JOHN J. FLYNN
FRICK CURATOR AND PROFESSOR, DIVISION OF PALEONTOLOGY
DEAN, RICHARD GILDER GRADUATE SCHOOL

HIGHEST DEGREE EARNED
Ph.D.

AREA OF SPECIALIZATION
Evolution of mammals and Mesozoic vertebrates, Carnivora systematics, geological dating, plate tectonics, and biogeography

EDUCATIONAL EXPERIENCE
Ph.D. in Geological Sciences, Columbia University, 1983
M. Phil. in Geological Sciences, Columbia University, 1980
M.A. in Geological Sciences, Columbia University, 1979
B.S. in Geology and Geophysics, Yale University, 1977, cum laude

PREVIOUS EXPERIENCE IN DOCTORAL EDUCATION
FACULTY APPOINTMENTS
Adjunct Professor, Department of Biology, City University of New York, 2005-present
Adjunct Professor, Department of Earth and Environmental Sciences, Columbia University, 2005-present
Visiting Professor, Universidad de Chile, July 2001-July 2002
Adjunct Professor, Department of Biological Studies (Ecology and Evolution program), 1995-2005
Assistant Professor, Department of Geological Sciences, Rutgers University, September 1982-December 1987
Lecturer, Department of Geology and Geophysics, Yale University, January-May 1982

COURSES TAUGHT (2000-PRESENT)
Grantsmanship, Ethics, and Communication (core course), Richard Gilder Graduate School (AMNH), Fall 2008-present. Instructors: M. Norell and J. Flynn.
Major Events in Evolution: The Paleozoic-Mesozoic Transition, Richard Gilder Graduate School, Spring 2011. Instructors: C. Kammerer and J. Flynn
Vertebrate Paleontology-Evolution Seminar (Earth & Environmental Sciences G9668), "*Topics in Vertebrate Evolution: Methods and Case Studies"*, Columbia University, Autumn 2005.
Seminar in vertebrate paleontology (Sect 1; Earth & Environmental Sciences G9668y), "*The Origins of Major Vertebrate Clades"*, Columbia University, Spring 2006.
Seminar in vertebrate paleontology (Sect 2; Earth & Environmental Sciences G9668y), *"A Total Evidence Approach to Lizard Phylogeny"*, Columbia University, Spring 2006. Instructors: M. Norell and J. Flynn.

Directed Readings Course (for M. Spaulding, Earth and Environmental Sciences G9001), "*Placental Mammal Intensive Reading Course"* (Analysis of synthesis volume edited by Rose and Archibald*)*, Columbia University, Spring 2006.
Directed Readings Course (for J. Finarelli), "*Rates of evolution in Mammalia*", University of Chicago, 2003.
Workshop and Mini-Course, "Vertebrate Paleontology and Evolution", Universidad de Chile, 29 April- 2 May 2002.
Directed Readings Course (for P. Anderson), "*Triassic vertebrate evolution, and the Triassic/Jurassic boundary*", University of Chicago, 2002.
Directed Readings Course (for A. Goswami and C.T. Stayton), "*Topics in synapsid evolution*", University of Chicago, 2001.
Directed Readings Course (for A. Goswami), "*Topics in mammalian evolution*", University of Chicago, 2001.
"*Evolution: Genes to Groups*" (BioSci 192 or 264 or 23270; University of Chicago, with Bill Ballard [1999, 2000] or Paul Goldstein [2002], Spring 1999 [majors, core curriculum], Fall 2000, 2002 [majors, elective]).

GRADUATE ADVISEES (2000-PRESENT)
Ph.D. Students:
Abby West, Columbia University, 2011-present
Kaori Tsukui, Columbia University, 2008-present
Michelle Spaulding, 2005-2011
Andrés Giallombardo, Columbia University, 2004-2009
Lovasoa Ranivoharimanana, University of Antananarivo, Madagascar, 1998-2007
Anjali Goswami, University of Chicago, 2001- 2005
John Finarelli, University of Chicago, 2002-2005
Jon Marcot, University of Chicago, 1999- 2003
Karen Sears, University of Chicago, 1999- 2003
Gina Wesley, University of Chicago, 1998- 2003
Darin Croft, University of Chicago, 1996- 2000
Doreen Covey, University of Illinois-Chicago, 1993- 2000

GRADUATE COMMITTEES (2000-PRESENT)
Ph.D. Students:
Hong-yu Yi, DEES, Columbia University, May 2010-present.
Rui Pei, DEES, Columbia University, Sept. 2010-present
Stephen Brusatte, DEES, Columbia University, Sept 2009-present.
Shaena Montanari, RGGS Comp Bio, 2009-present.
Amy Balanoff, Columbia University, 2006-2011
Sterling Nesbitt, Columbia University, September 2006-2009
Alan Turner, Columbia University, 2004-2008
Sunny Hwang, Columbia University, 2005-2007
Aaron Hogue, Northwestern University, 2002-2004
Mahesh Gurung, University of Illinois- Chicago, 1998- 2004

RESEARCH GRANT SUPPORT (2006-2011)

National Science Foundation, Graduate Research Fellowship Program, November 2010 (DGE 0952089, administrative PI for RGGS graduate student Z. Baldwin).

NSLS-II (National Synchrotron Light Source- II) Beamline Development Proposal (Type I), Project Team Member, "X-ray Fluorescence Microprobe (XFM): A three-pole wiggler X-ray fluorescence microprobe beamline for characterization of materials in an "as-is" state (XFM)." Approved for development, Brookhaven National Laboratory, October 2010.

National Science Foundation, IGERT program, July 2010. "IGERT—Interdisciplinary Evolutionary Primatology: Conservation and Human Evolution Join Behavior, Bones and Genes." (Flynn co-PI with E. Delson, C. McCann, M. Cords, and T. Harrison; DGE-0966166).

National Science Foundation, June 2009. "REU Site: 25 years of Undergraduate Research in Evolution and Systematics at the American Museum of Natural History" (DBI- 0850543; Flynn co-PI March 2010-August 2011; 5 years).

National Science Foundation, ATOL ("Assembling the Tree of Life") program, September 2006. "ATOL: Collaborative Research: Resolving Mammalian Phylogeny with Genomic and Morphological Approaches" ($2,998,841 total budget; with AMNH PIs M. Novacek, R. Asher, J. Meng, and N. Simmons]; BIO DEB EF- 0629811; 5 years).

National Science Foundation, September 2006. "Collaborative Research: A Complete Species Level Phylogeny of the Carnivora" (DEB-0614098; 3 years).

National Science Foundation, June 2006. "Collaborative Research: The Paleontology Portal" (EAR-0552256 to J. Flynn, PI, AMNH; C. Norris, Co-I; 3 years).

IRD, France, 2004-2006. ECLIPSE I-II programs ("Neogene of the Western Amazonian Basin") (J. Flynn as a research collaborator; P.-O. Antoine, PI).

National Science Foundation, March 2006. "Support for the AMNH Fossil Mammal Collection: An integrated program to rehouse types and Perissodactyla, and enhance on-line collections data and web-based educational resources" (DBI-0545155]; Co-PI with J. Meng and C. Norris).

RECENT ARTICLES IN REFEREED JOURNALS (2006-2011)

J.J. Flynn, R. Charrier, D.A. Croft, and A.R. Wyss. In Press. Cenozoic Andean faunas: Shedding new light on South American mammal evolution, biogeography, environments, and tectonics. *In:* B.D. Patterson and L.P. Costa (eds.), *Historical biogeography of Neotropical mammals*, University of Chicago Press, 30 mss pages + 4 figures.

R. Charrier, J.J. Flynn, A.R. Wyss, and D.A. Croft. In Press. Marco geológico–tectónico, contenido fosilífero y cronología de los yacimientos Cenozoicos pre–pleistocénicos de mamíferos terrestres fósiles de Chile. *In:* D. Rubilar-Rogers and M. Sallaberry (eds.), *Vertebrados Fósiles de Chile.*

J.J. Flynn. Carnivora. *In*: Kingdon, J.S. & Hoffmann, M. (Eds). In Press. The Mammals of Africa Vol 5. Carnivora, Pholidota, Perissodactyla. In Series: Kingdon, J., Butynski, T. and Happold, D. (Eds). The Mammals of Africa Vols 1-6. Academic Press, Amsterdam.

C.F. Kammerer, J.J. Flynn, L. Ranivoharimanana, and A.R. Wyss. In Press. Ontogeny of the traversodontid cynodont *Dadadon isaloi*, with a reconsideration of traversodontid phylogeny. For J. Anderson, M. Ruta, and S. Sumida (eds.), Festschrift in honor of John Bolt, U. of Chicago Press.

X. Ni, J.J. Flynn, and A.R. Wyss. In Press. Application of high-resolution CT and three-dimensional virtual reconstruction in morphological study on fossil mammalian inner ear. *Palaeontologica Electronica*.

M. Spaulding and J.J. Flynn. In Press. Phylogeny of the Carnivoramorpha: The impact of postcranial characters. *Journal of Systematic Palaeontology*.

A. Goswami, G.V.R. Prasad, P. Upchurch, D. Boyer, E. Seiffert, O. Verma, E. Gheerbrant, and J.J. Flynn. 2011. A radiation of arboreal basal eutherian mammals beginning in the Late Cretaceous of India. *PNAS*, v. 108, no. 39, p. 16,333-16,338 (www.pnas.org/cgi/doi/10.1073/pnas.1108723108).

R.W. Meredith, J.E. Janecka, J. Gatesy, O.A. Ryder, C.A. Fisher, E.C. Teeling, A. Goodbla, E. Eizirik, T.L.L. Simão, T. Stadler, D.L. Rabosky, R.L. Honeycutt, J.J. Flynn, C.M. Ingram, C. Steiner, T.L. Williams, T.J. Robinson, A. Burk, M. Westerman, N.A. Ayoub, M.S. Springer, and W.J. Murphy. 2011. Impacts of the Cretaceous terrestrial revolution and KPg extinction on extant mammal diversification. *Science*. (*Sciencexpress*, 22 September 2011/10.1126/science.1211028).

.C.J. Underwood, A. Goswami, G.V.R. Prasad, O. Verma, and J.J. Flynn. 2011. Marine vertebrates from the 'middle' Cretaceous (early Cenomanian) of South India. *Journal of Vertebrate Paleontology*, vol. 31, no. 3, p. 539-552.

J.F. Petrulevicius, A. Nel, D. De Franceschi, C. Goillot, P.-O. Antoine, R. Salas-Gismondi, and J.J. Flynn. 2011. First fossil blood sucking Psychodidae in South America: A sycoracine moth fly (Insecta: Diptera) in the middle Miocene Amazonian amber. *Insect Systematics and Evolution*, v. 42, p. 87-96. (DOI 10.1163/187631211X560919)

.C. Kammerer, J.J. Flynn, L. Ranivoharimanana, and A.R. Wyss. 2010. The first record of a probainognathian (Cynodontia: Chiniquodontidae) from the Triassic of Madagascar. *Journal of Vertebrate Paleontology*, vol. 30(6), p.1889–1894.

.X. Ni, J.J. Flynn, and A.R. Wyss. 2010. The bony labyrinth of the early platyrrhine primate *Chilecebus*. *Journal of Human Evolution*, vol. 59, p. 595-607 (doi:10.1016/j.jhevol.2010.06.008).

J.J. Flynn, J.A. Finarelli, and M. Spaulding. 2010. Phylogeny of the Carnivora and Carnivoramorpha, and the use of the fossil record to enhance understanding of evolutionary transformations. *In*: A. Goswami and A. Friscia (eds.), *Carnivoran Evolution: New Views on Phylogeny, Form, and Function*, Cambridge University Press, Cambridge, pp. 25-63 (plus 1 color plate).

M. Spaulding, J.J. Flynn, and R.K. Stucky. 2010. A new basal carnivoramorphan (Mammalia) from the 'Bridger B' (Black's Fork Member, Bridger Formation, Bridgerian NALMA, middle Eocene) of Wyoming, USA. *Palaeontology*. v. 53, part 4, p. 815–832.

J. J. Flynn, S. Nesbitt, J.M. Parrish, L. Ranivoharimanana, and A.R. Wyss. 2010. A new species of *Azendohsaurus* (Diapsida: Archosauromorpha) from the Triassic Isalo

Group of southwestern Madagascar: Cranium and mandible. *Palaeontology*, v. 53, part 3, p. 669-688.

T. Macrini, J.J. Flynn, D.A. Croft, and A.R. Wyss. 2010. Inner ear of a notoungulate placental mammal: anatomical description and examination of potentially phylogenetically informative characters. *Journal of Anatomy*, v. 216, p. 600-610.

D.M. Boyer, G.V.R. Prasad, D.W. Krause, M. Godinot, A. Goswami, O. Verma, and J.J. Flynn. 2010. New postcrania of *Deccanolestes* from the Late Cretaceous of India and their bearing on the evolutionary and biogeographic history of euarchontan mammals. *Naturwissenschaften*, v. 97, p. 365-377.

M. Spaulding and J.J. Flynn. 2009. Anatomy of the postcranial skeleton of "*Miacis*" *uintensis* (Mammalia: Carnivoramorpha). *Journal of Vertebrate Paleontology*, v. 29, no. 4, p. 1212-1223.

B.J. Shockey, R. Salas-Gismondi, François Pujos, P. Baby, J.-L. Guyot, M.C. Baltazar, L. Huaman, M. Stucchi, and J.J. Flynn. 2009. New Pleistocene cave faunas of the Andes of central Perú: Radiocarbon ages and the survival of low latitude, Pleistocene DNA. *Palaeontologica Electronica*, v. 12, issue 3, 15A, p. 1-15 (PE Article Number: 12.3.15A; http://palaeo-electronica.org/2009_3/189/index.html).

B.J. Shockey, R. Salas-Gismondi, P. Gans, A. Jeong, and J.J. Flynn. 2009. Paleontology and geochronology of the Deseadan (late Oligocene) of Moquegua, Perú. *American Museum Novitates*, no. 3668, p. 1-24.

A.A. Carlini, M.R. Ciancio, J.J. Flynn, G.J. Scillato-Yané, and A.R. Wyss. 2009. The phylogenetic and biostratigraphic significance of new armadillos (Mammalia, Xenarthra, Dasypodidae, Euphractinae) from the Tinguiririan (Early Oligocene) of Chile. *Journal of Systematic Palaeontology*, v. 7, no. 4, p. 489-503 (doi:10.1017/S1477201908002708; abstract published online 9 Feb 2009 in "First view")

J.A. Finarelli and J.J. Flynn. 2009. Brain-size evolution and sociality in Carnivora. *Proceedings of the National Academy of Sciences USA*, v. 106, no. 23, p. 9345-9349 (PNAS Early Edition, doi:10.1073_pnas.0901780106; online supplemental material at: www.pnas.org/cgi/content/full/0901780106/DCSupplemental).

J.J. Flynn, R. Charrier, D.A. Croft, P.B. Gans, T.M. Herriott, J.A. Wertheim, and A.R. Wyss. 2008. Chronologic implications of new Miocene mammals from the Cura-Mallín and Trapa Trapa Formations, Laguna del Laja area, south central Chile. *Journal of South American Earth Sciences*, v. 26, p. 412-423 (doi:10.1016/j.jsames.2008.05.006).

Croft, D.A., J.J. Flynn, and A.R. Wyss. 2008. The Tinguiririca Fauna of Chile and the early stages of "modernization" of South American mammal faunas. Arquivos do Museu Nacional, Rio de Janeiro (Brasil), v.66, n.1, 21 pp. (Jan/Mar 2008; ISSN 0365-4508).

Flynn, J.J., R. Charrier, D.A. Croft, P.B. Gans, T.M. Herriott, J.A. Wertheim, and A.R.Wyss. 2008. Chronologic implications of new Miocene mammals from the Cura-Mallín and Trapa Trapa Formations, Laguna del Laja area, south central Chile. Journal of South American Earth Sciences. (doi:10.1016/j.jsames.2008.05.006)

Kammerer, C., J.J. Flynn, L. Ranivoharimanana, and A.R. Wyss. 2008. New material of *Menadon besairiei* (Cynodontia: Traversodontidae) from the Triassic of Madagascar. *Journal of Vertebrate Paleontology*, v. 28, no. 2, p. 445-462.

Sears, K.A., J.A. Finarelli, J.J. Flynn, and A.R. Wyss. 2008. Estimating body mass in New World "monkeys" (Platyrrhini, Primates), with a consideration of the Miocene platyrrhine *Chilecebus carrascoensis*. *American Museum Novitates*, no. 3617, p. 1-29.

Shockey, B.J., and J.J. Flynn. 2008. Morphological diversity in the postcranial skeleton of Casamayoran (?middle to late Eocene) Notoungulata and foot posture in notoungulates. *American Museum Novitates*, no. 3601, p. 1-26.

Croft, D.A., J.J. Flynn, and A.R. Wyss. 2007. A new basal glyptodontid and other Xenarthra of the early Miocene Chucal Fauna, northern Chile. Journal of Vertebrate Paleontology, v. 27, no. 4, p. 781-797 (17 pp.; chosen by the editors as the "Featured Article" of the December issue, with a color illustration on the cover).

Finarelli, J.A., and J.J. Flynn. 2007. The evolution of encephalization in caniform carnivorans. *Evolution*, v. 61(7), p. 1758-1772 (doi:10.1111/j.1558-5646.2007.00131.x)

Flynn, J.J., A.R. Wyss, and R. Charrier. 2007. South America's Missing Mammals. Scientific American, May 2007: 68--75. Supplementary material online at: http://www.sciam.com/article.cfm?chanID=sa004&articleID=F83DEB7F-E7F2-99DF-3788D419B06C7E1D

Sears, K.E., A. Goswami, J.J. Flynn, and L.A. Niswander. 2007. The correlated evolution of Runx2 tandem repeats, transcriptional activity, and facial length in Carnivora. Evolution and Development, v. 9, no. 6, p. 555-565.

Antoine, P.-O., D. De Franceschi, J.J. Flynn, A. Nel, P. Baby, M. Benammi, Y. Calderón, N. Espurt, A. Goswami, and R. Salas. 2006. Western Amazonian Miocene amber with multiple organic inclusions. Proceedings of the National Academy of Sciences USA 103(37): 13595--13600.

Burmeister, K.C., J.J. Flynn, J.M. Parrish, and A.R. Wyss. 2006. Paleogeographic and biostratigraphic implications of new early Mesozoic terrestrial vertebrate fossils from Poamay, central Morondava Basin, Madagascar. *In* J.D. Harris, S.G. Lucas, J.A. Spielmann, M.G. Lockley, A.R.C. Milner, and J.I. Kirkland (editors), Bulletin of the New Mexico Museum of Natural History 37 (special volume: The Triassic-Jurassic Terrestrial Transition): 457--475.

Croft, D.A., L.R. Heaney, J.J. Flynn, and A.P. Bautista. 2006. A new extinct, diminutive *Bubalus* (Artiodactyla: Bovidae: Bovini) from Cebu Island, Philippines. Journal of Mammalogy 87(5): 1037--1051.

Finarelli, J. A. and J.J. Flynn. 2006. Ancestral state reconstruction of body size in the Caniformia (Carnivora, Mammalia): The effects of incorporating data from the fossil record. *Systematic Biology*, v. 55, no. 2, p. 301-313.

Flynn, J.J., S. Fox, J.M. Parrish, L. Ranivoharimana, and A.R. Wyss. 2006. Assessing diversity and paleoecology of a Middle Jurassic microvertebrate assemblage from Madagascar. *In* J.D. Harris, S.G. Lucas, J.A. Spielmann, M.G. Lockley, A.R.C. Milner, and J.I. Kirkland (editors), Bulletin of the New Mexico Museum of

Natural History 37 (special volume: The Triassic-Jurassic Terrestrial Transition): 476--489.

Hitz, R.H., J.J. Flynn, and A.R. Wyss. 2006. New basal Interatheriidae (Typotheria, Notoungulata, Mammalia) from the Paleogene of central Chile. American Museum Novitates 3520: 1--32.

Krause, D.W., P.M. O'Connor, A.H. Rasoamiaramanana, G.A. Buckley, D. Burney, M.T. Carrano, P.S. Chatrath, J.J. Flynn, C.A. Forster, L.R. Godfrey, W.L. Jungers, R.R.Rogers, K.E. Samonds, E.L. Simons, and A.R. Wyss. 2006. Preserving Madagascar's natural heritage: The importance of keeping the island's vertebrate fossils in the public domain. Madagascar Conservation & Development 1(1): 43--47.

McKenna, M.C., A.R. Wyss, and J.J. Flynn. 2006. Paleogene pseudoglyptodont xenarthrans from central Chile and Argentine Patagonia. American Museum Novitates 3536: 1--18.

SPECIAL RECOGNITION/AWARDS

16th Annual Communicator Awards (2010), Awards of Excellence for Extreme Mammals exhibit. Isolation Video: (with team: Sarah Galloway, Karen Santiago) and Locomotion Interactive (with team: Camilla Benitez, Liza McCarthy, Karen Santiago, Isabel Urbina, Ben Wilson).

Clara Jones Langston Lecturer in Vertebrate Paleontology, University of Texas at Austin, April 2010.

Fellow, American Association for the Advancement of Science (AAAS); elected a Fellow, in the Geology & Geography Section, by the AAAS Council, 18 December 2009.

Joseph T. Gregory Award, Society of Vertebrate Paleontology, honoring outstanding service to the welfare of the Society of Vertebrate Paleontology, 20 October 2007.

Premio "Roberto Araya" (Roberto Araya Prize), Sociedad Geológica de Chile, awarded 8 April 2002; for the best presentation of the year, "*Vertebrados fósiles en Chile*", 16 October 2001.

Fellow, John Simon Guggenheim Memorial Foundation, New York, awarded April 2001. "*The interplay of evolution and geologic change in South America*"; fellowship to support sabbatical year (July 2001-2002) of research, writing, and exploration in Chile.

Elected President, Society of Vertebrate Paleontology (October 1998-2000; Past-President, 2000-2002; Vice-President/President-Elect 1996-1998; Secretary, 1993-1996; Board/Executive Committee, 1993-2002)

Golden Muse Award, First Place for *Dino Documentary* (Field Museum Public Relations and RPM Advertising produced 30 second public service announcement of 1997 summer exhibit *Dino Families*; featured scientist), 8th Annual Muse Awards (1998; American Association of Museums); also awarded Bronze Telly (national award for advertising excellence).

First Place, Science Category, 6th Annual Muse Awards (1996; American Association of Museums), for "*Life Over Time News/The Evolutionary Broadcasting Network*" series (scientific content specialist on Development team).

"Best Museum Curator", 25th Anniversary Edition ("The Best of Chicago"), Chicago Magazine, December 1995.

Appointed to named curatorship (John D. and Catherine A. MacArthur Curator), Field Museum, 1995.

Alfred Sherwood Romer Prize (4th Annual), Society of Vertebrate Paleontology, October, 1982. For "Original and important research in Vertebrate Paleontology, and a presentation of highest quality at the Annual Meeting."

Fellow of the Faculty, Columbia University, September 1977-May 1979 and September 1980-1982.

Fellow of the Graduate Alumni Faculties, Columbia University, September 1979-May 1980.

William R. Belknap Prize (Excellence in Geology), Yale University, May, 1977.

Special Distinction in the Major (Geology and Geophysics), Yale University, May, 1977.

Henry Moses Scholarship, Yale University, September 1973-May 1977.