

STEPHEN F. PEKAR
Curriculum Vitae

Address: Queens College
School of Earth and Environmental Sciences
65-30 Kissena Blvd.
Flushing, NY 11367
Phone: 718-997-3305

E-mail: stephen.pekar@qc.cuny.edu
Birth date: January 28, 1959
Website: <http://qcpages.qc.edu/EES/pep/pekar.htm>
Marital Status: Married

PROFESSIONAL EXPERIENCE

- 7/08 **Associate Professor**
present **School of Earth and Environmental Sciences Queens College, Flushing, NY**
- 9/03 **Adjunct Associate Research Scientist**
present **Lamont-Doherty Earth Observatory of Columbia University, Palisades, NY**
- 9/02 **Assistant Director of the LDEO Summer Internship Program**
present **Lamont-Doherty Earth Observatory of Columbia University, Palisades, NY**
- 2/09 **Panel Member National Science Foundation, International Polar Year, Informal Science Education**
- 9/03- 6/08 **Assistant Professor**
 School of Earth and Environmental Sciences Queens College, Flushing, NY
- 10/08-12/08 **Offshore New Harbor, Antarctic Seismic Expedition**
 Lead PI that led an expedition to collect seismic and gravity data offshore of East Antarctica
- 10/07-12/07 **ANDRILL: Antarctic Drilling Expedition**
 Member of the science team of a drilling expedition that recovered over 1100 meters of sediments as old as 20 million years old in the Southern McMurdo Sound, Ross Sea, Antarctica
- 6/06 **Panel Member National Science Foundation, International Polar Year, Informal Science Education**
- 10/05-11/05 **ANDRILL: Antarctic Seismic Expedition**
 Member of the science team in a seismic and gravity expedition to Southern McMurdo Sound, Ross Sea
- 5/00-8/03 **Post-Doctoral Research Scientist**
 Lamont-Doherty Earth Observatory of Columbia University, Palisades, NY
- 5/00-7/00 **Sedimentologist and stratigrapher: Onsite Scientist**
 ODP Leg 174AX: Bethany Beach Borehole, Bethany Beach, Delaware
- 3/00-5/00 **Sedimentologist: Shipboard Scientist**
 ODP Leg 189: The Tasmanian Seaway between Australia and Antarctica
- 6/99-4/00 **Post-Doctoral Research Scientist**
 Rutgers, the State University of New Jersey, New Brunswick, NJ

- 7/97-9/97 **Sedimentologist and stratigrapher: Onsite Scientist**
ODP Leg 174AX: Ancora Borehole, Ancora, New Jersey
- 7/98-9/98 **Staff Scientist**
ODP Leg 174AX: Ocean View Borehole, Ocean View, New Jersey
- 4/99-6/99 **Petroleum Consultant**
Chevron Overseas Petroleum Inc., San Ramon, CA
Miocene Foraminiferal Biofacies and Sequences from Offshore Cabinda, Angola
- Performed benthic foraminiferal biofacies, biostratigraphic, and lithofacies analysis for 160+ samples from slope cuttings and sidewall cores.
- Prepared a written report for Chevron Overseas Petroleum Inc.
- 1/98-3/98 **Petroleum Consultant**
Chevron Overseas Petroleum Inc., San Ramon, CA
Developing an Integrated Sequence/Seismic Stratigraphic Framework For the West African Tertiary, Using Benthic Foraminiferal Biofacies and Sr-isotopic Chemostratigraphy
- Performed benthic foraminiferal biofacies, bio-, Sr chemo-, and litho-stratigraphic analysis for 120+ samples from slope cuttings and sidewall cores.
- Prepared a written report for Chevron Overseas Petroleum Inc.
- 1/97-6/97 **Research Assistant**
Rutgers, the State University of New Jersey, New Brunswick, NJ
- 11/96-3/97 **Petroleum Consultant**
Chevron Overseas Petroleum Inc., San Ramon, CA
Sr-Isotopic Chemostratigraphy: Development of a High-Resolution Chronostratigraphic Tool for the Pinda Formation
- Water-rock interaction models were constructed to determine original Sr-isotope ratios.
- Demonstrated that Sr-isotope chemostratigraphy can be a useful chronostratigraphic tool for West African Albian carbonate rocks.
- Prepared a written report for Chevron Overseas Petroleum Inc.
- 9/96-11/96 **Sedimentologist and stratigrapher: Onsite Scientist**
ODP Leg 174AX: Bass River Borehole, Bass River, New Jersey
- 3/94-5/94 **Sedimentologist and stratigrapher: Onsite Scientist**
ODP Leg 150X: Cape May Borehole, Cape May, New Jersey
- 9/93-5/99 **Teaching Assistant**
Rutgers, the State University of New Jersey, New Brunswick, NJ

AWARDS

Award for his collaborative effort in documenting the “state of Antarctic geoscience” in the 2007-2009 International Polar Year. Award by international Symposium of Antarctic Earth Sciences, August, 2007

Winner of The Feliks Gross Endowment Award for Outstanding Research by Junior Faculty Members in CUNY, 2006.

Winner of the “Outstanding Journal Paper in the Journal of Sedimentary Research for 2003”, presented at SEPM President's Reception and Awards Ceremony held at the AAPG meeting, Calgary Alberta, June, 2005

Pekar, S. F., Christie-Blick, N., Miller, K. G., and Kominz, M. A., 2003, Evaluating factors controlling stratigraphic architecture at passive continental margins: Oligocene sedimentation in New Jersey: *Journal of Sedimentary Research*, 73:227-245.

EDUCATION

October, 1999 **Ph.D., Geology**
Rutgers, the State University of New Jersey, New Brunswick, NJ
Dissertation Title: *A New Method for Extracting Water Depth, Relative Sea Level, and Eustatic Records From Onshore New Jersey Oligocene Sequence Stratigraphy*

April, 1995 **M.S., Geology**
Rutgers, the State University of New Jersey, New Brunswick, NJ
Thesis Title: *New Jersey Oligocene Sequences Recorded at the Leg 150X Boreholes (Cape May, Atlantic City, and Island Beach)*

May, 1986 **B.A., Education**
Queens College, Flushing, New York

FUNDED PROJECTS (~ \$1.4 million total, over \$670,000 at Queens College)

CURRENTLY FUNDED PROJECTS

Integrated Ocean Drilling Program

(Proposed budget: \$49,040; Funding Period: 1/10- 12/11)

Title: *Participation Plan for the IODP Wilkes Land Expedition: Developing a High-Resolution Sequence Stratigraphic Framework for the Greenhouse World to Icehouse World Transition at Wilkes Land*

PI: S. Pekar

This award is for S. Pekar to be part of the onboard scientific team for the Integrated Ocean Drilling Program Wilkes Land Expedition that will drill offshore of Wilkes Land, Antarctica on the research vessel called the JOIDES Resolution from January to March, 2010.

International Polar Year: National Science Foundation

(Budget: \$452,560, \$256,958 for Queens College; Funding Period: 5/08-4/10; Lead Institution: Queens College)

Title: *Collaborative Research: IPY: Using New Tools to Explore Undiscovered Country: Understanding the Stratigraphic and Tectonic History of Offshore New Harbor, Ross Sea, Antarctica*

Lead PI: S. Pekar, Co-PI: M Speece (Montana Tech)

University of Montana

(Budget: \$19,000; Funding Period: 5/09-4/10; Lead Institution: Queens College)

Lead PI: S. Pekar

ANDRILL Program

(budget: \$108,981; Funding Period: 5/08-8/09; Lead Institution: Queens College)

Title: *Research Description: Developing a High-Resolution Lithofacies and Sequence Stratigraphic Framework for the Middle Miocene in Southern McMurdo Sound*

This grant is for post drilling science studies for S. Pekar for the Southern McMurdo Sound Drilling Project and for graduate student support.

PI: S. Pekar

Spanish Geological Funding, Spain

(\$3,000 for S. Pekar, Funding Period: 9/06-8/09; Lead Institution: Instituto Andaluz de Ciencias de la Tierra, Granada, España)

Title: *Cenozoic East Antarctic Ice-Sheet and Paleooceanographic Evolution from Wilkes Land Sediments: Obtaining Antarctic Climate Evolution through a National and International Integrated Effort in the Context of the International Polar Year*

PI: C. Escutia (Granada, Spain)

PREVIOUSLY FUNDED PROPOSALS

ANDRILL Program

(budget: \$74,040; Funding Period: 9/07-5/08; Lead Institution: Queens College)

Title: *Research Description: Developing a High-Resolution Lithofacies and Sequence Stratigraphic Framework for the Middle Miocene in Southern McMurdo Sound*

This grant is for S. Pekar to be an on-ice scientist on the Southern McMurdo Sound Drilling Project in the fall of 2007, science studies, and for graduate student support.

PI: S. Pekar

National Science Foundation

(Award: \$109,605; funding Period: 7/04-7/08; Institution: Queens College)

Title: *Acquisition of an Inductively coupled Plasma- Atomic Emission Spectrometer (ICP-AES) for Research and Educational Training at Queens College (CUNY), New York*

PI: S. Pekar

ANDRILL Program

(Budget: \$13,700,000; \$10,000 for Queens College; Funding Period: 9/05-12/09)

Title: *Seismic and Gravity Survey for the Southern McMurdo Sound area*

PI's: D. Harwood, R. Levy

Ocean Drilling Program-Shore based Funds

(Award: \$8,065; Funding period: 1/04-7/06; Institution: Queens College)

Title: *Developing Paired High-Resolution Isotopic and Mg/Ca ratio Records for the Late Paleocene (59.5-55.5 ma) from Leg 207 Site 1258*

PI's: S. Pekar

Hudson River Foundation

(Award: \$156,770; Funding period: 9/01-10/05; Lead Institution: Queens College)

Title: *Assessing the Natural Hazard for the Lower Hudson River Region by Estimating Climate Variability for the Past 6,000 Years*

PI's: C. McHugh, S.F. Pekar, and L. Burckle

This grant will permit development of a high-resolution climate record of the Hudson Valley region for the past 6,000 years.

National Science Foundation

(Award: \$409,000; Funding period: 1/02-4/05)

Title: *New Tools Applied to a Classic Problem: Towards an Understanding of What Shapes the Stratigraphic Record at Passive Margins*

PI's: G. Mountain, N. Christie-Blick, C. McHugh, and S. F. Pekar

The objective of this grant is to examine Cretaceous/early Paleogene and Pleistocene sequence stratigraphic development in the New York Bight shelf area.

National Science Foundation

(Award: \$19,983; funding Period: 1/04-4/05)

Title: *Supplement to New Tools Applied to a Classic Problem: Towards an Understanding of What Shapes the Stratigraphic Record at Passive Margins*

PI's: G. Mountain, N. Christie-Blick, C. McHugh, and S. F. Pekar

Ocean Drilling Program-Post Cruise Funds

(Award: \$22,497; Funding period: 9/00-12/03)

Title: *Early Miocene High-resolution Stable Isotopic Studies from Site 1168*

PI's: R. Fairbanks and S. Pekar

This grant provided funding for partial salary support, supplies and analytical studies needed to work on samples obtained from Ocean Drilling Program Leg 189.

National Science Foundation, Ocean Sciences Program

(Award: \$126,153; Funding period: 5/00-4/03)

Title: *Direct Calibration of the Stratigraphic Response to Glacioeustatic Changes Using Oxygen Isotopic Data (Oligocene Sequences, Onshore New Jersey)*

PI's: N. Christie-Blick and S.F. Pekar

This grant provided funding for salary, supplies and analytical studies to work on cores obtained from the onshore ODP Leg 150X and 174AX boreholes.

Ocean Drilling Program

(Award: \$15,365; Funding period: 5/00-7/00)

Shipboard Scientist

Salary was provided for S. Pekar for participating as a shipboard scientist on the JOIDES Resolution ODP Leg 189.

Internal (CUNY) Grants/Awards

PSC-CUNY Research Grant

(Award: \$3,800; Funding Period: 7/06-12/07)

Title: *Deciphering the history of climate and sediment transport changes in the Hudson River for the past 7,000 years*

PI: S. Pekar

PSC-CUNY Research Grant

(Award: \$3,800; Funding Period: 7/05-6/06)

Title: *Developing High-Resolution Isotopic Records for the Late Paleocene (61 -55 Ma) from Deep-Sea Sites 1259 (Western Equatorial Atlantic Ocean) and 215 (Tropical Indian Ocean)*

PSC-CUNY Research Grant

(Award: \$4,850; Funding Period: 7/04-1/06)

Title: *Developing High-Resolution Isotopic Records for the Late Paleocene (59.5-55.5 Ma) from Leg 207 Site 1258*

Internal (LDEO) Grants/Awards

Lamont's Climate Center

(Award: \$5,850; Funding period: 8/04-2/05)

Title: Four Different Methods for Dating the Mahuika Impact Event

PI's: D. Abbott and S. Pekar

Lamont's Climate Center

(Award: \$5,830; Funding period: 2/03-1/04)

Title: Mahuika Impact Event: Source of Local Climate Change?

PI's: D. Abbott and S. Pekar

This grant provides funds for studying the impact crater located south of New Zealand.

Lamont's Climate Center

(Award: \$6,000; Funding period: 8/02-7/03)

Title: Developing High-Resolution Climate Records for the Hudson River Region Using an Integrated Approach

PI's: S. Pekar and C. McHugh

This grant provides funds for obtaining vibracores from the Hudson River.

Lamont's Climate Center

(Award \$1,967; Funding period: 1/01-12/01)

Title: Estimating Climate Variability for the Lower Hudson River Region Using a Two-Tracer Approach: Oxygen Isotopes and Mg/Ca Ratios

PI: S. Pekar

This research will develop the tools to evaluate climate variability (decadal to centennial scale) of the Hudson River region based on climate reconstructions from a time slice between 4,900 and 5,100 yr. B.P.

Lamont's Climate Center

(Award: \$ 3,214; Funding period: 1/00-12/01)

Title: The Miocene Climate Transition in the SE Pacific: is the Navidad Formation of Chile a Good Register?

PI's: K. Gregory and S. Pekar

This is was pilot study to determine the viability of using the Navidad Formation from central Chile as a register of both marine and terrestrial climate variability during the Miocene.

Lamont's Climate Center

(Award: \$1,243; Funding period: 7/00-1/01)

Title: Estimating Climate Variability for the Lower Hudson River Region Using Benthic Foraminiferal Biofacies and lithofacies Analysis

PI: S. Pekar

PEER-REVIEWED MANUSCRIPTS IN PREPARATION

Haywood, A.M., Pekar, S.F., Valdes, P.J., Thorn, V.C., Lunt, D.J., Francis, J.E., The Antarctic Circumpolar Current and onset of glaciation at the Eocene Oligocene Boundary, to be submitted to Nature Geoscience.

Pekar, S.F., Syed, S., Estimating bottom water temperatures and ice volume using stable Isotope and Mg/Ca records from deep-sea sites: Potential problems and pit falls: to be submitted to Paleoceanography.

PEER-REVIEWED PUBLICATIONS

- Galeotti, S., Rusciadelli, G., Sprovieri, M., Lanci, L., Gaudio, and Pekar, S.F., 2009, Sea-level control on facies architecture in the Cenomanian–Coniacian Apulian margin (Western Tethys): A record of glacio-eustatic fluctuations during the Cretaceous greenhouse?: *Palaeogeography, Palaeoclimatology, Palaeoecology*, 276:/1-4:196-205.
- Pekar, S.F., 2009, Glacial Eustasy: In V. Gornitz (Ed), *Encyclopedia of Paleoclimatology and Ancient Environments*. Kluwer Academic Publishers, New York.
- Rosenberger, A.L., Tejedor, M.F., Cooke, S.B., Pekar, S.F., 2009, Platyrrhine ecophylogenetics in space and time: Garber, P.A. et al., (eds), *South American Primates*, *Developments in Primatology: Progress and Prospects.*, Springer Book Publishing, p. 69-113.
- Wilson, G.S., Pekar, S.F., Passchier, S., 2009, Oligocene-Miocene boundary: In Florindo, F., and Siebert, M., *Antarctic Climate Evolution/Antarctic History*, Elsevier B.V..
- Pekar, S.F., Christie-Blick, N., 2008, Resolving apparent conflicts between oceanographic and Antarctic climate records and evidence for a decrease in $p\text{CO}_2$ during the Oligocene through early Miocene (34-16 Ma): *Palaeogeography, Palaeoclimatology, Palaeoecology*, 260/1-2 p. 41-49.
- Vila, G, Lupi, C., Cobianchi, M., Florindo, F., and Pekar, S.F., 2008, A Pleistocene warming event at 1 Ma in Prydz Bay, East Antarctica: Evidence from ODP Site 1165, *Palaeogeography, Palaeoclimatology, Palaeoecology*, 260/1-2.
- Christie-Blick, N., Pekar, S.F., Madof, A.S., 2007, Is there a role for sequence stratigraphy in chronostratigraphy?: *Stratigraphy*, v. 4, No. 2, p. 131 - 143.
- Pekar, S. F., DeConto, R.M., 2006, High-Resolution Ice-Volume Estimates for the Early Miocene: Evidence for a Dynamic Ice Sheet in Antarctica, *Palaeogeography, Palaeoclimatology, Palaeoecology*, v. 231, p. 101-109.
- Pekar, S.F., DeConto, R.M., Harwood, D.M., 2006, Resolving a late Oligocene conundrum: deep-sea warming versus Antarctic glaciation: *Palaeogeography, Palaeoclimatology, Palaeoecology*, v. 231, p. 29-40.
- Miller, K.G., Kominz, M.A., Browning, J.V., Wright, J.D., Mountain, G.S., Katz, M.E., Sugarman, P.J., Cramer, B.S., Christie-Blick, N., Pekar, S.F., 2005, The geological record of global-sea level change: *Science*, 310:1293-1298.
- Pekar, S. F., Hucks, A., Fuller, M., and Li, S., 2005, Glacioeustatic changes in the early and middle Eocene (51-42 Ma) greenhouse world based on shallow-water stratigraphy from ODP Leg 189 Site 1171 and oxygen isotope records: *Geological Society of America Bulletin*, 117:1081-1093.
- Pekar, S. F., McHugh, C., Christie-Blick, N., Jones, M., Carbotte, S., Bell, R. E., and Lynch-Stieglitz, J., 2004. Estuarine processes and their stratigraphic record: paleosalinity and sedimentation changes in the Hudson Estuary: *Marine Geology*, 209:113-129.
- McHugh, C., Pekar, S. F., Christie-Blick, N., Ryan, W B. F., Carbotte, S., Bell, R., and Burckle, L., 2004, Spatial variation in a condensed interval between estuarine and open-marine settings: Holocene Hudson River estuary and adjacent continental shelf: *Geology*, 32:169-172.
- Pekar, S. F., Christie-Blick, N., Miller, K. G., and Kominz, M. A., 2003, Evaluating factors controlling stratigraphic architecture at passive continental margins: Oligocene sedimentation in New Jersey: *Journal of Sedimentary Research*, 73:227-245. (***Outstanding Journal Paper in the Journal of Sedimentary Research for 2003***)
- Pekar, S. F., Christie-Blick, N., Kominz, M. A., and Miller, K. G., 2002, Calibrating eustasy to oxygen isotopes for the early icehouse world of the Oligocene: *Geology*, 30:903-906.
- Kominz, M. A., and Pekar, S. F., 2002, Testing the Tenets of Sequence Stratigraphy: In, 22nd Annual GCSSEPM Foundation Bob F. Perkins Research Conference, *Sequence Stratigraphic Models for Exploration and Production: Evolving Methodology, Emerging Models and Application Case Histories*, p. 349-365.

- Exon, N., Kennett, J., Malone, M., Brinkhaus, H., Chaproniere, G., Ennyu, Atsuhito, Fothergill, P., Fuller, M., Grauert, M., Hill, H., Janecek, T., Kelly, C., Latimer, J., McGonigal, K., Nees, S., Ninnemann, U., Nuernberg, D., Pekar, S., Pellaton, C., Pfuhl, H., Robert, C., Rohl, U., Schellenberg, S., Shevenell, A., Stickley, C., Suzuski, N., Touchard, Y., Wei, W., and White, T., 2002, Drilling reveals climatic consequences of Tasmanian gateway opening: *Eos*, Transactions, American Geophysical Union, 83:258-259.
- Kominz, M. A., and Pekar, S. F., 2001, Oligocene eustasy from two-dimensional sequence stratigraphic backstripping: *Geological Society of America Bulletin*, 113:291-304.
- Pekar, S. F., Christie-Blick, N., Kominz, M. A., and Miller, K. G., 2001, Evaluating the stratigraphic response to eustasy from Oligocene strata in New Jersey: *Geology*, 29:55-58.
- Pekar, S. F. and Kominz, M.A., 2001, Two-dimensional paleoslope modeling: a new method for estimating water depths for benthic foraminiferal biofacies and paleo shelf margins: *Journal of Sedimentary Research*, 71:608-620.
- Robert, C.M. Exon, N.F., Kennett, J.P. Malone., M.J., Brinkhuis, H., Chaproniere, G.C.H., Ennyu,A., Fothergill, P., Fuller, M.D., Grauert, M., Hill, P.J., Janecek, T.R., Kelly, D.C.,. Latimer, J.C., McGonigal Roessig, K., Nees, S., Ninnemann, U.S., Nürnberg, D., Pekar, S.F., Pellaton, C.C., Pfuhl, H.A., Röhl, U., Schellenberg, S.A., Shevenell, A.E., Stickley, C.E., Suzuki, N., Touchard, Y., Wei, W., White T., 2001, Paleogene ocean opening of South of Tasmania, and paleoceanographic implications: preliminary results of clay mineral analyses (ODP Leg 189): *Comptes Rendus de l'Académie des Sciences -Série IIa- Sciences de la Terre et des Planètes*, 332, 323-329.
- Pekar, S. F., Miller, K. G., and Kominz, M. A., 2000, Reconstructing the stratal geometry of New Jersey Oligocene sequences: resolving a patchwork distribution into a clear pattern of progradation: *Sedimentary Geology*, 134:93-109.
- Miller, K. G., Browning, J. V., Pekar, S. F., Sugarman, P. J., 1997, Cenozoic evolution of the New Jersey Coastal Plain: Changes in sea-level, tectonics, and sediment supply in Miller, K. G. and Snyder, S. W., *Proceedings of the Ocean Drilling Program, Scientific Results, 150X: College, Texas (Ocean Drilling Program)*, p. 361-376.
- Miller, K. G., Rufolo, S., Gwynn, D., and Pekar, S. F., 1997, Miocene benthic foraminiferal biofacies and sequences: in Miller, K. G. and Snyder, S. W., *Proceedings of the Ocean Drilling Program, Scientific Results, 150X: College, Texas (Ocean Drilling Program)*, p. 169-186.
- Pekar, S. F., Miller, K. G., and Browning, J. V., 1997, New Jersey Coastal Plain Oligocene Sequences: in Miller, K. G. and Snyder, S. W., *Proceedings of the Ocean Drilling Program, Scientific Results, 150X: College, Texas (Ocean Drilling Program)*, p. 187-206.
- Pekar, S. F., Miller, K. G., and Olsson R. K., 1997, Data report: the Oligocene Sewell Point and Atlantic City Formations, New Jersey Coastal Plain: in Miller, K. G. and Snyder, S. W., *Proc. Ocean Drilling Program, Scientific Results, 150X: College, Texas (Ocean Drilling Program)*, p. 81-90.
- Sugarman, P. J., McCartan, L., Miller, K. G., Pekar, S. F., Feigenson, M. D., Kistler, R. W., and Robinson, A. G., 1997, Strontium-isotopic comparisons of Oligocene to Miocene sequences, New Jersey and Florida: in Miller, K. G. and Snyder, S. W., *Proceedings of the Ocean Drilling Program, Scientific Results, 150X: College, Texas (Ocean Drilling Program)*, p. 147-160.
- Miller, K. G., Mountain, G. S., Blum, P, Gartner, S, Alm, P.G., Aubry, M.P., Burckle, L. H., Guerin, G, Katz, M. E., Christensen, B. A., Compton, J, Damuth, J. E., Deconinck, J. F., de Verteuil, L, Fulthorpe, C. S., Hesselbo, S. P., Hoppie, B. W., Kotake, N., Lorenzo, J. M., McCracken, S, McHugh, C. M., Quayle, W. C., Saito, Yoshiki, S., S. W., ten Kate, W. G., Urvat, M., Van Fossen, M. C., Vecsei, A., Sugarman, P. J., Mullikin, L, Pekar, S., Browning, J. V., Liu, C., Feigenson, M. D., Goss, M., Gwynn, D., Queen, D. G., Powars, D. S., Heibel, T. D., Bukry, D., 1996, Drilling and dating New Jersey Oligocene-Miocene sequences; ice volume, global sea level, and Exxon records, *Science*, 271:1,092-1,095.
- Pekar, S. F. and Miller, K. G., 1996, New Jersey Oligocene "Icehouse" sequences (ODP 150X) correlated with global $\delta^{18}\text{O}$ and Exxon eustatic records: *Geology*, 24:567-570.

OTHER PUBLICATIONS

- Speece, M.A., Levy, R.H., Harwood, D.M., Pekar, S.F., and Powell, R.D., 2009, New Seismic methods to support sea-ice platforms: IODP Scientific Drilling, 7:40-43.
- Pekar, S.F., 2008, When did the icehouse cometh?: in **News and Views in Nature**, 455:602-603.
- Pekar, S.F., and Lear, C.H., 2008, Estimating Cenozoic Ice Volume from Deep-Sea Records, chapter as part of the Marine Proxies for Antarctic Ice Volume: Continental Shelf Sequence Stratigraphy and Seismic Stratigraphy and Deep-Sea Records from High and Low Latitudes Workshop, In, Antarctica: A Keystone in a Changing World, Cooper, A.K., and Raymond, C.R., (eds.), USGS Open-File report.
- Pekar, S.F., and Kominz, M.A., 2008, Estimating Eustasy and Ice Volume from Backstripped Low-Latitude Stratigraphy, chapter as part of the Marine Proxies for Antarctic Ice Volume: Continental Shelf Sequence Stratigraphy and Seismic Stratigraphy and Deep-Sea Records from High and Low Latitudes Workshop, In, Antarctica: A Keystone in a Changing World, Cooper, A.K., and Raymond, C.R., (eds.), USGS Open-File report.
- Harwood, D., Florindo, F., Fielding, C., Levy, R., Pekar, S.F., Southern McMurdo Sound Drilling Prospectus, 2005, published by the ANDRILL Program.
- Harwood, D., Florindo, F., Fielding, C., Levy, R., Pekar, S.F., Southern McMurdo Sound Project, 2004. Andrill, v. 2, p. 3-4.
- Miller, K. G., Browning, J. V., Sugarman, P. J., McLaughlin, P. P., Kominz, M. A., Olsson, R. K., Wright, J. D., Cramer, B. S., Pekar, S. F., Van Sickle, W., 2003, Leg 174AX Leg Summary: Sequences, sea level, tectonics, and aquifer resources: coastal plain drilling by ODP Leg 174AX: Proceedings of the Ocean Drilling Program, Scientific Results, 174AX: College, Texas (Ocean Drilling Program), 40 p.
- Miller, K. G., Sugarman, P. J., Browning, J. V., Pekar, S. F., Katz, M. E., Cramer, B. S., Monteverde, D. H., Uptegrove, J., McLaughlin, P. P. Jr., Baxter, S. J., Aubry, M. P., Olsson, R. K., Van Sickle, B., Metzger, K. T., Feigenson, M. D., Tiffin, S., McCarthy, F., In Miller, K. G., Sugarman, P. J., Browning, J. V., et al., 2003, Proceedings of the Ocean Drilling Program, Ocean View Site Initial report 174AX (supplement): 72 p. [CD-ROM]. Available from: Ocean Drilling Program, Texas A & M University, College Station, Texas.
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INVITED TALKS

Pekar, S.F., Looking Back to Our Future: Climate and Atmospheric CO₂ Changes During Ancient Greenhouse Worlds: presented at The International Polar Weekend at the **American Museum of Natural History**, February 8, 2009.

Pekar, S.F., The Offshore New Harbor Drilling Project: Looking Back to Our Future- Using New Tools to Explore Undiscovered Country: Presented at the **ANDRILL Antarctica Science Committee Meeting**, December, 2008.

Pekar, S.F., The Offshore New Harbor Drilling Project: Looking Back to Our Future- Using New Tools to Explore Undiscovered Country: Presented at the **Antarctic Town Hall Meeting** at American Geophysicist Union Fall Meeting, December, 2008.

Pekar, S.F., The Offshore New Harbor Seismic and Gravity Expedition: Looking Back to Our Future by Exploring the Greenhouse World to Icehouse World in Antarctica: **Presented at McMurdo Station, Antarctica**, Sunday Night Science Lecture, October 12, 2008.

Pekar, S.F., Linking *p*CO₂ Estimates to Oceanographic and Antarctic Climate Records for the Early Icehouse World (34-17 Ma) and a New Antarctic Drilling Program (ANDRILL) to recover sedimentary archives

- from the Greenhouse to Icehouse Worlds: Given at **Cambridge University, Cambridge, UK**, August 20, 2008.
- Pekar, S.F., 2008, Linking $p\text{CO}_2$ Estimates to Oceanographic and Antarctic Climate Records for the Early Icehouse World (34-17 Ma) and a New Antarctic Drilling Program (ANDRILL) to recover sedimentary archives from the Greenhouse to Icehouse Worlds: **Princeton University**, April 24, 2008. .
- Pekar, S. F., 2007, Resolving Climatic Conundrums from the Greenhouse to Icehouse Worlds: Future ANDRILL Projects: **Presented at McMurdo Station, Antarctica**, Wednesday Night Science Lecture, October 17, 2007.
- Pekar, S.F., Resolving a climatic conundrum: Linking $p\text{CO}_2$ estimates to oceanographic and Antarctic climate records for the early icehouse world (34-16 Ma), **Instituto Andaluz de Ciencias de la Tierra (IACT) CSIC-Univ. de Granada, Spain**, April, 2007.
- Pekar, S.F., Glaciers in Manhattan? Forests in Antarctica? past Climate Change and what it means for us today: 30th annual NOAA-CUNY Conference at Kingsborough Community College, April, 2007.
- Pekar, S.F., Glaciers in Manhattan? Forests in Antarctica? Past Climate Change and what it means for us today: presented at the **Forum at the Gotham Center, CUNY Graduate Center**: Weather Report: What's Next for New York, Climatologically Speaking? Will We Be Drowned, Fried, or Frozen?, April, 2007
- Pekar, S.F., Linking $p\text{CO}_2$ Estimates to Oceanographic and Antarctic Climate Records for the Early Icehouse World (34-17 Ma) and a New Antarctic Drilling Program (ANDRILL) to Investigate the Dynamic Versus Polar Ice Sheet Debate (17-2 Ma), **Brown University**, Nov. 2006.
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- Pekar, S.F., Bringing Antarctic Research to Queens College and Expanding CUNY Research and Educational Programs to Governors Island, **Queens Annual College Alumni Reunion**, Sept., 2006.
- Pekar, S.F., Bringing Antarctic Research to Queens College and Expanding CUNY Research and Educational Programs to Governors Island, **Presidential Roundtable Lecture Series**, Queens College, December 12, 2005.
- Pekar, S.F., Developing High-Resolution Climate Records for the New York Area & a Sediment Transport Model for the Hudson River for the Past 7,000 Years, presented at the **Hudson River Foundation**, NYC, October 5, 2005.
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- Pekar, S.F., Correlating the $\delta^{18}\text{O}$ Record with the New Jersey Oligocene Sequences Recorded at the Leg 150X Boreholes (Cape May, Atlantic City, and Island Beach): Integrated Cenozoic Magneto-, -Bio-, Chemo-Chronology and Sequence Stratigraphy: Applications to Global Correlations and Sea Level, Annual Review Meeting, **Woods Hole Oceanographic Institute**, May, 1997.
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ABSTRACTS

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- Pekar, S. F and Miller, K. G., 1994, Correlation of Oligocene sequences between the New Jersey and Alabama Coastal Plain: Geological Society of America Abstracts with Programs, 26:A-90.

VOLUNTEERED LECTURES

- A 7,000-Year History of Climate Change in the NYC and What it Means for Us Today, Presented on **Governors Island** as part of a summer long science lecture series, 2006.
- Global Warming and Sea-Level Changes and Implications to Public Health, presented at Hunter College, as part of a special Urban health Promotion, April, 2005.
- Developing high-resolution stable isotope records for the late Paleocene (59-55 Ma) from ODP Leg 207 Site 1258: Ocean Drilling Program Post Cruise Meeting for Leg 207, held in Aubin sur Mer, France, September 13-17, 2004.

Developing High-Resolution Climate Records for the New York Area and Sediment Transport Model for the Hudson River for the Past 7,000 Years: UCEPRC Seminar Series, CUNY Graduate Center, September 2004.

Developing a Eustatic Record From Western Equatorial Pacific $\delta^{18}\text{O}$ Records and Onshore New Jersey Oligocene Sequence Stratigraphy: Queens College, Flushing, NY, May 1999.

Onshore-offshore New Jersey Oligocene Sequences: Reconstructing the Stratal Geometry and Estimating Eustasy: Business Unit Seminar, Chevron Overseas Petroleum Inc., San Ramon, California, December 1998.

Developing an Integrated Sequence/Seismic Stratigraphic Framework For the West African Tertiary, Using Benthic Foraminiferal Biofacies and Sr-isotopic Chemostratigraphy: Business Unit Seminar, Chevron Overseas Petroleum Inc., San Ramon, California, July, 1997.

Sr-Isotopic Chemostratigraphy: Development of a High Resolution Chronostratigraphic Tool for the Pinda Formation: Business Unit Seminar, Chevron Overseas Petroleum Inc., San Ramon, California, July, 1996.

POSTER AND EXHIBIT PRESENTATIONS

The Offshore New Harbor Drilling Expedition: Looking back to our Future. Exhibit at the International Polar Weekend at the American Museum of Natural History, February 7-8, 2009.

Climate Change in Our Lifetime: Why We should be Worried. Presented as part of the **CUNY Science Exhibition held on Governors Island** (Multimedia display), summer, 2007.

CUNY Marches with the Penguins. Presented as part of the **CUNY Science Exhibition held on Governors Island**, summer (Multimedia display), 2007.

Climate Change in Lifetime: Why We Should Be Worried. - Stephen Pekar, Queens College. Presented as part of the **CUNY Environmental Science Exhibition held on Governors Island**, summer, 2007.

A Greenhouse World in Our Lifetime? Why We Should Be Worried - Stephen Pekar, Queens College. Presented as part of the **CUNY Science Exhibition held on Governors Island**, summer, 2007.

Sea Level Rise in Our Lifetime? Why We Should Be Worried - Stephen Pekar, Queens College. Presented as part of the **CUNY Science Exhibition held on Governors Island**, summer, 2007.

Abrupt Climate Change Due to Gradual CO₂ Changes: The Greenhouse to Icehouse Transition- Stephen Pekar, Queens College. Presented as part of the **CUNY Science Exhibition held on Governors Island**, summer, 2007.

NYC Under Water? Swimming in the Arctic Ocean? An Example of a Runaway Greenhouse World - Stephen Pekar, Queens College. Presented as part of the **CUNY Science Exhibition held on Governors Island**, summer, 2007.

The Great Antarctic Debate: Stable Versus Dynamic Ice Sheet and What It Means for Us - Stephen Pekar, Queens College. Presented as part of the **CUNY Science Exhibition held on Governors Island**, summer, 2007.

A 7000-Year History of Paleosalinity Changes in the Hudson River Estuary and What It Means for US. presented as part of the **CUNY Science Exhibition held on Governors Island**, summer, 2007.

Can You Determine What the Salinity Was Like in the Hudson River Thousands of Years Ago?: Presented as part of the **CUNY Environmental Science Exhibition held on Governors Island**, summer, 2006.

The Ups and Downs of Sea Level, Past and Future: Presented as part of the **CUNY Environmental Science Exhibition held on Governors Island**, summer, 2006.

CUNY Marches with the Penguins: Presented as part of the **CUNY Environmental Science Exhibition held on Governors Island**, summer, 2006.

Deciphering the Depositional History of the Hudson Estuary and Estimating Summertime Precipitation Changes in the New York City area from the mid to late Holocene (7-1 ka): Presented at the workshop entitled: Enhancing Undergraduate environmental Education in the Hudson Valley: Exposition & Connections, October 29-30, 2004 at Marist College, Poughkeepsie, New York.

Stratigraphic Expression of the Turbidity Maximum and Evidence for Short-Term Climate Change from Estimates of Paleosalinity in the Hudson Estuary Between 6 and 2 ka: Presented at the conference Higher Education and the Hudson River valley: Meeting the Environmental Challenge, February, 2004.

REPORTS

Miocene Benthic Foraminiferal Biofacies and Sequences from Offshore Cabinda, Angola: *prepared for the Business Unit of Chevron Overseas Petroleum Inc., San Ramon, California, December, 1999.*

Developing an Integrated Sequence/Seismic Stratigraphic Framework For the West African Tertiary, Using Benthic Foraminiferal Biofacies and Sr-isotopic Chemostratigraphy: *prepared for the Business Unit of Chevron Overseas Petroleum Inc., San Ramon, California, December, 1997.*

Sr-Isotopic Chemostratigraphy: Development of a High Resolution Chronostratigraphic Tool for the Pinda Formation: *prepared for the Business Unit of Chevron Overseas Petroleum Inc., San Ramon, California, December, 1996.*

LIST OF CRUISES AND FIELD EXPEDITION WORK

Expedition: Offshore New Harbor, Western Ross Sea Seismic and Gravity Data Survey: Using New Tools to Explore Undiscovered Country

10/08-12/08

I led an expedition to Antarctica this past fall to carry out a seismic and gravity survey offshore of New Harbor, which is located in the eastern shores of east Antarctica. The goal of the expedition is to use this data to locate the optimal site to drill sediments that were deposited between 34 and 55 million years ago. This was a time that the world was a Greenhouse World and in Antarctica, the ice sheets were either absent or ephemeral in nature. We lived in a remote field camp approximately 70 km from the station for about 45 days. Additionally, a film crew accompanied the team onto the sea ice for creating a TV documentary. We collected over 47 km of multi channel seismic data, which was a record using this method. The data is now being processed and we expect to develop a drilling proposal in the near future.

Expedition: Southern McMurdo Sound (SMS) Drilling Project: Drilling Back Into the Future

10/07-12/07

I was part of an international team of scientists on an expedition to Antarctica that obtained over 1,100 meters of sedimentary cores in McMurdo Sound as part of the ANDRILL program. These sediments ranged back to nearly 20 million years old, a time when the Antarctic ice sheet was far more dynamic, with the glaciers advancing to near present-day size during warm periods and retreating hundreds of kilometers inland during colder periods.

Southern McMurdo Sound (SMS) seismic survey

10/05-12/05

I was part of a team that obtained seismic data for the SMS Drilling Project for the ANDRILL program.

Determining the magnitude of a mega-tsunami event ~1500 AD

2/04

I was the Co-PI leading an expedition of eight scientists and journalists to Stewart Island to identify mega-tsunami deposits and place constraints on run-ups.

Onsite scientist for ODP Leg 174AX, Sea Girt

10/03

I was an onsite sedimentologist and stratigrapher for the drilling of the Sea Girt borehole.

Coring expedition on the Hudson River (R.V. Robert Hayes)

9/02

Co-PI on a 2-day cruise to obtain vibracores from the Hudson River from sites east of Alpine NJ to Storm King Mountain, NY

Scientific expedition in the New York Bight on R.V. Endeavor (En370)

5/02-6/02

Co-PI on 3¹/₂ week cruise to collect seismic, chirp data and vibracores for the area south of New York City.

Fieldwork in Navidad Chile

5/01

CO-PI in which I described the sediments and dated early Miocene strata along the coast of Chile using Sr-isotopic chemostratigraphy, placing them into a sequence stratigraphic framework.

Onsite scientist for ODP Leg 174AX, Bethany Beach, DE

5/00-7/00

I was an onsite sedimentologist and stratigrapher for the drilling of the Bethany Beach borehole.

Onboard scientist on ODP Leg 189 in the Tasman Sea

3/00-5/00

Participated as a shipboard scientist as a sedimentologist on the oceanic cruise on the JOIDES Resolution.

Staff scientist for ODP Leg 174AX, Ocean View, NJ

8/99-9/99

Provided logistics and participated as sedimentologist and stratigrapher for drilling of the Ocean View borehole in New Jersey.

Onsite scientist for ODP Leg 174AX, Ancora, NJ

7/97-9/97

I was an onsite sedimentologist and stratigrapher for the drilling of the Ancora borehole.

Onsite scientist for ODP Leg 174AX, Bass River, NJ

9/96-11/96

I was an onsite sedimentologist and stratigrapher for the drilling of the Bass River borehole.

Onsite scientist for ODP Leg 150X, Cape May, NJ

3/94-5/94

I was an onsite sedimentologist and stratigrapher for the drilling of the Cape May borehole.

PROPOSALS AND MANUSCRIPTS REVIEWED

2007-2008

Journals

3 Geology
4 Palaeogeography, Palaeoclimatology, Palaeoecology
2 Nature
1 International Symposium on Antarctic Earth Science
5 others

Proposals reviewed

8 NSF

2000 through 2006

Journals

- 2 Global and Planetary Change
- 2 Journal of Sedimentary Research
- 3 Geology
- 1 Journal of Micropaleontology

Books

- 1 AAPG special volume, Olson, H., and Leckie, M. editors
- 1 GSA Penrose Special Volume, D. Prothero, editor

Proposals reviewed

- 9 NSF proposals reviewed
- 1 IODP proposal reviewed
- 2 ESF Eurocores on Euro climate

NSF Panels

- 1 NSF International Polar Year

Pre-2000

Journals

- 1 Journal of Geology
- 1 Journal of Sedimentary Geology

COMMITTEE AND EDUCATIONAL SERVICE AND OTHER COMMUNITY ACTIVITIES

Member of the U.S. Advisory Committee (USAC) for the US Science Support Program for the Integrated Ocean Drilling Program

10/08-present

The U.S. Advisory Committee for Scientific Ocean Drilling (USAC) is the national advisory committee for U.S. participation in the Integrated Ocean Drilling Program (IODP) and wider issues in scientific ocean drilling. USAC is established through the U.S. Science Support Program and intended to be broadly representative of the scientific community. USAC is a peer-elected committee of twelve members, serving three-year staggered terms, that meets biannually. New members are approved by the Consortium for Ocean Leadership Board of Trustees.

Member of the U.S. Advisory Committee for Scientific Ocean Drilling (USAC) Education Subcommittee

10/10- present

Member of the ANDRILL Science Committee (ASC)

8/06-present

The ASC is an international community-based planning committee that provides the Antarctic Earth science community with a framework, management structure, and mechanism to assist in the development and maturation of drilling proposals, the collection and integration of site survey results, and to coordinate initial discussions regarding resource allocations from National Antarctic Programs. The ASC's chief responsibility is the development of future ANDRILL science targets, from initial concept to the submission of proposals. Membership of the ASC includes national representatives appointed by National Steering Committees (or other bodies) and proponents of developing projects. Chief responsibilities of these members are (1) to develop science and operational portfolios for drilling around the Antarctic margin; (2) to facilitate the establishment of international consortia to support drilling operations; (3) to ensure a plan of geophysical surveys and drilling capability is operating on behalf of the international community; (4) to organize the

ANDRILL Site Survey Panel (ASSP) and ANDRILL Scientific Measurements Panel (ASMP); and (5) to maintain continuity of the ANDRILL Science Plan (ASP) in the developing portfolios and drilling projects.

U.S. Steering Committee of ANDRILL (ANTarctic DRILLing Program)

3/04-present

ANDRILL is a multinational initiative with the objectives to “recover stratigraphic core records for the use in interpreting Antarctic’s climatic, glacial, and tectonic history for the past 50 Ma”.

Professional Staff Congress Union Delegate

09/07- present

Workshop Organizer: Marine Proxies for Antarctic Ice Volume: Continental Shelf Sequence and Seismic Stratigraphy and $\delta^{18}\text{O}$ Records from High and Low Latitudes

Held during the International Symposium on Antarctic Earth Science

Lead Organizer

August, 2007.

I was the lead organizer for this is short workshop, which brought together a critical mass of researchers to describe, instruct, share, and discuss some of most important methods in deciphering the cryospheric evolution in Antarctica during the Cenozoic. This included methods using records from distal sources such as isotopic records from deep-sea cores and stratigraphic records from continental margins, which although are relatively complete, typically include signals not directly related to changes in the ice sheet. Proximal records on the other hand, such as borehole and seismic data from around Antarctica, provide the most direct if inherently fragmentary and qualitative constraints on polar climate and ice sheet dimensions.

A syntheses was presented by experts on different intervals of geological time from both low- and high-latitude proxy records of cryospheric changes. Our ultimate goal is to put together a special volume, either to be published in a journal or as a book, which will delve contributors’ unique perspectives on how to use and apply these methods to new data sets, their limitations and strengths as well as some cutting edge applications for each of them.

CUNY Climate Change Lecture Series and Exhibition on Governors Island

Lead Organizer

June-September, 2007

S. Pekar was the principal organizer in developing a CUNY science lecture series and exhibition based on the theme of “stabilizing the climate in the 21st century” on Governors Island for showcasing research being carried out by CUNY Faculty and students for the summer of 2007. This included 14-weeks of lectures from CUNY faculty and 27 exhibits by CUNY faculty and students.

National Science Foundation International Polar Year: informal Science Education Panelist

June, 2006

Lecture Series and Exhibition of CUNY research on Governors Island

June-August, 2006

S. Pekar is the principal organizer in developing a CUNY science lecture series and exhibition on Governors Island for showcasing research being carried out by CUNY Faculty and students for the summer of 2006.

Proposal for CUNY University Village on Governors Island (submitted to the Governors Island Preservation and Education Corporation)

Submitted May 2006

CUNY submitted a major proposal to have a University Village on Governors Island. S. Pekar provided 8 pages of ideas and concepts for curriculum, facilities, and programs that were included in the CUNY Village on Governors Island.

Organizer for CUNY at Governors Island Workshop: Leveraging funds for research and educational facilities on Governors Island

September 9, 2005 at the CUNY Graduate Center

The purpose of this workshop is for CUNY faculty together in forging collaborative efforts for the purpose of leveraging funds for development of research and educational facilities on Governors Island. Pekar was one of the leading organizers in this workshop.

CUNY's Expression of Interest for developing research and educational facilities and programs on Governors Island

June 2005

S. Pekar was the principal faculty member that first organized Queens College faculty to discuss the idea of writing an expression of interest for Governors Island. He was also one of the primary faculty in developing the ideas for the facilities as well as writing the document.

Harbor 360 CUNY Representative

5/05- 5/06

The New York-New Jersey Harbor's premier research and educational organizations joined together to develop Harbor 360, which proposed to develop a world-class harbor center on Governors Island. CUNY is a member of Harbor 360 and took a leading role in developing research and educational programs and facilities for Governors Island.

Board of Directors for the Urban Coastal Environmental Processes Research Center (UCEPRC)

7/05-3/06

The CPER Center focused on education and research that nurtures and protects the New York City environment, and especially the Hudson River estuary and associated bays and harbors.

Integrating Cutting Edge Antarctic science into East Harlem and South Bronx Elementary Public Schools

6/05-present

I have been developing collaborative efforts with Harlem public schools to bring research I am currently carrying out in Antarctica into the classroom. Among the schools I am working with is a charter school that is part of the Harlem Children's Zone, which was recently highlighted in a TV segmented aired on 60 Minutes on CBS-TV.

Queens College Representative and Science Research Committee Member for the Environmental Consortium of Hudson Valley Colleges & Universities

3/04-present

The Consortium is "committed to engaging the member institutions, their faculty, students and staff, and the local community in the study and enhancement of the Hudson River Valley. A common purpose and shared resources will enable the Consortium to shape the environmental future of the region."

Site Survey Committee for Southern McMurdo Sound project, ANDRILL (Antarctic drilling program)

11/03- 4/08

This Committee will be making the final decision on the site selection for the first two boreholes to be drilled during the 2007 drilling season.

Divisional Representative to the Queens College Academic Senate

10/03-5/06

Ocean Drilling Program Post Cruise Meeting, ODP Leg 207, Aubin sur Mer France

9/04

Presented a talk entitled, "Developing high-resolution stable isotope records for the late Paleocene (59-55 Ma) from ODP Leg 207 Site 1258".

Cooperation with the Department of Environmental Protection for preserving and using cores from the NYC area

6/02- 12/02

The D.E.P. and other agencies possess a vast collection of cores obtained throughout NYC.

I was part of a team from LDEO that was evaluated the potential for providing a repository for some of these cores at LDEO and/or sampling them for scientific investigations.

Yonkers Museum

11/00-3/01

Provided expertise both scientifically and educationally in developing curricula and exhibits on the Hudson River for the museum.

Ocean Drilling Program Post Cruise Meeting, ODP Leg 189, Urbino, Italy

7/01

Presented two talks:

- Developing a High-Resolution Sea-Level Record for the Middle Eocene (50-42 Ma) based on Sequence Stratigraphy of Site 1171.
- Paleooceanographic Changes in the Tasman Sea and Methane Hydrate Instability along the East Tasman Rise During the Early Miocene: Stable Isotope Records from Site 1168.

WORKSHOPS ATTENDED

ANDRILL Seismic and stratigraphy Workshop

May, 2007

Ohio State University, OH

ANDRILL Science Education and Outreach Committee Meeting

September 2, 2006

University of Nebraska at Lincoln, NE

Antarctic New Investigators Workshop

August 21-22, 2006

National Science Foundation, Arlington, VA

The aim of this workshop is to help promote Antarctic science by assisting young scientists who have never been a Principal Investigator or a Co-Principal Investigator on an award in the U.S. Antarctic Program.

East Antarctic workshop

September 18-20, 2005

Spoletto, Italy

The aim of this workshop was to promote dialogue between researchers from around the world who study the East Antarctic Ice Sheet (EAIS) evolution in the fields of glacial processes, glacial stratigraphy-sedimentation, and ice sheet modeling. The workshop was an ideal forum to synthesize what is known about the evolution of the EAIS, to develop collaborations to integrate the data already collected, and to generate a strong consortium to define future research activities and plan future cruises for recovering new data around the East Antarctic margin.

ANDRILL (ANTarctic DRILLing) workshop

April 1-2, 2005

Denver, Colorado

ANDRILL is an international program designed to investigate Antarctica's role in Cenozoic global environmental change through stratigraphic drilling and modeling. The initial two sites, to be drilled in 2006 and 2007, are aimed at recovering a record of ice sheet and climate history and tectonic evolution over the last 20 m.y. This workshop will provide essential information about ANDRILL scientific objectives and funded projects to potential participants, including procedures for applications, and information on science support. Participants will provide input to further develop science objectives. Discussion of future drilling opportunities will also take place.

Enhancing Undergraduate environmental Education in the Hudson Valley: Exposition & Connections

October 29-30, 2004

Marist College, Poughkeepsie, New York

A working conference to incorporate the Hudson River watershed as a natural classroom and laboratory.

Higher Education and the Hudson River Valley: Meeting the Environmental Challenge

February, 2004

Dolce Tarrytown House, Tarrytown, NY

The Environmental Consortium of Hudson Valley Colleges & Universities is an intercollegiate association for the establishment of the Hudson River Valley as a global center for the advancement of environmental studies and policy through the utilization of shared resources.

Southern McMurdo Sound ANDRILL (Antarctic DRILLing) workshop

November 2003

University of Nebraska, Lincoln, NE

I was one of 6 scientists selected to be on the final site survey committee for Southern McMurdo Sound (SMS) drilling project. This workshop revisited the geological history of the SMS area using reprocessed seismic profiles and new age dates from nearby cores, resulting in new exciting hypotheses on the geological evolution of the SMS region. This resulted in an abstract submitted to IGC (Pekar et al., 2004). This will project will to be drilled by ANDRILL in late 2007.

Interdisciplinary Thinking in an Interdisciplinary World Faculty Development Seminar

November 2003 and spring, 2004

CUNY Graduate Center

Interdisciplinary Teaching in an Interdisciplinary World” is a two-semester faculty development seminar for CUNY faculty and co-sponsored by the CUNY Honors College and the CUNY Faculty Development Program. Its purpose is to encourage and support effective and rigorous interdisciplinary curriculum planning and teaching. participants will attend a series of workshops designed to give them experience with pedagogical approaches that promote interdisciplinarity, such as collaborative and inquiry-based teaching and learning; curricular enrichment through a variety of materials—archival, visual, and virtual—from multiple disciplines; and partnerships with cultural and community institutions engaged in cross-disciplinary work.

Margins: Source to Sink- Education and Planning Workshop

September 11-15, 2000

Lake Tahoe

This workshop developed interdisciplinary approaches to research in the focus areas, and to implement a research strategy that maximizes synergy and use of facilities.

Margins: Source to Sink-- Sedimentary/Stratigraphy Workshop

September 28 - October 1, 1999

Lake Quinault, Washington State,

NSF, JOI Inc., and the MARGINS Program sponsored an interdisciplinary workshop (~50 participants) to discuss the most important directions for future research, recommend strategies for understanding pathways followed by sediments on their journey from source to sink (e.g., hill-slope erosion, river transport, biological production, temporary storage, seabed burial), which have major impacts on the lives and livelihoods of people worldwide, ranging from natural hazards, to pollutant transport, shoreline erosion, and resource preservation

Complex- Conference on Multiple Platform Exploration of the Ocean

May 26-29, 1999

Vancouver, BC, Canada

The overall goal for the COMPLEX workshop was to define the "intellectual challenges" of the post-2003 scientific ocean drilling program.

TEACHING ROLES AT QUEENS COLLEGE

GEO101- Physical Geology

Fall 2006

GEO102- Historical Geology (Required for Geology major)

Spring 2004; Spring 2005; Spring 2006, Spring 2007, Spring 2008, Spring 2009

GEO202 – Earth Materials II (Required for Geology major)

Fall, 2004

GEO239 – Evolution of Ecosystems (Required for Geology major)

Spring, 2004; Spring, 2007

GEO213 – Sedimentology and Stratigraphy (Required for Geology major)

Fall 2003; Spring, 2005; Fall 2006, spring 2008

GEO502 – Earth History and the Fossil Record

Spring 2006

GEO702 – Advanced Principles of Historical Geology

Spring 2008, Spring 2009

COLLEGE TEACHING ROLES PRIOR TO QUEENS COLLEGE

Physical Geology Lecturer

Rutgers, the State University of New Jersey, New Brunswick, NJ

17 students, Fall '99

Historical Geology Lecturer

Rutgers, the State University of New Jersey, New Brunswick, NJ

175 students, Spring '96

Stratigraphy Laboratory (Required for Geology major)

Rutgers, the State University of New Jersey, New Brunswick, NJ

15-20 students, Spring '95, Spring '96, Spring '97, Spring '99

Physical Geology Laboratory

Rutgers, the State University of New Jersey, New Brunswick, NJ

10-27 students, Fall '93, Spring '94, Fall '95, Fall '97, Fall '98

Invertebrate Paleontology Laboratory (Required for Geology major)

Rutgers, the State University of New Jersey, New Brunswick, NJ

20 students, Fall '96

Geophysics Laboratory Instructor (Required for Geology major)

Rutgers, the State University of New Jersey, New Brunswick, NJ

18 students, Fall '94

ADVISORY ROLES

Graduate students at Queens College

Howard, Koss, (1/07- present, Queens College) (main advisor)

Masters Thesis Title: *Developing a High-Resolution Lithofacies and Sequence Stratigraphic Framework for the Middle Miocene in Southern McMurdo Sound*

Expected defense date: 5/09

Undergraduate students at Queens College

Andrea Balbas (8/08-12/08, Queens College)
Sabah Syed (06/07- present, Queens College)
Jonathan Schweitzer (6/07-09/08, Queens College)
Maria Banks (6/04-8/04, Queens College)
Sean Smith (9/04-5/06, Queens College)
Nicole, Taitt-Finch (9/04-8/06, Queens College)
Vasquez, Vanessa (9/05-6/06, Queens College)
Papantovia, Barbara, (2/05-6/05)

Previous undergraduate students

Miriam Jones, Barnard College
LDEO Summer internship
Summer intern project title: *Paleoenvironmental Variability During the Holocene in the Hudson River by looking at Core Vema 32-02*
Dates: 5/01-8/01

Nicholas Jenning (6/04-8/04, LDEO)
LDEO Summer internship
Summer Intern Project Title: *Developing stable isotope records from the late Paleocene (59-55 Ma)*
Dates: 5/04-8/04

Kathleen Livelli (6/04-8/04, LDEO)
LDEO Summer internship
Summer Intern Project Title: *Constraining paleosalinity and sediment transport in the Hudson Estuary for the past 6,000 years*
Dates: 5/04-8/04

Lauren Neitzke, Rutgers University
LDEO Summer internship
Summer Intern Project Title: *Surface and intermediate paleoceanographic changes in the Southern Ocean during the early Miocene using stable isotopes and Mg/Ca ratios*
Dates: 5/03-8/03

Shawna Li, Columbia University
LDEO Summer internship
Summer Intern Project Title: *Glacio Eustatic Change in the Early Middle Eocene (49.2-47.9 Ma)? Sequence Stratigraphy and Benthic Foraminiferal Analysis at ODP Leg 189 Site 1171*
Dates: 5/02-7/02

Miriam Jones, Barnard College
Senior Thesis Project- This project will continued the work she started during her summer intern project on the Hudson River cores.
Dates: 9/01-5/02

Audrey Hucks, Rice University
LDEO Summer internship
Summer Intern Project Title: *Glacial Eustasy in a Global Greenhouse? An In-Depth Look at a Middle Eocene Sequence from ODP Leg 189 Site 1171*
Dates: 5/01-8/01

Mentoring High School Students

Belinda Lin, Jullian Miller, Annie Morales, and Ilia Neizvestriyi; Glover Cleveland High School, Brooklyn, NY
High School project title: *Sedimentation history of the Hudson River from 7,000 to 2,000 years ago: Implications for sediment transport and climate changes*
Dates 11/03- 10/04

Alexandra Marchese, Clarkstown High School South, West Nyack, NY
High School project
Project title: *Salinity and Energy Variations of the Western Flats (Core SD-11A) in the Hudson River Estuary*

Dates: 9/00-11/01

Amy Smith, Clarkstown High School South, West Nyack, NY

High School project

Project title: *Salinity and Grain Size Variability of the Western Near Shore Area of the Hudson River Estuary*

Dates: 9/00-8/01

PROFESSIONAL SOCIETIES

American Geophysical Union

Geological Society of America

Sigma Xi

COLLABORATORS

Recent collaborators (past 2 years)

Dallas Abbott, Lamont-Doherty Earth Observatory of Columbia University, Palisades, NY

Phillip Bart, Louisiana State University, LA

Robert DeConto, University of Massachusetts, Amherst, MA

Nicholas Christie-Blick, Lamont-Doherty Earth Observatory of Columbia University, Palisades, NY

Carlota Escutia Dotti, Instituto Andaluz de Ciencias de la Tierra, CSIC-Univ. de Granada, Granada, Spain

Fabio Florindo, Istituto Nazionale di Geofisica e Vulcanologia, Roma, Italy

Christopher R. Fielding, Department of Geosciences, University of Nebraska-Lincoln, NE

Michael Fuller, University of Hawaii at Manoa, Honolulu, Hawaii

David Harwood, Univ. of Nebraska-Lincoln, Lincoln, NE

Michelle Kominz, Department of Geosciences, Western Michigan Univ., Kalamazoo, MI

Richard Levy, University of Nebraska-Lincoln, Lincoln, NE

Kenneth Miller, Rutgers, The State University of New Jersey, New Brunswick, NJ

Gregory Mountain, Rutgers University, Piscataway, NJ

Alfred Rosenberger, Hunter College, CUNY, NY

Marvin Speece, Montana Tech, Butte, MT

Guilana Villa, Dipartimento di Scienze della Terra, Università di Parma, Parco Area delle Scienze, Parma, Italy

Past Manuscripts and Proposal collaborators

Mark Anders, Lamont-Doherty Earth Observatory of Columbia University, Palisades, NY

James Browning, Rutgers, The State University of New Jersey, New Brunswick, NJ

Lloyd Burckle, Lamont-Doherty Earth Observatory of Columbia University, Palisades, NY

Richard Fairbanks, Lamont-Doherty Earth Observatory of Columbia University, Palisades, NY

Kathryn Gregory, Lamont-Doherty Earth Observatory of Columbia University, Palisades, NY

Sidney Hemming, Lamont-Doherty Earth Observatory of Columbia University, Palisades, NY

Garry Karner, Lamont-Doherty Earth Observatory of Columbia University, Palisades, NY

Jean Lynch-Steiglitz, Lamont-Doherty Earth Observatory of Columbia University, Palisades, NY

Cecilia McHugh, Queens College CUNY, Flushing, NY; and Lamont-Doherty Earth Observatory of Columbia University, Palisades, NY

Richard Olsson, Rutgers, The State University of New Jersey, New Brunswick, NJ

Dorothy Peteet, Lamont-Doherty Earth Observatory of Columbia University, Palisades, NY

Peter Sugarman, New Jersey Geological Survey, Trenton, NJ

James Zachos, Department of Earth Science, University of California at Santa Cruz, Santa Cruz, CA

Other collaborators (abstracts, etc.)

Thomas Dignes, Mobil Exploration & Producing Technical Center, Dallas, TX
Bruce Fouke, University of Illinois, Urbana, IL
Sharma Gaponoff, Chevron Overseas Petroleum Inc., San Ramon CA
Donald Monteverde, Rutgers, The State University of New Jersey, New Brunswick, NJ
James Rubenstone, Lamont-Doherty Earth Observatory of Columbia University, Palisades, NY
Michael Steckler, Lamont-Doherty Earth Observatory of Columbia University, Palisades, NY
James Wright, Rutgers, The State University of New Jersey, New Brunswick, NJ

MEDIA COVERAGE

WABC TV (November, 2008)

Interviewed for a TV segment about the Antarctic expedition that I led in 2008.

Ebony Magazine (November, 2008)

Interviewed for an article about the Antarctic expedition that I led in 2008.

Time Magazine (October, 2008)

Interviewed for an article about the Antarctic expedition that I led in 2008.

Research Foundation of the City University of New York 2007 Annual Report (published in August, 2008)

Dr. Pekar was on the front page and had a two-page article in the annual report.

New York Times (March 29, 2008)

Interviewed for an article about the Antarctic expedition that I am leading in 2008, which was on the front page of the New York Times.

Q Magazine (Spring, 2007)

Interviewed for article entitled, "Global Warming Comes to a Boil", by Bob Suter.

CUNY Matters (Spring, 2007)

Interviewed for article entitled, "Global Warming: A City Under Water?"

WPIX-TV Channel 11, "News Close Up" by Marvin Scott (March 4, 2007)

30-minute segment, S. Pekar was one of two experts interviewed for this segment on climate change.

SEGMENT ON "STUDY FROM THE BEST" CUNY TV (shown in March, 2007)

Television segment on S. Pekar's research in Antarctica on the CUNY TV show "Study from the Best" that was broadcasted March, 2007.

NEBRASKA PUBLIC TELEVISION AND NOVA (FALL 2005)

Nebraska Public Television filmed in the fall of 2005 the scientific expedition to Antarctica that S. Pekar was part of (see "list of cruises and field work") that will be shown as part of a **NOVA** special on Antarctica as well as for the show "Study from the Best" (see above).

FYI – QUEENS COLLEGE FACULTY AND STAFF NEWS

Description in FYI of S. Pekar's upcoming award for best paper in the Journal of Sedimentary Research in 2003 and his presentation of two talks at the ANDRILL Workshop held in Denver CO, May, 2005.

JOINT OCEANOGRAPHIC INSTITUTION (JOI) PRESS RELEASE

JOI is a consortium of 20 premier oceanographic research institutions that serves the U.S. scientific community by leading large-scale, global research programs in scientific ocean drilling and ocean observing. In its press release it highlighted the invited key lecture talk by S. Pekar that was given at 32nd International Geological Congress and held between August 20-28, 2004.

FYI – QUEENS COLLEGE FACULTY AND STAFF NEWS

New faculty profile of S. Pekar in FYI, February, 2004

WORLD TRAVELS (nearly forty countries total)

North, Central, and South America

USA/Canada 7/80-8/80
Canada/Alaska 5/85-7/85
Mexico & Central America 6/81-7/81, 10/89-6/90, 1/07, 5/08
Ecuador/Peru & Galapagos 7/88-8/88
Argentina 12/97, 7/98, 12/98, 5/01, 12/02, 7/07, 12/08

Europe

Europe and the Middle East 6/82-10/83
Europe 12/84-1/85, 7-8/86, 7-8/87, 4/99, 4/03. 8/04, 9/05, 3/07, 7-8/08

East Asia

Japan & China 7/85-9/85

Antarctica and the Pacific

Australia/New Zealand/ Tahiti 3/00-5/00
Stewart Island, New Zealand 2/04
McMurdo Sound, Antarctica 10/05-12/05
McMurdo Station, Antarctica 10/07-12/07
McMurdo Station, Antarctica 10/08-12/08
Hawaiian Islands 1/09

GLOBE-TROTTING WORK EXPERIENCE

Archeology

Chartres, France

5/83-6/83 & 9/83-10/83

I was part of a team that excavated 2nd Century Gallo-Roman ruins.

Wine Harvest

Biengen and Mosel River, Germany

9/82-11/82 & 9/83-10/83

I participated in the wine harvest in two places in Germany, the first was in Biengen, in which I lived in a castle with a Baron and the second was in the beautiful mountainous region of the Mosel Valley.

Orange Harvest

Argos, Greece

11/82-12/82

I lived with a family while picking oranges before heading to Israel.

Kibbutz Volunteer

Bet Alpha and Hazorea, Israel

12/82-2/83

I lived on two kibbutzim working in a wide range of jobs from factory work to agricultural work.

Restaurant work and house pianist

Netanya, Israel

2/03-4/83

I started as a dishwasher, but after the owner of the restaurant heard me play compositions I wrote for the piano, I also took on the job of late evening pianist.

Flower bulb factory employment

Hilligen, Netherlands

7/83-8/83

I had among the most coveted jobs (salary wise) in the town, which provided funds for my continuing travels through Europe.

Actor - Movie extra

Shanghai, China

8/85

I was picked to be in a movie that was ultimately shown in three languages.

CREATIVE ENDEAVORS**Trombonist- began playing in 1973**

Selected as first trombonist in the All New York City Band for three years (1974-1977)

Performed at Carnegie Hall (1975, 1976, 1977)

Played at City Hall of New York (1976)

Played at the christening of the USS New York City (1976)

Performed in numerous other concerts

Guest trombonist in bands

Pianist and 20th century classical composer – started playing piano and composing in 1977

Studied in the conservatory of The Aaron Copland School of Music, CUNY (1979-1982)

Classical composition – in the style of early 20th century composers, such as Stravinsky, Debussy, and Ravel

Classical pianist – specialized in Chopin

Performances of original compositions as well as accompaniment include

Concert at Kibutz Hazorea, Israel (1983)

House pianist in a piano bar in Netanya, Israel (1983)

Oil painter

Studied at the Arts Student League in painting and drawing since 1994.

Oil painting in Central America - Brought oil paints (canvas, stretchers, paints, etc.) to Central America, painting over a half of dozens canvases during eight-month travel.