

### Research Funded by Programs of GSA and its Partners

More than 200 of the authors presenting their research at the GSA Annual Meeting received supporting funds from a GSA research grant, the GeoCorps™ America program, or the National Park Service (NPS) Geoscientists-In-the-Parks (GIP) program. To recognize these authors, GSA has posted their names and presentation titles on the Annual Meeting website: [community.geosociety.org/gsa2018/gsaresearch](http://community.geosociety.org/gsa2018/gsaresearch).

**The following students were funded through the GeoCorps America or the Geoscientists-In-the-Parks (GIP) Program**

Student Name	Session #	Presentation Title
Alberto Alvarado	T21	CONSERVATION CHALLENGES AT TIMUCUAN ECOLOGICAL AND HISTORIC PRESERVE: A COMPLEX URBAN MULTI-JURISDICTIONAL ESTUARINE PRESERVE
Phoebe Ferguson	T21	STORIES IN STONE: GEOLOGIC RESOURCES OF OUR NATIONAL FORESTS
Jenna M. Kaplan	T21	CAVE EXPLORATION AND KARST MANAGEMENT IN THE PRYOR MOUNTAINS, MT
Aliera E.A. Konett	T21	BUFFALO NATIONAL RIVER PALEONTOLOGICAL RESOURCE INVENTORY
Anne E. Kort	T21	THE EVOLUTION OF CARNIVORAN HUNTING STYLES AT JOHN DAY FOSSIL BEDS NATIONAL MONUMENT
Reba McCracken	T21	ASSESSING CITIZEN SCIENCE STRUCTURE-FROM-MOTION AS A METHOD FOR MEASURING GLACIER ANNUAL MASS BALANCE IN GRAND TETON NATIONAL PARK
Ariana Miranda	T21	A COMPREHENSIVE PALEONTOLOGICAL RESOURCES INVENTORY OF THE DELAWARE WATER GAP NATIONAL RECREATION AREA IN NORTHWESTERN NEW JERSEY AND NORTHEASTERN PENNSYLVANIA
Nathan S. Ong	T21	EXPLORING THE PALEONTOLOGY OF MOAB THROUGH THE JURASSIC WALKS AND TALKS PROGRAM
Catherine T. Ruhm	T21	SOIL PROPERTIES IMPEDE REFORESTATION OF ABANDONED MINE SITES IN CUYAHOGA VALLEY NATIONAL PARK
Mary Stack	T21	ASSESSING POTENTIAL TRENDS IN TEMPERATURE AND FLOW DATA THROUGH SPATIAL AND TEMPORAL ANALYSIS OF THERMAL SPRINGS AT HOT SPRINGS NATIONAL PARK FROM 2010 TO 2018
Christina N. Tenison	T21	ENJOY THE VIEW: ASSESSING RIVER-RELATED SCENIC VIEWS TO HELP DETERMINE WILD AND SCENIC RIVER ELIGIBILITY AT CUYAHOGA VALLEY NATIONAL PARK, OHIO
Alaina Tocci	T21	CYCLIC FOSSIL PROSPECTING AT JOSHUA TREE NATIONAL PARK
Angela Yragui	T21	MAPPING RIPARIAN ZONE SHRUBS AND TREES TO ANALYZE BEAVER HABITAT SUITABILITY IN THE MANCOS RIVER, MESA VERDE NATIONAL PARK

**The following students were funded through GSA research grants, or other GSA programs.**

Student Name	Session #	Presentation Title
Samuel A. Abdala	T110	STRATIGRAPHY AND PETROGRAPHY OF HETTANGIAN TO SINEMURIAN LACUSTRINE CARBONATES OF THE GLEN CANYON GROUP, WASHINGTON COUNTY (SW UTAH)
Ashley Adams	T129	EXPLORING THE PALEOENVIRONMENT OF THE MORRISON FORMATION IN THE BIGHORN BASIN
Steven Adams	T165	RESULTS OF EXPERIMENTAL AEOLIAN SALTATION AND IMPLICATIONS FOR THE INTERPRETATION OF LOESS DEPOSITS
Mohammed A. Al Musawi	D56	AN INTEGRATED SHELF TO BASIN CHEMO- AND CHRONO-STRATIGRAPHIC CORRELATION OF THE BURNT BLUFF GROUP (BBG) CARBONATES, MICHIGAN BASIN, U.S.A
Jordan C. Anderson	T54	EXPLORING THE EVOLUTION OF THE SOUTHERN COLORADO PLATEAU THROUGH THE DRAINAGE REVERSAL AND INCISION RATES OF THE SALT RIVER
Nina Ataee	T161	DATING SEISMIC-RELATED FANGLOMERATES IN THE COACHELLA VALLEY, SOUTHERN

# CALIFORNIA

Elizabeth A. Avery	D5	EFFECTS OF INJECTED WASTE WATER ON A HETEROGENEOUS SYSTEM
Teresa Baraza		DO SOILS SLOW THE TRANSPORT OF WINTER DEICING SALTS TO SHALLOW
Piazuelo	T15	GROUNDWATER?
Rebecca L. Beers	T49	QGG STANLEY A. SCHUMM AWARD: CHANNEL REFILL PROCESSES FOLLOWING POST-FIRE DEBRIS FLOWS, PINALEÑO MOUNTAINS, ARIZONA, USA
Kadie Bennis	T185	RECONSTRUCTING THE SUBAQUEOUS PHREATOMAGMATIC ERUPTION AT THE 71 GULCH VOLCANO, WESTERN SNAKE RIVER PLAIN, IDAHO
Erin Benson	T30	SULFUR ISOTOPE HETEROGENEITY IN DISSEMINATED SULFIDE MINERALIZATION: INSIGHTS FROM THE EAST EAGLE DEPOSIT, NORTHERN MICHIGAN
Souvik		CONTROLS ON LARGE SCALE ARCHITECTURE AND DISTRIBUTION OF CARBONATE
Bhattacharjee	T168	FACIES IN RAMP SETTINGS, SMACKOVER FORMATION, GULF OF MEXICO
Chelsea M. Blanton	T60	EARTHQUAKE SLIP, HURRICANES, AND RILL FORMATION – DRONE-BASED DEMS AND ORTHOMOSAICS FROM VERY HIGH-RESOLUTION SFM IMAGERY ALONG THE SOUTHERN SAN ANDREAS FAULT, COACHELLA VALLEY, CALIFORNIA
Hannah J. Blatchford	T142	THE RECORD OF GIANT UHP TERRANE EXHUMATION PRESERVED IN LITHOLOGICALLY DIVERSE, METERS-SCALE SHEAR ZONES: AN INTEGRATED TRACE ELEMENT THERMOBAROMETRY AND MICROSTRUCTURAL STUDY OF ECLOGITE AND GNEISS FROM THE WESTERN GNEISS REGION, NORWAY
Elizabeth M. Bollen	T140	COMPARISON OF SM-ND AND LU-HF GARNET AGES II: AMPHIBOLITE FACIES ROCKS, PICURIS-TUSAS MOUNTAINS, NEW MEXICO
Edwin J. Bomer	T48	AN INTEGRATED APPROACH FOR CONSTRAINING DEPOSITIONAL ZONES IN A TIDE-INFLUENCED RIVER: GORAI RIVER, SOUTHWEST BANGLADESH
Kendra Bonsey	T110	INVESTIGATION OF LEAD ISOTOPES AND TRACE METAL FLUXES AS PARTICULATE CONTAMINANT TRACERS AND CHRONOSTRATIGRAPHIC MARKERS FOR LAKE SEDIMENTS IN NORTHEASTERN PENNSYLVANIA
Rachel Bosch	T48	ABRASION, DISSOLUTION, AND THE EVOLUTION OF SCALLOPED FEATURES IN ROCKS
Shelby Bowden	D39	UNROOFING HISTORY OF THE WESTERN ETHIOPIAN PLATEAU: INSIGHTS FROM APATITE (U-TH)/HE AND FISSION TRACK THERMOCHRONOLOGY
Cassandra A.P. Brigham	T60	A PARTIALLY AUTOMATED WORKFLOW TO ANALYZE FAULT SCARP MORPHOLOGY USING UAV-ACQUIRED IMAGERY
David Brink-Roby	D38	METEORIC INFILTRATION ALONG THRUST FAULTS WITHIN THE WYOMING SALIENT OF THE SEVIER FOLD-THRUST BELT
Shannon K. Brophy	D16	BIOTIC RESPONSE TO A LATE CRETACEOUS ASH FALL: COMPARATIVE FAUNAL ANALYSES FROM A METHANE SEEP AND NON-SEEP ECOSYSTEM WITHIN THE WESTERN INTERIOR SEAWAY
Garett M. Brown	D22	ENVIRONMENTAL CONTROLS ON THE EARLY MISSISSIPPIAN (TOURNAISIAN) FAUNA OF THE LODGEPOLE FORMATION, THREE FORKS QUADRANGLE, MONTANA
Vanessa J. Bump	T65	INVESTIGATING SCORIA CONE MORPHOLOGY VIA GPR IMAGING IN CRATER FLAT VOLCANIC FIELD
Amanda E. Campbell	T31	ARE POINT-IN-TIME OBSERVATIONS OF METHANE IN DOMESTIC WELL WATER REPRESENTATIVE OF YEAR-ROUND CONDITIONS? RESULTS OF YEAR-LONG MONTHLY WATER QUALITY SAMPLING IN THE MARCELLUS PLAY
Tomas N. Capaldi	T184	STRATIGRAPHIC RESPONSE TO NEOGENE FLAT-SLAB SUBDUCTION, ARGENTINA
Lorraine K. Carnes	T54	RECONSTRUCTING LATE MIOCENE-EARLY PLIOCENE PALEOCLIMATE OF SONOITA CREEK BASIN, AZ
James H. Carrigan	T48	POST-MIOCENE DRAINAGE REORGANIZATION IN AN ACTIVE OROGEN, SIERRA NEVADA, BETIC CORDILLERA, SPAIN
Alexandria F. Cerpovicz	D33	CANOPY EFFECTS OF OCTOCORAL COMMUNITIES ON SEDIMENTATION: MODERN BAFFLES ON THE SHALLOW-WATER REEFS OF ST. JOHN, USVI
Jason M. Cesta	T56	LIMITED GLACIAL EROSION BENEATH A LATE PLEISTOCENE ICE CAP, CHAJNANTOR PLATEAU, NORTHERN CHILE
Jayeeta	T45	INVESTIGATING A LINK BETWEEN LOW-RANK COAL BEARING CARRIZO-WILCOX

Chakraborty		AQUIFER WATER AND KIDNEY DISEASE IN EAST TEXAS
William Chandonia	T177	“ROLLOVER-BREAK THRUSTS” AND ADVANCEMENT OF THE LEADING EDGE OF THE SEVIER FOLD AND THRUST BELT, SOUTHWEST UTAH
Brandon Franklin Chase	T171	THE SOUTHERN OKLAHOMA AULACOGEN: NEW INSIGHTS ON THE PALEOZOIC RIFT-RELATED AND INVERSION-RELATED STRUCTURES IN THE WICHITA UPLIFT
Michelle E. Chrpá	T118	MG/CA RATIOS OF ECHINODERM OSSICLES IN PENNSYLVANIAN COAL BALLS: IMPLICATIONS FOR RECONSTRUCTING MG/CA RATIOS OF PENNSYLVANIAN SEAWATER
Annaka M. Clement	D22	ASSESSING THE PALEOECOLOGICAL IMPACT OF DIAGENETIC OVERPRINTS ON SHALLOW MARINE MACRO- AND MICROFOSSIL ASSEMBLAGES: A CASE STUDY THE LATE TRIASSIC LUNING AND GABBS FORMATIONS (WESTERN NEVADA, USA)
Annaka M. Clement	T119	A NEW PANTHALASSAN IRON-OOLITE DEPOSIT FROM THE EARLY JURASSIC: IMPLICATIONS FOR GLOBAL SHALLOW MARINE IRON DEPOSITION IN THE AFTERMATH OF THE END-TRIASSIC MASS EXTINCTION
Claire Cleveland	T129	DOES OREODONT MORPHOLOGY AND THEIR EXTINCTION CORRELATE WITH GRASSLAND EXPANSION IN NORTH AMERICA’S CENTRAL-WESTERN GREAT PLAINS?
Cody L. Colleps	T182	PROVENANCE OF CRETACEOUS–PALEOGENE STRATA OF NORTHWEST INDIA: DETRITAL ZIRCON GEOCHRONOLOGIC AND HF ISOTOPIC INSIGHTS INTO THE TIMING OF INDIA–ASIA COLLISION
David R. Cordie	T127	SEARCHING FOR FRAMEWORK BUILDERS AFTER THE REGIONAL EXTINCTION OF ARCHAEOCYATHAN REEFS IN THE CAMBRIAN MULE SPRING LIMESTONE NEAR SPLIT MOUNTAIN, NEVADA, USA
Harriet S. Cornachione	T165	DRY TIMES IN THE CENTRAL COLORADO PLATEAU: PREHISTORIC DROUGHT RECORDED IN SOUTHERN UTAH DUNE FIELDS
George E. Daly	D41	MAGMA MINGLING AND MAGMA SOURCE HETEROGENEITY AT MORNE PATATES VOLCANO, DOMINICA, LESSER ANTILLES
Estefanny Davalos-Elizondo	T109	GEOTHERMOMETRY OF HOT SPRINGS IN THE MALAWI RIFT
Hannah Davis	D36	PERMO-TRIASSIC LAURENTIAN ARC INITIATION AND RECORD IN TRIASSIC SEDIMENTARY STRATA IN THE INYO MOUNTAINS, EASTERN CALIFORNIA
Emily A. Deebea	T15	LAND USE CONTROLS ON GROUNDWATER INPUTS TO STREAMS
Leila Donn	T27	LONG-TERM HUMAN IMPACT ON A NEOTROPICAL FLUVIAL SYSTEM IN THE BELIZE-GUATEMALA TRANSBOUNDARY AREA
Megan J. Doughty	T93	ROBERT K. FAHNESTOCK AWARD: ELECTRICAL IMAGING OF THE CHANGES IN HYPORHEIC EXCHANGE FROM CHANNEL-SPANNING LOGJAMS
Edward Duarte	T110	DELTAIC SEDIMENTATION IN AN ASYMMETRIC PULL-APART BASIN, LAKE IZABAL, GUATEMALA: NEW CONSTRAINTS FROM SHORT SEDIMENT CORES AND GEOPHYSICAL DATA
Oana A. Dumitru	D58	A U-PB DATED GLACIAL ISOSTASY CORRECTED PLIOCENE SEA-LEVEL RECORD IN MALLORCA (WESTERN MEDITERRANEAN) BASED ON PHREATIC OVERGROWTHS ON SPELEOTHEMS
J.I. Dunham	T157	CRYSTALLIZATION OF OPAL TO LENGTH-FAST CHALCEDONY WITHIN PROTEROZOIC MICROFOSSILIFEROUS CHERT
Jacob R. Dyson	T32	GEOCHEMISTRY AND ORGANIC PETROLOGY OF THE ANNA SHALE (PENNSYLVANIAN) AND PYRITE “SUNS” IN SOUTHWESTERN ILLINOIS
Matthew Edgin	T34	WATER-ROCK INTERACTION IN A GAS SHALE: EFFECTS OF STIMULATION FLUID ON MINERALOGY AND POROSITY IN THE PRESENCE OF FORMATION WATER
Joshua J. Ehlich	T30	GOLD SEQUESTRATION IN CHALCOPYRITE, BORNITE, AND PYRRHOTITE AT MAGMATIC CONDITIONS
John Idoko Ejembi	T168	FLUID FLOW THROUGH JURASSIC SANDSTONES IN THE PARADOX BASIN, COLORADO: SYNDEPOSITIONAL, DIAGENETIC OR LATER?
Emmanuel Escorcía-Ocampo	D5	NEW INSIGHTS INTO AUTHIGENIC AND HYDROTHERMAL MINERALIZATION PROCESSES OF THE GUAYMAS BASIN (GULF OF CALIFORNIA)
James Farrell	T185	4D MORPHOMETRY OF TRANSIENT TUMULI IN BASALTIC LAVA FLOW EXPERIMENTS

Sean Frangos	T79	MORE THAN 15 YEARS OF CHANGE IN HEAVY METAL CONTAMINATION IN OYSTER AND CORAL TISSUE FROM KANEOHE BAY, HI
Surya Margaret Freeman	T107	INVESTIGATION OF TEXTILE DYES AS A GROUNDWATER CONTAMINANT IN MANDALAY MYANMAR
Anthony J. Fuentes	T176	HIGH-RESOLUTION MAGNETOSTRATIGRAPHY OF THE K-PG BOUNDARY INTERVAL, CORRAL BLUFFS, DENVER BASIN, COLORADO (USA)
Katrina D. Gelwick	T54	LITHOLOGIC AND ROCK MAGNETIC CYCLOSTRATIGRAPHY IN PLEISTOCENE TERRESTRIAL SEDIMENTS
Sarah W.M. George	T183	JURASSIC TO MIOCENE MAGMATIC EVOLUTION OF THE NORTHERN ANDES: A HAFNIUM ISOTOPE PERSPECTIVE
Emily C. Geyman	T118	HOW DO CARBONATES RECORD SEAWATER CHEMISTRY? THE BAHAMAS AS A MODERN ANALOGUE FOR CLIMATE RECORDS PRESERVED IN ANCIENT SHALLOW-WATER CARBONATES
Timothy M. Gibson	T157	A TERMINAL MESOPROTEROZOIC RECORD OF ENVIRONMENTAL AND BIOLOGICAL DISRUPTION TO THE BORING BILLION FROM THE BYLOT SUPERGROUP, ARCTIC CANADA
Lindsey A. Gipson	T110	RESOLVING THE EFFECTS OF CLIMATE, TECTONICS, AND GEOMORPHIC PROCESSES ON A CLOSED LACUSTRINE SYSTEM, GREEN RIVER FORMATION, WYOMING
Emily Glasco	T11	SPATIAL DISTRIBUTION OF SOIL CHARACTERISTICS AND THEIR IMPACT ON SEED BANK DEVELOPMENT OF A MULTI-LEVEL EDUCATIONAL SMART DEVICE APPLICATION TO SUPPLEMENT TRAIL INTERPRETATION AT FLORISSANT FOSSIL BEDS NATIONAL MONUMENT
Anna Rose Golub	T25	USING LICHENOMETRY TO EVALUATE ROCKFALL RECURRENCE INTERVAL AND TALUS FAN BEHAVIOR, GLENWOOD CANYON, COLORADO
Andrew P. Graber	T11	NON-SYMMETRIC ZONING AND LACK OF CORRELATION AMONG NEIGHBORING K-FELDSPAR MEGACRYSTS IN GRANODIORITE
Justine G. Grabiec	T138	CLAY-RICH CLASTIC DIKES LOCALIZE FAULT SLIP IN THE RIO GRANDE RIFT
Jonathan Graham	T65	FINGERPRINTING CRUSTAL FOUNDERING IN THE NORTHERN ANDEAN VOLCANIC ZONE
Lisa J. Grohn	T138	USING BASALT GEOCHEMISTRY
Jeffrey Gunderson	T122	ASSESSING THE DENDROCLIMATOLOGICAL POTENTIAL OF <i>POLYLEPIS RODOLFO-VASQUEZII</i> IN THE PERUVIAN ANDES
Brittany R Guzzo	D34	PROVENANCE OF THE MIOCENE CHALK HILLS FORMATION AND RELATION TO HOTSPOT LANDSCAPE EVOLUTION, WESTERN SNAKE RIVER PLAIN, IDAHO
Clémentine Hamelin	T142	A NOVEL APPROACH FOR EXTRACTING EARLY, HIGHER- <i>P</i> RECORDS FROM ROCKS OVERPRINTED AT <i>HP-LT</i> CONDITIONS: INTEGRATING METAMORPHIC PETROLOGY AND MAGNETIC FABRICS OF AMPHIBOLITES EXHUMED IN A MIGMATITE DOME
Bari R. Hanafi	D60	DEFORMATION OF SALT LAYERS AND INTERBEDDED IMPURITIES: INSIGHTS FROM THE ORPHEUS RIFT BASIN, OFFSHORE EASTERN CANADA, AND SCALED EXPERIMENTAL MODELS
Jeffrey S. Hannon	D55	UNVEILING MAGMATIC HISTORY IN THE ASH: USING BENTONITES AS A TIME SENSITIVE PROXY FOR THE EMPLACEMENT OF THE IDAHO BATHOLITH
Sarah A. Harbert	T54	EXHUMATION, MOUNTAIN BUILDING, AND LANDSCAPE EVOLUTION ACROSS THE MARLBOROUGH FAULT SYSTEM, SOUTH ISLAND, NEW ZEALAND
Lydia J. Harmon	T141	TEMPORAL EXPLORATION OF VOLCANISM IN THE PARANÁ VOLCANIC PROVINCE, SOUTHERN BRAZIL: EVIDENCE FROM CONTINUOUS VERTICAL SECTIONS ALONG CANYON WALLS
Kira Harris	T105	GEOMORPHIC AND SEDIMENTOLOGICAL CONTROLS ON HYPORHEIC FLOW IN AN ALPINE RIVER
Carena Hasara	D26	"IT TURNS INTO SOMETHING I ALREADY KNOW..."
Reilly Hayes	T129	BAYESIAN CHARACTERIZATION OF THE LATE TRIASSIC ADAMANIAN-REVUELTIAN FAUNAL TURNOVER, PETRIFIED FOREST NATIONAL PARK, AZ, USA
Anya V. Hess	D34	SEDIMENTOLOGY AND CHEMOSTRATIGRAPHY OF UPPER SILURIAN–LOWER DEVONIAN MARINE STRATA AT WINFIELD QUARRY, CENTRAL PENNSYLVANIA

Elham Hosseinzadehsabeti	D28	THE KINEMATICS OF FRICTIONAL MELTS IN A SUBDUCTION ZONE:PILOT STUDY ON CORSICAN PSEUDOTACHYLYTES
Yong Huang	T139	PETROGENESIS OF THE LATE PERMIAN INTERMEDIATE ROCKS IN NORTHERN YOUJIANG PALEO-TETHYS BASIN OF THE SOUTH CHINA PLATE: CONSTRAINTS FROM CHRONOLOGY AND PETRO-GEOCHEMISTRY
Brittany N. Hupp	T120	EFFECTS OF SIZE-SELECTIVE SEDIMENT MIXING ON DEEP-SEA RECORDS OF THE PALEOCENE-EOCENE THERMAL MAXIMUM
Aubri Jenson	T5	THE IMPLICATIONS AND LIMITATIONS OF PHREATIC OVERGROWTHS OF SPELEOTHEMS AS SEA LEVEL INDICATORS: QUINTANA ROO, MEXICO
Wenzhe Jiao	T16	USE OF SATELLITE SOLAR-INDUCED CHLOROPHYLL FLUORESCENCE FOR METEOROLOGICAL DROUGHT ASSESSING: MERITS AND LIMITATIONS
Allison D. Jones	D60	DO SMALL FAULTS IN THE BARABOO SYNCLINE PRESERVE EVIDENCE OF EPISODIC TREMOR AND SLIP (ETS)?
Adam Jones	T176	TECTONIC SUBSIDENCE ANALYSIS AND SEDIMENT PROVENANCE EVOLUTION OF THE LATE PALEOZOIC OQUIRRH BASIN, UTAH
Rachel Kaiser	T1	DEVELOPING A THREAT AND VULNERABILITY ASSESSMENT AND MONITORING FRAMEWORK FOR URBAN KARST GROUNDWATER MANAGEMENT
John C. Kearney	T111	DEPOSITIONAL PROCESSES OF BED III AND BED IV, OLDUVAI GORGE, TANZANIA: EXPANDING ON THE WORK OF RICHARD HAY, 1976
Bridget T. Kelly	D22	PALEOECOLOGICAL STUDY OF SCLEROBIONT BORINGS AND ENCRUSTATION OF FOSSIL <i>HYOTISSA HYOTIS</i> OYSTER SHELLS FROM THE CALIFORNIA MIOCENE
Abigail Kelly	T129	NICHE PARTITIONING BETWEEN LATE PLEISTOCENE BERINGIAN BISON AND HORSES: NEW INSIGHTS REGARDING DIETARY BEHAVIOR OF HERBIVOROUS UNGULATES
Joshua T. Kelly	T98	ACROSS SPACE AND THROUGH TIME
James Kerr	D18	THE IMPACT OF CLIMATE CHANGE ON SHORELINE DYNAMICS ALONG SOUTHEAST QUEENSLAND, AUSTRALIA
Folarin Kolawole	T64	COMMENSALISM IN THE MIDST OF EXTINCTION: ENCRUSTERS AND BORERS OF THE APPALACIAN FORELAND BASIN ACROSS THE FRASNIAN-FAMENNIAN BOUNDARY
Dana Korneisel	D22	CHARACTERIZATION OF PRE-EXISTING STRUCTURES IN THE BASEMENT OF OKLAHOMA WITH IMPLICATIONS FOR INDUCED SEISMICITY
Olivia Koster	T117	WHAT MAKES FOR AN EXCEPTIONAL FOSSIL? THE PRESERVATION OF THE THERIZINOSAUR <i>BEIPIAOSAURUS INEXPECTUS</i> FROM THE YIXIAN FORMATION OF CHINA
Rostislav Kovtun	D33	STABLE CARBON ISOTOPE SIGNATURE OF THE LATE DEVONIAN (FRASNIAN) ALAMO IMPACT AT DEVILS GATE, NEVADA: GEOLOGICALLY INSTANTANEOUS TRANSFER OF <sup>13</sup> C-ENRICHED CARBON FROM THE LITHOSPHERE TO THE DISSOLVED INORGANIC CARBON POOL
Agustin Kriscautzky	D33	EARLY TRIASSIC PALEOCEANOGRAPHY ALONG WESTERN NORTH AMERICA: AN ANALYSIS OF THE MIDDLE MEMBER OF THE UNION WASH FORMATION, EAST-CENTRAL CALIFORNIA
DeAnna J. Laurel	T172	EXPLORATION OF PRECAMBRIAN MOLAR-TOOTH FABRIC WITH CATHODOLUMINESCENCE PETROGRAPHY: IMPLICATIONS FOR DIAGENESIS
Asmara Lehrmann	T168	THE PERSISTENCE OF BEAVER-INDUCED GEOMORPHIC HETEROGENEITY AND ORGANIC CARBON STOCK IN MOUNTAIN RIVER CORRIDORS
Gustave Allen Lester	D43	HOLOCENE FREQUENCY OF PALEO-FLOODS IN MOBILE BAY FROM SEDIMENT GRAIN SIZE AND ELEMENTAL ANALYSES: IMPLICATIONS FOR RECENT ESTUARINE EUTROPHICATION EVENTS
Drew A. Levy	T179	NATIVE COPPER : GEOLOGY, CAPITALISM, AND U.S. EXPANSION IN NINETEENTH CENTURY MICHIGAN
Zhiyang Li	T169	GEOLOGIC MAP OF THE HANGING ROCK CANYON 7.5' QUADRANGLE, INYO COUNTY, CALIFORNIA
		THE ORIGIN OF CLAY MINERALS IN THE UPPER CRETACEOUS TUNUNK SHALE MEMBER

		OF THE MANCOS SHALE FORMATION, HENRY MOUNTAINS REGION, SOUTH-CENTRAL UTAH
Maggie R. Limbeck	T134	EXPLORING THE DISTRIBUTION OF PARACRINOIDEA (ECHINODERMATA)
Bei Liu	T34	ROCK MECHANICAL PROPERTIES VARIATION IN THE SEQUENCE STRATIGRAPHIC CONTEXT OF THE UPPER DEVONIAN NEW ALBANY SHALE, ILLINOIS BASIN
Yuyang Liu	T34	PETREL2ANSYS: ACCESSIBLE SOFTWARE FOR SIMULATION OF CRUSTAL STRESS FIELDS USING CONSTRAINTS PROVIDED BY MULTIPLE 3D MODELS THAT EMPLOY DIFFERENT TYPES OF GRIDS
Bei Liu	T34	ORGANIC MATTER CONTENT AND TYPE VARIATION IN THE SEQUENCE STRATIGRAPHIC CONTEXT OF THE UPPER DEVONIAN NEW ALBANY SHALE, ILLINOIS BASIN
Joshua R. Lively	T130	DIVERSIFICATION OF MOSASAURINAE: INSIGHTS FROM ANATOMICAL DISPARITY, PHYLOGENETICS, AND A NEW MOSASAUR FROM THE WESTERN INTERIOR SEAWAY
Samuel J.C. LoBianco	T184	WESTWARD JURASSIC BACK-ARC BASIN MIGRATION IN THE CENTRAL ANDEAN CORDILLERA
Raisha Lovindeer	T172	THE IMPACT OF TERRIGENOUS IRON GRADIENTS ON CHROMATIC ACCLIMATION OF MARINE CYANOBACTERIA
Erin Lynch	T171	ISOTOPIC ANALYSES OF CENTRAL APPALACHIAN CLAYS IN FOLDED SEDIMENTARY ROCKS OF PA, WV, AND MD REVEAL MIXING OF SURFACE AND DEEPLY-SOURCED FLUIDS AND MINERALIZATION DURING OROGENIC EXHUMATION
Sarah A. Maithel	D35	NEW INSIGHTS ON CROSS-BED FACIES IN THE PERMIAN COCONINO SANDSTONE (ARIZONA, USA) FROM HIGH-RESOLUTION SCANS AND SCANNING ELECTRON MICROSCOPY
Kyle A. Makovsky	T141	GRENVILLE GRANITOIDS IN THE SOUTHERN APPALACHIANS – FURTHER EVIDENCE OF THE “HOT” GRANITE HYPOTHESIS
John Malone	T141	MESOARCHEAN U-PB GEOCHRONOLOGY OF THE SOUTHERN MARGIN OF THE BIGHORN BATHOLITH, WYOMING
Madeline S. Marshall	D21	HIATAL ASSOCIATION OF SKELETAL CONCENTRATIONS IN HIGH-PRODUCTIVITY RECORDS: PALEOECOLOGICAL IMPLICATIONS FOR THE PHOSPHORIA ROCK COMPLEX
Edward J. Matheson	T118	PALEOCEANOGRAPHIC AND PALEOCLIMATIC CONTROLS ON SILICEOUS VS. CARBONATE BENTHOS, SKELETAL MINERALOGY, AND EOGENESIS IN THE PHOSPHORIA ROCK COMPLEX OF THE BIGHORN BASIN, WYOMING, USA
Philip-Peter Maxeiner	D25	EARLY JURASSIC SPICULITES: PARAGENETIC SEQUENCES FOR THE GLASS RAMP DEPOSITS OF PERU
Andrea N. McClure	D41	DECIPHERING THE ERUPTIVE HISTORIES AND HAZARDS OF OVERLAPPING TEPHRA DEPOSITS BETWEEN THE BARVA AND POÁS VOLCANOES, COSTA RICA
Caitlin A. Meadows	T118	USING BIVALVE SCLEROCHRONOLOGY TO ASSESS BENTHIC ECOSYSTEM RESPONSES TO CHANGING ARCTIC SEASONAL SEA ICE
Brett Merkley	T15	SOURCES AND PATHWAYS OF LEAD CONTAMINATION IN URBAN COMMUNITY GARDENS IN TOLEDO, OHIO
Jeremiah L. Mickey	T160	TRACING LOBES OF THE LAURENTIDE ICE SHEET IN INDIANA USING DETRITAL ZIRCON AGE DISTRIBUTIONS
Nikolas C. Midttun	T54	STRIKE-SLIP FAULTING DOMINATES THE RESPONSE OF THE LESSER CAUCASUS TO THE ARABIA-EURASIA CONTINENT COLLISION
Joseph Mohan	T110	3D MODELING OF DIATOM FOSSILS REVEALS NUTRIENT BURIAL AND SEDIMENTATION RATE FLUCTUATIONS IN HERD LAKE, IDAHO, USA
Michael T. Mohr	T138	A MULTI-MINERAL PETROCHRONOLOGIC APPROACH FOR UNDERSTANDING CRYSTAL-RICH RHYOLITIC MAGMA SYSTEMS: AN EXAMPLE FROM THE MIOCENE APACHE LEAP TUFF, CENTRAL AZ
Danielle Molisee	T138	2018 JOHN A. BLACK AWARD: TOWARD DEVELOPING A CONCEPTUAL MODEL OF MAGMATISM AT MEDICINE LAKE VOLCANO, NORTHERN CALIFORNIA, USA
Shifat Monami	T171	A COMPARATIVE SANDSTONE PETROGRAPHIC AND HEAVY MINERAL STUDY OF THE LOWER PENNSYLVANIAN POTTSVILLE FORMATION FROM THE BITUMINOUS AND ANTHRACITE FIELDS IN PENNSYLVANIA

Erdoo Mongol	T110	PALYNOFACIES ANALYSIS AND PALEOENVIRONMENTAL RECONSTRUCTION OF HOLOCENE LACUSTRINE SEDIMENTS, LAKE IZABAL, EASTERN GUATEMALA
Geoffrey Montour	D28	CLINOPYROXENE GEOBAROMETRY OF OFF-AXIS BASALTIC LAVAS FROM THE SNÆFELLSJÖKULL VOLCANO, ICELAND
Paige Morkner	T11	VALIDATION OF PREDICTED TSUNAMI INUNDATION FOR THE INLAND COAST OF THE SALISH SEA ASSOCIATED WITH CASCADIA SUBDUCTION ZONE EARTHQUAKES
Benjamin B. Muddiman	T117	PALEOWILDFIRE IN THE PENNSYLVANIAN: A COAL BALL ANALYSIS APPROACH
Ryan M. Mustacato	T128	INSIGHTS INTO PALEOENVIRONMENTAL CONDITIONS, RELATIVE SEA-LEVEL, AND CARBONATE RESERVOIR QUALITY USING ICHNOLOGY: MIDDLE-UPPER MIOCENE SLOPE DEPOSITS FROM THE GREAT BAHAMA BANK
Alexandra B. Nagurney	T142	NANOSCALE INVESTIGATION OF GARNET GRAIN BOUNDARIES IN METAMORPHIC ROCKS
Amelia R. Nelson	T103	HETEROGENEITY IN RIVER-GROUNDWATER MIXING, MICROBIOLOGY, AND GEOCHEMISTRY IN AN ALPINE RIVERBED DURING BASEFLOW
Naomi T.P. Nichols	T45	SAHARAN DUST AND PEDIATRIC ASTHMA IN THE CARIBBEAN
Conor Lee O'Dowd	T138	PETROLOGY AND GEOCHEMISTRY OF THE BEARWALLOW MOUNTAIN ANDESITE, MOGOLLON-DATIL VOLCANIC FIELD, NEW MEXICO
Elizabeth Orr	T161	TIMING AND NATURE OF ALLUVIAL/ DEBRIS FLOW FAN FORMATION IN THE NW HIMALAYA OF NORTHERN INDIA
Elizabeth Orr	T54	PERIGLACIAL LANDSCAPE CHANGE OF THE UPPER BHAGIRATHI CATCHMENT, NW HIMALAYA: CONSTRAINING BEDROCK SLOPE EROSION RATES USING <sup>10</sup> BE
Lauren Parker	T168	EUTROPHICATION IN THE NORTHERN GULF OF MEXICO: AN EVALUATION OF LONG-TERM ENVIRONMENTAL CHANGE AND HUMAN IMPACTS ON COASTAL ESTUARIES
Annette I. Patton	T54	MORISAWA AWARD: LANDSLIDE RESPONSE TO CLIMATE CHANGE IN PERMAFROST REGIONS
Kathryn N. Pauls	T117	LATE PALEOZOIC REGIONAL PALEOCLIMATE OF THE PROTOPRECORDILLERAN GONDWANA MARGIN: A CASE STUDY IN THE PAGANZO BASIN
Madelyn S. Percy	T50	THE EFFECT OF DUST DEPOSITION ON SOIL FERTILITY ON A TROPICAL OCEAN ISLAND, SAN CRISTOBAL, GALAPAGOS
Amelia A. Perry	T117	A STRATIGRAPHIC MULTI-PROXY COVARIATION TEST FOR THE CAUSE OF THE LATE DEVONIAN <i>PUNCTATA</i> EVENT CARBON ISOTOPE EXCURSION, GUILMETTE FORMATION, EASTERN NEVADA, U.S.A
Maria E. Pesek	T54	EXHUMATION OF THE OREGON CASCADES: TESTING THE ROLE OF LITHOSPHERIC AND SURFACE PROCESSES ON OROGEN EVOLUTION
Bryant Platt	D55	IS MAFIC RECHARGE NECESSARY TO TRIGGER ANDESITIC VOLCANIC ERUPTIONS? NEW INSIGHTS FROM FELDSPAR AND PYROXENE THERMOBAROMETRY
Md Mahfujur Rahman	T107	FIELD-SCALE BIOREMEDIATION OF NATURALLY OCCURRING ARSENIC CONTAMINATED GROUNDWATER USING SULFATE REDUCING BACTERIA IN MACON COUNTY, ALABAMA
Darryl Reano	D26	VIEWING THE WORLD DIFFERENTLY: CONNECTIONS BETWEEN PLACE, CULTURE, AND GEOSCIENCE
Miles Mark Langly Reed	T59	THE MOST EXTREME ANTHROPOGENIC LANDSCAPE ON EARTH: INSIGHTS ON THE GEOMORPHOLOGY OF MOUNTAINTOP REMOVAL COAL MINING IN CENTRAL APPALACHIA
George A. Reo	D2	AN EXPERIMENTAL ASSESSMENT OF PLATINUM, PALLADIUM AND NICKEL PARTITIONING BETWEEN COEXISTING SULFIDE AND BASALTIC MELTS
Andrea E. Richardson	T179	GEOLOGIC MAP OF THE NORTHEASTERN UNICOI AND NORTHWESTERN IRON MOUNTAIN GAP QUADRANGLES, TENNESSEE APPALACHIANS
Christina Richardson	T29	IMPACT OF LAND USE ON GROUNDWATER CHEMISTRY AND MICROBIAL COMMUNITIES IN GREAT BEND PRAIRIE AQUIFER
Maegen L. Rochner	T49	DENDROGEOMORPHIC ANALYSIS OF AVALANCHE CHUTES IN THE ROCK CREEK VALLEY, BEARTOOTH MOUNTAINS, MONTANA, U.S.A
Sourav Saha	T54	SYSTEMATICALLY INHERITED COSMOGENIC <sup>10</sup> BE IN LATE HOLOCENE AGE MORaine

		BOULDERS IN THE BHAGIRATHI VALLEY, GARHWAL
Alejandra Santiago Torres	T32	SIGNIFICANCE OF MICROBIAL BINDING IN SILURIAN FOREREEF SLOPE DEPOSITS AT PIPE CREEK JR. QUARRY, INDIANA
Casey M. Saup	T103	JUST AROUND THE RIVERBEND: SEASONAL HYDROLOGIC CONTROLS ON HYPORHEIC MICROBIAL COMMUNITY FUNCTION
Amy M. Schott	T27	MULTI-SCALAR STUDIES OF SOIL GEOMORPHOLOGY AND SOIL PRODUCTIVITY IN PETRIFIED FOREST NATIONAL PARK TO UNDERSTAND PREHISTORIC AGRICULTURAL POTENTIAL
Judith A. Sclafani	T131	USING PHYLOGENETIC TREES AND 3D MORPHOMETRICS TO UNDERSTAND ECOLOGICAL CHANGE DURING THE LATE ORDOVICIAN MASS EXTINCTION AND RECOVERY
Neil J. Seifert	D40	STRUCTURAL ANALYSIS OF THE BENKAR CROSS STRUCTURE IN THE HIGHER HIMALAYAN OF THE KHUMBU REGION, EASTERN NEPAL
Jacob Setera	T138	CONSTRAINING THE MID-TEMPERATURE THERMAL AND HYDROTHERMAL HISTORY OF THE BUSHVELD IGNEOUS COMPLEX: INSIGHTS FROM APATITE U-PB AND BIOTITE AR-AR GEOCHRONOLOGY
Allison R. Severson	T136	U-PB SHRIMP-RG ANALYSIS OF ZIRCON IN MIGMATITIC ROCKS IN THE SOUTHEASTERN PART OF THE NASHOBA TERRANE, EASTERN MASSACHUSETTS
Christopher E. Sheehan	T50	A CUESTA STORY: DECIPHERING THE ROLE OF A MIGRATING TRANSVERSE ESCARPMENT USING GEOCHRONOLOGICAL DATING AND REMOTE MONITORING SENSORS
Nicolette A. Sheffield	T93	NITROGEN UPTAKE WITHIN AN URBAN STREAM ECOSYSTEM
Matthew Smart	T127	THE DEVONIAN PLANT REVOLUTION: ROOTS, WEATHERING AND THE IMPACT ON GLOBAL BIOGEOCHEMICAL CYCLING
Tyson Michael Smith	T176	TECTONIC ISOLATION AND DRAINAGE REORGANIZATION IN THE WESTERN ANCESTRAL ROCKY MOUNTAINS
Sarah Elisabeth Smith	T32	DETERMINATION OF FLUORINE CONCENTRATIONS IN MISSISSIPPI VALLEY-TYPE ORE FLUIDS THROUGH SEM-EDS ANALYSIS OF FLUID INCLUSION DECREPITATES
Devin Smith	T99	WATER CYCLING ON CULTIVATED LAND: AN INVESTIGATION OF THE TWO WATER WORLDS HYPOTHESIS IN CENTRAL OHIO
Melanie G. Sorman	T125	MESOZOIC PALEOCOMMUNITY STRUCTURE AND DYNAMICS IN THE WESTERN TETHYS
Nora Soto	T129	ANTHROPOGENIC AND ENVIRONMENTAL INFLUENCE ON LAND SNAIL SHELL ASSEMBLAGES IN WOODLANDS FROM SW OHIO
Richard Javier Stephenson	T118	ENVIRONMENTAL SIGNIFICANCE OF THE OXYGEN ISOTOPE COMPOSITION OF TROPICAL LAND SNAILS FROM TRINIDAD ISLAND
Christopher Steuer	T168	SEQUENCE STRATIGRAPHIC FRAMEWORK AND DEPOSITIONAL SYSTEMS OF THE LATE DEVONIAN (FRASNIAN) DUPEROW FORMATION IN WESTERN AND CENTRAL MONTANA
Dustin Stewart	T128	PALEOENVIRONMENTAL INTERPRETATION OF ALASKA'S LARGEST DINOSAUR MEGATRACKSITE FROM THE UPPER CRETACEOUS CANTWELL FORMATION, DENALI NATIONAL PARK AND PRESERVE
Elena Stiles	T129	MORPHOSPACE ANALYSIS OF CRETACEOUS-PALEOGENE LEAVES IN ARGENTINE PATAGONIA REVEALS RAPID SHIFT IN MORPHOSPACE OCCUPATION, COOLING, AND STABLE BUT DIVERSE DANIAN ASSEMBLAGES
Sara V. Stotter	T179	DETERMINING PRECAMBRIAN CRUSTAL ARCHITECTURE OF THE NORTHWEST MARGIN OF THE ARCHEAN WYOMING PROVINCE IN THE RUBY RANGE, SW MONTANA: MAPPING OF THE MINE GULCH 7.5' QUADRANGLE
Laura C. Streib	T110	A PRELIMINARY HIGH-RESOLUTION LATE HOLOCENE DIATOM STRATIGRAPHY AND HYDROCLIMATIC RECONSTRUCTION FROM JUNE LAKE (EASTERN SIERRA NEVADA)
Meredith L. Swallom	D60	CONSTRAINING SPATIAL AND TEMPORAL LANDSCAPE RESPONSE RATES TO TETON FAULT ACTIVITY THROUGH APATITE HELIUM THERMOCHRONOLOGY AND LIMNOGEOLOGY
Jennifer M. Taylor	D60	USING QUARTZ-HOSTED RUTILE NEEDLES TO ASSESS STRAIN IN THE MYLONITIC

		WILDHORSE DETACHMENT, PIONEER MOUNTAINS, IDAHO
Audrey K. Taylor	T111	BIOMARKER RECORDS OF PLIO-PLEISTOCENE PALEOCLIMATE FROM THE SOUTHEAST AFRICAN MARGIN
Larry D. Taylor	T122	BIOGEOGRAPHY IN THE ANCIENT OCEANS: INITIAL INSIGHT FROM PREHISTORIC WHALE MIGRATIONS
Kelly Thomson	T168	EXPLORING THE EFFECTS OF SEDIMENT MIXING AND HYDRAULIC SORTING ON DETRITAL ZIRCON SIGNAL PROPAGATION: EXAMPLES FROM THE EOCENE CASTISSENT FORMATION, SOUTH CENTRAL PYRENEES, SPAIN
Emily D. Thorpe	T129	DISCOVERY OF A EUPELYCOSAUR BODY FOSSIL IN THE LOWER PERMIAN YESO GROUP, CENTRAL NEW MEXICO
Jeffrey S. Timmons	D12	SMALL SCALE (<10,000 KM <sup>2</sup> ) ISOSCAPES REVEAL SPATIALLY VARIABLE WATER SOURCES FOR NORTHEASTERN OHIO PRECIPITATION, SURFACE WATER, AND GROUNDWATER
Leah M. Travis	D21	RECONSTRUCTING THE PALEOECOLOGY OF THE ALABAMA MOSASAUR <i>CLIDASTES</i> FROM PHOSPHATE OXYGEN ISOTOPES IN FOSSIL TOOTH ENAMEL
Charles C. Trexler	T177	BALANCED CROSS SECTIONS RECORD MARINE BASIN CLOSURE AND GROWTH OF A CONTINENTAL COLLISION ZONE: GREATER CAUCASUS MOUNTAINS, REPUBLIC OF GEORGIA
Kellie T. Wall	T141	THE ZIRCON RECORD OF ANDESITIC MAGMATISM AT GOAT ROCKS VOLCANIC COMPLEX, SOUTHERN WASHINGTON CASCADES
Matthew Wanker	T48	DYNAMICS OF SEDIMENT TRANSPORT THROUGH A RIVER BIFURCATION ACCRETION AND TRANSLATION OF THE MARA TERRANE: INSIGHTS FROM U/PB
Patricia Webber	D40	CHARACTERIZATION OF SIERRA DE MAZ AND RAMADITAS
Greta H. Wells	T56	GEOMORPHOLOGIC EVIDENCE AND TIMELINE RECONSTRUCTION OF HOLOCENE JOKULHLAUPS ALONG THE HVITA RIVER AND GULLFOSS, ICELAND
Leah Wenhold	D62	INVESTIGATIONS OF URBAN FLOODPLAIN SEDIMENT TEXTURE, DEPOSITIONAL RATE AND CONTAMINATION IN KNOXVILLE, TN
Emily J. White	D40	THE TOPOGRAPHY OF THE MODERN AND ANCIENT CENTRAL ANDEAN OROCLINE: A COMPARISON USING VOLCANIC GLASS PALEOALTIMETRY, SOUTHERN PERU
Spencer Williams	T34	UNDERSTANDING THE C-S-FE SYSTEMATICS OF THE MARCELLUS FORMATION
Dylan T. Wilmeth	T29	EVIDENCE FOR RAPID RATES OF OXYGENIC PHOTOSYNTHESIS WITHIN NEOARCHEAN STROMATOLITES
Christina R. Woltz	T126	TOTAL ORGANIC CARBON AND THE PRESERVATION OF PRECAMBRIAN ORGANIC-WALLED MICROFOSSILS IN SHALES
Annie Wong	T122	TIMING AND RATE OF GLACIALLY DRIVEN OUTWASH PLAIN AGGRADATION: POTHOLE LAKE, SOUTH-CENTRAL ALASKA
Alexander J. Wood	T3	HYDROGEOLOGY OF A PERCHED AND SEMI-CONFINED KARST AQUIFER, KAIBAB PLATEAU, GRAND CANYON
Chenliang Wu	T48	IMPACTS OF NON-UNIFORM FLOW HYDRAULICS ON FLUVIAL-DELTAIC STRATIGRAPHY: LINKING FIELD INVESTIGATIONS AND HYDRODYNAMIC MODELING
Veselina Yakimova	D60	A MICROSTRUCTURAL AND GEOCHEMICAL STUDY OF A SHEAR ZONE WITHIN THE CRETACEOUS CHUGACH ACCRETIONARY PRISM, SOUTHCENTRAL ALASKA
Nathan L. Young	T93	SIMULATING NITRATE TRANSPORT IN FRACTURED TILL INCLUDING TILE DRAINAGE: PRELIMINARY RESULTS
Kristine Zellman	T176	FLUVIAL FAN PROGRADATION IN RESPONSE TO EXTREME SEASONALITY IN PRECIPITATION: AN EXAMPLE FROM THE EARLY EOCENE OF THE SAN JUAN BASIN, NEW MEXICO
Xin Zhan	T174	EPISODES OF PERTURBATIONS OF CARBON AND NITROGEN CYCLES COUPLED WITH PERMO-TRIASSIC TERRESTRIAL MASS EXTINCTION IN NE PANGAEA, BOGDA MOUNTAINS, NW CHINA