

## CURRICULUM VITAE

### BLAIRE VAN VALKENBURGH

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#### EDUCATION

B.S. Natural Sciences, Stockton State College, New Jersey (1974)  
M.A. Vertebrate Paleobiology, The Johns Hopkins University (1979)  
Ph.D. Vertebrate Paleobiology, The Johns Hopkins University (Advisor, Dr. Robert Bakker) (1984)  
Postdoctoral research in Vertebrate Paleontology, The Johns Hopkins University School of Medicine,  
(Advisor: Dr. Alan Walker) (1984-1986)

#### APPOINTMENTS

Inaugural Chair, Donald R. Dickey Chair in Vertebrate Biology, (2016-present)  
Co-Chair, Department of Ecology and Evolutionary Biology, 2016-17  
Associate Dean of Academic Programs in the Life Sciences, UCLA (2011-present)  
Curator, Donald R. Dickey Collection of Birds and Mammals, UCLA (1986-present)  
Professor, Department of Ecology and Evolutionary Biology, UCLA (1995-present)  
Professor, Institute of the Environment, UCLA (2003-present)  
Vice Chair, Department of Ecology and Evolutionary Biology, UCLA (2004-06)  
Chair, Department of Organismic Biology, Ecology and Evolution, UCLA (1998-2004)  
Assistant to Associate Professor, Department of Organismic Biology, Ecology and Evolution, UCLA  
(1986-1995)

#### *Past Positions*

Advisory Board Member, National Evolutionary Synthesis Center, 2009-2012  
Past President, Society of Vertebrate Paleontology, 2010-2012  
President, Society of Vertebrate Paleontology, 2008-2010  
Vice President, Society of Vertebrate Paleontology, 2006-08  
Associate Professor, Department of Biology, University of California, Los Angeles, 1990-1995  
Assistant Professor, Department of Biology, University of California, Los Angeles, 1986-1990  
Research Associate, Department of Vertebrate Paleontology, Los Angeles County Museum of Natural  
History, 1987-present  
Instructor of Human Anatomy, Department of Cell Biology and Anatomy, The Johns Hopkins School of  
Medicine, Baltimore, Maryland, 1985-1986  
Postdoctoral Fellow, Department of Cell Biology and Anatomy, The Johns Hopkins School of Medicine,  
Baltimore, Maryland, 1984-1985

#### AWARDS AND HONORS

2016 Donald R. Dickey Chair in Vertebrate Biology (endowed professorship)  
2016 UCLA Life Sciences Excellence in Research, Full Professor Award  
2015-16 Phi Beta Kappa Visiting Scholar  
2013 Elected Fellow of the Paleontological Society  
2011 Professional Achievement Award, Stockton State College, NJ  
2011 UCLA Dean's Recognition Award, Faculty Research Colloquium  
2011 14<sup>th</sup> Annual Biology Research Symposium Chair's Lab Award, UCLA  
2007 UCLA University Distinguished Teaching Award

1997-present Honorary Fellow, California Academy of Sciences  
 1990, 2006 Distinguished Faculty Teaching Award, UCLA Department of Biology/Ecology and Evolutionary Biology  
 1988-1989 Career Development Award, UCLA  
 1981-1982 Predoctoral Fellow, American Association of University Women  
 1977-1979 Gilman Fellowship, The Johns Hopkins University

## FELLOWSHIPS AND GRANT SUPPORT

2015-2019 National Science Foundation, Integrative Organismic Biology (co P.I. with R. Wayne, B. Craven, W. Murphy) (\$424,888 to BVV) *Collaborative Research: The Genetic and Anatomical Determinants of Olfaction.*

2014-2019 National Science Foundation, Undergraduate Education (\$2,397,699) (lead P.I. with P. Barber, K. Eagen, T. Hasson, E. Sanders, and S. Smale) *Implementation of student-centered pedagogy: its impact on learning, persistence and the teaching culture.*

2013-2015 National Science Foundation, Undergraduate Education (\$249,529) (co-PI with P. Turner, S. Hurtado, A. Russell, R. Wesel) *Planning Grant: Transforming the culture of teaching and learning at UCLA: Development of a Change Strategy for UCLA.*

2013-2014 Doris Duke Charitable Foundation (\$100,000) (Co-PI with E. Sanders, T. Hasson) *Improving persistence of underrepresented minority students in science, technology, engineering, and math (STEM) majors.*

2013-2014 National Science Foundation, Integrative Organismic Biology (\$15,000) *Meeting: Inside the Vertebrate Nose, Barcelona, Spain, July 8-12, 2013.*

2012-2015 National Science Foundation, Sedimentary Geology and Paleobiology (\$50,000) *EAGER: Interpreting Pleistocene Predator-Prey Dynamics: inference from dental growth and attrition.*

2012-2013 UCLA Committee on Research (\$5,000) *Using dental growth and attrition to infer Ungulate Health.*

2011-2013 National Science Foundation, Collections in Support of Biological Research (\$193,375) *Replacement of antiquated cabinets for the D.R. Dickey Collection of Birds and Mammals.*

2011-2015 National Science Foundation, Integrative Organismic Biology (lead P.I. with B. Craven, C. Wysocki) ( total= \$1,072,177; \$279,738 to UCLA) *Collaborative Research: Reconstructing Airflow in the Nasal Cavity of Mammals.*

2011-2012 UCLA Committee on Research (\$10,000) *Unlocking the Skull: New Views into the Anatomy of Olfaction and Respiration*

2010-2013 National Science Foundation, Collections in Support of Biological Research (\$174,959) *Relocation and Infrastructure Upgrade for the Donald Ryder Dickey Collection of Birds and Mammals.*

2006-2009 National Science Foundation, Systematic Biology (with R.K. Wayne, J. Flynn) (\$73,570) *Collaborative Research: A Complete Species Level Phylogeny of the Carnivora*

2005-2009 National Science Foundation, Integrative Organismic Biology (\$336,228) *Quantitative Computed Tomography and Histological Analysis of Carnivoran Turbinates*

1999-2002 National Science Foundation, Polar Programs (\$392,000) (co-P.I. with R.K. Wayne) *Molecular Paleoecology of Permafrost Mammals*

1998-2002 National Science Foundation, Geology & Paleontology Program (\$150,000) *Taphonomy and Chronology of Rancho La Brea: A Critical Foundation for Future Research*

1994-1996 National Science Foundation, Ecological and Evolutionary Physiology Program (\$50,000) *Testing Alternative Hypotheses for Patterns of Tooth Breakage in Carnivores*

1995-1995 UCLA Committee on Research

1994 Donald Dickey, Jr., Collection Improvement (\$17,559)

1993 Museum of Paleontology, University of California, Berkeley (\$4,500)

1993 National Science Foundation, Support for American Society of Zoologists Symposium

- (\\$5493)
- 1989-93 National Science Foundation, Ecology Program (\$95,000) *Trophic Diversity in Ancient and Modern Predator Guilds: an Ecomorphological Analysis*
- 1988-89 Biomedical Research Support Grant (\$3050)
- 1986-94 UCLA Committee on Research (\$23,184)
- 1985-86 Johns Hopkins Institutional Research Grant (\$7056)
- 1984-86 Research Grant, National Geographic Society (\$11,984)

## PUBLICATIONS

1. Van Valkenburgh, B. 1982. Evolutionary dynamics of terrestrial, large predator guilds. Proc. Third N. Amer. Paleo. Conv. 2:557-562.
2. Stanley, S.M., Van Valkenburgh, B., and Steneck, R.S. 1983. Coevolution and the fossil record. Pp. 328-349 in Coevolution, D.J. Futuyma and M. Slatkin, eds. Sinauer Press, Massachusetts.
3. Van Valkenburgh, B. 1985. Locomotor diversity within past and present guilds of large predatory mammals. Paleobiology 11:406-428.
4. Van Valkenburgh, B. 1987. Skeletal indicators of locomotor behavior in living and extinct carnivores. Journal of Vertebrate Paleontology 7:162-182.
5. Van Valkenburgh, B. and Ruff, C.B. 1987. Canine tooth strength and killing behaviour in large carnivores. Journal of Zoology 212:379-397.
6. Van Valkenburgh, B. 1988. Incidence of tooth breakage among large, predatory mammals. American Naturalist 131:291-300.
7. Van Valkenburgh, B. 1988. Trophic diversity within past and present guilds of large predatory mammals. Paleobiology 14:156-173.
8. Van Valkenburgh, B. 1989. Carnivore dental adaptations and diet: a study of trophic diversity within guilds. In Carnivore Behavior, Ecology and Evolution, J.L. Gittleman, ed. Cornell University Press; Ithaca.
9. Wayne, R.K., B. Van Valkenburgh, Kat, P.W., Fuller, T.K., Johnson, W.E. and O'Brien, S.J. 1989. Genetic and morphologic divergence in sympatric canids (Mammalia: Canidae). Journal of Heredity 80:447-454.
10. Fuller, T., Biknevicius, A., Van Valkenburgh, B., Kat, P., and Wayne, R. 1989. Ecology of three sympatric jackal species in the rift valley of Kenya. African J. Ecology 27: 313-323.
11. Wayne, R.K., Van Valkenburgh, B., Fuller, T.K., and Kat, P.W. 1990. Allozyme and morphologic differences among highly divergent mtDNA haplotypes of black-backed jackals. In Molecular Evolution. M. Clegg and S.J. O'Brien, eds. Wiley-Liss; New York.
12. Wayne, R.K., Meyer, A., Lehman, N., Van Valkenburgh, B., Kat, P.W., Fuller, T.K., Girman, D., and O'Brien, S.J. 1990. Large sequence divergence among mitochondrial DNA genotypes within populations of East African black-backed jackals. Proc. Nat. Acad. Sci. 87:1772-1776.
13. Van Valkenburgh, B. 1990. Skeletal and dental predictors of body mass in carnivores. In Damuth, J. and B. MacFadden, eds. Body Size in Mammalian Paleobiology. Cambridge Univ. Press, Cambridge.

14. Van Valkenburgh, B., Teaford, M., and Walker, A. 1990. Molar microwear and diet in large carnivores: inferences concerning diet in the sabretooth cat, *Smilodon fatalis*. *Journal of Zoology* 222: 319-340.
15. Van Valkenburgh, B., F. Grady, F., and Kurtén, B. 1990. The Plio-Pleistocene cheetah-like cat *Miracinonyx inexpectatus* of North America. *Journal of Vertebrate Paleontology* 10:434-454.
16. Wayne, R.K., Van Valkenburgh, B., and O'Brien, S.J. 1991. Molecular distance and divergence time in carnivores and primates. *Molecular Biology and Evolution* 8:297-319.
17. Van Valkenburgh, B. 1991. Iterative evolution of hypercarnivory in canids (Mammalia: Canidae): evolutionary interactions among sympatric predators. *Paleobiology* 17: 340-362.
18. Van Valkenburgh, B. and Koepfli, K. 1993. Cranial and dental adaptations for predation in canids. In N. Dunstone and M.L. Gorman, eds. *Mammals as Predators*. Series: Symposia of the Zoological Society of London 65; Oxford University Press, Oxford.
19. Van Valkenburgh, B. and Hertel, F. 1993. Tough times at La Brea: tooth breakage in large carnivores of the late Pleistocene. *Science* 261:456-459.
20. Van Valkenburgh, B. and Janis, C.M. 1993. Historical diversity patterns in large mammalian herbivores and carnivores. In R. Ricklefs and D. Shluter, eds. *Species Diversity in Ecological Communities: Historical and Geographical Perspectives*. University of Chicago Press: Chicago.
21. Van Valkenburgh, B. 1994. Extinction and replacement among predatory mammals in the North American Late Eocene - Oligocene: tracking a guild over twelve million years. *Historical Biology* 8:1-22.
22. Van Valkenburgh, B. 1994. Eco-morphological analysis of fossil vertebrates and paleocommunities. In P.C. Wainwright and S.M. Reilly, eds. *Ecological Morphology: integrative organismal biology*. University of Chicago Press: Chicago.
23. Van Valkenburgh, B. 1994. Tough times in the tar pits. *Natural History* 4:84-85.
24. Van Valkenburgh, B. and Wayne, R.K. 1994. Shape divergence associated with size convergence in sympatric East African jackals. *Ecology* 75:1567-1581.
25. Van Valkenburgh, B. 1995. Tracking ecology over geologic time: evolution within guilds of vertebrates. *Trends in Ecology and Evolution* 10: 71-76.
26. Van Valkenburgh, B. 1996. Feeding behavior in free-ranging, large African carnivores. *Journal of Mammalogy* 77:240-254.
27. Yahnke, C.J., Johnson, W.E., Geffen, E., Smith, D., Hertel, F., Roy, M.S., Bonacic, C., Fuller, T.K., Van Valkenburgh, B., and Wayne, R.K. 1996. Darwin's fox rediscovered: a distinct endangered species from a vanishing habitat. *Conservation Biology* 10:366-375.
28. Biknevicius, A. and Van Valkenburgh, B. 1996. Design for killing: craniodental adaptations of predators. In *Carnivore Behavior, Ecology, and Evolution*, Vol. II, J. L. Gittleman, ed., Cornell University Press.
29. Biknevicius, A., Van Valkenburgh, B., and Walker, J. 1996. Incisor size and shape: implications for feeding behaviors in sabertoothed "cats." *Journal of Vertebrate Paleontology* 16:510-521.

30. Gittleman, J. and Van Valkenburgh, B. 1997. Sexual dimorphism in the skulls and teeth of carnivores: effects of size, phylogeny and behaviour. *Journal of Zoology* 242:97-117.
31. Lessa, E.P., Van Valkenburgh, B., and Farina, R. 1997. Testing hypotheses of differential mammalian extinctions subsequent to the Great American Interchange. *Palaeogeography, Palaeoclimatology, Palaeoecology* 135: 157-162.
32. Duckler, G. and Van Valkenburgh, B. 1998. Exploring the health of late Pleistocene mammals: the use of Harris lines. *Journal of Vertebrate Paleontology* 15:180-188.
33. Duckler, G. and Van Valkenburgh, B. 1998. Osteological corroboration of pathological stress in a population of endangered Florida pumas (*Puma concolor coryi*). *Animal Conservation* 1: 39-46.
34. Van Valkenburgh, B. and Hertel, F. 1998. The decline of North American predators during the Late Pleistocene. In J.J. Saunders, B.W. Styles, and G.F. Baryshnikov (eds.) *Quaternary paleozoology in the Northern Hemisphere*. Illinois State Museum Scientific Papers 27:357-374, Springfield, Illinois.
35. Van Valkenburgh, B. 1999. Major patterns in the history of carnivorous mammals. *Annual Review of Earth and Planetary Sciences*, Vol. 27:463-93.
36. Van Valkenburgh, B. and Binder, W. 2000. Biomechanics and feeding behaviour in carnivores: comparative and ontogenetic perspectives. In *Biomechanics in Animal Behaviour*. P. Domenici and R. Blake, eds. Bios; Oxford, U.K.
37. Binder, W. and Van Valkenburgh, B. 2000. Development of bite strength and feeding behaviour in spotted hyaenas (*Crocuta crocuta*). *Journal of Zoology* 252:273-283.
38. Van Valkenburgh, B. 2001. The dog-eat-dog world of carnivores: a review of past and present carnivore community dynamics. In *Meat-Eating and Human Evolution*, Stanford C. and Bunn, H.T., eds., Oxford University Press.
39. Van Valkenburgh, B. 2001. Predation in Saber-Tooth Cats. In *Paleobiology II*. Briggs, D.E.G. and Crowther, P.R., eds. Blackwell Science, Oxford.
40. Van Valkenburgh, B. and Sacco, T. 2002. Sexual dimorphism and intra-sexual competition in large Pleistocene carnivores. *Journal of Vertebrate Paleontology* 22:163-168.
41. Binder, W., Thompson, E. N. and Van Valkenburgh, B. 2002. Temporal variation in tooth fracture among Rancho La Brea dire wolves. *Journal of Vertebrate Paleontology* 22:423-428.
42. Van Valkenburgh, B and Jenkins, I. 2002. Evolutionary patterns in the history of Permo-Triassic and Cenozoic synapsid predators. In *The Fossil Record of Predation*. M. Kowalewski, P.H. Kelley, eds. Paleontological Society Special Publications Vol. 8.
43. Van Valkenburgh, B. and Molnar, R.E. 2002. Dinosaurian and mammalian predators compared. *Paleobiology* 28:527-543.
44. Spencer, L., Van Valkenburgh, B., and Harris, J.M. 2003. A taphonomic investigation of Pit 91, Rancho La Brea. *Paleobiology* 29:561-575.
45. Van Valkenburgh, B., Sacco, T. and Wang, X. 2003. Pack hunting in Miocene borophagine dogs: evidence from craniodental morphology and body size. *Bulletin of the American Museum of Natural History* 278: 147-162.

46. Sacco, T. and Van Valkenburgh, B. 2004. Ecomorphological indicators of feeding behaviour in the bears. *J. Zoology* 263:41-54.
47. Tedford, R.H., Wang, X., Van Valkenburgh, B. and Wayne, R.K. 2004. Evolutionary history, molecular systematics and evolutionary ecology. Pp. 39-54 in *Biology and Conservation of Wild Canids*. D.W. Macdonald and C. Sillero-Zubiri, eds., Oxford University Press.
48. Wang, X., Tedford, R.H., Van Valkenburgh, B., and Wayne, R.K. 2004. Phylogeny, classification, and evolutionary ecology of Canidae. Pp. 8-20 in *Canids: Foxes, Wolves, Jackals, and Dogs*. C. Sillero-Zubiri, M. Hoffmann, and D.W. Macdonald, eds., IUCN Press.
49. Van Valkenburgh, B., Theodor, J., Friscia, A., Pollack, A., and T. Rowe. 2004. Respiratory turbinates of canids and felids: a quantitative comparison. *J. Zoology* 264:1-13.
50. Van Valkenburgh, B., Wang, X., and Damuth, J. 2004. Cope's rule, hypercarnivory, and extinction in North American canids. *Science* 306:101-103. (***Cited as "Must Read" by the Faculty of 1000 website***)
51. Koepfli, K-P., Jenks, S.M., Eizirik, E., Zahirpour, T., Van Valkenburgh, B., and Wayne, R.K. 2006. Molecular systematics of the Hyaenidae: relationships of a relictual lineage resolved by molecular supermatrix. *Molecular Phylogenetics and Evolution* 38:603-620.
52. Munoz-Duran, J. and Van Valkenburgh, B. 2006. The Rancholabrean record of Carnivora: taphonomic effect of body size, habitat breadth, and the preservation potential of caves. *Palaeos* :421-430.
53. Friscia, A.R., Van Valkenburgh, B., Biknevicius, A.R. 2007. An ecomorphological analysis of extant small carnivores. *J. Zoology* 272:82-100.
54. Leonard, J., Vila, C., Fox-Dobbs, K., Koch, P., Wayne, R.K., and Van Valkenburgh, B. 2007. Genetics, isotopes, and morphology reveal a cryptic extinction of Pleistocene wolves. *Current Biology* 17:1146-1150.
55. Van Valkenburgh, B. 2008. Déjà vu: evolution of feeding adaptations in carnivorans. *Integrative and Comparative Biology* 47:147-163.
56. Friscia, A.R., Van Valkenburgh, B., Spencer, L., Harris, J. 2008. Chronology and spatial distribution of large mammal bones in Pit 91, Rancho La Brea. *Palaeos* 23:35-42.
57. Slater, G. and Van Valkenburgh, B. 2008. Long in the tooth: evolution of sabertooth cat cranial shape. *Paleobiology* 34:403-419.
58. Samuels, J. and Van Valkenburgh, B. 2008. Skeletal indicators of locomotor adaptations in living and fossil rodents. *Journal of Morphology* 269:1397-1411.
59. Van Valkenburgh, B. 2009. Costs of carnivory: tooth fracture in Pleistocene and recent carnivorans. *Biological Journal of the Linnean Society* 96:68-81.
60. Carbone, C., Maddox, T., Funston, P.J., Mills, M.G.L., Grether, G., and Van Valkenburgh, B. 2009. Parallels between playbacks and Pleistocene tar seeps suggest sociality in an extinct sabertooth cat, *Smilodon*. *Biology Letters* 5:81-85.
61. Samuels, J. and Van Valkenburgh, B. 2009. Craniodental adaptations for digging in extinct burrowing beavers. *Journal of Vertebrate Paleontology* 29:254-268.

62. Roemer, G., Gompper, M., and Van Valkenburgh, B. 2009. The ecological role of the mammalian mesocarnivore. *Bioscience* 59:165-173.
63. Meachen-Samuels, J. and Van Valkenburgh, B. Forelimb Indicators of prey-size preference in the Felidae. 2009. *Journal of Morphology* 270: 729-744.
64. Slater, G., Dumont, E., and Van Valkenburgh, B. 2009. Implications of predatory specialization for cranial form and function in canids. *Journal of Zoology* 278, 181-188.
65. Meachen-Samuels, J. and Van Valkenburgh, B. 2009. Craniodental indicators of prey size preference in the Felidae. *Biological Journal of the Linnean Society* 96. 784-799.
66. Slater, G. and Van Valkenburgh, B. 2009. Allometry and performance: the evolution of skull form in felids. *J. Evolutionary Biology* 22: 2278-2287.
67. Van Valkenburgh, B., Maddox, T., Funston, P.J., Mills, M.G.L., Grether, G., and Carbone, C. 2009. Sociality in Rancho La Brea *Smilodon*: arguments favour 'evidence' over 'coincidence'. *Biology Letters* 5:563-564.
67. Binder, W. J. and Van Valkenburgh, B. 2010. A comparison of tooth wear and breakage in Rancho la Brea sabertooth cats and dire wolves across time. *Journal of Vertebrate Paleontology* 30:255-261.
68. Kitchener, A., Van Valkenburgh, B, and Yamaguchi, N. 2010. Felid form and function. Pp. 83-106 in Macdonald, D. W and Loveridge, A, (eds) *Biology and Conservation of Wild Felids*. Oxford Univ. Press, Oxford.
69. A.R. Friscia and B. Van Valkenburgh. 2010. Ecomorphology of North American Eocene carnivores: evidence for competition between carnivorans and creodonts. Pp. 311-341 in: A.R.Friscia and, A. Goswami (eds.) *Carnivoran Evolution: Form, Function, and Phylogeny*. Cambridge University Press .
70. Ripple W.J., Van Valkenburgh, B. 2010. Linking top-down forces to the Pleistocene megafaunal extinctions. *Bioscience* 60: 516-526
71. Meachen-Samuels, J. and Van Valkenburgh, B. 2010. Radiographs reveal exceptional forelimb strength in the sabertooth cat, *Smilodon fatalis*. *PLoS ONE* 5(7): e11412. doi:10.1371/ journal.pone.0011412.
72. Van Valkenburgh, B. and R.K. Wayne. 2010. Primer: Carnivores. *Current Biology* 20:915-919.
73. Slater, G.J., B. Figueirido, L. Louis, P. Yang, and B. Van Valkenburgh. 2010. Biomechanical consequences of rapid evolution in the polar bear lineage. *PLoS ONE* 5(11): e13870. doi:10.1371/journal.pone.0013870.
74. Van Valkenburgh, B., Curtis, A., [Samuels](#) J.X., Bird, D., [Fulkerson](#) B., Meachen-[Samuels](#), J., and G.Slater. 2011. Aquatic adaptations in the nose of carnivorans: Evidence from the turbinates. *Journal of Anatomy* 218: 298-310.
75. MacDonald, G., Beilman, D.W., Kuzmin, Y.V., Orlova, L.A., Kremenetski, K.V., Shapiro, B., Wayne, R.K., and Van Valkenburgh, B. 2012. Pattern of extinction of the woolly mammoth in Beringia. *Nature Communications* 2012: doi:10.1038/ncomms1881.
76. Green, P., Van Valkenburgh, B., Pang, B., Bird, D., Rowe, T., and Curtis A. 2012. Respiratory and olfactory turbinal size in canid and arctoid carnivorans. *J. Anatomy* 221:609-621.

77. O'Keefe, F.R., Binder, W.J., Frost, S.R., Sadlier R.W., and Van Valkenburgh. B. 2014. Cranial morphometrics of the dire wolf, *Canis dirus*, at Rancho La Brea: temporal variability and its links to nutrient stress and climate. *Palaeontologica Electronica* 17.1.16A.
78. Fudge, D., Winegard, T., Herr, J., Mena, C., Lee, B., Dinov, I., Bird, D. Bernards, M. Jr., Hobel, S., Van Valkenburgh, B., and Toga, A. 2014. Coiling and maturation of a high performance fibre in hagfish slime gland thread cells. *Nature Communications* (DOI:10.1038/mcomms4534).
79. Bird, D., Amirkhanian, A., Pang, B., Van Valkenburgh, B. 2014. Quantifying the cribriform plate: influences of allometry, function and phylogeny in Carnivora. *The Anatomical Record* 297:2080-2092.
80. Curtis, A.A. and Van Valkenburgh, B. 2014. Beyond the sniffer: frontal sinuses in Carnivora. *The Anatomical Record* 297:2047-2064.
81. Van Valkenburgh, B., Pang, B., Bird, D., Curtis, C., Yee, K., Wysocki, C., and Craven, B. 2014. Respiratory and olfactory turbinals in feliform and caniform carnivorans: the influence of snout length. *The Anatomical Record* 297:2065-2097.
82. Ranslow, A. N., Richter, J. P., Neuberger, T., Pang, B., Van Valkenburgh, B., Ryan, T. M., Stecko, T. D., and Craven, B. A. 2014. Reconstruction and Morphometric Analysis of the Nasal Cavity of the White-Tailed Deer (*Odocoileus virginianus*) and Implications Regarding Respiratory and Olfactory Airflow. *The Anatomical Record*. 297:2138-2147.
83. Van Valkenburgh, B., Smith T.D., and Craven B.A. 2014. Tour of a labyrinth: exploring the vertebrate nose. *The Anatomical Record* 297:1975-1984.
84. Curtis, A.A., Lai, G., Wei, Fuwen, and Van Valkenburgh, B. 2015. Repeated loss of frontal sinuses in arctoid carnivorans. *Journal of Morphology* 276:22-32.
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86. Van Valkenburgh B, Hayward MW, Ripple WJ, Meloro C, and Roth VL. 2015. The impact of large terrestrial carnivores on Pleistocene ecosystems. *PNAS* 113:862-867.
87. Hayward MW, Kamler JF, Montgomery RA, Newlove A, Rostro-Garcia S, Sales LP, And Van Valkenburgh B. 2015. Prey preferences of the jaguar *Panthera onca* reflect the post-Pleistocene demise of large prey. *Frontiers in Ecology and Evolution* 3:148 <http://dx.doi.org/10.3389/fevo.2015.00148>
88. Yee KK, Craven BA, [Wysocki CJ](#), and Van Valkenburgh B. 2016. Comparative morphology and histology of the nasal fossa in four mammals: gray squirrel, bobcat, coyote and white-tailed deer. *The Anatomical Record* 299:840-852.
89. Pang B, Yee KK, Lischka FW, Rawson NE, Haskins ME, Wysocki CJ, Craven BA, and Van Valkenburgh B. 2016. The influence of nasal flow on respiratory and olfactory distribution in felids. *J. Experimental Biology* 219:1866-1874.
90. Ripple WJ, Chapron G, López-Bao JV.... Van Valkenburgh B,... and Zhang L. (37 authors). 2016. Saving the world's terrestrial megafauna. *BioScience* 66:807-812.



91. Ripple WJ, Chapron G, López-Bao JV.... Van Valkenburgh B,... and Zhang L. (37 authors). 2017. Conserving the world's megafauna: the fierce urgency of now. *BioScience* 67:197-200.
92. Rygg AT, Van Valkenburgh B, and Craven BA. 2017. The influence of sniffing on airflow and odorant deposition in the canine nasal cavity. *Chemical Senses* 42:683-698.
93. Mann SA, Van Valkenburgh B, and Hayward MH. 2017. Tooth fracture within the African carnivore guild: the influence of intraguild competition and resource availability. *Journal of Zoology* 303:261-269.
94. Brown C, Balisi M, Shaw CA, and Van Valkenburgh B. 2017. Skeletal trauma reflects hunting behavior in extinct sabre-tooth cats and dire wolves. *Nature Ecology and Evolution* 1: article no. 0131 doi:10.1038/s41559-017-0131.
95. Curtis AA, Orke M, Tetradis S, and Van Valkenburgh B. 2018. Diet-related differences in craniodental morphology between captive-reared and wild coyotes, *Canis latrans* (Carnivora: Canidae). *Biological Journal of the Linnean Society* 123:677-693, doi.org/10.1093/biolinnean/blx161.
96. Bird DJ, Murphy WJ, Rox-Rosales L, Hamid I, Eagle RA, and Van Valkenburgh B. 2018. Olfaction written in bone: cribriform plate size parallels olfactory receptor gene repertoires in Mammalia. *Proceedings of the Royal Society B*, dx.doi.org/10.1098/rpsb.2018.0100.
97. Stains M, Harshman J, Barker, MK .... Van Valkenburgh B, ...and Young AM (31 authors). 2018. Anatomy of STEM teaching in North American universities. *Science* 359:1468-1470.
98. Balisi M, Casey C, and Van Valkenburgh B. 2018. Dietary specialization is linked to reduced species durations in North American fossil canids. *Royal Society Open Science* 5: 171861. http://dx.doi.org/10.1098/rsos.171861.
99. Van Valkenburgh B, Pang B, Cherrin M, and Rook L. 2018. The cheetah: evolutionary history and paleoecology. Pp. 25-33, in Marker L, Boast LK, Schmidt-Kuntzel A (eds.), *Cheetahs: Biology and Conservation*. Academic Press, London.
100. Pang B, Van Valkenburgh B, Kitchell KF, Dickman A, and Marker L. 2018. History of the cheetah-human relationship. Pp. 17-24, in Marker L, Boast LK, Schmidt-Kuntzel A (eds.), *Cheetahs: Biology and Conservation*. Academic Press, London.
101. Figuerido B, Lautenschlager S, Perez-Ramos A, and Van Valkenburgh B. 2018. Three-dimensional biomechanics reveals distinct predatory behaviors in scimitar- and dirk-toothed sabertooth cats. *Current Biology* (in review).

## BOOK REVIEWS AND COMMENTARIES

- 2000 Review of *The History of the Origin, Evolution and Dispersal of the Late Pleistocene Mammuthus-Coelodonta Faunal Complex in Eurasia (Large Mammals)*, by Ralf-Dietrich Kahlke, *Quarterly Review of Biology* (accepted for publication).
- 1997 Review of *The Big Cats and their Fossil Relatives*, by A. Turner and M. Anton. *Quarterly Review of Biology* 72:478.
- 1987 An entangled bank -- The Smithsonian conference on the evolution of terrestrial ecosystems (with R. Beerbower and S. Scheckler). *Palaios* 2:526-527.

1988 Vertebrates, Phylogeny and Philosophy. (Review of Vertebrates, Phylogeny and Philosophy, J. Lillegraven and K.M. Flanagan, eds.) J. Vert. Paleo. 8:347-348.

## TEACHING AND FIELD EXPERIENCE

Professor, University of California, Los Angeles, 1986-present: vertebrate morphology, vertebrate paleontology, mammalogy, macroevolution, evolution of the cosmos and life  
Research on the systematics and morphology of Chilean canids, Chile, November 1993  
Research on the feeding behavior of large carnivores in the Masai Mara, Kenya, Summer 1989, 1990  
Research on ecology, morphology and genetics of East African jackals, Summer 1987; Kenya  
Crew Member, Leakey-Walker paleontological expedition to Rusinga Island, Kenya, Spring 1985  
Instructor, Human Anatomy and Embryology, The Johns Hopkins School of Medicine, 1984-1986  
Co-leader, Fieldwork in Vertebrate Paleontology, Summer 1978, 1980; New Mexico and Wyoming

## GRADUATE STUDENTS

Chairperson of 18 Ph.D. student committees.

Committee member, 17 Ph.D. and six M.S. students.

Theses completed under my direction:

Hertel, Fritz 1993. *Ecomorphological analysis of past and present guilds of avian scavengers.*  
Anyonge, William 1993. *Locomotor and dietary adaptations in large extinct and extant carnivorans.*

Deméré, Thomas 1994. *Phylogenetic systematics of the Family Odobenidae (Mammalia: Carnivora) with descriptions of new species from the Pliocene and a review of marine mammal paleofaunas of the world.*

Duckler, Georgie 1997. *An osteopathological assessment of the health of North American mammals from the upper Pleistocene (40,000-11,000 bp).*

Binder, Wendy 1998. *Functional aspects of tooth and jaw development in large carnivores.*

Sacco, Tyson 2001. *The functional morphology and evolutionary biology of bears.*

Frischia, Anthony R. 2004. *Paleobiology of carnivorous mammals in the North American Eocene.*

Adam, Peter J. 2007. *Morphological evolution in Cetacea: skull asymmetry and allometry of body size and prey.*

Samuels, Joshua X. 2008. *Paleoecology and functional morphology of beavers (Family Castoridae).*

Meachen-Samuels, Julie A. 2008. *Morphological indicators of prey-size preference in the Felidae.*

Slater, Graham J. 2009. *Biomechanical adaptations to predation in the carnivoran craniofacial skeleton.*

Curtis, Abigail A. 2014. *A 3-dimensional investigation of frontal sinus morphology and function in mammalian carnivores.*

Pang, Benison. 2017. *A Study of Respiratory Turbinal Morphology in Response to Evolutionary Pressure and Development*

Brown, Caitlin, 2017. *Interpreting Pleistocene Predator-Prey Dynamics: Inference from Skeletal Pathology, Dental Growth and Stature.*

Bird, Deborah J. 2017. *The cribriform plate: evolution of olfaction written in bone.*

Masters students (degrees completed):

Pollack, Ari (1999)

Kim, Sharon (1996)

## POSTDOCTORAL FELLOWS

Bird, Deborah J. 2017-

Rygg, Alex 2016-2017

Sedylmayr, Jayc 2001-2003

Theodor, Jessica 2001-2003

## **UCLA UNDERGRADUATE STUDENT RESEARCHERS (partial list, \*=co-author)**

Afrand, Sahar	Ganjian, Shahrouz	Lochhead, Louise Wealthy
Alburo, Anthony	Gershbock, Aaron	McKenzie, Neil Ryan
Amirkhanian, Arsineh*	Giambastiani, Christy	Moreand, Nicole
Bhatt, Roopak	Gilbert, Sophie Louise	Mount, Michael
Bonn, Amanda	Girman, Derek	Nguyen, Ronald
Camara, Anthony	Goodrich, Mavrick	Orke, Matthew*
Casey, Corrina*	Goody, Nicholas	Owada, Kumiko
Chan, Cindy	Gouine, Kim	Pang, Bension*
Chang, Karen	Goux, Hippolyte	Pollack, Ari
Chesler, Desiree	Green, Patrick*	Ramirez, Caroline
Chin, Matthew	Halpern, Zachery	Scott, Kim
Christianson, Celia	Hamid, Iman*	Sharma, Jayanti
Dahl, Melanie	Healy, Daniel	Somoano, Brian
Davydar, Yev	Helms, Will	Spafford, Claire
Dracolakis, Lisa	Horton, David	Starford, Brittny
Eckert, Kristin	Jett, Kristin	Thompson, Elicia Nicole
Farnkopf, Ian*	Kim, Sung Eun	Wedge, Daniel
Fartash, Arian	Lai, George*	Wizenfeld, Aaron
Foxman, Adam	Lampert, Alexandra	Wong, Ka Kim
Fox-Rosales, Lester*	Lazik, Ryan	
Galstyan, Anahit	Leavy, Michelle	
Yarosh, Will		

## **VISITING UNDERGRADUATE OR HIGH SCHOOL RESEARCHERS**

Leeann Louis, Summer 2008 (Hunter R. Rawlings III Presidential Research Scholar, Cornell University)  
Aisling Galligan, Winter Quarter, 2009 (from Dartmouth University)  
Annie McNutt, Fall 2010- 11, Marlborough High School, Los Angeles CA  
Katherine Ewell, 2011-12, Marlborough High School, Los Angeles CA  
Sania Syed, 2014, University High School, Los Angeles, CA  
Samantha Elms, 2014, University High School, Los Angeles, CA

## **SERVICE TO THE UNIVERSITY**

Member, Steering committee for CIRTL (Center for Integrated Research, Teaching and Learning) program at UCLA, 2016-present  
Member, Search Committee for division-wide hire for joint position with Center for Quantitative and Computational Biology in mathematical biology, 2017-2018.  
Member, Dean's Ad Hoc Committee to revise the Computational and Systems Biology Major 2016.  
Chair, Life Science committee on improving quantitative biology training for life science majors 2011-2016  
Co-Chair, Dean's Awards for teaching excellence committee 2013-15  
Member, LS Core Advisory Committee  
Member, Steering committee for NSF WIDER grant 2013-15  
Co-chair, Committee to organize a workshop on "Teaching Math to Life Science Students in the 21<sup>st</sup> Century" 2013-14  
Member, Advisory Board for the Center for Educational Innovation in the Life Sciences 2013-present  
Chair, Ad-hoc LS faculty committee to review the Chemistry curriculum for LS majors, 2013-14  
Ex-officio member, Ad-hoc LS faculty committee to review the Physics curriculum for LS majors, 2013- 2014  
Member, Foundations for Scientific Inquiry GE Curriculum Review committee, 2012

Member, Search committee for Dean and Vice Provost for Undergraduate Education, 2012  
 Chair, Life Science committee on quantitative biology training 2011-  
 Member, Dean's ad hoc committee on Bioscience Ph.D. programs 2011-  
 Member, Search Committee for the first Neikirk Term Chair in undergraduate education, 2011  
 Member, IoES/EEB Conservation Biologist search committee. 2010-2011  
 Member, Curriculum subcommittee, Campus Sustainability Committee, 2009-2011  
 Member, Committee on Research, 2010-2011  
 Chair, Darwin Celebration Committee, 2008-09  
 Member, 2008-09 Search Committee for the Life Sciences Dean  
 Participant, General Education meeting for WASC (Western Association of Schools and Colleges) 2008  
 Ad Hoc member, GE Governance review of Society and Culture, 2007-08  
 Member, IoE Personnel Committee, 2008-present  
 Member, GE Governance Committee 2007-present  
 Member, Campus-wide Sustainability Committee, 2007-present  
 Member, Academic subcommittee, Campus-wide Sustainability Committee, 2007-present  
 Faculty Sponsor, Bruin Equestrian Team, 2004-2006  
 Member, Chancellor's Competitiveness Task Force: Action Group on Space, 2002  
 Faculty panelist, Sciences Roundtable for Undergraduates, 2002  
 Member, Catalyst Mentorship Program, 1999  
 Campus Ad Hoc Review Committee, 1998  
 Member, Committee on Libraries, 1997-2001  
 Member, Anthropological Casts Review ad hoc committee, 1997-1998  
 Member, Chancellor's review committee for the Dean of Life Sciences, 1996-1997  
 Member, ad hoc committee of College of Letters and Science to monitor the implementation of the impacted course designation  
 Faculty speaker, UCLA Summer Orientation Program, 1995  
 Member, Life Sciences/Mathematics Coordinating Committee, 1994  
 Member, University Charges Committee, Academic Senate, 1993-1995  
 Member, Executive Committee, College of Letters and Science, 1993-1997  
 Member, Graduate Division Fellowship Review Committee, 1993-1994  
 Member, Life Sciences Cluster Course Subcommittee, College of Letters and Science, 1992-1993  
 Curator, UCLA Vertebrate Paleontology collections, 1989-present

## **SERVICE TO THE DEPARTMENT**

Botany Building Renovation Committee, 2017-2018  
 Personnel Committee, 2016-2018  
 Undergraduate Curriculum Committee, 2016-2018  
 EEB Department Co-Chair 2016-2017  
 La Kretz Graduate Research Awards Committee, member, 2016-17  
 GAANN Steering Committee, 2011-2014  
 Chair and P.I., Natural History NSF Collections Improvement Grant committee, 2008-10  
 Personnel Committee 2008-09  
 Development Committee 2008-2012  
 Evolutionary Biologist and Ecologist Search Committee 2007-08  
 Life Sciences Replacement Building, 2005-2006  
 Graduate Awards Committee, 2005  
 Graduate Admissions and Support Committee, 2005-2006  
 Department Graduate Awards Subcommittee, 2005-2006  
 IGERT Proposal Committee, 2005-2006  
 Committee on Departmental Written Qualifying Examination, 2005  
 Chair, ad hoc committee on graduate support packages, 2004-2006  
 Chair, Ecologist Search Committee, 2004-2005  
 Department Personnel Committee, 2004-2006  
 Department Ecologist Search Committee, Chair, 2004-2005

GAANN Proposal Committee, 2003-2005  
 Life Sciences Building Renovations Project Planning Committee, 2002-2003  
 Co-organizer with Joan Silk of joint departmental seminar series with Departments of Anthropology and Organismic Biology, Ecology, and Evolution, 2000-2001  
 Graduate Admissions and Support Committee, 1997  
 Planning Committee, 1994-1995  
 Ad hoc committee on "White Paper," 1994  
 Chair, Graduate Admissions and Support Committee, 1993-1996  
 Departmental Executive Council, 1993-1996  
 Member 1992, Chair 1992-1993, Evolutionary Biologist Search Committee Planning Committee, 1992  
 Committee on Staffing Needs, 1991-1992  
 Departmental Promotions Committee, 1990-1992  
 Member, Personnel Committee, 1990-1991  
 Chair, Integrative Biology Seminar Series committee, 1989-1990  
 Chair, Departmental Written Qualifying Exam Subcommittee on Morphology and Morphogenesis, Integrative Biology, 1989-1990  
 Co-chair, Committee on Graduate Studies In Evolutionary Biology at UCLA, 1988-1989  
 Chair, development of evolution program flyer for graduate recruitment, 1988-1989  
 Chair's special committee on undergraduate programs, 1988-1989  
 Spokesperson, Evolutionary Biology subgroup, Integrative Biology, 1988-1989  
 Curriculum and Scheduling Committee, 1987-1988  
 Division II Seminar Committee, Department of Biology, 1987-1988  
 Non-Mammalian Animal Care Committee, Department of Biology, 1986-1987  
 Biological Anthropologist Search Committee, Department of Anthropology, 1986-1987

## **SERVICE TO SOCIETY**

2016-17 Member, Search Committee for Asst. Curator of the Page Museum, LA County Museum of Natural History  
 2016 Invited Speaker, Dean's Circle event, Dec. 6  
 2016 Invited Speaker, UCLA Women and Philanthropy Fall Program  
 2015-16 Member, Search Committee for Curator of the Page Museum, LA County Museum of Natural History

### *Consulting Services*

2018 Scientific advisor, BBC quiz show "Curious Creatures"  
 2016 Scientific advisor, BBC show "Animal Weapons"  
 2014 Scientific advisor, Offspring Films (Bristol, UK) film on felid evolution  
 2014 Scientific advisor, Walt Disney animated feature on red fox behavior  
 2013 Scientific advisor, BBC film on olfaction in mammals  
 2013 Scientific advisor, BBC film on vision in mammals  
 2013 Consultant, children's book series on wild canines, Red Line Editorial.  
 2012 Scientific advisor, BBC series on the Ice Ages.  
 2011 Scientific advisor, National Geographic article on vertebrate hands.  
 2011 Scientific advisor, National Geographic film on Ice Age mammals.  
 2011 Scientific advisor, National Geographic film on polar bear evolution,  
 2010 Scientific Advisor, National Geographic documentary on "When Continents Collide"  
 2009 Scientific advisor. National Geographic film on cheetahs,  
 2009 Scientific Advisor, A Moment of Science radio program on pterosaurs  
 2007-2008 Scientific Advisor, travelling exhibition entitled, "TIGERS- Tracking a Legend" produced and designed by Carol Amore, wildlife photographer  
 2007 Consultant, planning process for a new exhibit on mammal evolution, LA County Museum of Natural History  
 2006 Scientific Advisor, "Fossil Mysteries" exhibition, San Diego Natural History Museum

- 2005 Scientific Advisor, “Be the Creature,” National Geographic Channel
- 2003 Scientific Advisor, National Geographic Channel, “Extinct!” series
- 2002-2003 Advisor, National Geographic Magazine, articles on dog evolution and the history of mammals
- 2000-2002 Scientific Advisor, “Dogs: Wolf, Myth, Hero, and Friend” exhibition, Los Angeles County Museum of Natural History
- 1994-1997 Guest Curator, Cats: Wild to Mild, a 5000 foot traveling exhibit developed by the Los Angeles County Museum of Natural History
- 1993-1996 Consulting Editor, McGraw Hill Yearbooks of Science and Technology
- 1991-1992 Consultant for book and television series on carnivores, Natural History Unit, British Broadcasting Corporation
- 1990 Consultant on television documentary on the African hunting dog, National Geographic Society
- 1990 Consultant, children’s book on cheetahs, Zoobooks

*Articles and Presentations for the Public*

- 2016 Southwestern University, Georgetown, TX, Phi Beta Kappa public lecture
- 2016 Trinity University, San Antonio, TX, Phi Beta Kappa public lecture
- 2016 James Madison University, Harrisonburg, PA, Phi Beta Kappa public lecture
- 2016 Roanoke College, Salem, VA, Phi Beta Kappa public lecture
- 2015 Wells College, Aurora, NY Phi Beta Kappa public lecture
- 2015 Hiram College, Hiram, OH, Phi Beta Kappa public lecture
- 2015 Centre College, Danville, KY, Phi Beta Kappa public lecture
- 2015 University of Mississippi, Oxford, MS, Phi Beta Kappa public lecture
- 2012 California Legacy Project, video interview on Rancho La Brea tar seeps.
- 2012 Presentation, “Categorically Not”, science and art cabaret, Santa Monica Art Studios (<http://categoricallynot.com/upcomingevents.html>)
- 2012 BBC series on the Ice Ages, video interview on sabertooth cats.
- 2009 UCLA Darwin Series speaker on sabertooth cats, November 18
- 2009 Radio interview for German radio station on Rancho La Brea tar seeps
- 2009 Scientific Advisor and televised speaker, National Geographic documentary on prehistoric “bear-dogs”
- 2008 “Herding saber-tooth cats” interview, Quirks and Quarks, Radio One, Canadian Broadcasting Company (<http://www.cbc.ca/quirks/archives/08-09/qq-2008-11-01.html#4>)
- 2008 Scientific Advisor and televised speaker, History Channel documentary on body size evolution
- 2008 Luncheon Speaker, Bruin Women, April 15, Faculty Center
- 2008 Scientific Advisor and televised speaker, National Geographic documentary on prehistoric “terror birds” and sabertooth cats
- 2006 Scientific Advisor and televised speaker, National Geographic documentaries on sabertooth cats and dire wolves
- 2005 “Predators of the Past,” invited lecture presented at the 2005 California Science Education Conference, Palm Springs, California
- 2004 “Origin of Land Mammals,” invited lecture to medical professionals at Encino-Tarzana Medical Center (Continuing Medical Education Program)
- 2004 “Sabertooth tigers, oh my!”, invited talk to second grade students at Victory Blvd. Elementary School, North Hollywood, California
- 2004 Van Valkenburgh, B. How to build a dog. Part 1: A bonanza of senses. *The Bark* 27:32-35.
- 2004 Van Valkenburgh, B. How to build a dog. Part 2: Form follows function. *The Bark* 28:40-44.

- 2004 Robinson, Janine, "Cat-alyt for Conservation: Champion for Carnivores," UCLA Today  
 2004 "Tales Told by Teeth," lecture provided to the docents of the George C. Page Museum  
 2003 "It's Lonely at the Top," interview, Quirks and Quarks, Radio One, Canadian Broadcasting Company  
 2003 Press conference for international journalists for an article in The Times of London on "Extinct," a National Geographic Channel series on Pleistocene predators  
 2002 "Walking with Prehistoric Beasts," BBC Television, interview  
 2001 Speaker, Wall-to-Wall television documentary, "Extinct"  
 2001 Interview, BBC documentary on saber-tooth cats  
 1999 Speaker, "Documenting Nature: The Collections of Donald Ryder Dickey," Friends of the UCLA Library  
 1998 Speaker, UCLA Chancellor's Associates Bruin Woods Weekend  
 1998 Lecturer, National Geographic Society  
 1998 Televised speaker, Glasshead Productions series on Evolution  
 1998 Contributor, Dynamerica film, "Body by Nature"  
 1997 Lecturer, Fellows Program, Los Angeles County Museum of Natural History  
 1997 Lecturer, Docents Program, Los Angeles County Museum of Natural History  
 1996 Televised speaker, KOCE-TV Coast educational telecourse series, "Cycles of Life"  
 1996 Televised speaker, Arts and Entertainment documentary on cats  
 1996 "Working with Cats," interview for web site of "Cats! Wild to Mild," Los Angeles County Museum of Natural History, [www.nhm.org/cats/bios/vanval/index.htm](http://www.nhm.org/cats/bios/vanval/index.htm).  
 1994 "Tough Times in the Tar Pits," Natural History, 4:84-85,  
 1993 Consultant and contributor, popular book on bears, Weldon-Owen Ltd.  
 1992 "From the Origin of Vertebrates to the Origin of Mammals," lecture in "Major Events in the History of Life, UCLA Extension/Center for the Study of Evolution and the Origin of Life, UCLA  
 1990 "Cats in communities: past and present." Article in Seidensticker, J. (ed.), Great Cats. Weldon Owen, Sydney, Australia.

## **SERVICE TO MY PROFESSION**

- Member, Nominating Committee, The Paleontological Society, 2013-2016  
 Organizer, Symposium on the vertebrate nose, International Congress of Vertebrate Morphologists, Barcelona, Spain, 2013.  
 Associate Editor, Journal of Vertebrate Paleontology, 2011-2017  
 Publications Committee, Society of Vertebrate Paleontology, 2011-present  
 Executive Committee, Society of Vertebrate Paleontology, 2006-2012  
 National Science Foundation grant proposals, reviewer, 1990-present  
 Invited participant, NSF Workshop on Grand Challenges in Sedimentary Geology and Paleontology. Tahoe, NV July 2010.  
 Invited Faculty, Mammal Research Institute Polish Academy of Sciences, 24-29th May 2010.  
 Advisory Board, National Center for Evolutionary Synthesis, Durham, NC, member 2009-2012.  
 Linnaeus Applications, Swedish Research Council, reviewer, 2006  
 Leakey Foundation grant proposals, reviewer, 2003-2006  
 Invited participant, National Academy of Sciences Frontiers in Polar Biology Workshop Tahoe, Nevada, 2001.  
 Member, Search committee for a Curator of Vertebrate Paleontology, Natural History Museum of Los Angeles County, 2001  
 Consultant, planning process for a new museum of natural history, Los Angeles County, 2000.  
 Member, External Committee to review the University of California, Berkeley Museum of Paleontology, 1997  
 International Union for the Conservation of Nature (IUCN), Canid Specialist Group, member 2001-2009  
 Systematics Agenda 2000: Earth History and Global Change Committee, member 2000-2001  
 Invited Participant, National Center for Ecological Analysis and Synthesis (NCEAS) working group on "Habitat and Climate Inference from the Structure of Mammal Communities", 1998-99.

Panel Member, Ecological and Evolutionary Physiology Program, National Science Foundation, 1994-1997.

Invited Participant, Conservation Assessment and Management Plan Workshop for Canids, Hyenas, and Aardwolves, Fossil Rim, Texas, 1997.

Associate Editor, *Evolution*, 1994-1996.

Smithsonian Institution, reviewer of grant proposals, 1990-99

National Geographic Society, reviewer of grant proposals, 1990-95.

### **INVITED LECTURES (last 14 years)**

- 2018 Keynote Speaker, American Society of Mammalogists Annual Meeting, Manhattan, KS
- 2017 Plenary Speaker, American Association of Anatomists Annual Meeting, Chicago, IL
- 2016 “The Natural History of Sabertooth Cats,” James Madison University, Harrisonburg, PA, Phi Beta Kappa research seminar
- 2016 “Other Worlds: the view from the Pleistocene”. University of Copenhagen, Copenhagen, Denmark.
- 2015 “The Natural History of Sabertooth Cats”. Hiram College, Hiram, OH, Phi Beta Kappa research seminar
- 2015 “Other Worlds: the view from the Pleistocene”. Centre College, Danville, KY, Phi Beta Kappa research seminar.
- 2015 “Complicated Noses: nasal turbinal anatomy and function in Carnivora”. Ohio University, Athens.
- 2014 “Inside the Carnivore Nose”. Royal Veterinary College, London, UK
- 2014 “Complicated Noses: nasal turbinal anatomy and function in Carnivora”. Society of Craniofacial Genetics and Developmental Biology, La Jolla, CA.
- 2014 “Predator-prey dynamics in late Pleistocene North America”, Conference on “Megafauna and Ecosystem Function from the Pleistocene to the Anthropocene”, Oxford, UK March 2014
- 2013 “Complicated Noses: nasal turbinal anatomy and function in Carnivora”. The Johns Hopkins School of Medicine, Baltimore, MD.
- 2013 “What can we learn from the past? Looking at extinct carnivores”, conference on “From Energetics to Macroecology: Carnivore Responses to Environmental Change”, Zoological Society of London, November 2014
- 2013 Wolf Research Conference, Yellowstone National Park, September 2013
- 2013 “Ecological Correlates of Nasal Turbinal Size in Carnivorans”, International Congress of Vertebrate Morphologists, Barcelona, Spain, July 2013.
- 2011 “Ecomorphology of Living and Fossil Carnivores”, Institute of Zoology, Chinese Academy of Sciences, Beijing.
- 2011 “Evolutionary Pattern and Process in Ancient Carnivores”. Institute of Vertebrate Paleontology and Paleoanthropology, Chinese Academy of Sciences, Beijing.
- 2011 “Large Predator Ecology: the View from the Pleistocene”, Swedish Academy of Sciences, Stockholm, Sweden.
- 2010 “Carnivore tooth fracture and Predator-Prey Dynamics”, 3rd International Paleontological Congress, Symposium on Mammals and Climate Change, London, UK
- 2010 “Lessons from Skeletons for Conservation Biologists,” BIOSEB Summer School, Mammal Research Institute, Bialowieza, Poland
- 2009 “Pleistocene Pandemonium : Tales told by Broken Teeth”. North American Paleontological Convention, symposium in honor of for J.B.J. Jackson
- 2009 “Sociality in sabertooths? New evidence from Rancho la Brea” Department of Geological Sciences, University of Oregon, Eugene.
- 2008 “Sociality in sabertooths? New evidence from Rancho la Brea” Department of Geological Sciences, University of Michigan, Ann Arbor
- 2008 “Finite Element Analysis of Cranial Form and Function in Canids”, Department of Ecology and Evolutionary Biology, University of Michigan, Ann Arbor



- 2008 “Solitary or Social”, Wolf Study group and park rangers, Yellowstone National Park, Mammoth Hot Springs, WY
- 2007 “Evolution of Feeding Adaptations in Carnivorans,” Symposium on Feeding Adaptations of Vertebrates, Society of Integrative and Comparative Biology Annual Meeting, Phoenix, Arizona
- 2006 “Tales Told by Skulls: Ecomorphology of Extinct and Extant Carnivores,” Department of Ecology and Evolutionary Biology, University of California, Irvine
- 2005 “The Rise and Fall of North American Canids,” Brown University, Section of Ecology and Evolutionary Biology
- 2005 University of California, Riverside, Department of Ecology and Evolutionary Biology
- 2005 “Cope’s Rule, Hypercarnivory and Extinction,” Center for the Study of Evolution and the Origin of Life, UCLA
- 2004 "Respiratory Turbinates of Canids and Felids Revealed by High-Resolution CT Scans," Center for Functional Anatomy and Evolution, The Johns Hopkins University, Maryland
- 2004 “The Rise and Fall of North American Canids,” University of Colorado, Boulder, Department of Environmental, Population, and Organismic Biology
- 2004 University of California, Santa Cruz, Department of Geology
- 2004 “Feeding Morphologies and Strategies in Carnivorous Synapsids,” Seventh International Congress on Vertebrate Morphology, Boca Raton, Florida

**PAPERS PRESENTED (last 10 years)**

- 2016 International Congress of Vertebrate Morphologists, Bethesda, MD
- 2015 Society of Vertebrate Paleontology, Dallas, TX
- 2014 16th International Symposium on Dental Morphology and 1st Congress of the International Association for Paleodontology. Zagreb, Croatia.
- 2013 Society of Vertebrate Paleontology Annual Meeting, Los Angeles
- 2013 10<sup>th</sup> International Congress of Vertebrate Morphologists, Barcelona
- 2013 Society for Integrative and Comparative Biology Annual Meeting, San Francisco, CA
- 2012 Society for Integrative and Comparative Biology Annual Meeting, Charleston, SC
- 2011 Society of Vertebrate Paleontology Annual Meeting, Raleigh, NC
- 2011 Society for Integrative and Comparative Biology Annual Meeting, Charlottesville, SC
- 2010 Society for Integrative and Comparative Biology Annual Meeting, Seattle, WA
- 2009 Society of Vertebrate Paleontology Annual Meeting, Cleveland, OH
- 2008 International Canine Science Forum, Budapest, Hungary