRS and Hantaviruses, Atlanta, GA, 1998 and 1998 SWAN meetings.
20. Yates, T. L., **Dunnum, J. L.**, Cheek, J. E., Frey, B. K., Ksiazek, T. G., Koster, F. T., Lamke, K. K., Parmenter, C. A., Peters, C. J., Polechla, P. J., Ruedas, L. A., Tinnin, D. S. The “Very Large Mouse Array” (A Closed System for Wild Rodent Study) and GIS Modeling: Recently Initiated Research at the University of New Mexico. 4th International Conference on HFRS and Hantaviruses, Atlanta, GA, 1998 and 1998 SWAN meetings.
21. Ruedas, L. A., Yates, T. L., Campbell, M. L., Abbott, K. H., Calisher, C. H., **Dunnum, J. L.**, Mills, J. N., Ksiazek, T. G., Parmenter, C. A., Peters, C. J., and Polechla, P. J. Effects of Hantavirus Infection on Natural Populations of Rodents (*Muridae peromyscus*). 4th International Conference on HFRS and Hantaviruses, Atlanta, GA, 1998.
22. Parmenter, C. A., R. R. Parmenter, T. L. Yates, **J. L. Dunnum**, M. L. Campbell, and J. Milner. Long-Term Mark-Recapture Studies of Small Mammals: Effects of Cumulative Low-Level Trap Mortalities on Density Estimation and Population Dynamics. 4th International Conference on HFRS and Hantaviruses, Atlanta, GA, 1998.
23. Yates, T., T. Ksiazek, R. Parmenter, J. Mills, P. Rollin, S. Nichol, **J. Dunnum**, R. Baker, C. Parmenter, C. Peters. Hantavirus Outbreaks and Rodent Ecology: The Role of El Niño. 4th International Conference on HFRS and Hantaviruses, Atlanta, GA, 1998.
24. Parmenter, C.A., R.R. Parmenter, T.L. Yates, **J.L. Dunnum**, M.L. Campbell, and J. Milner. Long-term mark-recapture studies of small mammals: Effects of cumulative low-level trap mortalities on density estimation and population dynamics. 1997 ASM meetings and 1997 SWAN meetings.
25. Polechla, P.J., **J.L. Dunnum**, R.W. Perry. Reproductive notes on a mid-winter sample of Arkansas small mammals. 1997 SWAN meetings.

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26. **Dunnum, J.L.**, M.L. Campbell, J.W. Dragoo, K.K. Lamke, J.N. Mills, J. Milner, C.A. Parmenter, P.J. Polechla, T.L. Yates. Do Short-term Mammal Surveys Give Valid Estimates of Species Diversity? 1997 SWAN meetings.
27. Parmenter, C. A., R. R. Parmenter, T. L. Yates, **J. L. Dunnum**, M. L. Campbell, and J. Milner. Long-Term Mark-Recapture Studies of Small Mammals: Effects of Cumulative Low-Level Trap Mortalities on Density Estimation and Population Dynamics. 7th International Theriological Congress, Acapulco, Mexico, 1997.
28. **Dunnum, J. L.**, J. Salazar Bravo, and T. L. Yates. 1997. The largest reported diploid chromosome number for a mammal, Dactylomys boliviensis. 1996 ASM meetings and 1995 SWAN meetings.
29. Parmenter, C.A., T.L. Yates, R.R. Parmenter, S. Mistry, M.L. Campbell, **J.L. Dunnum**, J. Milner, H.C. Smith, J.E. Childs, J.N. Mills, and C.J. Peters. Effects of blood sampling procedures on rodent survival and trapability. 1996 SWAN meetings.
30. Yates, T.L., T.G. Ksiazek, R.R. Parmenter, P.E. Rollin, J.W. Brunt, S.T. Nichol, **J.L. Dunnum**, R.J. Baker, and C.J. Peters. Viral refugia and climate change: The roll of rodent population density. 1996 SWAN meetings.

Presentations to general audience in a scholarly capacity:

1. Cook, JA and JL Dunnum. Mexican Wolf Specimen Bank and SSP Access. Joint Meeting of the Mexican and Red Wolf Species Survival Programs, Chico Hot Springs, MT, 2 Aug 2016.
2. Dunnum, JL. Natural history research collections and their role in science. Bernalillo County Master Naturalists Program. Albuquerque, NM. 9 June 2016.
3. Dunnum, JL. Natural history research collections and their role in science. New Mexico Museum of Natural History and Science. Presentation to staff, docents and volunteers. Albuquerque, NM. 20 July 2015.
4. Dunnum, JL. Mammals of the Middle Rio Grande Valley. Bernalillo Co. Open Space - Naturalists Series.14 March 2015.
5. Dunnum, JL and JA Cook. Emerging Pathogens and the Role of Natural History Archives: The Hantavirus Example. AEON series - University of New Mexico.
6. Dunnum, JL. The Museum of Southwestern Biology, an overview. Sandia High School. 21 January 2014
7. Dunnum, JL. Natural History Research Collections: Use and Value. Bernalillo County Master Naturalists Program. University of New Mexico. 26 August 2014.
8. Dunnum, JL. The Museum of Southwestern Biology, an overview. Bernalillo County Master Naturalists Program. 2013
9. Dunnum, JL. The Museum of Southwestern Biology an archival observatory for biodiversity and its role with the Mexican gray wolf. Mexican Wolf SSP meeting. 2012.

Foreign Field Experience:

Ecuador 2016 – Mammal/parasite surveys of the Yanayacu and Yasuni parks.

Panama 2015 – Mammal/parasite surveys of the Darien province.

Panama 2014 – Mammal/parasite surveys of Santa Fe and Omar Torrijos national parks.

Canada 2014. Mammal/parasite surveys of Yukon Territory (CIIBA project).

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Peru/Bolivia 2013. Mammal/parasite survey and inventory of altiplano and yungas (Caviid hypoxia study).

Panama 2012. Mammal/pathogen sampling Gorgas project/UNM tropical biology.

SE Alaska 2011. Mammal/parasite surveys of the islands of SE Alaska (ISLES project).

SE Alaska 2010. Mammal/parasite surveys of the islands of SE Alaska (ISLES project).

Panama 2010. Mammal/pathogen sampling Gorgas project.

Panama 2009. Mammal/pathogen sampling STRI/Gorgas project.

Costa Rica 2009. Assisted on one-week course on tropical biology. University of New Mexico.

Costa Rica 2008. Assisted on one-week course on tropical biology. University of New Mexico.

Colombia 2006. Global Mammal Assessment - Andes. Invited expert, International Union for Conservation of Nature (IUCN) workshop.

Panama 2004. Assisted in a one- week joint UNM/TTU Tropical Mammalogy/Zoonotic disease field class.

Bolivia 2003 Expedition. Mammal collecting trip to the Sud Yungas in La Paz department for Master's research.

Mongolia 2001 Expedition. Two week collecting trip and meeting of the International Long-Term Ecological Research Network at Lake Hovsgol National Park. NSF supplemental grant.

Bolivia 2000 Expedition. Small mammal survey of the Beni and Santa Cruz departments for an NIH funded Machupo virus project.

Mongolia 1999 Expedition. Organized and led a one-month trip to Mongolia to install International Long-Term Ecological Research (ILTER) small mammal monitoring webs and collect mammal specimens for the Museum of Southwestern Biology. NSF supplemental grant.

Bolivia 1993 Expedition. Two month mammalian survey and collection trip. La Paz and Cochabamba departments. REU supplemental grant.

Bolivia 1992 Expedition. Two month mammalian survey and collection trip. La Paz and Beni departments. REU supplemental grant.

Bolivia 1991 Expedition. Three month mammalian collection and survey trip. Santa Cruz and Tarija departments. REU supplemental grant.

Professional Memberships:

American Society of Mammalogists (ASM) 1991-present
ASM Systematic Collections Committee. 2010-present
ASM Latin American Awards committee, 2015-present
Co-Chair, Arctos database Working group, 2009-present
NEON Scientific Research Collections Technical Working Group, 2013-present

Journal Reviewer:

Co-editor – (Christiane Denys, Boris Kryštufek). *Mammalia* volume 72 special series “On the history of European Mammalogy”. 2012
AMNH Novitates (1)
Checklist (1)
Ecosphere (1)
Genetics and Molecular Biology (1)
Journal of Biogeography (1)
Journal of Experimental Zoology Part A: Comparative Experimental Biology (1)
Journal of Mammalogy (4)
Journal of Wildlife Disease (1)
Journal of Zoo and Wildlife Medicine (3)
Occasional Papers- Museum of Southwestern Biology (3)
Mammalia (5)

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Mastozoologia Neotropical (3)
Southwestern Naturalist (3)
Vector-borne Zoonotic Diseases (1)

Grants:

\$337,000 – Archiving of NEON Small Mammal-Related Samples and Specimens. NSF – Battelle Memorial Institute
\$35,000 – Rio Puerco mammals- El Malpais mammal/pathogen survey and assessment. BLM 2016-2017
\$499,712 - Upgrade and transfer of the Museum of Southwestern Biology's Division of Genomic Resources frozen tissue collection to nitrogen vapor storage. NSF-CSBR:Natural History. Co-PI. 2016-2019.
\$50,000 - USGS Specimen Georeferencing Supplement. 2016-2017.
\$15,000 – Improved archiving of Mexican Wolf Specimens in the MSB. USFWS. 2016-2017
\$10,000 – F15AP01070. Improved archiving of Mexican Wolf Specimens in the MSB. USFWS. 2015-2016.
\$49,980 - USGS Specimen Georeferencing (7/1/14-3/31/15). USGS
\$10,000 – F11AP00643. Improved archiving of Mexican Wolf Specimens in the MSB. USFWS. 2014-2015.
\$49,467 – Georeferencing of the United States Geological Survey (USGS) Arid Lands Field Station specimen data incorporated into the University of New Mexico's MSB. USGS. Co-PI. 2014-2015.
\$10,000 – F11AP00643. Improved archiving of Mexican Wolf Specimens in the MSB. USFWS. 2013-2014.
\$10,000 – F11AP00643. Improved archiving of Mexican Wolf Specimens in the MSB. USFWS. 2012-2013.
\$4,000 – Improved archiving of Mexican Wolf Specimens in the MSB. USFWS. 2011-2012.
\$7,000 – Improved archiving of Mexican Wolf Specimens in the MSB. USFWS. 2011-2012.
\$18,500 – Improved archiving of Mexican Wolf Specimens in the MSB. USFWS. 2010-2011.
\$7,000 - Housing and Maintenance of Mexican Wolves in the MSB. USFWS. 2009-2010.
\$13,000 - Housing and Maintenance of Mexican Wolves in the MSB. USFWS. 2006-2009.
\$259,285 - Curation, Databasing, and Integration of the Orphaned Illinois Mammal Collection. NSF Biological Research Collections. (Co-PI). 1 Jan 2008-31 March 2010.

Teaching:

Biol 402 – Mammal Scientific Preparation, Spring 2017
BIOL 461L/561L – Introduction to Tropical Biology. Spring 2016
Biol 502-037 – Mammal Scientific Preparation, Spring 2015
BIOL 461L/561L – Introduction to Tropical Biology. Spring 2014
BIOL 402/502 – Mammalian museum Specimen preparation. Spring 2014
Biodiversidad, ecología, y conservación de los roedores neotropicales. Short course at Museo de Historia Natural, Universidad Nacional de San Agustín, Arequipa, Peru 24-26 July 2013.
SEIS - Mammals of NM and the Value of Nat Hist Coll. Summer 2012.
BIOL 419/519 – Nat Hist curation/techniques. Spring 2012. 4 lectures.
BIOL 402/502 – Panama Diversity Field Methods. Spring 2012 .

Synergistic Activities:

1. Collection manager of 3rd largest and fastest growing mammal collection in world. Coordinate

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small mammal collecting expeditions on worldwide scale. Participated in over 100 mammalian survey and inventory expeditions throughout United States, Canada, Mexico, Central and South America, and Mongolia.

2. Trained over 200 students in mammal sampling, museum voucher specimen preparation and natural history collection curation and databasing methods.
3. Served as an invited expert for the IUCN Global Mammal Assessment, Andean Small Mammals Working Group. Villa de Leyva, Colombia. February 2006. Authored 60 IUCN assessments.
4. Invited participant to the 4th East Asian Long-Term Ecological Research Network Meeting in Hovsgol, Mongolia. Provided training workshop and presentation for Mongolian students on Long-term Monitoring of Small Mammals and Zoonotic Disease agents. 2001
5. Served as Field Leader for CDC/NIH funded “Longitudinal Studies of Rodent Reservoirs of Hantaviruses in the Southwestern United States” at UNM (Terry L. Yates - P.I.). Supervised 5 Field Research Associates employed by the project and trained > 50 NM Department of Health workers, Indian Health Service personnel, Research Technicians, undergraduate and graduate students in identification of New Mexico mammals and implementation of mammal, virus, plant, and arthropod collection and sampling techniques. July 1994- September 2003.

Awards:

- 2013 – Sarah Belle Brown Community Service Award – Nominee.
2012- Outstanding Staff member –University of New Mexico, Department of Biology.
2010 - Clyde Jones, Best poster presentation on studies pertaining to mammalian cytology, evolution, and systematic for “Phylogeny, evolution, and systematics of the south american genus *Microcavia* (Rodentia: Caviidae). Mahadeshwar, H. S., J. Dunnum, and J. Salazar-Bravo. Texas Society of Mammalogists meeting.
2007 - Sustainability Science Award, Ecological Society of America .
“The ecology and evolutionary history of an emergent disease: Hantavirus Pulmonary Syndrome”. Bioscience 52(11):989-998. 2002.
2003 - J. Knox Jones Memorial Endowed Scholarship – TTU Biological Sciences - Fall 2003 (\$1250.00).

Languages:

Working knowledge of Spanish and German.

Pertinent Skills:

Curation and databasing of natural history collection specimens and information
Retro-orbital serologic sampling/mark-release-recapture sampling of small mammals.
PIT tagging
DNA extraction, amplification, and sequencing.
Mammal voucher specimen preparation (>10,000).
Field karyology, chromosome photography and karyotype construction.
Field parasitology
Computer and analysis experience – BEAST, MrBayes, PAUP,SAS, Minitab.

Travel:

Extensive travel and fieldwork throughout the U.S., Europe, Mexico, Central and South America, Mongolia, New Zealand, Australia.
Academic or field expeditions to Bolivia (6); Mongolia (2); Peru (1); Mexico (8); Colombia (1); Panama (8), Costa Rica (2), Canada (1), Alaska (3).

References:

Upon request