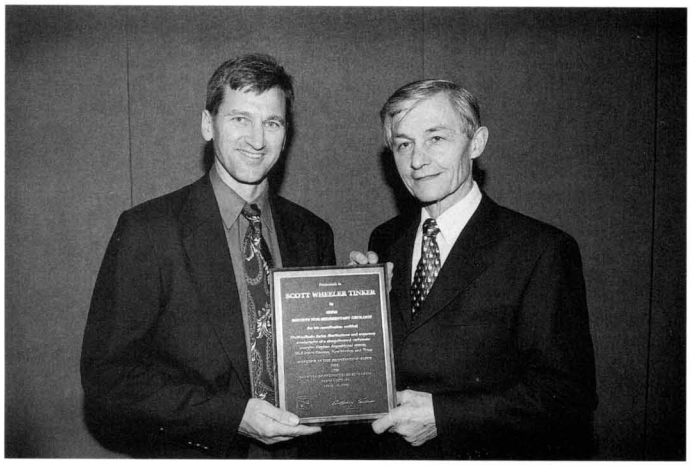
SOCIETY RECORDS AND ACTIVITIES

SEPM 2000 ANNUAL MEETING

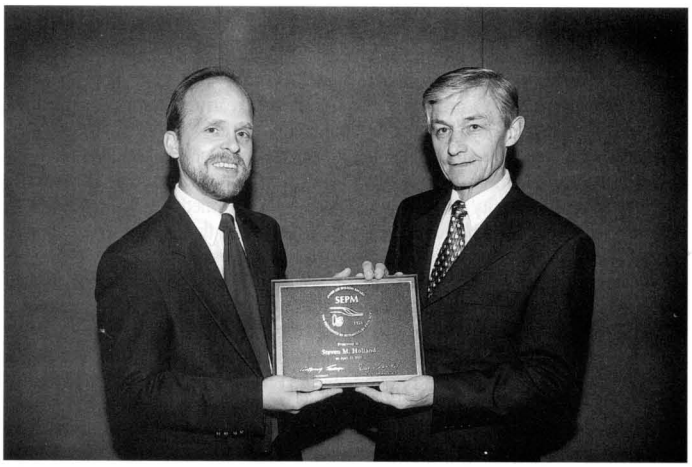
Kurt A. Grimm, left, Alice S. Chang, second from left, and Lisa D. White, second from right, accept the *PALAIOS* Outstanding Paper (published in 1998) from President Wolfgang Schlager

Robert E. Garrison, left, accepts the Pettijohn Medal from President Wolfgang Schlager

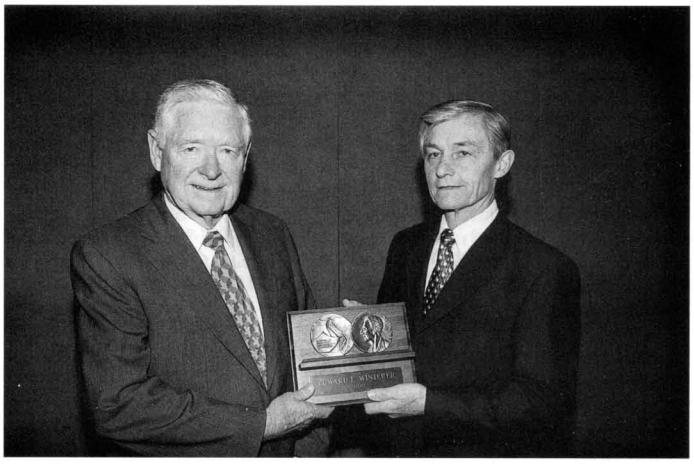


Scott W. Tinker, left, accepts the *Journal of Sedimentary Research* Outstanding Paper (published in 1998) from President Wolfgang Schlager

William A. Bergren, left, accepts the Moore Medal from President Wolfgang Schlager



Steven M. Holland, left, accepts the Shepard Medal from President Wolfgang Schlager



Edward L. winterer, left, accepts the Shepard Medal from President Wolfgang Schlager

JOURNAL OF SEDIMENTARY RESEARCH, VOL. 70, NO. 6, NOVEMBER, 2000, P. 1349–1359
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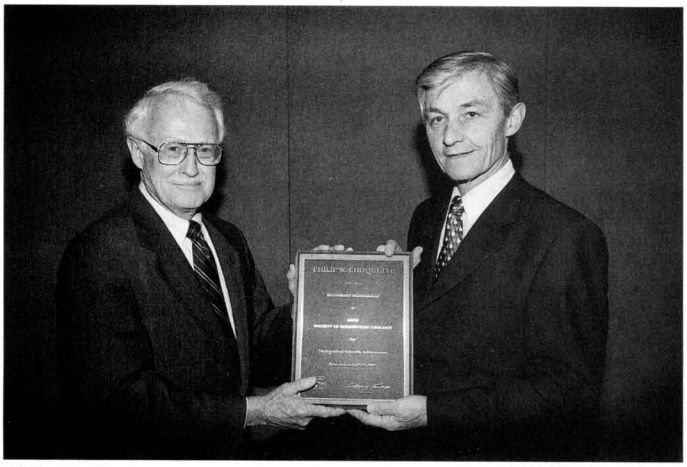
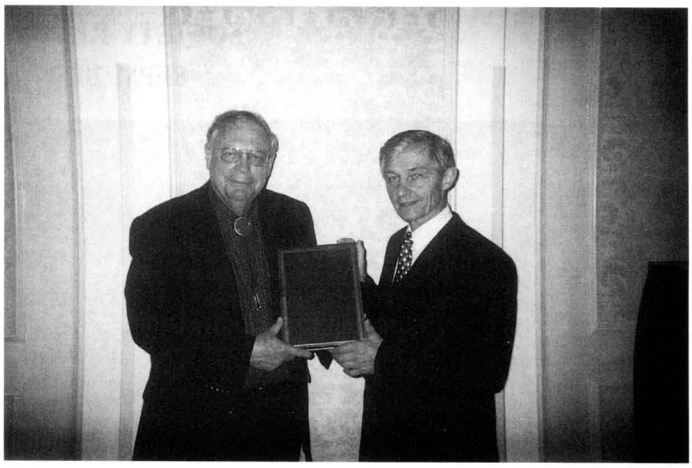
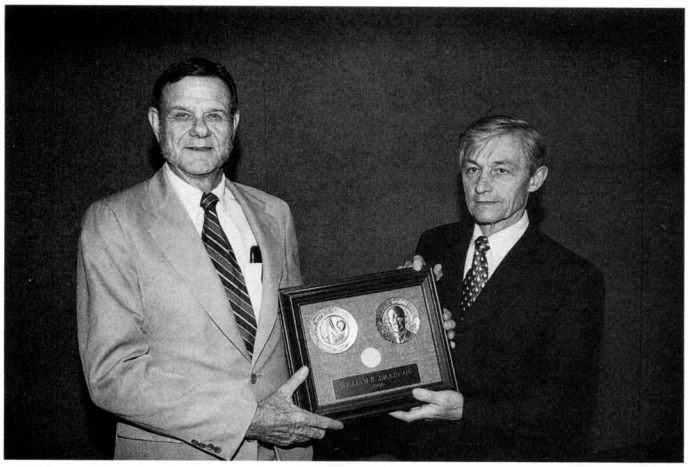


Philip W. Choquette, left, accepts Honorary Membership from President Wolfgang Schlager



William W. Hay accepts Honorary Membership from President Wolfgang Schlager



William R. Dickinson, left, accepts the Twenhofel Medal from President Wolfgang Schlager

Emma Kelley, SEPM Member Services Associate, with President Wolfgang Schlager. Emma retires December 31, 2000 after twenty-two years of loyal and dedicated service to the society.

ANNUAL REPORT OF THE SEPM (SOCIETY FOR SEDIMENTARY GEOLOGY) FOR THE YEAR ENDING AT THE SEVENTY-FOURTH ANNUAL MEETING

The Seventy-fourth Annual Meeting of the SEPM (Society for Sedimentary Geology) was held in New Orleans, Louisiana, 16–19 April 2000, in conjunction with the Annual Convention of the American Association of Petroleum Geologists. The SEPM Research Symposium entitled "25th Anniversary of Seismic Stratigraphy" was organized by A.J. Pulham and A.D. Donovan. Fourteen oral and twenty-two poster sessions were sponsored or cosponsored by the Society.

The Annual Report has been revised to include only the most essential elements: the audited financial statement; membership report; and the biographies, citations, and responses of our award recipients. Information of SEPM Section and Committee activities is posted on the SEPM Home Page at http://www.sepm.org and in the SEPM NEWS where it can be presented to all SEPM members in a more timely fashion.

Outstanding Paper Published in 1998
PALAIOS
"Diatomaceous Sediments from the Miocene Monterey Formation, California: a Lamina-Scale Investigation of Biological, Ecological and Sedimentary Processes"

Alice S. Chang

Biography: A short 27 years ago, Paul and Rosemary Chang welcomed their daughter Alice into this world. Car trips from their family home in Vancouver, British Columbia introduced her to a diversity of landscapes, seascapes and cultures, fueling her early passion for collecting everything, from rocks to bugs to slugs. Alice's interests have matured to a persistent and creative inquisitiveness at the interface of the solid Earth sciences and our living world.

Alice credits two high school science teachers, Ross Apperly and Don Mathewson, for advancing her innate curiosity and for encouraging her to pursue the science program at the University of British Columbia. Alice earned her B. Sc. Degree in geology with First Class Honours, in 1995. Alice passed through our program with smiling good humor, a creative flair, and a rock-solid work ethic. As advisor on her senior thesis, I was privileged to introduce Alice to the intricacies of laminated diatomaceous sediments from the Miocene Monterey Formation. Alice continued this work in our M. Sc. Program and obtained her degree in 1997, producing a first class thesis, one that earned honorable mention from the Canadian Society of Petroleum Geologists and resulted in two published papers. The first paper, published in *PALAIOS* in 1998 is the subject of this award. Alice's second paper was published in the *Journal of Sedimentary Research* in 1999. Alice has recently begun her doctoral studies at Carleton University in Ottawa, under the supervision of Dr. Tim Patterson.

Alice is an excellent example for many of us. Her gentle and humble approach to science is becoming a rarity as professional expectations rise alongside diminishing resources. Far more the sage tortoise than the overconfident hare, Alice links a disciplined work ethic with superior intellectual maturity and expert analytical skills

SEPM Council 2000–2001. *Front Row (left to right)*: Howard E. Harper, Jr., President, SEPM Foundation; Charles E. Savrda, Co-Editor, *Palaios*; Judith Totman Parrish, Councilor for Paleontology; Arnold H. Bouma, President; Mary J. Kraus, Co-Editor, *Journal of Sedimentary Research;*Salvatore J. Mazzullo, Secretary-Treasurer. *Back Row (left to right)*: Daniel Bernoulli, International Councilor; Peter J. McCabe, Councilor for Sedimentology; Dag Nummedal, President-Elect; Robert A. Gastaldo, Co-Editor, *PALAIOS*: David A. Budd, Co-Editor, *Journal of Sedimentary Research. Not pictured:* Robert W. Dalrymple, Editor of Special Publications; John B. Anderson, Councilor for Research Activities.

to address and communicate intricate paleoenvironmental problems. On behalf of our entire Society, we congratulate you most enthusiastically on this outstanding achievement.

Citation: The outstanding accomplishments of Alice Chang's young career provide an inspiring example. Her innate curiosity, resolute perseverance, and creative approaches to science are illuminating fundamental linkages between contemporary dynamism of our home planet and Earth's environmental evolution. We are grateful for the pleasure we find in learning from your outstanding work.

Kurt A. Grimm

Kurt A. Grimm

Biography: Born in Oakland, California, Kurt Grimm grew up in Peoria, Illinois nurtured by parents who instilled a strong work ethic and compassion for others. Awarded a bachelor's degree in geology from Denison University in 1983, he was particularly inspired by biologist Robert Haubrich and geologist Ken Bork, great teachers who fostered his eclectic approach to science. Moving to the University of Wisconsin-Madison for M.Sc. study, he came under the spell of Lloyd Pray and Dave Clark. In the late 1980's he headed west to undertake Ph.D. research at the University of California, Santa Cruz, where his 1992 thesis focused on the sedimentology of phosphorite-bearing biosiliceous deposits in remote regions of Baja California Sur, México. During the Santa Cruz period, he participated as shipboard sedimentologist on Leg 128 of the Ocean Drilling Program in the Japan Sea and also won the "Best Student Paper" Award (co-authored with Karl Föllmi) at the 1990 AAPG Convention for his presentation on "doomed pioneers" (tracemaking organisms displaced into anoxic environments). In 1992, he joined the faculty of the University of British Columbia where he holds the rank of Associate Professor and has acquired Canadian citizenship.

Kurt's research centers on the sedimentology of upwelling systems, and to this topic he brings a formidable array of analytical and intellectual skills. By examining these systems on scales ranging from microns to basins, he is helping us to understand the co-evolution of life and environment and the paleogeographies of ancient upwelling settings, including those in which phosphorites formed. As exemplified by the work on laminated diatomites which has garnered this award, he is a superb observer who "thinks outside the box" in formulating new concepts and in applying new methodologies to the solution of complex problems. This creative spirit extends also to his teaching at UBC where he has introduced innovative new courses on biogenic sediments and Earth system science, along with mentoring a lively and productive group of graduate students, including his co-awardee, Alice Chang. Kurt's activities extend beyond sedimentology to encompass broader concerns for Earth's environment and future, including the well-being of its inhabitants, particularly those in developing nations.

Citation: We honor Kurt A. Grimm for his meticulous observations, creative analyses, and innovative interpretations of sediments deposited in upwelling zones, research that advances our understanding of Earth's continuing evolution. We honor also his efforts to advance the careers of his students, as well as his concern with the future of our planet and the welfare of its populace.

Robert E. Garrison

Lisa D. White

Biography: Lisa D. White is an Associate Professor of Geology at San Francisco State University (SFSU) where she has been a faculty member since 1990. Raised in San Francisco, she graduated from SFSU with a B.A. in geology in 1984. While an undergraduate student at SFSU, she was an intern at the U.S. Geological Survey as part of the Minority Participation in the Earth Sciences program (MPES), a program which she later coordinated from 1988 to 1995. Working with USGS professionals on sedimentology projects in Alaska, New Mexico, and the California Coast Ranges, Lisa developed an interest in micropaleontology and siliceous sediments that led her to pursue graduate studies on the Monterey Formation of California.

In graduate school at University of California at Santa Cruz (UCSC), she was fortunate to work with Dr. Robert Garrison on the chronostratigraphy of middle Miocene quartz chert intervals in the Monterey Formation. While at UCSC, she

continued to work at the USGS as a graduate intern with Dr. John Barron on the application of diatom biostratigraphy to stratigraphic problems in the Monterey Formation. Her expertise in extracting diatom assemblages from dolostone units led to much-improved age recognition of diagenetically-altered intervals. Lisa was the recipient of graduate fellowships from the National Science Foundation, the American Geological Institute, and the University of California. Lisa received her Ph.D. in Earth Sciences from UCSC in 1989.

Since joining the faculty in the Department of Geosciences at SFSU in 1990, Lisa has distinguished herself equally as a teacher, researcher, and mentor as she continues to work and publish on the stratigraphy of siliceous sections around the Pacific Rim. In addition to ongoing work on the Monterey Formation, she has received funding for projects on Oligocene-Miocene siliceous sections in the Far East of Russia (Sakhalin Island), and has participated in two Ocean Drilling Program cruises (Japan Sea and Costa Rica accretionary wedge). She is an active member of both the Pacific Section and the National SEPM, and is a member of the American Geophysical Union, the Geological Society of America, and the National Association of Black Geologists and Geophysicists.

Citation: Dr. Lisa White has been an invaluable member of the San Francisco State University geosciences faculty for the last ten years. Her research on siliceous sediments has greatly improved the correlation of numerous Pacific Rim sections. Active in efforts to diversify the geosciences, Lisa is an outstanding teacher and mentor.

Raymond Sullivan

Outstanding Paper Published in 1998 Journal of Sedimentary Research

"Shelf-to-Basin Facies Distributions and Sequence Stratigraphy of a Steep-Rimmed Carbonate Margin: Capitan Depositional System, McKittrick Canyon, Texas"

Scott W. Tinker

Biography: Scott Tinker is a rare balance of field geologist, exploration geologist, traditional development geologist, advanced 3D modeler, UNIX jockey, and geophysicist. His research and publication record shows an ability to absorb fundamental academic concepts, refine them, and put them to use solving problems and making money for the hydrocarbon industry. The paper he is being honored for here; "Shelf-to-basin facies distributions and sequence stratigraphy of a steep-rimmed carbonate margin: Capitan depositional system, McKittrick Canyon, New Mexico and Texas", is a great example of Scott's ability to use the messages of the field to shed light on the architecture of subsurface stratigraphy and petrophysics.

Scott Tinker grew up in the oil patch the son of a Shell geologist. He attended Trinity University in San Antonio, graduating magna cum laude in 1982 with majors in Geology and Business. His first job out of the University was with Robert M. Sneider Exploration, where he put together regional subsurface plays in the East Texas Basin, and learned about the importance of multidisciplinary teams (1982–1984). Through his father and contacts like Bob Sneider, Scott developed a love of petroleum geology that he has melded with his academic interests. Scott then pursued a Master's from the University of Michigan where his supervisor, James Lee Wilson, instilled in him a love of carbonate geology and field studies, as he worked the Cretaceous La Pena of northern Mexico and its subsurface equivalents in Texas (1983–1985). From here Scott went on to work for Union Pacific Resources (1985–1988) and then on to Marathon Oil Company Technology Center in Littleton where along with Mike Uland (engineer) and Don Caldwell (geophysicist), he helped make Marathon an international leader in 3-D reservoir modeling. In 1991–96, while working full time and juggling a family of four, Scott took on a Ph.D. at the University of Colorado at Boulder under the supervision of Dave Budd. Scott's dissertation on the sequence framework and facies architecture of the north wall of McKittrick Canyon has succeeded in accomplishing a difficult task, making this already famous outcrop even more famous. Since completion of his dissertation, Scott continues to develop his skills as a communicator through teaching university and professional society short courses and field seminars and touring as a 1997–98 AAPG Distinguished Lecturer. And as a famous blues musician once noted, life begins at 40. By the time Scott accepts this award he will be the new director of the Texas Bureau of Economic Geology at the University of Texas in Austin.

Citation: In recognition of his drive to advance his understanding of carbonate sequence stratigraphy and reservoir characterization, and through his infectious enthusiasm, to bring his colleagues and coworkers along with him.

Charles Kerans

STEVEN M. HOLLAND James Lee Wilson Award For Excellence in Sedimentary Geology Research By A Young Scientist

Biography: Steve Holland combines both stratigraphy and paleontology in his work. He regularly publishes in major stratigraphic venues such as *Journal of Sedimentary Research, PALAIOS,* and *Journal of Geology.* But how many sedimentologists/stratigraphers do you know besides Steve Holland who also have published four papers in *Paleobiology,* the leading journal of theory in paleontology?

Steve started early as one of the rising stars of sedimentary geology. As an undergraduate at the University of Cincinnati, he received prestigious scholarships, was Phi Beta Kappa, and graduated summa cum laude. Then he won a National Science Foundation Graduate Fellowship and, with Susan Kidwell as his research supervisor, took his Ph.D. at The University of Chicago. After a year at Ohio State as a Battelle Post-Doctoral Fellow, Steve joined the faculty of the University of Georgia, where in eight years he has been named Department of Geology "Teacher of the Year" five times. Steve has served as Vice-President, President, and Councilor of the Southeastern Section of SEPM and he is a member of the workgroup that prepared the white paper "Paleontological Research in the Next Decade" for N.S.F. and the N.R.C. He has received a Petroleum Research Fund grant and two collaborative grants from the National Science Foundation.

Steve's research has focused on three interconnected issues: (1) sequence stratigraphy of the classic Middle and Upper Ordovician rocks of the Cincinnati Arch, Appalachian Basin, and Nashville Dome; (2) computer models for evaluating the likely effects of sea-level change, facies shifts, and their combined expression in stratigraphic sequences on the occurrence of fossils, especially the times of first and last occurrence of the taxa as compared to the times of origination and extinction; and (3) a series of studies, in collaboration with Mark Patzkowsky at Penn State, on Middle and Upper Ordovician faunas in the context of the sequence stratigraphic patterns seen in the eastern United States. Steve's brilliant sequence stratigraphic analyses have revised and clarified the basic stratigraphic framework of a truly classic suite of fossiliferous rocks, making them an ideal natural laboratory for testing a broad range of stratigraphic, sedimentological, and paleontological theories. His studies with Mark Patzkowsky not only quantitatively document the faunal patterns from these well known and widely studied rocks but are the most thorough and rigorous test bed yet developed for scrutinizing theories about regional community and diversity patterns in the fossil record.

Citation: In 1980 Stephen Jay Gould titled a paper, "The promise of paleobiology as a nomothetic evolutionary science." Nomothetic means something concerned with the study or discovery of scientific laws. Steve Holland is a pioneer in creating a nomothetic discipline our of paleoecology with his artful combination of paleobiology and stratigraphy.

Richard K. Bambach

Response: I am deeply honored to be this year's recipient of the James Lee Wilson Award. This is a wonderful time to be a stratigrapher and a paleontologist because the implications of sequence stratigraphy are only beginning to be realized. To take part in this exciting revolution is reward enough; to be recognized like this is far more than I ever expected.

It is impossible to acknowledge all who have helped me; there are simply too many. I thank my parents, not only for their love and encouragement over the years, but also for their curiosity, which spilled onto me. I also thank my colleagues and students at the University of Georgia who have made it an enjoyable and stimulating environment. There are also four people that I would particularly like to thank, for without them, I would not be standing here today.

I first want to thank Susan Kidwell, my Ph.D. advisor at the University of Chicago. Shortly after arriving at Chicago, I realized that my real interests lay where stratigraphy and paleontology met. In Susan, I found a kindred spirit. After our first few meetings, Susan realized we needed to speak the same language and handed me a three foot stack of books and papers—all the classics in stratigraphy from Barrell, Ulrich and Grabau to Pitman, Read and Vail. I was immediately hooked. I thank her for this and all of her help and advice over the years.

If we can have intellectual parents, Arnie Miller is surely my intellectual older brother. Besides bringing a perceptive insight and an inventive approach to science, Arnie has shared with me a deep understanding of many things, not just of science but of life.

I am especially grateful that Mark Patzkowsky and I shared an office at the University of Chicago. In a program well known for its theoretical approach, Mark shared my perspectives on the importance of fieldwork. I'm not sure how we were ever able to finish our dissertations. Our office was filled with a perpetual stream of ideas and discussions, and they have continued ever since. I've shared more hot,

muggy, tick-infested days in the field with Mark than I can remember. I've shared even more exciting days of discovery with him and I hope for many more. Finally, I want to thank Tish Yager for her love and for bringing meaning to everything.

ROBERT E. GARRISON
Francis J. Pettijohn Medalist
For Excellence in Sedimentology

Biography: Bob Garrison's distinguished career includes a major emphasis in teaching us how to interpret the rock record of pelagic and hemipelagic sediments. He completed his bachelors and master's degree at Stanford University. His initial major scientific contribution, his Ph.D. research at Princeton University, illustrated in admirable fashion the sedimentary facies of pelagic deposits on all scales from their ultrastructure to the depositional geometry of large submarine slides. His early papers are a forceful exercise in comparative sedimentology, equating Alpine pelagic sediments with deep oceanic deposits, confirming the visionary views of the 19th century geologists including Edward Suess, and anticipating the results of the later Deep Sea Drilling Project. He also showed that pelagic oozes, under conditions of slow deposition, could lithify on the sea floor, a notion that at the time was in contrast with conventional wisdom. In addition, he showed that the intimate relationship between oceanic basalts and cherts was not genetic, but that pelagic deposits were biogenic and unrelated to volcanic activity. This research naturally prepared Bob for engagement in DSDP and ODP where he has been one of the most important contributors both as a shipboard scientist and as a panelist.

Bob Garrison has also made major contributions in the study of organic-rich, siliceous, and phosphatic rocks. Much of his and his students' work has focused on the Monterey Formation of California, the classic example of this type of deposit. His work has tied these rocks, and circum-Pacific equivalents, to active upwelling systems leading to a better understanding of resource accumulation and paleoclimatology. Bob Garrison has been a pioneer in linking these traditional sedimentary interpretations and past and present ocean processes.

Exemplary formal courses and supervision of a large number of productive graduate students amplify Bob Garrison's research contributions. His research has been fertile training grounds for more than 30 masters and Ph.D. students. Bob has been especially effective in mentoring minority students and has taught short courses for professional geologists in the third world.

Numerous awards recognize Bob Garrison's professional accomplishments. He is a Guggenheim and a Fulbright Fellow, a Fellow of the AAAS and GSA, and Past President of the SEPM Pacific Section, and now, fittingly, Pettijohn Medalist. No description of Bob Garrison is complete without noting his extraordinary personal integrity. He is an unusually decent, caring individual. This is apparent in his great concern for colleagues and for students, in his interest in professional development in third-world nations, and in his scrupulously honest and ethical personal and professional conduct. Accordingly we wish him the best during many years of continuing productive activity as a scientist and as an outstanding human being.

Citation: In recognition of Bob Garrison's distinguished career The Society for Sedimentary Geology awards Pettijohn Medal for excellence in the study of pelagic and hemipelagic sediments, for the mentoring of legions of students, and for setting an example as a fine human being.

Casey Moore and Daniel Bernoulli

Response: My sincere thanks to the SEPM and to my nominators for this recognition, which also honors one of the century's greatest sedimentary geologists, the late Francis J. Pettijohn. A combination of lucky curiosity and fortunate opportunities marks my journey to this point. The luck of an adolescence nurtured by loving and patient parents on the western fringes of Dallas led me to an infatuation with the natural world of the forested creeks, birds, snakes, and chalk outcrops of that then sparsely populated area. Three extraordinary mentors gave me the opportunities to grow and learn: Bob Compton at Stanford, Aaron Waters at Santa Cruz, and Al Fischer at Princeton. The good fortune of arriving at Princeton at the birth of plate tectonics was paired there with a global view of geology and with a sense of high integrity provided by Al, Franklyn Van Houten, Hollis Hedberg, and Harry Hess; from them I learned that great scientists could also be great spirited people. A Fulbright Fellowship provided the opportunity to first encounter the Alps, and, on a lucky day in Innsbruck, to first glimpse my wife, Jan, across a crowded restaurant. The pillar of my life, she along with my son James created a loving haven and home for our family and for numerous visiting colleagues and especially for students. The latter, as every teacher knows, are the real joy of an academic life, and my great good fortune has been to work with and learn from a succession of talented young people who are also splendid human beings.

Good colleagues are an additional reward of a scholarly life, and I have had some of the best, at Santa Cruz and elsewhere. At a young age, I was given the opportunity to travel and live in Europe where lasting friendships developed and where I encountered different perspectives on life and geology. The mobilist views of the great Alpine geologists contrasted with the static emphasis of my North American education up to that point and guided me to interests in the Mesozoic pelagic facies of deeply subsided Tethyan basins, a path subsequently encouraged by Al Fischer, himself strongly influenced by the large vision of earlier European geologists. Later opportunities to follow these interests came via support from the Deep Sea Drilling Project/Ocean Drilling Program, the Guggenheim Foundation, the Petroleum Research Fund, and the National Science Foundation. Though my opportunities were in large measure a product of luck, they depended also upon the financial backing of diverse institutions, including those mentioned above. Future generations will stumble upon their own forms of luck, but they will still need the funds to pursue their scientific passions. What we owe them is the maintenance and growth of varied forms of support, including support from our own SEPM. I am very proud to be a member of this organization and deeply honored to be recognized by it in this fashion.

WILLIAM A. BERGGREN
Raymond C. Moore Medalist
For Excellence in Paleontology

Biography: William A. (Bill) Berggren is being honored by the SEPM with the Society's Raymond C. Moore Paleontology Medal. Bill was born in New York City and attended Fordham Preparatory School and Dickinson College, a liberal arts school in pastoral southeastern Pennsylvania. After earning a Masters degree at the University of Houston, he completed a Ph.D. at the University of Stockholm, a postdoctoral year at Princeton University, and a three-year stint as a research paleontologist with Oasis Oil Company in Libya. Bill began his research at the Woods Hole Oceanographic Institution in 1965; he became a Senior Scientist in 1971, continuing to his recent retirement and appointment as Emeritus Senior Scientist. In addition, he served as an Adjunct Professor at Brown University, from 1968–1993 commuting to Providence, Rhode Island, to spread the gospel of Cenozoic foraminifera. He has been an Adjunct Docent at the University of Stockholm for 30 years, a Research Associate of the American Museum of Natural History (New York), and a visiting professor at Madras University (India) and Universite Claude Bernard (Lyon, France). In 1989, he was elected to the U.S. National Academy of Sciences. He is a Fellow of the Geological Society of America, an Honorary Fellow of the Geological Society of London, recipient of the Mary Clark Thompson Medal, a member of the U.S.–U.S.S.R. cultural exchange programs (1962, 1998), and a Visiting Scholar to the People's Republic of China. Bill served as Editor of the *Journal of Paleontology* (1980–1985) and as a member of the Interim Council that founded the North American Micropaleontology Section of SEPM (NAMS) in 1977 and served as President from 1980–81.

Bill's early scientific career established him as an authority on Paleogene planktonic foraminifera. He was one of the pioneers of the Deep-Sea Drilling Project and one of the founding fathers of paleoceanography. However, he is best known for his work on geological time scales, publishing the first detailed Cenozoic geological time scale in 1971 and the first truly integrated magnetobiostratigraphic time scale in 1985. Bill's trademark continues to be his international connections. After a career of scientific globetrotting that included opening of Russian and Polish micropaleontology to the west, he splits his time between France and Woods Hole. Don't expect Bill to slow down after retirement: if you see a bearded scientist running through an airport flailing boxes of scientific documents, it is probably Bill Berggren on his next quest to visit outcrops and labs throughout the world.

Citation: We recognize William A. ''Bill'' Berggren for his contributions to our understanding of ''deep time.'' Bill has made major contributions to our understanding of planktonic foraminiferal biostratigraphy, paleoceanography, and stratigraphy. However, Bill is best known as the ''Dean'' of Cenozoic times scales, providing science with precise and testable geological boundaries.

Kenneth G. Miller

Response: President Schlager, Members of the Moore Medal Committee, ladies and gentlemen: On these occasions protocol calls for a response to the citation in which the honoree traditionally recounts and acknowledges all the major influences on his/her professional career, or offers thoughtful views and/or predictions on current and future directions of research in his/her field. This time around I thought I would take the liberty of acknowledging my debt and gratitude to SEPM for the honor bestowed upon me in a different manner. I propose to do so using the view that evolution is a bush and has proceeded by means of a series of speciation, or branching, events as a metaphor for enumerating the key branching points at which decisions were made that led to the next step in my professional growth. I think that the path we choose in life consists of many important branching points and the

forks we choose often have important consequences for subsequent contingencies. The purpose of this exercise is not to reiterate the main accomplishments in the course of my scientific career; that has more than adequately and graciously been expressed by the biography and citation accompanying the award of the Raymond C. Moore medal.

A product of the somewhat less than admirable public school system of New York City in the 1930s and 1940s, high school presented itself as an important choice: to proceed on through the public school system or to attend a private school. The good Jesuits at Fordham Prep in NYC provided a rigorous classical education for this nominal Presbyterian and a respect for learning tempered with a strict discipline.

Having achieved a degree of notoriety as a long-distance runner while at Fordham I was offered a track scholarship to Yale University by Bob Giegengack, its coach and formerly coach at Fordham Prep. My father thought it over and decided that I would be better off at a small college than lost among the throng at a big university! A short time later I was off to Carlisle, PA and 4 years at Dickinson College in the heart of the Valley and Ridge Province of the Appalachians. In retrospect I wonder whether my career choice might have been different had I attended Yale. However, I might have come in contact with the greats of the Yale geology department, John Rogers, Carl Dunbar, Richard Foster Flint, and others, and thus become interested in geology anyway.

During my sophomore year (1950), however, a seminal event occurred which sent me on the course of my professional life. I began (and ended) as a Philosophy Major but took a course in Geology from the one-man Geology Department Col. John Embich (formerly a student of Coryell at Columbia University) who infused his lectures with the animistic philosophy of Spinoza and the enthusiasm of a child. Embich showed me the fascinating shapes of foraminifera in a microscope. I was hooked and decided that, while philosophy was an interesting subject, I could not see myself as an incarnation of the peripatetic philosophers of the Stoa dispensing wisdom to the young men of Athens. I had found a direction.

As it turned out I was accepted in the MSc program at Cornell University on a Goldwin Smith Fellowship. At Cornell I fell under the influence of John West Wells (who had the most prodigious memory I have ever encountered) and W. Storrs Cole (who advised me at one time that if I wanted to make a mark in science I should choose a topic that no one else had tackled and become the expert in that field). At the end of a year in which I struggled with trying to apply the stereonet to three dimensional problems in Charles Merrick Nevin's class in Structural Geology, among other problems, I was growing weary. Cole had suggested that as a master's thesis topic I might want to look at the (undescribed) ostracode fauna of the mid-Devonian Enfield Shale. No, I really did not fancy that and I decided that I needed some fresh air in the form of experience/work elsewhere. And so I departed for Houston, Texas in 1953.

I worked a year in the Texas oilfields for Core Labs Inc. I began to think of returning to Graduate School. I sought out Carey Croneis (formerly Provost at the University of Chicago) recently appointed Provost at Rice University, who informed me that Rice was not yet in a position to offer courses in stratigraphy and (micro)paleontology and who advised me to see his friend Henryk B. Stenzel, newly appointed chairman of the Geology Department at the University of Houston. I prepared an MSc thesis on middle Eocene opisthobranch gastropods of the Stone City Formation (middle Eocene) under his guidance and that of Reginald Wright Barker, Shell Oil Company (foraminiferal) micropaleontologist.

Returning to Sweden from the recent (1956) International Geological Congress in Mexico, Fritz Brotzen, micropaleontologist with the Swedish Geological Survey stopped by Shell Oil Company Labs in Bellaire, Texas. I was working there on modern and late Neogene benthic foraminiferal faunas and biofacies of the Gulf of Mexico in Barney Barnard's laboratory to support myself during my graduate studies. Brotzen mentioned that Ivar Hessland was looking for good foreign graduate students at the University of Stockholm. The opportunity of returning to the roots of my family and pursue an advanced degree in geology in Europe took hold of my imagination and in August 1957 I sailed on the Gripsholm to Göteborg. I set about adapting to my new life as an Amanuens in the Institute of Historical Geology, which brought with it the munificent sum of 500 Swedish crowns a month (about $100)!

Professor Ivar Hessland, chair in Historical Geology at Stockholm suggested as a thesis topic the ostracodes of the type Danian Stage. I labored intensively in search of the little beasts concluding eventually that their rarity was a reflection of the fact that they were not eager to make a comeback after whatever event had occurred/decimated them at the Cretaceous/Paleogene boundary! But I came across small, globular microscopic objects which I recognized as planktonic foraminifera. With the recent publication of the "Bible", alias USNM Bulletin 215 by Hans Bolli, Al Loeblich and Helen Tappan, I soon realized that these organisms had great potential in biostratigraphy and set about understanding these small forms with the deceptively simple morphology.

As my thesis research drew to a close I faced the need of doing taxonomic work on my collections at the Smithsonian Institution. Once again Hessland came to my aid with an invitation from his friend Hollis D. Hedberg, recently appointed Professor of Stratigraphy and Petroleum Geology at Princeton University. Hedberg came to serve as the major mentor/influence on my further development and maturation as a geoscientist.

While at Princeton I was accepted into the Soviet-American Cultural Exchange Program which was to permit me to spend 6 months at the University of Moscow pursuing my research on Paleogene planktonic foraminiferal biostratigraphy. Having defended my DSc thesis in the late spring of 1962, I set off for Moscow in June. During my 6 months stay in the Soviet Union I worked extensively at the Geological Institute of the Soviet Academy of Sciences and I managed to do several weeks of field work collecting the shallow water Paleogene sections of the Crimea near Bakhchissaray followed by another three weeks traversing the northern Caucasus in Soviet military vehicles collecting the Cretaceous and Paleogene of the deeper water foreland facies. My experiences in the FSU were to have an important impact on the remainder of my career as I have attempted to amalgamate and reconcile taxonomic concepts of Paleogene planktonic foraminifera there with those in western literature.

When I completed my DSc studies in Stockholm I found myself in a situation not unlike that of many other new graduates: penniless and prospectless. I readily accepted a job offer with the Oasis Oil Company in Libya, and with the Soviet Union visit behind me, I traversed with my family an essentially frozen Europe by car in the fearsomely cold January of 1963. Three years in Libya restored the color to my skin, my sagging fortunes, and introduced me to Mediterranean Cenozoic stratigraphy. But I began to realize that a life in industry was not for me. Opportunity came in the form of an offer to establish a program in oceanic micropaleontology at Woods Hole in 1965. This essentially made possible the various achievements in my academic scientific career for which I am being honored tonight with the Raymond C. Moore medal. The plate tectonics and sea floor spreading "paradigm" was in the air in those halcyon days of 1965; integrated bio-magneto-radioisotopic-stratigraphy were around the corner and stable isotope stratigraphy not far down the line. All the ingredients that were needed for an integrated geochronology were falling into place.

Our scientific careers sometimes exact a toll on our personal lives. In my case it resulted in divorce in 1981. However, I had met a person who was to bring new meaning to my life and who has since become my closest friend, confident and severest critic. Together we have been fortunate enough to share our passion for travel, natural history and philosophy and science in the form of joint research projects and publications for the past 18 years. The branching choice was easy this time and Marie-Pierre Aubry and I were married in 1982.

When WHOI offered an early retirement package in the early 1990s to senior staff members I considered it seriously as it provided an opportunity to continue my research and to devote more time to furthering the scientific career of my wife, which, in turn, required frequent trips to her native France. I realized that this would require that we spend essentially half time on Cape Cod and the other half in Provence—the land of lavendar, olive oil, intense blue skies and Peter Mayle. It was a difficult choice to make but then someone has to make the larger sacrifices in life.

In retrospect I see that Embich had started me off and nurtured my curiosity; Stenzel had made me a paleontologist; Hessland had encouraged my independence; and Hedberg had made me a stratigrapher. I trust this little journey down the branching forks of my "yellow brick road" has not been too tiring. It is the odyssey of one human being. I invite you to sit back and (re)think your own private branching odyssey through life.

History in a sense has come full circle: SEPM was founded in 1927 as a by product of an attempt to provide an outlet separate from the AAPG Bulletin for publications in micropaleontology. The Journal of Paleontology was born the same year through the efforts of, among others, Henry V. Howe, Jesse James Galloway, Helen Jeanne Plummer, and the famous triumvirate of pioneering women micropaleontologists: Esther Applin, Alva Ellisor and Hedwig Kniker, together with the patron saint of paleontology, Raymond C. Moore. Joseph A. Cushman was the first editor. In honoring me tonight with the Moore Medal in Paleontology SEPM has returned to its roots. What better way to start the new millennium. To me this award is a recognition that bigger is not necessarily better; that important ideas and advances in the earth sciences can be realized with the smallest of objects—the foraminifera. Well, almost the smallest. The calcareous nannoplankton are even smaller. But that is another story. Micropaleontology lives! Thank you all once again.

EDWARD L. WINTERER
Francis P. Shepard Medalist
For Excellence in Marine Geology

Biography: Jerry Winterer came to UCLA from Pomona College with highest recommendation from Woodford. Superstars at UCLA included Gilluly, Bramlette,

Griggs and Tunnel. Jerry, whose mentor was Bramlette, chose as the focus of his dissertation the sedimentary deposits of Ventura Basin. He showed these to include turbidites, and reconstructed changing paleobathymetry on the basis of the crossings of depth-significant microfaunal correlations with turbidite beds.

After Bramlette went to Scripps, Jerry joined the UCLA faculty and was called later to Scripps. There he lived his belief that to understand the processes of geologic evolution, gazing at a twelve-inch globe, then a popular approach, is inadequate. One has also to go into the great mountain ranges of the world. Jerry does both; he is as adapt at field mapping as he is at surveying for oceanic fractures. He devoted a lifetime to keep marine geology a branch of geology.

Jerry was not only a brilliant scientist, but also a science statesman. He is my candidate for "Mr. JOIDES." He was for nearly two decades a member or chairman of many JOIDES panels and of the Planning Committee. His hand in steering the program in the right directions cannot be over-emphasized. Jerry led numerous oceanographic expeditions and was co-chief scientist of 6 JOIDES legs. The Pacific Ocean is his "backyard", but he did not neglect the Atlantic, coming thrice to drill the West African and the Iberian margins.

When Jerry was not at sea he went to the mountains. He used his knowledge of the Recent as the key to inspire European scientists in efforts to understand ancient pelagic sediments of the Alps. His paper with Bosellini on pelagic limestone and radiolarite of the Tethyan Mesozoic is a citation classic. He worked with Jenkyns on radiolarian chert, and with Sarti on neptunian dikes. His greatest contributions lie in Pacific geology. With his work on oceanic plateaus and guyots, he helped transform the older, too-simple postulate of a Darwin Rise. With Purdy, he corrected Darwin's misunderstandings about atolls with an improved theory on the origin of lagoons. He amplified and greatly modified Hess' ideas on the origin and subsidence of guyots. His work on Pacific geology will be a monument for years to come.

Jerry was demanding, and some students were scared of him. Jerry and I were always the best of friends, and he was one of the kindest and most thoughtful persons known to me. Our good friend Sy Schlanger used to say "Oh, Jerry is all right, if he only takes off his gorilla suit". He was uncompromising in his principles, and he did not suffer fools. Eventually we all know Jerry. When he danced in his rented gorilla suit at a party "celebrating" his retirement, we were no longer scared. Instead, everyone laughed.

A tribute to Jerry is incomplete without reference to Mrs. Winterer, Jacqueline Mammerickx, a distinguished geologist on her own merit. She has been a great companion both professionally and at home.

Citation: In recognition of his great contributions to Pacific geology, to geology of passive continental margins, and Tethyan geology, and of his scientific leadership in the JOIDES ocean drilling programs, the Society of Sedimentary Geology awards Edward L. (Jerry) Winterer the Francis Shepard Medal for Distinction in Marine Geology.

Ken Hsü

Response: I thank Ken Hsü for his flattering comments, and the Society for its generosity in conferring on me this medal, which memorializes my Scripps colleague Francis Shepard, a near legendary figure in our science.

It is not merely traditional but entirely fitting that I recognize those that most influenced me in my professional life, starting with my father, who was a petroleum geologist and took me, still a boy, to tramp the California hills while he did field mapping. I carried the samples and watched and listened to him, enthralled.

On his advice, I went to study with A.O. Woodford at Pomona, the most gifted teacher I ever met. He taught me not only to look searchingly at rocks, but to try to think critically about what I saw. It took me weeks of looking and drawing to persuade him that I knew how and why everything fitted together in my hand specimen of granite. Later, at UCLA, I was privileged to work as an assistant both to Jim Gilluly, who encouraged all of us to question everything we read or heard, and to Dave Griggs, who insisted we be quantitative.

Then I met M.N. Bramlette, who became my true mentor. I had to learn to read Bram's cryptic remarks and gestures, for he was not at all discursive. I tried to emulate his approach to science, which seemed to me to include, besides close observation, the following of sometimes ill formed but exciting hunches with rigorous testing, tossing whatever failed.

An essential part of our education, for all of us here, is what we learn from our fellow graduate students—the ones with us in the trenches—and from our own students. I was lucky to have fellow students like Ken Hsü and Warren Hamilton and students like Jim Ogg and Jock Keene. My generous coauthors, including Wolf Berger, Alfonso Bosellini, Hugh Jenkyns, Tom Shipley, Massimo Sarti and Ed Purdy have been unstinting in their efforts to teach me. None of these people is responsible for my record as a flagrant geological dilettante: it must relate to a short attention span.

Through the decades, my cherished wife Jacqueline, who managed to make her own distinguished career in marine geomorphology while raising our children, has given me her unflagging support.

WILLIAM W. HAY
SEPM Honorary Membership

Biography: I have known Bill Hay since 1983, when I was an undergraduate in geology at the University of Colorado. Bill was subsequently my graduate advisor, and has been my mentor and friend for seventeen years. Together we have developed computer-modeling techniques to reconstruct paleobathymetry, paleotopography, paleogeology, and the global mass-balance of Phanerozoic sediments. His ideas on global sediment flux, the carbon cycle, hydrologic cycle, and the fundamental rules governing ocean and atmosphere circulation through time have been an inspiration to me and many others. Bill has all of the attributes of a premier international scientist. He is extremely creative, intuitive, and intelligent. He is adaptable to new situations, eager to share his ideas and certainly willing to listen and learn from others.

After finishing his Ph.D. at Stanford, and postdoctoral study in Basel, Bill became a professor at the University of Illinois, where he built his career as a renowned micropaleontologist. In 1968, he became a joint Professor of Geology, University of Illinois and Professor of Marine Geology and Geophysics at the Rosenstiel School of Marine and Atmospheric Sciences in Miami. In the 1970s, Bill investigated global scale problems in paleoceanography and plate tectonics. He published a number of important papers describing global sediment mass-balance and began examining evidence for climatic change in the stratigraphic record. He also served as Dean of the Rosenstiel School from 1976–1980.

Bill's involvement with ocean drilling goes back to the beginning of his career. He was involved with Joint Oceanographic Institutions for Deep Earth Sampling and served on a variety of Deep Sea Drilling Project advisory panels. He participated in Deep Sea Drilling Project Legs 4, 15, and 75, and was co-chief scientist on Leg 75. Bill was also responsible for the establishment of Joint Oceanographic Institutions, Inc. He served on ODP Advisory Panels, Workshops, Committees, Planning Groups, National Science Foundation Panels, and was Chairman of the National Academy of Sciences/National Research Council's Continental Scientific Drilling Committee. He is currently Head of the JOIDES Office, and Professor of Paleoceanology in Kiel.

Bill's extensive record of leadership in ocean drilling, paleoceanography, paleoclimate, and plate tectonics is complemented by more than 230 papers, 350 abstracts, and seven edited books. He has served on more than 30 scientific committees, 24 consortia, 36 national, government, and international organizations, organized 20 international meetings, been an editor for six journals, and taught full-time. Bill Hay is an exemplary scientist who through his generosity, patience, and skillful guidance, has helped launch the careers of many geoscientists and current leaders in Earth Science.

Citation: To William H. Hay, in recognition of extraordinary contributions to the understanding of fundamental concepts in micropaleontology, paleoceanography, plate tectonics, global sediment flux, and paleoclimatology, a role model and inspiration for a lifetime of mentoring students and collaboration with colleagues, and for leading in the establishment of international scientific ocean drilling programs.

Christopher N. Wold

Response: I am very pleased to have been elected to honorary membership in SEPM. I appreciate all the kind remarks Chris Wold made about me, but in reality most of the credit for the things I have supposedly done goes to a fine group of graduate and undergraduate students, who worked with me at the Universities of Illinois, Miami, Colorado, and Kiel over the past 40 years. They were willing to venture into new fields of investigation which were untested and uncertain of success. One of them, John Steinmetz, who is currently Head of the Indiana Geological Survey, recently told me that his MS thesis at Illinois, on the ultrastructure of the shells of serpulid worms, had never been checked out, making it one of the best kept secrets in paleontology. Others made contributions which were immediately recognized. If you ask any of my former students, you will probably learn that I offered very little help in solving their problems other than to give encouragement. This was usually because I didn't know how to solve the problem, but believed that they would figure it out—and most of them did! So—thanks to all the students who helped me make a wonderful odyssey through paleontology, sedimentary geology, plate tectonics, paleoceanography and paleoclimatology.

PHILIP W. CHOQUETTE
SEPM Honorary Membership

Biography: Raised in the up-state New York community where his father was a professor at Colgate University, Phil Choquette "cut his undergraduate geologic

teeth'' at Allegheny College, PA., receiving in 1952 his B.S. with Honors and a ''Certificat d'Etudes'' in Geology at the Institute Catholique de Paris, France (senior year). Graduate geology studies (with a chemistry minor) at Johns Hopkins University resulted in his 1954 M.A. and in 1957 his Ph.D. with Phi Beta Kappa honors. Phil's doctoral research, under Ernst Cloos and Aaron Waters, concerned deformation and petrology of metamorphosed carbonates in the Maryland Piedmont. However, his first (1955) published article was on the State College, PA., deformed siliceous oolite, encouraged by his early mentor, Francis Pettijohn. This provided a foretaste of his career fascination with diagenesis of sedimentary carbonates.

Phil Choquette's perspectives have long been important to SEPM. He was Councilor for Sedimentology (1981–83), an Associate Editor of JSP from 1973–84, and during the last two decades has served on nearly all SEPM standing committees. He has co-organized carbonate research conferences and technical programs for SEPM and other geologic organizations.

In 1959, after two years of fieldwork for the USGS, Phil joined the Denver Research Center of the Ohio Oil Company (now Marathon Oil). There for the next 28 years he was a vital contributor to its carbonate research program and to its North American and international technical service projects. These provided Phil broad experience with a wide variety of ancient and modern carbonate facies and their diagenetic complexities. He was among the pioneers applying stable isotope analysis to interpretation of carbonate diagenesis. In the 1970's and 1980's Phil's creative and collaborative talents resulted in four extensively cited and reprinted articles. These are the AAPG article (Choquette and Pray, 1970) on classification, nomenclature and interpretation of porosity; and three syntheses in collaboration with Noel James (Canadian Geoscience 1983, 1984, 1987) summarizing the environments, processes and products of limestone diagenesis. Phil's editing talents were instrumental in producing two books: *Carbonate Petroleum Reservoirs* (Roehl and Choquette, eds., 1985) and *Paleokarst* (James and Choquette, eds., 1988). Since Phil's 1986 Marathon retirement, he has continued his quest for diagenetic understanding, especially of dolomite cements, partly through collaboration with staff and students at SUNY Stony Brook and Colorado University.

Throughout his life, Phil Choquette has had a severe speech impediment. Despite this handicap, he has managed to communicate his valuable insights on carbonate sedimentology. All along the way, Phil has openly shared his views in one-on-one friendly intercommunication with his fellow scientists. Beyond his scientific contributions, Phil is a warm and caring individual for his family, his friends and his community. Surprisingly, he is also a talented vocal artist, singing for many years as a soloist and in choral groups. Phil Choquette's many friends and admirers join us in celebrating his well-deserved award of SEPM Honorary Membership.

Citation: For career-long contributions to the science of limestone and dolomite sedimentary through focussed research, for exemplary services to SEPM over a score of years, and for widespread support of many other geologists along the way.

Lloyd C. Pray and Dexter H. Craig

Response: Thank you, SEPM and the friends who championed this award. I am deeply honored to be joining a company that includes many of the great contributors to our science. It's a great privilege to be taking a place among you—including friends here this evening.

This is a perfect occasion to acknowledge a veritable constellation of people who strongly influenced my career in this most rewarding of all the sciences. Two men not widely known in our science, William Parsons at Allegheny College and John Woodruff at Colgate, persuaded me (though unknowingly) to set aside journalism and English-language literature as undergraduate majors and choose instead the premier science of Earth—unquestionably the ideal road. Two other men widely known in France in the mid-twentieth century—a generalist named Albert de Lapparent and a petrologist, Piette Bordet—taught me in a company of French-speaking students in Paris during the early 50's, and opening more doors to our science as well as leaving me with a two-language vocabulary of geology that still surfaces occasionally!

Johns Hopkins was in the 1950's (and still appears to be) a heady place to acquire a graduate education in geology. Ernst Cloos, a gentle giant of a man and a dedicated field geologist who chaired Geology then, made scholarships and assistantships available, and taught me a style of structural geology less widely practiced since the advent of world-scale plate tectonics but no less valuable. Francis Pettijohn, a superb teacher who proved to be one of the fathers of modern sedimentary geology, encouraged my efforts from the start at Hopkins, helped me land two jobs, and in retrospect is centrally responsible for my becoming—after a doctoral byroad through a fascinating set of amphibolite-grade metamorphosed carbonates, followed by excellent field-mapping experience with the USGS—an enthusiastic student of carbonate sediments and rocks. Another superb teacher, Aaron Waters, first-rank vulcanologist/igneous and metamorphic petrologist, championed me and co-directed my doctoral research. Whatever success I enjoyed as a field geologist I owed initially to those three mentors.

My 28 years as a staff scientist in Marathon Oil Company's lab were the premier years of my career, truly exciting and productive years that enriched my life immeasurably. I took part there in a period of tremendous growth of fundamental knowledge about sedimentary carbonates, starting in the 1950's, in association first with Lloyd Pray, John Wray and Alan Horowitz. Don Baker, John Harms, Chuck Hewitt, Dave MacKenzie and Don McCubbin rounded out the ''original fifties'' members of the research staff assembled and ably directed by Dana Russell. The Lab's carbonate group was joined in the 60's by Harry Cook and Dexter Craig, and by Bill Meyers, Mike Brady, Randy Steinen, Paul McDaniel and numerous other talented geologists who ''graduated'' to academia and elsewhere. The following two decades in Marathon saw the Lab's emphasis shift strongly into technical-service projects involving carbonate geology worldwide, in most of which I was a very active participant. My interest in things diagenetic and especially dolomitic continued however and became increasingly productive.

Among many longtime friends and much-appreciated colleagues, I must close by acknowledging just a few: Lloyd Pray for mentorship in the early Marathon years and long friendship since; Dexter Craig for great personal integrity and many collaborations that have enriched my life; Noel James for those wonderfully productive collaborations; Perry Roehl for labors together that produced a solid ''casebook'' with Springer-Verlag; John Harms for his exceptional generalist abilities and friendship; and Robin Bathurst, David Budd and Bob Ginsburg for many things. There are many more of you but regrettably I must soon end this. You know . . .

Last in these acknowledgements, but of central importance to me, have been my wife Jean, a talented, brilliant and steadfast companion for 40 years, and my now-adult children Steve and Janine who have enriched our lives again, this time with five energetic young grandchildren—the crown of later years. . . Thank you, all of you, from the bottom of my heart!

WILLIAM R. DICKENSON
Twenhofel Medalist
For Excellence in Sedimentary Geology

Biography: The name of William R. Dickinson is woven inextricably into the fabric of sedimentation and plate tectonics, a discipline greatly enriched by his intellectual drive. Aware of the potential contribution of sedimentary petrology to understanding the new global tectonics, Bill pioneered several techniques that apply sedimentary rocks to interpretation of plate tectonics; perhaps most widely known is the system of ternary plots for interpreting plate tectonic setting from sandstone composition. Through his numerous publications, and by mentoring approximately 85 M.S. and Ph.D. students over nearly 40 years, Bill Dickinson has contributed almost beyond calculation to the body of modern knowledge in the field of tectonics and sedimentation.

Several intellectual and conceptual milestones during his career significantly advanced the role of sedimentary geology in tectonic analysis. Each of these advanced the role of sedimentary geology in tectonic analysis. Each of these advances stemmed from fieldwork at many localities along the Pacific. Notable insights include an interpretive approach to feldspathic and lithic sandstone composition that sprang from observations made in active and ancient volcanic settings, a sedimentary basin classification based on plate setting and derived from appraisal of actualistic tectonic processes, and plate-tectonic approach to sandstone provenance. Through his prolific research and writing, Bill has also contributed substantively to our knowledge of both the Phanerozoic tectonic evolution of the North American Cordillera and to the geoarcheology of the South Pacific as understood from sand temper in prehistoric ceramics.

Bill Dickinson is no stranger to service in support of the geologic sciences. He has participated in over 65 topical symposia as either speaker or convenor, participated in and chaired several panels for the National Research Council, and been general chair for several meetings of the Geological Society of America. He has served as Vice-President of SEPM and President of GSA. He has received the Penrose Medal from the Geological Society of America (1991) and the Sloss Award from GSA's Sedimentary Geology Division (1999). The Twenhofel Medal is an esteemed and deserved addition to this list of accomplishments.

Born in Nashville, Tennessee, Bill received all of his degrees from Stanford University: a B.S. in Petroleum Engineering (1952), M.S. and Ph.D. in Geology (1956, 1958). He served in the U.S. Air Force from 1952–1954. His professional university career began in 1958, also at Stanford, where he advanced to the rank of Professor of Geology in 1968. He took a faculty position at the University of Arizona in 1979, and served as Chair of the Department of Geosciences from 1986 until his advancement to Emeritus Professor in 1991. Bill now aggressively pursues retirement in Tucson, Arizona, where he lives with his wife, Jacqueline (Jackie) Dickinson, a constant companion and inspiration.

Citation: Recognizing contributions of extraordinary depth and breadth to sedimentary geology and plate tectonics; an uncanny vision of the multidisciplinary application of sedimentary geology within the broader field of the geological sciences; a career of service to the discipline; and long-term critical yet inspirational guidance to his students.

Timothy F. Lawton

Response: To have my name added to the list of Twenhofel Medalists, so many of them inspirational to me over the years, is like living a dream. Even the name Twenhofel invokes awe for me, for his pacesetting *Treatise on Sedimentation* was perhaps the first book on sedimentary geology that I tried as a student to digest and absorb. It is hard to appreciate in retrospect just how much his leadership meant to our field.

To receive the premier medal of SEPM is also a very special treat, for it was by contributing to field trip guides of the Pacific Section that I first learned there was a potential audience for my thoughts outside the campus classroom. In those more relaxed professional times, I was three years into a teaching career before publishing any articles in properly refereed journals.

When I think back to those beginnings, I am struck by how casually yet how deliberately I came to focus on relations between sedimentation and tectonics as a career pathway. As a student, working first in the California Coast Ranges and then in the John Day inlier of central Oregon, my interests were almost equally divided between sedimentary and structural geology. Even as a green faculty member, however, I could see that I had to adopt a sharper focus to make any real professional headway.

In one sense, my principal choice was made for me, because part of my initial charge at Stanford was to inaugurate a comprehensive course in sedimentary geology, a field in which our curriculum was short at the time. This proved a labor of love never wholly laid aside until I retired from Arizona 33 years later. To that staple of my curricular offerings, I later added a course on sedimentary basins once plate tectonics had shown the way.

But by then I had long since decided to mine the interface between tectonics and sedimentation for all it was worth. Never once have I forgotten the task I thus set myself so early on, and any scientific success I have enjoyed stems directly, I think, from the unflagging and ultimately stubborn way that I pursued that course, wherever it led. Persistence, if well directed, has its rewards.

In olden days, most sedimentologists were fully occupied with the generally undeformed platform successions and foreland sequences that lie outside orogenic belts, which were left by and large for igneous and metamorphic petrologists to decipher. The latter were then primarily captivated by the coarsely crystalline rocks of orogen cores, and paid little heed to the less metamorphosed rocks that bulk much larger in net volume. In the seam between those two teams of stalwarts, I sensed a vast arena of intricately deformed, petrologically varied, and diagenetically messy orogenic sediments where a young guy on the make might score a few points for himself.

My quest took me from Oregon to Fiji, back to California and Nevada, over to Arizona and Utah, then out to Tonga and the Marianas. In the orogenic wonderlands, I followed the trail from magmatic arcs to forearc basins and subduction complexes, on to transforms and foreland basins, both peripheral and retroarc, to remnant arcs and backarc basins, and to plain old rift troughs along the way. It gave me the chance to ponder relationships I could not have given names at the outset of the journey, and it is the glory of sedimentary research that it gives us a handle on such far-reaching questions. It was pure serendipity that so many improved techniques and concepts, from turbidites to plates, came along during my lifetime to help penetrate the orogenic darkness.

Of all my facets of good fortune, however, I rank the collaboration of a steady parade of remarkably able and dedicated students as the most providential. If I have ever had a useful idea that did not stem in some important measure from stimulating interaction with them, I cannot think of it off-hand. To them, to thoughtful colleagues, to the teachers who launched me on my way, and to the twin institutions, Stanford and Arizona, where I was accorded complete academic freedom throughout my career, I owe everything I am and have achieved as a geoscientist.

I could never adequately express the gratification that recognition as Twenhofel Medalist brings to my heart, but I thank you one and all for this moment. In my own mind, however, I stand here as proxy for the host of fellow workers who have done sedimentary battle with me over the years, and I salute them one and all. For those of you who do not know our personal style, it is also a simple truism that my wife, Jackie, has been standing right beside me, in the words of the country song, through everything I've done. Perhaps I might have been here without her, but that is an untested theory in my view. Science is the most supremely collegial of all human endeavors, and none of us stands truly alone, even as a medalist. In that spirit, may SEPM and sedimentary geology thrive forever!

MEMBERSHIP STATISTICS

	DECEMBER								
	1991	1992	1993	1994	1995	1996	1997	1998	1999
SEPM MEMBERSHIP:									
Members	5,360	5,438	5,408	5,241	5,153	5,067	4,804	4,706	4,625
Nondues Paying Members	116	125	133	206	237	236	239	296	261
	5,476	5,563	5,541	5,447	5,390	5,303	5,043	5,002	4,886
PALAIOS MAILING LIST:									
SEPM Members & Honorary (Regular)	1,206	1,289	1,297	1,258	1,196	1,049	1,034	1,040	992
SEPM Members (Students)	120	166	198	214	188	43	175	187	148
Subscribers	446	455	459	450	435	424	432	440	447
	1,772	1,910	1,954	1,922	1,819	1,516	1,641	1,667	1,587
Journal of Sedimentary Research MAILING LIST:									
SEPM Members & Honorary (Regular)	4,077	4,031	3,919	3,816	3,696	3,265	3,180	3,170	2,959
SEPM Members (Students)	397	451	498	511	520	505	479	482	397
Subscribers	1,630	1,601	1,568	1,506	1,319	1,340	1,298	1,310	1,204
	6,104	6,083	5,985	5,833	5,535	5,110	4,957	4,962	4,560
NEW MEMBER INFORMATION:									
Applications Completed	318	530	467	382	435	348	349	335	198
Reinstatements	49	27	33	31	10	18	21	19	16
Transfers	21	8	3	0	0	0	0	0	0
Resigned	66	104	99	70	69	36	45	31	34
Deceased	7	10	14	20	10	8	21	17	15
Dropped for nonpayment of dues	356	409	417	417	378	625	346	288	281

SEPM (SOCIETY FOR SEDIMENTARY GEOLOGY) AND SUBSIDIARY CONSOLIDATED STATEMENTS OF FINANCIAL POSITION

	Year ended 31 December	
	1999	1998
ASSETS		
Current Assets		
Cash and cash equivalents	$ 383,583	$ 375,738
Accounts receivable, less allowance of $4,169 for possible losses (Notes 8 and 9)	9,999	56,654
Inventories	329,624	302,812
Prepaid expenses	33,680	24,629
TOTAL CURRENT ASSETS	756,886	759,833
Noncurrent Assets		
Land, furniture and equipment, less accumulated depreciation (Note 1)	55,904	135,819
Long-term investments, including board-designated funds of $568,235 and $564,677 (Note 3)	1,504,418	1,169,943
	$2,317,208	$2,065,595

	Year ended 31 December	
	1999	1998
LIABILITIES AND NET ASSETS		
Current Liabilities		
Accounts payable and accrued liabilities	$ 31,192	$ 34,385
Deferred Income (Note 4)	494,931	572,308
Current portion of long-term debt	–0–	4,939
Total current liabilities	526,123	611,632
Net Assets—Unrestricted (Note 6)	1,791,085	1,453,963
	$2,317,208	$2,065,595

SEPM (SOCIETY FOR SEDIMENTARY GEOLOGY) AND SUBSIDIARY CONSOLIDATED STATEMENTS OF ACTIVITIES

	Year ended 31 December 1999	1998
CHANGES IN UNRESTRICTED NET ASSETS		
Revenue and Gains, and Other Support		
Dues	$ 99,460	$ 93,553
Publications	309,714	264,013
Journal of Sedimentary Petrology—subscriptions, royalties, and other	417,724	408,309
Palaios—subscriptions, royalties, and other	134,885	124,957
Continuing education	51,594	77,059
Meetings, conferences, and field trips	36,493	110,812
Membership activities	24,649	26,835
Royalties—New Frontiers Fund (Note 6)	2,565	2,885
Gain (loss) on sale of investments	8,625	7,318
Investment income	112,010	85,725
Net unrealized gain on investments	258,650	34,714
Other income	(250)	2,575
Total revenues, gains, and other support	1,456,119	1,238,755
Expenses		
Publishing costs—*Journal of Sedimentary Petrology*	235,445	234,312
Publishing costs—*Palaios*	91,762	92,250
Publications	240,749	142,841
Continuing education	31,687	46,986
Meetings, conferences, and field trips	29,071	91,084
Membership activities	66,774	83,940
General and administrative	423,509	452,302
Total expenses	1,118,997	1,143,715
Increase in unrestricted net assets	337,122	95,040
Net Assets, beginning of year	1,453,963	1,358,923
Net Assets, end of year	$1,791,085	$1,453,963

SEPM (SOCIETY FOR SEDIMENTARY GEOLOGY) AND SUBSIDIARY CONSOLIDATED STATEMENTS OF CASH FLOWS

	Year ended 31 December 1999	1998
Cash Flows from Operating Activities		
Increase in unrestricted net assets	$ 337,122	$ 95,040
Adjustments to reconcile increase in unrestricted net assets to net assets provided by operating activities:		
Depreciation	23,194	24,020
(Gain) on sale of investments	(8,625)	(7,318)
Loss on sale of land	31,537	—
Net unrealized gains on investments	(258,650)	(34,714)
(Increase) decrease in:		
Accounts receivable	6,745	28,378
Due from affiliate	39,910	(16,061)
Inventory	(26,812)	(104,674)
Prepaid expenses	(9,051)	6,770
Increase (decrease) in:		
Accounts payable and accrued expenses	(4,154)	(39,421)
Deferred income	(77,377)	99,049
Due to affiliate	961	—
Net cash provided by operating activities	54,800	51,069
Cash Flows from Investing Activities		
Payments for purchases of equipment	(11,046)	(20,958)
Proceeds from sale of land	36,230	—
Purchase of investments	(193,124)	(191,535)
Proceeds from maturations and sales of investments	125,924	141,505
Net cash (used in) investing activities	(42,016)	(70,988)
Cash Flows from Financing Activities—		
Payments on long-term debt	(4,939)	(4,934)
Net Increase (Decrease) in Cash	7,845	(24,853)
Cash and Cash Equivalents at Beginning of Year	375,738	400,591
Cash and Cash Equivalents at End of Year	$ 383,583	$ 375,738

See Note 7 for Supplemental Cash Flows information.

SUMMARY ACCOUNTING POLICIES

Organization and Business

On September 27, 1987, the Society of Economic Paleontologists and Mineralogists (Society) became a separate entity from the American Association of Petroleum Geologists. Prior to this date, the Society was an unincorporated technical division of the American Association of Petroleum Geologists. In the event of the dissolution of the Society, the net assets will be donated to charitable, scientific, or educational institutions; no assets shall inure to the benefit of any member.

The objective of the Society is to advance the science of stratigraphy through the dissemination of scientific knowledge of, promotion of, research in, and other contributions to paleontology, sedimentology, and allied disciplines.

Principles of Consolidation

The consolidated financial statements include the accounts of the Society and its subsidiary, The SEPM Building, Incorporated, which was incorporated under the laws of the State of Oklahoma on September 11, 1985, for the purpose of acquiring property for the Society. All material intercompany accounts and transactions are eliminated.

Estimates

In preparing financial statements in conformity with generally accepted accounting principles, management is required to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements and revenues and expenses during the reported period. Actual results could differ from those estimates.

Fair Value of Financial Instruments

The Society's financial instruments consist of cash, receivables,

long-term investments, accounts payable, deferred income, and long-term debt. The carrying value of all financial instruments approximates fair value.

Inventory

Inventory consists of special publications (including short course notes), which excludes the journals published by the Society. The limited excess quantities of the journals are provided as reference material to the profession and, as such, are not inventoried.

Special publications are valued at cost (specific identification) in the year of publication and the next two succeeding years. After this period, publications are valued at 50% of cost, with the further limitation that the valuation of publications over five years old is limited to 100 copies. Resulting inventory write-downs were as follows:

	Year ended 31 December	
	1999	1998
Publications	$22,967	$22,537
Continuing education	2,218	4,789
	$25,185	$27,326

Inventory consists of the following:

	Year ended 31 December	
	1999	1998
Publications	$218,016	$175,324
Continuing education materials	6,864	14,204
Work in process	104,744	113,284
	$329,624	$302,812

Furniture and Equipment

Furniture and equipment are valued at cost. Depreciation is provided using the straight-line method over the useful life, three to 6⅔ years.

Tax Status

The Society is exempt from taxation under Section 501(c)(3) of the Internal Revenue Code.

Revenue Recognition

The Society recognizes income and expense on the accrual accounting basis for financial statement presentation.

The Society recognizes membership dues and subscriptions as revenue ratably over the period of membership or subscription term.

Contributions

The Society classifies donor restricted contributions as unrestricted support if the restrictions are satisfied in the same reporting period in which the contribution was received.

Advertising Expense

The Society expenses advertising costs when incurred. No advertising expenses were incurred during the years ended December 31, 1999 and 1998.

INDEPENDENT AUDITOR'S REPORT

SEPM Council
SEPM (Society for Sedimentary Geology)
Tulsa, Oklahoma

We have audited the accompanying consolidated statements of financial position for SEPM (Society for Sedimentary Geology) and subsidiary as of December 31, 1999 and 1998, and the related consolidated statements of activities and cash flows for the years then ended. These financial statements are the responsibility of the Society's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of SEPM (Society for Sedimentary Geology) and subsidiary as of December 31, 1999 and 1998, and the consolidated changes in its net assets and its cash flows for the years then ended, in conformity with generally accepted accounting principles.

Tulsa, Oklahoma
February 21, 2000

Emmons, Hartog & Swartout, P.C.