

# DANIEL A. STEPHEN

## *Associate Professor of Geology* Department of Earth Science

### EDUCATIONAL BACKGROUND:

- **Doctor of Philosophy in Geology, 2001, Texas A&M University**  
Dissertation: *The Impact of Reproductive Strategy on Cephalopod Evolution.*
- **Master of Science in Geology, 1997, University of Arkansas**  
Thesis: *Cephalopod Mass Mortality and Gigantism, Middle Carboniferous (Chesterian–Morrowan) Strata, Northern Arkansas.*
- **Bachelor of Science in Geology, 1994, University of Arkansas**  
Academic minors in Mathematics and Anthropology.

### PROFESSIONAL AFFILIATIONS:

- Geological Society of America
- National Association of Geoscience Teachers
- Paleontological Society (USA)
- Palaeontological Association (UK)
- International Palaeontological Association
- Utah Academy of Arts & Sciences

### COURSES TAUGHT AT UVU:

- GEOL 1010 & 1015 – Introduction to Geology (lecture & lab)
- BIOL 1010 – General Biology
- GEOL 1220 & 1225 – Historical Geology (lecture & lab)
- BIOL/GEOL 202r – Natural History Excursion
- ENST 3000 – Introduction to Environmental Studies
- BIOL 4500 – Principles of Evolution
- BIOL 494r – Biology Senior Seminar
- GEOL 4500 – Sedimentary Geology (lecture & lab)
- GEOL 4510 – Paleontology (lecture & lab)
- BIOL/GEOL 204r/490r – Desert Natural History, Capitol Reef
- BIOL/GEOL 204r/490r – Tropical Natural History, Costa Rica
- BIOL 489r – Supervised Biology Student Research
- GEOL 495r – Supervised Geology Student Research
- GEOL 4600 – Geology Summer Field Course

### CURRENT RESEARCH:

- Bylund, K.G., and **D.A. Stephen**. Late Early Coniacian (Cretaceous) ammonites from central Utah. [Manuscript accepted by *Bulletin of the Wyoming Geological Association*.]
- **Stephen, D.A.** Life history strategies in evolutionary time: the impact of reproductive strategy on cephalopod phylogenetic patterns. [Manuscript accepted by *Paleobiology*, but needs to be resubmitted due to elapsed revision time.]
- **Stephen, D.A.** Variation in cephalopod embryonic morphology. [Manuscript accepted by *Journal of Paleontology*, but needs to be resubmitted due to elapsed revision time.]
- Smith, C., T. Laville, E. Fara, G. Escarguel, N. Olivier, E. Vennin, N. Goudemand, K.G. Bylund, J. Jenks, **D.A. Stephen**, M. Hautmann, S. Charbonnier, L. Krumenacker, and A. Brayard. Exceptional fossil assemblages confirm the existence of complex Early Triassic ecosystems soon after the end-Permian mass extinction. [Manuscript submitted to: *Geology*.]
- **Stephen, D.A.**, and K.G. Bylund. Late Cretaceous nautiloids from the Western Interior Seaway. [Paper in preparation, to be submitted to: *Journal of Paleontology*.]
- Goudemand, N., H. Bucher, A. Brayard, **D.A. Stephen**, K.G. Bylund, and L. Menlove. Early Triassic conodonts in central and western Utah. [Paper in preparation, to be submitted to: *Lethaia*.]
- **Stephen, D.A.**, and W.J. Zinsmeister. Systematics of the Late Cretaceous nautiloids of Antarctica. [Paper in preparation, to be submitted to: *Historical Biology*.]

- Grossman, E.L., H. Wang, T.E. Yancey, and **D.A. Stephen**. Modest seasonality during the assembly of Pangea: evidence from isotopic analyses of brachiopod shells. [Paper in preparation, to be submitted to: *Palaaios*.]

#### PEER-REVIEWED PUBLICATIONS:

- Brayard, A., N. Olivier, E. Vennin, J. Jenks, K.G. Bylund, **D.A. Stephen**, D. McShinsky, N. Goudemand, E. Fara, and G. Escarguel (2020). New middle and late Smithian ammonoid faunas from the Utah/Arizona border: new evidence for calibrating Early Triassic transgressive -regressive trends and paleobiogeographical signals in the western USA basin. *Global & Planetary Change* 192:103251. <https://doi.org/10.1016/j.gloplacha.2020.103251>
- Romano, C., T. Argyriou, L. Krumenacker, A. Brayard, N. Olivier, G. Escarguel, E. Fara, N. Goudemand, P. Gueriau, K.G. Bylund, J.F. Jenks, **D.A. Stephen**, E. Vennin, M. Thoury C. Thomazo (2019). Chondrichthyan teeth from the Early Triassic Paris Biota (Bear Lake County, Idaho, USA). *Geobios* 54(1):63-70. doi: 10.1016/j.geobios.2019.04.001
- Thomazo, C., A. Brayard, S. Elmeknassi, E. Vennin, N. Olivier, G. Caravaca, G. Escarguel, E. Fara, K.G. Bylund, J.F. Jenks, **D.A. Stephen**, B. Kilingsworth, S. Pierre, and P. Cartigny (2019). Multiple sulfur isotope signals associated with the late Smithian event and the Smithian/Spathian boundary. *Earth Science Reviews* 195:96–113.
- Olivier, N., E. Fara, E. Vennin, K.G. Bylund, J. Jenks, G. Escarguel, **D.A. Stephen**, N. Goudemand, D. Snyder, C. Thomazo, and A. Brayard, (2018). Late Smithian microbial deposits and their lateral marine fossiliferous limestones (Early Triassic, Hurricane Cliffs, Utah, USA). *Facies* 64:13. <https://doi.org/10.1007/s10347-018-0526-3>
- Caravaca, G., A. Brayard, E. Vennin, M. Guiraud, L. Le Pourhiet, A.-S. Grosjean, C. Thomazo, N. Olivier, E. Fara, G. Escarguel, K.G. Bylund, J.F. Jenks, and **D.A. Stephen**. (2018). Controlling factors for differential subsidence in the Sonoma Foreland Basin (Early Triassic western USA). *Geological Magazine* 155(6):1305-1329.
- Villier, L., A. Brayard, K.G. Bylund, J.F. Jenks, G. Escarguel, N. Olivier, **D.A. Stephen**, E. Vennin, and E. Fara (2018). *Superstesaster promissor* gen. et sp. nov., a new starfish (Echinodermata, Asteroidea) from the Early Triassic of Utah, USA, filling a major gap in the phylogeny of asteroids. *Journal of Systematic Palaeontology*, 16(5):395-415, DOI: 10.1080/14772019.2017.1308972.
- Grosjean, A.-S., E. Vennin, N. Olivier, G. Caravaca, C. Thomazo, E. Fara, G. Escarguel, K.G. Bylund, J.F. Jenks, **D.A. Stephen**, and A. Brayard (2018). Early Triassic environmental dynamics and microbial development during the Smithian–Spathian transition (Lower Weber Canyon, Utah, USA). *Sedimentary Geology* 363:136–151.
- Caravaca, G., C. Thomazo, E. Vennin, N. Olivier, T. Coquerez, G. Escarguel, E. Fara, K.G. Bylund, J.F. Jenks, **D.A. Stephen**, and A. Brayard. (2017). Early Triassic fluctuations of the global carbon cycle: new evidence from paired carbon isotopes in the western USA basin. *Global and Planetary Change* 154:10–22.
- Brayard, A., L.J. Krumenacker, J.P. Botting, J. Jenks, K.G. Bylund, E. Fara, E. Vennin, N. Olivier, N. Goudemand, T. Saucedo, S. Charbonnier, C. Romano, L. Doguzhaeva, B. Thuy, M. Hautmann, **D.A. Stephen**, C. Thomazo, and G. Escarguel. (2017). Unexpected Early Triassic marine ecosystem and the rise of the Modern evolutionary fauna. *Science Advances*. doi: 10.1126/sciadv.1602159
- Thomazo, C, E. Vennin, A. Brayard, I. Bour, O. Mathieu, S. Elmeknassi, N. Olivier, G. Escarguel, K.G. Bylund, J. Jenks, **D.A. Stephen**, and E. Fara, (2016). A diagenetic control on the Early Triassic Smithian-Spathian carbon isotopic excursions recorded in the marine settings of the Thaynes Group (Utah, USA). *Geobiology* 14(3):220-236.
- Brayard, A., M. Meier, G. Escarguel, E. Fara, A. Nützel, N. Olivier, K.G. Bylund, J. Jenks, **D.A. Stephen**, M. Hautmann, E. Vennin, and H. Bucher (2015). Early Triassic Gulliver gastropods: Spatio-temporal distribution and significance for biotic recovery after the end-Permian mass extinction. *Earth Science Reviews* 146(1):31-64.
- Olivier, N., A. Brayard, E. Vennin, G. Escarguel, E. Fara, K.G. Bylund, J. Jenks, G. Caravaca, and **D.A. Stephen** (2015). Evolution of depositional settings in the Torrey area during the Smithian (Early Triassic, Utah, USA) and their significance for the biotic recovery. *Geological Journal* 51:600-626. doi: 10.1002/gj.2663
- Vennin, E., N. Olivier, A. Brayard, I. Bour, C. Thomazo, G. Escarguel, E. Fara, K.G. Bylund, J. Jenks, **D.A. Stephen**, and R. Hofmann (2014). Microbial deposits in the aftermath of the end-Permian mass extinction: a diverging case from the Mineral Mountains (Utah, USA). *Sedimentology* 62:753-792. doi: 10.1111/sed.12166
- Olivier, N., A. Brayard, E. Fara, K.G. Bylund, J. Jenks, E. Vennin, **D.A. Stephen**, and G. Escarguel (2014). Smithian shoreline migrations and depositional settings in Timpoweap Canyon (Early Triassic, Utah, USA). *Geological Magazine* 151(5):938-955.
- Brayard, A., K.G. Bylund, J. Jenks, **D.A. Stephen**, N. Olivier, G. Escarguel, E. Fara, and E. Vennin, (2013). Smithian ammonoid faunas from Utah: implications for Early Triassic biostratigraphy, correlation and basinal paleogeography. *Swiss J. Palaeontology* 132(2):141-219.
- **Stephen, D.A.**, K.G. Bylund, P. Garcia, R.D. McShinsky, and H.J. Carter (2012). Taphonomy of dense concentrations of juvenile ammonoids in the Upper Cretaceous Mancos Shale, east-central Utah, USA. *Geobios* 45(1):121-128.
- Brayard, A., E. Vennin, N. Olivier, K.G. Bylund, J. Jenks, **D.A. Stephen**, H. Bucher, R. Hofmann, N. Goudemand, and G. Escarguel (2011). Transient metazoan reefs in the aftermath of the end-Permian mass extinction. *Nature Geoscience* 4(10):693-697.
- Brayard, A., A. Nützel, A. Kaim, G. Escarguel, M. Hautmann, **D.A. Stephen**, K.G. Bylund, J. Jenks, and H. Bucher (2011). Gastropod evidence against the Early Triassic Lilliput Effect: Reply. *Geology* 39:e233.

- **Stephen, D.A.**, K.G. Bylund, P.J. Bybee, and W.J. Ream (2010). Ammonoid beds in the Lower Triassic Thaynes Formation of western Utah, USA. *Cephalopods – Present and Past*, Tokai University Press, Tokyo, Japan, p. 243-252.
- Brayard, A., A. Nützel, **D.A. Stephen**, K.G. Bylund, J. Jenks, and H. Bucher (2010). Gastropod evidence against the Early Triassic Lilliput Effect. *Geology* 38(2):147-150.
- **Stephen, D.A.**, W.L. Manger, and C. Baker (2002). Ontogeny and heterochrony in the middle Carboniferous ammonoid *Arkanites relictus* (Quinn, McCaleb, and Webb) from northern Arkansas. *Journal of Paleontology* 76(5):810-821.
- **Stephen, D.A.**, and R.J. Stanton, Jr. (2002). Impact of reproductive strategy on cephalopod evolution. *Berichte der Geologischen Bundesanstalt, Wien*, 57:151-155.
- Manger, W.L., L.K. Meeks, and **D.A. Stephen** (1999). Pathologic gigantism in Middle Carboniferous cephalopods, southern midcontinent, United States. *Advancing Research on Living and Fossil Cephalopods*, Plenum Pub., p. 77-89.
- Manger, W.L., **D.A. Stephen**, and L.K. Meeks (1999). Possible cephalopod reproductive mass mortality reflected by Middle Carboniferous assemblages, Arkansas, southern United States. *Advancing Research on Living and Fossil Cephalopods*, Plenum Pub., p. 345-364.
- Miller, D.M., P.A. Moore, Jr., D.A. Edwards, **D.A. Stephen**, and E.E. Gbur (1993). Determination of water soluble phosphorous in soil. *Ark. Farm Research*, 42(4):10.

#### SELECTED CONFERENCE ABSTRACTS:

- Forster, C., K.G. Bylund, L. Axelsen, N.E. Perdue, A.M. DeNittis, M.A. Stearns, A. Zanazzi, and **D.A. Stephen** (2020). Ammonite biostratigraphy and paleoceanography of the Mancos Shale (Upper Cretaceous) in the San Rafael Swell, east-central Utah. *GSA Abs. with Prgms.*, v. 52, no. 6. doi: 10.1130/abs/2020AM-359040
- Perdue, N., J. Burke, K.G. Bylund, and **D.A. Stephen** (2019). Isotope paleothermometry of belemnites from the Jurassic Sundance Sea of western North America. *GSA Abs. with Prgms.*, v. 54, no. 5. doi: 10.1130/abs/2019AM-340098
- Jenks, J., **D.A. Stephen**, A. Brayard, and H. Bucher (2014). Unusual umbilical modification in a Middle Smithian (Early Triassic) ammonoid from Crittenden Springs, Elko County, Nevada. 9th International Cephalopod Symposium, Zürich, Switzerland: *Cephalopods – Present and Past, Abs. with Prgms.*
- Brayard, A., K.G. Bylund, J. Jenks, **D.A. Stephen**, N. Olivier, G. Escarguel, E. Fara, and E. Vennin (2014). New Smithian (Lower Triassic) ammonoid zonation from Utah (USA). 9th International Cephalopod Symposium, Zürich, Switzerland: *Cephalopods – Present and Past, Abs. with Prgms.*
- Fara, E., A. Brayard, G. Escarguel, M. Meier, N. Olivier, K.G. Bylund, J. Jenks, **D.A. Stephen**, A. Nützel, M. Hautmann, E. Vennin, and H. Bucher (2014). Body-size distribution of Early Triassic gastropods: macroevolutionary pattern or biased signal? *EGU Gen.Ass., Geophys.Res.Abs.*
- Caravaca, G., N. Olivier, A. Brayard, E. Vennin, G. Escarguel, E. Fara, K.G. Bylund, J. Jenks, and **D.A. Stephen** (2014). Facies and depositional settings during the Smithian in the Torrey area (Early Triassic, Utah, USA). *EGU Gen.Ass., Geophys.Res.Abs.*
- **Stephen, D.A.**, A. Brayard, N. Olivier, E. Vennin, K.G. Bylund, J. Jenks, G. Escarguel, E. Fara, D. Snyder, and G.D. Stanley Jr., (2013). Early Triassic metazoan reefs from the western USA. *GSA Abs. with Prgms.*, v. 45, no. 7, p. 883.
- Bour, I., E. Vennin, C. Thomazo, A. Brayard, N. Olivier, G. Escarguel, K.G. Bylund, J. Jenks, and **D.A. Stephen** (2013). Microbialites and geochemistry of the Early Triassic enigma. *EGU Gen.Ass., Geophys.Res.Abs.*, v. 15, EGU2013-5877-3.
- Brayard, A., G.D. Stanley Jr., E. Vennin, N. Olivier, K.G. Bylund, J. Jenks, **D.A. Stephen**, R. Hofmann, N. Goudemand, and G. Escarguel (2012). Transient metazoan reefs in the aftermath of the end-Permian mass extinction. *GSA Abs. with Prgms.*, v. 44, no. 7, p. 402.
- **Stephen, D.A.**, and K.G. Bylund (2010). Taphonomy of dense concentrations of juvenile ammonoids in the Mancos Shale in east-central Utah, USA. 8th International Cephalopod Symposium, Dijon, France: *Cephalopods – Present and Past, Abs. with Prgms.*, p. 93.
- Bylund, K.G., and **D.A. Stephen** (2010). Coniacian (Late Cretaceous) ammonoid fauna of eastern Utah, USA. 8th International Cephalopod Symposium, Dijon, France: *Cephalopods – Present and Past, Abs. with Prgms.*, p. 115.
- **Stephen, D.A.**, and K.G. Bylund (2010). Late Cretaceous nautiloids from eastern Utah, USA. 8th International Cephalopod Symposium, Dijon, France: *Cephalopods – Present and Past, Abs. with Prgms.*, p. 150.
- Bylund, K.G., **D.A. Stephen**, A. Brayard, H. Bucher, J. Jenks, and R.D. McShinsky (2009). Ammonoids of the Lower Triassic Thaynes Group in the Pahvant Range, Utah. *GSA Abs. with Prgms.*, v. 41, no. 6, p. 38.
- **Stephen, D.A.**, K.G. Bylund, A. Brayard, and H. Bucher (2009). Lower Triassic ammonoid biostratigraphy of central and western Utah. 9th North American Paleontological Convention: *Cincinnati Museum Center, Scientific Contributions*, No. 3, p. 200-1.
- **Stephen, D.A.**, L. Menlove, N. Goudemand, and A. Brayard (2009). Early Triassic conodonts in central and western Utah. 9th North American Paleontological Convention: *Cincinnati Museum Center, Scientific Contributions*, No. 3, p. 201-2.
- **Stephen, D.A.**, C.L. Stephen, R. Van Buren, and H. Truong (2009). Capitol Reef Field Station: Past, Present, and Future. *GSA Abs. with Prgms.*, v. 41, no. 6, p. 47.

- **Stephen, D.A.**, K.G. Bylund, P.J. Bybee, and W.J. Ream (2007) Ammonoid mass mortality beds in the Lower Triassic Thaynes Formation of western Utah, USA. 7th International Cephalopod Symposium, Sapporo, Japan: *Cephalopods – Present and Past, Abs. with Prgms.*, p. 33.
- **Stephen, D.A.**, and W.J. Zinsmeister (2004) Systematics of the Late Cretaceous nautiloids of Antarctica. 6th International Cephalopod Symposium, Fayetteville: *Cephalopods – Present and Past, Abs. with Prgms.*, p. 145-6.
- **Stephen, D.A.** (2001) The impact of reproductive strategy on cephalopod evolution. 7th North American Paleontological Convention: *PaleoBios*, Vol. 21, supp. to no. 2, p. 121.
- **Stephen, D.A.**, W.L. Manger, and L.K. Meeks (2000) Middle Carboniferous ammonoid population dynamics, southern midcontinent, USA. *GSA Abs. with Prgms.*, v. 32, no. 7, p. 371.
- **Stephen, D.A.** (2000) Heterochrony in Pennsylvanian (Morrowan) ammonoids from northern Arkansas. *GSA Abs. Prgms.*, v. 32, no. 3, p. 42.
- **Stephen, D.A.**, and R.J. Stanton, Jr. (1999) Impact of reproductive strategy on cephalopod evolution. 5th International Cephalopod Symposium, Vienna: *Cephalopods – Present and Past, Abs. with Prgms.*, p. 106.
- **Stephen, D.A.** (1999) Ammonitella size as a conservative trait: evidence from two Carboniferous ammonoid lineages. *GSA Abs. with Prgms.*, v. 31, no. 7, p. 172.
- Grossman, E.L., H. Wang, T.E. Yancey, and **D.A. Stephen** (1998) Modest seasonality during the assembly of Pangea: evidence from isotopic analyses of brachiopod shells. *GSA Abs. with Prgms.*, v. 30, no. 7., p. 272.
- **Stephen, D.A.** (1998) Intra- and inter-specific embryonic size variation in two Carboniferous ammonoid species. *GSA Abs. with Prgms.*, v. 30, no. 7., p. 93.
- **Stephen, D.A.**, and W.L. Manger (1997) Dimorphism and maturity in Middle Carboniferous ammonoids, southern midcontinent, United States. *GSA Abs. with Prgms.*, v. 29, no. 6, p. 343.
- **Stephen, D.A.**, W.L. Manger, and L.K. Meeks (1996) Possible reproductive mass mortality and pathologic gigantism in Middle Carboniferous (Chesterian-Morrowan) cephalopod assemblages, southern midcontinent. *GSA Abs. with Prgms.*, v. 28, no. 7, p. 430.
- **Stephen, D.A.**, L.K. Meeks, and W.L. Manger (1996) Possible cephalopod mass mortality, Fayetteville Shale (Chesterian), northwestern Arkansas. *GSA Abs. with Prgms.*, v. 28, no. 1, p. 64.
- Chandler, S.L., A.K. Braden, **D.A. Stephen**, B.K. Kelly, E.C. Bartholmey, and J.J. Hoaster (1996) Possible carbonate olistoliths, St. Joe Limestone (Lower Mississippian), northwestern Arkansas. *GSA Abs. with Prgms.*, v. 28, no. 7, p. 336.

#### SELECTED PROFESSIONAL & COMMUNITY SERVICE:

- Served as Chair of the UVU Earth Science Department RTP Committee, currently overseeing 5 tenure-track colleagues. (2012-present)
- Delivered presentations to UVU Biology Department students for "Research Day" events. (2011-present)
- Served as President of the Southwest Section of the National Association of Geoscience Teachers, and helped develop NAGT field trips for Utah and adjacent states. (2009-present)
- Established the Gilbert Club, an informal reading group for Earth Science students and interested community members; meets every week to discuss important new or historically relevant geoscience publications. (2009-present)
- Served as Coordinator/Director for the UVU Environmental Studies Program. (2008-2018)
- Mentored undergraduate student research, including the UVU Scholarly & Creative Opportunities Program. (2008-present)
- Served on the Faculty Committee, UVU Interdisciplinary Studies Program. (2008-present)
- Orchestrated the accession and formal cataloging of several large, excellent collections of seashells and fossils donated by local community members and by other institutions. (2008-present)
- Served on numerous Search Committees for hiring of new faculty, staff, and Dean of UVU College of Science & Health. (2007-present)
- Volunteered as a science fair judge for the Central Utah Science and Engineering Fair. (2006-present)
- Performed formal observations of classroom teaching of colleagues in UVU Earth Science Department. (2006-present)
- Supervised senior theses in the UVU Integrated Studies Program. (2006-present)
- Represented the UVU Department of Earth Science at the "Expanding Your Horizons" conference for grade-school girls from around the state. (2005-present)
- Represented the UVU Department of Earth Science at the "Empowering Your Tomorrow" conference for grade-school boys from around the state. (2005-present)
- Served on the UVU University College [previously the School of General Academics] Auxiliary Curriculum Committee. (2005-present)
- Represented the UVU Department of Earth Science at "majors fairs" for current students. (2005-present)
- Mentored undergraduate UVU students in career development. (2004-present)
- Shared expertise with UVU colleagues in the Department, College, and Institution. (2003-present)
- Served the professional scientific community by reviewing grant proposals and papers for publication in scientific journals. (2001-present)

- Gave presentations dealing with the most important basic concepts in geology and paleontology to children at local public elementary schools. (1994-present)
- Served on the UVU College of Science & Health Faculty Excellence Award Committee. (2007-2010)
- Served on the UVU Capitol Reef Field Station [previously Sleeping Rainbow Ranch] Advisory Committee. (2006-2012)
- Represented the UVU College of Science & Health at orientation meeting for the Utah County Academy of Sciences, a public-charter school in Orem, UT. (2006-2007)
- Visited the Walden School, a public-charter school in Provo, UT, to talk about the fields of paleontology and geology, discuss science careers in general, and promote learning opportunities at UVU. (2005-2012)
- Represented the UVU Department of Earth Science at the "UV-You" outreach program, which brings in area high school students. (2005-2008)
- Represented the UVU Department of Earth Science at the "UV-Experience" orientation program for incoming freshmen. (2005-2008)
- Served on the Scientific Committee, 6th International Cephalopod Symposium. (2005)
- Served on the UVU Strategic Directions Advisory Committee. (2004-2007)
- Took local public elementary school children on geology field trips. (1995-2001)

#### **SELECTED ACADEMIC PRESENTATIONS:**

- Earth Science Seminar Series, Utah Valley University (2016)
- Utah Friends of Paleontology, Salt Lake City (2015)
- 9th International Cephalopod Symposium, Zurich, Switzerland (2014)
- Earth Science Seminar Series, Utah Valley University (2014)
- Geological Society of America Annual Meeting, Denver, CO (2013)
- Earth Science Seminar Series, Utah Valley University (2013, Fall)
- Earth Science Seminar Series, Utah Valley University (2013, Spring)
- Earth Science Seminar Series, Utah Valley University (2012)
- 8th International Cephalopod Symposium, Dijon, France (2010)
- Earth Science Seminar Series, Utah Valley University (2010)
- 9th North American Paleontological Conference, Cincinnati, OH (2009)
- Earth Science Seminar Series, Utah Valley University (2009)
- Geological Society of America Rocky Mountain Regional Meeting, Orem, UT (2009)
- Earth Science Seminar Series, Utah Valley State College (2008)
- 7th International Cephalopod Symposium, Sapporo, Japan (2007)
- Annual meeting of the Utah Academy of Arts and Sciences, Orem, UT (2006)
- Guy F. Atkinson Distinguished Lecture Series, University of Utah (2005)
- 6th International Cephalopod Symposium, Fayetteville, AR (2004)
- Biology & Geology Seminar Series, Utah Valley State College (2003)
- 7th North American Paleontological Conference, Berkeley, CA (2001)
- Geological Society of America Annual Meeting, Reno, NV (2000)
- Ecology Seminar Series, Texas A&M University (2000)
- Geological Society of America South-Central Regional Meeting, Fayetteville, AR (2000)
- Texas A&M University Student Research Week (2000)
- Geological Society of America Annual Meeting, Denver, CO (1999)
- 5th International Cephalopod Symposium, Vienna, Austria (1999)
- Geological Society of America Annual Meeting, Toronto, Canada (1998)
- Geological Society of America Annual Meeting, Salt Lake City, UT (1997)
- Geological Society of America South-Central Regional Meeting, Austin, TX (1996)
- Geological Society of America Annual Meeting, Denver, CO (1996)

#### **SELECTED FIELD EXPERIENCES:**

- Extensive paleontology and stratigraphy field work (1995-present) -- Utah, Texas, and Arkansas.
- Numerous formal and informal geology and paleontology field trips (1990-present) -- in every state in the USA.
- Informal geology field excursion (2017) -- Scotland.
- Informal natural history field excursion (2017) -- Croatia and Bosnia & Herzegovina.
- Informal natural history field excursion (2016) -- Ireland.
- Informal geology field excursion (2016) -- Norway.
- Informal natural history field excursion (2015) -- Australia.
- Paleontology and stratigraphy field trip (2014) -- Jura Mountains, Switzerland.

- Natural history field class (2011, 2013, 2014) -- Costa Rica.
- Biology field work (2014) -- Costa Rica.
- Geoscience education field trip (2014) -- Arizona.
- Biology field work (2013) -- Costa Rica and Panama.
- Geoscience education field trips (2010, 2013) -- Utah.
- Informal natural history field excursion (2012) -- Borneo and adjacent islands, Malaysia and Indonesia.
- Geoscience education field trip (2012) -- New Mexico.
- Informal natural history field excursion (2012) -- Baja, Mexico.
- Geoscience education field trip (2011) -- Colorado.
- Natural history field class (2011) -- Capitol Reef National Park.
- Paleontology and stratigraphy field trip (2010) -- Burgundy, France.
- Informal geology field excursion (2010) -- Spain and Portugal.
- Informal geology field excursion (2009) -- Guatemala.
- Informal geology field excursion (2008) -- New Zealand.
- Paleontology field work (2007) -- England.
- Paleontology and stratigraphy field trip (2007) -- Hokkaido, Japan.
- Informal geology field excursion (2007) -- Sonora, Mexico.
- Informal geology field excursion (2006) -- Scotland and Ireland.
- Informal geology field excursion (2005) -- Alaska.
- Biology field work (2003-2004) -- Turks & Caicos Islands, British West Indies.
- Biology field work (2001-2002) -- Saint Lucia, West Indies.
- Informal geology field excursion (2001) -- southern Germany.
- Desert ecology and zoology/botany field trip (2000) -- Big Bend National Park.
- Informal geology field excursion (1999) -- Finland and Sweden.
- Paleontology and stratigraphy field trip (1999) -- Carnic Alps: Austria and Italy.
- Informal geology field excursion (1998) -- Yucatan, Mexico.
- Biology, ecology, and geology of modern and ancient carbonate communities (1996) -- San Salvador Island, Bahamas.
- Geology field camp (1994) -- Montana, Idaho, Wyoming, Colorado.
- Archeology field work (1991-1992) -- South Dakota, and Arkansas.
- Extensive agronomy field work (1989-1995) -- Arkansas.