

PROFESSIONAL CURRICULUM VITAE

REX D. COLE, Ph.D., P.G.
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Colorado Mesa University
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EDUCATION

Ph.D. in Geology University of Utah, Salt Lake City, UT; Advisors: Drs. M.D. Picard and M.L. Jensen
B.S. in Geology Colorado State University, Fort Collins, CO; Advisor: Dr. Stanley A. Schumm
A.S. in Geology Mesa College, Grand Junction, CO; Advisor: Dr. Robert G. Young

PROFESSIONAL REGISTRATION

Registered Professional Geologist (Wyoming) since 1992; Number PG-463

PROFESSIONAL EXPERIENCE

- 2020-Pres. Professor of Geology, Emeritus; Colorado Mesa University, Grand Junction, CO
- 1995-2020 Colorado Mesa University and Mesa State College, Grand Junction, CO
Professor of Geology; Dept. of Physical and Environmental Sciences (1999-2019)
Associate Professor of Geology; Dept. of Physical and Environmental Sciences (1995-1999)
Duties: undergraduate teaching (geoscience courses); research; advising B.S. and A.S. students; service to Geoscience Program, Physical and Environmental Sciences Dept., professional societies, and community. Details provided in later sections.
- 1983-95 Unocal Corp., Production and Development Technology Group, Brea, CA; Senior Research Geologist, Research Associate, and Sr. Research Associate
Duties: Sedimentologic, petrologic, and geochemical evaluations of subsurface oil and gas reservoirs; delineation and monitoring of hazardous materials in ground water (site studies); in-house teaching and instruction of sedimentologic and stratigraphic principles; technical service work in support of the Company's petroleum exploration and development operations in the Rocky Mountains, Mid-Continent Gulf Coast, northern Canada, the North Slope of Alaska, and the offshore Beaufort Sea, Alaska; geochemical and mineralogic study of oil shale and spent oil shale; preparation of detailed, comprehensive geotechnical reports; supervision of technicians; contract definition and monitoring.
- 1982-Pres. R.D. Cole and Associates, Grand Junction, CO; Consulting Geoscientist
Scope: Part-time practice related to field-oriented corporate teaching of geologic topics, petroleum geology, oil-shale and saline-mineral development, and ground-water hydrologic studies in Colorado, Utah, Wyoming, and New Mexico.
- 1980-82 Multi Mineral Corp., Grand Junction, CO; Manager of Geotechnical Operations
Duties: Administrative and technical management of mineral exploration and development programs and ground-water evaluation programs; definition, implementation, and interpretation of geological research programs; technical evaluation of property submittals on industrial minerals, petroleum and coal; mine mapping of saline minerals and oil shale; assessment of saline-mineral and shale-oil reserves; delineation of rotary and core drilling programs; interface with government regulatory agencies (input for mining plans and environmental documents); regional saline-mineral exploration in Nevada and California; supervision of a staff (3 to 7 persons) of professional geologists, a ground-water hydrologist, and geologic technicians. Most of the work was in support of the Corporation's oil-shale, nahcolite, dawsonite, and ground-water development program in the north-central Piceance Creek basin, Colorado. The company went bust following the 1982 collapse of oil-shale development (i.e., "Black Sunday").

- 1978-80 Bendix Field Engineering Corporation, Grand Junction, CO; Staff Geoscientist IV
Duties: Project manager for various uranium research and development projects (definition, procurement, and technical monitoring of contracts); supervision of core and rotary drilling projects; Group Leader of the "World Class Studies" evaluation of non-conventional uranium deposits in Colorado, Wyoming, Utah, Montana, Arizona, and California. All work was in support of the U.S. Department of Energy's National Uranium Resource Evaluation (NURE).
- 1975-77 Department of Geology, Southern Illinois University, Carbondale, IL; Assistant Professor of Geology
Duties: Teaching of undergraduate and graduate courses in physical geology, stratigraphy, sedimentology, environments of deposition, graduate seminar, and isotope geochemistry; supervision of graduate research (M.S. degree); personal research in sedimentology, geomorphology, and stable-isotope geochemistry; preparation of technical manuscripts for publication; preparation of grants to fund research; service to the department, university, professional societies, and community.
- 1973-75 American Smelting and Refining Company, Salt Lake City, UT; Exploration Geologist (part time)
Duties: Assisted with the reconnaissance and detailed mapping of metallic mineral deposits; definition of drilling prospects; supervision of geochemical sampling programs (soil, rock, and water); prospect evaluation; geophysical surveys (IP and magnetics); report writing; drafting; computer processing of geochemical data. Work was in support of base-metal and precious-metal exploration in Utah, Nevada, and Idaho.
- 1970-73 Department of Geology and Geophysics, University of Utah, Salt Lake City, UT; Teaching Fellow and Research Assistant (academic months)
Duties: Teaching of undergraduate laboratories in physical geology, mineralogy, structural geology, geophysics, and field camp. Geologic photo-mapping of portions of the lunar surface in support of the NASA-funded Apollo 17 Lunar Sounder Experiment.
- 1971 Inspiration Development Company, Spokane, WA; Exploration Geologist (summer)
Duties: Detailed surface mapping of copper mineralization in north-central Washington and mapping of the Black Pine Mining District near Phillipsburg, Montana.
- 1970 Exploration Geologist; Duval Corporation, Salt Lake City, UT; Exploration Geologist (summer)
Duties: Stream-sediment sampling, prospect evaluation, and mapping in Idaho and Montana; report writing; drafting. Work involved base-metal exploration.
- 1968 Petro-Nuclear Ltd., Naturita, CO; Assistant Geologist (summer)
Duties: Surveying; logging of drill cuttings; mine and prospect mapping; calculation of ore reserves from geophysical logs; drafting. Work involved uranium exploration and development in the Uravan Mineral Belt, Colorado.

PROFESSIONAL AFFILIATIONS

Geologic Society of America (1975-present); Chair of Rocky Mountain Section (2005).
Society of Economic Paleontologists and Mineralogists (since 1972-1999): Invited book reviewer for the Journal of Sedimentary Petrology (1974-1980); Session co-chairman, Rocky Mountain Sectional Meeting (1977); Member of national New Programs Committee (1984-1986), and Computer Applications Committee (1987-1990).
Grand Junction Geological Society: Vice President (1978-1980); President (1980-1981 and 2016-2017); Council Member (2017-2019); Honorary Life Member (since 2004).
New Mexico Geological Society (2017-present).

EXPERTISE

Sedimentology, stratigraphy, and sequence stratigraphy, reservoir characterization, energy resources, mineral resources, low-temperature geochemistry, geotechnical writing/editing, project management, and administration. Analytical qualifications: petrographic microscope, gas-source mass spectrometer, x-ray

diffractometer, x-ray fluorescence spectrometer, scanning-electron microscope, gamma-ray spectrometer, GIS/GPS, well-log analysis (Petra), bore-hole imaging techniques, and aerial photography (sUAV/drone).

UNIVERSITY AND COLLEGE COURSES TAUGHT

Mesa State College and Colorado Mesa University (enrollment numbers through Fall Semester, 2019).
Total No. Sections = 276; Total No. Students = ~6672 (based on end-of-semester grade records).

	<u># Sections</u>	<u># Students</u>
GEOL 105, Geology of Colorado (1995-2019)	71	~4,501
GEOL 111, Physical Geology (2003)	1	29
GEOL 111L, Physical Geology Lab. (1995-2005)	23	~470
GEOL 112, Historical Geology (2000-2019)	35	~459
GEOL 112L, Historical Geology Lab. (2000-2019)	35	~460
GEOL 202, Introduction to Field Studies (2000-2019)	4	~25
GEOL 359, Survey of Energy-Related Nat. Resources (1998-2018)	14	~105
GEOL 361, Survey of Mineral-Related Nat. Resources (1999)	1	8
GEOL 395, Independent Study (1996)	1	1
GEOL 396, Topics (Subsurface Methods) (2007-2018)	4	31
GEOL 411, Invertebrate Paleontology (1996-2001)	5	15
GEOL 411L, Invertebrate Paleontology Laboratory (1996-2001)	5	15
GEOL 444, Sedimentology and Stratigraphy (1995-2019)	24	244
GEOL 444L, Sedimentology and Stratigraphy Lab. (1995-2019)	24	245
GEOL 480, Summer Field Camp (1996-2018); every camp		
GEOL 490, Seminar (1996-2009)	4	14
GEOL 495, Independent Study (1997-1998)	3	3
GEOL 496, Topics (Petra) (2015-2016)	2	18
GEOL 497, Structured Research (2002-2018)	20	29

Southern Illinois University – Carbondale

Physical Geology and Laboratory
Stratigraphy and Sedimentology
Stable-Isotope Geochemistry
Seminar

ADVISING

Complete records (1995-2019) are not available; however, between Fall Semester 2008 and Fall Semester 2019, I averaged 24 students per semester (range = 19-35).

COLLEGE AND UNIVERSITY SERVICE (MSC and CMU)

2019	Co-leader for the Western Slope Geology Field Conference, hosted by CMU.
2018-20	Member of three TT search committees in Geology.
2018	Consulted with the CMU Foundation on the Forest Nelson Endowment to the Geology Program.
2017-20	Member of Distinguished Faculty Committee.
2017-21	Faculty coordinator for X-ray dosimeter service for the Geology Program.
2017	Coordinated donation of research-quality microscopes to the Geology Program. Value: ~7K\$.
2016-18	Participated in development of a proposal for a professional M.S. degree in Geology.
2016	Served on a Geology search committee for an instructor.
2015	Member of two search committees for the Director of CMU's Land Management Program.
2014	Co-leader for the Western Slope Geology Field Conference, hosted by CMU.
2013	Participated in a promotional video for the Geology Program.
2010-13	Served on Sabbatical Leave and Professional Development Fund Committee.

- 2010 Co-leader for the Western Slope Geology Field Conference, hosted by CMU.
- 2005 Assisted in preparation of a proposal to the Colorado Energy Research Institute to develop a Geotechnology Minor.
- 2003 Acting Chair for PES Department (Fall Semester) while Dr. Prasanta Misra was on sabbatical.
- 2003 Served as PES representative to the Program Assessment Committee.
- 2002 Coordinated donation of a minipermeameter from Unocal Corp. Value: ~30K\$.
- 2001-02 Served on NS&M Goals Committee
- 2001 Coordinated Western Slope Geologic Field Conference hosted by MSC.
- 2000-02 Chair of search committee for geology-environmental science TT faculty member.
- 2000 Assisted Dr. W.C. Hood with a donation of geological equipment from the U.S. Dept. of Energy. Value: ~45K\$.
- 1999-2013 Coordinator of Geology Program.
- 1999-2000 Assisted in the development of Geology website and a recruitment brochure.
- 1999-2000 Chair for a self-study evaluation of B.S. degrees in the PES Department.
- 1999 Coordinated, via Dr. W.C. Hood, a major equipment donation (commuter workstations, plotters, microscopes, work tables, projectors, etc.) from BP-Amoco Corp. Value: ~50K\$.
- 1999 Coordinated donation of a petrographic microscope from the Kessler family. Value: ~ 1K\$.
- 1999 Gave presentation at a MSC faculty colloquium.
- 1998-2013 Helped facilitate donation of geologic literature to the MSC/CMU Library.
- 1998-2004 Member of Curriculum Committee.
- 1998-2002 Member of MSC's Scanning Electron Microscope Committee.
- 1998-99 Member of a TT Geology Search Committee.
- 1998-99 Member of a TT Chemistry Search Committee.
- 1998-99 Member of a TT Physics Search Committee.
- 1998 Coordinated development of an exit exam for Geology Program.
- 1998 Member of PES Faculty Evaluation Criteria Committee.
- 1997-98 Coordinated acquisition of Rigaku Miniflex X-ray diffractometer via the MSC Foundation. Dr. W.C. Hood was advisor.
- 1997-98 Coordinator for geoscience scholarships at MSC.
- 1997-98 Member of Graduate Education Committee.
- 1997 Coordinated donation of a gamma-ray spectrometer from Unocal Corp.
- 1997 Member of College of Natural Sciences and Mathematics General Education Review Committee.
- 1996-98 Served on a faculty committee dealing with expansion of scientific periodicals in Tomlinson Library.
- 1996-97 Chair of search committee for a TT geology faculty position.
- 1996 Orchestrated donation of surplus microscopes and laboratory equipment (thin-section machines) from Unocal Corp. Estimated value: 40-60K\$.
- 1996 Served on a committee dealing with a proposed Master's program via Colorado State University.
- 1996 Coordinated scholarship nomination activities for the Grand Junction Gem and Mineral Club.
- 1996 Served as coordinator for student assistants and work-study personnel.
- 1996 Coordinated the Western Slope Geology Field Conference hosted by MSC.
- 1995-2003 Served as member of MSC Geologic Advisory Board.
- 1995-2000 Served as faculty advisor for MSC Geology Club.

UNIVERSITY SERVICE (Southern Illinois University – Carbondale)

- 1976-78 Chair of Graduate Admissions Committee (Geology Dept.).

PROFESSIONAL SERVICE

- 2016-21 Council Member for Grand Junction Geological Society.
- 2016-17 Vice President and President of Grand Junction Geological Society.
- 2012 Provided a memorial for Dr. Robert Young, published by the American Association of Petroleum Geologists.
- 2010-12 Field Trip Co-Chair for the 2012 annual meeting of the Rocky Mountain Section of the American Association of Petroleum Geologists.
- 2008-12 Gave presentations to the Grand Junction Chapter of the Society of Petroleum Engineers on the Energy Resources of the Piceance Basin.

- 2007-11 Indirectly involved with the Colorado Rockies Experiment and Seismic Transect project administered by the University of New Mexico. Funding for age dating of basaltic samples from Grand Mesa was obtained.
- 2007 Gave invited presentation to the Colorado Oil and Gas Conservation Commission (Denver) on gas resources in the Piceance Basin.
- 2006-07 Participated in a research program by the Colorado Energy Research Institute to study low-permeability gas reservoirs in the Piceance Basin, as funded by the DOE's Research Partnership to Secure Energy Independence in America.
- 2006 Faculty leader for a segment of a NSF-REU project involving six students.
- 2005 Served as the General Chair for the annual meeting of the Rocky Mountain Section of the Geologic Society of America, which was hosted by the MSC Geology Program.
- 2005-06 Served as Chair of the Rocky Mountain Section of Geologic Society of America. The section includes northern Arizona, New Mexico, Utah, Colorado, Wyoming, Montana, Idaho, North Dakota, South Dakota, Alberta, and Saskatchewan.
- 2002 Co-leader for a second, five-day teachers institute on John Wesley Powell sponsored by the Colorado Endowment for the Humanities. Other leaders: Dr. Clay Jenkinson and Dr. Steve Schulte.
- 2001 Coordinated a field trip for the American Association of Petroleum Geologists led to a 11K\$ donation to the Grand Junction Geological Society.
- 2001 Co-leader for a five-day teachers institute on John Wesley Powell sponsored by the Colorado Endowment for the Humanities. Other leaders: Dr. Clay Jenkinson and Dr. Steve Schulte.
- 2000 Presented "after-dinner" talk for the Western Slope Colorado Oil and Gas Association.
- 2000 Assisted the Grand Junction Geological Society in acquiring a satellite image of western Colorado for fund raising.
- 1999-2002 Assisted geoscientists from the U.S. Geological Survey in sampling basalt clasts from the flanks of Grand Mesa for cosmogenic age dating.
- 1999 Co-leader for a field seminar for high school teachers on the Ecosystems of the Gunnison River Drainage sponsored by MSC's Montrose Campus.
- 1998-2000 Participated in mapping of the Colorado National Monument Quadrangle by the U.S. Geological Survey.
- 1997-98 President of MSC chapter of Sigma Xi.
- 1997 Provided expert-witness testimony on oil shale during a trial conducted by an administrative law judge for the U.S. Department of Interior in Salt Lake City, Utah. Defendant was Cliffs Synfuels, Inc.
- 1996-97 Vice President of MSC chapter of Sigma Xi.
- 1996-2002 Member of MSC chapter of Sigma Xi.
- 1996 Gave technical presentation to the Grand Junction Gem and Mineral Society,
- 1996 Organized a core workshop on oil shale for research conference sponsored by the Society of Sedimentary Geology (SEPM).
- 1996 Served as temporary chair for a short-course program conducted at the 1998 national meeting of the Society of Economic Paleontologists and Mineralogists in Salt Lake City.
- 1995-2019 Provided geologic field trips for energy companies and societies interested in the western Colorado and eastern Utah (American Association of Petroleum Geologists, Society of Economic Paleontologists, Society of Petroleum Engineers, Geologic Society of America, Denver International Petroleum Society, American Institute of Professional Geologists, Forest Oil, Mineral Acquisition Partners, Teton Energy, EOG Resources, Tom Brown, Inc., Williams Production, Bass Petroleum, Encana, West Hawk Development, Bill Barrett, Questar, Westport, Kerr-McGee, Anadarko, Chevron, Shell, Occidental, ConocoPhillips, BP America, Petro-Canada, Cabot, Halliburton, Marathon, XTO, Dominion, C&C Energy, COG Energy, Ultra Petroleum, Bowie Resource Partners, Caerus, and Omega.
- 1995-2019 Provided numerous technical presentations (about one per year) and/or field trips to the Grand Junction Geological Society.

COMMUNITY SERVICE

- 2019 Provided input to the *Colorado Sun* on the 50th anniversary of the Rulison nuclear detonation.
- 2019 Provided input to the *Grand Junction Daily Sentinel* on the 5th anniversary of the West Salt Lake Landslide.
- 2018 Presented talk on landslides to 5th grade students at Pomona Elementary School.
- 2018 Presented talk on the geology of Grand Mesa at Book Cliff Country Club.

- 2018 Presented talk on the geology of Grand Mesa at the Mesa County Library with local media coverage.
- 2017-21 Assisted in development of geological displays for the Grand Mesa National Forest Visitors Center. Gave two oral presentations.
- 2017 Featured in presentation (Uranium Mania) on Rocky Mountain PBS's *Colorado Experience*.
- 2015 Gave presentation to the Grand Junction Audubon Society on the West Salt Creek Landslide.
- 2014 Provided geological assistance to Mesa County regarding the West Salt Creek Landslide. Also provided interviews with local media.
- 2014 Facilitated donation of geological materials to the Ouray County Historical Society.
- 2013-14 Gave geologic presentations for the Museum of Western Colorado (Changing Landscapes of Science Series).
- 2013 Co-leader of a geologic field trip for the Ouray County Historical Society.
- 2012-13 Led field trips for local high school students through the McConnell Math and Science Center. Also provided advice on geologic displays.
- 2009 Gave presentation on the geologic history of western Colorado at the Grand Junction Home and Garden Show.
- 2007 Provided interview for KAFM on the oil and gas resources of the Piceance Basin.
- 2007 Gave two geologic presentations at the Palisade Institute in Gateway, CO.
- 2005-06 Participated in two community forums on oil and gas resources in Garfield County.
- 2005 Gave two presentations (Telluride and Norwood) on the basics of petroleum geology to the San Miguel County Commissioners and technical personnel.
- 2004 Provided interview to the *Aspen Times* on the energy resources of Garfield County.
- 2003 Prepared GPS maps for cross-country ski trails maintained by the Grand Mesa Nordic Council.
- 1996-2014 Judge for Western Colorado Science Fair.
- 1996-2003 Participated in Sigma Xi's Visiting Scientist Program (MSC Chapter).
- 1996 Gave a talk to 4th-grade students at Tope Elementary School, Grand Junction, via Sigma Xi's Visiting Scientist Program.
- 1996 Conducted a geologic field trip to Colorado National Monument for the Colorado Earth and Space Science Educators Network (cosponsored by the Mesa County Valley School District 51).

GRANTS AND FUNDING

- 2017 Received a \$1,000 grant from Colorado Mesa University (Faculty Development Fund) to purchase an unmanned aerial vehicle (drone) to support field research.
- 2016 Received \$26,344 grant from Unconventional Energy Center at Colorado Mesa University to support the X-ray Mineralogy-Geochemistry Laboratory at Colorado Mesa University. Dr. W.C. Hood was co-principle investigator.
- 2016 Received a \$2,390 grant from the Grand Junction Geological Society to study the geochemistry of and mineralogy of the Green River Formation. Dr. W.C. Hood was co-principle investigator.
- 2015 Received a \$1,750.50 grant from the Grand Junction Geological Society to study the geochemistry of mafic flows and dikes in the Grand Mesa volcanic field, western Colorado.
- 2015 Received a \$906.25 grant from Colorado Mesa University (Faculty Development Fund) to prepare petrographic thin sections of mafic flows and dikes from the Grand Mesa volcanic field, western Colorado.
- 2013 Received a \$789.45 grant from Colorado Mesa University (Faculty Development Fund) to attend training sessions for the PETRA software system at Colorado School of Mines.
- 2013 Received a \$22,661.00 grant from the Unconventional Energy Center at Colorado Mesa University to study the mineralogy and geochemistry of the Mancos Shale in western Colorado. Dr. W.C. Hood was co-principle investigator.
- 2011 Received a \$2,787.50 grant from Colorado Mesa University (Faculty Development Fund) for geochemical analyses of basaltic rock samples from Grand Mesa, Colorado.
- 2011 Received \$5,000 from the Reservoir Characterization and Modeling Laboratory at the University of Colorado, Boulder, for Phase 6 research on the Williams Fork Formation; funding was via the Williams Fork Consortium (funded by 10 energy companies).
- 2010 Coordinated acquisition (with Tony Kovschak) of an in-kind academic license for the PETRA™ software system (market value is ~\$300,000). 2009 Received a grant (\$32,387) from Colorado School of Mines for research on the Williams Fork Formation in the Piceance Creek Basin, CO. Funding source was from

- RPSEA/U.S. Dept. of Energy (project title: “Reservoir Connectivity and Stimulating Gas Flow in Tight Sands; Task 4 – Development of Static Reservoir Models”). Project completed in 2011.
- 2009 Received \$51,125 from the Reservoir Characterization and Modeling Laboratory at the University of Colorado, Boulder, for Phase 5 research on the Williams Fork Formation; funding was via the Williams Fork Consortium (funded by 16 energy companies).
- 2007 Received \$10,000 from the Reservoir Characterization and Modeling Laboratory at the University of Colorado, Boulder, for Phase 4 research on the Williams Fork Formation; funding was via the Williams Fork Consortium (funded by 12 energy companies).
- 2005 Co-investigator on a National Science Foundation REU grant (\$362,586) to Mesa State College.
- 2004 Received \$5,000 from the Reservoir Characterization and Modeling Laboratory at the University of Colorado, Boulder, for Phase 3 research on the Williams Fork Formation; funding was via the Williams Fork Consortium (funded by 12 energy companies).
- 1977 Received \$1,500 grant from the Office of Research and Projects, Southern Illinois University.
- 1976 Received \$29,140 grant from the Coal Research Center, Southern Illinois University.
- 1976 Received \$9,000 grant from the American Chemical Society (Petroleum Research Fund).
- 1973 Received \$450 grant from Sigma Xi to partially fund graduate research program.

HONORS, AWARDS AND SPECIAL EVENTS

- 2021 Received a Certificate of Appreciation from the U.S. Forest Service for volunteer work at Grand Mesa Visitor Center.
- 2020 Received a plaque from Colorado Mesa University acknowledging emeritus status.
- 2016 Invited participant in CMU’s Author Showcase.
- 2014 Invited speaker for the monthly meeting of the Rocky Mountain Section of the Society of Economic Paleontologists and Mineralogists, Denver.
- 2008 Received (with Dr. Matt Pranter) the A.I. Levorsen Award for best oral presentation at the Rocky Mountain Section Meeting of the American Association of Petroleum Geologists.
- 2006 Received Outstanding Achievement in Scholarship Award from Mesa State College.
- 2005 Received Best Paper of the Year (2005) Award from the Rocky Mountain Association of Geologists (Denver) for paper with Steve Cumella in the *Mountain Geologist*.
- 2004 Co-recipient of the John Runge Best Student Award from the Wyoming Geological Association. Amanda Ellison (CU-Boulder grad student) was the main author. Other recipients: Dr. Matthew Pranter and Dr. Penny Patterson.
- 2004 Selected as General Chair for the 57th Meeting (2005) of the Rocky Mountain Section of the Geological Society of America.
- 2004 Elected Chair of the Rocky Mountain Section of the Geological Society of America.
- 2004 Awarded a Lifetime Membership in the Grand Junction Geological Society in recognition for prolonged service and fund raising.
- 2004 Nominated for a distinguished faculty award (overall) at Mesa State College.
- 2003 Invited speaker for the monthly meeting of the Rocky Mountain Association of Geologists, Denver.
- 2003 Nominated for a distinguished faculty award (overall) at Mesa State College.
- 2002 Nominated for a distinguished faculty award (research) at Mesa State College.
- 1996 Elected to membership into the Mesa State College Chapter of Sigma Gamma Epsilon.
- 1994 Nominated for a creativity award from Unocal Corporation for geological research.
- 1993 Nominated for a creativity award from Unocal Corporation for geological research.
- 1992 Invited speaker at Department of Geosciences, New Mexico Institute of Mining and Technology, Socorro.
- 1992 Received special commendation from Unocal Corporation for participation in a special business venture in New Mexico.
- 1992 Received a creativity award from Unocal Corporation for geological research.
- 1991 Invited speaker at Department of Geology and Geophysics, Louisiana State University, Baton Rouge.
- 1990 Invited speaker at Colorado School of Mines, Golden.
- 1989 Invited speaker for Wyoming Geological Association, Casper.
- 1985 Invited speaker at University of Colorado, Denver.
- 1977 Elected chair of the Graduate Admissions Committee, Department of Geology and Geophysics, Southern Illinois University.

1976 Elected to the College of Science's Molecular Science Faculty (interdepartmental Ph.D.-granting program) at Southern Illinois University.

GRADUATE STUDENT INVOLVEMENT

In addition to his professional duties at Mesa State College and Colorado Mesa University, Cole served as a formal outside committee member for graduate students working in western Colorado, including the following universities:

2016-21 University of Oklahoma (3 M.S. students and 1 Ph.D. student)
 2002-15 University of Colorado, Boulder (18 M.S. students)
 1999-2003 Northern Arizona University (1 M.S. student)
 1990-97 New Mexico Tech. (2 M.S. students)
 1989-92 Long Beach State University (1 M.S. student)
 1977-79 Southern Illinois University-Carbondale (2 M.S. students)

SHORT COURSES, RESEARCH SYMPOSIA AND SUPPLEMENTAL TRAINING

2014 PETRA software training, conducted at the Colorado School of Mines, CO (two days).
 1995 Reservoir characterization and geostatistics computer workshop, conducted by the R3 Group, in Brea, CA (five days).
 1995 Invited participant in a sequence stratigraphy research/field conference conducted by the Society of Sedimentary Geology (SEPM) and American Association of Petroleum Geologists (five days, Wyoming).
 1992 Reservoir characterization and geostatistics computer workshop, conducted by Cr. Mohan Kelkar in Brea, CA (three days).
 1991 Invited participant in a sequence stratigraphy research/field conference conducted by the American Association of Petroleum Geologists (seven days, Utah and New Mexico), led by Dr. John Van Wagoner.
 1988 Sequence stratigraphy of Tertiary strata in Mississippi, Alabama, and Georgia (field symposium), conducted by Dr. Peter Vail (one week).
 1988 Seismic stratigraphic and seismic facies analysis of deep-water siliciclastic systems, (short course), conducted by Geoquest International, Inc. (one week).
 1988 Sequence stratigraphy and sea-level changes (field trip and workshop), conducted by Working Group I of Global Sedimentary Geology Program (three days).
 1987 Sequence stratigraphy (short course), conducted by Dr. Peter Vail (two days).
 1986 Shelf sands and strandline systems (short course), conducted by the American Association of Petroleum Geologists (two days).
 1986 Depositional sequences and shelf sandstones in Cretaceous strata of the San Juan basin, New Mexico (field symposium), conducted by Gulf Coast Section of Society of Economic Paleontologists and Mineralogists (three days).
 1985 Seismic facies analysis (short course), conducted by Geoquest International, Inc. (one week).
 1978 Depositional and ground-water flow systems in the exploration for uranium (short course), conducted by the Bureau of Economic Geology, University of Texas at Austin (two days).
 1976 Carbonate depositional environments (short course), conducted by Dr. G. Friedman (one day).

RESEARCH CONSORTIA MEETINGS CONDUCTED

2013 With Dr. Matt Pranter (CU-Boulder) Williams Fork Consortium Phase 6 Research Meeting "Stratigraphic architecture and sedimentology of the middle and upper Williams Fork Formation fluvial system: Douglas Creek Arch and Piceance Basin, Colorado;" April 26-28, 2013: 25 attendees (with field trip).
 2012 With Dr. Matt Pranter (CU-Boulder) Williams Fork Consortium Phase 6 Research Meeting "Stratigraphic architecture and sedimentology of the middle and upper Williams Fork Formation fluvial system: Douglas Creek Arch and Piceance Basin, Colorado;" May 15, 2012: 28 attendees.
 2011 With Dr. Matt Pranter (CU-Boulder) Williams Fork Consortium Phase 6 Research Meeting "Stratigraphic architecture and sedimentology of the middle and upper Williams Fork Formation fluvial system: Douglas Creek Arch and Piceance Basin, Colorado;" September 23-25: 30 attendees (with field trip).
 2011 With Dr. Matt Pranter (CU-Boulder) Williams Fork Consortium Phase 5 Research Meeting "Stratigraphic architecture and reservoir characteristics of the Mesaverde Group: Application of outcrop-based concepts and statistics to the subsurface, Piceance Basin, Colorado"; May 13, 2011: 44 attendees.

- 2010 With Dr. Matt Pranter (CU-Boulder) Williams Fork Consortium Phase 5 Research Meeting "Stratigraphic architecture and reservoir characteristics of the Mesaverde Group: Application of outcrop-based concepts and statistics to the subsurface, Piceance Basin, Colorado"; April 30, 2010: 50+ attendees.
- 2009 With Dr. Matt Pranter (CU-Boulder) Williams Fork Consortium Phase 4 Research Meeting "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."; April 23, 2009: 42 attendees.
- 2008 With Dr. Matt Pranter (CU-Boulder) Williams Fork Consortium Phase 4 Research Meeting "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."; April 4, 2008: 40 attendees.
- 2006 With Dr. Matt Pranter (CU-Boulder) Williams Fork Consortium Phase 3 Research Meeting "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"; January 6, 2006.

DISSERTATION

- 1975 **R.D. Cole**, Sedimentology and sulfur isotope geochemistry of the Green River Formation (Eocene) and associated rock units, eastern Uinta Basin, Utah, and Piceance Creek Basin, Colorado (Ph.D. dissertation): University of Utah, 274 p. Advisors: Dr. M. Dane Picard and M. L. Jensen.

ARTICLES PUBLISHED (N = 60) (refereed unless noted; * denotes a student coauthor from outside MSC/CMU; ** denotes MSC/CMU student coauthor)

- 2020 J.J. Tellez*, M. J. Pranter, and **R.D. Cole**, Fluvial architecture and sequence stratigraphy of the Burro Canyon Formation, southwestern Piceance Basin, Colorado: Interpretation, v. 8, issue 4.
- 2019 J.M., Chesnutt*, K.W. Wegmann, T.A. Pawl*, J.L. White, **R.D. Cole**, and P.K. Byrne, Geologic map of the Mesa Lakes Quadrangle, Mesa and Delta Counties, Colorado: Colorado Geological Survey Open-File Report 19-08 (1:24,000 scale).
- 2018 K.D. Lewis*, M.J. Pranter, Z.A. Reza, and **R.D. Cole**, 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, Society for Sedimentary Geology, v. 16, no. 3, p. 4-10.
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