

ROSS D. E. MACPHEE
CURATOR AND PROFESSOR
DEPARTMENT OF MAMMALOGY

HIGHEST DEGREE EARNED

Ph.D.

AREA OF SPECIALIZATION

Systematics and paleontology of mammals, island paleobiogeography

EDUCATIONAL EXPERIENCE

Ph.D., University of Alberta, Edmonton, Canada, 1977

B.A., University of British Columbia, Vancouver, Canada, 1969

PREVIOUS EXPERIENCE IN DOCTORAL EDUCATION

FACULTY APPOINTMENTS

Visiting Instructor of Cell Biology, New York University Medical Center, 2005-present

Adjunct Professor, Department of Ecology, Evolution, and Environmental Biology,
Columbia University, 2004

Adjunct Professor, Doctoral Program in Anthropology, Graduate Center, City University
of New York, 1991-present

Adjunct Associate Professor, Department of Anthropology and Doctoral Program in
Anthropological Sciences, State University of New York, Stony Brook, 1989-present

Associate Professor, Department of Anatomy, Duke University, 1985-1988

Assistant Professor, Department of Anatomy, Duke University, 1979-1985

Visiting Assistant Professor, Department of Anthropology, University of Manitoba,
1978-1979

Visiting Assistant Professor, Department of Anthropology, University of Winnipeg,
1977-1978

COURSES TAUGHT

Extinction Science, E3B Department, Columbia University, 2004

Human Gross Anatomy, Department of Cell Biology, New York University School of
Medicine, 2005-date

RECENT GRADUATE COMMITTEES

Patricia Sutherland, University of Alberta, 2004

Eske Willerslev, University of Copenhagen, 2004

Rob Asher, State University of New York, 2000

Ines Horovitz, State University of New York, 1997

Jennifer White, State University of New York, 1993

RESEARCH GRANT SUPPORT

FEDERAL SOURCES

National Science Foundation, Megafaunal Mammal Genetics and Extinction Dynamics in the Late Pleistocene: Testing the Hyperdisease Hypothesis, \$473,067, September 1, 2001- August 31, 2006

National Science Foundation, Vertebrate Paleontology of Livingston Island (West Antarctica), \$76,000, August 1, 2006-July 31, 2009

NON-FEDERAL SOURCES

Niarchos Foundation, Support of Holarctic Paleontological Investigations, \$20,000, 2004-2005

Evelyn Stefansson Nef Foundation, At the Limit: Woolly Mammoth and Other Pleistocene Megafuna of the Canadian Arctic Archipelago, \$25,000, 2004-2005.

SELECTED RECENT ARTICLES IN REFEREED JOURNALS

Wyatt, K, P.F. Campos, M.T.P. Gilbert, S.-O. Kolokotronis, W.H. Hynes, R. DeSalle, P. Daszak, R.D.E. MacPhee, A.D. Greenwood (in press). Historical mammal extinction on Christmas Island (Indian Ocean) correlates with introduced infectious disease. PLoS One

Debruyne, Régis; G. Chu, C. E. King, K. Bos, M. Kuch, C. Schwarz, P. Szpak, D. R. Gröcke, P. Matheus, G. Zazula, D. Guthrie, D. Froese, B. Buigues, C. de Marliave, C. Flemming, D. Poinar, D. Fisher, J. Southon, A. N. Tikhonov, R.D.E. MacPhee, H. N. Poinar (September 2008). "Out of America: Ancient DNA Evidence for a New World Origin of Late Quaternary Woolly Mammoths". Current Biology 18: 1320-1326.

Bininda-Emonds, O.R.P., M. Cardillo, K.E. Jones, R.D.E. MacPhee, R.M.D. Beck, R. Grenyer, S.A., Price, R.A. Vos, J.L. Gittleman, and A. Purvis. 2007. The delayed rise of present-day mammals. Nature 446: 507-511.

Kolokotronis, S.-O., R.D.E. MacPhee, and A. Greenwood. 2007. Detection of mitochondrial insertions in the nucleus (NuMts) of Pleistocene and modern muskoxen. BMC Evolutionary Biology 7: 67-98.

<http://www.biomedcentral.com/bmcevolbiol>.

Kolokotronis, S-O, R.D.E. MacPhee, and A.D. Greenwood. 2007. Identifying mitochondrial insertions in the nucleus (NuMts) of Pleistocene and modern muskoxen. BMC Evolutionary Biology 7: 67

<http://www.biomedcentral.com/1471-2148/7/67>

MacPhee, R.D.E. 2007. Mammoths in the insular Nearctic? Some constraints on the existence of a Pleistocene megafaunal refugium in the Canadian Arctic Archipelago. Quaternary International 169-170: 29-38.

Capelli, C., R.D.E. MacPhee, A. Roca, F. Brisighelli, N. Giorgiadis, S.J. O'Brien, and A.D. Greenwood. 2006. A nuclear DNA phylogeny of the woolly mammoth (*Mammuthus primigenius*). Molecular Phylogenetics and Evolution 40: 620-627.

MacPhee, R.D.E., and J. Meldrum. 2006. Postcranial remains of extinct monkeys of the Greater Antilles, with evidence for semiterrestriality in *Paralouatta*. American Museum Novitates 3516: 1-65.

Mashchenko, E.N., A.N. Tikhonov, and R.D.E. MacPhee. 2006. Mammoth calf from Bolshoi Lyakhovskii Island (New Siberian Islands, Arctic Siberia). Russian Journal of Theriology 4(1): 79-88.

- Poinar, H.N., C. Schwarz, J. Qi, B. Shapiro, R.D.E. MacPhee, B. Buigues, A. Tikhonov, D.H. Huson, L.P. Tomsho, A. Auch, M. Rampp, W. Miller, and S.C. Schuster. 2006. Metagenomics to paleogenomics: large-scale sequencing of mammoth DNA. *Science* 322: 392-394. (e-pub 20 December, 2005; 10.1126/science.1123360).
- MacPhee, R.D.E. 2005. "First" appearances in the Cenozoic land-mammal record of the Greater Antilles: significance and comparison with South American and Antarctic records. *Journal of Biogeography* 32: 551-564.
- MacPhee R.D.E, A.N. Tikhonov, D. Mol, and A.D. Greenwood. 2005. Late Quaternary loss of genetic diversity in muskox (*Ovibos*). *BMC Evolutionary Biology* 5: 49. <http://www.biomedcentral.com/1471-2148/5/49>
- Steadman, D., P. Martin, R.D.E. MacPhee, A.T. Jull, G. McDonald, C.A. Woods, M.A. Iturralde-Vinent, and G. Hodgkins. 2005. Asynchronous extinction of late Quaternary sloths on continents and islands. *Proceedings of the National Academy of Sciences USA* 102: 11763-11768.
- MacPhee, R.D.E. and I. Horovitz. 2004. New craniodental remains of the Quaternary Jamaican monkey *Xenothrix mcgregori* (Xenotrichini, Pitheciidae, Platyrrhini) and the Aotus hypothesis. *American Museum Novitates* 3434: 1-51.
- Iturralde-Vinent, M.A. and R.D.E MacPhee. 2004. Los mamíferos terrestres de las Antillas Mayores: notas sobre su paleogeografía, biogeografía, irradiaciones y extinciones. *Academia de Ciencias de la República Dominicana, Santo Domingo*.
- Greenwood, A.D., C.C. Englbrecht, and R.D.E. MacPhee. 2004. Characterization of an endogenous retrovirus class in elephants and their relatives. *BMC Evolutionary Biology* 4: 38 <http://www.biomedcentral.com/1471-2148/4/38> [BioMed Central].
- Jull, A.J.T., M.A. Iturralde-Vinent, J.M. O'Malley, R.D.E. MacPhee, G. McDonald, P.S. Martin, J. Moody, and A. Rincón. 2004. Radiocarbon dating of extinct fauna in the Americas recovered from tar pits. *Nuclear Instruments and Methods in Physics Research B* 223/224: 668-671.
- MacPhee, R.D.E., M.A. Iturralde-Vinent, and E.S. Gaffney. 2003. Domo de Zaza: an Early Miocene vertebrate locality in south-central Cuba, with notes on the tectonic evolution of Puerto Rico and Mona Passage. *American Museum Novitates* 3394: 1-42.
- MacPhee, R.D.E. and C. Flemming. 2003. A possible heptaxodontine and other caviidan rodents from the Late Quaternary of Jamaica. *American Museum Novitates* 3422: 1-42.
- MacPhee, R.D.E. and C. Flemming. 2002. CREO mammal list of extinctions since AD 1500 (v1.0). <http://creoamnh.org> [Committee on Recently Extinct Organisms/Center for Biodiversity and Conservation American Museum of Natural History].
- MacPhee, R.D.E., A.N. Tikhonov, D. Mol, C. de Marliave, H. van der Plicht, A.D. Greenwood, C. Flemming, and L. Agenbroad. 2002. Radiocarbon chronologies and extinction dynamics of the late Quaternary mammalian megafauna of the Taimyr Peninsula, Russian Federation. *Journal of Archaeological Science* 29: 1017-1042.
- MacPhee, R.D.E. and C. Flemming. 2001. Extinction: complexity of assessing risk. *Science* 292: 217.

- Greenwood, A.D., F. Lee, C. Capelli, R. DeSalle, P.A. Marx, and R.D.E. MacPhee.
2001. Evolution of endogenous retroviral-like elements of the woolly mammoth
(*Mammuthus primigenius*) and its relatives. *Molecular Biology and Evolution* 18:
840-847.
- MacPhee, R.D.E. 2001. Historical extinctions, island biotas, and the biodiversity crisis.
Bolletí de la Societat d'Història Natural de les Balears 44: 9-14.

SPECIAL RECOGNITION/AWARDS

- Honor Award (highest merit), Society for Environmental Design, 2000, American
Institute of Graphic Arts, 2000 (for Shackleton exhibition)
- CINE Golden Eagle award, 1999 (for Shackleton exhibition)
- Laureate (with Manuel A. Iturralde-Vinent), Premio Anual, Academia de Ciencias de
Cuba [Cuban national award for outstanding scientific research], 1997