**MATTHEW J. PRANTER**
*Director, School of Geosciences*
*Eberly Family Chair and Professor of Geosciences*

*Affiliate Faculty*
*Mewbourne School of Petroleum and Geological Engineering*

Mewbourne College of Earth and Energy
University of Oklahoma
Norman, Oklahoma
(303) 949-5988
matthew.pranter@ou.edu
Faculty Website: http://matthewpranter.oucreate.com/
LinkedIn: linkedin.com/in/matthew-pranter-13a540144
ORCID Profile: https://orcid.org/0000-0003-1628-1305

## EDUCATION

**Ph.D. in Geology**
Colorado School of Mines, Golden, Colorado
- Dissertation: *Use of a Petrophysical-Based Reservoir Zonation and Multicomponent Seismic Attributes for Improved Geologic Modeling*
- Minor: Petroleum Engineering
- Paul S. Pustmueller Scholarship
- Geological Society of America Research Grant
- American Association of Petroleum Geologists Research Grant (awarded 2 grants)
- Society of Professional Well Log Analysts Research Grant (awarded 2 grants)
- Sigma Xi, Scientific Research Honor Society
- Advisor: Dr. Neil F. Hurley
- Committee Members: Drs. Tom Davis, Roger Slatt, Craig Van Kirk, Rod Eggert

**M.S. in Geology**
Baylor University, Waco, Texas
- Thesis: *Facies Analysis of the Strawn Submarine Fan Complex: Fort Worth Basin, Central Texas*
- Wendlandt Assistantship for Academic Achievement
- Sun Company Scholarship
- American Association of Petroleum Geologists Research Grant
- Advisor: Dr. Robert C. Grayson, Jr.

**B.S. in Geological Engineering**
Colorado School of Mines, Golden, Colorado
- Geotechnics, Hydrogeology, Groundwater, Subsurface
- Tau Beta Pi, National Engineering Honor Society
- Graduated with High Scholastic Honors
- Professional Engineer-Intern (EIT): State of Colorado

**B.S. in Geology**
Oklahoma State University, Stillwater, Oklahoma
- Minor: Petroleum Engineering
- Skinner Scholarship for Academic Achievement

## EXPERIENCE

**Director, School of Geosciences, and Eberly Family Chair**, 2023-present
**Professor of Geosciences**, 2013-present
**Affiliate Faculty**, Mewbourne School of Petroleum and Geological Engineering, 2022-present
**Victor E. Monnett Chair in Energy Resources**, 2020-2023
**Lew and Myra Ward Chair in Reservoir Characterization**, 2013-2019
University of Oklahoma
Mewbourne College of Earth and Energy
School of Geosciences
Norman, Oklahoma

**As Director:**

- Manage, lead, and facilitate the vision of the School of Geosciences.
- Administer ~$6.8M operating budget (FY24); address funding policies and decisions.
- Attract funding from alumni, corporations, and other donors to support School programs and operations.
- Oversee personnel and student matters (for 21 tenured, tenure-track, and ranked renewable-term faculty, Bartell Field Camp Director, 8 affiliate/adjunct/cooperating faculty, 12 emeritus faculty, 6 staff members, 68 graduate and 101 undergraduate students).
- Collaborate with Mewbourne College of Earth and Energy (MCEE) Dean, unit Directors, and members of the MCEE Board of Visitors to develop the MCEE Strategic Plan.
- Conduct faculty and staff evaluations.
- Provide guidance and support to tenure-track faculty for progress to tenure.
- Address instruction, advising, curriculum, and enrollment matters.
- Address space (e.g., office, lab), equipment, and vehicle issues.
- Establish and maintain positive collaborations with alumni and friends of the School and industry.
- Serve on the Executive Committee of the Alumni Advisory Council (AAC).
- Participate in, present at, and help coordinate events: director, faculty, and staff meetings, Alumni Advisory Council (AAC) meetings, Alumni and Friends Receptions, Pigott Colloquium Series, Convocation, Sooner Saturday, Geosciences Day, AAPG Student Research Symposium and Expo, Alumni Field Camp, Coffee and Conversation, School picnics/events, awards ceremonies, Trailblazer Gala.

**As Professor of Geosciences and Eberly Family Chair:**

- Conduct research and instruct undergraduate and graduate courses in petroleum geosciences, energy resources, subsurface reservoir characterization and 3D modeling, sedimentary geology, and introductory geology.
- Develop robust grant proposals to secure external funding from industry and government to support graduate students and research.
- Served as principal investigator (PI) and co-PI on several industry sponsored research consortia and projects, as well as government-funded research projects.
- Served as the primary advisor to 53 graduate students to date at two different R1 universities.
- Publish research with my students and colleagues in discipline-specific peer-reviewed journals and present the results at professional national and regional conferences.
- Serve the university, college, school/department, and professional organizations in a variety of roles.
- Serve on the American Association of Petroleum Geologists (AAPG) Executive Committee and as AAPG Editor with supervision and final authority for the AAPG Bulletin and special publications.

**Associate Professor of Geological Sciences**, 2008-2013
**Assistant Professor of Geological Sciences**, 2001-2008
University of Colorado Boulder
College of Arts and Sciences
Department of Geological Sciences
Boulder, Colorado

- Conducted research and instructed undergraduate and graduate courses in petroleum geosciences, energy resources, subsurface reservoir characterization and 3D modeling, sedimentary geology, and introductory geology.
- Developed robust grant proposals to secure external funding to support graduate students and research.
- Served as principal investigator and collaborator on several industry sponsored research consortia and projects, as well as research funded by the federal government and other organizations.
- Lead PI on four (4) research phases of the Williams Fork Consortium on fluvial and shallow-marine reservoirs. Sponsored by industry, RPSEA, and ACS-PRF.
- Published research with my students and colleagues in discipline-specific peer-reviewed journals and presented the results at professional national and regional conferences.
- Served as the primary advisor to 22 graduate students while at the University of Colorado Boulder.
- Served the university, college, department, and professional organizations in a variety of roles.
- Served as Chair of the Dean's College of Arts & Sciences Council Budget Committee (6 yrs; 3 yrs as Chair) and Arts & Sciences Council Department Representative (3 yrs).
- Served as member of the Department Executive Committee (2 yrs).

**Senior Research Geologist**, ExxonMobil Upstream Research Company, 1999-2001
Houston, Texas

- Reservoir Characterization Division - Geologic Modeling Section
- Conducted geologic modeling research and research applications on deep-water and carbonate reservoirs and systems using object-based and cell-based methods.
- Built object-based geologic models of the Forties field "Charlie channel" deepwater channel complex; models were used to investigate development scenarios of deepwater reservoirs.
- Co-instructor for ExxonMobil's 3-D Modeling of Sandstone Reservoirs School. Taught sandstone facies modeling exercises and prepared and instructed exercises on petrophysical modeling and petrophysical modeling using trends.
- Conducted short-term assignment with ExxonMobil Exploration Company; used high-resolution 3-D seismic data and amplitude versus offset (AVO) techniques to explore for deepwater sandstone reservoirs offshore Angola.
- Selected as geologic modeler for ExxonMobil's Carbonate Reservoir Collaborative (CRC) - a multidisciplinary project whose goal is to improve current characterization and 3-D modeling technology and methodology associated with carbonate reservoirs.

**Research Assistant**, Colorado School of Mines, 1996-1999
Golden, Colorado

- Reservoir Characterization Project (RCP) Research Center – RCP Phase VII: Dynamic Reservoir Characterization at Vacuum Field, New Mexico.
  - Conducted most aspects of integrated reservoir characterization to address the controls of sequence stratigraphy, structure, and diagenesis on reservoir performance.
  - Work included core description and well-log analysis through 3-D seismic interpretation, attribute analysis, and geologic model construction.
- Assisted in preparing the Atlas of Oil and Gas Plays on American Indian Reservations for the U.S. Bureau of Indian Affairs through the Department of Geology and Geological Engineering.

**Research Geologist**, Exxon Production Research Company, 1998
Houston, Texas
- Reservoir Geometry and Continuity Division - Geologic Modeling Section
- Built object-based geologic models and forward seismic models to compare static connectivity and 3-D seismic expression of channel-dominated and bar-dominated fluvial reservoirs.
- Co-published 2 internal research reports that document the research results.

**Research Geologist**, ARCO Exploration and Production Technology, 1997
Plano, Texas
- Exploration Research and Technical Services - Geophysical Interpretation Research Group
- Conducted an integrated 3-D seismic interpretation and AVO analysis of Paleocene channels and turbidite sands, central North Sea.

**Reservoir Geologist / Geophysicist**, Conoco Inc., 1989-1994
Midland, Texas
- Project Team Leader for reservoir characterization and development program (Patterson Lake field). Patterson Lake was Conoco's first onshore development program in North America to utilize company-designed and processed 3-D seismic data. The latest seismic technology and modeling was used to delineate and map Permian (Wolfcampian) carbonate debris flow reservoirs and select optimum well locations.
- Produced detailed 3-D seismic maps of isolated pinnacles associated with the eroded top of a Pennsylvanian carbonate reservoir at Roundtop field. Utilized 3-D seismic data to determine in-fill development well locations.
- Recommended reservoir management plan to optimize waterflood operations for 53 wells within the highly vuggy and fractured Pennsylvanian Limestone (Strawn Formation) at Todd field. Estimated increase in secondary reserves was 2.7 million barrels. Reservoir plan was approved and implemented.

**Geologist / Geophysicist**, Sun Exploration and Production Company, 1988
Dallas, Texas
- Gulf of Mexico and East Coast District: Generated prospects for Lease Sale 115 (Texas Offshore); evaluated detachment-fold anticlines related to salt tectonics within the Perdido fold belt utilizing two-dimensional seismic and well data.

**Graduate Teaching Assistant**, Baylor University, 1988-1989
Waco, Texas
- Instructed graduate, junior, and freshman level geology labs including Carbonate Depositional Systems, Sedimentary Petrology, and Earth Science.
- Co-led field trips for undergraduate non-majors in Introductory Geology and Earth Science courses.

## PROFESSIONAL AFFILIATIONS

American Association of Petroleum Geologists (AAPG)
Society for Sedimentary Geology (SEPM)
Geological Society of America (GSA)
Society of Exploration Geophysicists (SEG)
Rocky Mountain Association of Geologists (RMAG)
Oklahoma City Geological Society (OCGS)

## PROFESSIONAL REGISTRATION

Professional Geologist (PG): State of Arkansas # 1757
Professional Engineer-Intern (EIT): State of Colorado

## RESEARCH

**PUBLICATIONS** *(*denotes student coauthor; **denotes post-doc coauthor)*

***Refereed Publications***

48. Tellez, J., *M. H. Williams, **M. J. Pranter**, in prep, Seismic-constrained lithology prediction and reservoir-quality modeling using pre-stack inversion and Bayesian classification, Mississippian Meramec strata, eastern Anadarko Basin, Oklahoma, AAPG Bulletin.

47. *Turnini, A. M., and **M. J. Pranter**, in review, Statewide assessment of $CO_2$ storage capacity for the lower Paleozoic strata, Oklahoma (Part 2): Hunton Group, Viola Limestone, and Simpson Group, AAPG Bulletin.

46. *Turnini, A. M., and **M. J. Pranter**, accepted, Statewide assessment of $CO_2$ storage capacity for the lower Paleozoic strata, Oklahoma (Part 1): Arbuckle Group, AAPG Bulletin.

45. *Duarte, D., R. Pires de Lima, D. Devegowda, **M. J. Pranter**, accepted, Semi-supervised workflow to generate petrofacies logs from tin sections and XRF data, Interpretation.

44. *Caf, A. B., **M. J. Pranter**, Z. A. Reza, D. Lubo-Robles, H. Bedle, K. M. Marfurt, accepted, Seismic-constrained reservoir modeling and simulation for $CO_2$ sequestration potential assessment of the Arbuckle Group: Wellington Field, Kansas, AAPG Bulletin.

43. Ortiz Sanguino, L., H. Bedle, **M. J. Pranter**, S. Verma, accepted, Revealing Channelized Features Through Multi-Scale Workflows in A Mixed Carbonate Siliciclastic Setting, Grayburg and San Andres Formations, Midland Basin, TX, Interpretation.

42. *Caf, A. B., D. Lubo-Robles, K. J. Marfurt, H. Bedle, **M. J. Pranter**, 2024, Characterization of seismic-scale petrofacies variability in the Arbuckle Group using supervised machine learning: Wellington Field, Kansas, Interpretation, vol. 12, no. 3 (July 2024), T341-T354, https://doi-org.ezproxy.lib.ou.edu/10.1190/INT-2023-0093.1

41. *Duarte, D., R. Pires de Lima, J. Tellez, and **M. J. Pranter**, 2023, Spatial variability of petrofacies using supervised machine learning and geostatistical modeling: Sycamore Formation, Sho-Vel-Tum Field, Oklahoma, USA, Interpretation, vol. 11. no. 2, (May 2023), p. T289-302, https://doi.org/10.1190/INT-2022-0064.1.

40. *Lubo Robles, D., H. Bedle, K. J. Marfurt, **M. J. Pranter**, 2023, Evaluation of principal component analysis for seismic attribute selection and self-organizing maps for seismic facies discrimination in the presence of gas hydrates, Marine and Petroleum Geology, (January 2023), vol. 150 https://doi.org/10.1016/j.marpetgeo.2023.106097

39. *Lubo-Robles, D., D. Devegowda, V. Jayaram, H. Bedle, K. J. Marfurt, and **M. J. Pranter**, 2022, Quantifying the sensitivity of seismic facies classification to seismic attribute selection: An explainable machine-learning study, Interpretation, vol. 10, no. 3 (August 2022), 29 p., http://dx.doi.org/10.1190/INT-2021-0173.1

38. *Duarte, D., M. Benmadi, R. D. Elmore, **M. J. Pranter**, and R. Slatt, 2021, Diagenetic controls on reservoir quality of a mixed carbonate-siliciclastic system: Sycamore Formation, Sho-Vel-Tum Field, Oklahoma, USA. Marine and Petroleum Geology, vol. 134 (December 2021), 13 p. https://doi.org/10.1016/j.marpetgeo.2021.105375

37. *Drummond, K., **M. J. Pranter**, and G. M. Grammer, 2021, Regional stratigraphy and proximal-to-distal variation of lithology and porosity within a mixed carbonate-siliciclastic system, Mississippian strata of northern and central Oklahoma. Interpretation, vol. 9, no. 4 (November 2021); p. T1111–T1131, https://doi.org/10.1190/INT-2020-0170.1

36. *Hardisty, L., **M. J. Pranter**, D. Devegowda, K. J. Marfurt, C. H. Sondergeld, C. S. Rai, I. Gupta, H. Han, S. Dang, C. McLain, R. Larese, 2021, Stratigraphic variability of Mississippian Meramec chemofacies and petrophysical properties using machine learning and geostatistical modeling, STACK trend, Anadarko Basin, Oklahoma. Interpretation, vol. 9, no. 3 (August 2021); p. T987–T1007, https://doi.org/10.1190/INT-2020-0169.1

35. *Suriamin, F., and **M. J. Pranter**, 2021, Lithofacies, depositional, and diagenetic controls on the reservoir quality of the Mississippian mixed siliciclastic-carbonate system, eastern Anadarko Basin, Oklahoma, USA. Interpretation, vol. 9, no. 3 (July 2021); p. T881–T910, https://doi.org/10.1190/INT-2020-0165.1

34. *Tellez, J., **M. J. Pranter**, C. H. Sondergeld, C. S. Rai, J. Fu, H. Han, S. Dang, and C. McLain, 2021, Mechanical stratigraphy of Mississippian strata using machine learning and seismic-based reservoir characterization and modeling, Anadarko Basin, Oklahoma. Interpretation, vol. 9, no. 2 (April 2021); p. SE53–SE71, https://doi.org/10.1190/INT-2020-0167.1

33. *Miller, M., **M. J. Pranter**, D. Devegowda, I. Gupta, K. J. Marfurt, C. H. Sondergeld, C. S. Rai, C. McLain, R. Larese, and J. Packwood, 2021, Mississippian Meramec lithologies and petrophysical property variability, stack trend, Anadarko Basin, Oklahoma. Interpretation, vol. 9, no. 2 (April 2021); p. SE1–SE21, https://doi.org/10.1190/INT-2020-0161.1

32. *Lubo-Robles, D., T. Ha, S. Laksmivarahan, K. J. Marfurt, and **M. J. Pranter**, 2021, Exhaustive Probabilistic Neural Network for attribute selection and supervised seismic facies classification, Interpretation, vol. 9, no. 2 (April 2021); p. T421–T441, https://doi.org/10.1190/INT-2020-0102.1

31. *Wang, Y., S. Kabir, **M. J. Pranter**, and Z. Reza, 2020, Immersive diagnostics of reservoirs under WAG injection, Part II – Effect of depositional settings and dynamic spatial correlations. Journal of Petroleum Science and Engineering, vol. 195, no. 26 (December 2020), https://doi.org/10.1016/j.petrol.2020.107858

30. *Tellez, J. J., **M. J. Pranter**, and R. D. Cole, 2020, Fluvial architecture and sequence stratigraphy of the Burro Canyon Formation, southwestern Piceance Basin, Colorado, Interpretation, vol. 8, no. 4 (November 2020); p. T1037–T1055, https://doi.org/10.1190/INT-2019-0215.1

29. *Machado, G. L. *G. J. Hickman, *M. P, Gogri, K. J. Marfurt, **M. J. Pranter**, and Z. A. Reza, 2019, Characterization of Arbuckle-basement waste-water disposal system, Payne County, northern Oklahoma, Interpretation, vol. 7, no. 4 (October 2019); p. SL19–SL36, http://dx.doi.org/10.1190/INT-2019-0025.1

28. *Phan, T. N., *Y. M. Zapata, C. S. Kabir, J. D. Pigott, **M. J. Pranter**, and Z. A. Reza, 2019, Probing hydraulically fractured wells in unconventional shale reservoirs under cyclic $CO_2$ injection: Variation of thermophysical properties, Journal of Petroleum Science and Engineering, vol. 181 (October 2019), p. 1-14, https://doi.org/10.1016/j.petrol.2019.106206

27. *Pires de Lima, R., *F. Suriamin, K. J. Marfurt, and **M. J. Pranter**, 2019, Convolutional neural networks as aid in core lithofacies classification, Interpretation, vol. 7, no. 3, (May 2019) p. SF27–SF40, https://doi.org/10.1190/INT-2018-0245.1

26. *Turnini, A. M., **M. J. Pranter**, K. J. Marfurt, 2019, Mississippian limestone and chert reservoirs, Tonkawa field, north-central Oklahoma, *in* G. M. Grammer, J. M. Gregg, J. O. Puckette, P. Jaiswal, S. J. Mazzullo, M. J. Pranter, and R. H. Goldstein, eds., Mississippian reservoirs of the midcontinent: AAPG Memoir 122 (https://doi.org/10.1306/AAPG122) (January 2019), p. 489–511, https://doi.org/10.1306/13632160M1161925

25. *Lindzey, K. M., **M. J. Pranter**, and K. J. Marfurt, 2019, Lithological and petrophysical controls on production of the Mississippian limestone, northeastern Woods County, Oklahoma, *in* G. M. Grammer, J. M. Gregg, J. O. Puckette, P. Jaiswal, S. J. Mazzullo, M. J. Pranter, and R. H. Goldstein, eds., Mississippian reservoirs of the midcontinent: AAPG Memoir 122 (https://doi.org/10.1306/AAPG122) (January 2019), p. 541–560, https://doi.org/10.1306/13632163M1161925

24. *Qi, X., *J. Snyder, *T. Zhao, K. J. Marfurt, and **M. J. Pranter**, 2019, Correlation of seismic attributes and geomechanical properties to the rate of penetration in the Mississippian limestone, Oklahoma, *in* G. M. Grammer, J. M. Gregg, J. O. Puckette, P. Jaiswal, S. J. Mazzullo, M. J. Pranter, and R. H. Goldstein, eds., Mississippian reservoirs of the midcontinent: AAPG Memoir 122 (https://doi.org/10.1306/AAPG122) (January 2019), p. 527–539 https://doi.org/10.1306/13632162M1163795

23. Shelley, S., G. M. Grammer, and **M. J. Pranter**, 2019, Outcrop-based reservoir characterization and modeling of an Upper Mississippian mixed carbonate–siliciclastic ramp, northeastern Oklahoma, *in* G. M. Grammer, J. M. Gregg, J. O. Puckette, P. Jaiswal, S. J. Mazzullo, M. J. Pranter, and R. H. Goldstein, eds., Mississippian reservoirs of the midcontinent: AAPG Memoir 122 (https://doi.org/10.1306/AAPG122) (January 2019), p. 207–225, https://doi.org/10.1306/136321482158M1163788

22. *Clark, S. A., **M. J. Pranter**, Z. A. Reza, and R. D. Cole, 2018, Fluvial architecture of the Burro Canyon Formation using unmanned aerial vehicle-based photogrammetry and outcrop-based modeling: Implications for reservoir performance, Escalante Canyon, southwestern Piceance Basin, Colorado. Interpretation, vol. 6, no. 4 (November 2018), p. T1117-1139, https://doi.org/10.1190/INT-2018-0091.1

21. *Wethington, N., and **M. J. Pranter**, 2018, Stratigraphic architecture of the Mississippian limestone through integrated electrofacies classification, Hardtner field area, Kansas and Oklahoma, Interpretation, vol. 6, no. 4 (November 2018), p. T1095-T1115, https://doi.org/10.1190/INT-2018-0042.1

20. *Suriamin, F., and **M. J. Pranter**, 2018, Stratigraphic and lithofacies control on pore characteristics of Mississippian limestone and chert reservoirs of north-central Oklahoma, Interpretation, vol. 6, no. 4 (November 2018), p. T1001-T1022, https://doi.org/10.1190/INT-2017-0204.1

19. *Lewis, K. D., **M. J. Pranter**, Z. A. Reza, and R. D. Cole, 2018, Fluvial architecture of the Burro Canyon Formation using UAV-based photogrammetry and outcrop-based modeling: implications for reservoir performance, Rattlesnake Canyon, southwestern Piceance Basin, Colorado, The Sedimentary Record, vol. 16, no. 3, p. 4-10 (September 2018), https://doi.org/10.2110/sedred.2018.3

18. *Gogri, M. P., J. M. Rohleder, C. S. Kabir, **M. J. Pranter**, and Z. A. Reza, 2018, Prognosis for safe water-disposal-well operations and practices that are based on reservoir flow modeling and real-time performance analysis, SPE Reservoir Evaluation & Engineering, vol. 21, no. 3 (April 2018), p. 576-592, https://doi.org/10.2118/187083-PA

17. *Allen, D. B., and **M. J. Pranter**, 2016, Geologically constrained electrofacies classification of fluvial deposits: an example from the Cretaceous Mesaverde Group, Uinta and Piceance basins, AAPG Bulletin, v. 100, no. 12 (December 2016), p. 1775-1801, https://doi.org/10.1306/05131614229

16. *El Attar, A., and **M. J. Pranter**, 2016, Regional stratigraphy, elemental chemostratigraphy, and organic richness of the Niobrara Member of the Mancos Shale, Piceance Basin, Colorado, AAPG Bulletin, v. 100, no. 3 (March 2016), p. 345–377, https://doi.org/10.1306/12071514127

15. *Keeton, G. I., **M. J. Pranter**, R. D. Cole, and E. R. (Gus) Gustason, 2015, Stratigraphic architecture of fluvial deposits from borehole images, spectral-gamma-ray response, and outcrop analogs, Piceance Basin, Colorado, AAPG Bulletin, v. 99, no. 10 (October 2015), p. 1929-1956, https://doi.org/10.1306/05071514025

14. **Pranter, M. J.**, *A. C. Hewlett, R. D. Cole, H. Wang, and J. R. Gilman, 2014, Fluvial architecture and connectivity of the Williams Fork Formation: use of outcrop analogues for stratigraphic characterisation and reservoir modelling, *in* A. W. Martinius, J. A. Howell, and T. R. Good, eds., Sediment-body geometry and heterogeneity: analogue studies for modelling the subsurface, The Geological Society of London, Special Publication (https://doi.org/10.1144/SP387), vol. 387 (January 2014), p. 57-83, https://doi.org/10.1144/SP387.1

13. *Baytok, S. and **M. J. Pranter**, 2013, Fault and fracture distribution within a tight-gas sandstone reservoir: Mesaverde Group, Mamm Creek Field, Piceance Basin, Colorado, U.S.A., Petroleum Geoscience, vol. 19, no. 3 (August 2013), p. 203-222, https://doi.org/10.1144/petgeo2011-093

12. **Pranter, M J.** and *N. K. Sommer, 2011, Static connectivity of fluvial sandstones in a lower coastal-plain setting: An example from the Upper Cretaceous lower Williams Fork Formation, Piceance Basin, Colorado, AAPG Bulletin, vol. 95, no. 6 (June 2011), p. 899-923, https://doi.org/10.1306/12091010008

11. **Pranter, M. J.**, R. D. Cole, *H. Panjaitan, *N. K. Sommer, 2009, Sandstone-body dimensions in a lower coastal-plain depositional setting: lower Williams Fork Formation, Coal Canyon, Piceance Basin, Colorado, AAPG Bulletin, vol. 93, no. 10 (October 2009), p. 1379-1401, https://doi.org/10.1306/06240908173

10. **Pranter, M. J.**, *M. F. Vargas, and T. L. Davis, 2008, Characterization and 3-D reservoir modeling of fluvial sandstones of the Williams Fork Formation, Rulison Field, Piceance Basin, Colorado, USA, Journal of Geophysics and Engineering, vol. 5, no. 2 (June 2008), p. 158-172, https://doi.org/10.1088/1742-2132/5/2/003

9. **Pranter, M. J.**, *A. I. Ellison, R. D. Cole, and P. E. Patterson, 2007, Modeling and analysis of intermediate-scale reservoir heterogeneity based on a fluvial point-bar outcrop analog, Williams Fork Formation, Piceance Basin, Colorado, AAPG Bulletin, vol. 91, no. 7 (July 2007), p. 1025-1051, https://doi.org/10.1306/02010706102.

8. **Reza, Z. A., **M. J. Pranter**, and P. Weimer, 2006, ModDRE: A program to model deepwater reservoir elements using geomorphic and stratigraphic constraints: Computers & Geosciences, vol. 32, no. 8 (October 2006), p. 1205-1220, https://doi.org/10.1016/j.cageo.2005.11.004

7. Budd, D. A., **M. J. Pranter**, and **Z. A. Reza, 2006, Lateral periodic variations in the petrophysical and geochemical properties of dolomite: Geology, vol. 34, no. 9 (May 2006), p. 373-376, https://doi.org/10.1130/G22132.1

6. **Pranter, M. J.**, **Z. A. Reza, and D. A. Budd, 2006, Reservoir-scale characterization and multiphase fluid-flow modeling of lateral petrophysical heterogeneity within dolomite facies of the Madison Formation, Sheep Canyon and Lysite Mountain, Wyoming, USA, Petroleum Geoscience, v. 12, no. 1 (February 2006), p. 29-40, https://doi.org/10.1144/1354-079305-660

5. **Pranter, M. J.** and R. M. Slatt, 2006, Deepwater reservoir modeling, *in* Weimer, P. and Slatt, R.M., eds., Introduction to the Petroleum Geology of Deepwater Settings: AAPG Studies in Geology No. 57, p. 625-682.

4. **Pranter, M. J.**, *C. B. Hirstius, and D. A. Budd, 2005, Scales of lateral petrophysical heterogeneity within dolomite lithofacies as determined from outcrop analogs: Implications for 3-D reservoir modeling: AAPG Bulletin, vol. 89, no. 5 (May 2005), p. 645-662, https://doi.org/10.1306/11300404049

3. **Pranter, M. J.**, N. F. Hurley, and T. L. Davis, 2004, Sequence-stratigraphic, petrophysical, and multicomponent seismic analysis of a shelf-margin reservoir: San Andres Formation (Permian), Vacuum field, New Mexico, United States: *in* G. P. Eberli, J. L. Masaferro, and J. F. Sarg, eds., Seismic Imaging of Carbonate Reservoirs and Systems: AAPG Memoir 81, p. 59-89.

2. **Pranter, M. J.**, N. F. Hurley, T. L. Davis, M. A. Raines, and S. C. Wehner, 2004, Dual-lateral horizontal wells successfully target bypassed pay in the San Andres Formation, Vacuum Field, New Mexico, AAPG Bulletin, vol. 88, no. 1 (January 2004), p. 99-113, https://doi.org/10.1306/09050302017

1. **Pranter, M. J.**, N. F. Hurley, and T. L. Davis, 2004, Anhydrite distribution within a shelf-margin carbonate reservoir: San Andres Formation, Vacuum Field, New Mexico, USA, Petroleum Geoscience, vol. 10, no. 1 (January 2004), p. 43-52, https://doi.org/10.1144/1354-079302-547

***Published Abstracts for Technical Presentations***

120. *Zhai, R., and **Pranter, M. J.**, 2024, Quantitative lithology prediction of turbidite deposits, Bone Spring Formation, Delaware Basin, Southeast New Mexico and West Texas. Houston, TX: 2024 IMAGE Conference.

119. *Grayson, F., **Pranter, M. J.**, *Turnini, A., Spalvieri, J., 2024, Regional stratigraphy and depositional characteristics of the Pennsylvanian Prue Sandstone, Lincoln County, Oklahoma. Houston, TX: 2024 IMAGE Conference.

118. *Akif, M., *Turnini, A., **Pranter, M. J.**, 2024, Statewide Assessment of CO2 Storage Capacity of Mississippian Strata (Kinderhookian to Meramecian), Oklahoma. Houston, TX: 2024 IMAGE Conference.

117. *Levrets, M., **Pranter, M. J.**, *Turnini, A., Spalvieri, J., 2024, Stratigraphic variability and petrophysical characteristics of the Pennsylvanian Prue Sandstone, central Lincoln County, Oklahoma. Houston, TX: 2024 IMAGE Conference.

116. *Turnini, A., **Pranter, M. J.**, 2024, Statewide assessment of CO2 Storage Capacity for the Cambrian-Ordovician Arbuckle Group and selected Ordovician formations, Oklahoma. Oklahoma City, OK: 2024 Carbon Capture, Utilization, and Storage Conference.

115. *Zhai, R., **Pranter, M. J.**, 2023, High-resolution sequence stratigraphy of fine-grained turbidite deposits, Leonardian Bone Spring Formation, Delaware Basin. Oklahoma City, OK: 2023 AAPG Midcontinent Sectional.

114. *Caf, A., Lubo Robles, D., **Pranter, M. J.**, Bedle, H., Marfurt, K. J., Reza, Z. A., 2023, Seismic-constrained reservoir modeling and simulation for CO2 sequestration potential assessment of the Arbuckle Group: Wellington Field, Kansas. Oklahoma City, OK: 2023 AAPG Midcontinent Sectional Meeting.

113. *Turnini, A., **Pranter, M. J.**, 2023, Statewide assessment of CO2 Storage Capacity for the Cambrian-Ordovician Arbuckle Group and selected Ordovician formations, Oklahoma. Oklahoma City, OK: 2023 AAPG Midcontinent Sectional.

112. Ortiz, L., Bedle, H., **Pranter, M. J.**, Verma, S., 2023, Depositional and geomorphological evolution of the channel system in the mixed carbonate-siliciclastic San Andres and Grayburg interval through seismic multi-attribute analysis and seismic-constrained facies modeling, Midland Basin, TX. Houston, TX: 2023 IMAGE Conference.

111. *Zhai, R., **Pranter, M. J.**, Pigott, J. D., 2023, Multidimensional data-driven characterization of deepwater turbidite deposits, Leonardian Bone Spring Formation, Delaware Basin, Southeast New Mexico and West Texas. Houston, TX: 2023 IMAGE Conference.

110. *Turnini, A., **Pranter, M. J.**, 2023, Statewide assessment of CO2 Storage Capacity for the Cambrian-Ordovician Arbuckle Group and selected Ordovician formations, Oklahoma. Houston, TX: 2023 IMAGE Conference. https://doi.org/10.1130/abs/2022AM-383132.

109. *Caf, A., Lubo Robles, D., **Pranter, M. J.**, Bedle, H., Marfurt, K. J., Reza, Z. A., 2023, Seismic-constrained reservoir modeling and simulation for CO2 sequestration potential

108. *Tellez, J., Cole, R., **Pranter, M. J.**, 2022, Stratigraphic evolution and architecture of alluvial paleovalleys in the lower Cretaceous Burro Canyon Formation, Southwest Piceance Basin, Colorado. Denver, Colorado: 2022 GSA Connects Conference. https://doi.org/10.1130/abs/2022AM-383132.

107. *Caf, A. B., *D. Lubo-Robles, **M. J. Pranter**, H. Bedle, and Z. A. Reza, 2022, Seismic-constrained modeling and dynamic simulation of long-term carbon storage potentials, carbon-sequestration well injectivity, and $CO_2$ plume behavior and evolution, Arbuckle Group, Wellington Field, Kansas, Unconventional Resources Technology Conference, Houston, TX, June 2022.

106. *Caf, A. B., *D. Lubo-Robles, **M. J. Pranter**, H. Bedle, K. J. Marfurt, and Z. A. Reza, 2022, Injectivity and storage potential assessment of the Arbuckle Group for $CO_2$ sequestration using seismic-constrained reservoir modeling and simulation: Wellington Field, Kansas, AAPG Carbon Capture, Utilization, and Storage Conference, Houston, TX, March 2022.

105. *Caf, A. B., *D. Lubo-Robles, **M. J. Pranter**, H. Bedle, K. J. Marfurt, and Z. A. Reza, 2022, Injectivity and storage potential assessment of the Arbuckle Group for $CO_2$ sequestration using supervised machine learning: Wellington Field, Kansas, Boone Pickens School of Geology TechFest, Oklahoma State University, Stillwater, OK, February 2022.

104. Suriamin, F., and **M. J. Pranter**, 2021, Petrophysical analysis of Mississippian rock types and reservoir properties within a sequence-stratigraphic framework, eastern Anadarko Basin, Oklahoma, USA, AAPG Mid-continent Section Convention, Tulsa, OK, October 2021.

103. *Duarte, D., and **M. J. Pranter**, 2021, From rocks to models revisited: using machine learning techniques to link thin-section petrography and 3D facies modeling, AAPG Mid-continent Section Convention, Tulsa, OK, October 2021.

102. *Duarte, D., B. Milad, R. D. Elmore, **M. J. Pranter**, and R. Slatt, 2021, Diagenetic controls on reservoir quality of the Sycamore Formation, northern Ardmore Basin, Oklahoma, AAPG Mid-continent Section Convention, Tulsa, OK, October 2021.

101. **Pranter, M. J.**, J. *Tellez, *M. Miller, and C. T. McLain, 2021, Multiscale reservoir characterization of Mississippian strata using seismic-constrained reservoir characterization and modeling, STACK play, Anadarko Basin, Oklahoma, AAPG Mid-continent Section Convention, Tulsa, OK, October 2021.

100. *Duarte, D., R. Pires de Lima, and **M. Pranter**, 2021, Classification of Sycamore Formation Petrofacies with Semi-Supervised and Supervised Machine Learning Techniques, Sho-Vel-Tum Field, Ardmore Basin, Oklahoma, USA, International Meeting for Applied Geoscience & Energy (IMAGE), Denver, CO, September 2021.

99. *Tellez, J., **M. J. Pranter**, C. Sondergeld, C. Rai, J. Fu, H. Han, and C. T. McLain, 2021, Mechanical Stratigraphy of Mississippian Strata in the STACK Play, Anadarko Basin, Oklahoma, International Meeting for Applied Geoscience & Energy (IMAGE), Denver, CO, September 2021.

98. *Morgan H., **M. J. Pranter**, and R. Cole, 2020, Sedimentology, chemofacies, and stratigraphic architecture of the lower Cretaceous Burro Canyon Formation, Ninemile Hill Unaweep Canyon, Colorado, AAPG Annual Convention, Houston, TX (virtual), June 2020.

97. *Dingmore, L. M., **M. J. Pranter**, J. D. Pigott, and Z. A. Reza, 2020, Stratigraphic variability of detrital carbonates and associated petrophysical properties of the Wolfcamp Formation, Northwest Shelf, Delaware Basin, GSA South-Central Section 54th Annual Meeting, Fort Worth, TX, March 2020.

96. Zhui, R., T. Phan, T. Bickley, Y. Zapata, J. D. Pigott, **M. J. Pranter**, and Z. Reza, 2019, Production analytics and decline curve analysis of the Bone Spring Formation and comparison with seismic: initial results, West Texas Geological Society Fall Symposium, Midland, TX, September 2019.

95. Phan, T., R. Zhui, J. D. Pigott, **M. J. Pranter**, and Z. Reza, 2019, Critical insights on CO2 huff-n-puff injection performance of hydraulically fractured wells in the Wolfcamp Formation in the Midland Basin, West Texas Geological Society Fall Symposium, Midland, TX, September 2019.

94. Bickley, T., J. D. Pigott, H. Bedle, K. Pigott, R. Zhui, T. Phan, **M. J. Pranter**, and Z. Reza, 2019, High resolution 3D seismic-petrophysical sequence stratigraphy of the Bone Springs Formation, Northern Delaware Basin, West Texas Geological Society Fall Symposium, Midland, TX, September 2019.

93. *Morgan, H. M., **M. J. Pranter**, and R. Cole, 2019, Sedimentology, chemostratigraphy, and stratigraphic architecture of the Lower Cretaceous Burro Canyon Formation, Ninemile Hill, Colorado, AAPG Rocky Mountain Section Convention, Cheyenne, Wyoming, September 2019.

92. *Tellez, J. J., **M. J. Pranter**, and R. Cole, 2019, Fluvial architecture and sequence stratigraphy of the Burro Canyon Formation using UAV-based outcrop models, southwestern Piceance Basin, Colorado, AAPG Rocky Mountain Section Convention, Cheyenne, Wyoming, September 2019.

91. *Tellez, J. J., **M. J. Pranter**, and R. Cole, 2019, UAV-Based photogrammetry for facies architecture and fluvial sequence stratigraphic definition of the Burro Canyon Formation, Piceance Basin, Colorado, AAPG International Conference & Exhibition, Buenos Aires, Argentina, August 2019.

90. **Pranter, M. J.**, *S. A. Clark, *K. D. Lewis, *J. J. Tellez, Z. A. Reza, and R. D. Cole, 2019, Characterizing fluvial architecture using UAV-based photogrammetry and outcrop-based modeling: implications for reservoir performance, southwestern Piceance Basin, Colorado, AAPG Annual Convention, San Antonio, TX. May 2019.

89. Suriamin, Fnu, **M. J. Pranter**, and A. B. Cullen, 2018, Petrophysical characterization of the Meramec interval of the STACK Play, Anadarko Basin, Oklahoma Geological Survey STACK Play Workshop, Oklahoma City, OK, September 2018.

88. *Lewis, K., **M. J. Pranter**, Z. Reza, and R. Cole, 2018, Outcrop characterization and modeling of fluvial tight-gas sandstones using drone-based photogrammetry, Burro Canyon Formation, northwest Colorado: implications for reservoir performance, SPE/AAPG/SEG Unconventional Resources Technology Conference (URTEC), Houston, TX, July 2018.

87. *Tellez, J. J., *K. Lewis, *S. Clark, R. Cole, **M. J. Pranter**, and Z. A. Reza, 2018, Exploring multi-scale heterogeneity of braided-fluvial reservoirs: implications for reservoir performance, AAPG Annual Convention, Salt Lake City, UT, May 2018.

86. *Lewis, K., **M. J. Pranter**, Z. A. Reza, and R. D. Cole, 2018, Fluvial architecture of the Burro Canyon Formation using UAV-based photogrammetry: implications for reservoir performance, Rattlesnake Canyon, Colorado, AAPG Annual Convention, Salt Lake City, UT, May 2018.

85. *Henglai, P., and **M. J. Pranter**, 2018, Parasequence stacking and facies control on reservoir quality and productivity of Early to Middle Miocene fluvial-deltaic deposits, Formation 2, Gulf of Thailand, AAPG Annual Convention, Salt Lake City, UT, May 2018.

84. *Miller, J., A. Cullen, and **M. J. Pranter**, 2018, Regional stratigraphy and organic richness of Meramecian and equivalent strata, Anadarko Basin, central Oklahoma, AAPG Annual Convention, Salt Lake City, UT, May 2018.

83. *Hickman, G., **M. J. Pranter**, Z. A. Reza, and A. Cullen, 2018, Reservoir characterization of the Mississippian Meramec and Osage Series of Canadian, Kingfisher, and Blaine Counties (STACK Trend), Oklahoma: relating reservoir characteristics to productivity, AAPG Annual Convention, Salt Lake City, UT, May 2018.

82. *Gogri, M., *G. Hickman, *G. Machado, K. Marfurt, **M. Pranter**, and Z. Reza, 2018, History-matching and characterization of Arbuckle-Basement waste-water disposal system, Payne County, northern Oklahoma, SPE International Conference and Exhibition on Formation Damage Control, Lafayette, Louisiana, February 2018.

81. *Tellez, J. J., **M. J. Pranter**, and R. Cole, 2017, Application of UAV-based photogrammetry for outcrop characterization of fluvial deposits of the Burro Canyon Formation, Piceance Basin, Colorado, 7TH International Symposium on Hydrocarbon Accumulation Mechanism and Petroleum Resources Evaluation, Beijing, China, October 2017.

80. *Suriamin, F., and **M. J. Pranter**, 2017, Lithofacies and pore-structure characterization of the mid-continent Mississippian Limestone, Grant Count, Oklahoma, AAPG Mid-Continent Section Convention, Oklahoma City, Oklahoma, October 2017.

79. *Machado, G., *G. Hickman, *M. Gogri, K. J. Marfurt, **M. J. Pranter**, and Z. A. Reza, 2017, Multidisciplinary geomechanical and geophysical characterization of the coupled Arbuckle-basement system, Payne County, Oklahoma, AAPG Mid-Continent Section Convention, Oklahoma City, Oklahoma, October 2017.

78. *Drummond, K., **M. J. Pranter**, and G. M. Grammer, 2017, Regional stratigraphy and proximal to distal variation of lithology and porosity within a mixed carbonate-siliciclastic system, Meramec and Osage Series (Mississippian), north-central Oklahoma, AAPG Mid-Continent Section Convention, Oklahoma City, Oklahoma, October 2017.

77. *Suriamin, F., and **M. J. Pranter**, 2017, Stratigraphic and facies control on porosity and pore types of Mississippian limestone and chert reservoirs: an example from north-central Oklahoma, AAPG Mid-Continent Section Convention, Oklahoma City, Oklahoma, October 2017.

76. *Wethington, N., and **M. J. Pranter**, 2017, Stratigraphic architecture of the Mississippian Limestone through integrated electrofacies classification, Hardtner Field Area, Kansas and Oklahoma, AAPG Mid-Continent Section Convention, Oklahoma City, Oklahoma, October 2017.

75. *Elium, E., G. M. Grammer, and **M. J. Pranter**, 2017, Combining sequence stratigraphy with artificial neural networks to enhance regional correlation and determination of reservoir quality in the "Mississippian Limestone" of the mid-continent, USA, AAPG Annual Convention, Houston, TX, April 2017 (2017 Search and Discovery Article #42091).

74. *Cervantes Velazquez, A., **M. J. Pranter**, and K. J. Marfurt, 2017, Structural analysis of Upper Cretaceous Carbonates using curvature attributes, Campeche Sound, Gulf of Mexico, AAPG Annual Convention, Houston, TX, April 2017 (2017 Search and Discovery Article #30522).

73. *Obermeier, S. A., **M. J. Pranter**, Z. A. Reza, and R. D. Cole, 2017, Multi-scale analysis of fluvial architecture and facies of the Burro Canyon-Dakota formations using UAV-based outcrop photogrammetry and modeling – implications for reservoir performance, Escalante Canyon, Piceance Basin, Colorado, AAPG Annual Convention, Houston, TX, April 2017.

72. *Machado, G., *G. Hickman, *M. Gogri, **M. J. Pranter**, K. J. Marfurt, and Z. A. Reza, 2017, Multidisciplinary characterization of geomechanical properties and flow behavior of the coupled Arbuckle-basement system, Payne County, northern Oklahoma, AAPG Annual Convention, Houston, TX, April 2017.

71. *Suriamin, F., and **M. J. Pranter**, 2017, Petrophysical properties from quantitative multiscale pore-structure characterization in unconventional carbonate reservoir: an example from the mid-continent Mississippian Limestone, AAPG Annual Convention, Houston, TX, April 2017.

70. *Tellez, J. J., and **M. J. Pranter**, 2016, Application of UAV-Based Photogrammetry for Outcrop Characterization of Fluvial Deposits of the Burro Canyon Formation, Piceance Basin, AAPG Geosciences Technology Workshop, New opportunities with drones: new needs, FAA rule changes, new technologies, Houston, TX, December 2016.

69. *Salantur, B., and **M. J. Pranter**, 2016, Granite Wash stratigraphy and reservoir geology, Elk City Field, Anadarko Basin, Oklahoma, AAPG Annual Convention, Calgary, Alberta, Canada, June 2016.

68. *Senoglu, D. E., **M. J. Pranter**, and K. M., Marfurt 2016, Stratigraphy, seismic characteristics, and reservoir properties of the Desmoinesian Granite Wash, Buffalo Wallow Field area, Anadarko Basin, Texas, AAPG Annual Convention, Calgary, Alberta, Canada, June 2016 (2017 Search and Discovery Article #20380).

67. *Suriamin, Fnu, and **M. J. Pranter**, 2016, Investigation of petrophysical-property heterogeneity for electrofacies classification in carbonate reservoirs, AAPG Annual Convention, Calgary, Alberta, Canada, June 2016.

66. *Wethington, N. W., and **M. J. Pranter**, 2016, Stratigraphic controls on Mississippian Limestone reservoir quality through integrated electrofacies classification and seismic-constrained spatial statistics, Hardtner Field, south-central Kansas, AAPG Annual Convention, Calgary, Alberta, Canada, June 2016.

65. *Qi, X., *J. Snyder, K. Marfurt, and **M. Pranter**, 2015, Correlation of seismic attributes and mechanical properties to rate of penetration in the Mississippi Lime, OK, AAPG Mid-Continent Section Convention, Tulsa, Oklahoma, October 2015.

64. *Lindzey, K., and **M. Pranter**, 2015, Geologically constrained seismic characterization and 3-D reservoir modeling of Mississippian reservoirs, north-central Anadarko Shelf, Oklahoma, AAPG Mid-Continent Section Convention, Tulsa, Oklahoma, October 2015.

63. *Suriamin, F., and **M. Pranter**, 2015, Integrating standard petrophysical analysis with statistical measures of petrophysical heterogeneity to estimate petrofacies in Mississippian carbonates, north-central Oklahoma., AAPG Mid-Continent Section Convention, Tulsa, Oklahoma, October 2015.

62. **Pranter, M**., 2015, Multidisciplinary characterization and modeling of Mississippian carbonate and silica-rich reservoirs, northern Oklahoma, AAPG Mid-Continent Section Convention, Tulsa, Oklahoma, October 2015.

61. *Birch, C., and **M. Pranter**, 2015, Reservoir-scale stratigraphy, sedimentology, and porosity characteristics of Mississippian reservoirs, northeastern Anadarko Shelf, Oklahoma, AAPG Mid-Continent Section Convention, Tulsa, Oklahoma, October 2015.

60. *Turnini, A., and **M. Pranter**, 2015, Stratigraphic and structural controls on Mississippian Limestone and tripolitic chert reservoir distribution using seismic-constrained reservoir characterization and modeling, northern Oklahoma, AAPG Mid-Continent Section Convention, Tulsa, Oklahoma, October 2015.

59. *Karis, A., and **M. Pranter**, 2015, Stratigraphy and reservoir characteristics of the Desmoinesian Granite Wash (Marmaton Group), southern Anadarko Basin, AAPG Mid-Continent Section Convention, Tulsa, Oklahoma, October 2015.

58. *Holmes, C., **M. Pranter**, and D. Jordan, 2015, Core-calibrated stratigraphic architecture and facies distribution of the Colony Granite Wash, Anadarko Basin, Oklahoma, AAPG Mid-Continent Section Convention, Tulsa, Oklahoma, October 2015.

57. *Birch, C. B., and **M. J. Pranter**, 2015, Reservoir-scale stratigraphy, sedimentology and porosity characteristics of Mississippian reservoirs, northeastern Anadarko Shelf, Oklahoma, AAPG Annual Convention, Denver, Colorado, May 31-June 3, 2015.

56. *Holmes, C. D., **Pranter, M. J.**, and D. W. Jordan, 2015, Stratigraphic architecture, facies distribution, and reservoir characteristics of the Colony Granite Wash, Anadarko Basin, Oklahoma, AAPG Annual Convention, Denver, Colorado, May 31-June 3, 2015.

55. *Karis, A. M., and **M. J. Pranter**, 2015, Stratigraphy and reservoir characteristics of the Desmoinesian Granite Wash, Southern Anadarko Basin, AAPG Annual Convention, Denver, Colorado, May 31-June 3, 2015.

54. *Lindzey, K. M., and **M. J. Pranter**, 2015, Geologically constrained seismic characterization and 3-D reservoir modeling of Mississippian reservoirs, north-central Anadarko Shelf, Oklahoma, AAPG Annual Convention, Denver, Colorado, May 31-June 3, 2015.

53. *Fenn, C., and **M. J. Pranter**, 2014, Outcrop to subsurface reservoir characterization of the lower Mesaverde Group, Red Wash Field, Uinta Basin and Douglas Creek Arch, Utah and Colorado, AAPG Annual Convention, Houston, Texas, April 2014.

52. *Evsan, T., **M. J. Pranter**, and M. Connolly, 2014, Geological controls on formation water salinity distribution, southeastern Greater Natural Buttes Field, Uinta Basin, Utah, AAPG Annual Convention, Houston, Texas, April 2014.

51. *Allen, D. and **M. J. Pranter**, 2014, Geologically constrained electrofacies classification of fluvial deposits: an example from the Cretaceous Mesaverde Group, Uinta and Piceance basins, AAPG Annual Convention, Houston, Texas, April 2014.

50. *Evsan, T., **M. J. Pranter**, and M. Connolly, 2013, Geological controls on formation water salinity distribution, southeastern Greater Natural Buttes Field, Uinta Basin, Utah, AAPG International Conference & Exhibition, Istanbul, Turkey, September 2014.

49. *Evsan, T., M. Connolly, and **M. J. Pranter**, 2013, Geological controls on formation water salinity distribution, southeastern Greater Natural Buttes Field, Uinta Basin, Utah, AAPG Rocky Mountain Section Convention, Salt Lake City, Utah, September 2013.

48. *Sharma, R., **M. J. Pranter**, R. D. Cole, and P. E. Patterson, 2013, Sedimentology and fluvial architecture of the upper Williams Fork Formation, Plateau Creek Canyon, Piceance Basin, Colorado, AAPG Rocky Mountain Section Convention, Salt Lake City, Utah, September 2013.

47. *El Attar, A., **M. J. Pranter**, and M. Connolly, 2013, Regional stratigraphy, elemental chemostratigraphy, and organic richness of the Niobrara Formation, Piceance Basin, Colorado, AAPG Rocky Mountain Section Convention, Salt Lake City, Utah, September 2013.

46. *McFadden, J., **M. J. Pranter**, and R. D. Cole, 2013, Reservoir-scale facies and stratigraphic architecture of the middle and upper Williams Fork Formation, upper Philadelphia Creek, Douglas Creek Arch, Colorado, AAPG Rocky Mountain Section Convention, Salt Lake City, Utah, September 2013.

45. *Allen, D., and **M. J. Pranter**, 2013, Geologically constrained electrofacies classification of fluvial deposits: an example from the Cretaceous Mesaverde Group, Uinta and Piceance basins, AAPG Rocky Mountain Section Convention, Salt Lake City, Utah, September 2013.

44. **Pranter, M. J.**, *J. A. Sloan, R. D. Cole, H. Meng, and J. Gilman, 2012, Fluvial architecture and connectivity of the Williams Fork Formation: combining outcrop analogs and reservoir modeling for stratigraphic reservoir characterization, AAPG Rocky Mountain Section Convention, Grand Junction, Colorado, September 2012.

43. *Keeton, G. I., **M. J. Pranter**, E. R. (Gus) Gustason, and R. D. Cole, 2012, Characterization of fluvial sandstones based on outcrop gamma-ray data and borehole images, Williams Fork Formation, Piceance Basin, Colorado, AAPG Rocky Mountain Section Convention, Grand Junction, Colorado, September 2012.

42. *Boulas, P., *K. S. Hlava, **M. J. Pranter**, and R. D. Cole, 2012, A tale of two point bars: inclined heterolithic strata and reservoir compartmentalization, Piceance Basin, Colorado, AAPG Rocky Mountain Section Convention, Grand Junction, Colorado, September 2012.

41. *Harper, E., R. D. Cole, and **M. J. Pranter**, 2012, Fluvial architecture of the lower Williams Fork Formation (Middle Mesaverde Group), Douglas Creek Arch, Colorado, AAPG Rocky Mountain Section Convention, Grand Junction, Colorado, September 2012.

40. *Hlava, K. S., **M. J. Pranter**, and R. D., Cole, 2012, Sequence-stratigraphic controls on reservoir-scale architecture of the middle Mesaverde Group, Douglas Creek Arch, Colorado, AAPG Rocky Mountain Section Convention, Grand Junction, Colorado, September 2012.

39. *Shaak, R. V., **M. J. Pranter**, and E. R. (Gus) Gustason, 2012, Stratigraphic architecture and preservation of shallow-marine parasequences: lower Williams Fork Formation, southeastern Piceance Basin, Colorado, AAPG Rocky Mountain Section Convention, Grand Junction, Colorado, September 2012.

38. *Rybowiak, C., and **M. J. Pranter**, 2012, Assessment of scale on permeability estimates in late Cretaceous reservoirs, Denver, Basin, Colorado, AAPG Rocky Mountain Section Convention, Grand Junction, Colorado, September 2012.

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36. *Rybowiak, C., and **M. J. Pranter**, 2012, Assessment of scale on permeability estimates in late Cretaceous reservoirs, Denver, Basin, Colorado, AAPG Annual Convention, Long Beach, California, April 2012.

35. Cole, R. D. and **M. J. Pranter**, 2011, Coastal- and alluvial-plain architectural elements of the Upper Cretaceous Williams Fork Formation, southeastern Piceance Basin, Colorado: outcrop analogs for subsurface reservoir characterization, AAPG Rocky Mountain Section Convention, Cheyenne, Wyoming, June 2011.

34. *Shaak, R. V., **M. J. Pranter**, and E. R. Gustason, 2011, Stratigraphic architecture of shallow-marine to coastal-plain parasequences: lower Williams Fork Formation, southeastern Piceance Basin, Colorado, AAPG Annual Convention, Houston, Texas, April 2011.

33. *Aboktef, A. M., **M. J. Pranter**, and D. A. Budd, 2011, Sequence-stratigraphic controls on sandstone diagenesis: An example from the Williams Fork Formation, Piceance Basin, Colorado, AAPG Annual Convention, Houston, Texas, April 2011.

32. *Sloan, J. A., and **M. J. Pranter**, 2011, Stratigraphic characterization and modeling of fluvial deposits of the lower Williams Fork Formation combining outcrop analogs and multipoint statistical simulation (MPS), Grand Valley Field, Piceance Basin, Colorado, AAPG Annual Convention, Houston, Texas, April 2011.

31. *Harper, E. S., *K. S. Hlava, R. D. Cole, and **M. J. Pranter**, 2011, Stratigraphic variability of coastal-plain and marginal-marine deposits of the Middle Mesaverde Group, Douglas Creek Arch, Colorado, AAPG Annual Convention, Houston, Texas, April 2011.

30. *Hewlett, A. C., **M. J. Pranter**, and S. P. Cumella, 2010, Stratigraphic architecture, reservoir quality, and sandstone-body connectivity of the Mesaverde Group, central Mamm Creek Field, Piceance Basin, Colorado, AAPG Annual Convention, New Orleans, Louisiana, April 2010.

29. *Haynie, J., **M. J. Pranter**, and G. M. Grammer, 2009, Characterization and modeling of petrofacies and pore-volume distribution within a gas-storage reservoir, Ray Reef Field, southern Michigan Basin, Michigan, AAPG Annual Convention, Denver, Colorado, June 2009.

28. **Pranter, M. J.**, R. D. Cole, and *B. Binford, 2009, Analysis and modeling of fluvial sandstone-body architecture and heterogeneity in the Cameo interval of the lower Williams Fork Formation in Coal Canyon, Southwestern Piceance Basin, Colorado, AAPG Annual Convention, Denver, Colorado, June 2009.

27. *Binford, B., R. D. Cole, and **M. J. Pranter**, 2009, Stratigraphic architecture and connectivity of high-sinuosity fluvial sandstone bodies in Coal Canyon, Colorado with subsurface comparison to Grand Valley Field, AAPG Annual Convention, Denver, Colorado, June 2009.

26. Cole, R. D., and **M. J. Pranter**, 2009, Detailed architectural analysis of two point-bar complexes in the Cameo interval of the lower Williams Fork Formation from "Hoodoo Hill," southwestern Piceance Basin, Colorado, AAPG Annual Convention, Denver, Colorado, June 2009.

25. *Harper, E., R. D. Cole, and **M. J. Pranter**, 2009, Dimensions of fluvial geobodies in the middle Williams Fork Formation (Late Cretaceous), Main Canyon, Colorado, AAPG Annual Convention, Denver, Colorado, June 2009.

24. Cole, R. D., and **M. J. Pranter**, 2008, Stratigraphic variability of sandstone-body dimensions in the Williams Fork Formation: outcrop data from the southwest Piceance Basin, Colorado, AAPG Rocky Mountain Section Convention, Denver, Colorado, July 2008.

23. *Sommer, N. K., **M. J. Pranter**, and R. D. Cole, 2008, Sandstone-body connectivity in a meandering-fluvial system: an example from the Williams Fork Formation, Piceance Basin, Colorado, AAPG Rocky Mountain Section Convention, Denver, Colorado, July 2008.

22. **Pranter, M. J.**, *N. K. Sommer, *H. Panjaitan, *Q. A. German, R. D. Cole, N. F. Hurley, and D. S. Anderson, 2007, Fluvial sandstone-body dimensions and reservoir connectivity within a meandering to braided system: an example from the Williams Fork Formation, Piceance Basin, Colorado, AAPG Annual Convention, Long Beach, California, April 2007.

21. *Sommer, N. K., **M. J. Pranter**, and R. D. Cole, 2007, Architectural-element modeling and connectivity analysis of the Williams Fork Formation, Coal Canyon, Main Canyon, and Plateau Creek Canyons, Piceance Basin, Colorado, U.S.A., AAPG Annual Convention, Long Beach, California, April 2007.

20. *Sommer, N., *Q. A. German, **M. J. Pranter**, and R. D. Cole, 2006, Analysis of fluvial sand-body characteristics and dimensions in a high net-to-gross system, Upper Williams Fork Formation, Main and Plateau Creek Canyons, Piceance Basin, Colorado, AAPG Rocky Mountain Section Convention, Billings, Montana, June 2006.

19. *German, Q. A., **M. J. Pranter**, and R. D. Cole, 2006, Analysis of fluvial sand-body characteristics and connectivity in a high net-to-gross system, Upper Williams Fork Formation, Plateau Creek Canyon, Piceance Basin, Colorado, AAPG Annual Convention, Houston, Texas, April 2006.

18. Budd, D. A. and **M. J. Pranter**, 2006, Diagenetic origins of lateral periodic variations in the properties of dolomite: evidence of self-organizing phenomena?, AAPG Annual Convention, Houston, Texas, April 2006.

17. *Vargas, M. F., **M. J. Pranter**, and T. L. Davis, 2006, Characterization and 3-D reservoir modeling of fluvial tight-gas sandstones in the Williams Fork Formation, Rulison Field, Piceance Basin, Colorado, USA, AAPG Annual Convention, Houston, Texas, April 2006.

16. **Pranter, M. J.**, D. A. Budd, and **Z. A. Reza, 2005, Reservoir-scale characterization and modeling of lateral petrophysical and geochemical variability within dolomite facies of the Madison Formation, Sheep Canyon and Lysite Mountain, Wyoming: *in* P. Lufholm and D. Cox, eds., Unconventional Reservoirs Technology and Strategies, Alternative Perspectives for the Permian Basin, WTGS Publication #05-115, p. 193-196, WTGS 2005 Fall Symposium, Midland, Texas, October 2005.

15. Budd, D. A. and **M. J. Pranter**, 2005, The hidden world of dolomites: self-organization of porosity and permeability at the decameter scale during dolomitization, AAPG Annual Convention, Calgary, Alberta, Canada, June 2005.

14. **Pranter, M. J.**, **Z. A. Reza, and P. Weimer, 2005, A novel integrated approach to stochastic deepwater reservoir modeling using sequence-stratigraphic and geomorphic constraints, AAPG Annual Convention, Calgary, Alberta, Canada, June 2005.

13. **Pranter, M. J.** and **Z. A. Reza, 2005, Use of outcrop analogs to assess the impact of lateral petrophysical cyclicity on static connectivity and fluid flow within dolomite reservoirs, AAPG Annual Convention, Calgary, Alberta, Canada, June 2005.

12. **Pranter, M. J.** and D. A. Budd, 2004, Evidence for geochemical self-organization at the decameter scale during dolomitization, Geological Society of America Annual Meeting, Denver, Colorado, November 2004.

11. *Ellison, A. I., **M. J. Pranter**, R. Cole, and P. E. Patterson, 2004, Quantification of stratigraphic heterogeneity within a fluvial point-bar sequence, Williams Fork Formation, Piceance Basin, Colorado: Application to reservoir modeling, AAPG Rocky Mountain Section, Rocky Mountain Association of Geologists, and Colorado Oil and Gas Association Rocky Mountain Natural Gas Conference, Denver, Colorado, August 2004.

10. Davis, T. L., R. D. Benson, and **M. J. Pranter**, 2004, Time-lapse seismic investigation - Rulison Field, Piceance Basin, Colorado, AAPG Rocky Mountain Section, Rocky Mountain Association of Geologists, and Colorado Oil and Gas Association Rocky Mountain Natural Gas Conference, Denver, Colorado, August 2004.

9. *Ellison, A. I., **M. J. Pranter**, R. Cole, and P. E. Patterson, 2004, Anatomy of a point bar: outcrop modeling using lidar data of the Upper Cretaceous Williams Fork Formation, Piceance Basin, Colorado, AAPG Annual Convention, Dallas, Texas, April 2004.

8. *Hirstius, C. B., **M. J. Pranter**, and D. A. Budd, 2004, Scales of lateral petrophysical heterogeneity within dolomite rock fabrics as determined from outcrop analogs: Implications for 3-D reservoir modeling, AAPG Annual Convention, Dallas, Texas, April 2004.

7. *Hirstius, C. B., **M. J. Pranter**, and D. A. Budd, 2004, Characterization and modeling of multiple scales of lateral petrophysical heterogeneity within dolomite rock fabrics as determined from outcrop analogs, *in* C. Feazel, A. Byrnes, J. Honefenger, B. Leibrecht, B. Loucks, S. McCants, and A. Saller, eds., Carbonate Reservoir Characterization and Simulation: From Facies to Flow Units: Proceedings, AAPG Hedberg Conference, El Paso, Texas, March 2004.

6. **Pranter, M. J.,** and N. F. Hurley, 2004, Flow unit definition for reservoir simulation, *in* C. Feazel, A. Byrnes, J. Honefenger, B. Leibrecht, B. Loucks, S. McCants, and A. Saller, eds., Carbonate Reservoir Characterization and Simulation: From Facies to Flow Units: Proceedings, AAPG Hedberg Conference, El Paso, Texas, March 2004.

5. *Ellison, A. I., **M. J. Pranter**, R. Cole, and P. E. Patterson, 2003, Stratigraphic architecture of the Upper Cretaceous Williams Fork Formation, Piceance Basin, Western Colorado through outcrop studies and high-resolution lidar imaging, Geological Society of America Annual Meeting, Seattle, Washington, November 2003.

4. *Hirstius, C. B., **M. J. Pranter**, and D. A. Budd, 2003, Lateral petrophysical variability within dolomite rock fabrics: Implications for petrophysical characterization and modeling, Geological Society of America Annual Meeting, Seattle, Washington, November 2003.

3. *Ellison, A. I., **M. J. Pranter**, R. Cole, P. E. Patterson, and S. Cumella, 2003, Analysis and modeling of stratigraphic architecture of the Upper Cretaceous Williams Fork Formation, Piceance Basin, Western Colorado, through outcrop studies and high-resolution lidar imaging, Rocky Mountain Association of Geologists Piceance Basin Field Symposium, Glenwood Springs, Colorado, October 2003.

2. **Pranter, M. J.**, N. F. Hurley, T. L. Davis, L. Duranti, M. A. Raines, and S. C. Wehner, 1999, Identification of subtle faults using 3-D seismic and multilateral borehole profiles, AAPG/SPWLA Hedberg Research Symposium, Horizontal wells: focus on the reservoir, Woodlands, Texas, October 1999.

1. **Pranter, M. J.,** and N. F. Hurley, 1999, Use of a petrophysical-based reservoir zonation and time-lapse, multicomponent (4-D, 3-C) seismic attributes for improved geologic modeling, 1999 AAPG Annual Convention, San Antonio, Texas, April 1999.

***Regional Publications, Conference Proceedings and Transactions***

19. *Caf, A. B., Lubo-Robles, D., **Pranter, M. J.**, Bedle, H., Marfurt, K., Reza, Z. A. (2022). "CO2 injectivity and storage potential assessment of the Arbuckle Group using supervised machine

learning and seismic-constrained reservoir modeling and simulation, Wellington Field, Kansas." Houston, TX, SEG-AAPG Second International Meeting for Applied Geoscience & Energy DOI: http://dx.doi.org/10.1190/image2022-3751017.1.

18. *Tellez, J., *Williams, H., **Pranter, M. J.**, 2022, Multiscale characterization of unconventional Mississippian reservoirs using a Bayesian approach for seismic-based reservoir models. Houston, TX, August 2022, SEG-AAPG Second International Meeting for Applied Geoscience & Energy DOI: http://dx.doi.org/10.1190/image2022-3751985.1.

17. *Stroud, B. V., Seyedolali, A., **Pranter, M. J.**, 2022, Regional variability of Caney Shale elemental composition, mineralogy, and petrophysical properties: Ardmore Basin, Oklahoma. Houston, TX, August 2022, SEG-AAPG Second International Meeting for Applied Geoscience & Energy DOI: http://dx.doi.org/10.1190/image2022-3751213.1.

16. *Caf, A. B., Lubo-Robles, D., **Pranter, M. J.**, Bedle, H., Marfurt, K., Reza, Z. A., 2022, Injectivity and storage potential assessment of the Arbuckle Group for CO2 sequestration using seismic-constrained reservoir modeling and simulation: Wellington Field, Kansas. Houston, TX, AAPG Carbon Capture, Utilization, and Storage Conference. (Published)

15. *Lubo-Robles, D., D. Devegowda, V. Jayaram, H. Bedle, K. J. Marfurt, and **M. J. Pranter**, 2020, Machine learning model interpretability using SHAP values: Application to a seismic facies classification task, SEG International Exposition and Annual Meeting (October 2020), p. 1460-1464, http://dx.doi.org/10.1190/segam2020-3428275.1 and https://onepetro.org/SEGAM/proceedings/SEG20/2-SEG20/D021S008R006/462760?searchresult=1

14. *Suriamin, F., and **M. J. Pranter**, 2020, Proximal to distal variability of Mississippian lithofacies, diagenetic processes, and reservoir quality within a mixed siliciclastic-carbonate system, northern and central Oklahoma, USA, SPE/AAPG/SEG Unconventional Resources Technology Conference (URTEC), Austin, TX (July 2020), 16 p., https://doi-org/10.15530/urtec-2020-2562

13. *Miller, J. C., **M. J. Pranter**, and A. B. Cullen, 2019, Regional stratigraphy and organic richness of the Mississippian Meramec and associated strata, Anadarko Basin, central Oklahoma, The Shale Shaker, vol. 70, no. 2 (March/April 2019), p. 50-79, https://archives.datapages.com/data/ocgs/data/070/070002/50_ocgs700050.htm

12. *Tellez, J. J., **M. J. Pranter**, and R. Cole, 2018, Application of UAV-based photogrammetry for outcrop characterization of fluvial deposits of the Burro Canyon Formation, Piceance Basin, Colorado, The Outcrop, vol. 67, no. 3 (March 2018), https://rmag1.app.box.com/s/4gk7hg4f27nw0fno91znne30b2lbd048

11. *Shelley, S., G. M. Grammer, and **M. J. Pranter**, 2017, Reservoir characterization and modeling of a subsurface Meramec analog from a quarry in northeastern Oklahoma, The Shale Shaker, vol. 68, no. 5 (September/October 2017), p. 224-243, https://archives.datapages.com/data/ocgs/data/068/068005/224_ocgs680224.htm

10. *Gogri, M., J. Rohleder, S. Kabir, **M. Pranter**, and Z. Reza, 2017, Prognosis for safe water-disposal-well operations and practices based on reservoir flow modeling, SPE Annual Technical Conference, San Antonio, TX (October 2017), 16 p., https://doi-org/10.2118/187083-MS

9. *Cronk, B. R., *M. P. Gogri, J. E. Ortiz, S. Kalra, A. Cullen, **M. J. Pranter**, and Z. Reza, 2017, A unified and integrated approach for reservoir and fluid characterization using minimal production and well data for the Mississippian Meramec interval within the STACK play of Oklahoma, SPE

Liquids-Rich Basins Conference-North America, Midland, Texas (September 2017), https://doi-org.ezproxy.lib.ou.edu/10.2118/187497-MS

8. *Cook, S., A. Abdulmohsen, K. J. Marfurt, and **M. J. Pranter**, 2016, Calibrating seismic fracture prediction using borehole image logs, application to the Mississippian Limestone, SEG Annual Meeting, Dallas, TX (October 2016), p. 4023-4027, https://doi.org/10.1190/segam2016-13970405.1 and https://onepetro.org/SEGAM/proceedings/SEG16/All-SEG16/SEG-2016-13970405/101235?searchresult=1

7. *Qi, X., *J. Snyder, K. J. Marfurt, and **M. J. Pranter**, 2015, Linking for rate of penetration to seismic attributes and mechanical properties in the Mississippi Lime, OK, SEG Annual Meeting, Houston, TX (October 2015), 6 p., https://doi.org/10.1190/segam2015-5930003.1 and https://onepetro.org/SEGAM/proceedings/SEG15/All-SEG15/SEG-2015-5930003/65665?searchresult=1

6. *Machado, G. P., K. J. Marfurt, O. Davogustto, and **M. J. Pranter**, 2013, Seismic imaging of spur and groove structures in the San Andres Formation, Midland Basin, Texas, SEG Annual Meeting (September 2013), p. 1545-1549, https://doi.org/10.1190/segam2013-1431.1 and https://onepetro.org/SEGAM/proceedings/SEG13/All-SEG13/SEG-2013-1431/99670?searchresult=1

5. **Pranter, M. J.**, **Z. A. Reza, and P. Weimer, 2005, Deepwater reservoir modeling using sequence-stratigraphic and geomorphic constraints: SPE Annual Technical Conference, Dallas, TX (October 2005), SPE 95952, 11 p., https://doi-org.ezproxy.lib.ou.edu/10.2118/95952-MS

4. **Pranter, M. J.**, R. Cabrera-Garzón, J. J. Blaylock, T. L. Davis, and N.F. Hurley, 2000, Use of multicomponent seismic for the static reservoir characterization of the San Andres Formation at Vacuum Field, New Mexico, SEG Annual Meeting, Calgary, Alberta, Canada (August 2000), 4 p., https://doi.org/10.1190/1.1815704 and https://onepetro.org/SEGAM/proceedings/SEG00/All-SEG00/SEG-2000-1548/87954?searchresult=1

3. Bard, K. C. and **M. J. Pranter**, 1999, Tracking miscible processes in the subsurface utilizing time-lapse shear-wave seismic data: SPE Annual Technical Conference, Houston, Texas (October 1999), SPE 56689, 14 p., https://doi-org.ezproxy.lib.ou.edu/10.2118/56689-MS

2. **Pranter, M. J.**, 1994, Patterson Lake field, Glasscock County, Texas: in Oil and gas fields in West Texas, Volume VI, West Texas Geological Society, p. 209-212.

1. **Pranter, M. J.**, and R. C. Grayson, Jr., 1990, "Lower Strawn" submarine fan complex and associated depositional systems, *in* C. M. Gibbs, C. W. Reynolds, W. Tucker, and J. Ritchie, eds., Transactions of the AAPG Southwest Section Convention, Wichita Falls, TX (March 1990), p. 103-120, http://matthewpranter.oucreate.com/article_pdf/Pranter_90_trans_article.pdf

***Field Trip Guidebooks***

6. Cole, R. D. and **M. J. Pranter**, with contributions from Daniel Allen, Aya Attar, Tuba Evsan, Chelsea Fenn, John McFadden, Roger Miller, Ryan Sharma and Ellen Wilcox, 2013, Stratigraphic architecture and sedimentology of the middle and upper Williams Fork Formation fluvial system, RCML Piceance Basin Field Trip Guidebook, 116 p.

5. Cole, R. D. and **M. J. Pranter**, with contributions from Adel Aboktef, Patrick Boulas, Mark Gorenc, Ericka Harper, Kim Hlava, Gabriela Keeton, Jeremy Ring, Ali Sloan, and Beau Taylor, 2010,

Stratigraphic architecture and reservoir characteristics of the Mesaverde Group: Application of outcrop-based concepts and statistics to the subsurface, western and northern Piceance Basin, Colorado, RCML Piceance Basin Field Trip Guidebook, 91 p.

4. Cole, R. D., **M. J. Pranter**, Steve Cumella, and Mark Kirschbaum, 2009, Iles-Williams Fork Field Trip, Southern Piceance Basin, Colorado, Grand Junction, Colorado, SEPM Field Trip Guidebook, 245 p.

3. Cole, R. D. and **M. J. Pranter**, 2008, Outcrop-based analysis and statistics for subsurface characterization of fluvial reservoir geometry and connectivity, Williams Fork Formation, Piceance Basin, Colorado, Grand Junction, Colorado, RCML Piceance Basin Field Trip Guidebook, 325 p.

2. Grayson, Jr., R. C., **M. J. Pranter**, L. L. Lambert, and G. K. Merrill, 1990, Carboniferous geology and tectonic history of the southern Fort Worth (foreland) basin, and Concho platform: Geological Society of America Field Trip Guidebook, Dallas Geological Society, 67 p.

1. **Pranter, M. J.**, 1988, Antelope Creek section, in R. C. Grayson, Jr. and G. K. Merrill, eds., Carboniferous geology of the northern Llano uplift, southern Fort Worth basin and Concho platform: Fort Worth Geological Society Field Trip Guidebook, 100 p.

***Invited Colloquia / Talks***

28. Tulsa Geological Society, Statewide Assessment of $CO_2$ Storage Capacity for Lower Paleozoic Strata, Oklahoma, February 25, 2025.

27. Oklahoma State University TechFest Professional Panelist. Guest Speaker-Member of special panel on energy transition and geosciences opportunities for students, February 24, 2024.

26. Norman Lions Club, Aspects of the World Energy Mix, Norman Lions Club, Norman, OK., November 7, 2023, Oral Presentation, Seminar.

25. Pioneer Natural Resources, Technology Lunch and Learn, Characterizing fluvial architecture using UAV-based photogrammetry and outcrop-based modeling: implications for reservoir performance, southwestern Piceance Basin, Colorado, Virtual, January 2022.

24. Society of Petroleum Evaluation Engineers, December Luncheon, Multiscale and seismic-constrained reservoir characterization and modeling of Mississippian strata, STACK play, Anadarko Basin, Oklahoma, Virtual, December 2021.

23. Oklahoma State University, Characterizing fluvial architecture using UAV-based photogrammetry and outcrop-based modeling: implications for reservoir performance, southwestern Piceance Basin, Colorado, Stillwater, Oklahoma, August 2018.

22. Bill Hailey Memorial Short Course, AAPG Southwest Section, Fundamentals of reservoir characterization and modeling, Fort Worth, Texas, January 2016.

21. Bill Hailey Memorial Short Course, AAPG Southwest Section, Fundamentals of reservoir characterization and modeling, Abilene, Texas, January 2016.

20. Tulsa Geological Society, Fluvial architecture and connectivity of the Williams Fork Formation, Piceance Basin, Colorado: combining outcrop analogs and reservoir modeling for stratigraphic reservoir characterization, Tulsa, Oklahoma, February 2014.

19. North Texas Geological Society, Fluvial architecture and connectivity of the Williams Fork Formation, Piceance Basin, Colorado: combining outcrop analogs and reservoir modeling for stratigraphic reservoir characterization, Wichita Falls, Texas, February 2014.

18. Oklahoma City Geological Society, Fluvial architecture and connectivity of the Williams Fork Formation, Piceance Basin, Colorado: combining outcrop analogs and reservoir modeling for stratigraphic reservoir characterization, Oklahoma City, Oklahoma, January 2014.

17. GSA Penrose Conference on Geothermal Reservoirs (SedHeat Workshop: Predicting and Detecting Natural and Induced Flow Paths for Geothermal Fluids in Deep Sedimentary Basins), Integrating outcrop analogs and subsurface data for mapping basin- and reservoir-scale properties: an assessment of the fluvial architecture, reservoir quality, and connectivity of the Cretaceous Williams Fork Formation, Piceance Basin, Colorado, Park City, Utah, October 2013.

16. Oklahoma State University, Fluvial architecture and connectivity of the Williams Fork Formation: combining outcrop analogs and reservoir modeling for stratigraphic reservoir characterization, Stillwater, Oklahoma, August 2013.

15. University of Oklahoma, Fluvial architecture and connectivity of the Williams Fork Formation: combining outcrop analogs and reservoir modeling for stratigraphic reservoir characterization, Norman, Oklahoma, April 2012.

14. Petrel Users Group, Schlumberger, Fluvial deposits and the Williams Fork Consortium, Greenwood Village, Colorado, June 2011.

13. Colorado School of Mines AAPG Student Chapter, Stratigraphic characterization and modeling of coastal-plain and marginal-marine deposits of the Williams Fork Formation (Mesaverde Group), Piceance Basin, Colorado, Golden, Colorado, December 2010.

12. EnCana Oil & Gas (USA) Inc., Sandstone-body dimensions and connectivity in a lower coastal-plain depositional setting: lower Williams Fork Formation, Coal Canyon, Piceance Basin, Colorado, Denver, Colorado, June 2010.

11. EnCana Oil & Gas (USA) Inc., Sandstone-body dimensions and connectivity in a lower coastal-plain depositional setting: lower Williams Fork Formation, Coal Canyon, Piceance Basin, Colorado, Dallas, Texas, June 2010.

10. ExxonMobil Upstream Research Company, Stratigraphic variability and "field-scale" architecture of fluvial sandstone bodies of the Williams Fork Formation, Houston, Texas, May 2010.

9. Anadarko Corporation, Stratigraphy and reservoir characteristics of the Williams Fork Formation, Piceance Basin, Colorado, Denver, Colorado, February 2009.

8. Colorado Energy Research Institute, Use of outcrop analogs for reservoir characterization and modeling, Golden, Colorado, February 2008.

7. Shell Technical Symposium, Use of outcrop analogs to assess the impact of lateral petrophysical cyclicity on static connectivity and fluid flow within dolomite reservoirs, Houston, Texas, June 2006.

6. Western Michigan University, Department of Geological Sciences, Reservoir-scale characterization and modeling of lateral petrophysical variability within dolomite facies of the Madison Formation, Sheep Canyon and Lysite Mountain, Wyoming, Kalamazoo, Michigan, February 2006.

5. Petroleum Geology Seminar Series, Colorado School of Mines, Department of Geology and Geological Engineering, Characterization of lateral petrophysical variability within dolomite facies of the Madison Formation, Sheep Canyon and Lysite Mountain, Wyoming: significance for reservoir modeling, Golden, Colorado, November 2005.

4. Society for Sedimentary Geology, Rocky Mountain Section Luncheon, Numerical modeling of heterogeneity within a fluvial point-bar deposit using outcrop and lidar data: Williams Fork Formation, Piceance Basin, Colorado, Denver, Colorado, October 2004.

3. Colorado School of Mines, Department of Geophysics, Characterization and modeling of fluvial sandstone distribution and static connectivity: Williams Fork Formation, Piceance Basin, Colorado, Golden, Colorado, October 2004.

2. Colorado State University, Department of Geological Sciences Colloquium, Use of outcrop analogs to characterize and model stratigraphic and petrophysical variability – their role in 3-D reservoir modeling, Fort Collins, Colorado, November 2003.

1. University of Wyoming, Department of Geology and Geophysics Colloquium, Rocks to models: reservoir characterization and 3-D geologic modeling, examples and direction, Laramie, Wyoming, February 2002.

## GRANTS / CONSORTIA

The Oklahoma Carbon Hub, 01/2025 – 12/2027
**M. J. Pranter, Lead PI**; R. Moghanloo and B. Milad, Co-PIs
**Recommended for financial assistance award, October 18, 2024; in negotiation phase**
U.S. Department of Energy; DE-FOA-0002711
$23,432,658 (University of Oklahoma, $5,008,146; Carbon Solutions LLC, $5,822,144; CapturePoint LLC, $10,724,064; Projeo Corporation, $453,304; Los Alamos National Laboratory, $1,425,000)

Reservoir characterization in unconventional oil and gas reservoirs, 07/01/2017 – 12/31/2020
C. Sondergeld, Lead PI, **M. J. Pranter**, K. Marfurt, D. Devegowda, A. Tinni, C. Rai, Co-PIs
(Marathon Oil Company)
$2,866,243 ($573,249 to Pranter)

McCoy Research Grant (OU College of Earth and Energy), 01/01/2019 – 01/31/2019
Delaware Basin Bone Spring sweet spot prediction through basin-reservoir modeling
J. Pigott; **M. J. Pranter** Z. A. Reza, Co-PIs
$60,000 ($20,000 to Pranter)

State of Oklahoma Research Grant, 05/2016 – 05/2019
Geological characteristics, reservoir properties, and geomechanical and flow behavior of the coupled Arbuckle-basement system in northern Oklahoma
Z. A. Reza, Lead PI; **M. J. Pranter** and K. Marfurt, Co-PIs
$120,000 ($40,000 to Pranter)

OU Mississippi Lime Consortium, 06/01/2013 – 08/31/2015

Stratigraphic, structural, and diagenetic controls on heterogeneity and productivity of Mississippian carbonate, tripolite, and associated reservoirs of the midcontinent
**M. J. Pranter**, Lead PI; K. Marfurt, Co-PI
(4 Industry Sponsors: Chesapeake Energy, Devon Energy, QEP Resources, Tiptop Energy/Sinopec)
$320,000 ($160,000 to Pranter)

OU Granite Wash Consortium, 06/01/2013 – 08/31/2015
Multidisciplinary reservoir characterization and modeling of the Pennsylvanian "Granite Wash", Anadarko Basin - stratigraphic, structural, and diagenetic controls on reservoir distribution and productivity
**M. J. Pranter**, Lead PI; K. Marfurt, Co-PI
(4 Industry Sponsors: Chesapeake Energy, Devon Energy, QEP Resources, SM Energy)
$110,000 ($55,000 to Pranter)

RCML Williams Fork Consortium Phase 6, 06/01/2011 – 05/31/2013
Stratigraphic architecture and sedimentology of the middle and upper Williams Fork Formation fluvial system: Douglas Creek Arch and Piceance Basin, Colorado
**M. J. Pranter**, Lead PI; R. D. Cole, Co-PI
(10 Industry Sponsors: Anadarko, Chevron, ExxonMobil, Fugro-Jason, IHS, iReservoir, OXY, Suncor Energy, Schlumberger, Williams)
$240,000 ($235,000 to Pranter)

U.S. Department of Energy, National Energy Technology Laboratory (NETL),
Geological Carbon Sequestration (DE-FE-0000730), 07/2009 – 09/2012
$CO_2$ saline storage demonstration in Colorado sedimentary basins - applied studies in reservoir assessment and dynamic processes affecting industrial operations: Task 6 - Assessment of scale on permeability estimates for geologic storage of $CO_2$ in saline aquifers and depleted petroleum reservoirs
K. L. Doran, Lead PI; **M. J. Pranter**, Co-PI
$369,546 ($123,187 to Pranter)

RCML Williams Fork Consortium Phase 5, 05/01/2009 – 08/31/2012
Stratigraphic architecture and reservoir characteristics of the Mesaverde Group: Application of outcrop-based concepts and statistics to the subsurface, western and northern Piceance Basin, Colorado
**M. J. Pranter**, Lead PI; R. D. Cole, Co-PI
(16 Industry Sponsors: Anadarko, Bill Barrett, Chevron, ConocoPhillips, El Paso, ExxonMobil, Fugro-Jason, Gunnison, IHS, iReservoir, Marathon, Newfield, OXY, Suncor Energy, Schlumberger, Williams)
$400,000 ($348,875 to Pranter)

Research Partnership to Secure Energy for America (RPSEA), 09/2008 – 05/2011
Stratigraphic architecture, connectivity, and static reservoir modeling of tight-gas sandstones
D. Nummedal (Colorado Energy Research Institute), Lead PI; **M. J. Pranter**, Co-PI
$3,800,000 ($333,244 to Pranter)

RCML Williams Fork Consortium Phase 4, 05/2007 – 05/2011
From rocks to models: outcrop-based analysis and statistics for subsurface characterization of fluvial reservoir geometry and connectivity, Williams Fork Formation, Piceance Basin, Colorado, U.S.A.
**M. J. Pranter**, Lead PI; R. D. Cole, Co-PI
(12 Industry Sponsors: Anadarko, Bill Barrett Corp., Chevron, ConocoPhillips, ExxonMobil, IHS, Marathon, OXY, Shell, Suncor Energy, Schlumberger, Williams)

$200,000 ($190,000 to Pranter)

AVID Consortium - Phase II, 05/2007 – 04/2009
Analysis of variability in dolomites: origin(s)
D. A. Budd, Lead PI; **M. J. Pranter**, Co-PI
(3 Industry Sponsors: ConocoPhillips, ExxonMobil, Shell)
$60,000 ($30,000 to Pranter)

Subcontract with Western Michigan University, 05/2006 – 04/2008
Reservoir facies, architecture, and petrophysics of Niagaran (Silurian) reef reservoirs, an example from Ray Reef Field, Michigan Basin
**M. J. Pranter**, Collaborator
$20,000

Petroleum Research Fund, Type G**,** 01/2005 – 08/2007
Quantification of fluvial stratigraphic architecture using high-resolution laser imaging (LiDAR), Williams Fork Formation, Colorado: implications for 3-D reservoir modeling
**M. J. Pranter**, Sole PI
$35,000

AVID Consortium Phase I, 04/2005 – 03/2007
Analysis of variability in dolomites, origin and implications for 3-D reservoir modeling
**M. J. Pranter**, Lead PI; D. A. Budd, Co-PI
(3 Industry Sponsors: ConocoPhillips, ExxonMobil, Shell)
$60,000 ($30,000 to Pranter)

RCML Williams Fork Consortium Phase 3, 05/2004 – 04/2006
Stratigraphic architecture, reservoir characteristics, and 3-D outcrop modeling using high-resolution laser imaging (LiDAR), Williams Fork Formation of the Mesaverde Group, Piceance Basin, Colorado
**M. J. Pranter**, Lead PI; R. D. Cole and N. F. Hurley, Co-PIs
(12 Industry Sponsors: Bill Barrett Corp., Chevron Thailand, ConocoPhillips, Dominion, EnCana, ExxonMobil, Hydro, Kerr McGee, Marathon, OXY, PetroCanada, Williams; 1 In-Kind Sponsor: Merrick & Company, donated ~$8000 in software)
$120,000 ($115,000 to Pranter)

Subcontract with Colorado School of Mines, 06/2004 – 05/2005
Three-dimensional modeling of the Lewis Shale, Eastern Green River Basin, Wyoming
**M. J. Pranter**, Collaborator
$10,000

In-Kind Software Contributions
Acquired software/data donations to the University of Oklahoma and University of Colorado Boulder for reservoir analysis, mapping, and numerical modeling. These high-end software packages include PETREL, GeoGraphix, Pix4Dmapper, IRAP-RMS, GOCAD, ECLIPSE, Kingdom Suite+, PETRA, Enerdeq, PetraSeis, PowerLog, EMERGE, and ISMap.

## TEACHING

***Post-Doctoral Researchers Supervised*** (University of Colorado Boulder)

2. Dr. Xiangyang Xie, September 2009-May 2010. Now a tenured Associate Professor of Geology at Texas Christian University.

1. Dr. Zulfiquar A. Reza, August 2004-March 2006. Now at SLB, Houston.

***Graduate Students Supervised*** (University of Oklahoma and University of Colorado Boulder)

54. Lima A. Choiti, anticipated 2028, The Oklahoma Carbon Hub - subsurface geological characterization and $CO_2$ storage capacity of lower Paleozoic strata, Osage and Kay counties, Oklahoma.

53. Md. Montasir A. Akif, anticipated 2027, Statewide assessment of $CO_2$ storage capacity of the upper Paleozoic strata, Oklahoma, Ph.D. dissertation, University of Oklahoma, Norman, Oklahoma.

52. Morgan E. Levrets, anticipated 2025, Stratigraphic variability and petrophysical characteristics of the Pennsylvanian Prue Sandstone, central Lincoln County, Oklahoma, master's thesis, University of Oklahoma, Norman, Oklahoma.

51. Rui Zhai, anticipated 2025, The regressive systems tract: recognition in periplatform to deepwater environments through high-resolution 3-D seismic and sequence stratigraphy, Ph.D. dissertation, University of Oklahoma, Norman, Oklahoma.

50. T. Faith Grayson, anticipated 2025, Regional stratigraphy and depositional characteristics of the Pennsylvanian Prue Sandstone, Lincoln County, Oklahoma, master's thesis, University of Oklahoma, Norman, Oklahoma.

49. Anna M. Turnini, 2025, Statewide assessment $CO_2$ storage capacity of the Arbuckle Group and selected Ordovician formations, Oklahoma, Ph.D. dissertation, University of Oklahoma, Norman, Oklahoma.

48. Grace S. Barber, anticipated 2024, Stratigraphy and reservoir characteristics of the Springer-Goddard Shale, southeastern Anadarko Basin, Oklahoma, master's thesis, University of Oklahoma, Norman, Oklahoma.

47. Abidin B. Caf, 2022, Quantitative seismic interpretation and machine learning applications for subsurface characterization and modeling, Ph.D. dissertation, University of Oklahoma, Norman, Oklahoma.

46. Brittany V. Stroud, 2022, Regional variability of Caney Shale elemental composition, mineralogy, and petrophysical properties, Ardmore Basin, Oklahoma, master's thesis, University of Oklahoma, Norman, Oklahoma.

45. David A. Lubo-Robles, 2022, Combining seismic attributes and machine learning for seismic facies analysis, Ph.D. dissertation, University of Oklahoma, Norman, Oklahoma (co-advisor: Dr. Kurt Marfurt).

44. David Duarte, 2021, Diagenetic and stratigraphic controls on reservoir quality of a mixed carbonate-siliciclasic system: Sycamore Formation, Sho-Vel-Tum Field, Oklahoma, USA, Ph.D. dissertation, University of Oklahoma, Norman, Oklahoma.

43. Hannah M. Morgan, 2021, Sedimentology, chemofacies, and stratigraphic architecture of the Lower Cretaceous Burro Canyon Formation, Ninemile Hill, Unaweep Canyon, Colorado, master's thesis, University of Oklahoma, Norman, Oklahoma.

42. J. Javier Téllez-Rodríguez, 2021, Integrated characterization of tight siliciclastic reservoirs: examples from the Cretaceous Burro Canyon Formation, Colorado and Mississippian Meramec strata, Oklahoma, Ph.D. dissertation, University of Oklahoma, Norman, Oklahoma.

41. Lindy M. Dingmore, 2020, Seismic-constrained reservoir characterization and modeling of the Wolfcamp Formation, Northwest Shelf, Delaware Basin, master's thesis, University of Oklahoma, Norman, Oklahoma.

40. Madison H. Williams, 2020, Integrated seismic interpretation and geological modeling of the Mississippian Meramec, eastern Anadarko Basin, Oklahoma, master's thesis, University of Oklahoma, Norman, Oklahoma.

39. Fnú Suriamin, 2020, Stratigraphy, pore architecture, and petrophysics of a mixed carbonate-siliciclastic system, Meramec and Osage series (Mississippian), north-central Oklahoma, Ph.D. dissertation, University of Oklahoma, Norman, Oklahoma.

38. Laynie E. Hardisty, 2019, Stratigraphic variability of Mississippian Meramec chemofacies using machine learning and geostatistical modeling, STACK trend, Anadarko Basin, Oklahoma, master's thesis, University of Oklahoma, Norman, Oklahoma.

37. Michael Miller, 2019, Mississippian Meramec lithologies and petrophysical property variability, STACK trend, Anadarko Basin, Oklahoma, master's thesis, University of Oklahoma, Norman, Oklahoma.

36. Garrett J. Hickman, 2018, Parasequence-scale stratigraphic variability of lithology and porosity of Mississippian Meramec reservoirs and the relationship to production characteristics, STACK trend, Oklahoma, master's thesis, University of Oklahoma, Norman, Oklahoma.

35. Katherine A. Drummond, 2018, Regional stratigraphy and proximal to distal variation of lithology and porosity within a mixed carbonate-siliciclastic system, Meramec and Osage series (Mississippian), central Oklahoma, master's thesis, University of Oklahoma, Norman, Oklahoma.

34. Puntira Henglai, 2018, Sequence-stratigraphic and facies control on reservoir quality and productivity of Early to Middle Miocene fluvial and tide-dominated deltaic deposits, Formation 2, Gulf of Thailand, master's thesis, University of Oklahoma, Norman, Oklahoma.

33. Joshua C. Miller, 2018, Regional stratigraphy and organic richness of the Mississippian Meramec and associated strata, Anadarko Basin, central Oklahoma, master's thesis, University of Oklahoma, Norman, Oklahoma.

32. Kelsey D. Lewis, 2018, Fluvial architecture of the Burro Canyon Formation using UAV-based photogrammetry and outcrop-based modeling: implications for reservoir performance, Rattlesnake Canyon, southwestern Piceance Basin, Colorado, master's thesis, University of Oklahoma, Norman, Oklahoma.

31. Sarah A. Clark, 2018, Fluvial architecture of the Burro Canyon Formation using UAV-based photogrammetry and outcrop-based modeling: implications for reservoir performance, Escalante Canyon, southwestern Piceance Basin, Colorado, master's thesis, University of Oklahoma, Norman, Oklahoma.

30. Niles Wethington, 2017, Stratigraphic architecture of the Mississippian Limestone through integrated electrofacies classification, Hardtner Field area, Kansas and Oklahoma, master's thesis, University of Oklahoma, Norman, Oklahoma.

29. Doğa Şenoğlu, 2017, Reservoir characterization and modeling of the Desmoinesian Series Granite Wash, Buffalo Wallow Field, Anadarko Basin, Texas, master's thesis, University of Oklahoma, Norman, Oklahoma.

28. Burak Salantur, 2016, Continuity, connectivity, and reservoir characteristics of Desmoinesian fan-delta conglomerates and sandstones, Elk City Field, Anadarko Basin, Oklahoma, master's thesis, University of Oklahoma, Norman, Oklahoma.

27. Cori D. Holmes, 2015, Stratigraphic architecture, facies characteristics, and distribution of deepwater deposits, Colony Granite Wash, Anadarko Basin, Oklahoma, master's thesis, University of Oklahoma, Norman, Oklahoma.

26. Katherine M. Lindzey, 2015, Geologically constrained seismic characterization and 3-D reservoir modeling of Mississippian reservoirs, north-central Anadarko Shelf, Oklahoma, master's thesis, University of Oklahoma, Norman, Oklahoma.

25. Alyssa M. Karis, 2015, Stratigraphy and reservoir characteristics of the Marmaton Series (Pennsylvanian) Granite Wash, southern Anadarko Basin, master's thesis, University of Oklahoma, Norman, Oklahoma.

24. Colton B. Birch, 2015, Reservoir-scale stratigraphy, sedimentology and porosity characteristics of Mississippian reservoirs, northeastern Anadarko Shelf, Oklahoma, master's thesis, University of Oklahoma, Norman, Oklahoma.

23. Anna M. Turnini, 2015, Stratigraphic and structural controls on Mississippian limestone and tripolitic chert reservoir distribution using seismic-constrained reservoir characterization and modeling, northern Oklahoma, master's thesis, University of Oklahoma, Norman, Oklahoma.

22. John L. McFadden, Jr., 2015, Depositional environment and reservoir characteristics of the upper Mesaverde Group, upper Philadelphia Creek, Douglas Creek Arch, Colorado, master's thesis, University of Colorado, Boulder, Colorado.

21. Chelsea A. Fenn, 2014, Outcrop to subsurface reservoir characterization of the lower Mesaverde Group, Red Wash Field, Uinta Basin and Douglas Creek Arch, Utah and Colorado, master's thesis, University of Colorado, Boulder, Colorado.

20. Jeremy D. Ring, 2014, Petrophysical evaluation of lithology and mineral distribution with an emphasis on feldspars and clays, middle and upper Williams Fork Formation, Grand Valley Field, Piceance Basin, Colorado, master's thesis, University of Colorado, Boulder, Colorado.

19. Ryan J. Sharma, 2013, Fluvial architecture and sequence stratigraphy of the upper Williams Fork Formation, Plateau Creek Canyon, Piceance Basin, Colorado, master's thesis, University of Colorado, Boulder, Colorado.

18. Tuba Evsan, 2013, Geological controls on formation water salinity distribution, southeastern Greater Natural Buttes Field, Uinta Basin, Utah, master's thesis, University of Colorado, Boulder, Colorado.

17. Aya El Attar, 2013, Regional stratigraphy, elemental chemostratigraphy, and organic richness of the Niobrara Formation, Piceance Basin, Colorado, master's thesis, University of Colorado, Boulder, Colorado.

16. Daniel B. Allen, 2013, Geologically constrained electrofacies classification of fluvial deposits: an example from the Cretaceous Mesaverde Group, Uinta and Piceance basins, master's thesis, University of Colorado, Boulder, Colorado.

15. Gabriela I. Keeton, 2012, Characterization of fluvial sandstones based on outcrop spectral-gamma-ray data and borehole images, Williams Fork Formation, Piceance Basin, Colorado, master's thesis, University of Colorado, Boulder, Colorado.

14. Christopher M. Rybowiak, 2012, Evaluation of measured and facies-based effective permeability and the significance for reservoir mapping and connectivity, master's thesis, University of Colorado, Boulder, Colorado.

13. Jayne A. Sloan, 2012, Stratigraphic architecture and connectivity of a low net:gross fluvial system: combining outcrop analogs and multiple-point geostatistical modeling, lower Williams Fork Formation, Piceance Basin, Colorado, master's thesis, University of Colorado, Boulder, Colorado.

12. Ericka S. Harper, 2011, Fluvial architecture of the lower Williams Fork Formation, (middle Mesaverde Group), Douglas Creek Arch, Colorado, master's thesis, University of Colorado, Boulder, Colorado.

11. Kimberly S. Hlava, 2011, Sequence-stratigraphic controls on reservoir-scale architecture of the middle Mesaverde Group, Douglas Creek Arch, Colorado, master's thesis, University of Colorado, Boulder, Colorado.

10. Sait Baytok, 2010, Seismic investigation and attribute analysis of faults and fractures within a tight-gas sandstone reservoir: Williams Fork Formation, Mamm Creek Field, Piceance Basin, Colorado, master's thesis, University of Colorado, Boulder, Colorado.

9. Alicia C. Hewlett, 2010, Fluvial architecture and static connectivity of the Williams Fork Formation central Mamm Creek Field, Piceance Basin, Colorado, master's thesis, University of Colorado, Boulder, Colorado.

8. Rachel V. Shaak, 2010, Stratigraphic architecture of shallow-marine to coastal-plain parasequences: lower Williams Fork Formation, southeastern Piceance Basin, Colorado, master's thesis, University of Colorado, Boulder, Colorado.

7. Brandon N. Binford, 2009, Stratigraphic architecture and connectivity of high-sinuousity fluvial sandstone bodies in Coal Canyon, Colorado, with subsurface comparison to Grand Valley Field, master's thesis, University of Colorado, Boulder, Colorado.

6. Jill M. Haynie, 2009, Characterization and modeling of petrofacies and pore-volume distribution within a gas-storage reservoir, Ray Reef Field, southern Michigan Basin, Michigan, master's thesis, University of Colorado, Boulder, Colorado.

5. Nicholas K. Sommer, 2007, Sandstone-body connectivity in a meandering-fluvial system: an example from the Williams Fork Formation, Piceance Basin, Colorado, master's thesis, University of Colorado, Boulder, Colorado.

4. Quentin A. German, 2006, Analysis of fluvial sandstone-body characteristics and architecture within a high net-to-gross system, upper Williams Fork Formation, Piceance Basin, Colorado, master's thesis, University of Colorado, Boulder, Colorado.

3. Marielis F. Vargas, 2004, Characterization and modeling of fluvial sandstone distribution and static connectivity, Williams Fork Formation, Rulison Field, Piceance Basin, Colorado, master's thesis, University of Colorado, Boulder, Colorado.

2. Amanda I. Ellison, 2004, Numerical modeling of heterogeneity within a fluvial point-bar deposit using outcrop and lidar data: Williams Fork Formation, Piceance Basin, Colorado, master's thesis, University of Colorado, Boulder, Colorado.

1. Colette B. Hirstius, 2003, Multiple scales of lateral petrophysical heterogeneity within dolomite lithofacies as determined from outcrop analogs: Implications for 3-D reservoir modeling, master's thesis, University of Colorado, Boulder, Colorado.

***Graduate Student Committees - Committee Member***

- 55 Masters Student Committees in Geosciences, University of Oklahoma
- 19 Doctoral Student Committees in Geosciences, University of Oklahoma
- 6 Masters Student Committees in Petroleum Engineering, University of Oklahoma
- 16 Doctoral Student Committees in Petroleum Engineering, University of Oklahoma
- Numerous Masters and Doctoral Committees in Geological Sciences, University of Colorado

***Supervised numerous Undergraduate Students in research***

***University of Oklahoma Courses Instructed***

**Geology of National Parks** (GEOL 1023; GenEd, Natural Science, Non-lab). The amazing landforms and geologic features within the National Parks have a story to tell about their geologic history and tectonic setting and are important for illustrating and describing concepts related to Earth processes and geologic time. This course blends an introduction to geology with geologic concepts as they apply to selected National Parks. Enrollment: 70-100 students.

**Earth, Energy, Environment** (GEOL 1033; GenEd, Natural Science, Non-lab). Introduces physical geology and the link to global energy resources - their origin, properties, abundance, distribution in and on Earth, and environmental challenges. Emphasizes the advantages, disadvantages, and misconceptions of each energy resource. Also explores hydrogen as an energy resource, critical

minerals and metals for energy applications, and possible methods to capture and store $CO_2$. Enrollment: 25-30 students.

**Introductory Petroleum Geology and Geophysics** (GPHY 3423; required for Petroleum Engineering majors). Addresses conventional and unconventional petroleum resources, basic sedimentary and structural geology, the petroleum system, source rocks, migration, types of traps and seals, reservoir rock properties, exploration and development methods, and volumetric reserves calculations. Students conduct oral presentations for 2 assignments. Enrollment: 10-30 students.

**Petroleum Geology for Geoscientists** (GEOL 4133; required for Petroleum Geology option majors) Discusses the origin and distribution of conventional and unconventional petroleum resources, source rocks, traps, seals, reservoir rock properties, exploration methods, reservoir geology, and reserves calculations. Students conduct oral presentations for 2 assignments. Enrollment: 5-10 students.

**Subsurface Methods** (GEOL 4233; required for Petroleum Geology option majors) Concepts and methods of subsurface geoscience data analysis, modeling, and interpretation. Data integration (core, well logs, 3-D seismic, outcrops) to evaluate, map, model, and interpret subsurface geological characteristics and formation property heterogeneity. Application to subsurface reservoirs and aquifers related to energy (oil, gas, geothermal, hydrogen), water, and $CO_2$ storage. Enrollment: 10-15 students.

**Reservoir Characterization** (GEOL 6970; *previously named Reservoir Characterization and Modeling, 3-D Reservoir Modeling, or Reservoir Characterization II*) is a graduate course that introduces concepts and methods of geological reservoir characterization and modeling. Involves extensive use of Petrel software. I conduct a field trip to Colorado to view world-class outcrop analogs. Enrollment: 10-15 students from geology, geophysics, and petroleum engineering.

**Reservoir Geology Seminar** (GEOL 6970-002) focuses on the preparation and completion of the graduate thesis or dissertation proposal. Involves literature reviews, presentations of research and proposal progress, and writing the thesis/dissertation proposal document. Enrollment: 5-10 students.

***University of Oklahoma, other courses instructed or co-instructed***

**Machine Learning in Geosciences** (GEOL/GPHY 6970, Fall 2021, co-instructed) 1-hour seminar, overview of the concepts and methods of machine learning as applied to the geosciences.

**Reservoir Characterization and Modeling – Study Abroad in Bogotá, Colombia** (GEOL 4970-5970; summer 2018) concepts and methods of geological reservoir characterization and modeling. Extensive use of Petrel software. Enrollment: 5 OU students; students from University of Los Andes and industry.

**Reservoir Characterization and Modeling** (GEOL 6970) concepts and methods of geological reservoir characterization and modeling. Extensive use of Petrel software. Field trip to Piceance Basin, Colorado. Enrollment: 10-25 students from geosciences and petroleum engineering.

**Integrated Reservoir Modeling & Simulation** (GEOL/PE 6970; co-instructed) concepts and methods of integrated static reservoir modeling and dynamic fluid-flow simulation. Extensive use of Petrel/Eclipse software. Enrollment: 20 students (10 geosciences and 10 petroleum engineering - work in teams).

**3-D Reservoir Modeling** (GEOL 6970) concepts and methods of 3-D geologic modeling. Enrollment: 20-25 students from geosciences and petroleum engineering.

**Field Methods** (GEOL 4136; summer 2014, 2015; co-instruct) six-week summer course held at the Geology Field Camp in Cañon City, Colorado. Enrollment: 30-45 students.

**Geology of Italy – Study Abroad** (GEOL 4970; summer 2015; co-instructed) geology of Rome, Pompeii, Vesuvius, Apennines, Arezzo, Venice, and the Dolomites. Enrollment: 20 students.

***University of Colorado Boulder Courses Instructed***

**Introduction to Geology** (GEOL 1010) provides an introduction to geological sciences. Covers the composition and structure of Earth, its dynamic processes, and the role of geological sciences in our society. Enrollment: ~169 students.

**Earth Resources and the Environment** (GEOL 3500) examines Earth's most important natural resources and their impact on society and the environment. Addresses the geology, occurrence, production, and use of petroleum, coal, mineral, and water resources. Future world energy supply and demand, conservation, and the transition from fossil fuels to non-polluting renewable resources are discussed. Enrollment: 20-30 students.

**Petroleum Geology** (GEOL 3540) discusses the origin and distribution of conventional and unconventional petroleum resources, source rocks, traps, seals, reservoir rock properties, exploration methods (well logs, core-to-log calibration, pay determination, subsurface mapping, 3-D seismic interpretation), reservoir geology, and reserves calculations. Enrollment: 15-25 students.

**Petroleum Reservoir Characterization and Modeling** (GEOL 5550) emphasizes concepts and methods of petroleum reservoir data analysis, integration, and modeling using subsurface information and outcrop analogs. Addresses the petroleum system, reservoir properties, stratigraphic and structural controls on reservoir heterogeneity, flow units, well logs and pay determination, subsurface mapping, 3-D seismic, concepts and methods of 3-D reservoir modeling. Enrollment: 5-15 students.

**Carbonate Sedimentary Environments** (GEOL 5650; co-instructor David Budd) examines the recognition and interpretation of modern and ancient carbonate sedimentary environments and facies associations through analysis of fauna, texture, fabric, sedimentary structures, and stratal architecture using hand samples, cores, well logs, seismic data, and outcrops. Enrollment: 10 students.

**Sedimentology and Stratigraphy** (GEOL 3430; co-instructors; David Budd and Lon Abbott) introduces sedimentary rocks emphasizing their origin, characteristics, and interpretation; principles and techniques for establishing the temporary order and spatial distribution of sedimentary layers. Enrollment: 40 students.

***University of Colorado Boulder, Science Education Initiative (SEI) and Faculty Teaching Excellence Program (FTEP) Workshops***

- Defining Learning Goals for Introduction to Geology, SEI, May 2007
- Lessons Learned Workshop, SEI, December 2006
- Science Education Initiative Overview Workshop, FTEP/SEI, March 3, 10, 17, 2006
- Symposium on Teaching and Learning - Refreshing your Teaching: Goals oriented teaching through interactive learning by Dr. Carl Wieman, FTEP, January 2005

- Videotape and Evaluation; Introduction to Geology; FTEP, November-December 2005
- Tenure Process Workshop, FTEP, February and April 2003
- A Model for Preparing Lectures Workshop, FETP, October 2001
- Performance in a Nutshell Workshop, FTEP, October 2001

***Short-Course and Field-Trip Instructor***

- **From rocks to models: geological reservoir characterization and modeling,** 2023 AAPG Midcontinent Sectional Meeting, 1-day course, 10 participants, October 7, 2023.
- **2021 Oklahoma Woodford Geoscience Field Trip**, for Continental Resources, Ardmore, Oklahoma and surrounding area (with B. Carpenter, E. Torres, M. Oekerman, B. Kilian, R. Gilbert, G. Alexander, C. Mount, C. Sharp), October 22, 2021.
- **3-D reservoir modeling**, AAPG-OU Student EXPO, Norman, Oklahoma, 1-day course, 22 participants, March 2019.
- **Reservoir characterization and modeling**, AAPG-OU Student EXPO, Norman, Oklahoma, 1-day course, 21 participants, March 2018.
- **From rocks to models: geological reservoir characterization and modeling**, AAPG Mid-Continent Section Meeting, Oklahoma City, Oklahoma, 1-day course, 31 participants, September 2017.
- **From rocks to models: geological reservoir characterization and modeling**, 2017 AAPG Annual Convention Short Course 8, Houston, Texas (with Z. Reza), 2-day course, 29 participants, April 2017.
- **3-D reservoir modeling**, AAPG-OU Student EXPO, Norman, Oklahoma, 1-day course, 25 participants, March 2017.
- **From rocks to models: geological reservoir characterization and modeling**, 2016 AAPG Annual Convention Short Course 9, Calgary, Canada (with L. Stright), June 2016.
- **3-D reservoir modeling**, AAPG-OU Student EXPO, Norman, Oklahoma, 1-day course, 25 participants, March 2016,
- **Fundamentals of reservoir characterization and modeling**, 2016 Bill Hailey Memorial Short Course, Fort Worth, Texas, January 12, 2016.
- **Fundamentals of reservoir characterization and modeling**, 2016 Bill Hailey Memorial Short Course, Abilene, Texas, January 11, 2016.
- **From rocks to models: applied reservoir characterization and modeling**, AAPG Annual Convention, Short Course 13 (EMD), Denver, Colorado, May 31, 2015.

- **From rocks to models: applied reservoir characterization and modeling**, for PT Geoservices Inc., Bali Indonesia, 5-day course, December 9-13, 2013.

- **Reservoir characterization fundamentals**, for Marathon Oil Company, Upstream Technology Houston, Texas, (with iReservoir), October 2011; October 2012; April 2013; and October 2013.

- **From rocks to models: reservoir geology for graduate students**, 2010 AAPG Annual Convention, New Orleans, 2-day course, April 10-11, 2010.

- **SEPM Field Trip #2 - Iles-Williams Fork field trip, southern Piceance Basin, Colorado**, 2009 AAPG Annual Convention, Denver; 245-page guidebook (with R. Cole, S. Cumella, M. Kirshbaum), June 2009.

- **Rocks to models: an introduction to 3-D reservoir characterization and modeling**, 2005 AAPG Eastern Section Meeting, Morgantown, West Virginia (with N. Hurley), 1-day course, 25 participants, September 2005.

- **Rocks to models: an introduction to 3-D reservoir characterization and modeling**, 2004 AAPG Annual Convention, Dallas, Texas (with N. Hurley), April 2004.

- **3-D modeling of sandstone reservoirs school**, ExxonMobil Upstream Research Company, Houston, Texas, Co-Instructor, October 2000.

- **Carboniferous geology and tectonic history of the southern Fort Worth (foreland) Basin and Concho Platform, Texas**, Geological Society of America Field Trip, Dallas, Texas, 2-day field trip (with R. C. Grayson, Jr., L. L. Lambert, and G. K. Merrill), 67-page guidebook, November 1990.

- **Carboniferous geology of the northern Llano Uplift, southern Fort Worth Basin, and Concho Platform, central Texas**, Southwestern Association of Student Geological Societies, 2-day field trip (with R. C. Grayson, Jr. and G. K. Merrill), 100-page guidebook, 1989.

- **Carboniferous geology of the northern Llano Uplift, southern Fort Worth Basin, and Concho Platform, central Texas**, Fort Worth Geological Society Field Trip, 2-day field trip, 67-page guidebook including Antelope Creek Section (with R. C. Grayson, Jr. and G. K. Merrill), 1988.

## SERVICE

***University-Level Service – University of Oklahoma***

- Member, Provost's Academic Program Review Committee, Serve as Lead for the School of Electrical and Computer Engineering Review and co-Lead for 3 other Schools (Chemical, Biological, and Materials Engineering, Computer Science, and Industrial and Systems Engineering), 2023-2024

- Member, Associate Deans Forum; Serve with the Vice President for Research and Partnerships (OVPRP) and Associate Deans of Research to provide regular, ongoing dialogue and information flow between colleges and OVPRP as related to research and creative activity topics. The goal is to improve communication of ongoing and planned activities at OVPRP and provide a forum for exchanging new strategic ideas and tactical concerns for planning and coordination, 2024-2025

***College-Level Service – University of Oklahoma***

- Committee Member, MCEE Strategic Plan Task Force, 2023-2025
- Committee Chair, Dean Annual Evaluation Committee, January-March 2024
- Chair, Academic Appeals Board, 2015-2023
- Committee Member, MCEE Outstanding Senior Committee, 2022-2023
- Member, DEI Implementation Ad-Hoc Committee, 2021
- Enunciator, announce student names at graduation ceremony, 2016-2018; 2023
- Member, Scholarship Committee, 2016-2017
- Member, Oklahoma Geological Survey, Senior Research Geologist Search Committee, 2016-2017
- Member, Search Committee for Dean, College of Earth and Energy, 2014-2015

***Departmental Service – University of Oklahoma***

- Guest Speaker, Seminar Presentation. OU AAPG Student Chapter, *How to succeed in the publication process*, April 21, 2023
- Guest Speaker, Seminar Presentation. Co-Presenter with M. Elwood Madden, *Graduate School Do's and Don'ts*, September 13, 2023
- Committee Member, AAPG Spring Student Expo Planning, 2023
- Faculty Advisor, AAPG Student Chapter, 2023-present
- Member, Communication Committee. Alumni newsletter, website, social media, 2023-present
- Member, Committee A (School executive committee), 2023-present
- Committee Member, Geosciences Computer Lab Committee, School Operations, 2021-2023
- Chair, Student Awards Committee, 2021-2023
- Member, Applied Structural Geology Search Committee, 2020-2021
- Chair, Petroleum Geosciences Vision Committee, 2019-2020
- Member, Committee A (School executive committee), 2018-2020
- Member, Exploration Geophysics Faculty Search Committee, 2017-2018
- Member, Petroleum Geochemistry Faculty Search Committee, 2015-2017

- Chair, Graduate Affairs Committee, 2013-2021
- Safety Captain, Sarkeys Energy Center, 2013-2020
- Member, Applied Geophysics Faculty Search Committee, 2015
- Member, Committee A (School executive committee), 2014-2015
- Member and Co-Chair, Teaching and Field Intensive Faculty Search Committee, 2013-2014

***College-Level Service – University of Colorado Boulder***

- Chair, Arts & Sciences Council Budget Committee (advisory committee to Dean), 2010-2013
- Member, Arts & Sciences Council Budget Committee (advisory committee to Dean), 2009-2013
- Department Representative, Arts & Sciences Council (advisory committee to Dean), 2009-2013

***Departmental Service – University of Colorado Boulder***

- Member, Baylor University Geology Department Advisory Board, 2007-2010
- Member, Graduate Curriculum Committee, 2006-2013
- Coordinator, New Graduate Student Field Trip, 2005-2013
- Coordinator, Energy Company Recruiting, 2002-2013
- Faculty Sponsor, AAPG CU Student Chapter, 2002-2010
- Member, Graduate Interview Committee, 2005-2006
- Member, Executive Committee, 2003-2004
- Member, Program Review - Graduate Program Committee, 2003
- Member, Ad hoc Departmental Chair Search Committee, 2002

***Professional Society Service***

- AAPG Executive Committee, 2022-present.
- AAPG Editor, 2022-present.
- Associate Editor, SEG-AAPG Interpretation, July 2022 – present.
- Committee Member, AAPG Geophysical Integration Committee, June 2022 – present.
- Committee Member, AAPG Research Committee, June 2022 – present.

- Senior Associate Editor, AAPG Bulletin, 2021-present.
- Associate Editor, AAPG Bulletin, 2001-2004; 2009-2016; 2021.
- Reviewer, AAPG Bulletin, Marine and Petroleum Geology, Interpretation, Sedimentary Geology, and other peer-reviewed journals, 2000-present.
- Reviewer, Conference Papers, SEG-AAPG IMAGE 2022 Conference. Assisted in soliciting and reviewing abstracts/conference papers for Theme I: Siliciclastic Systems, February 2022 - May 2022.
- Session Co-Chair, Reservoir characterization of siliciclastic systems honoring Dr. Roger Slatt, SEG-AAPG IMAGE Conference, Denver, CO, September 2021.
- Co-Editor, AAPG Memoir 122, Mississippian Reservoirs of the Mid-Continent, USA, 2015-2019.
- Short Course Instructor, 3-D reservoir modeling, 1-day course, AAPG-OU Student Expo, Norman, OK, March 2016, 2017, 2018, 2019, 2023.
- Short Course Instructor, From rocks to models: geological reservoir characterization and modeling, 1-day course, AAPG Mid-Continent Section Meeting, Oklahoma City, OK, September 2017.
- Short Course Instructor, From rocks to models: geological reservoir characterization and modeling, 2-day course: AAPG Annual Convention, Houston, TX (with Z. Reza), April 2017.
- Short Course Instructor, From rocks to models: geological reservoir characterization and modeling, 2-day course, AAPG Annual Convention, Calgary, Alberta, Canada (with L. Stright), June 2016.
- Short Course Instructor, From rocks to models: applied reservoir characterization and modeling, 1-day course, AAPG Annual Convention, Denver, CO, May 2015.
- Short Course Instructor, From rocks to models: reservoir geology for graduate students, 2-day course, AAPG Annual Convention, New Orleans, LA, April 2010.
- Field Trip Instructor, SEPM Field Trip 2 - Iles-Williams Fork Field Trip, AAPG Annual Convention, Denver, CO (with R. Cole, S. Cumella, M. Kirshbaum), June 2009.
- Session Co-Chair (Oral and Poster), Tight gas sandstones and carbonates - micropore networks and fracture systems, AAPG Annual Convention, Denver, CO, June 2009.
- Session Co-Chair (Oral and Poster), AAPG Annual Convention, Reservoir characterization and modeling: reservoir characterization for EOR/IOR and bypassed pay: case studies, San Antonio, TX, April 2008.
- Session Co-Chair (Oral and Poster), AAPG Annual Convention, Reservoir characterization and modeling: new approaches to reservoir characterization and modeling I and II, Long Beach, CA, April 2007.
- Member, AAPG Reservoir Development Committee, 2004-2007.
- Vice Chair, AAPG Future of Earth Scientists Committee, 2004-2007.

- Short Course Instructor, Rocks to models: an introduction to 3-D reservoir characterization and modeling, 1-day course, AAPG Eastern Section Meeting, Morgantown, WV, September 2005.

- Short Course Instructor, Rocks to models: an introduction to 3-D reservoir characterization and modeling, 2-day course, AAPG Annual Convention, Dallas, TX, April 2004.

- Member, AAPG Distinguished Lecture Committee, 2001-2004.

- Member, AAPG Foundation Grants-in-Aid Committee, 2000-2002.

## PROFESSIONAL DEVELOPMENT

***Professional Short Courses, Workshops, and Field Trips Attended***

- **Petrophysical evaluation of unconventional reservoirs**, Salt Lake City, Utah, by Jack Breig, May 2018.

- **Petrography of mudrock hydrocarbon reservoirs**, Salt Lake City, Utah, by Lyn Canter, Terri Olson, Mark Longman, Joe MacQuaker, and David Hull, May 2018.

- **Sequence-stratigraphic analysis of mudstones: key to paleoclimate archives, subsurface fluid flow and hydrocarbon source**, Denver, Colorado, by Kevin M. Bohacs, Ovidiu Remus Lazar, Joe Macquaker, and Juergen Schieber, May 2015.

- **Shale reservoir evaluation**, Houston, Texas, by Randy Miller, April 2014.

- **Play assessment**, Salt Lake City, Utah, by Ken Hood and Peggy Walker, May 2013.

- **Multiple-point statistical simulation workshop**, ExxonMobil, Houston, Texas, by Taskin Akpulat, May 2010.

- **Petroleum geoengineering: integration of static and dynamic models**, Golden, Colorado, by Patrick Corbett, May 2009.

- **Reservoir geophysics: applications**, Golden, Colorado, by William L. Abriel, May 2008.

- **Principles of reservoir characterization**, Long Beach, California, by Jeffrey Yarus, April 2007.

- **Facies and stratigraphy of the Mesaverde, southern Picieance Basin – a core workshop**, Lakewood, Colorado, by Edmund "Gus" Gustason and Steve Cumella, February 2007.

- **Petrel introduction**, Houston, Texas, by Kent Adamson and Randi Ashburn, August 2006.

- **Giant hydrocarbon reservoirs of the world core workshop**, Houston, Texas, by P. M. Harris and Jim Weber, April 2006.

- **Stratigraphy and reservoir characteristics of the Mesaverde Group, Piceance Basin, Colorado Field Trip**, by Rex Cole and Steve Cumella, August 2004.

- **Low-permeability core petrophysics and reservoir assessment**, Denver, Colorado, by Alan Byrnes, August 2004.
- **Algerita Escarpment field trip, Guadalupe Mountains, Texas and New Mexico**, by Charles Kerans, James Jennings, and Jerry Lucia, March 2004.
- **Collapse breccia field trip, Ordovician El Paso and Montoya Groups, southern Franklin Mountains, El Paso, Texas**, by Jerry Lucia, Charles Kerans, and Robert Loucks, March 2004.
- **Reservoir modeling with geostatistics**, Denver, Colorado, by Clayton Deutsch, October 2003.
- **Geostatistics for seismic data integration in earth models**, Golden, Colorado, by Olivier Dubrule, April 2003.
- **Kingdom Suite**, Golden, Colorado, by Todd Stallings, January 2003.
- **Horizontal well completions**, Ruidoso, New Mexico, by Vithal Pai, June 2002.
- **Utah stratigraphy field trip**, by Gary Hampson, Howard Johnson, Matthew Jackson, April 2002.
- **Reservoir architecture of the deep-water Brushy Canyon Formation, West Texas field trip, Guadalupe Mountains, Texas**, by Rick Beaubouef, Christine Rossen, and Morgan Sullivan, March 2002.
- **Assessing reservoirs, seals, and pay**, Boulder, Colorado, by John Kaldi, March 2002.
- **Heterogeneity modeling for reservoir characterization – IRAP-RMS**, Houston, Texas, by Laurie Green and Jeff Bayless, July 2001.
- **IESX to GeoFrame**, Houston, Texas, by Royce Olsen, December 2000.
- **Carbonate facies and stratigraphy, Turks and Caicos, BWI and West Texas / SE New Mexico**, by Jeff Dravis (Modern) and Jim Markello, Steve Bachtel, and Paul Wagner (Ancient), September 2000.
- **SAS Fundamentals**, Houston, Texas, SAS Institute, by Eric Rossland and Tori Barr, June 2000.
- **Sequence stratigraphy and characterization of carbonate reservoirs**, San Antonio, Texas, by Charlie Kerans and Scott Tinker, April 1999.
- **Modern / ancient deep-sea fan sedimentation**, Salt Lake City, Utah, by Hans Nelson and Tor Nilsen, May 1998.
- **Applied parameter estimation for groundwater modeling**, Golden, Colorado, by Mary Hill and Richard Cooley, June 1996.
- **Comparative structural geology**, Midland, Texas, by Richard Groshong, June 1993.
- **Principal centered leadership**, Midland, Texas, by Stephen Covey associates, March 1993.
- **Carbonate logging**, Midland, Texas, by Jeff Martin, Dan Hartmann, Steve Solomon, and Peter Delaney, January 1993.

- **Seismic / sequence stratigraphy**, Houston, Texas, by Frank Brown, November 1992.
- **Interpretation of 3-D seismic data**, Lafayette, Louisiana, by Alistair Brown, August 1992.
- **Geologic application of borehole electrical images course and field trip**, central Texas, by Mike Grace, May 1992.
- **Seismic processing**, Ponca City, Oklahoma, by Tom Stoeckley and Chuck Burch, October 1991.
- **Team building seminar**, Midland, Texas, by Leeanna Washington, July 1991.
- **Basic reservoir engineering**, Houston, Texas, by Donald Helander, July 1991.
- **Reservoir heterogeneity and sequence stratigraphic framework, San Andres and Grayburg Formations, central Guadalupe Mountains, New Mexico**, by Charlie Kerans, May 1991.
- **A practical application of migration and DMO**, Midland, Texas, by John Bancroft, August 1990.
- **Fundamentals of diplog analysis**, Midland, Texas, Atlas Wireline, Ed L. Bigelow, July 1990.
- **Basic Logging (Formation Evaluation)**, Bandera, Texas, by Peter Delaney, Jim Albright, Tommy Ragland, Jeff Martin, Dave Harwell, John Berner, and Tim Borbas, May 1990.
- **Subsurface geological mapping**, New Orleans, Louisiana, by Duncan Goldthwaite, November 1989.
- **Prospecting with old e-logs**, Waco, Texas, by Rollyn Frank, February 1988.

## HONORS

- **Best Student Paper Award**, Co-Recipient, AAPG Mid-Continent Section Meeting; D. Duarte and M. J. Pranter, From rocks to models revisited: using machine learning techniques to link thin-section petrography and 3D facies modeling, 2021
- **President's Certificate for Excellence in Poster Presentation**, Co-Recipient, AAPG Annual Convention; M. J. Pranter, S. A. Clark, K. D. Lewis, J. J. Tellez, Z. A. Reza, and R. D. Cole, Characterizing fluvial architecture using UAV-based photogrammetry and outcrop-based modeling: implications for reservoir performance, southwestern Piceance Basin, Colorado, 2019
- **Award of Excellence "Top 10" Poster Presentation**, Co-Recipient, AAPG Annual Convention; E. Elium, G. M. Grammer, and M. J. Pranter, Combining sequence stratigraphy and artificial neural networks to enhance regional correlation and determination of reservoir quality in the "Mississippian Limestone" of the Mid-Continent, USA, 2017
- **Roger N. Planalp Memorial Award**, Best Poster, Co-Recipient, AAPG Mid-Continent Section Meeting; K. Drummond, M. J. Pranter, and G. M. Grammer, 2017, Regional stratigraphy and proximal to distal variation of lithology and porosity within a mixed carbonate-siliciclastic system, Meramec and Osage Series (Mississippian), north-central Oklahoma, AAPG Datapages/Search and Discovery Article #90309, 2017

- **Steve Champlin Memorial Award**, Best Poster, Co-Recipient, AAPG Rocky Mountain Section Meeting; E. R. (Gus) Gustason, III and M. J. Pranter, Integrated characterization and modeling of reservoir lithofacies and reserves of the Sussex Sandstone, House Creek North area, Power River Basin, Wyoming, 2012

- **Marinus Smith Award**, CU Parents Association, in recognition of CU-Boulder faculty, staff, coaches, and administrators who have made a significant impact on the lives of CU undergraduate students, 2012

- **SEPM Excellent Poster Presentation**, Co-Recipient, AAPG-SEPM Annual Convention; R. V. Shaak, M. J. Pranter, and E. R. (Gus) Gustason, III, Stratigraphic architecture of shallow-marine to coastal-plain parasequences: lower Williams Fork Formation, southeastern Piceance Basin, Colorado, 2011

- **Honorary Coach**, University of Colorado Women's Basketball, November 30, 2011

- **Honorary Coach**, University of Colorado Football, November 4, 2011

- **Honorary Coach**, University of Colorado Women's Basketball, November 19, 2010

- **A. I. Levorsen Memorial Award**, Best Paper, Co-Recipient, AAPG Rocky Mountain Section Meeting; R. D. Cole and M. J. Pranter, Stratigraphic variability of sandstone-body dimensions in the Williams Fork Formation: Outcrop data from the southwest Piceance Basin, Colorado, 2008

- **Steve Champlin Memorial Award**, Best Poster, Co-Recipient, AAPG Rocky Mountain Section Meeting; Q. A. German, N. K. Sommer, M. J. Pranter, and R. D. Cole, Analysis of fluvial sand-body characteristics and dimensions in a highnNet-to-gross system, Upper Williams Fork Formation, Main and Plateau Creek canyons, Piceance Basin, Colorado, 2006

- **John Runge Award**, Best Student Paper, Co-Recipient, AAPG Rocky Mountain Section Meeting; A. I. Ellison, M. J. Pranter, R. Cole, and P. E. Patterson, Quantification of stratigraphic heterogeneity within a fluvial point-bar sequence, Williams Fork Formation, Piceance Basin, Colorado: Application to reservoir modeling, 2004

- **Student Paper Competition Award**, 3rd Place, AAPG Annual Convention; Facies analysis of the Strawn submarine fan complex: Fort Worth Basin, central Texas, 1989