SEPM (Society for Sedimentary Geology)

2018 PRESIDENT'S RECEPTION AND AWARDS CEREMONY

Salt Lake Marriott Downtown at City Creek
Salt Lake City, UT
May 22, 2018

Program

Eat, Drink and Networking Time — All

- Recognitions and Thank Yous — Maria Mutti
    - Annual Meeting Committee
    - Short Courses and Field Trip Leaders
    - Luncheon Talk
    - Supporters
    - Council and Staff

- SEPM Foundation — Rick Sarg
    - Foundation Student Research Grants
    - Foundation Student Participation Grants
    - ACE Outstanding Student Poster Awards

- SEPM Outstanding Journal Papers Awards — Maria Mutti
    - JSR
    - PALAIOS

- SEPM Science Awards — Maria Mutti
    - James Lee Wilson Award – Sara B. Pruss
    - Dickinson Medal – Brian K. Horton
    - Honorary Membership – Charlie Kerans
    - Shepard Medal – Peter Townsend Harris
    - Moore Medal – William I. Ausich
    - Pettijohn Medal – Peter G. DeCelles
    - Twenhofel Medal – Donald R. Lowe

- SEPM Outgoing President Recognition — Gary Nichols

- Concluding Remarks — Maria Mutti

Continue - Eat, Drink and Networking Time — All

The Scientific community looks to the SEPM Foundation to meet the challenges in educational, scientific and charitable activities.

SEPM Foundation Funds

Robert J. and Ruth A. Weimer Student Fund

Gerald M. Friedman Student Fund

John E. Sanders Student Fund

Grover and Sally Murray Educational Fund

Kenneth Hsü Student Travel Fund

James L. Wilson Medal Fund

William H. Twenhofel Medal Fund

Francis P. Shepard Medal Fund

Francis J. Pettijohn Medal Fund

Honorary Members Fund

Bruce Harleton Publications Fund

SEPM Endowment Fund

Garry Jones and Brian O'Neill Memorial Fund for NAMS Student Research

SEPM Foundation General Fund

Arnold and Lieneke Bouma Fund

If you would like to contribute to the SEPM Foundation please contact SEPM Headquarters for more information.

SEPM 2018 Annual Meeting Supporters

SEPM gratefully acknowledges support from the following companies and individuals for the 2018 Annual Meeting

ExxonMobil
Chevron
Repsol
Lario Oil & Gas
Shell
KAUST
ConocoPhillips
Apache Corp
Ava Clastics
Eby Petrography & Consulting, Inc

Alton Brown
Marshall Carothers
Gregor Eberli
Gary Hampson
Howard Harper
Dawn Jobe
Charlie Kerans
William Morgan

Plus numerous anonymous member donations

2018 Annual Meeting Organizing Committee

The Society thanks the members of the committee for their time and effort

- **Cari Johnson**, SEPM Vice Chair
- **Alan Carroll**, SEPM Field Trip Chair
- **Howard Harper**, SEPM Short Course Chair
- **Sam Hudson**, SEPM Awards Chair
- **Gary Hampson & Zane Jobe**, Clastics Theme Representatives
- **Steve Bachtel & Mitch Harris**, Carbonates Theme Representative
- **Cari Johnson**, Research Symposium Theme Chairs
- **Howard Harper**, SEPM Sponsorship Chair

SEPM Council

SEPM Society for Sedimentary Geology is governed by these elected officials, who volunteer their time

	2017-2018	2018-2019
President	Maria Mutti	Gary Nichols
President-Elect	Gary Nichols	Lynn Soreghan
Secretary-Treasurer	Jean Hsieh	Kevin Bohacs
Sedimentology Councilor	Laura Zahm	Laura Zahm
Paleontology Councilor	Charles Savrda	Charles Savrda
Research Councilor	Elizabeth Hajek	Cari Johnson
International Councilor	John Reijmer	Emese Bordy
Web Councilor	Jeremy Krimmel	Jeremy Krimmel
Early Career Councilor	Kristin Bergmann	Dawn Jobe
Student Councilor	Xiaowei Li	Xiaowei Li
SEPM Foundation Pres	Rick Sarg	Rick Sarg
PALAIOS Co-Editors	Gabriela Mangano & Martin Zuschin	Gabriela Mangano & Martin Zuschin
JSR Co-Editors	Leslie Melim & Gary Hampson	Peter Burgess & Gary Hampson
Special Publications Editor	John-Paul Zonneveld	John-Paul Zonneveld

SEPM Staff

- **Howard Harper**, SEPM Executive Director
- **Theresa Scott**, Associate Director & Business Manager
- **Michele Tomlinson**, Managing Editor, SEPM Publications
- **Cassie Turley**, Deputy Business Manager
- **Hayley Cooney**, Membership Coordinator
- **Melissa Lester**, Managing Editor for JSR
- **Kathleen Huber**, Managing Editor for PALAIOS

SEPM Foundation Research Grants

Please consider a donation to these funds to help them recover: Robert J. and Ruth A. Weimer Student Fund; Gerald M. Friedman Student Fund; John E. Sanders Student Fund; Grover and Sally Murray Educational Fund; and Kenneth Hsü Student Travel Fund.

SEPM Foundations Student Research Grant Awardees

Isaac Allred, University of Kansas
Eric Barefoot, Rice University
Marie Bartlett, University of North Carolina – Wilmington
Samantha Bartnik, New Mexico State University
Craig Bennett, University of Kansas
Edwin Bomer, Louisiana State University
Kristina Butler, University of Texas at Austin
Luke Fritz, West Virginia University
Kacey Garber, University of Iowa
Brandt Gibson, Vanderbilt University
Lindsey Gipson, Northern Arizona University
Jennifer Gonzales, Moss Landing Marine Laboratories
Romain Gougeon, University of Saskatchewan
Brittany Hupp, University of Wisconsin – Madison
Claire Johnson, University of Southern California
Ekaterina Larina, University of Southern California
Evin Maguire, Kent State University
Nicholas McCaroll, Utah State University
Gretchen O'Neil, North Dakota State University
Abigail Padgett, University of Cincinnati
Lauren Parker, University of Alabama
Ethan Parrish, University of Wisconsin – Madison
Robert Pearigen, Colorado School of Mines
Justin Rosenblume, University of Iowa
Alejandra Santiago-Torres, Oklahoma State University
Benjamin Smith, University of Texas at Austin
Molly Smith, Florida Atlantic University
Joel Spansel, Colorado State University
Richard Stephenson, University of Cincinnati
Christopher Steuer, Montana State University
Ian Thompson, University of Kansas
Kelly Thomson, University of Texas at Austin
Rebecca Vanderleest, University of Connecticut
Wylie Walker, Colorado School of Mines
Matthew Wanker, Indiana University
Emily White, University of Idaho
Nick Wondolowski, University of Pittsburgh

SEPM Foundation Presentation Grants

SEPM Student Presentation Travel Grants (to date) awarded to SEPM Student Members to present their work at various meetings around the globe.

Olu-Segun Abatan, West Virginia University
Adedoyin Adeyilola, University of North Dakota
Elizabeth Brown, University of South Florida
Andrew Canada, University of Idaho
Grant Cole, University of Plymouth
Elson Core, University of Kansas
David Cousins, Keele University
Hand Deng, Colorado School of Mines
Clyde Findlay, Texas A&M University
Henry Galvis-Portilla, University of Calgary
George Ghon, University of Leoben, Austria
Sonnet Gomes, West Virginia University
Christian Haller, University of South Florida
Matthew Hemenway, Western Michigan University
Ningjie Hu, University of Texas at Austin
Woong Mo Koo, University of Texas at Austin
Zhiyang Li, Indiana University – Bloomington
Cameron Manche, Western Michigan University
Andrew McCarthy, Colorado State University
Francis Chidi Nwachukwu, University of North Dakota
Christopher Odezulu, Rice University
Chioma Onwumelu, University of North Dakota
Abbey Padgett, University of Cincinnati
Yang Peng, University of Texas at Austin
Ross Pettigrew, Keele University
Brooks Ryan, Western Michigan University
Zexuan Wang, University of Oklahoma
Logan West, University of Texas at Austin
Jianan Wu, University of Aberdeen
Jingqi Xu, Colorado School of Mines
Xin Zhan, Missouri University
Jinyu Zhang, University of Texas at Austin

SEPM Foundation

The purpose of the SEPM Foundation is to raise and distribute funds in support of SEPM (Society for Sedimentary Geology) activities. The primary Foundation activities are to support student research.

Reasons to donate:

- Support MSc and PhD student research. In 2017, SEPM awarded $37,000 in grants to 34 students. Awards ranged from $800 - $1500.
- Support student travel to the AAPG-SEPM annual meeting for poster and oral presentations. In 2017, SEPM helped 35 students present at ACE Houston, along with many other research conferences.
- SEPM Foundation is a USA - 501 (c) (3) organization so donations may be tax deductible.
- Your employer may match your gift, and SEPM can accept gifts of stock as well as cash contributions.

Donate online at www.sepm.org/Form/Donation-Form

Please contact Theresa Scott (tscott@sepm.org); 1-800-865-9765 to arrange for a donation to the SEPM Foundation.

Also, do not forget if your place of employment has a matching donation program.

2018 Outstanding Paper in the *Journal of Sedimentary Research*

Paul R. Durkin, Ron L. Boyd, Stephen M. Hubbard,

Albert W. Shultz, and Michale D. Blum

2017, Three-Dimensional Reconstruction of Meander-Belt Evolution, Cretaceous McMurray Formation, Albert Basin, Canada: JSR 87:10.

*The Outstanding Paper from JSR has been chosen from a pool of papers from 2013-2017, using reference metrics as well as individual input from people reading and comparing the top papers.

Print-on-Demand Facsimile of Online Articles
PALAIOS
Emphasizing the Impact of Life on Earth's History
May 2016 Volume 31, No. 5

An International Journal of SEPM
(Society for Sedimentary Geology)

2018 Outstanding Paper in *PALAIOS*

Logan A. Wiest, Ilya V. Buynevich, David E. Grandstaff, Dennis O. Terry Jr., Zachary A. Maza, and Kenneth J. Lacovara

2016, Ichnological Evidence for Endobenthic Response to the K–Pg Event, New Jersey, U.S.A.: PAL 31:5.

2018 Outstanding Paper in *PALAIOS*

Honorable Mentions

Ken P. Coulson and Leonard R. Brand

2016, Lithistid Sponge-Microbial Reef-Building Communities Construct Laminated, Upper Cambrian (Furongian) 'Stromatolites': PAL 31:7.

*PALAIOS continues to use the process which identifies the outstanding paper from a single year, looking back two years to 2016.

James Lee Wilson Award

For Excellence in Sedimentary Geology Research by a Young Scientist

Sara B. Pruss

Sara B. Pruss did her undergraduate education at the University of Rochester, where she began her career as a geobiologist through strong exposure to sedimentary geology and paleobiology within a renowned undergraduate program. After receiving her B.S. at Rochester (1999) in Biology – Geology, Sara migrated to the west coast for her graduate work at the University of Southern California. There she began work on one of the major themes of her research career, investigating the geobiology of the Early Triassic aftermath from the end-Permian mass extinction. Her master's (2001) and Ph.D. (2004) research was extremely successful leading to an Agouron Geobiology Post-doctoral Fellowship at Harvard University (2004-2007). At Harvard she further developed another big component of her research interests, the geobiology of the Precambrian – Cambrian transition and how interactions between microbes, animals and sediments play out during this time.

In 2007 Sara began as an Assistant Professor of Geosciences at Smith College. There her interests continued to grow with studies of modern environments including important work with colleagues at MIT encompassing experimental work on wrinkle structures as well as geochemical work on ooids. In 2013 she became Associate Professor at Smith, which honored her for her teaching excellence with the Sherrerd Award for Distinguished Teaching in 2015. Her exceptional career trajectory was recognized early on with an award in 2014 for "Outstanding Contributions to Geobiosciences" from the GSA Division of Geobiology and Geomicrobiology. This has been followed by further recognition for her accomplishments through receipt of the Terry J. Beveridge Award for a mid-career scientist in Geobiology given in 2017 by the Geobiological Society.

All the time through her research career she has woven her various research directions into a broader interest in how geobiological studies can better reveal the evolutionary and ecological history of life on Earth. It is for her broad research accomplishments that SEPM now honors her with the James Lee Wilson award, as further validation of her pioneering work in integrative geobiology.

Biographer: David Bottjer

Citation: *Sara B. Pruss represents a model for the modern sedimentary geologist who is investigating geobiological problems. Her pioneering integrative geobiological research has been invaluable towards solving important questions from critical times in Earth and life history. With a growing research career, integrated with outstanding teaching, we can expect to hear much more from her through the lens of her innovative and creative scientific perspective.*

William R. Dickinson Award

For Excellence in Sedimentary Geology Research by a Mid-Career Scientist

Brian K. Horton

Brian Horton is an intellectual leader in employing the clastic stratigraphic record to determine tectonic histories of continental orogenic systems. He has a sustained record of fundamental contributions (>90 publications) that combine meticulous documentation of sedimentary strata in the field and subsequent analytical approaches for illuminating further detail, including detrital zircon geochronology and sedimentary petrology for provenance insights, as well as varied geo/thermochronological and geochemical approaches that seek to reconstruct past topographic, erosional, and depositional histories. He received the Young Scientist (Donath Medal) award from the Geological Society of America in 2004 and was awarded an endowed Chair at UT Austin in 2015. Throughout his career he has successfully guided and promoted the development of a long string of diverse graduate students, who have endeavored with their dedicated mentor to further discover and highlight relationships between sedimentation and mountain building. Brian continues to be at the leading edge of this research, and is entirely worthy of receiving the William Dickinson Medal from SEPM.

Brian Horton has boldly identified an earlier onset of foreland basin sedimentation and mountain building in several settings, recognized the importance of fluvial megafans in modern systems and the rock record, and explored the feedbacks between erosion and tectonics. He has worked on the Tibetan Plateau (documenting basin growth and deformation during the India-Asia collision), in the Zagros Mountains of Iran (generating the first large-scale detrital geochronological and thermochronological studies of the region) and in the North American Cordillera (on Cretaceous-Paleogene retroarc shortening and foreland basin formation). However, he is best known for his sustained research in the Andes of South America.

The Andean research has crossed disciplinary boundaries. Whereas his early work in the Central Andes (Bolivia) involved basin analysis and structural mapping, over the past decade Brian and his students have expanded their field-based research into the Northern Andes (Colombia, Ecuador, Peru) and Southern Andes (Argentina). In this period he further developed his use of detrital geochronology, thermochronology, and chronostratigraphy to document the growth of hinterland, wedge-top, and foreland basins in numerous settings, revealing a complex history of retroarc thrust-belt propagation. Most recently, he has generated grand syntheses of the Mesozoic-Cenozoic histories of sediment provenance, accumulation, and basin evolution along the ~7000 km stretch of the Andes, venturing into the fundamental geodynamic processes governing mountain building along convergent plate margins.

Brian Horton is a giant in the unravelling of orogenic belts by detailed examination of the sedimentary sinks within these systems. He has made many fundamental and lasting contributions to our knowledge on the intersection of tectonics and sedimentation.

Biographer: Ron Steel

Citation: *In recognition of a defining influence and sustained high-level research in mountain belts, high plateaus and their associated sedimentary basins; intellectual leadership and the fostering of field education in tectonics and sedimentation; a great teacher, researcher and friend who has boundless energy and creativity.*

Honorary Membership

For contributions to the science and SEPM

Charlie Kerans

Honorary Membership in SEPM for Charles Kerans recognizes his sustained service and leadership to the Society. Many of his well-cited and award-wining papers on carbonate geology have been presented at SEPM meetings and published the Journal of Sedimentary Research, the Journal of Sedimentary Petrology and SEPM Special Publications.Charlie Kerans is currently Professor and Goldhammer Chair in Carbonate Geology and serves as the Chair of the Department of Geological Sciences at the Jackson School of Geosciences, University of Texas at Austin.

I have known Charlie Kerans as a professional colleague since he joined the Bureau of Economic Geology of the University of Texas at Austin in 1985, and have followed his career in research and teaching closely since. In 2005, with the Jackson School faculty's enthusiastic support Charlie moved to the Department of Geological Sciences. Since joining the Department Charlie Kerans has basically carried the carbonate program, developing and teaching the carbonate courses at the undergraduate and graduate levels, and supervising a horde of students interested in carbonates. Charlie is a mainstay in leading the Department's formal field courses, especially at the undergraduate level where beginning to know rocks and scale are fundamental to their continued geologic education and training.

Charlie Kerans is a preeminent teacher whether in the university classroom, the corporate laboratory or with colleagues and students in the field. For in all situations he brings to his teaching a strong, up to date research background, a clear and understated lecture style and a sincere engagement and identification with students and colleagues alike. He is always known as Charlie, not Professor Kerans, but commands the respect of his students, not through rank, but by a genuine sense of engagement with them. Another important aspect of Charlie Kerans' teaching is that while conveying the fundamentals and basics of his subject, he always puts what he imparts in a real world context. That is not as common in a university setting as it should be, but it is vitally important to those he teaches.

Kerans' research and teaching have a strong field orientation and it is perhaps in the field that his abilities shine the most. What he can show, teach and engage colleagues and students in on an outcrop is simply amazing and in my experience without peer.

For the past 30 years, Charlie Kerans has been and is a leader and principal in the Bureau of Economic Geology's Reservoir Characterization Research Laboratory. RCRL is an industrial associates program with current participation, by subscription, of 31 companies. The Lab is an important conveyor of both research and teaching to large number of corporate professionals. Charlie's abilities in working with professional colleagues, in the lab and in the field, are as well-known and respected and a key reason for the long-term and continuing existence of the Lab. Experience with professional colleagues deepens his sense of applying his research to real world exploration and production problems and issues and imparting such experience to students as they enter their corporate careers. Experience in RCRL plus Kerans' industry consultations keep him on top of technical advances in exploration and production and to incorporate this experience in his teaching of students. In fact, many of his students work in the RCRL as graduate research assistants during the course of their work, involving them directly with corporate professionals.

Professor Kerans' recognition as a teacher is confirmed in his recent receipt of the Murray Outstanding Educator Award from the Association and internally in the University by his award, on three separate occasions, of the Jackson School's Knebel Teaching Award. Uniquely the award is determined by a formal and tabulated vote of the students. And he has won the award for both undergraduate and graduate teaching. He also is the recipient of the Walter Award, the highest award of the Jackson School, for his contributions to the School in teaching, research and service. An in-depth, quality research record goes hand in hand with good teaching at both the undergraduate and graduate level. And here Kerans is superb, if not unique. In his career Charlie has won 14 best paper and poster awards, several from SEPM and its local sections. Twice he has received the Wallace Pratt Memorial Award for the best annual paper in the AAPG Bulletin and three times he has been named a Distinguished Lecturer of the Association, including a stint as an International Distinguished Lecturer. Charlie is a recent recipient of the Pettijohn Medal in Sedimentology from SEPM, one of the highest awards in the field of sedimentology. He is an Honorary Member of SEPM Permian Basin Section. Biographer: Bill Fisher

Citation: *For career-long, exemplary contributions to SEPM and the sedimentary geology community, as a strong leader, a dedicated and prominent researcher and an inspiring teacher.*

Francis P. Shepard Medal

For Sustained Excellence in Marine Geology

Peter Townsend Harris

Peter Harris has made significant contributions in a number of areas. He has carried out pioneering work on tide-dominated coastal and shelf depositional systems, the sedimentary records of the Antarctic glaciation and of Antarctic bottom water formation and the geomorphology of ocean basins, especially submarine canyons.

Peter received his first degree in Geology and Oceanography in 1981 from the University of Washington and went on to complete a Master's and PhD at the University of Wales (Swansea), UK, where he was a student of the late Michael Collins. After completing his studies in 1984, he was awarded a post-doctoral fellowship from the Australian Bureau of Mineral Resources (now Geoscience Australia) to work at the University of Sydney, where he became interested in clastic-carbonate transitions. Peter continued to work at the University of Sydney as a Senior Research Fellow and Lecturer until 1994. His papers on the tidally-dominated Fly River delta were the first to document the Holocene record of deltaic clinoforms containing varves, prograding onto the shelf.

The first Australian to be awarded the Shepard Medal, Peter has been a leader in the Australian marine geoscience community for over 25 years. From 1994-2014 he served as the head of Geoscience Australia's Antarctic and marine and coastal environment programmes. He published over 120 peer-reviewed articles and book chapters, documenting different aspects of the Australian and Antarctic continental margins. From the polar to the tropical, important discoveries include documenting the Holocene sedimentary record to indicate that Antarctic bottom water production is spatially episodic, which has influenced thinking of this process as being non-steady-state over century timescales; describing a vast new mesophotic coral reef province in the Gulf of Carpentaria; developing and applying quantitative methods to characterize clastic coastal depositional systems in terms of wave, tide and river power; creating depositional models for rhodoliths; and investigating unidirectional cyclone transport of sediment along the continental shelf. As a contribution to global marine science, Peter completed a seafloor geomorphic features map in 2014 (after compiling the first nation-scale version).

While still an active researcher, in the last five years Peter has expanded his vision, with a mission to make science central to the decisions we make about our planet and how we use its resources.

Biographers: Elaine Baker

Citation: *In recognition of Peter Harris's sustained contribution across many areas of marine geology from coral reefs to deep water benthic habitats. And in appreciation of his application of robust science in support of improved national and global marine policy and management.*

Raymond C. Moore Medal

For Sustained Excellence in Paleontology

William I. Ausich

Bill was born in 1952 in Kewanee in northwestern Illinois and got his geological education at the University of Illinois (B.S. 1974) and at Indiana University (A.M. 1976 and Ph.D. 1978). Because his graduate advisor was the internationally well-known crinoid specialist and 1995 Raymond C. Moore medalist N. Gary Lane, it was natural that much of Bill's thesis work came to involve Mississippian geology in the Midcontinent region and crinoids. After six years as a faculty member at Wright State University in Dayton, Ohio, Bill was hired in 1984 by the Department of Geological Sciences at The Ohio State University, where he remained to his retirement in 2013. He served as Department Chair in 1995-99. During his university career, Bill supervised the thesis research by 11 Ph.D. and 18 M.S. students. He is still carrying out vigorous research at Ohio State and continuous to fill the position as Director of the Orton Geological Museum.

As shown by the fact that he has authored or co-authored more than 230 articles, eight books, and a very large number of abstracts, Bill has been highly active in research, most of which has dealt with crinoids. However, he has also published papers on echinoids, cystoids, blastoids, sponges, cryptospores, stromatoporoids, problematic Cambrian echinoderms, conodonts, and trace fossils as well as on sedimentology. Three joint papers with D. J. Bottjer (1982, 1987, 1991) on tiering of marine suspension feeders continue to be basic references in that subject area. His discovery, in cooperation with his Ph.D. student C. E. O'Malley, of taxon specific organic molecules preserved in Mississippian crinoids has attracted international attention also from non-paleontologists. However, there is no doubt that nationally and internationally, Bill is best known as a leading expert on the morphology, taxonomy, evolution, and geologic distribution of Paleozoic crinoids. He has studied the wide distribution and diverse morphology of these fossils from their first occurrence in the Lower Ordovician to their presence in the recent oceans, and has described a very large number of new taxa and revised many old collections. Although most of his work has been on North American and European materials, some of his recent studies have been on Chinese and African collections. For many years, he has been the Coordinating Author of, and major contributor to, the revised crinoid Treatise on Invertebrate Paleontology, which is a huge undertaking. It is safe to state that Bill's research has added enormously to our understanding of the fossil record of crinoids.

Bill's university teaching was much appreciated by the students as indicated by the fact that at Ohio State, he received four times the prestigious 'Distinguished Graduate Teaching Award', which is given out annually by the graduate students. No other geology professor has been received this award as many times as Bill. Particularly appreciated by the students were his field courses, such as his paleoecological course at Lake Cumberland in Kentucky and his carbonate sedimentology course on San Salvador Island in the Bahamas.

Bill's professional service has been extremely comprehensive. Among other things, he has served as editor of several books and other volumes and as manuscript reviewer for more than 75 journals and other publication outlets. He was President of the Paleontological Society in 2002-04 and has served as a member of numerous organizing committees for several conferences.

Finally, it may be appropriate to note that Bill Ausich shares several similarities with Ray Moore, who has given his name to this prestigious award. As was the case with Ray, much of Bill's very extensive research has been on middle-late Paleozoic crinoids; both these men have been successful educators, who have produced university text-books and attracted excellent students; both have been very extensively involved in work on the Treatise on Invertebrate Paleontology; and both have been very active in professional service, including occupying important positions in professional societies and serving as editors and manuscript reviewers. However, based on my close association with Bill for almost 40 years and having had the opportunity to meet Ray Moore once more than 50 years ago, it is my impression that their personalities differed greatly.

Biographer: Stig M. Bergström

Citation: *In recognition of Bill Ausich's wide-ranging, scientifically fundamental, and voluminous contributions to national and international paleontology, especially as a leader in crinoid research, his inspiring and exemplary university teaching at both the undergraduate and graduate levels, and in appreciation of his very extensive professional service to the geological community.*

Francis J. Pettijohn Medal

For Sustained Excellence in Sedimentology

Peter G. DeCelles

Peter G. DeCelles stands at the forefront of a distinguished congress of sedimentologists and stratigraphers investigating the links between orogenic- and basin-filling processes. Pete has been a leader in understanding the interaction between contractional deformation systems and sedimentation in associated basins for more than two decades. Pete is instrumental in changing tectonic basin analysis from a purely descriptive to a quantitative science. He successfully linked foreland basin-thrust belt evolution to the extent that we rarely think of these as decoupled systems. His publications are standard texts both for understanding the theory behind thrust-belt and foreland basin interaction and also for describing the interaction of specific systems spanning the globe.

Pete's scientific contributions encompass scales ranging from bed-scale sediment transport to lithosphere-scale orogenic evolution. The fine-scale, quantitative focus is exemplified by his early contributions which systematized paleocurrent measurements using trough cross-stratification and quantitatively modeled sediment provenance and source area exhumation.

In his most widely recognized work, Pete masterfully summarized the systematic relationship between flexural loading by thrust sheet stacking and the resultant foreland basin geometry. His expansion of the tripartite foreland basin system including foredeep, forebulge, and backbulge into a four part system which includes the proximal wedgetop depozone cut the Gordian knot facing foreland basin models at the time. Pete further predicted a systematic stacking of depozones and depositional environments in foreland basins that result from migration of their associated fold-thrust belt. This publication, and subsequent research bearing out these predictions, has set the paradigm for understanding and describing foreland basin systems.

Pete's research at the thrust-belt scale encompasses the western USA, the Andes, and the Himalaya. His is still the definitive kinematic reconstruction of the Utah thrust belt. In the Himalaya, Peter's kinematic reconstructions of the fold-thrust belt sparked the ongoing understanding of the role of underthrust Indian lower crust and lithosphere in the evolution of the Tibetan Plateau.

At the orogen scale, his synthesis of the linked evolution of the Cordilleran thrust belt and foreland basin in the Western USA is a standard text for students of retroarc systems. Pete's recognition of the links between basin formation and fold-thrust belt evolution led to a revision of the chronology of Andean deformation, pushing the onset of contractional orogenesis to the early Cenozoic rather than early Oligocene as had been previously thought. Finally, Pete continues to push the bounds of our understanding of orogenic system-basin pairs by identifying cyclicity that links magmatic arcs, orogenic hinterlands, fold-thrust belts, and foreland basins in retroarc systems.

Pete's students and colleagues can attest to his commitment to a "data-rich", multi-disciplinary approach to geology research, with a focus on fundamental geological field observations. Pete carries this multidisciplinary approach to all aspects of research, seeking synergies between academia and industry approaches to the geosciences. His students' success in both academic and industry positions is a testament to the power and scope of his approach to tectonic basin analysis. He continues to set a rigorous scientific standard not only for his students, but also for the broader sedimentology community.

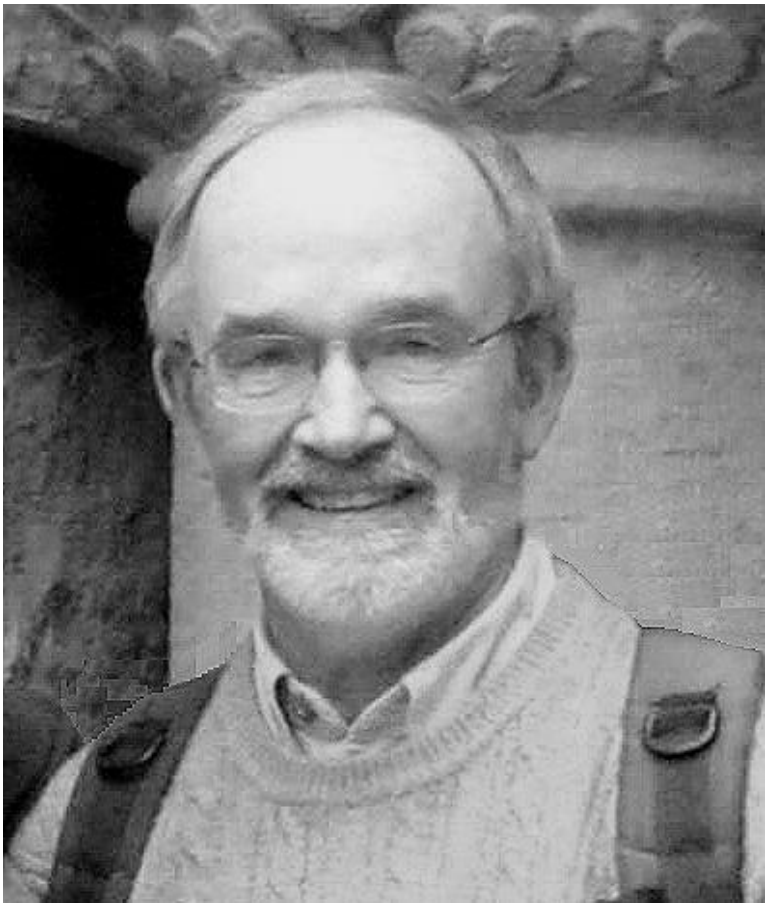
Biographer: Joel Saylor

Citation: *In recognition of an ongoing record of leadership in tectonic basin analysis covering more than two decades of innovative and high- quality research on the links between tectonics, sedimentology, and basin evolution, from the students and colleagues who are better scientists for knowing Pete.*

William F. Twenhofel Medal

For a Career of Outstanding Contributions in Sedimentary Geology

Donald R. Lowe



Donald R. Lowe

Donald R. Lowe's career is celebrated with the William F. Twenhofel Medal, awarded for contributions in two important arenas: the processes and deposits of sediment-gravity flows and reconstructions of the Archean Earth from its sedimentary rocks.

Don Lowe grew up in Sacramento, California, near the Cretaceous turbiditic strata of the Great Valley Group that later hosted his PhD field work and formed a cornerstone for much of his life's work. Following high school, Don migrated 90 miles to the southwest to Stanford University, where he quickly discovered geology. He moved to the University of Illinois for graduate school, yet elected to study a Turonian deep-water mass transport complex northwest of his Sacramento home for his 1967 PhD dissertation. After a two-year USGS post doc, Don became an Assistant Professor at Louisiana State University, rising to the rank of Professor. In 1998, he returned to Stanford, where he is currently the Max Steineke Professor of Geology.

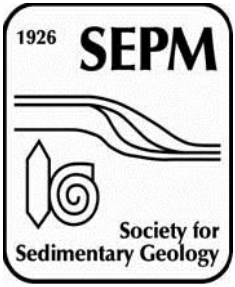
Since his first sole-authored paper on his thesis rocks, published in the Journal of Sedimentary Petrology (JSP) in 1972, Don has published over 40 papers on sediment-gravity flow processes and deposits from across the globe. His works have tremendously influenced thought on deep-water depositional systems: his 1982 JSP paper on the deposits of high-density turbidity currents has been cited over 2500 times.

Don's interest in the Archean Earth began with a field trip to South Africa in 1975 and has been nearly continuous since. Mapping by Lowe and colleagues published in 2012 won several national and international awards. Topical studies have included major papers on early life, surface temperatures, large meteorite impacts, and pyroclastic sedimentation.

Don's advising of graduate students (31 at LSU; 28 at Stanford) was recognized by AAPG's Grover E. Murray Memorial Distinguished Educator Award. Through a half century of research and mentoring of students, Donald R. Lowe has registered lasting impact in sedimentary geology.

Biographers: Steve Graham and Gary Byerly

Citation: *For a half century, Donald R. Lowe has been in the vanguard in understanding sediment-gravity flow processes and deep-water sedimentation, as well as surface processes and life on early Earth. As a distinguished educator, he has impacted the lives and education of generations of university students and professionals in sedimentary geology.*



SEPM Society for Sedimentary Geology, founded in 1926, is a global not-for-profit society dedicated to the dissemination of scientific information on all aspects of sedimentary geology. The Society supports the science and its members by the publication of Journal of Sedimentary Geology, PALAIOS, The Sedimentary Record and Special Publications in addition to offering Research Conferences, Short Courses, Field Trips and Research Group meetings.

The SEPM Foundation was formed to promote the science of sedimentary geology through encouraging scientific research in and disseminating educational information about paleontology, sedimentary petrology and allied disciplines; and for charitable, educational and scientific purposes.

SEPM (Society for Sedimentary Geology)
SEPM Foundation
4111 S. Darlington, Suite 100
Tulsa, Oklahoma 74135-6373 U.S.A.
www.sepm.org