Stephan A. Graham Welton Joseph and Maud L'Anphere Crook Professor, Department of Geological Sciences Stanford University Stanford, California 94305 USA

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# YEAR AND PLACE OF BIRTH

1950 Evansville, Indiana, USA

# **EDUCATION**

1972 A.B., Geology, with Honors, Indiana University

1974 M.S., Geology, Stanford University1976 Ph.D., Geology, Stanford University

Dissertation: "Sedimentary tectonics of the Salinian block, California";

Advisors: W.R. Dickinson and J.C. Ingle, Jr.

# PROFESSIONAL EXPERIENCE

| 1976         | Research Geologist, Exxon Production Research Company                        |
|--------------|------------------------------------------------------------------------------|
| 1976-78      | Exploration Geologist, Chevron USA, Inc.                                     |
| 1978-80      | Development Geologist, Chevron USA, Inc.                                     |
| 1980-89      | Associate Professor, Applied Earth Sciences and Geology, Stanford University |
| 1989-93      | Professor of Applied Earth Sciences and Geology, Stanford University         |
| 1989-present | Professor of Geophysics, by courtesy, Stanford University                    |
| 1993-present | Professor of Geological & Environmental Sciences, Stanford University        |
| 1993-present | Professor of Energy Resources Engineering, by courtesy, Stanford University  |
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### HONORS AND AWARDS

| 1968      | Earth Sciences Freshman Scholarship, Indiana University                                   |
|-----------|-------------------------------------------------------------------------------------------|
| 1968-72   | Arthur R. Metz Distinguished Scholarship, Indiana University                              |
| 1969-70   | Standard Oil Co. of Texas, undergraduate geology award                                    |
| 1971      | Best student paper, Rocky Mountain Section, Geological Society of America                 |
| 1972      | Senior Faculty Scholarship Award, Indiana University                                      |
| 1972      | Phi Beta Kappa                                                                            |
| 1972-1975 | National Science Foundation Graduate Fellowship                                           |
| 1982      | Fellow, Geological Society of America                                                     |
| 1987      | Sproule Award, American Association of Petroleum Geologists (AAPG)                        |
| 1987      | Outstanding Teacher Award, School of Earth Sciences, Stanford University                  |
| 1991      | Honorary Member, Pacific Section, SEPM (Society for Sedimentary Geology)                  |
| 1995      | Outstanding Educator Award, Pacific Section, American Association of Petroleum Geologists |
|           | (AAPG)                                                                                    |
| 2005      | Welton Joseph and Maud L'Anphere Crook Professor                                          |
| 2005      | A.I. Levorsen Award, Pacific Section, American Association of Petroleum Geologists (AAPG) |
| 2007      | Grover E Murray Memorial Distinguished Educator Award, American Association of Petroleum  |
|           | Geologists (AAPG)                                                                         |
| 2013      | Charles Taylor Fellow, American Association of Petroleum Geologists (AAPG)                |
| 2014      | Richard Owen Award, Indiana University                                                    |
| 2016      | Robert Mitchum Award, European Association of Geoscientists and Engineers (EAGE)          |
| 2016      | SEPM-ACE Outstanding Presentation Award, Research Symposium-Orals                         |

2016 Dean's Discretionary Award for Distinguished Service, School of Earth, Energy and

Faculty Search Committee, Petroleum Engineering Department

Environmental Sciences

2017 Francis Pettijohn Medal, SEPM (Society for Sedimentary Geology)

# PROFESSIONAL SOCIETY MEMBERSHIPS

American Association of Petroleum Geologists American Geophysical Union Geological Society of America Pacific Section, Society of Economic Paleontologists and Mineralogists SEPM (Society for Sedimentary Geology) Sigma Xi

# **UNIVERSITY ACTIVITIES**

1980

| 1981-present | Director, Stanford Petroleum Geology Industrial Affiliates Program                            |
|--------------|-----------------------------------------------------------------------------------------------|
| 1983-84      | Faculty Senate                                                                                |
| 1983-84      | Faculty Search Committee, Petroleum Engineering Department                                    |
| 1984-85      | Freshman Advisor                                                                              |
| 1983-1993    | Graduate Admissions Committee, Applied Earth Sciences Department                              |
| 1986         | Faculty Search Committee, Geology Department                                                  |
| 1987         | Faculty Search Committee, Applied Earth Sciences Department                                   |
| 1987-88      | Chairman, Sedimentary Geology Faculty Search Committee, Geology Department                    |
| 1987-2007    | Director, Stanford-China Geosciences Industrial Affiliates Program                            |
| 1987-1989    | Graduate Advisor, Masters of Exploration Geophysics Program, Geophysics Department            |
| 1992-present |                                                                                               |
| 1992-93      | Chairman, Organic Geochemistry Faculty Search Committee, Stanford University                  |
| 1994-95      | Advisor, Stanford University Sexual Harassment Panel                                          |
| 1995         | Petroleum Engineering Search Committee                                                        |
| 1995-1999    | Chairman, Ocean Margins Initiative Faculty Search Committee                                   |
| 1996-1998    | Associate Chair, Geological and Environmental Sciences Department                             |
| 1996-1999    | Faculty Senate                                                                                |
| 1996-present | Earth Sciences Council, School of Earth Sciences                                              |
| 1998-1999    | Acting Chair, Geological and Environmental Sciences                                           |
| 1999-2000    | Associate Chair, Geological and Environmental Sciences Department                             |
| 1999-2007    | Associate Dean for Academic Affairs, School of Earth Sciences                                 |
| 1999-2000    | University Committee on Graduate Studies                                                      |
| 1999-2007    | University Undergraduate Advisory Council                                                     |
| 1999-2007    | University Writing Advisory Board                                                             |
| 2000         | Acting Dean, School of Earth Sciences                                                         |
| 2001-2005    | Faculty Senate                                                                                |
| 2004-2005    | Overseas Studies Program Director, Search Committee                                           |
| 2004-2005    | President's Commission on Graduate Education                                                  |
| 2004-2005    | Co-Chair, Paleobiology Faculty Search Committee                                               |
| 2004-2005    | Search Committee, Earth Sciences Librarian                                                    |
| 2006         | Search Committee for Vice Provost and Dean of Research and for Dean of Graduate Studies       |
| 2006-2009    | Interim Co-Director, Stanford University Microanalytical Center                               |
| 2007-2009    | Faculty Search Committee, Geochronology Faculty Search                                        |
| 2007         | Faculty Search Committee, Energy Resource Engineering Department                              |
| 2007-2009    | Chair, Geological and Environmental Sciences                                                  |
| 2007-present | Co-Director, Basin and Petroleum Systems Modeling Industrial Affiliates Program               |
| 2009-2014    | Associate Dean for Academic Affairs and Diversity, School of Earth Sciences                   |
| 2014-2016    | Senior Associate Dean for Faculty Affairs, School of Earth, Energy and Environmental Sciences |
| 2016-2017    | Faculty Search Committee, Continental Dynamics Search                                         |
| 2017         | Dean Search Committee, School of Earth, Energy and Environmental Sciences                     |
|              |                                                                                               |

# PROFESSIONAL ACTIVITIES

| 1979         | Field Trip Leader, Pacific Section, Society of Economic Paleontologists and Mineralogist, Annual Fall Field Trip                              |
|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| 1980         | Field Trip Leader, Pacific Section, Society of Economic Paleontologists and Mineralogists,<br>Annual Fall Field Trip                          |
| 1981         | Session Convener, 1981 Annual Meeting, American Association of Petroleum Geologists                                                           |
| 1981         | Field Trip Leader, 1981 Annual Meeting, American Association of Petroleum Geologists                                                          |
| 1982         | President Pacific Section, Society of Economic Paleontologists and Mineralogists                                                              |
| 1983         | Field Trip Leader, Annual Meeting, Pacific Section, Society of Economic Paleontologists and                                                   |
|              | Mineralogists                                                                                                                                 |
| 1983-84      | Chairman, Deep-water Sedimentation Group, Society of Economic Paleontologists and Mineralogists                                               |
| 1983-89      | Associate Editor, American Association Petroleum Geologists Bulletin                                                                          |
| 1983         | Session Convener, Annual Meeting, Pacific Section, Society of Economic Paleontologists and                                                    |
|              | Mineralogists                                                                                                                                 |
| 1984         | Field Trip Leader, Annual Meeting, Geological Society of America                                                                              |
| 1984         | Organizing committee member, First Annual SEPM Midyear Meeting                                                                                |
| 1985         | Field Trip Leader, Pacific Section, Society of Economic Paleontologists and Mineralogists Annual Fall Field Trip                              |
| 1985-90      | Coordinator, West Coast Stratigraphic Cross-Section Project, American Association Petroleum                                                   |
| 1005         | Geologists  Months of Connection on North and Paristin LP C P                                                                                 |
| 1985         | Member, Committee on Northern Pacific Drilling I.P.O.D.                                                                                       |
| 1986-88      | Research Committee, American Association of Petroleum Geologists                                                                              |
| 1988         | Session Convener, Annual Meeting, American Association of Petroleum Geologists                                                                |
| 1990         | Session Convener, Annual Meeting, American Association of Petroleum Geologists                                                                |
| 1990         | SEPM (Society for Sedimentary Geology) Technical Program Chairman for 1990 Annual Meeting of the American Association of Petroleum Geologists |
| 1990-93      | Councilor of Sedimentology, SEPM (Society for Sedimentary Geology)                                                                            |
| 1994-97      | Associate Editor, Journal of Sedimentary Research                                                                                             |
| 1994         | Session Co-Convener, Annual Meeting, Geological Society of America                                                                            |
| 1996         | Symposium Convener, SEPM (Society of Sedimentary Geology) Annual Meeting                                                                      |
| 2000         | Field Trip Chairman, Centennial Meeting of the Cordilleran Section, Geological Society of                                                     |
|              | America                                                                                                                                       |
| 2000         | Co-Convener, Hedberg Field Research Conference, American Association of Petroleum<br>Geologists                                               |
| 2001-present | Circum-Pacific Council Board of Directors                                                                                                     |
| 2003         | Session Convener, American Geophysical Union                                                                                                  |
| 2003         | Session Convener, Geological Society of America, Cordilleran Section                                                                          |
| 2006-2015    | Co-Instructor, Deep-water Field Seminar, American Association of Petroleum Geologists                                                         |
| 2007         | Co-Convener, International Conference on Nonmarine Depositional Systems, Beijing                                                              |
| 2007         | Session Chair, Arizona Geological Society Symposium                                                                                           |
| 2009-present | Co-P.I., ICDP Cretaceous Climate Corehole Project                                                                                             |
| 2010         | Guest editor, Basin Research, Special Issue on Chinese Nonmarine Basins                                                                       |
| 2010         | Co-Convenor, Songliao Scientific Drilling Workshop                                                                                            |
| 2010-17      | AAPG Centennial Field Trip Committee                                                                                                          |
| 2011         | AGU Chapman Conference, Program Committee                                                                                                     |
| 2012         | Pacific Section SEPM, Vice President                                                                                                          |
| 2015         | Session Chair, Geological Society of America Annual Meeting                                                                                   |
| 2016         | Session Chair, Geological Society of America Annual Meeting                                                                                   |
| 2016-present | Advisory Council, King Faud University of Petroleum and Minerals                                                                              |
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# **COURSE OFFERINGS**

Regularly taught courses: Geologic Interpretation of Reflections Seismograms (GP 223) Introduction to Sedimentary Geology (GS 106)

Petroleum Geology (GS 253) Reservoir Characterization (GS/ERE 246) Sedimentary Basins (GS 251)

#### M.S. AND PH.D. DISSERTATIONS SUPERVISED

- 1982 Scott Cooley, M.S., Depositional environments of the lower and middle Miocene Temblor Formation of Reef Ridge and vicinity, Fresno and Kings Counties, California
- 1982 Jane Woodward, M.S., Development and infilling of the South Pass shelf-edge failure bowl, offshore Mississippi delta
- 1982 John Moragne, M.S., Development and infilling of the South Pass shelf-edge failure bowl, offshore Mississippi delta
- 1983 Jon Kuespert, M.S., The depositional environment and provenance of the Miocene Temblor Formation and associated Oligo-Miocene units in the vicinity of Kettleman North Dome, San Joaquin Valley, California
- 1983 Cathy Gavigan, M.S., Sedimentary petrology of Mio-Pliocene sandstones of the central California Coast Ranges with application to interpretation of movement on the San Gregorio-Hosgri fault system
- Hugh Whelan, M.S., Geostatistical estimation of the spatial distributions of porosity and percent clay in a Miocene Stevens turbidite reservoir: Youlumne Field, California
- Matthew Bate, M.S., Temblor and Big Blue Formations: Interpretation of depositional environment sequence on Coalinga anticline, Fresno County, California
- 1985 Jack Carter, M.S., Depositional environments and tectonic history of the type Temblor Formation, Chico-Martinez Creek, Kern County, California
- Happy Harun, M.S., Distribution of deposition of lower to middle Eocene strata in central San Joaquin Valley, California
- 1985 Margot Sherr, M.S., An analysis of the economics of petroleum extraction on the continental shelf of eastern China
- 1985 Richard Ward, M.S., Sedimentology, diagenesis, and provenance of the slope channel deposits exposed within the upper siliceous member of the Monterey Formation west of Gaviota Beach, California
- 1985 Linda Weber, M.S., Lithologic and organic source analysis--Stevens interval, Cal Canal field, Kern County, California
- 1986 Jennifer Pence, M.S., Sedimentation and tectonics of the upper Oligocene to midle Miocene Temblor Formation of the northern Temblor Range, Kern and San Luis Obispo counties, California
- James Bent, M.S., Petrographic reconnaissance of upper Oligocene-middle Miocene sandstones of the San Joaquin basin, California
- 1986 Roy Marion, M.S., Neogene stratigraphy and hydrocarbon generation in the Salinas basin, California
- Robert Milam, Ph.D., Biostratigraphy and sedimentation of the Eocene and Oligocene Kreyenhagen Formation, central California (co-advised with J.C. Ingle, Jr.,)
- 1986 Blake Gillespie, M.S., The Temblor Formation: Maricopa to the eastern San Emigdio Mountains, Kern County, California
- Jane Hicks Gruenenfelder, M.S., Stratigraphy and source rock potential of the Miocene Monterey Formation, San Joaquin basin, California
- 1987 Adrian Hudson, M.S., Natural gas contracts in a deregulated supply market
- 1987 Richard Hubbard, Ph.D., Geologic evolution of three rifted margins in the Americas
- 1987 Julianne Lundberg, M.S., Master limited partnerships: Form, taxation, and performance analysis
- 1987 Greta Miller, M.S., Sedimentology, depositional environment, and reservoir characteristics of the Kern River Formation, southeastern San Joaquin basin
- Ralph Tolson, Ph.D., Structure, stratigraphy, and tectonic evolution and petroleum source potential of the Hope basin, southern Chukchi Sea, Alaska
- John Beery, M.S., Depositional history and paleo-environments of the lower and middle Miocene Temblor Formation, northern San Joaquin basin, California
- Douglas McGuire, Ph.D., Stratigraphy, depositional history, and hydrocarbon source-rock potential of the upper Cretaceous-lower Tertiary Moreno Formation, central San Joaquin basin, California (coadvised with J.C. Ingle, Jr.,)
- Hilary Clement Olson, Ph.D., Middle Tertiary stratigraphy, depositional environments, paleoecology and tectonic hisatory of the southeastern San Joaquin basin, California (co-advised with J.C. Ingle, Jr.,)

- 1989 Andrew Evans, Ph.D., The sedimentary evolution of the Suez rift basin, Egypt: Neogene paleobathymetry, subsidence and uplift history, tectonic and stratigraphic events
- 1989 Karen Grove, Ph.D., Late Cretaceous sedimentation and tectonics of the Salinian terrane, west central California
- 1989 Mark Rentschler, Ph.D., Cenozoic tectonics of the southeastern Coast Ranges and San Joaquin basin, California
- 1990 Ian Moxon, Ph.D., Stratigraphic and structural architecture of the San Joaquin and Sacramento Valleys
- 1990 Karen Loomis, Ph.D., Late Neogene depositional history and paleoenvironment of the west-central San Joaquin basin, California (co-advised with J.C. Ingle, Jr.,)
- 1991 Roger Bloch, Ph.D., Studies of the stratigraphy and structure of the San Joaquin basin, California
- 1991 Alan Carroll, Ph.D., Late Paleozoic tectonics, sedimentation, and petroleum potential of the Junggar and Tarim basins, northwest California
- 1992 Tina Niemi, Ph.D., Late Holocene slip rate, prehistoric earthquakes, and Quaternary neotectonics of the northern San Andreas fault, Marin County, California
- 1992 Marc Hendrix, Ph.D., Sedimentary basin analysis and petroleum potential of Mesozoic strata, northwest China
- 1993 Benjamin Schulein, M.S., Sedimentology and tectonics of the upper lower to lower middle Eocene Domengine Formation, Vallecitos syncline, California
- 1993 Cleavy McKnight, Ph.D., Structural styles and tectonic significance of Tian Shan foothill fold-thrust belts, northwest China
- 1994 Tracey Chester, M.S., Analysis of vertical cyclicity patterns in two sediment gravity flow sequences
- 1995 Edward R. Sobel, Ph.D., Basin analysis and apatite fission-track thermochronology of the Jurassic-Paleogene southwest Tarim basin, NW China
- 1995 Alysa M.D. Keller, M.S., Paleoclimatologic analysis of an Upper Jurrasic petrified forest, southeastern Mongolia
- 1995 Cristy P. Harrison, M.S., Aspects of the deposition and depositional architecture of the upper Stevens deep-sea depositional system, southern San Joaquin basin, Kern County, CaliforniaJerome Y.
- 1995 Amory, M.S., Permian sedimentation and tectonics of southern Mongolia
- 1997 Thomas A. Williams, Ph.D., Basin-fill architecture and forearc tectonics, Cretaceous Great Valley Group, Sacramento basin, northern California
- 1997 Da Zhou, Ph.D., Studies in the tectonics of China: Extensional tectonics of the northern margin of the South China Sea; amalgamation and uplift of the Tian Shan; and wedge extrusion model for the Altyn Tagh fault
- 1998 Xudong Ying, Ph.D., Syn-rift structural style, basin fill and sequence stratigraphy and their control on development of organic facies in the Beibu Gulf basin, South China Sea
- 1998 Bradley D. Ritts, Ph.D., Mesozoic tectonics and sedimentation, and petroleum systems of the Qaidam and Tarim basins, NW China
- 1998 Melissa A. Lamb, Ph.D., Paleozoic sedimentation, volcanism, and tectonics of southern Mongolia
- 1998 Elizabeth L. Mason, M.S., Internal facies architecture of a sand-rich, deep-sea depositional system: The Rocks Sandstone, Reliz Canyon Formation, northern Santa Lucia Range, Monterey County, California
- 1998 Kai S. Anderson, Ph.D., Facies architecture of two Paleogene structurally-controlled turbidite systems, central California
- 1999 Andrew D. Hanson, Ph.D., Organic geochemistry and petroleum geology, tectonics, and basin analysis of southern Tarim and northern Qaidam basins, northwest China
- 1999 Jing Li, M.S., Paleobathymetry estimation by using seismic and paleonotology data in QDN basin, South China Sea
- 1999 Donald D. Miller, Ph.D., Sequence stratigraphy and controls on deposition of the upper Cenozoic Tulare Formation, San Joaquin Valley, California
- 2000 Todd Greene, Ph.D., Tectonics, basin analysis and organic geochemical attributes of Permain through Mesozoic deposits and their derivative oils of the Turpan-Hami basin, northwestern China
- 2001 Kathy DeGraaff Surpless, Ph.D., SHRIMP detrital zircon geochronology of forearc basins: a study of the Great Valley Group of California and the Methow basin of Washington (co-advised with M. McWilliams)
- 2001 Cari L. Johnson, Ph.D., Sedimentary record of late Mesozoic extension, southeast Mongolia: Implications for the petroleum potential and tectonic evolution of the China-Mongolia border region
- 2003 Tim Cope, Ph.D., Sedimentary evolution of the Yanshan fold-thrust belt, northeast China
- 2003 Li Yuan Hsiao, Ph.D., Sequence stratigraphy and structure of the south Xialiao basin, Bohai, China
- 2003 Adedayo Adeogba, M.S., Depositional controls and geometries of deep-water deposits as imaged by near-surface 3D seismic data, Niger delta, Nigeria

- 2003 Michael Shultz, Ph.D., Stratigraphic architecture of two deep-water depositional systems: The Tres Pasos formation, Chilean Patagonia, and the Stevens Sandstone, Elk Hills
- 2003 Yongjun Yue, Ph.D., Slip history of the Altyn Tagh fault and its implication for tectonics of Asia
- Andrea Fildani:, Ph.D., Analysis of two arc-associated basins and onset of their deep-water stages: Magellanes basin, Chile, and Talara basin, Peru
- 2004 Brita Graham Wall, Ph.D., Evolution of fluid flow pathways along fracture controlled faults in fold and thrust belt carbonates (co-advised with Attila Aydin)
- 2006 Stephen Hubbard, Ph.D., Deep-Sea foreland basin axial channels and associated sediment gravity flow deposits, Oligocene Molasse basin, Upper Austria, and Cretaceous Magallanes Basin, Chile
- 2006 Amy L. Weislogel, Ph.D., The sedimentary record of Mesozoic collisional orogensis, central China: Geochemical, geochronometric and paleoenvironmental constraints
- 2007 Mangzheng Zhu, Ph.D., Offshore Red River fault and slope sediments in northern South China Sea: Implications for paleoceanography and uplift of the Tibet Plateau
- 2008 Brian W. Romans, Ph.D., Controls on distribution, timing, and evolution of turbidite systems in tectonically active settings: The Cretaceous Tres Pasos Formation, southern Chile, and the Holocene Santa Monica Basin, California.
- 2008 Jacob Covault, Ph.D., Development of turbidite architecture on tectonically active continental margins: Multiscale investigation of the Quaternary California Borderland, Tertiary Molasse Basin, Austria, and Cretaceous Magallanes Basin, Chile
- 2009 Dominic Armitage, Ph.D., High-resolution architectural evolution of depositional elements in deep-marine slope environments: The Quaternary Niger delta slope, Quaternary southwest Grand Banks slope, Canada, and Cretaceous Tres Pasos Formation, Chile
- 2009 Abena Temeng, M.S., Distributary channel development of the Newport submarine canyon-channel system, Southern California Borderland
- 2009 Christopher Mitchell, M.S., Subduction complex uplift and exhumation and its influence on Maastrichtian forearc stratigraphy in the Great Valley basin, northern San Joaquin Valley, California
- 2010 Elizabeth J. Cassel, Ph.D, Cenozoic landscape evolution of the northern Sierra Nevada and western Basin and Range: Implications for tectonics, climate, and topography.
- 2011 Lisa E. Stright, Ph.D., Multiscale modeling of deep-water channel deposits: an interdisciplinary study integrating geostatistics, geology and geophysics--- the Cretaceous Cerro Toro Formation, southern Chile, the Eocene Ardath and Scripps Formations, Southern California, and the Oligocene Puchkirken Formation, Upper Austria.
- 2011 Keisha Durant, M.S., Basin and petroleum system modeling of the Sur and northern offshore Santa Maria areas, offshore central California
- Julie C. Fosdick, Ph.D., Linking orogenic deformation, exhumation, and basin evolution in the Patagonian Andes and Magallanes basin, southernmost South America
- 2012 Katherine Maier. Ph.D., Depositional architecture of deep-water slope systems: Examples from the Quaternary Lucia Chica channel system, offshore central California and the upper Miocene Urenui Formation, New Zealand.
- 2012 Meng He, Ph.D., Evaluating petroleum systems using advanced geochemistry and basin modeling.
- 2014 Wisam Alkawai, M.S., Integrating basin modeling with seismic technology and rock physics
- 2014 Blair Burgreen, Ph.D., The influence of convergent margin structure on deep-water stratigraphic architecture, pore pressure evolution, and source rock maturation in the East Coast basin, New Zealand
- 2014 Theresa Menotti, Ph.D., Petroleum system evolution, strike-slip tectonism and diagenesis of the Monterey Formation in the Salinas basin, central California
- 2014 Glenn Sharman, Ph.D., Provenance, paleogeography, and mass-movement of deep-water depositional systems in arc-adjacent basins: The Cretaceous-Paleogene California forearc and upper Miocene Mohakatino Formation, New Zealand
- 2015 Theresa M. Schwartz, Ph.D., Insights into the growth and decay of orogenic wedges from foreland basin successions
- Matthew A. Malkowski, Ph.D., Controls on along-strike variations in stratigraphy and provenance of a successor foreland basin system, Jurassic¿Cretaceous evolution of the southern Patagonian Andes and the Magallanes/Austral Basin
- 2016 Lauren Schultz, M.S., Evaluating the thermal history of the Los Angeles basin, California through 3-D basin and petroleum system modeling
- 2016 Lauren Shumaker, Ph.D., Sedimentology, seismic geomorphology, and provenance investigations of deepwater deposits: Taranaki basin, New Zealand, New Zealand
- 2017 Christopher H. Kremer, M.S., Transversely-sourced mass-transport deposits and stratigraphic evolution of

#### POST-DOCTORAL RESEARCH ASSOCIATES SUPERVISED

Loretta Williams, Peter DeCelles, Marc Hendrix, Melissa Lamb, Karen Chin, Cari Johnson, Yongjun Yue, Danica Dralus, Devon Orme

#### PUBLICATIONS IN REFEREED JOURNALS AND BOOKS

Journal articles published in: American Association of Petroleum Geologists Bulletin; American Journal of Science; Annual Review of Marine Science; Austrian Journal of Earth Sciences Science; Basin Research; Earth and Planetary Sciences Letters; Earth-Science Reviews; Geological Society of America Bulletin; Geology; Geosphere; International Geology Review; Journal of Geological Education; Journal of Geology; Journal of Sedimentary Petrology, Journal of Sedimentary Research; Lithosphere; Marine and Petroleum Geology, Nature; Palaeogeography, Palaeoclimatology, Palaeoecology; Palaios; PNAS; Organic Geochemistry; Sedimentology; Tectonics, Tectonophysics

- 1. Graham, S.A., 1974, Remnant magnetization of modern tidal flat sediments from San Francisco Bay, California: Geology, v. 2, p. 223-226.
- 2. Graham, S.A., and L.J. Suttner, 1974, Occurrence of middle Cambrian islands in southwest Montana: The Mountain Geologist, v. 11, p. 71-84.
- 3. Graham, S.A., W.R. Dickinson, and R.V. Ingersoll, 1975, Himalayan-Bengal model for flysch dispersal in the Appalachian-Ouachita system: Geological Society of America Bull., v. 86, no. 3, p. 273-286.
- 4. Graham, S.A., R.V. Ingersoll, and W.R. Dickinson, 1976, Common provenance for lithic grains in Carboniferous from Ouachita Mountains and Black Warrior Basin: Journal of Sedimentary Petrology, v. 46, p. 620-632.
- 5. Graham, S.A., 1978, Role of Salinian block in evolution of San Andreas fault system, California: American Association Petroleum Geologists Bulletin, v. 62, 2214-2231.
- 6. Graham, S.A., and W.R. Dickinson, 1978, Apparent offsets of onland geologic features across the San Gregorio-Hosgri fault trend: Science, v. 199, p. 179-181.
- 7. Graham, S.A., and W.R. Dickinson, 1978, Apparent offsets of onland geologic features across the San Gregorio-Hosgri fault trend: Calif. Div. Mines and Geology Special Report, v. 137, p. 13-23.
- 8. Dickinson, W.R., R.V. Ingersoll, and S.A. Graham, 1979, Paleogene sediment dispersal and paleotectonics in northern California: Geol. Soc. America Bull., v. 90, summary in Part I, p. 897-898, text in Part II, p. 1458-1528
- 9. Graham, S.A., 1983, Evolving concepts and teaching approaches in tectonics and sedimentation: Journal of Geological Education, v. 31, no. 4, p. 266-276.
- 10. Graham, S.A., and S.B. Bachman, 1983, Controls on submarine fan geometry and internal architecture: Upper La Jolla fan system, offshore southern California: American Association Petroleum Geologists Bulletin, v. 67, no. 1, p. 83-96.
- 11. Ingersoll, R.V., and S.A. Graham, 1983, Recognition of shelf-slope break along tectonically active ancient continental margins: Society Economic Paleontologists and Mineralogists, Special Publication No. 33, p. 107-117.
- 12. Graham, S.A., C. McCloy, M. Hitzman, R. Ward, and R. Turner, 1984, Basin evolution during change from convergent to transform continental margin in central California: American Association Petroleum Geologists Bulletin, v. 58, p. 233-240.
- 13. Graham, S.A., and L.A. Williams, 1985, Tectonic, depositional, and diagenetic history of Monterey Formation (Miocene), central San Joaquin basin, California: American Association Petroleum Geologists Bulletin, v. 69, p. 385-411.
- 14. Bachman, S.B., and S.A. Graham, 1986, La Jolla Fan, Pacific Ocean. In A.H. Bouma, W.R. Normark, and N.E. Barnes, eds., Submarine fans and related turbidite systems: Springer-Verlag Publishers, p. 65-70.
- 15. Bate, M.A., and S.A. Graham, 1987, Significance of reservoir stratigraphy in production of heavy oil from Coalinga oil field, California: American Association of Petroleum Geologists Studies in Geology 25, p. 301-311.
- DeCelles, P., R. Tolson, S.A. Graham, and 12 co-authors, 1987, Laramide thrust-generated alluvial-fan sedimentation, Sphinx Conglomerate, southwestern Montana: American Association of Petroleum Geologists, v. 71, p. 135-155.

- 17. Graham, S.A., 1987, Tectonic controls on petroleum occurrence in central California. In R.V. Ingersoll and W.G. Ernst, eds., Cenozoic basin development of coastal California: Rubey Volume VI, Prentice-Hall, p. 47-61.
- 18. Graham, S.A., and 14 co-authors, 1987, Provenance modeling as a technique for analyzing source terrane evolution and controls on foreland sedimentation: International Association of Sedimentologists Special Publication 8, p. 425-436.
- 19. Moxon, I.W., and S.A. Graham, 1987, History and controls of subsidence in the Late Cretaceous-Tertiary Great Valley Forearc basin, California: Geology, v. 15, p. 626-629.
- Ingersoll, R.V., W. Cavazza, S.A. Graham, and Indiana University Graduate Field Seminar Participants, 1987, Provenance of impure calcilithites in the Laramide foreland of southwestern Montana: Journal of Sedimentary Petrology, v. 57, p. 995-1003.
- 21. Graham, S.A., R.G. Stanley, J.V. Bent, and J.B. Carter, 1989, Oligocene and Miocene paleogeography of central California and displacement along the San Andreas fault: Geological Society of America Bulletin, v. 101, p. 711-730.
- Liou, J.G., Graham, S.A., Maruyama, S., Wang, X., Xiao, X., Carroll, A.R.\*, Chu, J., Feng, Y., Hendrix, M.S., Liang, Y.H., McKnight, C.L., Tang, Y., Wang, Z.X., Zhao, M. and Zhu, B., 1989, Proterozoic blueschist belt in western China: Best documented Precambrian blueschists in the world: Geology, v. 17, p. 1127-1131
- 23. Carroll, A.R., Y. Liang, S.A. Graham, X. Xiao, M.S. Hendrix, J. Chu, and C.L. McKnight, 1990, Junggar basin, northwest China: Trapped late Paleozoic ocean: Tectonophysics, v. 181, p. 1-14.
- 24. Graham, S.A., S. Brassell, A.R. Carroll, X. Xiao, G. Demaison, C.L. McKnight, Y. Liang, J. Chu, and M.S. Hendrix, 1990, Characteristics of selected petroleum-source rocks, Xinjiang Upper Autonomous Region, northwest China: American Association of Petroleum Geologists Bulletin, v. 74, p.493-512.
- 25. Liou, J.G., Maruyama, S., Wang, X. and Graham, S.A., 1990, Precambrian blueschist terranes of the world: Tectonophysics, v. 181, p.97-111.
- 26. McKnight, C.L., Q. Gan, A.R. Carroll, M. Zhao, D. Dilcher, Y. Liang, S.A. Graham, 1990, Fluvial sedimentology of an upper Jurassic petrified forest assemblage, Shishu Formation, Junggar basin, Xinjiang, China: Palaeogeography, Palaeoecology, Palaeoclimatology, v. 79, p. 1-9.
- 27. Nakajima, T., S. Maruyama, S.Uchiumi, J.G.Liou, X. Wang, X. Xiao, and S.A. Graham, 1990, The age of the oldest blueschist of the world--the Aksu Group of northwestern China: Nature, v. 346, 263-265.
- 28. Carroll, A.R., S. C. Brassell, and S.A. Graham, 1992, Upper Permian lacustrine oil shales, southern Junggar basin, northwest China: American Association of Petroleum Geologists Bulletin, v. 76, p. 1874-1902.
- Hendrix, M.S., S.A. Graham, A.R. Carroll, E.R. Sobel, C.L. McKnight, B.J. Schulein, and Z. Wang, 1992, Sedimentary record and climatic implications of recurrent deformation in the Tian Shan: evidence from Mesozoic strata of the north Tarim, south Junggar, and Turpan basins, northwest China: Geological Society of America Bulletin, v. 104, p. 53-79.
- 30. Yeats, R., Christiansen, R., Graham, S., Niem, A., Snavely, P.D., Jr., 1992, Post-Laramide geology of the U. S. Cordilleran region, in Burchfiel, B.C., Lipman, P.W., and Zoback, M.L., editors, The Cordilleran orogen: Conterminous U.S.: Geological Society of America, Geology of North America v. G-3, p. 261-406.
- 31. Graham, S.A., M.S. Hendrix, L.B. Wang, and A.R. Carroll, 1993, Collisional successor basins of western China: Impact of tectonic inheritance on sand composition: Geological Society of American Bulletin, v. 105, p. 323-344.
- 32. Hendrix, M.S., Dumitru, T.A., and Graham, S.A., 1994, Late Oligocene-early Miocene unroofing in the Chinese Tian Shan: An early effect of the India-Asia collision, Geology, v. 22, No. 6, p. 487-490.
- 33. Carroll, A.R., Graham, S.A., Hendrix, M.S., Ying, D., and Zhou, D., 1995, Late Paleozoic tectonic amalgamation of northwest China: Sedimentary record of the northern Tarim, northwestern Turpan, and southern Junggar basins: Geological Society of America Bulletin, v. 107, p. 571-594.
- 34. Hendrix, M.S., Brassell, S.C., Carroll, A.R., and Graham, S.A., 1995, Sedimentology, organic geochemistry, and petroleum potential of Jurassic coal measures: Tarim, Junggar, and Turpan basins, northwest China: American Association of Petroleum Geologists Bulletin, 79, 929-959.
- 35. Ingersoll, R.V., Graham, S.A., Dickinson, W.R., 1995, Remnant ocean basins, in Busby, C.J., and Ingersoll, R.V., eds., Tectonics of sedimentary basins: Blackwell Science, p. 363-392.
- 36. Hendrix, M.S., Graham, S.A., Amory, J.Y., Badarch, G., 1996, Noyon Uul (King Mountain syncline), southern Mongolia: Early Mesozoic sedimentary record of the tectonic amalgamation of central Asia: Geological Society of America Bulletin, v. 108, p. 1256-1274.
- 37. Liou, J. G., Graham, S. Maruyama, S., and Zhang, R. Y., 1996, Characteristics and tectonic significance of the Late Proterozoic Aksu blueschist and diabasic dikes, northwest Xinjiang, China: International Geology Review, v. 38, p. 228-244.

- 38. Murray, C. J., Lowe, D. R., Graham, S. A., and 10 other co-authors, 1996, Statistical analysis of bed thickness patterns in a turbidite section from the Great Valley Sequence, Cache Creek, northern California: Journal of Sedimentary Research, v. 66, p. 900-908.
- Zhou, Da, and Graham, S.A., 1996, Songpan-Ganzi complex of the west Qinling Shan as a Triassic remnantocean basin, in A. Yin and M. Harrison, Tectonic evolution of Asia: Cambridge University Press, p. 281-299.
- 40. Zhou, D., and Graham, S.A., 1996, Extrusion of the Altyn Tagh wedge: A kinematic model for the Altyn Tagh fault and palinspastic reconstruction of northern China: Geology, v. 24, p. 427-430.
- 41. Graham, S.A., Hendrix, M.S., Barsbold, R., Badamgarav, D., Sjostrom, D., Kirschner, W., McIntosh, J.S., 1997, Stratigraphic occurrence, paleoenvironment and description of the oldest known dinosaur (Late Jurassic) from Mongolia: Palaios, v. 12, p. 292-297.
- 42. Williams, T.A., Graham, S.A., and Constenius, K.N., 1998, Recognition of a Santonian submarine canyon, Great Valley Group, Sacramento basin, California: Implications for petroleum exploration and sequence stratigraphy of deep-marine strata, American Association of Petroleum Geologists Bulletin, v. 82, p. 1575-1595.
- 43. Anderson, K.S., Hickson, T., Crider, J., and Graham, S.A., 1999, Integrating teaching with field research in the Wagon Rock Project, Journal of Geological Education, v. 47, p. 227-235.
- 44. Harrison, C., and Graham, S.A., 1999, Upper Miocene Stevens Sandstone, San Joaquin basin, California: Reinterpretation of a petroliferous, sand-rich, deep-sea depositional system: American Association of Petroleum Geologists Bulletin, v. 83, p. 898-924.
- 45. Lamb, M.A., Hanson, A.D. Graham, S.A., Badarch, G., Webb, L.E., 1999, Left-lateral sense offset of Upper Proterozoic and Paleozoic features across the Gobi Onon, Tost, and Zuunbayan faults in southern Mongolia and implications for other central Asian faults: Earth and Planetary Sciences Letters, v. 173, p.183-194.
- 46. Webb, L.E., Graham, S.A., Johnson, C.L., Badarch, G., and Hendrix, M.S., 1999, Occurrence, age and implications of the Yagan-Onch Hayrhan metamorphic core complex, southern Mongolia: Geology, v. 27, p. 143-146
- 47. Zhang, S. C., Hanson, A. D., Moldowan, J. M., Graham, S. A., Liang, D. G., Chang, E., and Fago, F., 2000, Paleozoic Oil-Source Rock Correlations in the Tarim Basin, NW China: Organic Geochemistry, v. 31, p. 273-286.
- 48. Carroll, A.R., Graham, S.A., Chang, E., McKnight, C., 2001, Sinian-Permian sedimentary evolution of the northwest Tarim basin, in Hendrix, M.S. and Davis, G.A., eds., Paleozoic and Mesozoic tectonic evolution of central and eastern Asia--from continental assembly to intracontinental deformation: Geological Society of America Special Paper 194, p. 47-69.
- 49. Dumitru, T.A., Zhou, D., Chang, E., Graham, S.A., Hendrix, M.S., Sobel, E.R., and Carroll, A.R., 2001, Uplift, exhumation and deformation in the Chinese Tian Shan, in Hendrix, M.S. and Davis, G.A., eds., Paleozoic and Mesozoic tectonic evolution of central and eastern Asia--from continental assembly to intracontinental deformation: Geological Society of America Special Paper 194, p. 71-99.
- 50. Graham, S.A., Hendrix, M.S., Johnson, C.L., Badamgarav, D., Badarch, G., Amory, J., Porter, M., Barsbold, R., Webb, L.E., Hacker, B.R., 2001, Sedimentary record and tectonic implications of Mesozoic rifting in southeast Mongolia: Geological Society of America Bulletin, v. 13, p. 1560-1579.
- 51. Greene, T. J., Hendrix, M. S., Carroll, A. R., Graham, S. A., 2001, Sedimentary record of intra-Mesozoic deformation and Middle to Late Triassic inception of the Turpan-Hami basin, northwest China, in Hendrix, M. S. and Davis, G., eds., Paleozoic and Mesozoic tectonic evolution of central Asia-from continental assembly to intracontinental deformation: Geological Society of America Special Paper 194, p. 317-340.
- 52. Hendrix, M.S., Beck, M.A., Badarch, G., Graham, S.A., 2001, Triassic synorogenic sedimentation in southern Mongolia: early effects of intracontinental deformation, in Hendrix, M.S. and Davis, G.A., eds., Paleozoic and Mesozoic tectonic evolution of central and eastern Asia--from continental assembly to intracontinental deformation: Geological Society of America Special Paper 194, p. 389-412.
- 53. Johnson, C.L., Webb, L.E., Graham, S.A., Hendrix, M.S., and Badarch, G., 2001, Sedimentary and structural records of late Mesozoic high-strain extension and strain partitioning, East Gobi basin, southern Mongolia, in Hendrix, M.S. and Davis, G.A., eds., Paleozoic and Mesozoic tectonic evolution of central and eastern Asia-from continental assembly to intracontinental deformation: Geological Society of America Special Paper 194, p. 413-433.
- 54. Sjostrom, D., Hendrix, M.S., Badamgarav, D., Graham, S.A., and Nelson, B., 2001, Non-marine record of mid-Mesozoic deformation in central Asia: sedimentology, provenance, and tectonic setting of Jurassic and lower Cretaceous strata, western Mongolia, in Hendrix, M.S. and Davis, G.A., eds., Paleozoic and Mesozoic tectonic evolution of central and eastern Asia--from continental assembly to intracontinental deformation: Geological Society of America Special Paper 194, p. 361-388.

- 55. Yue, Y., Liou, J. G., and Graham, S. A., 2001, Tectonic correlation of Beishan and Inner Mongolia orogens and its implications for the palinspastic reconstruction of north China, in Hendrix, M. S., and Davis, G. A., eds., Paleozoic and Mesozoic tectonic evolution of central Asia -- from continental assembly to intracontinental deformation: Geological Society of America Special Paper 194, p. 101-116.
- 56. Yue, Y., Ritts, B.D., and Graham, S.A., 2001, Initiation and long-term slip history of the Altyn Tagh fault: International Geology Review, v. 43, no. 12.
- 57. Zhou, D., Graham, S.A., Chang, E.Z., Wang, B., Hacker, B., 2001, Paleozoic tectonic amalgamation of the Chinese Tian Shan: Evidence from a transect along the Dushanzi-Kuqa highway, in Hendrix, M.S., and Davis, G.A., eds., Paleozoic and Mesozoic tectonic evolution of central and eastern Asia—from continental assembly to intracontinental deformation: Geological Society of America Special paper 194, p. 23-46
- 58. DeGraaff-Surpless, K., Graham, S. A., Wooden, J. L., and McWilliams, M. O., 2002, Detrital zircon provenance analysis of the Great Valley Group, California: Evolution of an arc-forearc system: Geological Society of America Bulletin, v. 114, no. 12, p. 1564-1580.
- 59. Fildani, A., Cope, T., Graham, S.A., and Wooden, J., 2003, Initiation of the Magellanes foreland basin: timing of the southernmost Patagonia Andes orogeny revised by detrital zircon provenance analysis: Geology, v. 31, p. 1081-1084.
- 60. Ingersoll, R.V., Dickinson, W.R., and Graham, S.A., 2003, Remnant-ocean submarine fans: Largest sedimentary systems on Earth, in Chan, M.A., and Archer, A.W., eds., Extreme depositional environments: Mega end members in geologic time: Geological Society of America Special Paper 370, p. 191-208.
- 61. Hsiao, L.Y., Graham, S.A., and Tilander, N., 2004, Seismic reflection imaging of a major strike-slip fault zone in a rift system: Paleogene structure and evolution of the Tan-Lu fault system: American Association of Petroleum Geologists Bulletin, v. 88, p. 71-98.
- 62. Johnson, C.L., and Graham, S.A., 2004, Sedimentology and reservoir architecture of a syn-rift lacustrine delta, southeastern Mongolia: Journal of Sedimentary Research, v. 74, p. 26-41.
- 63. Johnson, C.L., and Graham, S.A., 2004, Cycles in perilacustrine facies of late Mesozoic rift basins: Journal of Sedimentary Research, v. 74, p. 42-60.
- 64. Mason, E.L., and Graham, S.A., 2004, Application of stratigraphic architectural analysis to a sand-rich, deep-sea depositional system: The Rocks Sandstone (Eocene), California, in Appi C. J.; D'Avila, R., Viana, A., eds., Deep-Water Sedimentation: Technological Challenges for the Next Millennium, Brazilian Association of Petroleum Geologists, Special Edition 1.
- 65. Ritts, B. D., Yue, Y. J., and Graham, S. A., 2004, Oligocene-Miocene tectonics and sedimentation along the Altyn Tagh fault, northern Tibetan Plateau: Analysis of the Xorkol, Subei, and Aksay basins: Journal of Geology, vol. 114, p. 207-230.
- 66. Yue, Y. J., Ritts, B. D., Hanson, A. D., and Graham, S. A., 2004, Sedimentary evidence against large-scale translation along the Northern Altyn Tagh fault: Earth and Planetary Science Letters, vol. 228, p.311-313.
- 67. Yue, Y. J., Ritts, B. D., Graham, S. A., Wooden, J. L., Gehrels, G. E., and Zhang, Z., 2004, Slowing extrusion tectonics: Lowered estimate of the post-Early Miocene slip rate along the Altyn Tagh fault: Earth and Planetary Science Letters, vol. 217, p. 111-122.
- 68. Adeogba, A., McHargue, T.R., and Graham, S.A., 2005, Transient fan architecture and depositional controls from near-surface 3-D seismic data, Niger delta continental slope: American Association of Petroleum Geologists Bulletin, v. 89, p. 627-644.
- 69. Dickinson, W.R., Ducea, M., Rosenberg, L.L., Greene, H.G., Graham, S.A., Clark, J.C., Weber, G.E., Kidder, S., Ernst, W.G., and Brabb, E.E., 2005, Net dextral slip, Neogene San Gregorio-Hosgri fault zone, coastal California: Geological evidence and tectonic implications: Geological Society of America Special Paper 391, 43 p.
- 70. Cope, T., Ritts, B.D., Darby, B.J., Fildani,, A., and Graham, S. A., 2005, Late Paleozoic sedimentation on the northern margin of the North China block: implications for regional tectonics and climate change, International Geology Review, v. 47, no. 3, p. 270-296.
- 71. Fildani, A., Hanson, A.D., Chen, Z., Moldowan, J.M., Graham, S.A., and Arriola, P., 2005, Geochemical characteristics and possible correlation between oil and source rocks of Talara basin, NW Peru: American Association of Petroleum Geologists Bulletin, v. 89, p. 1519-1545.
- 72. Graham, S. A., Chamberlain, P., Yue, Y. J., Ritts, B. D., Hanson, A. D., Horton, T. S, Waldbauer, J. R., Poage, M. A., and Feng, X., 2005, Stable isotope records of Cenozoic climate and topography, Tibetan Plateau and Tarim Basin: American Journal of Science, v. 305, p. 101-118.
- 73. Greene, T.J., Carroll, A.R., Wartes, M., and Graham, S.A., 2005, Integrated Provenance Analysis of a Complex Orogenic Terrane: Turpan-Hami Basin, NW China: Journal of Sedimentary Research, v. 75, p. 251-267.

- 74. Hubbard, S.M., de Ruig, M.J., and Graham, S.A., 2005, Utilizing outcrop analogs to improve subsurface mapping of natural gas-bearing strata in the Puchkirchen Formation, Molasse Basin, Upper Austria: Austrian Journal of Earth Sciences, v. 98, p. 52-66.
- 75. Shultz, M.R., Cope, Fildani, A., Cope, T.D., and Graham, S.A., 2005, Deposition and stratigraphic architecture of an outcropping ancient slope system; Tres Pasos Formation, Magellanes basin, southern Chile: Geological Society of London, Special Publication 244, p. 27-50.
- 76. Anderson, K.S., Graham, S.A., and Hubbard, S.M., 2006, Facies, architecture and origin of a reservoir-scale sand-rich succession within submarine canyon fill: Insights from Wagon Caves Rock (Paleocene), Santa Lucia Range, California: Journal of Sedimentary Research, v. 76. p. 819-838.
- 77. Johnson, C.L., and Graham, S.A., 2006, Middle Tertiary stratigraphic sequences of the San Joaquin basin, California, in San Joaquin Basin Province Assessment Team, Assessment of undiscovered oil and gas resources of the San Joaquin basin province of California, 2003: U.S. Geological Survey Professional Paper 1713, chapter 6, http://pubs.usgs.gov/pp/pp1713/
- 78. Mulch, A., Graham S.A., Chamberlain, C.P., 2006, Following the 49ers: High Eocene elevation of the Sierra Nevada revealed by paleo-altimetry of gold-bearing river gravels: Science, v. 305, p. 87-89.
- 79. Surpless, K.D, Graham, S.A., Covault, J., and Wooden, J., 2006: Does the Great Valley Group contain any Jurassic strata? Re-evaluation of the age and early evolution of a classic forearc basin fill: Geology, v. 34, p. 21-24
- 80. Vermeesch, P., Miller, D.D., Graham, S.A., Degrave, J., and McWilliams, M.O., 2006, Multi-method detrital thermochronology of the Great Valley Group near New Idria, California: Geological Society of America Bulletin, v. 118, p. 210-218.
- 81. Weislogel, A.L., Graham, S.A., Chang, E.Z., Wooden, J.L., Gehrels, G.E., and Yang, H., 2006, Detrital zircon provenance of the Late Triassic Songpan-Ganzi complex: record of collision and unroofing of the Oinling-Dabie orogen: Geology, v. 34, p. 97-100.
- 82. Hubbard, S.M., Romans, B.W., and Graham, S.A., 2007, An outcrop example of large-scale conglomeratic intrusions sourced from deep-water channel deposits, Cerro Toro Formation, Magallanes Basin, Southern Chile, in Hurst, A., and Cartwright, J., eds., Sand Injectites: Implications for Hydrocarbon Exploration and Production: American Association of Petroleum Geologists Memoir 87, p. 199-209 (figures on CD).
- 83. Cope, T., and Graham, S. A., 2007, Upper crustal response to Mesozoic tectonism in western Liaoning, North China, and implications for lithospheric delamination. In: Zhai, M., Windley, B. F., Kusky, T.M., and Meng, Q. (Eds.) Mesozoic sub-continental lithospheric thinning under eastern Asia. Geological Society of London Special Publication, 280, p. 201-222.
- 84. Cope, T.D., Shultz, M.R., and Graham, S.A., 2007, Detrital record of Mesozoic shortening in the Yanshan belt, NE China: testing structural interpretations with basin analysis: Basin Research, v. 19, p. 253-272.
- 85. Covault, J.A., Normark, W.R., Romans, B.W., and Graham, S.A., 2007, Highstand fans in the California borderland: The overlooked deep-water depositional systems: Geology, v. 35, p. 783-786.
- 86. Fildani, A., Shultz, M.R., Graham, S.A., and Leier, A., 2007, A deep-water amalgamated sheet system, Punta Barrosa Formation, Marina's Cliff, Chile, in Nilsen, T., Shew, R., Steffens, G, and Studlick, J., eds., Deep-Water Outcrops of the World Atlas: American Association of Petroleum Geologists Studies in Geology 56, p. 123-124.
- 87. Hubbard, S.M., Romans, B.W., and Graham, S.A., 2007, Deepwater channel margin architecture, Cerro Toro Formation, Cerro Mocho, Chile, in Nilsen, T., Shew, R., Steffens, G, and Studlick, J., eds., Deep-Water Outcrops of the World Atlas: American Association of Petroleum Geologists Studies in Geology 56, p. 128-131.
- 88. Romans, B.R., Shultz, M.R., Hubbard, S.M., and Graham, S.A., 2007, Facies architecture of slope channel complexes, Tres Pasos Formation at Cerro Divisadero Chile, in Nilsen, T., Shew, R., Steffens, G, and Studlick, J., eds., Deep-Water Outcrops of the World Atlas: American Association of Petroleum Geologists Studies in Geology 56, p. 132-135.
- 89. Shultz, M., Cope, T., Fildani, A., and Graham, S., 2007, Coarse-grained turbiditic infill of failure-generated slope accommodation, Tres Pasos Formation, west face, Sierra Contreras, southern Chile, in Nilsen, T., Shew, R., Steffens, G, and Studlick, J., eds., Deep-Water Outcrops of the World Atlas: American Association of Petroleum Geologists Studies in Geology 56, p. 136-139.
- 90. Weislogel, A. and Graham, S.A., 2007, Turbidite deposition of the Songpan-Ganzi Complex, China, in Nilsen, T., Shew, R., Steffens, G, and Studlick, J., eds., Deep-Water Outcrops of the World Atlas: American Association of Petroleum Geologists Studies in Geology 56, p. 162-164.
- 91. Fildani, A., Hessler, A.M., Graham, S.A., 2008, Trench-forearc interactions reflected in the sedimentary fillof Talarabasin, northwest Peru: Basin Research, v. 20, p. 305–331, doi: 10.1111/j.1365-2117.2007.00346.x

- 92. Hubbard, S. M., Romans, B.W., and Graham, S.A., 2008, Deep-water foreland basin deposits of the Cerro Toro Formation, Magallanes basin, Chile: Architectural elements of a sinuous basin axial channel belt: Sedimentology, p. 1333-1359.
- 93. Johnson, C.L., Amory, J.A., Graham, S.A., Lamb, M.A., Badarch, G., and Affolter, M., 2008, Accretionary tectonics and sedimentation during late Paleozoic arc collision, China-Mongolia border region, in Draut, A., Clift, P., and Scholl, D., eds., Formation and application of the sedimentary record in arc collision zones: Geological Society of America Special Paper 436, p. 363-390.
- 94. Ritts, B.D., Yue, Y., Graham, S.A., Sobel, E.R., Abbink, O.A., and Stockli, D., 2008, From sea level to high elevation in 15 million years: Uplift history of the northern Tibetan Plateau margin in the Altun Shan: American Journal of Science, v. 208, no. 5, p. 657-678.
- 95. Wang, C.S., Zhao, X.X., Liu, Z.F., Lippert, P.C., Graham, S.A., Coe, R.S., Yi, H.S., Zhu, L.D., Liu, S., Li, Y.L., 2008, New Constraints on the Early Uplift History of the Tibetan Plateau: Proceedings of the National Academy of Sciences (PNAS), v. 105, p. 4987-4992.
- 96. Armitage, D.A., Romans, B.W., Covault, J.A., and Graham, S.A., 2009, The influence of mass transport deposit topography on the evolution of turbidite architecture; The Sierra Contreras, Tres Pasos Formation (Cretaceous), southern Chile: Journal of Sedimentary Research, v. 79, p. 287-301.
- 97. Cassel, E.J., Calvert, A.T., Graham, S.A., 2009, Age, Geochemical Composition, and Distribution of Oligocene Ignimbrites in the Northern Sierra Nevada of California: Implications for Landscape Morphology, Elevation, and Drainage Divide Geography of the Nevadaplano: International Geology Review, v. 51, p. 723-742
- 98. Cassel, E.J., Graham, S.A., and Chamberlain, C. P., 2009, Cenozoic tectonic and topographic evolution of the northern Sierra Nevada, California, through stable isotope paleoaltimetry in volcanic glass: Geology, v. 37, p. 547-550.
- Covault, J.A., and Graham, S.A., 2009, Turbidite architecture in proximal foreland basin-system deep-water depocenters; Insights from the Tertiary of western Europe: Austrian Journal of Earth Sciences, v. 101, p. 36-51.
- 100. Covault, J.A., Hubbard, S.M., Graham, S.A., Hinsch, R., and Linzer, H.-G., 2009, Turbidite-reservoir architecture in complex foredeep-margin and wedge-top depocenters, Tertiary Molasse foreland basin system, Austria: Marine and Petroleum Geology, v. 26, p. 379-396.
- 101. Covault, J.A., Romans, B.W., and Graham, S.A., 2009, Outcrop expression of a continental-margin-scale shelf-edge delta from the Cretaceous Magallanes Basin, Chile: Journal of Sedimentary Research, v. 79, p. 523-539.
- 102. Fildani, A., Hessler, A.M., and Graham, S.A., 2009, Trench-forearc interactions reflected in the sedimentary fill of Talara basin, northwest Peru: Basin Research, p. 85-112.
- 103. Hubbard, S.M., de Ruig, M.J., and Graham, S.A., 2009: Confined channel-levee complex development in an elongate depo-center: Deep-water Tertiary strata of the Austrian Molasse basin: Marine and Petroleum Geology, p. 85-112.
- 104. Kent-Corson, M. Ritts, B., Zhuang, G., Bovet, P.M., Graham, S.A., C. Page Chamberlain, C.P., 2009, Stable isotopic constraints on the tectonic, topographic, and climatic evolution of the northern margin of the Tibetan Plateau: Earth and Planetary Science Letters, v. 282, p. 158-166.
- 105. Ritts, B.D., Weislogel, A., Graham, S.A., and Darby, B.J., 2009, Mesozoic tectonics and sedimentation of the giant polyphase nonmarine intraplate Ordos basin, western north China block: International Geology Review, v. 51, p. 95-115.
- 106. Romans, B.W., Hubbard, S.M., and Graham, S.A., 2009, Stratigraphic evolution of an outcropping continental slope system, Tres Pasos Formation at Cerro Divisadero, Chile: Sedimentology, v. 56, p. 737-764.
- 107. Romans, B.W., Normark, W.R., McGann, M.M., Covault, J.A., and Graham, S.A., 2009, Interactions of controls on coarse-grained sediment delivery and distribution in a deep-marine basin, the Holocene Santa Monica Basin, California; Implications for evaluating source-to-sink flux at millennial time scales: Geological Society of America Bulletin, v. 121, p. 1394-1408, doi: 10.1130/B26393.1.
- 108. Surpless, K.D., Ward., R. and Graham, S.A., 2009, Evolution and stratigraphic architecture of marine slope gully complexes: Monterey Formation (Miocene), Gaviota Beach, California: Marine and Petroleum Geology, v. 26, p. 269-288.
- 109. Zhu, M., Graham, S.A., and McHargue, T., 2009, The Red River Fault Zone in the Yinggehai Basin, South China Sea: Tectonophysics, v. 476, p. 397-417, doi:10.1016/j.tecto.2009.06.015.
- 110. Zhu, M., Graham, S.A., Pang, X., and McHargue, T., 2009, Characteristics of migrating submarine canyons from the middle Miocene to Present: Implications for Paleoceanographic circulation, northern South China Sea: Marine and Petroleum Geology, doi:10.1016/j.marpetgeo.2009.05.005.

- 111. Carroll, A.R., Graham, S.A., and Smith, M.E., 2010, Walled sedimentary basins of China: Basin Research, v. 22, p. 17-32.
- 112. Covault, J.A., and Graham, S.A., 2010, Submarine fans at all sea level stands: tectonomorphologic and climatic controls on coarse-grained sediment delivery to the deep sea: Geology, v. 38, p. 939-942.
- 113. Covault, J.A., Romans, B.W., Fildani, A., McGann, M., and Graham, S.A., 2010, Rapid climatic signal propagation from source to sink in a southern California sediment-routing system: The Journal of Geology, v. 118, p. 247-259.
- 114. Hsiao, L.Y., Graham, S.A., and Tilander, N., 2010, Stratigraphy and sedimentation in a rift basin modified by synchronous strike-slip deformation: Southern Xialiao Basin, Bohai, offshore China: Basin Research, v. 22, p. 61-79.
- 115. Kent-Corson, M., Mulch, A., Graham, S., Carroll, A., Ritts, B., Chamberlain, P., 2010, Diachronous isotopic and sedimentary responses to topographic change as indicators of mid-Eocene hydrologic reorganization in the western United States: Basin Research, doi: 10.1111/j.1365-2117.2009.00456.x.
- 116. Mitchell, C., Graham, S.A., and Suek, D., 2010, Subduction complex uplift and exhumation and its influence on Maastrichtian forearc stratigraphy in the Great Valley basin, northern San Joaquin Valley, California: Geological Society of America Bulletin, v. 122; p. 2063-2078.
- 117. Romans, B.W., Fildani, A., Graham, S. Hubbard, S., Covault, J., 2010, Importance of predecessor basin history on sedimentary fill of a retroarc foreland basin: Provenance analysis of the Cretaceous Magallanes basin, Chile (50°S-52°S): Basin Research, v. 22, p. 640-658.
- 118. Weislogel, A.L., Graham, S.A., Chang, E.Z., Wooden, J.L., Gehrels, G.E., 2010, Detrital zircon provenance from three turbidite depocenters of the Middle-Upper Triassic Songpan-Ganzi complex, central China: Record of collisional tectonics, erosional exhumation, and sediment production: Geological Society of America Bulletin, v. 122; no. 11/12; p. 2041-2062, DOI: 10.1130/B26606.1.
- 119. Cassel, E.J., and Graham, S.A., 2011, Paleovalley morphology and fluvial system evolution of Eocene—Oligocene sediments ("auriferous gravels"), northern Sierra Nevada, California: Implications for climate, tectonics, and topography: Geological Society of America Bulletin, v. 123, p. 1699-1719.
- 120. Covault, J.A., Roman, B.W., Graham. S.A., Andrea Fildani, A., and Hilley, G.E., 2011, Terrestrial source to deep-sea sink sediment budgets at high and low sea levels: Insights from tectonically active Southern California: Geology, v. 39; no. 7; p. 619–622.
- 121. Fosdick, J.C., Romans, B.W., Fildani, A., Bernhardt, A., Calderón, A., and Graham, S.A., 2011, Kinematic history of the Cretaceous-Neogene Patagonian fold-thrust belt and Magallanes foreland basin, Chile and Argentina (51°30'S): Geological Society of America Bulletin, v. 123, p. 1679-1698.
- 122. Maier, K.L., Fildani, A., Paull, C.K., Graham, S.A., McHargue, T.R., 2011, The elusive character of discontinuous deep-water channels: New insights from Lucia Chica channel system, offshore California: Geology, v. 39; p. 327-330.
- 123. Romans, B.W., Fildani, A., Hubbard, S.M., Covault, J.A., Fosdick, J.C., and Graham, S.A., 2011, Evolution of deep-water stratigraphic architecture, Magallanes Basin, Chile: Marine and Petroleum Geology, v. 28, p. 612-628.
- 124. Zhu, M., McHargue, T., and Graham, S.A., 2011, 3-D reflection seismic characterization of submarine slides on a Pliocene siliciclastic continental slope and its implications for tectonics, sediment supply, and climate change, South China Sea, in Shipp, C., Weimer, P., and Posamentier, H., eds., Mass-transport deposits in deepwater settings: Society of Sedimentary Geology (SEPM) Special Publication 96, p. 111-126.
- 125. Armitage, D.A., McHargue, T.R., Fildani, A., and Graham, S.A., 2012, Post-avulsion channel evolution: Niger Delta continental slope: American Association of Petroleum Geologists Bulletin, v. 96, p. 823–843.
- 126. Cassel, E.J., Grove, M., and Graham, S.A., 2012, Eocene Drainage evolution and erosion of the Sierra Nevada batholith across northern California and Nevada: American Journal of Science, v. 312, p. 117-144.
- 127. Cassel, E.J., Graham, S.A., Chamberlain, C. Page, 2012, Early Cenozoic topography, morphology, and tectonics of the northern Sierra Nevada and western Basin and Range: Geosphere, v. 8, doi:10.1130/GES00671.1.
- 128. Chamberlain, C.P., Mix, H., Mulch, A., Hren, M.T., Kent-Corson, M.L., Davis, S.J., Horton, T.W., and Graham, S.A., 2012, The Cenozoic climatic and topographic evolution of the western North American Cordillera: American Journal of Science, v. 312, p.213-262; doi:10.2475/02.2012.05.
- 129. Graham, S.A., Cope, T., Johnson, C.L., Ritts, B.D., 2012, Sedimentary basins of the late Mesozoic extensional domain of China and Mongolia, in Bally, A.W., and Roberts, D.G., eds., Phanerozoic Regional Geology of the World, 1: Elsevier, p. 421-436.
- 130. Hsiao, L.Y., and Graham, S.A., 2012, Xialiao basin arm of the North China basin: A Paleogene rift basin modified by strike-slip deformation, in Bally, A.W., and Roberts, D.G., eds., Phanerozoic Regional Geology of the World: Elsevier, p. 217-234.

- 131. Maier, K.L., Fildani, A., Paull, C.K., Graham, S.A., McHargue, T.R., 2012, Deep-water punctuated channel migration: high-resolution subsurface data from the Lucia Chica channel system, offshore California: Journal of Sedimentary Research, v. 82, p. 1-8, DOI: 10.2110/jsr.2012.10.
- 132. Maier, Katherine L., Fildani, Andrea, Paull, Charles K., McHargue, Timothy R., Graham, Stephan A., Caress, David W., 2012, Deep sea channel evolution and stratigraphic architecture from inception to abandonment from high-resolution AUV surveys offshore central California: Sedimentology, doi:10.1111/j.1365-3091.2012.01371.x
- 133. Romans, B., and Graham, S.A., 2012, A Deep-time perspective of land-ocean linkages in the sedimentary record: Annual Review of Marine Science, v. 5, DOI: 10.1146/annurev-marine-121211-172426.
- 134. Carroll, A.R., Dumitru, T.A., Graham, S.A., Hendrix, M.A., 2013, An 800 million year detrital zircon record of continental amalgamation, northern Tarim basin, NW China: International Geology Review, http://dx.doi.org/10.1080/00206814.2013.787232.
- 135. Chamberlain, C.P., Wan, X., Graham, S.A., Carroll, A.R, Doebbert, A.C., Sageman, B.B., Blisniuk, P., Kent-Corson, M.L., Wang, Z., Wang Ch, 2013, Stable isotopic evidence for climate and basin evolution of the Late Cretaceous Songliao Basin, China: Palaeogeography, Palaeoclimatology, Palaeoecology, v. 385, p. 106-124.
- 136. Dumitru, T.A.. Ernst, W.G., Wright, J.E., Wooden, J.L., Wells, R.E., Farmer, L.P., Kent, A.J.R., and Graham, S.A., 2013, Eocene extension in Idaho generated massive sediment floods into the Franciscan trench, and into the Tyee, Great Valley and Green River basins: Geology, v. 41, p. 187-190.
- 137. Feng, Z., Wang, C., Graham, S., Koeberl, C., Dong, H., Huang, Y., Yuan Gao, 2013, Continental Scientific Drilling Project of Cretaceous Songliao Basin: Scientific Objectives and Drilling Technology: Palaeogeography, Palaeoclimatology, Palaeoecology, v. 385, p. 6-16.
- 138. Wang, C., Scott, R.W., Wan, X., Graham, S.A., Huang, Y., Wang, P., Wu, H. Dean, W.E., Zhang, L., 2013, Late Cretaceous climate changes recorded in eastern Asian lacustrine deposits and North American epieric sea strata: Earth Science Reviews, v. 126, p. 300-320.
- 139. Sharman, G.R., Graham, S.A., Grove, M., and Hourigan, J.K., 2013, A reappraisal of the early slip history of the San Andreas fault, central California, USA: Geology, doi:10.1130/G34214.1.
- 140. Williams, T.A., and Graham, S.A., 2013, Controls on forearc basin architecture from seismic and sequence stratigraphy of the Upper Cretaceous Great Valley Group, central Sacramento basin, California: International Geology Review, v. 55, p. 2030-2059, 10.1080/00206814.2013.817520.
- 141. Burgreen, B., and Graham, S.A., 2014, Evolution of a deep-water lobe system in the Neogene trench-slope setting of the East Coast Basin, New Zealand: Lobe stratigraphy and architecture in a weakly confined basin configuration: Marine and Petroleum geology, v. 54, http://dx.doi.org/10.1016/j.marpetgeo.2014.02.011
- 142. Fosdick, J. C., S. A. Graham, and G. E. Hilley, 2014, Influence of attenuated lithosphere and sediment loading on flexure of the deep-water Magallanes retroarc foreland basin, Southern Andes: Tectonics, v. 33, doi:10.1002/2014TC003684.
- 143. He, M., Graham, S.A., Scheirer, A.S., and Peters, K.E., 2014, A basin modeling and organic geochemistry study in the Vallecitos syncline, San Joaquin Basin, California: Marine and Petroleum Geology, v. 49, p. 15– 34
- 144. Johnson, C.L., Constenius, K.C., Graham, S.A., Mackay, G., Menotti, A., Payton, A., and Tully, J., 2014, Subsurface evidence for late Mesozoic extension in western Mongolia: tectonic and petroleum systems implications: Basin research, v. 27, n. 3, p. 272-294; doi: 10.1111/bre.12073
- 145. Schwartz, T.M., and Graham, S.A., 2014, Stratigraphic architecture of a tide-influenced shelf-edge delta, Upper Cretaceous Dorotea Formation, Magallanes-Austral Basin, Patagonia: Sedimentology, doi: 10.1111/sed.12176.
- 146. Sharman, G.R., Graham, S.A., Grove, M., Kimbrough, D.L., and Wright, J.E., 2014, Detrital zircon provenance of the Late Cretaceous-Eocene California forearc: Influence of Laramide low-angle subduction on sediment dispersal and paleogeography: Geological Society of America Bulletin, doi:10.1130/B31065.1.
- 147. Stright, L., Stewart, J., Campion, K., and Graham, S., 2014, Geologic and seismic modeling of a coarse-grained deepwater channel reservoir analog (Black's Beach, LaJolla, CA): American Association of Petroleum Geologists Bulletin, v. 98, p. 695-728.
- 148. Wang, C. Dai, J., Zhao, X., Li, Y., Graham, S.A., He, H., Ran, B., and Meng, J., 2014, Outward-growth of the Tibetan Plateau during the Cenozoic: A review: Tectonophysics, v. 621, p. 1-43.
- 149. Burgreen, B., Meisling, K., and Graham, S., 2015, Basin and petroleum system modeling of the East Coast Basin, New Zealand: A test of overpressure scenarios in a convergent margin: Basin Research, p. 1–32, doi: 10.1111/bre.12121
- 150. Caves, J.K., Winnick, M.J., Graham, S., Sjostrom, D.J., Mulch, A., Chamberlain, C.P., 2015, Role of the Westerlies in central Asia climate over the Cenozoic: Earth and Planetary Science Letters, v. 428, p. 33-43.

- 151. DeCelles, P.G., and Graham, S.A., 2015, Cyclical processes in the North American Cordilleran orogenic system: Geology, v. 43, p. 287-290, doi:10.1130/G36482.1.
- 152. Fosdick, J., Grove, M., Graham, S., Hourigan, J., Lovera, O., Romans, B., 2015, Detrital thermochronologic record of burial heating and sediment recycling, in Patagonian Andes: Basin Research, v. 27, no. 4, p. 546-572, DOI:10.1111/bre.12088/.
- 153. Gao, Yuan, Ibarra, Daniel E., Wang, Chengshan, Caves, Jeremy K., Chamberlain, C. Page, Graham, Stephan A. and Wu, Huaichun, 2015, Mid-latitude terrestrial climate of East Asia linked to global climate in the Late Cretaceous: Geology, doi:10.1130/G36427.1.
- 154. Malkowski, M., Grove, M., Graham, S., 2015, Unzipping the Patagonian Andes—Long-lived influence of rifting history on foreland basin evolution: Lithosphere, doi: 10.1130/L489.1
- 155. Malkowski, M., Sharman, G., Graham, S., Fildani, A., 2015, Characterization and diachronous initiation of coarse clastic deposition in the Magallanes–Austral retroarc foreland basin, Patagonian Andes: Basin Research, doi: 10.1111/bre.12150.
- 156. Mulch, A., Chamberlain, C.P., Cosca, M.A., Teyssier, C., Methner, K., Graham, S.A., 2015, Rapid change in western North American high-elevation rainfall patterns during the Mid Eocene Climatic Optimum (MECO), American Journal of Science, v. 315, p. 317-336, doi: 10.2475/04.2015.02
- 157. Sharman, G.R., Graham, S.A., Masalimova, L.U., Shumaker, L.E., and King, P.R., 2015, Spatial patterns of deformation and paleoslope estimation within the marginal and central portions of a basin-floor mass-transport deposit, Taranaki Basin, New Zealand: Geosphere, Exploring the Deep Sea and Beyond, themed issue, v. 11 no. 2 p. 266-306, doi:10.1130/GES01126.1.
- 158. Dumitru, T.A., Elder, W.P., Hourigan, J.K., Chapman, A.D., Graham, S.A., Wakabayashi, J., 2016, Four Cordilleran paleorivers that connected Sevier thrust zones in Idaho to depocenters in California, Washington, Wyoming, and, indirectly, Alaska: Geology, v. 44, no.1, p. 75-78
- 159. Maier, K.L., Crundwell, M.P., Coble, M.A., King, P.E., Graham, S.A., 2016, Refined depositional history and dating of the Tongaporutan reference section, north Taranaki, New Zealand New Zealand Journal of Geology and Geophysics, v. 59, p. 313-329, doi: 10.1080/00288306.2015.1132744.
- 160. Malkowski, M.A., Schwartz, T.A., Sharman, G.R., Sickmann, Z., Graham, S.A., 2016, Stratigraphic and provenance variations in the early evolution of the Magallanes-Austral foreland basin: implications for the role of longitudinal vs. transverse sediment dispersal during arc-continent collision: Geological Society of America Bulletin, doi: 10.1130/B31549.1.
- 161. Methner, K., Mulch, A., Fiebig, J., Wacker, U., Gerdes, A., Graham, S.A., Chamberlain, C.P., 2016, Rapid Middle Eocene temperature change in western North America: Earth and Planetary Science Letters, v. 450, p. 132-139, DOI: 10.1016/j.epsl.2016.05.053
- 162. Mix, Hari T., Ibarra, Daniel E., Mulch, Andreas, Graham, Stephan A., and Chamberlain, C. Page, 2016, A hot and high Eocene Sierra Nevada: Geological Society of America Bulletin, v. 128; no. 3/4; p. 531–542, doi:10.1130/B31294.1
- 163. Schwartz, T., Fosdick, J., and Graham, S., 2016, Using detrital zircon U-Pb ages to calculate Late Cretaceous sedimentation rates in the Magallanes-Austral basin, Patagonia: Basin Research, doi: 10.1111/bre.12198.
- 164. Sharman, G.R., Schwartz, T.M., Shumaker, L.E., Trigg, C., Nieminski, N., Sickmann, Z., Malkowski, M.A., Johnstone, S., Hourigan, J.K., Graham, S.A., 2016, Submarine Mass Failure within the Shelfal-Deltaic Domengine Formation (Eocene), California (U.S.A.): Geosphere, v. 13, no. 3, doi:10.1130/GES01442.1.
- 165. Shumaker, L.E., Jobe, Z., and Graham, S.A., 2016, Evolution of submarine gullies on a prograding slope: Insights from 3D seismic reflection data: Marine Geology, doi:10.1016/j.margeo.2016.06.006.
- 166. Sickmann, Z.T., Paull, C.K., and Graham, S.A., 2016, Detrital zircon mixing and partitioning in fluvial to deep marine systems, central California: Journal of Sedimentary Research, v. 86, p. 1298-1307,
- 167. Tong, Y., Ibarra, D., Caves, J., Mukerji, T., Graham, S.A., 2016, Constraining basin thermal history and petroleum generation using paleoclimate data in the Piceance Basin, Colorado: Basin Research, doi: 10.1111/bre.12213.
- 168. AlKawai, Wisam, Mukerji, Tapan, Scheirer, Allegra Hosford, Graham, Stephan, 2017, Combining Seismic Reservoir Characterization Workflows with Basin Modeling in the Deepwater Gulf of Mexico Mississippi Canyon Area: American Association of Petroleum Geologists Bulletin, DOI:10.1306/0504171620517153
- 169. AlKawai, Wisam, Mukerji, Tapan, Scheirer, Allegra Hosford, Graham, Stephan, 2017, Integrating Statistical Rock Physics and Pressure and Thermal History Modeling to Map Reservoir Lithofacies in the Deepwater Gulf of Mexico: Geophysics, **submitted.**
- 170. Jones, M.M., Ibarra, D.E., Gao, Y., Sageman, B.B., Selby, D., Chamberlain, C.P., Graham, S.A., 2017, Lacustrine biogeochemical cycling and Oceanic Anoxic Event 3 in the Turonian-Coniacian Qingshankou Formation, Songliao Basin, northeast China: Earth and Planetary Sciences Letters, submitted.

- 171. Kremer, C.H., McHargue, T.R., Scheucher, L., Graham, S.A., 2017, Transversely-sourced mass-transport deposits and stratigraphic evolution of a foreland submarine channel system: Deep-water Tertiary strata of the Austrian Molasse Basin: Marine and Petroleum Geology, **submitted**.
- 172. Menotti, T., and Graham, S.A., 2017, Field Excursion: The Salinas Basin, Central California, USA (Petroleum System in Outcrop): AAPG Centennial Field Guide, **in press**.
- 173. Menotti, Tess, Meisling, Kristian, Scheirer, Allegra Hosford, Graham, Stephan A., 2017, Integrating strikeslip tectonism with 3D basin and petroleum system analysis of the Salinas basin, California: American Association of Petroleum Geologists Bulletin, **submitted.**
- 174. Nieminski, N.M, and Graham, S.A., 2017, Modeling stratigraphic architecture using small unmanned aerial vehicles and photogrammetry: Examples from the Miocene East Coast basin, New Zealand: Journal of Sedimentary Research, v. 87, p. 126-132.
- 175. Schwartz, T.M. and Graham, S.A., 2017, Depositional history and provenance of Paleogene strata in the Sage Creek basin, southwestern Montana: Geosphere, accepted pending revisions.
- 176. Sharman, G.R., Hubbard, S.M., Covault, J.A., Weislogel, A.L., and Graham, S.A., 2017, Spatial and temporal evolution of sediment routing in the Alpine foreland basin system: Integrated seismic stratigraphy and detrital-zircon geochronology: Geological Society of America Bulletin, accepted pending revisions.
- 177. Sickmann, Z.T., Schwartz, T.M., and Graham, S.A., 2017, Refining stratigraphy and tectonic history using detrital zircon maximum depositional age: An example from the Cerro Forteleza Formation, Austral Basin, southern Patagonia: Basin Research, **accepted pending revisions.**
- 178. Shumaker L.E., Sharman, G.R., Peter R. King, P.R., Graham, S.A., 2017, The source is in the sink: Deepwater deposition by a submarine volcanic arc, Taranaki Basin, New Zealand: Sedimentology, **submitted.**

#### NON-REVIEWED ARTICLES AND REGIONAL PUBLICATIONS

- 1. Dickinson, W.R., and S.A. Graham, 1975, Sedimentary environments, depositional systems and stratigraphic cycles. In W.R. Dickinson, ed., Current concepts of depositional systems with applications for petroleum geology: San Joaquin Geological Society Short Course, Bakersfield, p. 1-10.
- 2. Graham, S.A., 1976, Tertiary stratigraphy and depositional environments near Indians Ranch, Monterey County, California: Neogene Symposium Volume, Pacific Section, Society Economic Paleontologists and Mineralogists, p. 125-136.
- 3. Graham, S.A., 1979, Tertiary paleotectonics and paleogeography of the Salinian block: Pacific Section, Society Economic Paleontologists and Mineralogists, v. 7, p. 45-51.
- 4. Graham, S.A., 1979, Field Trip Roadlog, Day 1: Stratigraphy and structure of Tertiary rocks, King City to Indians Ranch area, Los Padres National Forest, California: Pacific Section, Society Economic Paleontologists and Mineralogists, v. 14, p. 101-117.
- 5. Graham, S.A., and K.D. Berry, 1979, Early Eocene paleogeography of the central San Joaquin Valley: Origin of the Cantua Sandstone: Tertiary Symposium Volume, Pacific Section, Society Economic Paleontologists and Mineralogists, p. 119-127.
- 6. Graham, S.A., 1980, Notes on the Miocene section at Atascadero California. In G.H. Blake, ed., Neogene biostratigraphy of the northern LaPanza Range, San Luis Obispo County, California: Pacific Section, Society Economic Paleontologists and Mineralogists, v. 6, p. 39-44.
- 7. Graham, S.A., 1981, Stratigraphic and depositional patterns and hydrocarbon occurrence, Sacramento Valley, California: Pacific Section, American Association Petroleum Geologists, v. 50, p. 43-58.
- 8. Graham, S.A., and R.V. Ingersoll, 1981, Field guide to the Mesozoic-Cenozoic convergent margin of northern California: Objectives and geologic overview: Pacific Section, American Association Petroleum Geologists, v. 50, p. 3-12.
- 9. Schweickert, R.A., and S.A. Graham, 1981, Field trip roadlog: Sierra Nevada arc complex, Reno to Sacramento: Pacific Section, American Association Petroleum Geologists, v. 50, p. 25-40.
- 10. Fasshi, M.R., S. Abu-Khamsin, W.E. Brigham, L.A. Williams, and S.A. Graham, 1982, A preliminary study of in situ combustion in diatomites: Proceedings of the Society of Petroleum Engineers, California Regional Meeting (1982), p. 37-54.
- 11. Graham, S.A., L.A. Williams, M. Bate, and L.S. Weber, 1982, Stratigraphic and depositional framework of the Monterey Formation and associated coarse clastics of the central San Joaquin basin: Pacific Section, Society Economic Paleontologists and Mineralogists, v. 25, p. 3-16.
- 12. Williams, L.A., S.A. Cooley, S.A. Graham, and L. Phillips, 1982, Roadlog: Monterey Formation and associated coarse clastics of the central San Joaquin Valley: Pacific Section, Society Economic Paleontologists and Mineralogists, v. 25, p. 75-95.

- 13. Estes, P., C. Gavigan, S. Graham, C. McCloy, L. Weber, and M. Hitzman, 1983, Orinda and Moraga Formations at Eastern Portal of Caldecott Tunnel: Pacific Section, Society Economic Paleontologists and Mineralogists, v. 29, p. 89-92.
- 14. Graham, S.A., and L.A. Williams, 1983, The Monterey: Formation tapped for big pays: American Association Petroleum Geologists, AAPG Explorer, September 1983, p. 1-5.
- 15. Graham, S.A., C. Gavigan, C. McCloy, M. Hitzman, R. Ward, and R. Turner, 1983, Basin evolution during the change from convergent to transform continental margin: An example from the Neogene of central California: Pacific Section, Society Economic Paleontologists and Mineralogists, v. 29, p. 101-118.
- 16. Ward, R., and S. Graham, 1983, Neroly Formation along Kirker Pass Road, South of Pittsburg. In V.B. Cherven and S.A. Graham, eds., Geology and sedimentology of the southwestern Sacramento Basin and East Bay Hills: Pacific Section, Society Economic Paleontologists and Mineralogists, v. 29, p. 86.
- 17. Garrison, R.E., and S.A. Graham, 1984, Early diagenetic dolomites and the origin of dolomite-bearing breccias, lower Monterey Formation, Arroyo Seco, Monterey County, California: Pacific Section, Society Economic Paleontologists and Mineralogists, v. 41, p. 87-102.
- 18. Ingersoll, R.V., S.A. Graham, R.A. Schweichert, J.R. Kleist, and D.S. Cowan, 1984, Mesozoic-Cenozoic convergent margin of northern California: Mackay School of Mines (Nevada), Geological Society of America Guidebook, v. 4, p. 304-353. Graham, S. A., 1985, Introduction: Geology of the Temblor Formation, western San Joaquin Basin, California, in Graham, S. A., ed., Geology of the Temblor Formation, western San Joaquin basin, California: Pacific Section SEPM v. 44, p. 1-3.
- 19. Graham, S.A., J.B. Carter, J.J. Pence, S.A. Cooley, and M.A. Bate, 1985, Field guide to the Temblor Formation (Miocene), central San Joaquin basin, California: Pacific Section, Society Economic Paleontologists and Mineralogists, v. 44, p. 179-202.
- 20. Graham, S.A., S.A. Carroll, and G.E. Miller, 1988, Kern River Formation as a recorder of uplift and glaciation of the southern Sierra Nevada. In Graham, S.A., ed., Studies of the geology of the San Joaquin basin: Pacific Section, Society Economic Paleontologists and Mineralogists, v. 60, p. 319-332.
- 21. McKnight, C.L., Carroll, A.R., Chu, J., Hendrix, M.S., Graham, S.A. and Lyon, R.J., 1989, Stratigraphy and structure of the Kalpin uplift, Tarim basin, northwest: Proceedings of the Seventh Thematic Conference on Remote Sensing for Exploration Geology, Environmental Research Institute of Michigan, p. 1085-1096.
- 22. Graham, S.A., and Lowe, D.R., 1993, 1ntroduction, in Graham, S. A., and Lowe, D. R., editors, Advances in the sedimentary geology of the Great Valley Group, Sacramento Valley, California: SEPM Pacific Section Guidebook, p. 1-2.
- 23. Graham, S.A., Lowe, D.R., Anderson, K.S., Hickson, T., 1996, Thick-bedded coarse-grained deep-water deposits, Cretaceous and Paleogene, central California, in Abbott, P.L., and Cooper, J.D., eds., American Association of Petroleum Geologists Field Conference Guide 1996: Pacific Section American Association of Petroleum Geologists Guidebook 73, p. 1-4.
- 24. Mason, E.L., and Graham, S.A., 2000, Structural and tectonic controls on basin partitioning, sediment dispersal, and stratigraphic architecture of Mesozoic and Cenozoic deep-marine coarse-clastic deposits, central California: in Appi, C.J., d'Avila, R.S.F., and Viana, A.R., eds., Deep-water sedimentation: Technological challenges for the next millenium: 31<sup>st</sup> International Geological Congress Workshop Program and Abstract Volume, p. 43-48.
- 25. Lamb, M.A., Anderson, K.S., and Graham, S.A., 2003, Stratigraphic architecture of a sand-rich, deep-sea depositional system: The Stevens Sandstone, San Joaquin basin, California: Pacific Section, American Association of Petroleum Geologists Special Publication MP-47.
- 26. Graham, S.A., and Lowe, D.R., 2008, Preface, in Nilsen, T., Shew, R., Steffens, G, and Studlick, J., eds., Deep-Water Outcrops of the World Atlas: American Association of Petroleum Geologists Special Publication, p. 2.
- 27. Armitage, D.A., Romans, B.W., Covault, J.A., and Graham, S.A., 2009, Tres Pasos mass transport deposit topography; Sierra Contreras, in Fildani, A., Hubbard, S.M., and Romans, B.W., eds., Stratigraphic evolution of deep-water architecture; Examples on controls and depositional styles from the Magallanes Basin, Chile: SEPM Field Trip Guide Series #10.
- 28. Covault, J.A., Romans, B.W., and Graham, S.A., 2009, Transition from deep-water to shelf edge deposition, Tres Pasos and Dorotea formations, Cerro Escondido, in Fildani, A., Hubbard, S.M., and Romans, B.W., eds., Stratigraphic evolution of deep-water architecture; Examples on controls and depositional styles from the Magallanes Basin, Chile: SEPM Field Trip Guide Series #10.
- 29. Graham, S.A., Carroll, A.R., and Luo, P., 2010, Tectonic and stratigraphic evolution of nonmarine basins of China: Basin Research, v. 22, p. 1-3.
- 30. Menotti, T.A., and Graham, S.A., 2012, Salinas Basin Petroleum System of central California and its outcrop expression: Pacific Section SEPM Book 114, 31 p.

# **EDITED VOLUMES**

- 1. Graham, S.A., editor, 1979, Field guide to the Salinas Valley and Santa Lucia Range, California: Pacific Coast Paleogeography Field Guide 4, Pacific Section, Society Economic Paleontologists and Mineralogists, 148 p.
- 2. Graham, S.A., editor, 1981, Field guide to the Mesozoic-Cenozoic convergent margin of northern California: Pacific Section, American Association of Petroleum Geologists, volume 50, 118 p.
- 3. Williams, L.A., and S.A. Graham, editors, 1982, Monterey Formation and associated coarse clastic rocks, central San Joaquin basin, California: Pacific Section, Society Economic Paleontologists and Mineralogists, Volume and Field Guide, 95 p.
- 4. Cherven, V.B., and Graham, S.A., eds., 1983, Geology and sedimentology of the southwestern Sacramento Basin and East Bay Hills: Pacific Section, Society Economic Paleontologists and Mineralogists, v. 29.
- 5. Graham, S.A., editor, 1985, Geology of the Temblor Formation, western San Joaquin basin, California: Pacific Section, Society Economic Paleontologists and Mineralogists, Volume 44, 202 p.
- 6. Grove, K., and S. Graham, editors, 1986, Geology of Upper Cretaceous and lower Tertiary rocks near Lake Nacimiento, California: Pacific Section, Society Economic Paleontologists and Mineralogists, Volume 49, 63 p.
- 7. Graham, S.A., editor, 1988, Studies of the geology of the San Joaquin basin: Pacific Section, Society Economic Paleontologists and Mineralogists, v. 60, 351 p.
- 8. Graham, S. A., and Lowe, D. R., editors, 1993, Advances in the sedimentary geology of the Great Valley Group, Sacramento Valley, California: SEPM Pacific Section Guidebook, 65 p.
- 9. Wagner, D., and Graham, S.A., editors., 1999, Geologic field trips in northern California: California Division of Mines and Geology Special Publication 119, 254 p.
- 10. Graham, S.A., Carroll, A.R., and Luo, P., editors, 2010, Nonmarine sedimentary basins of China: Basin Research special issue, 138 p.
- 11. Graham, S.A., editor, 2010, Collected graduate dissertations of the Stanford San Joaquin Project, 1981-2000: Pacific Section AAPG, 2-DVD set.
- 12. Wang, C., Graham, S.A., Parrish, J.T., and Wan, X., editors, 2013, Environmental/climate change in the Cretaceous Greenhouse World: records from terrestrial scientific drilling of Songliao Basin and adjacent area of China: Palaeogeography, Palaeoclimatology, Palaeoecology, v. 385, 228 p.
- 13. Wang, C., Feng, Z, Wang, P., Graham, S., 2017, Initial Report of Continental Scientific Drilling Project of the Cretaceous Songliao Basin (SK-1): Elsevier, in press.

#### DISCUSSION AND REPLY

- 1. Weislogel, A.L., Graham, S.A., Chang, E.Z., Wooden, J.L., Gehrels, G.E., Yang, H., 2006, Detrital zircon provenance of the Late Triassic Songpan-Ganzi complex: Sedimentary record of collision of the North and South China blocks: REPLY: Geology, doi 10.1130/G23141.1, page e108
- 2. Maier, K.L., Flidani, K., McHargue, T., Paull, C.K., Graham, S.A., and Caress, D.W., 2012, Discussion Reply: Punctuated deep-water channel migration: High-resolution subsurface data from the Lucia Chica channel system, offshore California, U.S.A. Reply: Journal of Sedimentary Research.
- 3. Gao, Yuan, Ibarra, Daniel E., Wang Chengshan, Caves Jeremy K., Chamberlain, C. Page, Graham, Stephan A. and Wu, Huaichun, 2015, Mid-latitude terrestrial climate of East Asia linked to global climate in the Late Cretaceous: Reply: Geology, doi:10.1130/G37574Y.1.

#### MAPS AND CHARTS

- 1. Graham, S.A., Indians Ranch Section, In Bishop, C.C., and J.F. Davis, coordinators, 1984, Central California province correlation chart: American Association of Petroleum Geologists Correlation of Stratigraphic Units in North America (COSUNA).
- 2. Bloch, R.B. and Graham, S.A., Co-ordinators, 1991, West Coast Regional Cross Section: American Association of Petroleum Geologists Regional Cross Section Series, 3 sheets.
- 3. Graham, S.A., Seedorf, D., Walter, O., and Bloch, R.B., 1991, San Andreas fault to Pacific Coast (Sheet 2 of 3), in Bloch, R.B. and Graham, S.A., Co-ordinators, West Coast Regional Cross Section: American Association of Petroleum Geologists Regional Cross Section Series.

4. Johnson, C.J., Bloch, R.B., and Graham, S.A., 2005, Tertiary Sequences of the Central San Joaquin Basin, California: Age Control and Eustatic Versus Tectonic Forcing Factors: Pacific Section American Association of Petroleum Geologists, Chart MP49.

# DIGITAL VIDEO DISK

1. Howell, D.G., Graham, S.A., and Zlatnik, D., co-ordinators, 2003, Perspectives on Energy: Today and Tomorrow. Discussions of Resources, Technology, Economics and Policy: Circum-Pacific Council for Energy and Mineral Resources, 2 DVD set of 11 lectures.