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Education:

1980-1986 Scripps Institution of Oceanography, La Jolla, California; Ph.D. in Oceanography

1976-1978 University of Miami, Miami, Florida; M.S. in Marine Geology and Geophysics.

1970-1975 Harvard College, Cambridge, Massachusetts; B.A. cum laude in Geology.

Professional Activities:

1999 – present, Senior Scientist, Monterey Bay Aquarium Research Institute, Moss Landing California

2000 – Adjunct Professor (by-courtesy appointment), Stanford University, Palo Alto, California.

1996 –1999, Amos L. Hawley Distinguished Professor, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina

1987-1998, Assistant (1987-1991), Associate (1991-1993), and Full (1993-1999) Professor, Geology Department and Marine Sciences Curriculum, University of North Carolina at Chapel Hill

1986 – 1993, Assistant (1986-1988) and Associate (1988-1993) Research Scientist, Marine Physical Laboratory, Scripps Institution of Oceanography, La Jolla, California

1985-1986, Visiting Scientist, ETH Zurich, Switzerland.

1980-1985, Research Assistant, Scripps Institution of Oceanography, La Jolla, California.

1977-1980 & 1975-1976, Geologist, Resource Assessment Group of the U. S. Geological Survey's Office of Marine Geology, Woods Hole, Massachusetts.

1976-1977, Research Assistant, University of Miami, Miami, Florida.

Research Interests:

- Determining the frequency, distribution and environmental significance of continental margin pore water seeps is a central theme of my research efforts. In the past I have worked on diverse seeps including those in the floors of coastal lagoons, on continental slopes, at bases of carbonate escarpments, over the crests of diapirs, and sections of the continental rise that contain extensive amounts of gas hydrates. Efforts are also being directed at establishing a better understanding of the relationship between fluid flow and the generation of submarine geomorphic features such as sinkholes, canyon heads, and pockmarks.
- Establishing the *in situ* characteristics of marine gas hydrates is a major objective of both past and future work. This work led to ODP Leg 164, for which I was major proponent and ultimately Co-Chief Scientist. I am still actively working on the results of this Leg. Now that I am at MBARI, I expect to refocus this work to specifically investigate the biogeochemical processes that occur at the sulfate - methane interface in gas rich marine sediments and geochemical consequences of these reactions.
- Understanding the diverse processes that initially form and subsequently erode continental margins is a recurrent theme of my past work. At MBARI, I anticipate initiating studies of submarine canyons, and continental margin sediment failures.
- Calibrating the sources of strontium isotopes in pore waters and extent of exchange between the strontium in pore waters and carbonates is an on-going research topic.

Teaching Experience:

During my 12 years as a faculty member at UNC-Chapel Hill, I taught 3 courses per year. Every year I offered an undergraduate course in Stratigraphy and a graduate course in Paleooceanography. The content of the third course varied considerably, but always within the constraints of what else is offered within the department. Periodically I taught a large (~150 student) introductory geology class. Most years I was involved in seminar courses. The topics ranged from strontium isotopes as tracers of natural processes, the evolution of continental margin geology, the environmental significance of gas hydrates, to a required seminar for new graduate students in the general fields of soft rock geology.

Professional Society Memberships:

American Association of Petroleum Geologists
American Geophysical Union
Society of Economic Paleontologists and Mineralogists

Honors and Service

ODP Sedimentary Geochemistry and Physical Processes Panel 1992 - 1995.
Recipient of the "Z. Reynolds Smith" sabbatical leave 1992.
UNC-CH Faculty Council 1992-1995
Associate Chair, UNC-CH Geology Department 1993-present
SEPM Plenary Speaker - 1995
ODP - Site Survey Panel 1995 - present
JOI-USSAC Distinguished Lecturer 1996-1997
Awarded Amos Hawley Distinguished Professorship 1996
Assistant Editor, Geological Society of America Bulletin 1996-99
Featured Speaker at COSAIRES 1996 Gas Hydrate Workshop
Chair - ODP –Gas Hydrate Program Planning 1998-1999
Provided Senate Testimony on Gas Hydrates, May 1998

Sea-Going and Field Experience:

Participated in the scientific party of 32 cruises and have been the chief or co-chief scientist on 12 cruises including being co-chief on ODP Leg 164. Experienced in the collection of: single and multichannel seismic reflection data; seismic refraction data; piston, box, and gravity cores; dredge and grab samples; heat flow data; Seabeam, Deep-Tow, high resolution and GLORIA side-scan-sonar surveys on oceanographic vessels. 26 dives in research submersibles including 12 in ALVIN and 4 in NR-1. Participated in mapping/sampling projects in Montana, Mexico, Guatemala, and the Southern Alps. Also have extensive experience coring in shallow waters from small boats, especially for pore water analysis.

Published Papers

- Gould, S. J., and Paull, C. K., 1977, Natural history of the Cerion VIII, geographic variation of Cerion (Mollusca Pulmonata) from the eastern end of its range (Hispaniola to the Virgin Islands: coherent patterns and taxonomic simplification: Breviora, no. 445, p. 1-45.
- Dillon, W. P., Paull, C. K., Buffler, R. T., and Fail, J. P., 1979, Structure and development of the Southeast Georgia Embayment and northern Blake Plateau, preliminary analysis: *in* Geological and Geophysical Investigations of Continental Margins, ed. by J. S. Watkins, L. Montadert, and P. W. Dickerson, American Association of Petroleum Geologists, Memoir 29, p. 27-41.
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- Dillon, W. P., Grow, J. A., and Paull, C. K., 1980, Unconventional gas hydrate seals may trap gas off the Southeastern U. S., *Oil and Gas Journal*, January 7, p. 124-130.
- Paull, C. K., and Dillon, W. P., 1980, The erosional origin of the Blake Escarpment, an alternative hypothesis, *Geology*, v. 8, p. 538-542.
- Manheim, F. T., and Paull, C. K., 1981, Patterns of groundwater salinity changes in a deep continental-oceanic transect off the southeastern Atlantic coast of the U. S. A., *Journal of Hydrology*, v. 54, p. 95-105.
- Sheridan, R. E., Crosby, J. T., Kent, K. M. Dillon, W. P., and Paull, C. K., 1981, The geology of the Blake Plateau and Bahamas Region, *in* *Geology of the North Atlantic borderlands*, eds., Kerr, J. W., and Fergusson, A. J., Canadian Society of Petroleum Geologists, Memoir 7, Calgary, Alberta, 1981, p. 487-502.
- Liddicoat, J. C., C. R. Denham, and C. K. Paull, 1981, Paleomagnetism of cored sediments from Lake Atitlan, Guatemala: A preliminary study, *Geofisica International*, v. 20, no. 3, p. 263-270.
- Paull, C. K., and Dillon, W. P., 1982, Reply to "Comment on erosional origin of the Blake Escarpment: an alternative hypothesis", *Geology*, v. 4, p. 409-463.
- Dillon, W. P., and Paull, C. K., 1982, Summary of the development of the continental margin off Georgia based on multichannel and single channel seismic-reflection profiling and stratigraphic well data, *in* Arden, D. D., Beck, B. F., and Morrow, E., eds., *Proceedings of the Second Symposium on Southeastern Coastal Plain Geology*, Department of Natural Resources, Atlanta, p. 197-200.
- Manheim, F. T., and Paull, C. K., 1982, Hydrochemistry of the formation fluids in onshore and offshore strata in the Southeast Georgia Embayment, *in* Arden, D. D., Beck, B. F., and Morrow, E., eds., *Proceedings of the Second Symposium on Southeastern Coastal Plain Geology*, Department of Natural Resources, Atlanta, p. 211-218.
- Paull, C. K. and Dillon, W. P., 1982, The stratigraphy of the Florida-Hatteras shelf and slope and its relationship to the offshore extension of the principal artesian aquifer, *in* Arden, D. D., Beck, B. F., and Morrow, E., eds., *Proceedings of the Second Symposium on Southeastern Coastal Plain Geology*, Department of Natural Resources, Atlanta, p. 178-181.
- Dillon W. P., Klitgord, K. D., and Paull, C. K., 1983, Mesozoic development and structure of the continental margin off South Carolina, *in* Gohn G. S., ed. *Studies related to the Charleston, South Carolina, Earthquake of 1886 - tectonics and seismicity*, U. S. Geological Survey Professional Paper 1313, p. N1-N16.
- Dillon W. P., and Paull, C. K., 1983, Marine gas hydrates -II: Geophysical evidence, *in* Cox, J. L., ed., *Natural Gas Hydrates: Properties, Occurrences, and Recovery*, Butterworth Publishers, Boston, p. 73-90.
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- Paull, C. K., Hecker, B., Neumann, A. C., Sikes, E. L., Hook, J., Corso, W., Freeman-Lynde, R., Commeau, R., Golubic, S., and Curray, J., 1984, The seeps find at the Florida Escarpment, *Oceanus*, v. 27. no. 3, p. 32-34.
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