

## Curriculum Vitae

### David L. Cundall

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#### Degrees:

B.Sc. 1967. McGill University, Montréal, Québec.  
M.S. 1970. University of Arkansas, Fayetteville, AR.  
Ph.D. 1974. “ “

#### Work Experience:

Instructor of Zoology, University of Arkansas, Sept. 1972 - June 1974.  
Assistant Professor of Biology, Virginia Commonwealth University, Sept. 1974 - Aug. 1975.  
Assistant Professor of Biology, Lehigh University, Sept. 1975 - Aug. 1980.  
Associate Professor of Biology, Lehigh University, Sept. 1980 - Aug. 1992.  
Professor of Psychology, Lehigh University, Sept. 1992 - Aug. 1995  
Professor of Biological Sciences, Lehigh University, Sept. 1995-present

#### Courses Taught at Lehigh:

1. Introductory biology for both majors and non-majors.
2. Introductory vertebrate zoology (taught with one lab a week: designed the labs and wrote a lab manual).
3. Comparative vertebrate anatomy (with two labs a week).
4. Vertebrate field biology, vertebrate natural history (introductory field ecology course with six weekend field trips).
5. Invertebrate zoology (with two labs a week).
6. Genetics (taught twice).
7. Vertebrate Development (with two labs a week).
8. Vertebrate Histology (with two labs a week).
9. Evolution (taught 1/3 of course once)
10. Functional and Evolutionary Morphology (graduate level, with labs and demonstrations).
11. Experimental neuroscience (lab course developed and taught for two years for a neuroscience major that previously had no lab courses).
12. Herpetology/ Advances in Herpetology (undergraduate and graduate level, with labs and field trips).
13. Systematics and Evolution (graduate level).
14. Shapes in Nature (college seminar course—taught once).

### **Courses Taught at Lehigh:**

15. Integrative and Comparative Biology (sophomore introductory core course: designed and developed half the course and labs/ co-taught with C. Saldanha for five years: 2004-2008 and Murray Itzkowitz, 2015-present)

### **Thesis and Dissertation:**

Chromosomal analysis of three North American species of water snakes (genus *Natrix*). M.S. thesis, Univ. Arkansas, 1970. Advisor: William L. Evans

The cranial osteology and myology of the green snakes, genus *Opheodrys*. Ph.D. dissertation, Univ. Arkansas, 1974. Advisor: J. Martin Walker.

### **Publications: Refereed articles and book chapters**

1. Cundall, D. 1973. Variations in trigeminal foramen morphology in the snake genus *Opheodrys*. HISS News-Journ. 1, 17.
  2. Cundall, D., C. Gans 1979. Feeding in water snakes: An electromyographic study. J. Exp. Zool. 209, 189-208.
  3. Cundall, D. 1981. Cranial osteology of the colubrid snake genus *Opheodrys*. Copeia 1981, 352-371.
  4. Reinert, H. K., D. Cundall 1982. An improved surgical implantation method for radio-tracking snakes. Copeia 1982, 702-705.
  5. Cundall, D. 1983. Activity of head muscles during feeding by snakes: A comparative study. Amer. Zool. 23, 383-396.
  6. Erdman, S., D. Cundall 1984. The feeding apparatus of the salamander, *Amphiuma tridactylum*: Morphology and behavior. J. Morphol. 181, 175-204.
  7. Reinert, H. K., D. Cundall, L. M. Bushar 1984. Foraging behavior of the timber rattlesnake, *Crotalus horridus*. Copeia 1984, 976-981.
  8. Guilday, J. E., J. Cotter, D. Cundall, E. Evenson, J. Gatewood, A. V. Morgan, A. Morgan, A. McCrady, D. Peteet, R. Stuckenrath, K. Vanderwal. 1984. Paleocology of an early Pleistocene (Irvingtonian) cenote: Preliminary report on the Hanover Quarry No. 1 fissure, Adams County, Pennsylvania. p. 119-132. In: Correlation of Quaternary Chronologies, W. C. Mahaney (Ed.). Geo Books, Norwich, England.
- D. Cundall—Curriculum Vitae—3

9. Cundall, D., D. A. Rossman 1984. Quantitative comparisons of skull form in the colubrid snake genera *Farancia* and *Pseudoeryx*. *Herpetologica* 40, 388-405.
10. Cundall, D. 1986. Variations of the cephalic muscles in the colubrid snake genera *Entechinus*, *Opheodrys*, and *Symphimus*. *J. Morphol.* 187, 1-21.
11. Cundall, D., F. J. Irish 1986. Aspects of locomotor and feeding behavior in the Round Island boa, *Casarea dussumieri*. *Dodo, J. Jersey Wildl. Preserv. Trust* 23, 108-111.
12. Cundall, D. 1987. Functional morphology, p. 106-140. In: *Snakes: Ecology and Evolutionary Biology*, R. A. Seigel, J. T. Collins, and S. S. Novak (Eds.). Macmillan, New York.
13. Cundall, D., J. Lorenz-Elwood, J. D. Groves. 1987. Asymmetric suction feeding in primitive salamanders. *Experientia* 43, 1229-1231.
14. Cundall, D., F. J. Irish. 1989. The function of the intramaxillary joint in the Round Island boa, *Casarea dussumieri*. *J. Zool., Lond.* 217, 569-598.
15. Cundall, D., D. A. Rossman. 1993. Cephalic anatomy of the rare Indonesian snake *Anomochilus weberi*. *Zool. J. Linn. Soc.* 109, 235-273.
16. Cundall, D., V. Wallach, D. A. Rossman. 1993. The systematic relationships of the snake genus *Anomochilus*. *Zool. J. Linn. Soc.* 109, 275-299.
17. Elwood, J. R. L., D. Cundall 1994. Behavior and morphology of the feeding apparatus in *Cryptobranchus alleganiensis* (Amphibia: Caudata). *J. Morphol.* 220, 47-70.
18. Cundall, D., J. Shardo. 1995. Rhinokinetic snout of thamnophiine snakes. *J. Morphol.* 225, 31-50.
19. Cundall, D. 1995. Feeding behaviour in *Cylindrophis* and its bearing on the evolution of alethinophidian snakes. *J. Zool., Lond.* 237, 353-376.
20. Cundall, D., A. Deufel. 1999. Striking patterns in booid snakes. *Copeia* 1999, 868-883.
21. Deufel, A., D. Cundall. 1999. Do booids stab prey? *Copeia* 1999, 1102-1107.
22. Cundall, D., H. W. Greene. 2000. Feeding in snakes, pp. 293-333. In: *Feeding: Form, Function, and Evolution in Tetrapod Vertebrates*. K. Schwenk (Ed.). Academic Press, San Diego.

23. Cundall, D. 2000. Drinking in snakes: kinematic cycling and water transport. *J. Exp. Biol.* 203, 2171-2185.
24. Cundall, D., S. J. Beaupre. 2001. Field records of predatory strike kinematics in timber rattlesnakes, *Crotalus horridus*. *Amphibia-Reptilia* 22, 492-498.
25. Cundall, D. 2002. Envenomation strategies, head form, and feeding ecology in vipers, pp. 149-161. In: *Biology of the Vipers*, G. Schuett, M. Höggren, M. E. Douglas, and H. W. Greene (eds.). Eagle Mountain Publishing, Utah.
26. Deufel, A., D. Cundall. 2003. Feeding in *Atractaspis* (Serpentes: Atractaspididae): A study in conflicting functional constraints. *Zoology* 106, 43-61.
27. Deufel, A., D. Cundall. 2003. Prey transport in “palatine-erecting” elapid snakes. *J. Morphol.* 258, 358-375.
28. Cundall, D., A. Deufel. 2006. Influence of the venom delivery system on intraoral prey transport in snakes. *Zool. Anz.* 245, 193-210.
29. Deufel, A., D. Cundall. 2006. Functional plasticity of the venom delivery system in snakes with a focus on the poststrike prey release behavior. *Zool. Anz.* 245, 249-267.
30. Cundall, D., A. Deufel, F. Irish. 2007. Feeding in boas and pythons: motor recruitment patterns during striking, pp. 169-197. In: *Biology of the Boas and Pythons*, R. W. Henderson and R. Powell (eds.), Eagle Mountain Publishing, Utah.
31. Buckley, C. A., J. E. Schneider, D. Cundall. 2007. Kinematic analysis of an appetitive food-handling behavior: The functional morphology of Syrian hamster cheek pouches. *J. Exp. Biol.* 210, 3096-3106.
32. Pattishall, A., D. Cundall. 2008. Dynamic changes in body form during swimming in water snakes, *Nerodia sipedon*. *Zoology* 111, 48-61.
33. Pattishall, A., D. Cundall. 2008. Spatial biology of Northern Watersnakes (*Nerodia sipedon*) living along an urban stream. *Copeia* 2008, 752-762.
34. Cundall, D., F. J. Irish. 2008. The snake skull, pp. 349-692. In: *Biology of the Reptilia*, Vol. 20, Morphology H, C. Gans, A. S. Gaunt, and K. Adler (eds.). SSAR, Ithaca, New York.
35. Cundall, D. 2009. Viper fangs: functional limitations of extreme teeth. *Physiol. Biochem. Zool.* 82, 63-79.

36. Pattishall, A., D. Cundall. 2009. Habitat use by synurbic watersnakes (*Nerodia sipedon*). *Herpetologica* 65, 183-198.
37. Deufel, A., D. Cundall. 2010. Functional morphology of the palato-maxillary apparatus in “palatine dragging” snakes (Serpentes: Elapidae: *Acanthophis*, *Oxyuranus*). *J. Morphol.* 271, 73-85.
38. Cundall, D., A. Pattishall. 2011. Foraging time investment in an urban population of watersnakes (*Nerodia sipedon*). *J. Herpetol.* 45, 174-177.
39. Cundall, D., E. L. Brainerd, J. A. Constantino, A. Deufel, D. Grapski, N. Kley. 2012. Drinking in snakes: resolving a biomechanical puzzle. *J. Exp. Zool.* 317, 152-172.
40. Close, M., D. Cundall. 2012. Mammals as prey: Estimating ingestible size. *J. Morphol.* 273, 1042-1049.
41. Close, M., D. Cundall. 2014. Snake lower jaw skin: Extension and recovery of a hyperextensible keratinized integument. *J. Exp. Zool.* 321A, 78-97.
42. Cundall, D., C. Tuttmann, M. Close. 2014. A model of the anterior esophagus in snakes, with functional and developmental implications. *Anat. Rec.* 297, 586-598.
43. Close, M., S. Perni, C. Franzini-Armstrong, D. Cundall. 2014. Highly extensible skeletal muscle in snakes. *J. Exp. Biol.* 217, 2445-2448.
44. Cundall, D., A. Deufel, G. MacGregor, A. Pattishall, M. Richter. 2016. Effects of size, condition, measurer and time on measurements of snakes. *Herpetologica* 72, 227-234.
45. Fernandez, E., F. Irish, D. Cundall. 2017. How a frog, *Pipa pipa*, succeeds or fails in catching fish. *Copeia* 105, 108-119.
46. Cundall, D., E. Fernandez, F. Irish. 2017. The suction mechanism of the pipid frog, *Pipa pipa* (Linnaeus, 1758). *J. Morphol.* 278, 1229-1240.

**Published reviews and comments:**

1. Cundall, D. 1993. Review of “Australian Snakes: A Natural History,” by Richard Shine. *Copeia* 1993: 908-911.
2. Cundall, D. 1999. Review of “Biology of the Reptilia, Vol. 19. Morphology G. Visceral organs,” edited by Carl Gans and Abbot S. Gaunt. *Copeia* 1999: 847-850.

3. Cundall, D. 1999. Review of "A Kansas Snake Community: Composition and Changes Over 50 Years," by Henry S. Fitch. *Quart. Rev. Biol.* 74: 487-488.
4. Greene, H. W. and D. Cundall. 2000. Perspectives: Evolutionary Biology: Limbless tetrapods and snakes with legs. *Science* 287:1939-1941.
5. Cundall, D. 2014. Review of "How Snakes Work: Structure, Function, and Behavior of the World's Snakes" by Harvey B. Lillywhite. *Herp. Rev.* 45:365-368.

**Popular articles/book chapters:**

1. Cundall, D. 2003. False blindsnakes (Anomochilidae). In: Grzimek's Animal Life Encyclopedia, 2nd Edition, Vol. 7:387-389. M. Hutchins, J.B. Murphy & N. Schlager (eds.). Gale Group, Farmington Hills, Michigan.
2. Cundall, D. 2003. Shieldtail snakes (Uropeltidae). In: Grzimek's Animal Life Encyclopedia, 2nd Edition, Vol. 7:391-394. M. Hutchins, J.B. Murphy & N. Schlager (eds.). Gale Group, Farmington Hills, Michigan.
3. Cundall, D. 2003. Pipe snakes (Cylindrophiiidae). In: Grzimek's Animal Life Encyclopedia, 2nd Edition, Vol. 7:395-397. M. Hutchins, J.B. Murphy & N. Schlager (eds.). Gale Group, Farmington Hills, Michigan.
4. Cundall, D. 2003. False coral snakes (Aniliidae). In: Grzimek's Animal Life Encyclopedia, 2nd Edition, Vol. 7:399-400. M. Hutchins, J.B. Murphy & N. Schlager (eds.). Gale Group, Farmington Hills, Michigan.
5. Cundall, D. 2003. Sunbeam snakes (Xenopeltidae). In: Grzimek's Animal Life Encyclopedia, 2nd Edition, Vol. 7:401-403. . M. Hutchins, J.B. Murphy & N. Schlager (eds.). Gale Group, Farmington Hills, Michigan.

**Published Letters:**

1. Greene, H. W. and D. Cundall. 2000. Response to Lee et al. *Science* 288:1344-1345.
2. Cundall, D. entry in: Murphy, J. B. and H. M. Smith. 2013. In memorium: David Alfred Chiszar (1944-2013), with reflections from colleagues and friends. *Herp. Rev.* 44:188-195.

**Published and Unpublished  
Abstracts and Meeting Presentations:**

1. Cundall, D. 1970. The chromosomes of three species of *Natrix*. Amer. Soc. Ichthyologists and Herpetologists (ASIH), New Orleans, LA
2. Rossman, D. A. and D. Cundall 1977. Comparative cranial osteology of *Farancia* and *Pseudoeryx*: Systematic implications. Joint Herp. League/SSAR meeting, Lawrence, KS.
3. Cundall, D. and C. Gans 1977. A preliminary electromyographic analysis of ingestion by *Nerodia* (Serpentes: Reptilia). Amer. Zool. 17:871.
4. Cundall, D. 1981. Patterns of cephalic muscle activity during feeding in the cottonmouth, *Agkistrodon piscivorus*. ASIH, Corvallis, OR.
5. Cundall, D. and H. W. Greene 1982. Evolution of the feeding apparatus in alethinophidian snakes. Amer. Zool. 22:924.
6. Erdman, S. and D. Cundall 1983. Form and function of the feeding apparatus in *Amphiuma tridactylum*. ASIH, Tallahassee, FL.
7. Reinert, H. K., D. Cundall and L. M. Bushar 1983. Observations on the foraging behavior of the timber rattlesnake, *Crotalus horridus*. ASIH, Tallahassee, FL.
8. Cundall, D. 1984. Feeding behavior in the primitive snake, *Cylindrophis rufus*. Joint annual meeting of ASIH, Herp. League, SSAR, Norman, OK.
9. Cundall, D. and J. S. Cundall. 1985. Snout mobility in some natricine snakes. Amer. Zool. 25:45A.
10. Cundall, D., J. Lorenz and J. D. Groves 1986. Asymmetries in jaw and hyoid movements during feeding in *Cryptobranchus*. ASIH, Victoria, British Columbia.
11. Cundall, D. and F. J. Irish 1987. The function of the intramaxillary joint of the Mascarene bolyeriid snake, *Casarea dussumieri*. Joint meeting of SSAR, Herp. League and Com. Herp. Nac., Veracruz, Mexico.
12. Cundall, D. and D. A. Rossman 1988. Fossoriality and skull form in *Anomochilus* and other primitive snakes. Amer. Zool. 28:37A.
13. Cundall, D. 1993. Evolution of feeding mechanics in snakes. Invited symposium presentation, joint annual meeting of ASIH, Herp. League, and AES, Austin, TX.

## Abstracts (cont.)

14. Cundall, D. and J. McHugh 1994. HERPS: The project and its purpose. PAEE Jour.
15. Cundall, D. 1995. Snake length, bending, and intervertebral joint function. Joint annual meeting of ASIH, AES, and HL, Edmonton, Alberta.
16. Cundall, D. and J. McHugh 1995. Microgeographic herpetofaunal distributions in Northampton County, PA. SSAR, Boone, North Carolina.
17. Cundall, D. 1995. Drinking in snakes. Amer. Zool. 35: 106A
18. Braun, T. B., and D. Cundall. 1995. Hydrodynamics of fishing in snakes (*Nerodia*). Am. Zool. 35: 105A
19. Cundall, D. 1996. A view of snakes through their noses. Northeast Regional Meeting, Division of Vertebrate Morphology, Amherst, MA.
20. Goldman, S. and D. Cundall. 1996. Snakes, balance and gravity. Northeast Regional Meeting, Division of Vertebrate Morphology, Amherst, MA.
21. Cundall, D. 1996. A view of snakes through their noses. Vertebrate Biology Symposium, Shippensburg University, Shippensburg, PA.
22. Knepper, J. and D. Cundall. 1996. Microgeographic herpetofaunal distributions in Northampton County, PA. Vertebrate Biology Symposium, Shippensburg University, Shippensburg, PA.
23. Deufel, A. and D. Cundall. 1997. Do boids stab prey? Northeast Regional Meeting, Division of Vertebrate Morphology, University of Connecticut, Storrs, CT.
24. Cundall, D. 1998. Striking in boid snakes. Joint annual meeting Amer. Soc. Ichthyol. Herpetol., SSAR, Herpetol. League, AES, CAH University of Guelph, Guelph, Ontario.
25. Cundall, D. 1998. Evolution of the squamate suspensorium. Northeast regional meeting of the Division of Vertebrate Morphologists, Soc. Int. Comp. Biol., Harvard Univ., Cambridge, MA, Nov. 7.
26. Cundall, D. 1998. Squamate suspensorial evolution and feeding behavior. Amer. Zool. 38:12A.
27. Deufel, A. and D. Cundall. 1999. What form defines function? A cautionary case from elapid snakes. Amer. Zool. 39:97A.



**Abstracts (cont.):**

28. Cundall, D. 2000. Envenomation strategies, head form, and feeding ecology in vipers. Biology of the Vipers Symposium, Uppsala, Sweden, May 17-20.
29. Cundall, D. 2000. Feeding in snakes: Relationships among structure, function, phylogeny and ecology. Invited symposium presentation, 21<sup>st</sup> Congress of the European Society of Comparative Physiology and Biochemistry, Liège, Belgium, July 24-28: Comp. Physiol. Biochem. 126A, S35.
30. Deufel, A. and D. Cundall. 2000. Feeding in stiletto snakes. Amer. Zool. 40:996.
31. Deufel, A. and D. Cundall. 2001. Function of the palato-maxillary apparatus of elapid snakes during prey transport. Ann. Meeting ASIH, Penn State, July.
32. MacGregor, G. and D. Cundall. 2001. Using body posture as an indicator of feeding readiness in free-ranging *Crotalus horridus*. Ann. Meeting ASIH, Penn State, July.
33. Deufel, A. and D. Cundall. 2001. Functional units in the palato-maxillary apparatus of higher snakes. J. Morphol. 248: 223.
34. Cundall, D. 2002. Drinking in snakes shows elements of play. Ann. Meeting ASIH, Herp. League, SSAR, Kansas City, MO, July 3-8.
35. Deufel, A. and D. Cundall. 2002. An evolutionary scenario for the origin of the strange feeding mechanism of *Atractaspis*. Ann. Meeting ASIH, Herp. League, SSAR, Kansas City, MO, July 3-8.
36. Cundall, D. and N. Ford. 2002. *Xenopeltis unicolor*: Evolution of unilateral jaw movement and macrostomy in snakes. Integr. Comp. Biol. 42: 1215.
37. Cundall, D., H. W. Greene and M. Russell. 2003. Evolution of motor action patterns: constriction in vipers. SICB-DVM SE Regional Meeting, James Madison Univ., Harrisonburg, VA, Sept 27.
38. Cundall, D., N. J. Kley and J. C. O'Reilly. 2004. Burrowing in snakes: past efforts and future directions. J. Morphol. 260: 285.
39. Cundall, D. and A. Deufel. 2004. Influence of envenomation on ingestion mechanics in snakes. J. Morphol. 260: 285.

## Abstracts (cont.)

40. Deufel, A. and D. Cundall. 2004. Functional plasticity of the venom injection system in snakes. *J. Morphol.* 260: 287.
41. Buckley, C. A., D. Cundall, and J. Schneider. 2004. How Syrian hamsters fill their cheek pouches: Co-opted masticatory motor patterns and the role of the retractor muscle. *Society for Comparative and Behavioral Endocrinology*, 2004.
42. Buckley, C. A., J. Schneider, and D. Cundall. 2004. How Syrian hamsters fill their cheek pouches: co-opted masticatory motor patterns and the role of the retractor muscle. *Int. Comp. Biol.* 44: 531.
43. Cundall, D., F. Irish, and A. Deufel. 2005. Feeding in boas and pythons: motor recruitment patterns during striking. *Ann. Meeting ASIH, Herp. League, SSAR, Tampa Fl.*, July 6-11.
44. Cundall, D. 2006. The control of rapid head movements during striking in snakes. Invited talk presented at a symposium titled "New Directions in Snake Biology" sponsored by the Sociedade Brasileira de Herpetologia, Instituto de Biociências e Museu de Zoologia, Universidade de São Paulo, and the Butantan Institute, São Paulo, Brasil, June 9-11.
45. Cundall, D. and A. Pattishall. 2006. Anatomy underlying the body form of swimming watersnakes, *Nerodia sipedon*. *Joint Ann. Meeting ASIH, Herp. League, SSAR, New Orleans*, July 12-17.
46. Pattishall, D. and D. Cundall. 2006. Facultative flattening of the trunk in swimming *Nerodia sipedon*. *Joint Ann. Meeting ASIH, Herp. League, SSAR, New Orleans*, July 12-17.
47. Cundall, D. 2007. The viper strike. Talk presented at Natural Bridge State Resort Park's Herpetology Weekend 2007, May 4, 2007, Natural Bridge, KY.
48. Cundall, D., A. Deufel, G. MacGregor, and A. Pattishall. 2007. Measuring snakes. *Joint Ann. Meeting ASIH, Herp. League, SSAR, St. Louis, MO*, July 11-16.
49. Cundall, D. 2007. Viper fangs: functional limitations of extreme teeth. *ICVM-8, Symposium paper presentation, Paris, France*, July 16-23.
50. Pattishall, A. and D. Cundall. 2008. Habitat use of Northern Watersnakes (*Nerodia sipedon*) living along an urban stream. Presentation given at the Fifth Annual Lehigh Valley Ecology and Evolution Symposium, Lafayette College, April 12, 2008.

**Abstracts (cont.)**

51. Close, M. and D. Cundall. 2008. Lower jaw extensibility in snakes. Presentation given at the Fifth Annual Lehigh Valley Ecology and Evolution Symposium, Lafayette College, April 12, 2008.
52. Grapski, D. and D. Cundall. 2008. The muscular basis of drinking in snakes. Poster presentation given at the Fifth Annual Lehigh Valley Ecology and Evolution Symposium, Lafayette College, April 12, 2008.
53. Pattishall, A. and D. Cundall. 2008. A new home range estimator for sedentary species that move along corridors. Joint Ann. Meeting ASIH, HL, SSAR, AES, CAH, Montreal, Quebec, July 23-28.
54. Pattishall, A. and D. Cundall. 2009. Habitat use and spatial biology of Northern Watersnakes living along an urban stream. Invited symposium presentation at the Urban Wildlife Ecology and Management Conference sponsored by The Wildlife Society at the University of Massachusetts, Amherst, MA, June 21-24.
55. Cundall, D. and A. Pattishall. 2009. Time devoted to foraging by watersnakes (*Nerodia sipedon*). Snake Ecology Group Meeting, Donnelly, Idaho, July 18-20.
56. Cundall, D., F. Irish, D. Grapski, and J. Constantino. 2009. Drinking homologies in snakes: Another window on evolution. Joint Ann. Meeting ASIH, HL, SSAR, AES, Portland, OR, July 22-27.
57. Close, M. and D. Cundall. 2009. Anatomical and histological correlates to snake lower jaw function. Joint Ann. Meeting ASIH, HL, SSAR, AES Portland, OR, July 22-27.
58. Close, M. and D. Cundall. 2010. Prey size and its effect on snake lower jaw behavior. Lehigh Valley Ecology and Evolution Symposium oral presentation (Awarded Best Graduate Student Oral Presentation), Lehigh University,
59. Close, M. and D. Cundall. 2010. Differences in lower jaw form and function among three macrostomatan snake families. Joint Ann. Meeting ASIH, HL, SSAR, AES Providence, RI, July 7-12.
60. Ecker, J. and D. Cundall. 2011. Tooth form along the tooth-row in snakes. LVEES poster, Muhlenberg College, April 16, 2011.

**Abstracts (cont.):**

61. Close, M. and D. Cundall. 2011. The snake lower jaw apparatus: arriving at a model for extreme extensibility. SICB Division of Vertebrate Morphology SE Regional Meeting, Wake Forest University, Winston-Salem, NC.
62. Perni, S, M. Close, D. Cundall, and C. Franzini-Armstrong. 2012. High levels of calsequestrin in some snake muscles. Why? Biophysical Journal 102(3), Suppl. 1:366a.
63. Close, M. and D. Cundall. 2012. Extensible tissues and their contribution to macrostomy in snakes. Society of Integrative and Comparative Biology Annual Meeting, Charleston, SC, January 3-7, 2012.
64. Cohen, J. and D. Cundall. 2012. Mealtime acrobatics without limbs. Lehigh Valley Ecology and Evolution Symposium poster, DeSales University, April 14, 2012. This was also presented as an oral presentation at the Eckardt Scholar Symposium at Lehigh University on April 29, 2012, and won the Lemmon Prize.
65. Thiel, A. J. and D. Cundall. 2012. Responses of rodents to strikes by boas and pythons. LVEES poster, DeSales University, April 14, 2012.
66. Tuttmann, C., J. Wise, M. Close and D. Cundall. 2012. Where does the snake esophagus begin? LVEES poster, DeSales University, April 14, 2012.
67. Close, M. and D. Cundall. 2012. Mammals as snake prey: Determining ingestible size. LVEES oral presentation (Awarded Best Graduate Student Oral Presentation), DeSales University, April 14, 2012.
68. Cundall, D., C. Tuttmann and M. Close. 2013. The extraordinary nature of the anterior gut in snakes. Joint Meeting of Ichthyologists and Herpetologists, Albuquerque, NM, July 10-15.
69. Cundall, D and G. Cundall. 2013. How skin aids arboreal locomotion in cornsnakes (*Pantherophis guttatus*). N.E. Regional meeting of the Divisions of Vertebrate Morphology and Comparative Biomechanics of SICB, Yale University, Oct. 19<sup>th</sup>.
70. Fernandez, E. and D. Cundall. 2014. How an aquatic frog, *Pipa pipa*, catches fish. LVEES poster, Cedar Crest College, March 29, 2014.
71. Cundall, D and S. Deban. 2014. Extraordinary aspects of pitviper predatory strikes. 2<sup>nd</sup> Pitviper Conference, Tulsa OK, June 4-7, 2014.

**Abstracts (cont.):**

72. Cundall, D. 2015. Performance, morphology, and natural history. Regional DVM/DCB meeting, Newark, NJ, November 7, 2015.
73. Cundall, D., E. Fernandez, and F. Irish. 2016. *Pipa pipa*: Evolutionary innovation in a suction mechanism. Joint Meeting of Ichthyologists and Herpetologists, New Orleans, LA, July 6-10, 2016.

**Professional Affiliations and Society Memberships:**

American Association for the Advancement of Science  
Society for Integrative and Comparative Biology  
American Society of Ichthyologists and Herpetologists  
Society for the Study of Evolution  
Society for the Study of Amphibians and Reptiles  
The Herpetologists' League  
International Society of Vertebrate Morphologists  
Sigma Xi  
Canadian Association of Herpetologists  
Societas Europea Herpetologica  
South American Herpetological Society  
American Association for Zoological Nomenclature

**Professional Service:**

American Society of Zoologists Education Committee Member, 1977-1978.  
Herpetologists' League Graduate Research Award Committee, 1995.  
Chair, Joint Committee of ASIH, HL, SSAR for support of student travel, 1987-1989.  
ASIH, Board of Governors, member 1988-1992, 2001-2005.  
Herpetologists' League Book Review and Essay Editor, *Herpetologica*, 1986 - 1993.  
ASIH Co-Editor (shared with F. J. Irish) for General Herpetology, *Copeia*, 1991 - 1997.  
ASIH Nominating Committee, member 1998-1999. 2002-2004 (committee chair, 2003-2004).  
ASIH Storer Award Committee, member, 2002.  
ASIH *Copeia* ad hoc committee: 2004. Charged by President Pat Gregory, chaired by Scott Schaefer  
ASIH Stoye Award Committee, member, 1988, 1998, 1999, chair, Genetics, Development and Morphology section, 2005.  
ASIH Endowment and Finance Committee: member 2009—2014.  
ASIH Endowment and Finance Committee: chair 2011-2013.  
The Herpetologists' League, Vice President, [elected position], Feb. 2007-Dec. 2007.  
The Herpetologists' League, President, January 1, 2008—December 31, 2009.  
The Herpetologists' League, member, Board of Trustees, Feb. 2007-Dec. 2015.  
Society for the Study of Amphibians and Reptiles, Board of Directors, 2009-2012.

**Professional Service, cont.:**

The Herpetologists' League: Nominating Committee, chair, 2010-2011.

The Herpetologists' League, Editorial Board member, 2011-present.

Society for the Study of Amphibians and Reptiles, Editorial Board member, 2012-present.

Herpetologists' League, E. E. Williams Award, chair of the systematics and morphology section judges for proposals submitted 2014: judge, 2012, 2013, 2015.

Herpetologists' League ad hoc committee on constitutional and by-laws review, member.

Charged by President James Spotila. Chaired by Vice President David Green, 2014-2015.

Herpetologists' League Student Award judge, for oral presentations presented at the Joint Meeting of Ichthyologists and Herpetologists, New Orleans, July 7-10, 2016.

**Reviewed manuscripts for:**

Science, Nature, Evolution, PLoS One, American Naturalist, Journal of Experimental Biology, Journal of Zoology, Acta Zoologica, Systematic Biology, Zoologischer Anzeiger, Copeia, Herpetologica, Journal of Herpetology, Herpetological Monographs, Journal of Paleontology, Journal of Vertebrate Paleontology, Memorie della Societa Italiana di Scienze Naturali e del Museo Civico di Storia Naturale di Milano, Fieldiana: Zoology (Publ. of the Field Museum, Chicago), Bulletin of the Museum of Comparative Zoology-Harvard, Amphibia-Reptilia, Ecology, Functional Ecology, Animal Behaviour, Behaviour, Cambridge Biological Reviews, Biology of the Vipers symposium proceedings, Biology of the Boas and Pythons symposium proceedings (the latter two both published as books), Marine and Fresh Water Research, Physiological and Biochemical Zoology, Zoological Journal of the Linnean Society, Journal of Morphology, University of California Press [book manuscript], Academic Press [book manuscript], Journal of Anatomy, Animal Biology, Evolutionary Ecology, Acta Herpetologica, Anatomical Record, Biological Journal of the Linnean Society, BMC Evolutionary Biology, Russian J. Herpetology, Southwestern Naturalist, Journal of Experimental Zoology A, Current Herpetology, Journal of Ethology.