Dean C. Adams

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Education

1999	Ph.D.	Ecology & Evolutionary Biology, Stony Brook University
1994	M.S.	Biology, University of Louisiana, Lafayette
1992	B.A.	Biology, Franklin & Marshall College

Academic Appointments

2021 – Pres.	Distinguished Professor	Dept. Ecology, Evolution, and Organismal Biology, Iowa State Univ.
2022–2023	Vis. Professor	Institute of Biological Evolution, Barcelona, Spain
2012 – 2021	Professor	Dept. Ecology, Evolution, and Organismal Biology, Iowa State Univ.
2012 – 2018	Professor	Dept. Statistics, Iowa State Univ.
2015 – 2016	Professeur Invité	Laboratoire Biogéosciences, Université de Bourgogne, France
2015 – 2016	Chercheur Invité	Conseil Régional de Bourgogne, France
2006 – 2012	Assoc. Professor	Dept. Ecology, Evolution, and Organismal Biology, Iowa State Univ.
2006 – 2012	Assoc. Professor	Dept. Statistics, Iowa State Univ.
2009 – 2010	Vis. Assoc. Prof.	Museo di Storie Naturale, Università degli Studi di Firenze, Italy
2001 – 2006	Assist. Professor	Dept. Ecology, Evolution, and Organismal Biology, Iowa State Univ.
2001 – 2006	Assist. Professor	Dept. Statistics, Iowa State Univ.
1999 – 2001	NSF Postdoc.	Iowa State Univ.

Administrative Appointments

2018 – 2022	Chair & Director	Ecology & Evolutionary Biology Grad. Program, Iowa State Univ.
2017 – 2019	Exec. Vice Pres.	Society of Systematic Biologists
2017 – 2019	Exec. Joint Council	American Society of Naturalists, Society for the Study of Evolution, Society of Systematic Biologists

Honors and Awards

2023	Senior Fellow	Fulbright Program, Barcelona, Spain
2021	Distinguished Professor	Iowa State University
2019	Rohlf Medal	Stony Brook University
2018	Fellow (elected)	American Association for the Advancement of Science (AAAS)
2018	Service Award	International: College of Liberal Arts and Sciences, Iowa State Univ.
2014	Research Award	Mid-Career: College of Liberal Arts and Sciences, Iowa State Univ.
2011	Teaching Award	Outstanding: College of Liberal Arts and Sciences, Iowa State Univ.
2005	Career Award	National Science Foundation

Major Grants ($3.5 Million Total)

2022 – 2025	NSF	Collaborative research: OPUS: Permutational Biometry: Synthesizing the analytics of data analysis in ecology and evolution PI: Dean Adams, Co-PI: Michael Collyer. (DEB-2140720)
2019 – 2022	NSF	Collaborative research: CIBR: Geomorph - statistical software for shape analysis: Enhancing usability, performance, and methods PI: Dean Adams, Co-PI: Michael Collyer. (DBI-1902511)
2016 – 2020	NSF	Collaborative Research: Extension of phylogenetic comparative methods for evaluating within-species, microevolutionary patterns in a macroevolutionary context. PI: Dean Adams, Co-PI: Michael Collyer. (DEB-1556379)
2013 – 2016	NSF	Evolution of the multivariate phenotype: phylogenetic tests of rates of size and shape evolution in salamanders. (DEB-1257287)
2011 – 2015	NSF	Evolutionary convergence or parallelism? Examining recurrent patterns of phenotypic evolution in marine scallops. PI: Jeanne Serb, Co-PI: Dean Adams (DEB-1118884)
2005 – 2011	NSF	CAREER: Evolutionary community ecology in *Plethodon* salamanders. (DEB-0446758)
2001 – 2003	NSF	Research Starter Grant: The morphological consequences of competition in Plethodon salamanders. (DEB-0122281)
1999 – 2001	NSF	Postdoctoral Research Fellowship in Biological Informatics: Comparison of three-dimensional protein structures using geometric morphometrics. (DBI-9974207)
1998 – 2000	NSF	Doctoral Dissertation Improvement Grant: Extensions of landmark-based morphometrics methods to articulated structures: an example using *Plethodon*. PI: F. James Rohlf; Co-PI: Dean Adams. (IBN-9800636)

Publications (‡indicates lab member): Google Scholar

Scholarly metrics: H-index = 66; i_{10} = 128; total citations = 23968;

154. 2025 Mitteroecker, P., M.L. Collyer, and **D.C. Adams**. 2025. Exploring phylogenetic signal in multivariate phenotypes by maximizing Blomberg's *K*. *Systematic Biology*. (In Press).

153. 2024 Burriel-Carranza, B., T. Koppetsch, J. Tabares, A. Talavera, A., G. Mochales-Riaño, M. Estrellas, B. Wipfler, J. Els, M. Simo-Riudalbas, **D.C. Adams**, S. Al Saadi, J. Garcia-Porta, K. Tamar, J. Smid, S. Carranza. 2024.Cryptic speciation in arid mountains: An integrative revision of the *Pristurus rupestris* species complex (Squamata, Sphaerodactylidae) from Arabia based on morphological, genetic and genomic data, with the description of four new species. *PLoS ONE*. (Accepted).

152. 2024 **Adams, D.C.**, and M.L. Collyer. 2024. Extending Phylogenetic Regression Models for Comparing Within-Species Patterns Across the Tree of Life. *Methods in Ecology and Evolution*. 15:2234-2246.

151. 2024 Glynne, E.‡, and **D.C. Adams**. 2024. The effect of miniaturization on the evolution of sexual size dimorphism in geckos. *Evolution*. 78:1275–1286.

150. 2024 Talavera, A., E.E. Valbuena-Ureña, B. Burriel-Carranza, G. Mochales-Riaño, **D.C. Adams**, F. Amat, F. Carbonell, S. Carranza. 2024. Integrative systematic revision of the Montseny brook newt (*Calotriton arnoldi*), with the description of a new subspecies. *PeerJLife*. 12:e17550.

149. 2024 Collyer, M.L., and **D.C. Adams**. 2024. Interrogating random and systematic measurement error in morphometric data. *Evolutionary Biology*. 51:179-207.

148. 2024 Talavera, A., M. Palmada-Flores. B. Burriel-Carranza, E. Emilio Valbuena-Ureña, G. Mochales-Riaño, **D.C. Adams**, H.Tejero-Cicuéndez, A. Soler-Membrives, F. Amat, D. Guinart, F. Carbonell, E. Obon, T. Marques-Bonet and S. Carranza. 2023. Genomic insights into the Montseny brook newt (*Calotriton arnoldi*), a Critically Endangered glacial relict. *iScience*. 108665.

147. 2023 Reyes-Puig, C., **D. C. Adams**, U. Enriquez-Urzelai, and A. Kaliontzopoulou. 2023. Rensch's Rule: linking intraspecific to evolutionary allometry. *Evolution*. 77:2576–2589.

146. 2023 Tejero-Cicuéndez, H., I. Menéndez, A. Talavera, G. Riaño, B. Burriel-Carranza, M. Simó-Riudalbas, S. Carranza, and **D. C. Adams**. 2023. Evolution along allometric lines of least resistance: Morphological differentiation in *Pristurus* geckos. *Evolution*. 77:2547–2560.

145. 2023 Porter, C., F. Romero, **D.C. Adams**, R. Bowie, and E. Riddell. 2023. Adaptive and non-adaptive convergent evolution in feather reflectance of Channel Islands songbirds. *Proceedings of the Royal Society, B.* 290:20231914.

144. 2023 Juarez, B.H.‡, D.S. Moen, and **D.C. Adams**. 2023. Ecology, sexual dimorphism, and jumping evolution in anurans. *Journal of Evolutionary Biology*. 36:829–841.

143. 2022 Conaway, M.A.‡, and **D.C. Adams**. 2022. An effect size for comparing the strength of morphological integration across studies. *Evolution*. 76: 2244–2259.

142. 2022 Baken, E.K.‡, **D.C. Adams**, and M.S. Rentz. 2022. Jigsaw method improves learning and performance for observation-based undergraduate biology laboratory activities. *Journal of Biological Education*. 56:317–322.

141. 2022 Juarez, B.H.‡ and **D.C. Adams**. 2022. Evolutionary allometry of sexual dimorphism of jumping performance in anurans. *Evolutionary Ecology*. 36:717–733.

140. 2022 Audino, J., **D.C. Adams**, and J.M. Serb. 2022. Variation in eye abundance among scallops reveals ontogenetic and evolutionary convergence associated with life habits. *Evolution*. 76:1607–1618.

139. 2022 **Adams, D.C.**, and M.L. Collyer. 2022. Consilience of methods for phylogenetic analysis of variance. *Evolution*. 76:1406–1419.

138. 2022 Collyer, M.L., E.K. Baken, and **D.C. Adams**. 2022. A Standardized Effect Size for Evaluating and Comparing the Strength of Phylogenetic Signal. *Methods in Ecology and Evolution*. 13:367-382.

137. 2021 Baken, E.K., M.L. Collyer, A. Kaliontzopoulou, and **D.C. Adams**. 2021. geomorph v4.0 and gmShiny: enhanced analytics and a new graphical interface for a comprehensive morphometric experience. *Methods in Ecology and Evolution*. 12:2355-2363.

136. 2021 Baken, E.K., L. Mellenthin‡, and **D.C. Adams**. 2021. Is salamander arboreality limited by broad-scale climatic conditions? *PLoS ONE*. 16(8): e0255393.

135. 2021 Ruden, R.M., J.S. Adelman, and **D.C. Adams**. 2021. Using multivariate analyses to explore disease progression of finch mycoplasmosis. *Journal of Wildlife Diseases*. 57:525-533.

134. 2021 Collyer, M.L., and **D.C. Adams**. 2021. Phylogenetically aligned component analysis. *Methods in Ecology and Evolution*. 12:359-372.

133. 2020 **Adams, D.C.**, E. Glynne‡, and A. Kaliontzopoulou. 2020. Interspecific allometry for sexual shape dimorphism: Macroevolution of multivariate sexual phenotypes with application to Rensch's Rule. *Evolution*. 74:1908-1922.

132. 2020 Juarez, B.H.‡, D.S. Moen, and **D.C. Adams**. 2020. A morphological method to approximate jumping performance in anurans for macroevolutionary studies. *Evolutionary Biology*. 47:260-271.

131. 2020 Collyer, M.L., M.A. Davis, and **D.C. Adams**. 2020. Making heads or tails of combined landmark configurations in geometric morphometric data. *Evolutionary Biology*. 47:193-205.

130. 2020 Baken, E.K.‡, L. Mellenthin‡, and **D.C. Adams**. 2020. Macroevolution of desiccation-related morphology in plethodontid salamanders as inferred from a novel surface area to volume ratio estimation approach. *Evolution*. 74:476-486.

129. 2019 **Adams, D.C.**, and M.L. Collyer. 2019. Comparing the strength of modular signal, and evaluating alternative modular hypotheses, using covariance ratio effect sizes with morphometric data. *Evolution*. 73:2352-2367.

128. 2019 **Adams, D.C.**, and M.L. Collyer. 2019. Phylogenetic comparative methods and the evolution of multivariate phenotypes. *Annual Review of Ecology, Evolution, and Systematics*. 50:405-425.

127. 2019 Baken, E.K‡., and **D.C. Adams**. 2019. Macroevolution of arboreality in salamanders. *Ecology and Evolution*. 9:7005-7016.

126. 2019 Escalona, T., N. Valenzuela, and **D.C. Adams**. 2019. Do local environmental factors and lunar cycle influence timing and synchrony of oviposition of a turtle with strict nocturnal nesting? *Diversity*. 11(5): 78. doi.org/10.3390/d11050078.

125. 2019 Gallaher, T.J., **D.C. Adams**, L. Attigala, S.V. Burke, J.M. Craine, M.R. Duvall, P.C. Klahs, E. Sherratt, W.P. Wysocki, and L.G. Clark. 2019. Leaf shape tracks transitions across forest-grassland boundaries in the grass family (Poaceae). *Evolution*. 73:927-946.

124. 2018 Collyer, M.L, and **D.C. Adams**. 2018. RRPP: An R package for fitting linear models to high-dimensional data using residual randomization. *Methods in Ecology and Evolution*. 9:1772-1779.

123. 2018 **Adams, D.C.**, and M.L. Collyer. 2018. Phylogenetic ANOVA: Group-clade aggregation, biological challenges, and a refined permutation procedure. *Evolution*. 72: 12-4-1215.

122. 2018 **Adams, D.C.**, and J.D. Nason. 2018. A phylogenetic comparative method for evaluating trait coevolution across two phylogenies for sets of interacting species. *Evolution*. 72: 234-243.

121. 2018 Escalona, T., **D.C. Adams**, and N. Valenzuela. 2018. A lengthy solution to the optimal propagule size problem in the large-bodied South American Freshwater Turtle, *Podocnemis unifilis*. *Evolutionary Ecology*. 32:29-41.

120. 2018 **Adams, D.C.**, and M.L. Collyer. 2018. Multivariate phylogenetic comparative methods: Evaluations, comparisons, and recommendations. *Systematic Biology*. 67:14-31.

119. 2017 Sherratt, E., J.M. Serb, and **D.C. Adams**. 2017. Rates of morphological evolution, asymmetry and morphological integration of shell shape in scallops. *BMC Evolutionary Biology*. 17(248):1-10.

118. 2017 Serb, J.S., E. Sherratt, A. Alejandrino, and **D.C. Adams**. 2017. Phylogenetic convergence and multiple shell shape optima for gliding scallops (Bivalvia: Pectinidae). *Journal of Evolutionary Biology*. 30:1736-1747.

117. 2017 **Adams, D.C.**, D. Korneisel‡, M. Young‡, and A. Nistri. 2017. Natural history constrains the macroevolution of foot morphology in European plethodontid salamanders. *American Naturalist*. 190:292-297.

116. 2017 Bohórquez-Herrera, J., D. Aurioles-Gamboa, C. Hernández-Camacho and **D.C. Adams**. 2017. Variability in the Skull Morphology of Adult Male California Sea Lions and Galapagos Sea Lions. Pp. 22-49 in: *Tropical pinnipeds: Bio-ecology, threats and conservation*. (J.J. Avala ed). CRC Press.

115. 2017 Cayuela, M.L., E. Aguilera, A. Sanz-Cobena, **D.C. Adams**, D. Abalos, L. Barton, R. Ryals, W.L. Silver, M.A. Alfaro, V.A. Pappa, P. Smith, J. Garnier, G. Billen, L. Bouwman, A. Bondeau, and L. Lassaletta. 2017. Direct nitrous oxide emissions in Mediterranean climate cropping systems: Emission factors based on a meta-analysis of available measurement data. *Agriculture, Ecosystems and Environment*. 238:25-35.

114. 2016 **Adams, D.C.**, and M.L. Collyer. 2016. On the comparison of the strength of morphological integration across morphometric datasets. *Evolution*. 70:2623-2631.

113. 2016 Sherratt, E.‡, A. Alejandrino‡, A.C. Kraemer‡, J.M. Serb, and **D.C. Adams**. 2016. Trends in the sand: directional evolution in the shell shape of recessing scallops (Bivalvia: Pectinidae). *Evolution*. 70:2061-2073.

112. 2016 Kraemer, A.C.‡, J.M. Serb, and **D.C. Adams**. 2016. Both novelty and conspicuousness influence selection on *Plethodon cinereus* color morphs by mammal predators. *Biological Journal of the Linnean Society*. 118:889-900.

111. 2016 **Adams, D.C.** 2016. Evaluating modularity in morphometric data: Challenges with the RV coefficient and a new test measure. *Methods in Ecology and Evolution*. 7:565-572.

110. 2016 Kaliontzopoulou, A., and **D.C. Adams**. 2016. Phylogenies, the comparative method and the conflation of tempo and mode. *Systematic Biology*. 65:1-15.

109. 2015 Collyer, M.L., D.J. Sekora, and **D.C. Adams**. 2015. A method for analysis of phenotypic change for phenotypes described by high-dimensional data. *Heredity*. 115: 357-365.

108. 2015 Denton, J.S.S., and **D.C. Adams**. 2015. A new phylogenetic test for comparing multiple high-dimensional evolutionary rates suggests interplay of evolutionary rates and modularity in lanternfishes (Myctophiformes; Myctophidae). *Evolution*. 69:2425-2440.

107. 2015 Salvidio, S., F. Crovetto, and **D.C. Adams**. 2015. Rapid evolution of foot morphology in Italian plethodontid salamanders (*Hydromantes strinatii*) following the colonization of an artificial cave. *Journal of Evolutionary Biology*. 28:1403-1409.

106. 2015 Kraemer, A.C.‡, J.M. Serb, and **D.C. Adams**. 2015. Model toxin level does not directly influence the evolution of mimicry in the salamander *Plethodon cinereus*. *Evolutionary Ecology*. 29:511-523.

105. 2015 Kraemer, A.C.‡, J.M. Serb, and **D.C. Adams**. 2015. Batesian mimics influence the evolution of conspicuousness in an aposematic salamander. *Journal of Evolutionary Biology*. 28:1016-1023.

104. 2015 Rice, J.W., M.C. Clough, J.K. Olson, **D.C. Adams**, and J.T. Colbert. 2015. University faculty and their knowledge and acceptance of biological evolution. *Evolution, Education, and Outreach*. 8:8. doi:10.1186/s12052-015-0036-5

103. 2015 Bohórquez-Herrera, J., V. H. Cruz-Escalona, **D.C. Adams**, and M. S. Peterson. 2015. Feeding ecomorphology of seven demersal marine fish species in the Mexican Pacific Ocean. *Environmental Biology of Fishes*. 98:1459-1473.

102. 2015 **Adams, D.C.**, and M.L. Collyer. 2015. Permutation tests for phylogenetic comparative analyses of high-dimensional shape data: what you shuffle matters. *Evolution*. 69: 823-829.

101. 2015 Kaliontzopoulou, A.‡, M.A. Carretero, and **D.C. Adams**. 2015. Ecomorphological variation in male and female wall lizards and the macroevolution of sexual dimorphism in relation to habitat use. *Journal of Evolutionary Biology*. 28:80-94.

100. 2014 **Adams, D.C.** 2014. A method for assessing phylogenetic least squares models for shape and other high-dimensional multivariate data. *Evolution*. 68:2675-2688.

99. 2014 **Adams, D.C.** 2014. A generalized K statistic for estimating phylogenetic signal from shape and other high-dimensional multivariate data. *Systematic Biology*. 63:685-697.

98. 2014 Caruso, N.M., M. Sears, **D.C. Adams**, and K.R. Lips. 2014. Widespread rapid reductions in body size of Appalachian salamanders in response to climate change. *Global Change Biology*. 20:1751-1759.

97. 2014 **Adams, D.C.** and R. Felice. 2014. Assessing phylogenetic morphological integration and trait covariation in morphometric data using evolutionary covariance matrices. *PLoS ONE*. 9(4):e94335.

96. 2014 Kraemer, A.C.‡, and **D.C. Adams**. 2014. Predator perception of Batesian mimicry in a salamander. *Evolution*. 68:1197-1206.

95. 2014 Condon, M.A., S.J. Scheffer, M. Lewis, R. Wharton, **D.C. Adams**, and A.A. Forbes. 2014. Lethal interactions between parasites and prey increase niche diversity in a tropical community. *Science*. 343:1240-1244.

94. 2014 Rivera, G.‡, J.N. Davis‡, J.C. Godwin, and **D.C. Adams**. 2014. Parallel evolution of habitat-associated divergence in shell shape of turtles. *Evolutionary Biology*. 41:29-37.

93. 2014 **Adams, D.C.** 2014. Quantifying and comparing phylogenetic evolutionary rates for shape and other high-dimensional phenotypic data. *Systematic Biology*. 63:166-177.

92. 2013 Kelly, C.D., K.E. Folinsbee, **D.C. Adams**, and M.D. Jennions. 2013. Intraspecific sexual size and shape dimorphism in an Australian freshwater fish differs with respect to a biogeographic barrier and latitude. *Evolutionary Biology*. 40:408-419.
91. 2013 Collyer, M. L., and **D.C. Adams**. 2013. Phenotypic trajectory analysis: Comparison of shape change patterns in evolution and ecology. *Hystrix*. 24:75-83.
90. 2013 **Adams, D.C.** F. J. Rohlf, and D.E. Slice. 2013. A field comes of age: Geometric morphometrics in the 21st century. *Hystrix*. 24:7-14.
89. 2013 Weiner, S.A., D.A. Galbraith, **D.C. Adams**, N. Valenzuela, F.B. Noll, C.M. Grozinger, and A.L. Toth. 2013. A survey of DNA methylation across social insect species, life stages, and castes reveals abundant and caste-associated methylation in a primitively social wasp. *Naturwissenschaften*. 100:795-799.
88. 2013 Outomuro, D., **D.C. Adams**, and F. Johansson. 2013. Wing shape allometry and aerodynamics in calopterygid damselflies: a comparative approach. *BMC Evolutionary Biology*. 13(118):1-11.
87. 2013 Outomuro, D., **D.C. Adams**, and F. Johansson. 2013. Evolution of wing shape in ornamented-winged damselflies. *Evolutionary Biology*. 40:300-309.
86. 2013 Berns, C.M.‡, and **D.C. Adams**. 2013. Becoming different but staying alike: patterns of sexual size and shape dimorphism in bills of hummingbirds. *Evolutionary Biology*. 40:246-260.
85. 2013 Ceballos, C., **D.C. Adams**, J. Iverson, and N. Valenzuela. 2013. Phylogenetic patterns of sexual size dimorphism in turtles and their implications for Rensch´s rule. *Evolutionary Biology*. 40:194-208.
84. 2013 **Adams, D.C.**, and E. Otárola-Castillo. 2013. geomorph: an R package for the collection and analysis of geometric morphometric shape data. *Methods in Ecology and Evolution*. 4:393-399.
83. 2013 Deitloff, J., J.D. Petersen, and **D.C. Adams**. 2013. Complex species interactions lead to unpredictable outcomes in *Plethodon*. *Herpetologica*. 69:1-10.
82. 2013 **Adams, D.C.** 2013. Comparing evolutionary rates for different phenotypic traits on a phylogeny using likelihood. *Systematic Biology*. 62:181-192.
81. 2012 Kraemer, A.C.‡, J. Kissner‡, and **D.C. Adams**. 2012. Morphological color changes in the red-backed salamander (*Plethodon cinereus*) while kept in captivity. *Copeia*. 2012:748-755.
80. 2012 Rabosky, D.L., and **D.C. Adams**. 2012. Rates of morphological evolution are correlated with species richness in salamanders. *Evolution*. 66:1807-1818.
79. 2012 Kaliontzopoulou, A.‡, **D.C. Adams**, A. van der Meijden, A. Perera, and M.A. Carretero. 2012. Relationships between head morphology, bite performance and ecology in two species of *Podarcis* wall lizards. *Evolutionary Ecology*. 26:825-845.
78. 2012 Blankers, T., **D.C. Adams**, and J.J. Wiens. 2012. Ecological radiation with limited morphological diversification in salamanders. *Journal of Evolutionary Biology*. 25:634-646.
77. 2012 Donnelly, J., **D.C. Adams**, and J. Dekker. 2012. Does phylogeny determine the shape of the outer seed hull in Setaria seeds? Pp. 101-142 In: Dekker, J., *D.C. Adams*, A. van Aelst, B. Dekker, J. Donnelly, and M. Haar, M. Hargrove, H. Hilhorst, C. Karssen, J. Lathrop, E. Luschei, and D. Todey. 2012. Weedy *Setaria* seed germination-dormancy behavior: Regulatory compartmentalization. Lambert Academic Publishing, Saarbrücken, Germany. ISBN: 978-3-659-24309-7. 214. Pp.
76. 2012 Dekker, J., **D.C. Adams**, A. van Aelst, B. Dekker, J. Donnelly, and M. Haar, M. Hargrove, H. Hilhorst, C. Karssen, J. Lathrop, E. Luschei, and D. Todey. 2012. Weedy *Setaria* seed germination-dormancy behavior: Regulatory compartmentalization. Lambert Academic Publishing, Saarbrücken, Germany. ISBN: 978-3-659-24309-7. 214 Pp.
75. 2011 **Adams, D.C.**, and J.O. Church‡. 2011. The evolution of large-scale body size clines in *Plethodon*: evidence of heat-balance or species-specific artifact? *Ecography*. 34:1067-1075.

74. 2011 Serb, J.M., A. Alejandrino‡, E. Otárola-Castillo‡, and **D.C. Adams**. 2011. Morphological convergence of shell shape in distantly related scallop species (Mollusca: Pectinidae). *Zoological Journal of the Linnean Society*. 163:571-584.
73. 2011 **Adams, D.C.** 2011. Quantitative genetics and evolution of head shape in *Plethodon* salamanders. *Evolutionary Biology*. 38:278-286.
72. 2011 Valenzuela, N., and **D.C. Adams**. 2011. Chromosome number and sex determination co-evolve in turtles. *Evolution*. 65:1808-1813.
71. 2011 **Adams, D.C.** A. Cardini, L. R. Monteiro, P. O'Higgins, and F.J. Rohlf. 2011. Morphometrics and phylogenetics: principal components of shape from cranial modules are neither appropriate nor effective cladistic characters. *Journal of Human Evolution*. 60:240-243.
70. 2010 Kelly, C.D., and **D.C. Adams**. 2010. Sexual selection, ontogenetic acceleration, and hypermorphosis generates male trimorphism in Wellington tree weta. *Evolutionary Biology*. 37:200-209.
69. 2010 Piras, P., P. Colangelo, **D.C. Adams**, A. Buscalioni, J. Cubo, T. Kotsakis, C. Meloro, and P. Raia. 2010. The Gavialis-Tomistoma debate: the contribution of skull ontogenetic allometry and growth trajectories to the study of crocodylian relationships. *Evolution and Development*. 12:568-579.
68. 2010 Berns, C.M.‡, and **D.C. Adams**. 2010. Bill shape and sexual shape dimorphism between two species of temperature hummingbirds: *Archilochus alexandri* (black-chinned hummingbirds) and *Archilochus colubris* (ruby-throated hummingbirds). *The Auk*. 127:626-635.
67. 2010 **Adams, D.C.** and A. Nistri. 2010. Ontogenetic convergence and evolution of foot morphology in European cave salamanders (Family: Plethodontidae). *BMC Evolutionary Biology*. 10(216):1-10.
66. 2010 **Adams, D.C.** 2010. Parallel evolution of character displacement driven by competitive selection in terrestrial salamanders. *BMC Evolutionary Biology*. 10(72):1-10.
65. 2009 Deitloff, J.‡, J.O. Church‡, **D.C. Adams**, and R.G. Jaeger. 2009. Interspecific agonistic behaviors in a salamander community: implications for alpha-selection. *Herpetologica*. 65:174-182.
64. 2009 Escalona, T., **D.C. Adams**, and N. Valenzuela. 2009. Nesting ecology in the freshwater turtle *Podocnemis unifilis*: spatiotemporal patterns and inferred evolutionary explanations. *Functional Ecology*. 23:826-835.
63. 2009 **Adams, D.C.**, C.M. Berns‡, K.H. Kozak, and J.J. Wiens. 2009. Are rates of species diversification correlated with rates of morphological evolution? *Proceedings of the Royal Society of London, B.* 276:2729-2738.
62. 2009 Butterworth, K.M.‡, **D.C. Adams**, H.T. Horner, and J.F. Wendel. 2009. Initiation and early development of fiber in wild and cultivated cotton. *International Journal of Plant Sciences*. 170:561-574.
61. 2009 **Adams, D.C.**, and M.L. Collyer. 2009. A general framework for the analysis of phenotypic trajectories in evolutionary studies. *Evolution*. 63:1143-1154.
60. 2009 Marsteller, S., **D.C. Adams**, M.L. Collyer, and M. Condon. 2009. Six sympatric cryptic species on a single host plant: morphometric evidence for possible reproductive character displacement. *Ecological Entomology*. 34:66-73.
59. 2008 Myers, E.M.‡, and **D.C. Adams**. 2008. Morphology is decoupled from interspecific competition in *Plethodon* salamanders in the Shenandoah Mountains. *Herpetologica*. 64:281-289.
58. 2008 Berner, D., **D.C. Adams**, A.C. Grandchamp, and A.P. Hendry. 2008. Inferring natural selection from patterns of lake-stream divergence in stickleback foraging morphology. *Journal of Evolutionary Biology*. 21:1653-1665.
57. 2008 Olson, C.R.‡, C.M. Vleck, and **D.C. Adams**. 2008. Decoupling morphological development from growth in periodically cooled zebra finch embryos. *Journal of Morphology*. 269:875-883.

56. 2008 Deitloff, J.‡, **D.C. Adams**, B.F.M. Olechnowski, and R.G. Jaeger. 2008. Interspecific aggression in Ohio *Plethodon*: implications for competition. *Herpetologica*. 64:180-188.
55. 2008 Condon, M., **D.C. Adams**, D. Bann, K. Flaherty, J. Gammons, J. Johnson, M.L. Lewis, S. Marsteller, S.J. Scheffer, F. Serna, and S. Swensen. 2008. Uncovering tropical diversity: six sympatric cryptic species of *Blepharoneura* (Diptera: Tephritidae) in flowers of Gurania spinulosa (Cucurbitaceae) in eastern Ecuador. *Biological Journal of the Linnean Society*. 93:779-797.
54. 2008 **Adams, D.C.** 2008. Phylogenetic meta-analysis. *Evolution*. 62:567-572.
53. 2008 **Adams, D.C.**, and J.O. Church‡. 2008. Amphibians do not follow Bergmann's rule. *Evolution*. 62:413-420.
52. 2007 Collyer, M.L.‡, C.A. Stockwell, **D.C. Adams**, and M.H. Reiser. 2007. Phenotypic plasticity and contemporary evolution in introduced populations: evidence from translocated populations of white sands pupfish. *Ecological Research*. 22:902-910.
51. 2007 Arif, S.‡, **D.C. Adams**, and J.A. Wicknick. 2007. Bioclimatic modeling, morphology, and behavior reveal alternative mechanisms regulating the distributions of two parapatric salamander species. *Evolutionary Ecology Research*. 9:843-854.
50. 2007 **Adams, D.C.** 2007. Organization of *Plethodon* salamander communities: guild-based community assembly. *Ecology*. 88:1292-1299.
49. 2007 **Adams, D.C.**, and M.L. Collyer‡. 2007. Analysis of character divergence along environmental gradients and other covariates. *Evolution*. 61:510-515.
48. 2007 Collyer, M.L.‡, and **D.C. Adams**. 2007. Analysis of two-state multivariate phenotypic change in ecological studies. *Ecology*. 88:683-692.
47. 2007 **Adams, D.C.**, M.E. West‡, and M.L. Collyer‡. 2007. Location-specific sympatric morphological divergence as a possible response to species interactions in West Virginia *Plethodon* salamander communities. *Journal of Animal Ecology*. 76:289-295.
46. 2007 **Adams, D.C.**, and M.M. Cerney‡. 2007. Quantifying biomechanical motion using Procrustes motion analysis. *Journal of Biomechanics*. 40:437-444.
45. 2006 Hollander, J., **D.C. Adams**, and K. Johannesson. 2006. Evolution of adaptation through allometric shifts in a marine snail. *Evolution*. 60:2490-2497.
44. 2006 Hollander, J., M.L. Collyer‡, **D.C. Adams**, and K. Johannesson. 2006. Phenotypic plasticity in two marine snails: constraints superseding life-history. *Journal of Evolutionary Biology*. 19:1861-1872.
43. 2006 Myers, E.M.‡, F.J. Janzen, **D.C. Adams**, and J.K. Tucker. 2006. Quantitative genetics of plastron shape in slider turtles (*Trachemys scripta*). *Evolution*. 60:563-572.
42. 2006 Maerz, J.C., E.M. Myers‡, and **D.C. Adams**. 2006. Trophic polymorphism in a terrestrial salamander. *Evolutionary Ecology Research*. 8:23-35.
41. 2005 Fedrigo, O.†, **D.C. Adams**, and G.J.P. Naylor. 2005. DRUIDS – Detection of regions with unexpected internal deviation from stationarity. *Journal of Experimental Zoology (Molecular and Developmental Evolution)*. 304B:119-128.
40. 2004 Cerney, M.M.‡, and **D.C. Adams**. 2004. Sequestering Size: The Role of Allometry and Gender in Digital Human Modeling. *SAE Transactions Journal of Aerospace*. 113:208-214. (republication of: Cerney and Adams, 2004. Proc. SAE Dig. Hum. Mod. Conf.).
39. 2004 Valenzuela, N., **D.C. Adams**, R.M. Bowden, and A.C. Gauger‡. 2004. Geometric morphometric sex estimation for hatchling turtles: a powerful alternative for detecting subtle sexual shape dimorphism. *Copeia*. 2004:735-742.
38. 2004 **Adams, D.C.** 2004. Character displacement via aggressive interference in Appalachian salamanders. *Ecology*. 85:2664-2670.
37. 2004 Swart, C.C., and **D.C. Adams**. 2004. The role of muscle mass and tooth number in ecological character displacement between *Plethodon cinereus* and *P. hoffmani* (Caudata: Plethodontidae). *Herpetologica*. 60:408-413.

36. 2004 Kassam, D.D., **D.C. Adams**, and K. Yamaoka. 2004. Functional significance of variation in trophic morphology within feeding microhabitat-differentiated cichlid species in Lake Malawi. *Animal Biology*. 54:77-90.
35. 2004 Loy, A., M. Corti, **D.C. Adams**, D.E. Slice, and F.J. Rohlf, guest editors. 2004. Proceedings of the Rome Geometric Morphometric Workshop. Homage to Leslie F. Marcus. *Special Publication of the Italian Journal of Zoology*, Mucchi Editore, Modena. 71(1). 88 pp.
34. 2004 **Adams, D.C.**, F.J. Rohlf, and D.E. Slice. 2004. Geometric morphometrics: Ten years of progress following the 'revolution'. *Italian Journal of Zoology*. 71:5-16.
33. 2004 Loy, A., M. Corti, **D.C. Adams**, D.E. Slice, and F.J. Rohlf. 2004. Introduction to the proceedings. Italian Journal of Zoology. 71:1-3.
32. 2004 Cerney, M.M.‡, and **D.C. Adams**. 2004. Sequestering Size: The Role of Allometry and Gender in Digital Human Modeling. *Proceedings of the SAE Digital Human Modeling Conference*. Syracuse, Michigan. 2004-04DHM-38.
31. 2003 Naylor, G.J.P., and **D.C. Adams**. 2003. Total evidence versus relevant evidence: response to O'Leary et al. (2003). *Systematic Biology*. 52:864-865.
30. 2003 Kassam, D.D., **D.C. Adams**, A.J.D. Ambali, and K. Yamaoka. 2003. Body shape variation in relation to resource partitioning within cichlid trophic guilds coexisting along the rocky shore of Lake Malawi. *Animal Biology*. 53:59-70.
29. 2003 Kassam, D.D., **D.C. Adams**, M. Hori, and K. Yamaoka. 2003. Morphometric analysis on ecomorphologically equivalent cichlid species from Lakes Malawi and Tanganyika. *Journal of Zoology*. 260:153-157.
28. 2003 Valenzuela, N., **D.C. Adams**, and F.J. Janzen. 2003. Pattern does not equal process: Exactly when is sex environmentally determined? *American Naturalist*. 161:676-683.
27. 2003 Ashlock, D., **D.C. Adams**, and D. Doty. 2003. Morphometric grayscale texture analysis using foot patterns. *Proceedings of the 2003 Congress on Evolutionary Computation*. 1575-1582.
26. 2003 Cerney, M.M.‡, **D.C. Adams**, and J.M. Vance. 2003. Image Warping of Three-Dimensional Scan Data. *Proceedings of the SAE Digital Human Modeling Conference*. Montreal, Canada. 2003-01-2231.
25. 2003 **Adams, D.C.**, and G.J.P. Naylor. 2003. A comparison of methods for assessing the structural similarity of proteins. in *Mathematical Methods for Protein Structure Analysis and Design. Advanced Lectures.* (C. Guerra, S. Istrail., eds.). Springer Verlag Lecture Notes in Bioinformatics. 2666:109-115.
24. 2002 Jaeger, R.G., E.D. Prosen, and **D.C. Adams**. 2002. Character displacement and aggression in two species of terrestrial salamanders. *Copeia*. 2002:391-401.
23. 2002 **Adams, D.C.** 2002. Review of: Morphology, Shape and Phylogeny. *Biometrics*. 58:694-695.
22. 2001 **Adams, D.C.**, and C.K. Beachy. 2001. Historical explanations of phenotypic variation in the plethodontid salamander *Gyrinophilus porphyriticus*. *Herpetologica*. 57:353-364.
21. 2001 Naylor, G.J.P., and **D.C. Adams**. 2001. Are the fossil data really at odds with the molecular data? Morphological evidence for cetartiodactyla phylogeny reexamined. *Systematic Biology*. 50:444-453.
20. 2001 Rüber, L., and **D.C. Adams**. 2001. Evolutionary convergence of body shape and trophic morphology in cichlids from Lake Tanganyika. *Journal of Evolutionary Biology*. 14:325-332.
19. 2001 Tavaré, S., **D.C. Adams**, O. Fedrigo, and G.J.P. Naylor. 2001. A model for phylogenetic inference using structural and chemical covariates. Pp. 215-225 in *Pacific Symposium on Biocomputing.* (R. B. Altman, A. K. Dunker, L. Hunter, K. Lauderdale, and T. E. Klein, etc.). World Scientific. Singapore.
18. 2000 **Adams, D.C.**, and F.J. Rohlf. 2000. Ecological character displacement in *Plethodon*: biomechanical differences found from a geometric morphometric study. *Proceedings of the National Academy of Sciences, U.S.A.* 97:4106-4111.
17. 2000 Rosenberg, M.S., **D.C. Adams**, and J. Gurevitch. 2000. *MetaWin: Statistical software for meta-analysis.* Version 2.0. Sinauer Associates, Sunderland, Massachusetts. 128 pp.

16. 2000 **Adams, D.C.**, and G.J.P. Naylor. 2000. A new method for evaluating the structural similarity of proteins using geometric morphometrics. Pp. 120-121 in *Currents in Computational Molecular Biology*. Frontiers Science Series No. 30. (S. Miyano, R. Shamir, and T. Takagi, eds.). Universal Academy Press. Tokyo.
15. 2000 **Adams, D.C.** 2000. Divergence of trophic morphology and resource use among populations of *Plethodon cinereus* and *P. hoffmani* in Pennsylvania: a possible case of character displacement. Pp. 383-394 in The *Biology of Plethodontid Salamanders.* (R. C. Bruce, R. J. Jaeger, and L. D. Houck, eds.). Klewer Academic/Plenum. New York.
14. 2000 **Adams, D.C.** 2000. Review of: Sampling and Statistical Methods for Behavioral Ecologists. *Quarterly Review of Biology*. 75:76.
13. 1999 **Adams, D.C.** 1999. Methods for shape analysis of landmark data from articulated structures. *Evolutionary Ecology Research*. 1:959-970.
12. 1999 Jackson, J.F., **D.C. Adams**, and U. B. Jackson. 1999. Allometry of constitutive defense: a model and comparative test with tree bark and fire regime. *American Naturalist*. 153:614-632.
11. 1999 **Adams, D.C.** 1999. *Plethodon hoffmani* (Valley and Ridge Salamander). Predation. *Herpetological Review*. 30:160.
10. 1999 **Adams, D.C.** 1999. Review of: Salamanders of the United States and Canada. *Quarterly Review of Biology*. 74:235.
9. 1998 **Adams, D.C.**, and M.S. Rosenberg. 1998. Partial-warps, phylogeny, and ontogeny: a comment on Fink and Zelditch (1995). *Systematic Biology*. 47:168-173.
8. 1998 Caldecutt, W.J., and **D.C. Adams**. 1998. Morphometrics of trophic osteology in four ecotypes of the threespine stickleback, *Gasterosteus aculeatus*. *Copeia*. 1998:827-838.
7. 1997 **Adams, D.C.**, and D.J. Funk. 1997. Morphometric inferences on sibling species and sexual dimorphism in *Neochlamisus bebbianae* leaf beetles: multivariate applications of the thin-plate spline. *Systematic Biology*. 46:180-194.
6. 1997 **Adams, D.C.**, J. Gurevitch, and M.S. Rosenberg. 1997. Resampling tests for meta-analysis of ecological data. *Ecology*. 78:1277-1283.
5. 1997 **Adams, D.C.**, M.S. Di Bitetti, C.H. Janson, L.B. Slobodkin, and N. Valenzuela. 1997. An "audience effect" for ecological terminology: use and misuse of jargon. *Oikos*. 80:632-636.
4. 1997 **Adams, D.C.**, and J.F. Jackson. 1997. A phylogenetic analysis of the southern pines (*Pinus* subsect. Australes loud.): Biogeographical and ecological implications. *Proceedings of the Biological Society of Washington*. 110:681-692.
3. 1997 Rosenberg, M.S., **D.C. Adams**, and J. Gurevitch. 1997. *MetaWin: Statistical software for meta-analysis with resampling tests.* Sinauer Associates, Sunderland, Massachusetts. 65 pp.
2. 1996 **Adams, D.C.**, and C.D. Anthony. 1996. Using randomization techniques to analyse behavioural data. *Animal Behaviour*. 51:733-738.
1. 1995 **Adams, D.C.**, and J.F. Jackson. 1995. Estimating the allometry of tree bark. *American Midland Naturalist*. 134:99-106.

Software Developed

Professionally Published

2. 2000 MetaWin. Version 2.0. (Rosenberg, Adams, and Gurevitch, 2000. full citation above)
1. 1997 MetaWin. Version 1.0. (Rosenberg, Adams, and Gurevitch, 1997. full citation above)

Freeware: Major R-Packages

3. 2021 gm-Shiny. A new graphical interface for a comprehensive morphometric experiencen R (for geomorph). https://www.gmshiny.com/ (see Baken et al. 2021. *Methods Ecol. Evol.*)

2. 2018 RRPP. Software for residual randomization in permutation procedures in R. (see Collyer and Adams 2018. *Methods Ecol. Evol.*)
1. 2013 geomorph. Software for geometric morphometric analyses in R. (see Adams and Otárola-Castillo. 2013. *Methods Ecol. Evol.*)

Freeware: Specific Analytical Routines in R

I have written dozens of analytical functions for performing phenotypic and biostatistical analyses. These are incorporated in the `geomorph` and `RRPP` packages. For a list of functions, see:

https://cran.r-project.org/web/packages/geomorph/geomorph.pdf
https://cran.r-project.org/web/packages/RRPP/RRPP.pdf

Teaching Experience: University Instruction

2004 – Pres.	Vertebrate Biology (BIOL 365). Undergraduate: yearly. Iowa State Univ.
2000 – Pres.	Advanced Biostatistics (EEOB 590). Graduate: every-other year. Iowa State Univ.
2018 – Pres.	Macroevolution (BIOL 465/EEOB 565). Undergraduate/Graduate: every-other year. Iowa State Univ.
2002 – 2012	Morphometrics (EEOB 565). Graduate: every-other year. Iowa State Univ.
2015	EEB-Statistical Methods (EEB 698). Graduate. Iowa State Univ.
2003	Phylogenetic Comparative Methods (ZOOL 698). Graduate. Iowa State Univ.

Teaching Experience: Workshops

2024	Geometric Morphometics in R. Univ. Copenhagen, Denmark.
2023	Geometric Morphometics in R. Univ. Barcelona, Spain.
2023	Geometric Morphometrics Short Course. Institute of Biol. Evolution, Barcelona, Spain.
2022	Biostatistics in R Short Course. Institute of Biol. Evolution, Barcelona, Spain.
2019	Geometric Morphometics in R. Glasgow, Scotland.
2019	Geometric Morphometics in R. Univ. de Concepción, Chile.
2018	High-Dimensional Data Analysis in Ecology and Evolution in R. Univ. Lund, Sweden.
2018	Geometric Morphometics in R. Wales.
2016	Geometric Morphometics in R. Univ. of Lund, Sweden.
2016	Multivariate Data Analysis for Ecology and Evolution in R. Trans. Science, Spain.
2015	Geometric Morphometics in R. CIBIO, Portugal.
2015	Geometric Morphometics in R. Univ. of Montreal at Quebec, Canada.
2015	Geometric Morphometics in R. American Museum of Natural History, NY.
2014	Geometric Morphometics in R. Univ. of Tromsø, Norway.
2013	Geometric Morphometrics Course. Univ. of Iowa Dental School, IA.
2013	Geometric Morphometrics Course. Boston Univ. Medical Center, MA.
2012	Multivariate Data Analysis for Ecology and Evolution in R. CIBIO, Portugal.
2010	Advanced Geometric Morphometrics Workshop in Evolution. Univ. of Molise, Italy.
2010	Geometric Morphometrics Short Course. Univ. of Firenze, Italy.
2010	Geometric Morphometrics Short Course. Univ. of Genova, Italy.
2006	Geometric Morphometrics Workshop. Middle East Technical Univ., Turkey.
2006	Geometric Morphometrics Workshop. Iowa State Univ., IA.
2004	Geometric Morphometrics Workshop. Umeå Univ., Sweden.
2002	Geometric Morphometrics Workshop. Museo Civico di Zoologica, Italy.
2001	Geometric Morphometrics Workshop. Univ. de Chile, Chile.

Mentoring

Graduate Student Supervision

15.	2024 – Pres.	Jordyn Eovito	M.S. Ecology and Evolutionary Biology. Iowa State University
14.	2018 – Pres.	Elizabeth Glynne	Ph.D. Ecology and Evolutionary Biology. Iowa State University
13.	2015 – 2021	Bryan Juarez	Ph.D. Ecology and Evolutionary Biology Iowa State University (Currently: Postdoctoral Researcher. Stanford University)
12.	2015 – 2020	Erica Baken	Ph.D. Ecology and Evolutionary Biology. Iowa State University (Currently: Visiting Assistant Professor. St. John's University)
11.	2009 – 2014	Andrew Kraemer	Ph.D. Ecology and Evolutionary Biology. Iowa State University (Currently: Lead Data Analyst, WGU Academy)
10.	2007 – 2013	Chelsea Berns	Ph.D. Ecology and Evolutionary Biology. Iowa State University Currently: (Adjunct Assistant Professor. Salisbury University)
9.	2006 – 2011	James Church	Ph.D. Ecology and Evolutionary Biology. Iowa State University (Currently: Nature Photographer)
8.	2003 – 2008	Jennifer Deitloff	Ph.D. Ecology and Evolutionary Biology. Iowa State University (co-advised with N. Valenzuela). (Currently: Professor. Lock Haven University)
7.	2003 –2008	Erin Myers	Ph.D. Ecology and Evolutionary Biology. Iowa State University (co-advised with F. Janzen). (Currently: Research Assistant Professor. University of Houston)
6.	2003 – 2005	Saad Arif	M.S. Ecology and Evolutionary Biology. Iowa State University (Currently: Senior Lecturer (UK system). Oxford Brookes University)
5.	2003 – 2005	Melinda Cerney	Ph.D. Human Computer Interaction. Iowa State University (co-advised with J. Vance). (Currently: Microsoft Corp.)
4.	2001 – 2003	Kara Butterworth	M.S. Botany. Iowa State University (co-advised with J. Wendel). (Currently: High School Teacher, Denver, CO)
3.	2001 – 2003	Aspen Garry	M.S. Ecology and Evolutionary Biology. Iowa State University (co-advised with G. Naylor).
2.	2001 – 2003	Jennifer Donnelly	M.S. Ecology and Evolutionary Biology. Iowa State University (Currently: Lecturer. Grand View University)
1.	1998 – 2003	Tibisay Escalona	Ph.D. Ecology, Evolution, and Systematics. University of Missouri at St. Louis, St. Louis, MO. (co-advisor with B. Loiselle). (Currently: Researcher at CIIMAR. Portugal)

Graduate Student Committees (38 Total)

Momin Ahmed (current), Alvin Alejandrino (Ph.D., 2014), Elizabeth Boyer (Ph.D., 2015), Claudia Ceballos (Ph.D., 2010), JerPin Chong (Ph.D., 2016), Jessica Davis nee Petersen (Ph.D., 2010), Wade Dismukes (Ph.D., 2022), Bruno Do Rosario Petrucci (current), Brad Duthie (Ph.D., 2013), Daniel Edwards (current), Vicente Faria (Ph.D., 2006), Toni Ferrara (M.S., 2004), Lucia Guitierrez (Ph.D., 2008), Md Shazid Hasan (current), Mark Haussman (Ph.D., 2005), Kaitlyn Holden (Ph.D., 2020), Josh Justison (Ph.D. 2024), Phil Klahs (PH.D., 2021), Anita Krause (Ph.D., 2016), Kristy Kubik-Bernhard (M.S., 2005), Nicole Leahy (Ph.D., 2004), Stacy Lindshield (Ph.D., 2014), Jose Lopez (did not finish), Nick Lyon (M.S., 2019), Chris Olson (Ph.D., 2006), Ceren Ordas (current), Gabriela Palacios (Ph.D., 2009), Finn Piatscheck (Ph.D., 2019), Tori Pocius (Ph.D., 2018), Kevin Quinteros (Ph.D., 2022), Justin Rice (Ph.D., 2011), Rachel Ruden (Ph.D., 2019), Julie Ryburn (M.S., 2005), Justin Schonfeld (Ph.D., 2006), Nicholas Topping (current), Justin VanGoor (Ph.D., 2018), Nicolette Wackerly (M.S., 2019), Amy Worthington (Ph.D., 2015)

External Graduate Student Committees

8.	2017	Sarah Steele	Ph.D. Department of Biology, University of Toronto.
7.	2017	Nick Caruso	Ph.D. Department of Biology. University of Alabama.
6.	2016	Éric Anjard	M.S1. Laboratoire Biogéosciences, Université de Bourgogne.
5.	2014	Andy Grass	Ph.D. Department of Geosciences. University of Iowa.
4.	2014	Jimena Bohórquez Herrera	Ph.D. Centro Interdisciplinario de Ciencias Marinas - Instituto Politécnico Nacional, La Paz, México.
3.	2009	Holly Berg	M.S. University of Iowa.
2.	2007	H. George Wang	Ph.D. University of Louisiana, Lafayette.
1.	2005	Juan Manuel Daza Roja	M.S. Universidad de Antioquia Medellín, Colombia.

Postdoctoral Associate Supervision

5.	2021 – 2023.	Dr. Mark Conaway (Currently: Postdoc. University of Toronto, Canada)
4.	2013 – 2014	Dr. Emma Sherratt (Currently: ARC Fellow. University of Adelaide, Australia)
3.	2011 – 2012; 2014 – 2015	Dr. Antigoni Kaliontzopoulou (Currently: Ramon y Cahal Researcher, Universitat de Barcelona)
2.	2010 – 2012	Dr. Gabriel Rivera (Currently: Associate Professor. Creighton University)
1.	2003 – 2007	Dr. Michael Collyer (Currently: Professor. Chatham University)

Undergraduate Honors Theses

3.	2021	Hunter Blum	Patterns of shape variation in Sphaerodactylidae claw morphology. Undergraduate Biology Program. Iowa State University
2.	2007	Nicole Seda	Head shape variation and ecology in Plethodon salamanders in the southeastern United States. Undergraduate Animal Ecology Program. Iowa State University
1.	2006	Mary West	Location-specific sympatric morphological divergence as a possible response to species interactions in West Virginia Plethodon salamander communities. Undergraduate Biology Program. Iowa State University

Undergraduate Research Supervision (60 Total: ‡Honors student; †McNair scholar)

Emily Allen, Stanley Barbel, Philip Bice, Hunter Blum‡, Nathan Bond, Kally Boyer, David Brady, Patricia Buck, Brooke Busse, Kayla Cain, Ashley Connor, Joi Davis, Jessica Day (nee Kissner), Nicolas Dimenstein, Jordyn Eovito, Andrew Flander, Adam Frakes, Marinda Gacke, Nadya Gonzalez, Julie Graesch (nee Perrett), Tiffany Gummert, Samantha Hadrock, McKenna Hansel, Mary Harmon, Anne Hatch, Elizabeth Heldt, Sidney Hofmann, Aubrie James, Kayla Kaasa, Dana Korneisel, Katie Kramer, Nicole Laurito, Nicole Lindsey, Sara Luchtel, Andrea Mallarino, Sarah Marsteller, Lauren Mellenthin, Clayton Michael, Giselle Narvaez, Andrea Oake, Samantha Pike, Kevin Quinteros, Jorge Rivera, Della Rivera Casanova, Kristopher Rhodes, Heather Sanders, Daniel Schnadt, Nicole Seda‡, Sydney Seng‡, Lillie Smith, Madison Smith‡, Megan Steffen, Erika Suesmith, Alyssa Torseth, Andres Vargas†, Audri Weaver, Mary West‡, Katherine Weigert, Morgan Young, Meredith Zipse

Diversity, Equity, Inclusion Training and Contributions

2023	Co-Organized Go-Fund-Me Campaign for ASIH DEI Activities and Cashner Award
2022	Member of Evo-Allies for joint Evolution meetings
2021	Men allies for gender equity training: Iowa State

2021	AdvanceGeo bystander training: EEOB Dept.
2020	CELT Inclusive Classroom training: EEOB Dept.
2019	Member of Evo-Allies for joint Evolution meetings
2019	Anti-harrassment training for the Society of Systematic Biologists leadership (for SafeEvolution program)
2018 – 2020	Mentor of McNair scholar
2013	Mentor of IINSPIRE LSAMP undergraduate scholar
2010 – 2012	Mentor of NSF Minority Postdoctoral Fellow
2001 – 2021	20% of undergraduate research assistants trained were from underrepresented groups

Professional Service (Select)

Committees and Editorships

2021 – Pres.	Co-Chair	Endowment and Finance Committee; American Society of Ichthyology and Herpetology
2021 – Pres.	Member	Executive Committee; American Society of Ichthyology and Herpetology
2017 – 2019	Exec. Vice Pres.	Society of Systematic Biologists
2017 – 2019	Exec. Joint Council	Amer. Soc. Natur., Soc. Study Evol., Soc. System. Biol.
2015 – 2018	Editorial Board	Journal of Evolutionary Biology
2013 – 2016	Editorial Board	Evolution
2010 – 2014	Editorial Board	BMC Evolutionary Biology
2009 – 2014	Associate Editor	American Naturalist
2004 – 2009	Associate Editor	Herpetologica
2023; 2021; 2013	Chair	Rohlf Medal Committee. Stony Brook University
2011	Member	Rohlf Medal Committee. Stony Brook University
2011	Chair	Stoye Awards Committee in General Herpetology (Joint Annual Meetings of ASIH, HL, and SSAR)
2008	Judge	Storer Award Committee in General Herpetology (Joint Annual Meetings of ASIH, HL, and SSAR)
2007	Member	National Science Foundation Panel (BIO), Washington, DC
2006	Organizer	Geometric Morphometrics Workshop, Iowa State University

Reviewer of Grant Proposals (> 50 Total)

Austrian Research Fund, Graduate Women in Science Fellowship, National Science Foundation

Reviewer of Manuscripts (> 500 Total)

American Journal of Primatology, American Naturalist, Amphibia-Reptilia, Anatomical Record, Animal Behaviour, Annals of the Entomological Society of America, Animal Behaviour, Bioinformatics, Biological Journal of the Linnean Society, BMC Evolutionary Biology, Bulletin of Entomological Research, Copeia, Ecography, Ecology, Ecology Letters, Ethology Ecology and Evolution, Evolution, Evolutionary Ecology Research, Evolution Education and Outreach, Freeman Publishers, Herpetologica, Herpetological Journal, Hydrobiologia, Journal of Anatomy, Journal of Animal Ecology, Journal of Environmental Management, Journal of Evolutionary Biology, Journal of Fish Biology, Journal of Heredity, Journal of Herpetology, Journal of Human Evolution, Journal of Microbiological Methods, Journal of Morphology, Infection Genetics and Evolution, Italian Journal of Zoology, Methods in Ecology and Evolution, Molecular Ecology Resources, Naturwissenschaften, Oikos, Paleobiology, PLoS One, Proceedings of the National Academy of Sciences,

Scientific Reports, Systematic Biology, Systematic Botany, Taylor and Francis Publishers, Transactions of the American Fisheries Society, Trends in Ecology and Evolution, ZooTaxa

External Evaluator of Promotion/Tenure Cases (17 Total)

University Service (Select)

2023-2025	Member	Faculty Senate Committee on Appeals
2020 – 2027	Member	Promotion and Tenure Committee, College of Liberal Arts and Sciences
2023-2024	Chair	Executive Committee; EEOB Department
2023-2026	Member	EEB Admissions Committee
2023	Member	EEOB Honors and Awards Committee
2018 – 2022	Chair & Director	Ecology and Evolutionary Biology Graduate Program
2021 – 2022	Chair	Graduate Faculty Council; Graduate College
2020 – 2021	Chair	Graduate Faculty Membership Committee; Graduate College
2020 – 2021	Vice-Chair	Graduate Faculty Council; Graduate College
2019 – 2022	Member	Graduate Faculty Council; Graduate College
2020	Member	Graduate Student Appeal Committee; Graduate College
2013 – 2014	Chair	Committee for Sustainability Signature Themes Workshop, College of Liberal Arts and Sciences
2013	Chair	Faculty Search Committee (Macroevolution), EEOB Department
2013	Member	Committee for Big Data Signature Themes Workshop, College of Liberal Arts and Sciences
2013 – 2016	Member	Steering Committee for Signature Themes Workshops, College of Liberal Arts and Sciences
2017 – 2018	Member	EEB Graduate Program Curriculum Committee
2012 – 2015	Member	EEB Graduate Program Admissions Committee
2012 – 2018	Chair	Honors and Awards Committee, EEOB Department
2010 – 2013	Chair	Academic Standards and Admissions Committee, College of Liberal Arts and Sciences
2010 – 2013	Member	Faculty Senate Academic Standards and Admissions Committee
2010 – 2013	Member	Representative Assembly, College of Liberal Arts and Sciences
2005 – 2011	Faculty Mentor	EEOB Department (for Assistant Professor)
2001 – Pres.	Member	EEB graduate program
2001 – Pres.	Member	BCB graduate program
2018 – 2019	Student Mentor	PFF program (Preparing Future Faculty)
2008 – 2009	Student Mentor	PFF program (Preparing Future Faculty)
2008 – 2009	Chair	Academic Standards and Admissions Committee, College of Liberal Arts and Sciences
2008 – 2009	Member	Faculty Senate Academic Standards and Admissions Committee
2007 – 2008	Member	Academic Standards and Admissions Committee, College of Liberal Arts and Sciences
2010 – 2012	Member	Honors and Awards Committee, EEOB Department
2008	Member	Faculty Search Committee (Ecological/Evolutionary Theory), EEOB Department
2006 – 2009	Chair	EEB/EEOB Seminar Committee, EEOB Department
2003 – 2009	Faculty Advisor	EEOB Department Graduate Student Organization
2006	Member	Faculty Search Committee (Ecology and Evolution), EEOB Department
2005	Member	Faculty Search Committee (Theoretical Biology), EEOB Department
2002 – 2005	Member	Supervisory Committee, EEB Graduate Program

2001 – 2004 Member PACE Awards Committee, Graduate College

Professional Affiliations

American Association for the Advancement of Science, American Society of Ichthyologists and Herpetologists, American Society of Naturalists, Herpetologist's Society for the Study of Evolution, Society of Systematic Biologists

Invited Presentations and Symposia

38. 2022 University of Barcelona, Barcelona, Spain
37. 2021 Florida Museum of Natural History, University of Florida. (virtual)
36. 2020 Keynote Address. 1st Iberoamerican Congress in Geometric Morphometrics (virtual)
35. 2019 Keynote Address. Rohlf Medal Recipient Presentation. Stony Brook University
34. 2019 Universidad de Concepción, Chile
33. 2018 Joint Evolution, ESEB Meetings, Montpellier, France
32. 2017 University of Toronto, Canada
31. 2017 Field Museum of Natural History
30. 2017 University of Idaho
29. 2016 Keynote Address. 9th Symposium national de Morphométrie et Evolution des Formes, France
28. 2016 National Museum of Natural Sciences, Spain
27. 2015 University Bourgogne, France
26. 2015 University of Reno, Nevada
25. 2014 University of Toronto
24. 2013 Western Kentucky University
23. 2012 Centro de Investigação em Biodiversidade e Recursos Genéticos(CIBIO), Portugal
22. 2012 Ohio University
21. 2011 University of Minnesota
20. 2010 Keynote Address. 7th International Symposium on the Lacertids of the Mediterranean Basin., Spain
19. 2010 Hull-York Medical School, York, England
18. 2010 Museo di Storie Naturale, Università degli Studi di Firenze, Italy
17. 2008 University of Iowa
16. 2007 Brigham Young University
15. 2007 5th Conference on the Biology of Plethodontid Salamanders. Mexico
14. 2007 National Museum of Natural History, Smithsonian Institution. Washington, D.C.
13. 2005 John Carroll University, Cleveland, Ohio
12. 2005 Cornell College, Mounty Vernon, Iowa
11. 2004 Universidad de Los Andes, Bogotá, Colombia
10. 2004 Texas A & M University, College Station, Texas
9. 2004 Cornell College, Mounty Vernon, Iowa
8. 2003 Washington University Saint Louis, St. Louis, Missouri
7. 2002 International Congress of Systematic and Evolutionary Biology (ICSEB) VI, Greece
6. 2001 University of Iowa
5. 2001 University of Nebraska-Lincoln
4. 2000 Iowa State University
3. 1999 Indiana State University
2. 1999 Brigham Young University
1. 1998 Instituto de Investigação Agrária e Extensão Rural, Estação Agronómica Nacional, Portugal

Contributed Presentations

121. 2024 Adams, D.C., and M. L. Collyer. Extending phylogenetic regression models for comparing within-species patterns across the tree of life. Joint Annual Meeting of the American Society of Naturalists, the Society for the Study of Evolution, and the Society of Systematic Biologists.

120. 2024 Glynne, E. and D. C. Adams. Allometry of sexual size dimorphism in geckos. Joint Annual Meeting of the American Society of Naturalists, the Society for the Study of Evolution, and the Society of Systematic Biologists.

119. 2024 Tejero-Cicuéndez, H., I. Menéndez, M. Simó-Riudalbas, A. Talavera, G. Mochales-Riaño, B. Burriel-Carranza, D.C. Adams, and S. Carranza. Habitat-specific allometric trends shaped ecomorphological evolution in *Pristurus* geckos. World Congress of Herpetology.

118. 2024 Tejero-Cicuéndez, H., I. Menéndez, M. Simó-Riudalbas, A. Talavera, G. Mochales-Riaño, B. Burriel-Carranza, D.C. Adams, and S. Carranza. Morphological evolution in the Afro-Arabian *Pristurus* geckos. Society for the Study of Amphibians and Reptiles Meeting.

117. 2024 Porter, C., F. Romero, DC. Adams, R. Bowie, and E. Riddell. Why are birds dark in cold, wet places? Society for Integrative and Comparative Biology Annual Meeting. Seattle, Washington.

116. 2023 Tulloch, S., ; M. Estarellas, D. C. Adams, V. Pagone, D. Fernández-Guiberteau, F. Amat, A. Montori, F. Carbonell, E. Obon, Elena; M. Alonso, M. Santmartín, R. Marsol, D. Guinart, S. Solórzano, A. Talavera, B. Burriel-Carranza, G. Mochales, E. Bosch, J. del Campo, Javier, and S. Carranza. Comparative microbiome analysis reveals differences between wild and captive populations of the Montseny Brook Newt (Calotriton arnoldi). Congreso Ibérico de Sistemática Biológica. Barcelona, Spain.

115. 2023 Glynne, E. and D. C. Adams. Allometry of sexual size dimorphism in geckos. Joint Annual Meeting of the American Society of Ichthyologists and Herpetologists.

114. 2023 Koppetsch, T., B. Burriel-Carranza, B. Wipfler, E. Glynne, X. Luo, D.C. Adams, M. Matschiner, and S. Carranza. Genomic and Morphometric Analyses of Diversification Dynamics in the Pristurus rupestris Species Complex. Joint Annual Meeting of the American Society of Ichthyologists and Herpetologists.

113. 2022 Adams, D.C., and M.A. Conaway. An effect size for comparing the strength of morphological integration across studies. Joint Annual Meeting of the American Society of Naturalists, the Society for the Study of Evolution, and the Society of Systematic Biologists.

112. 2022 Conaway, M.A., and D.C. Adams. Morphological integration of the hominoid os coxa: implications for human bipedalism. Joint Annual Meeting of the American Society of Naturalists, the Society for the Study of Evolution, and the Society of Systematic Biologists.

111. 2022 Glynne, E., and D.C. Adams. Allometry of sexual size dimorphism in geckos. Joint Annual Meeting of the American Society of Naturalists, the Society for the Study of Evolution, and the Society of Systematic Biologists.

110. 2021 Adams, D.C., and M.L. Collyer. Simulation-based inference in evolutionary biology: potential pitfalls and comments on phylogenetic ANOVA. Joint Annual Meeting of the American Society of Naturalists, the Society for the Study of Evolution, and the Society of Systematic Biologists, (online).

109. 2021 Collyer, M.L, and D.C. Adams. A standardized effect size for measuring and comparing phylogenetic signals. Joint Annual Meeting of the American Society of Naturalists, the Society for the Study of Evolution, and the Society of Systematic Biologists, (online).

108. 2019 Adams, D.C., and M.L. Collyer. Interpreting the strength of phylogenetic signal in multivariate datasets. Joint Annual Meeting of the American Society of Naturalists, the Society for the Study of Evolution, and the Society of Systematic Biologists, Providence, Rhode Island.

107. 2019 Baken, E. and D.C. Adams. Lungless Salamander SA:V Evolution is Constrained by Region and Microhabitat. Joint Annual Meeting of the American Society of Naturalists, the Society for the Study of Evolution, and the Society of Systematic Biologists, Providence, Rhode Island.

106. 2019 M.L. Collyer, M.L., and D.C. Adams. Phylogenetically-aligned Components Analysis: a new phylogenetic ordination method. Joint Annual Meeting of the American Society of Naturalists, the Society for the Study of Evolution, and the Society of Systematic Biologists, Providence, Rhode Island. (Poster Session).

105. 2019 Mellenthin, L., E. Baken, and D.C. Adams. Does climate limit arboreality in lungless salamanders?. Joint Annual Meeting of the American Society of Naturalists, the Society for the Study of Evolution, and the Society of Systematic Biologists, Providence, Rhode Island. (Poster Session).

104. 2019 Baken, E., L. Mellenthin, and D.C. Adams. Arboreal plethodontid salamanders live in different climates than terrestrial species. Joint Annual Meeting of the American Society of Naturalists, the Society for the Study of Evolution, and the Society of Systematic Biologists, Providence, Rhode Island. (Poster Session).

103. 2019 Juarez, B, D. Moen, and D.C. Adams. Does morphology predict interspecific and intraspecific jumping performance in frogs? Joint Annual Meeting of the American Society of Ichthyologists and Herpetologists, the Herpetologist League, and the Society for the Study of Amphibians and Reptiles. Salt Lake City, Utah. (Poster Session).

102. 2018 Adams, D.C. Phylogenetic Comparative Methods for Studying Multivariate Trait Evolution: Advances and Retreats. Joint Evolution Meeting: European Society of Evolutionary Biology, American Society of Naturalists, the Society for the Study of Evolution, and the Society of Systematic Biologists, Montpellier, France.

101. 2018 Baken, E., and D.C. Adams. Repeated Evolution Across the Multiple Invasions of the Arboreal Microhabitat in Lungless Salamanders. Joint Annual Meeting of the American Society of Ichthyologists and Herpetologists, the Herpetologist League, and the Society for the Study of Amphibians and Reptiles. Rochester, New York.

100. 2017 Adams, D.C. and M.L. Collyer. Comparing comparative methods: Evaluating high-dimensional multivariate phylogenetic approaches. Joint Annual Meeting of the American Society of Naturalists, the Society for the Study of Evolution, and the Society of Systematic Biologists, Portland, Oregon.

99. 2017 Baken, E., and D.C. Adams. Living in trees: Macroevolution of morphology and diversity in arboreal Plethodontid salamanders. Joint Annual Meeting of the American Society of Naturalists, the Society for the Study of Evolution, and the Society of Systematic Biologists, Portland, Oregon.

98. 2017 Juarez, B., D. Moen, and D.C. Adams. Morphology predicts jumping performance in frogs. Joint Annual Meeting of the American Society of Ichthyologists and Herpetologists, the Herpetologist League, and the Society for the Study of Amphibians and Reptiles. Austin, Texas.

97. 2015 Denton, J.S.S., and D.C. Adams. A new phylogenetic test for high-dimensional evolutionary rate differences among body regions reveals complex interplay of evolutionary rates and modularity in lanternfish (Myctophiformes: Myctophidae) photophore and body shape evolution. Joint Annual Meeting of the American Society of Ichthyologists and Herpetologists, the Herpetologist League, and the Society for the Study of Amphibians and Reptiles. Reno, Nevada.

96. 2015 Adams, D.C. Permutation tests for phylogenetic regression: what you shuffle matters. Annual Meeting of the Society of Systematic Biologists, Ann Arbor, Michigan.

95. 2015 Waldman, R., M. Muel, M. Salsbery, D. Debinski, and D.C. Adams. Ways to wing it: correlation of wing shape with habitat preferences, toxicity and migration in butterflies. Iowa Academy of Sciences, Iowa City, Iowa. (Poster Session).

94. 2014 Sherratt, E., M.L. Collyer, and D.C. Adams. Geomorph: Uniting phylogenetic comparative biology with high-dimensional data. Modern Phylogenetic Comparative Methods and their Application in Evolutionary Biology. Seville, Spain.
93. 2014 Adams, D.C. Elevated rates of morphological evolution in montane endemic species of *Plethodon* salamanders. Joint Annual Meeting of the American Society of Ichthyologists and Herpetologists, the Herpetologist League, and the Society for the Study of Amphibians and Reptiles. Chattanooga, Tennessee.
92. 2014 Harnik, P.G., J.M. Serb, D.C. Adams, R. Riemann, and T. Smith. Are changing environments reflected in the morphological disparity of fossil and recent scallops from the tropical Americas? Geological Society of America Meetings. Vancouver, Canada.
91. 2014 Adams, D.C. Phylogenetic comparative biology and morphometrics collide: PIC, PGLS, and the challenge of high-dimensional data. Joint Annual Meeting of the American Society of Naturalists, the Society for the Study of Evolution, and the Society of Systematic Biologists, Raleigh, North Carolina.
90. 2014 Sherratt, E., D.C. Adams, and J.M. Serb. Macroevolution, phylomorphospace and directional evolution in burrowing scallops. Joint Annual Meeting of the American Society of Naturalists, the Society for the Study of Evolution, and the Society of Systematic Biologists, Raleigh, North Carolina.
89. 2014 Adams, D.C. Tempo and mode of morphological evolution in plethodontid salamanders. 6th Conference on the Biology of Plethodontid Salamanders. Tulsa, Oklahoma.
88. 2014 Kraemer, A.C., J.M. Serb, and D.C. Adams. Coevolution of coloration and conspicuousness in a Batesian mimic. 6th Conference on the Biology of Plethodontid Salamanders. Tulsa, Oklahoma.
87. 2014 Kraemer, A.C., J.M. Serb, and D.C. Adams. Coevolution of coloration and conspicuousness in a Batesian mimic. Annual Meeting of the Society for Integrative and Comparative Biology. Austin, Texas.
86. 2013 Caruso, N., M. Sears, D. Adams, and K. Lips. Widespread declines in body size in Appalachian *Plethodon* salamanders. Annual Meeting of the Ecological Society of America. Minneapolis, Minnesota.
85. 2013 Adams, D.C, and A. Nistri. Rates of morphological evolution in European *Hydromantes* salamanders. Joint Annual Meeting of the American Society of Ichthyologists and Herpetologists, the Herpetologist League, and the Society for the Study of Amphibians and Reptiles. Albuquerque, New Mexico.
84. 2013 Adams, D.C. A generalized kappa statistic for estimating phylogenetic signal from multivariate data. Joint Annual Meeting of the American Society of Naturalists, the Society for the Study of Evolution, and the Society of Systematic Biologists, Snowbird, Utah.
83. 2013 Kraemer, A., D.C. Adams, and J.M. Serb. A likelihood framework for combining selective models for the evolution of color polymorphism. Joint Annual Meeting of the American Society of Naturalists, the Society for the Study of Evolution, and the Society of Systematic Biologists, Snowbird, Utah.
82. 2013 Kraemer, A., D.C. Adams, and J.M. Serb. The evolution of aposematic traits in a Batesian mimicry system. Joint Annual Meeting of the American Society of Naturalists, the Society for the Study of Evolution, and the Society of Systematic Biologists, Snowbird, Utah.
81. 2013 Alejandrino, A., D.C. Adams, and J.M. Serb. Gliding convergence from convergent, parallel, and divergent shell shapes: evolution of complex phenotypic traits in scallops (Bivalvia: Pectinidae). World Congress of Malacology. Azores, Portugal.
80. 2013 Kaliontzopoulou, A., D.C. Adams, and M. A. Carretero. Understanding phenotypic diversity at micro- and macroevolutionary scales. 8th International Symposium on the Lacertids of the Mediterranean Basin. Koper, Slovenia.

79. 2013 Kaliontzopoulou, A., D.C. Adams, and M. A. Carretero. Habitat use and sexual dimorphism in *Podarcis* wall lizards: micro- and macroevolutionary patterns of morphological variation. XIV Congress of the European Society of Evolutionary Biology. Lisbon, Portugal.
78. 2012 Adams, D.C. Rates of morphological evolution in *Plethodon* salamanders. World Congress of Herpetology. Vancouver, Canada.
77. 2012 Caruso, N.M., K.R. Lips, D.C. Adams, R.W. McDiamid, and R.C. Fleischer. Through the looking glass: widespread declines in body size in Appalachian plethodontid salamanders. World Congress of Herpetology. Vancouver, Canada.
76. 2012 Adams, D.C. Comparing evolutionary rates for different phenotypic traits on a phylogeny using likelihood. 1st Joint Congress on Evolutionary Biology. Ottawa, Canada.
75. 2012 Rice, J., D.C. Adams, and J. Colbert. The knowledge-acceptance-understanding trifecta in evolution education. 1st Joint Congress on Evolutionary Biology. Ottawa, Canada.
74. 2012 Kraemer, A., and D.C. Adams. Conspicuousness in a Batesian mimetic system AS SEEN through the eyes of predators. 1st Joint Congress on Evolutionary Biology. Ottawa, Canada.
73. 2012 Folinsbee, K., C. Kelly, D. Adams, and M. Jennions. Intraspecific sexual size and shape dimorphism in an Australian freshwater fish differ with respect to a biogeographic barrier and latitude. 1st Joint Congress on Evolutionary Biology. Ottawa, Canada. (Poster Session).
72. 2012 Rice, J., D.C. Adams, and J. Colbert. The knowledge-acceptance-understanding trifecta in evolution education. Conference of the Society for the Advancement of Biology Education Research. Minneapolis, Minnesota. (Poster Session).
71. 2012 Otárola-Castillo,E., D.C. Adams, S. Chumbley, and B.J. Danielson. Morphometric analyses of bone-surface marks. Annual Meeting of the Society for American Archaeology, Memphis, Tennessee.
70. 2012 Rivera G, J.N. Davis, J.C. Godwin, and D.C. Adams. Parallel evolution of shape divergence in the shells of freshwater turtles inhabiting different flow regimes. Annual Meeting of the Society for Integrative and Comparative Biology, Charleston, South Carolina.
69. 2012 Rivera G, M.M. Hansel, and D.C. Adams. Evolutionary rates of sexual shape and size dimorphisms in the shells of emydid turtles. Annual Meeting of the Society for Integrative and Comparative Biology, Charleston, South Carolina. (Poster Session).
68. 2011 Adams, D.C.. A phylogenetic evolutionary rate for shape and other multi-dimensional traits. Joint Annual Meeting of the American Society of Naturalists, the Society for the Study of Evolution, and the Society of Systematic Biologists, Norman, Oklahoma.
67. 2011 Valenzuela, N. and D.C. Adams. Chromosome number and sex determination co-evolve in turtles during climate change. Joint Annual Meeting of the American Society of Naturalists, the Society for the Study of Evolution, and the Society of Systematic Biologists, Norman, Oklahoma.
66. 2011 Kraemer, A., J. Kissner, and D.C. Adams. Temporal color changes in the red-backed salamander while kept in captivity. Joint Annual Meeting of the American Society of Naturalists, the Society for the Study of Evolution, and the Society of Systematic Biologists, Norman, Oklahoma. (Poster Session).
65. 2011 Adams, D.C., and J.O. Church. Spurious body size clines and methodological artifacts from grid-cell assemblages: pattern and process in biogeography. Joint Annual Meeting of the American Society of Ichthyologists and Herpetologists, the Herpetologist League, and the Society for the Study of Amphibians and Reptiles, Minneapolis, Minnesota.
64. 2011 Church, J.O., and D.C. Adams. Putting the niche into macroecology: the n-dimensional hypervolume, limiting similarity and population ecology in *Plethodon* salamander communities. Joint Annual Meeting of the American Society of Ichthyologists and Herpetologists, the Herpetologist League, and the Society for the Study of Amphibians and Reptiles, Minneapolis, Minnesota.

63. 2011 Kraemer, A., J. Kissner, and D.C. Adams. Temporal color changes in the red-backed salamander while kept in captivity. Joint Annual Meeting of the American Society of Ichthyologists and Herpetologists, the Herpetologist League, and the Society for the Study of Amphibians and Reptiles, Minneapolis, Minnesota.

62. 2011 Rivera, G., M. Hansel, and D.C. Adams. Evolution of sexual shape dimorphism in emydid turtles. Joint Annual Meeting of the American Society of Ichthyologists and Herpetologists, the Herpetologist League, and the Society for the Study of Amphibians and Reptiles, Minneapolis, Minnesota. (Poster Session).

61. 2011 Berns, C.M., and D.C. Adams. Phenotypic evolution of sexual size and shape dimorphism in hummingbird bills. Society for Integrative and Comparative Biology. Salt Lake City, Utah.

60. 2010 Serb, J.M., A. Alejandrino, E. Otárola-Castillo, and D.C. Adams. Application of modern landmark-based geometric morphometrics to quantify shell shape and detect convergence using scallops (Bivalvia: Pectinidae) as a model. Joint Annual Meeting of the American Society of Naturalists, the Society for the Study of Evolution, and the Society of Systematic Biologists, Portland, Oregon.

59. 2010 Serb, J.M., A. Alejandrino, E. Otárola-Castillo, and D.C. Adams. Application of modern geometric morphometrics to quantify shell shape and detect convergence using scallops (Bivalvia: Pectinidae) as a model. World Congress of Malacology. Phuket, Thailand.

58. 2010 Otárola-Castillo,E., B.J. Schoville, and D.C. Adams. Integrating Quantitative and Qualitative Data in Multivariate Analyses. Annual Meeting of the Paleoanthropology Society, St. Louis, Missouri.

57. 2009 Adams, D.C. From microevolution to macroevolution: the evolution of phenotypic diversity in *Plethodon* salamanders. Meeting of the European Society of Evolutionary Biology, Turin, Italy.

56. 2008 Adams, D.C., and J.O. Church. Community organization in *Plethodon* salamanders: categorical but not continuous patterns of body size assortment. Joint Annual Meeting of the American Society of Ichthyologists and Herpetologists, the Herpetologist League, and the Society for the Study of Amphibians and Reptiles, Montreal, Canada.

55. 2008 Adams, D.C., J.O. Church, A. Weaver, and M. Zipse. Patterns of phenotypic variation in multi-species salamander communities: convergence or divergence? Joint Annual Meeting of the American Society of Naturalists, the Society for the Study of Evolution, and the Society of Systematic Biologists, Minneapolis, Minnesota.

54. 2007 Church, J.O., and D.C. Adams. Ecological niche modeling, interspecific competition, and range restriction in *Plethodon* salamander communities of the southeastern United States. Fifth Conference on the Biology of Plethodontid Salamanders. San Cristóbal de las casas, Mexico.

53. 2007 Adams, D.C. Organization of *Plethodon* salamander communities: Guild-based community assembly. Fifth Conference on the Biology of Plethodontid Salamanders. San Cristóbal de las casas, Mexico. (Poster Session).

52. 2007 Church, J.O., and D.C. Adams. Amphibians do not follow Bergmann's rule. Fifth Conference on the Biology of Plethodontid Salamanders. San Cristóbal de las casas, Mexico. (Poster Session).

51. 2007 Adams, D.C. Organization of *Plethodon* Salamander Communities: Interspecific Competition and Guild-Based Community Assembly. Joint Annual Meeting of the American Society of Ichthyologists and Herpetologists, the Herpetologist League, and the Society for the Study of Amphibians and Reptiles, St. Louis, Missouri.

50. 2007 Church, J.O., and D.C. Adams. Ecological niche modeling, interspecific competition, and range restriction in *Plethodon* salamander communities of the southeastern United States. Joint Annual Meeting of the American Society of Ichthyologists and Herpetologists, the Herpetologist League, and the Society for the Study of Amphibians and Reptiles, St. Louis, Missouri.

49. 2007 Escalona, T., N. Valenzuela, and D.C. Adams. Social facilitation explains nesting behavior in the South American freshwater turtle *Podocnemis unifilis*. Joint Annual Meeting of the American Society of Ichthyologists and Herpetologists, the Herpetologist League, and the Society for the Study of Amphibians and Reptiles, St. Louis, Missouri.

48. 2007 West, M.E., D.C. Adams, and M.L. Collyer. Location-specific morphological divergence as a response to possible species interactions in West Virginia *Plethodon* salamander communities. Joint Annual Meeting of the American Society of Ichthyologists and Herpetologists, the Herpetologist League, and the Society for the Study of Amphibians and Reptiles, St. Louis, Missouri. (Poster Session).

47. 2007 Church, J.O., and D.C. Adams. Amphibians do not follow Bergmann's rule. Joint Annual Meeting of the American Society of Ichthyologists and Herpetologists, the Herpetologist League, and the Society for the Study of Amphibians and Reptiles, St. Louis, Missouri. (Poster Session).

46. 2006 Adams, D.C. and M.L. Collyer. Phenotypic evolution and diversification in the *Plethodon* cinereus species complex. Joint Annual Meeting of the American Society of Naturalists, the Society for the Study of Evolution, and the Society of Systematic Biologists, Stony Brook, New York.

45. 2006 Adams, D.C. Evolution of *Plethodon* Salamander Communities: Guild-Based Community Organization. Joint Annual Meeting of the American Society of Naturalists, the Society for the Study of Evolution, and the Society of Systematic Biologists, Stony Brook, New York. (poster session).

44. 2006 Marsteller, S., F. Serna, J. Johnson, D.C. Adams, M.L. Collyer, and M. Condon. Wing shape differences among *Blepharoneura* (Diptera: Tephnitidae) of easter Ecuador: a morphometric approach. Joint Annual Meeting of the American Society of Naturalists, the Society for the Study of Evolution, and the Society of Systematic Biologists, Stony Brook, New York. (poster session).

43. 2005 Adams, D.C., S. Arif, and J.A. Wicknick. Defending the Alamo: Compensatory biotic and abiotic forces regulate species distributions in a salamander community. Joint Annual Meeting of the American Society of Ichthyologists and Herpetologists, the Herpetologist League, and the Society for the Study of Amphibians and Reptiles, Tampa, Florida.

42. 2005 Collyer, M.L., D.C. Adams, and M. Smith. A method for comparing alternative models for the analysis of multivariate morphological data: an example with the prairie rattlesnake. (Crotalus viridis viridis) Joint Annual Meeting of the American Society of Ichthyologists and Herpetologists, the Herpetologist League, and the Society for the Study of Amphibians and Reptiles, Tampa, Florida. (poster session).

41. 2005 Adams, D.C., and M.L. Collyer. A generalized framework for the analysis of phenotypic change. Joint Annual Meeting of the American Society of Naturalists, the Society for the Study of Evolution, and the Society of Systematic Biologists, Fairbanks, Alaska.

40. 2005 Collyer, M.L., and D.C. Adams. A multivariate method of model selection for evolutionary data. Joint Annual Meeting of the American Society of Naturalists, the Society for the Study of Evolution, and the Society of Systematic Biologists, Fairbanks, Alaska.

39. 2005 Myers, E.M., F.J. Janzen, D.C. Adams, and J. Tucker. Quantitative genetics of plastron shape in slider turtles (*Trachemys scripta*). Joint Annual Meeting of the American Society of Naturalists, the Society for the Study of Evolution, and the Society of Systematic Biologists, Fairbanks, Alaska.

38. 2005 Collyer, M.L., and D.C. Adams. How similar morphogenetic processes do not equal parallel patterns of phenotypic change. Joint Annual Meeting of the American Society of Naturalists, the Society for the Study of Evolution, and the Society of Systematic Biologists, Fairbanks, Alaska. (poster session).
37. 2005 Marsteller, S., D. Bann, D.C. Adams, M. Lewis, S. Scheffer, S. Swensen, and M. Condon. Evolution of wing shape in *Blepharoneura*: (Diptera: Tephritidae). Joint Annual Meeting of the American Society of Naturalists, the Society for the Study of Evolution, and the Society of Systematic Biologists, Fairbanks, Alaska. (poster session).
36. 2005 Marsteller, S., D.C. Adams, and M. Condon. Wing shape in *Blepharoneura*: a morphometric approach. Annual Meeting of the Iowa Academy of Sciences, Cornell College, Mount Vernon, Iowa (poster session). (April 29, 2005).
35. 2004 Collyer, M.L., and D.C. Adams. The analysis of multivariate reaction norms for assessing phenotypic plasticity. Joint Annual Meeting of the American Society of Naturalists, the Society for the Study of Evolution, and the Society of Systematic Biologists, Fort Collins, Colorado.
34. 2004 Deitloff, J, and D.C. Adams. Morphological variation in populations of *Plethodon cinereus* and *P. electromorphus*. Joint Annual Meeting of the American Society of Ichthyologists and Herpetologists, the Herpetologist League, and the Society for the Study of Amphibians and Reptiles, Norman, Oklahoma. (poster session).
33. 2004 Arif, S., D.C. Adams, and J.A. Wicknick. Morphological variation in populations of *Plethodon cinereus* and *Plethodon hubrichti*. Joint Annual Meeting of the American Society of Ichthyologists and Herpetologists, the Herpetologist League, and the Society for the Study of Amphibians and Reptiles, Norman, Oklahoma. (poster session).
32. 2004 Maerz, J.C., E.M. Myers, and D.C. Adams. Fine scale trophic polymorphism in a terrestrial salamander. Joint Annual Meeting of the American Society of Ichthyologists and Herpetologists, the Herpetologist League, and the Society for the Study of Amphibians and Reptiles, Norman, Oklahoma. (poster session).
31. 2004 Myers, E.M., F.J. Janzen, and D.C. Adams. Quantitative genetics of shape variation in the slider turtle (*Trachemys scripta*). Joint Annual Meeting of the American Society of Ichthyologists and Herpetologists, the Herpetologist League, and the Society for the Study of Amphibians and Reptiles, Norman, Oklahoma.
30. 2004 Donnelly, J.L., D.C. Adams, D.A. Ashlock, and J.H. Dekker. Morphology of Invasiveness: A Study of Seed Shape in Foxtails (Setaria spp.). Annual Meeting of the American Institute of Biological Sciences, Washington D.C.
29. 2004 Myers, E.M., F.J. Janzen, and D.C. Adams. Quantitative genetics of shape variation in the slider turtle (*Trachemys scripta*). Annual Meeting of the Society of Integrative and Comparative Biology, New Orleans, Louisiana.
28. 2003 Collyer, M.L., C.A. Stockwell, and D.C. Adams. Adaptive morphological divergence of a pupfish species in as little as three decades. Annual Meeting of the Desert Fishes Council, Death Valley, California.
27. 2003 Olson, C., E. Farrar, and D.C. Adams. A morphometric shape analysis of phenotypic plasticity in plains spadefoot toad (*Spea bombifrons*) tadpoles. Annual Meeting of the Society of Integrative and Comparative Biology, Toronto, Ontario.
26. 2002 Adams, D.C. Morphological consequences of interspecific competition between *Plethodon jordani* and *P. teyahalee* in the Great Smoky and Balsam Mountains. Joint Annual Meeting of the Society for the Study of Evolution, and the Society of Systematic Biologists, Champaign-Urbana, Illinois.
25. 2002 Valenzuela, N., D.C. Adams, and F.J. Janzen. Pattern does not equal process: when exactly is sex environmentally determined? Joint Annual Meeting of the Society for the Study of Evolution, and the Society of Systematic Biologists, Champagne-Urbana, Illinois.

24. 2002 Adams, D.C. Morphological consequences of interspecific competition between *Plethodon jordani* and *P. teyahalee*. Joint Annual Meeting of the Herpetologist League, and the Society for the Study of Amphibians and Reptiles, Kansas City, Missouri.
23. 2002 Valenzuela, N., D.C. Adams, and F.J. Janzen. When exactly is sex environmentally determined? Joint Annual Meeting of the Herpetologist League, and the Society for the Study of Amphibians and Reptiles, Kansas City, Missouri.
22. 2002 Adams, D.C. Quantifying morphology to test ecological and evolutionary hypotheses. 9th Annual Ecology and Evolutionary Biology Spring Symposium, Iowa State Univeristy, Ames, Iowa.
21. 2001 Beachy, C.K., and D.C. Adams. Historical explanations of phenotypic variation in the Plethodontid salamander, *Gyrinophilus porphyriticus*. Joint Annual Meeting of the Herpetologist League, and the Society for the Study of Amphibians and Reptiles, Indianapolis, Indiana.
20. 2001 Adams, D.C., and C.K. Beachy. Historical explanations of phenotypic variation in the Plethodontid salamander, *Gyrinophilus porphyriticus*. Joint Annual Meeting of the American Society of Naturalists, the Society for the Study of Evolution, and the Society of Systematic Biologists, Knoxville, Tennessee. (poster session).
19. 2001 Tavaré, S., D.C. Adams, O. Fedrigo, and G.J.P. Naylor. A model for phylogenetic inference using structural and chemical covariates. Pacific Symposium on Biocomputing, Honolulu, Hawaii.
18. 2000 Adams, D.C., and G.J.P. Naylor. Assessing the structural similarity of proteins: A comparison of existing methods and geometric morphometric techniques. C.I.M.E. Workshop on Protein Structure, Martina-Franca, Italy.
17. 2000 Adams, D.C. Morphometrics, biomechanics, and character displacement in two species of Plethodontid salamander. Joint Annual Meeting of the American Society of Naturalists, the Society for the Study of Evolution, and the Society of Systematic Biologists, Bloomington, Indiana.
16. 2000 Fedrigo, O., K. Vander Velden, D.C. Adams, and G.J.P. Naylor. Are particular protein regions predisposed to yield misleading phylogenetic inferences? Joint Annual Meeting of the American Society of Naturalists, the Society for the Study of Evolution, and the Society of Systematic Biologists, Bloomington, Indiana.
15. 2000 Vander Velden, K., O. Fedrigo, D.C. Adams, and G.J.P. Naylor. Visualizing molecular evolutionary signal conflicts on protein structures. Joint Annual Meeting of the American Society of Naturalists, the Society for the Study of Evolution, and the Society of Systematic Biologists, Bloomington, Indiana.
14. 2000 Adams, D.C. Biomechanics, morphometrics and character displacement in *Plethodon*. Joint Annual Meeting of the American Society of Ichthyologists and Herpetologists, the Herpetologist League, and the Society for the Study of Amphibians and Reptiles, La Paz, Mexico.
13. 2000 Adams, D.C., and G.J.P. Naylor. 2000. A new method for evaluating the structural similarity of proteins using geometric morphometrics. RECOMB2000, Tokyo, Japan. (poster session).
12. 1999 Adams, D.C., O. Fedrigo, K. Vander Velden, and G.J.P. Naylor. Estimating models of evolutionary change from empirical data. Gordon Research Conference in Molecular Evolution, Hayama, Japan. (poster session).
11. 1999 Adams, D.C. Methods for shape analysis of articulated structures and ecological character displacement in *Plethodon*. Department of Zoology and Genetics, Iowa State University, Ames, Iowa.
10. 1999 Adams, D.C. Ecological character displacement in *Plethodon* and methods for shape analysis of articulated structures. Dissertation Defense, Department of Ecology and Evolution, State University of New York at Stony Brook, Stony Brook, New York.

9. 1998 Adams, D.C. Morphological and trophic variability in populations of *Plethodon cinereus* and *P. hoffmani* in south-central Pennsylvania. Joint Annual Meeting of the American Society of Naturalists, the Society for the Study of Evolution, and the Society of Systematic Biologists, Vancouver, British Columbia.
8. 1998 Adams, D.C. Analysis of landmark data from articulated structures. Joint Annual Meeting of the American Society of Naturalists, the Society for the Study of Evolution, and the Society of Systematic Biologists, Vancouver, British Columbia. (poster session).
7. 1998 Adams, D.C. Morphological and trophic variability in populations of *Plethodon cinereus* and *P. hoffmani* in south-central Pennsylvania. Fourth Highlands Conference on the Biology of Plethodontid Salamanders, Highlands, North Carolina. (poster session).
6. 1998 Adams, D.C. The problem with parallax. Annual retreat of the Department of Ecology and Evolution, State University of New York at Stony Brook, Stony Brook, New York.
5. 1997 Rosenberg, M.S., J. Gurevitch, and D.C. Adams. Metawin: windows software for ecological meta-analysis. Annual Meeting of the Ecological Society of America, Albuquerque, New Mexico.
4. 1996 Caldecutt, W.J., and D.C. Adams. Morphometrics of trophic osteology in threespine stickleback. Annual retreat of the Department of Ecology and Evolution, State University of New York at Stony Brook, Stony Brook, New York.
3. 1995 Adams, D.C., and D.J. Funk. Morphometric analysis of *Neochlamisus* (Coleoptera: Chrysomelidae): inferences on host races and sexual dimorphism. Joint Annual Meeting of the American Society of Naturalists, the Society for the Study of Evolution, and the Society of Systematic Biologists, Montreal, Canada. (poster session).
2. 1995 Adams, D.C. Using randomization tests to analyze behavioural data. Annual retreat of the Department of Ecology and Evolution, State University of New York at Stony Brook, Stony Brook, New York.
1. 1994 Adams, D.C. Defensive structures in the genus *Pinus*: heterochronic changes in bark ontogeny and its evolutionary implications. Master Defense. Department of Biology, University of Southwestern Louisiana, Lafayette, Louisiana.