Amelia Endicott Shevenell

Lecturer (UK equivalent to US Assistant Professor)
Department of Geography/Department of Earth Sciences
University College London
Gower Street, London WC1E 6BT
Tel: +44 (0) 20 7679 0671; *Fax:* +44 (0) 20 7679 0565
Email: a.shevenell@ucl.ac.uk

EMPLOYMENT

2008-present ***Lecturer (Assistant Professor):*** Department of Geography (60%) and Department of Earth Sciences (40%), University College London, London, United Kingdom.

2005-2007 ***Postdoctoral Fellow:*** Program On Climate Change, JISAO/School of Oceanography, University of Washington, Seattle, Washington.

1998-2004 ***Research and Teaching Assistant***: Department of Geological Science, University of California Santa Barbara, Santa Barbara, California.

1997-1998 ***Geologist/ Associate Environmental Scientist:*** Montgomery Watson, Juneau, Alaska.

1996-1997 ***Chemistry Laboratory Technician/ Health and Safety Officer:*** Montgomery Watson Laboratories, Juneau, Alaska.

1994-1996 ***Research and Teaching Assistant***: Department of Geology, Hamilton College, Clinton, New York.

EDUCATION

Associate Fellow of the Higher Education Academy, *University College London* (2009)
- Postgraduate Certificate in Learning and Teaching in Higher Education

Ph.D. Marine Science, *University of California Santa Barbara* (2004)
- *Dissertation:* The role of climate feedbacks in the Middle Miocene climate transition
- *Advisor:* J.P. Kennett

M.Sc. Marine Science, *University of California Santa Barbara* (2001)
- *Thesis:* Antarctic Holocene climate change: A stable isotopic record from Palmer Deep
- *Advisor:* J.P. Kennett

B.A. Geological Sciences, Hamilton College, with honors (1996)
- *Thesis:* Record of Holocene climate change along the Antarctic Peninsula: Evidence from glacial marine sediments, Lallemand Fjord
- *Advisor:* E.W. Domack

HONORS AND AWARDS

- ***GSA Storrs Cole Memorial Research Award*** *(2006)*
  Awarded to a Geological Society of America Member or Fellow between 30 and 65 years of age who has published one or more significant papers on invertebrate micropaleontology.
- ***Postdoctoral Research Fellowship***, Institute for Marine and Coastal Sciences, Rutgers University, New Jersey *(declined, 2004)*
- ***Wendell Phillips Woodring Memorial Graduate Fellowship*** (2003)
  Awarded by the UCSB Geological Sciences faculty to a graduate student working on a Ph.D. dissertation proposal of superior quality, judged capable of seeing the project to a distinguished and early completion.
- ***Marine Science Fellowship,*** University of California Santa Barbara (1998-1999)
- ***Antarctic Service Medal*** (1995, 1998, 2001)
- ***Rogers Prize in Geology*** (1996)
  Awarded by the Hamilton College Geological Sciences faculty to the outstanding senior geology major.
- ***L. David Hawley Prize Scholarship in Geology*** (1995)
  Awarded by the Hamilton College Geological Sciences faculty to the outstanding junior geology major who exhibits promise as a scientist and intends to pursue a career in geology.

FUNDED RESEARCH GRANTS

Externally Funded

- **Shevenell, A.E.,** Maslin, M., Davies, M., Guilderson, T., and Hendy, I., NERC, *A role for the North Pacific Ocean in deglacial atmospheric CO_2 rise?* **£464,904** (2011-2014).

- Rack, F., Luyendyk, B., Sorlien, C., Wilson, D., DeConto, R., Pollard, D., Bartek, L., Kennett, J., Wise, S., and **Shevenell, A**., NSF OPP Award #0944099*, Cooperative Agreement for SHALDRIL Coring in the southeastern Ross Sea, Antarctica: Early history of the West Antarctic Ice Sheet and pre-Neogene climate and tectonics* (Letter from NSF OPP received November 2009; Award amount pending negotiation of three year Cooperative Agreement; target 2011-2014).

- S. Hautala (PI), **A. Shevenell** (Co-PI), L. Thompson (Co-PI), and P. Johnson (Co-PI), NSF OCE Physical Oceanography #0726519. *Ocean Circulation and climate impacts of proglacial lake outbursts into the Northeastern Pacific Ocean,* **$605,752** (2007-2010).

- S. Emerson (PI), **A. Shevenell** (Co-PI; Primary author), and M. Brzezinski (Co-PI; UCSB), NSF OCE Marine Geology and Geophysics Award #0729954. *SGER-Collaborative Research: Paleoceanographic evidence for changes in ocean circulation and the ecological effects of iron fertilization in the Northeast Pacific (0-20 ka),* **$53,111** (2007-2009).

- S. Emerson, A. Ingalls, and **A. Shevenell** (Co-PI; Primary author), NSF OPP Award #0620099. *SGER: Extracting Holocene Sea Surface Temperature, Ventilation, and Productivity Records from Antarctic Continental Margin Sediments: Novel Geochemical Insights from Palmer Deep*, **$26,953** (2006-2008).

- J.P. Kennett (PI) and **A. Shevenell** (Primary author), NSF Office of Polar Programs Award #0229898. *The middle Miocene climate transition: Investigating magnitude, phasing, and processes involving cryosphere expansion and global cooling*, **$111,093** (2003-2005).

- J.P. Kennett (PI) and **A. Shevenell** (Primary author), JOI/USSSP Post-Cruise Funding, ODP Leg 189. *High-resolution stable isotopic and foraminifer investigations of the middle to late Middle Miocene climate transition: ODP Leg 189, South Tasman Rise*, **$20,000** (2000-2001).

Internally Funded

- UCL Graduate School Research Project Grant, *West Antarctic Ice Sheet and global sea level variations in the Late Miocene (7-5 Ma): Insights from the oxygen isotopic composition of seawater*, **£1400**.

- UCL Dean's Travel Fund, *10th International Conference on Paleoceanography*, San Diego, CA, August 29-September 3, 2010. **£750**.

- M.Sc. Research Fund, *UCL ENSIS Ltd. Trust*, **£500/student** (2008-2010: 5 students; £2500)

- UCL Graduate School Staff Conference Fund, **£600/trip** (AGU 2008, AGU 2009; £1200)

- Maslin, M., McArthur, J., Robinson, S., **Shevenell, A**., and Thurow, J., 2008, *UCL Capitol Infrastructure Funds for an Interdepartmental Environmental ICP-MS Facility*, **£350,000**.

- **A. Shevenell** (PI), UW Program on Climate Change. *Trace metals in Antarctic Holocene Sediments*, **$3500** (2005).

- J.P. Kennett (PI) and **A. Shevenell** (Primary author), UCSB Academic Senate Grant. High-resolution stable isotopic and foraminiferal investigations of the Middle Miocene climate transition: ODP Leg 189, South Tasman Rise, **$5,000** (2002-2003)

RESEARCH INTERESTS

Overarching Research Themes: Cenozoic ocean history (temperature, biogeochemistry, circulation), Evolution of the Southern Ocean and Antarctic cryosphere (Cenozoic through present), Role of the high-latitude oceans in glacial-interglacial CO_2 changes, Reconstructing past sea level change, Developing and calibrating geochemical proxies for Paleoclimatology/paleoceanography.

Current Research (2008-present)
Lecturer (Assistant Professor), University College London
Collaborators: S. Jaccard (ETH), M. Brzezinski (UCSB), M. Maslin, D. Ostermann, C. Tzedakis, S. Robinson (UCL), S. Emerson, L. Thompson, S. Hautala, A. Ingalls (UWashington), I. Hendy (UMichigan), T. Guilderson (LLNL), G. Swann (BGS/NERC NIGL), E. Domack (Hamilton), C. John (Imperial), M. Greaves (Cambridge), J. Tain, P. Wang (Tonji University).

- Reconstructing Quaternary bottom water oxygen concentrations in the North Pacific/ Southern Ocean.
- Assessing deglacial nutrient utilization/ocean circulation changes in the subarctic North Pacific.
- Climate impacts of meltwater influx to the North Pacific during deglaciation.

- Ventilation of the intermediate North Pacific during the "Mystery Interval".
- Holocene Antarctic margin sea surface temperature history/past changes in Southern Hemisphere Westerlies.
- Neogene sea level estimates using a multiproxy approach: backstripping techniques combined with the chemical composition of biogenic carbonates.
- Late Miocene (Messinian) sea level history.
- Middle Miocene paleocirculation and geochemistry of the South China Sea.

Postdoctoral Research (2005-2007)
Program on Climate Change, School of Oceanography, University of Washington
Collaborators: S. Emerson, A. Ingalls, P. Johnson, L. Thompson, S. Hautala, M. Brzezinski (UCSB), R. Murray (BU), E. Domack (Hamilton)
- Redox sensitive trace metals in Antarctic margin marine sediments: Proxies for Holocene ventilation and productivity change
- Glacial/interglacial history of late Quaternary (0-20 ka) circulation and productivity in the Subarctic Pacific
- High-resolution TEX_{86} sea surface temperature studies of Holocene marine sediments from the western Antarctic Peninsula continental margin
- The impact of glacial Lake Missoula discharge events on NE Pacific circulation, carbon cycling, and climate

Technology/Techniques employed: Finnegan MAT 252 IRMS, Quadropole ICP-MS, LC-MS; Mg/Ca, bulk sediment trace element proxy development (U, Mo, Re), $\delta^{18}O$, $\delta^{13}C$, and ^{14}C dating of foraminifers, TEX_{86}, $\delta^{30}Si$ (diatoms), foraminifer assemblage studies.

Ph.D. Research (2001-2004)
Interdepartmental Graduate Program in Marine Science, University of California Santa Barbara
Advisor: J.P. Kennett
Committee: D. Lea, B. Tiffney, R. Dunbar (Stanford University)
- Middle Miocene planktonic and benthic foraminifer trace element and stable isotope geochemistry, faunal analysis, and biostratigraphy
- Southern Ocean deep sea (Cenozoic) and Antarctic margin (Late Quaternary-Holocene) sedimentology

Technology/Techniques employed: Element2 ICP-MS, Finnegan MAT 251 IRMS; Mg/Ca, foraminifer trace elements (U, Sr), $\delta^{18}O$ and $\delta^{13}C$ of foraminifers, and foraminifer assemblage studies.

M.Sc. Research (1998-2001)
Interdepartmental Graduate Program in Marine Science, University of California Santa Barbara
Advisor: J.P. Kennett
- Stable isotope analysis of Holocene benthic foraminifers from Palmer Deep, Antarctica

Undergraduate Research (1995-1996)
Hamilton College
Advisor: E. Domack
- High-resolution sedimentologic and organic carbon investigations of western Antarctic Peninsula Holocene climate variability

FIELD EXPERIENCE

Research Assistant, *RV T. Thompson,* Oregon Margin (Oct. 5-10, 2005)
- *PI:* H.P. Johnson, University of Washington
- *Cruise Objective:* Student teaching cruise to obtain sediment cores for Missoula Flood pilot study.

Research Assistant, *RV/IB N.B. Palmer,* Santa Barbara Basin (Nov. 6-10, 2002)
- *PI:* J.P. Kennett, University of California Santa Barbara
- *Cruise Objective:* An intermediate water transect of the Southern California Borderland.

Research Scientist, *RV/IB N.B. Palmer*, US Antarctic Program, NSF OPP #9909367 (Jan.-Mar. 2001)
- *PI:* A. Leventer, Colgate University
- *Cruise Objective:* To obtain Quaternary-Holocene sedimentary records from the remote East Antarctic Margin.

Shipboard Sedimentologist, *JOIDES Resolution,* ODP Leg 189: Southern Gateways (Mar.-May 2000)
- *PIs:* J.P. Kennett (University of California Santa Barbara) and N. Exon (AGSO, Canberra, Australia)
- *Leg Objective:* To test the hypothesis that Cenozoic Antarctic cryospheric evolution resulted from isolation of Antarctica by the Antarctic Circumpolar Current.

Research Assistant *R/V L.M. Gould,* US Antarctic Program, NSF OPP-RUI #9418153 (Feb.-Apr. 1998)
- *PI:* E.W. Domack, Hamilton College
- *Cruise Objective:* To obtain Holocene sedimentary records from the western Antarctic Peninsula to better understand the region's climate and oceanographic response to decadal-millennial scale climate perturbations.

Undergraduate Assistant, *RV/IB N.B. Palmer*, US Antarctic Program, NSF OPP-RUI #9418153 (Oct.-Dec. 1995)
- *PIs:* L. Lawver, University of Texas, G. Klinkhammer, Oregon State University
- *Cruise Objective:* Marine geophysical investigations of the neotectonic evolution of the Drake Passage region and geochemical investigations of the Bransfield Basin, Antarctic Peninsula.

PROFESSIONAL ACTIVITIES

1. **Workshops and symposiums**
   - ***UK IODP Invited Participant:*** Forcings and Feedbacks workshop, Cardiff, Wales (NERC UK IODP Funding) (February 16-17, 2011).
   - ***UK IODP Participant:*** IODP INVEST, Bremen, Germany (NERC UK IODP Funding-£400 (2009)
   - ***Participant,*** The Leverhulme Climate Symposium 2008. Earth's Climate: Past, Present and Future. University of Cambridge and the Royal Society, London (March 2008).

- ***Invited Speaker/Participant,*** *Climate Feedbacks and the Middle Miocene Climate Transition: Southern Ocean Foramininferal geochemical and faunal investigations*, Towards an Integrated Data-Modeling Perspective of Miocene Climate Change: ECOM Workshop, Bremen, Germany (2006)
- ***Invited Participant****, Role of climate feedbacks in the middle Miocene Climate Transition,* JOI Southern Ocean Synthesis Workshop, Boulder, CO (2005)
- ***Session Chair***, PP11B, AGU Fall Meeting, San Francisco, CA (2005)

2. Invited Talks

- University of Rochester, *The Southern Ocean reveals its climate secrets: Paleotemperature insights from marine sediments* (2011).
- University of South Florida College of Marine Science, *The Southern Ocean reveals its climate secrets: Paleotemperature insights from marine sediments* (2011)
- Tonji University, China, *Middle Miocene Antarctic Ice Growth and Southern Ocean Cooling* (Planned for Spring 2011)
- University of Florida, *Middle Miocene Antarctic Ice Growth and Southern Ocean Cooling* (2010)
- AGU Fall Meeting, *Glacial-Interglacial changes in silicon cycling in the subarctic North Pacific: Insights from diatom* δ^{30}*Si over Termination I* (2009)
- Cambridge University, *Orbital and millennial-scale variability of Holocene climate on the Antarctic Peninsula* (2009)
- Earth Sciences Department, University College London, *Atmospheric modulation of western Antarctic Peninsula Holocene climate variability* (2008)
- Geography Department, University College London, *Antarctica and global climate: Southern Ocean paleotemeperature insights* (2007)
- University of Bristol, *Antarctica and global climate: Southern Ocean paleotemeperature insights* (2007)
- Rice University, *Middle Miocene Antarctic Cryosphere Expansion and Southern Ocean Cooling* (2007)
- Indiana State University, *Middle Miocene Antarctic Cryosphere Expansion and Southern Ocean Cooling* (2007)
- University of Michigan, *Middle Miocene Antarctic Cryosphere Expansion and Southern Ocean Cooling* (2007)
- AGU Fall Meeting, *Orbital and atmospheric forcing of western Antarctic Peninsula climate during the Holocene: The* TEX_{86} *paleotemperature record of Palmer Deep* (2006)
- Keynote, *Is there a relationship between the middle Miocene Antarctic Ice Sheet development and the Columbia River Flood Basalts?* Northwest Geological Society November Meeting, Seattle Washington (2006)
- Hamilton College, *Middle Miocene Southern Ocean Cooling and Antarctic Cryosphere Expansion* (2006)
- San Jose State University, *Middle Miocene Southern Ocean Cooling and Antarctic Cryosphere Expansion* (2006)
- Southern Illinois University, *Middle Miocene Southern Ocean Cooling and Antarctic Cryosphere Expansion* (2006)
- School of Oceanography, University of Washington, *Middle Miocene Southern Ocean Cooling and Antarctic Cryosphere Expansion* (2005)

- UC Santa Barbara, *Middle Miocene Southern Ocean Cooling and Antarctic Cryosphere Expansion* (2004)
- JISAO, University of Washington, *Middle Miocene Southern Ocean Cooling and Antarctic Cryosphere Expansion* (2004)

3. Professional Service

- ***UCAS Admissions Interviewer,*** UCL Department of Geography (2010-2011)
- ***External PhD Examiner***: Dr. Christine Euler, *Advisors:* Dr. Ulysses Ninnemann and Dr. Kikki Kleiven, *Second External PhD Examiner:* Dr. Elisabeth Michel, *Internal PhD Examiner:* Prof. Eystein Jansen, University of Bergen, Department of Earth Sciences (2010)
- ***Invited Member,*** UCL Earth Sciences Departmental Review Committee (2010)
- ***Invited Member*****,** UCL Earth Sciences Research Committee (charged with admitting postgraduate students to UCL Earth Sciences; 2009-present)
- ***Founder/Convenor,*** UCL Paleoclimate Working Group (2009-present**)**
- ***Chair,*** UCL Interdepartmental Environmental ICP-MS Facility Management Committee (2009-present)
- ***Internal Ph.D. Examiner:*** Dr. Alex Dickson, *Advisor:* Prof. Mark Maslin, UCL Geography, *External Examiner:* Prof. David Hodell, Cambridge University (2009)
- ***Student Organizer*****,** Colloquium; UCSB Interdepartmental Marine Science Graduate Program (2002, 2003)
- ***Student Organizer*****,** Colloquium; UCSB Department of Geological Sciences (2000, 2001)
- ***Student Liaison*****,** Field Committee, UCSB Department of Geological Sciences (1999)
- ***Peer Reviewer:*** NSF MG&G, NSF Chemical Oceanography, NSF Earth Sciences, NSF IODP, NERC, Italian Antarctic Programme, Royal Society of New Zealand, University of Washington Royalty Research Fund, *Nature, Nature Geosciences, Earth and Planetary Science Letters, Geophysical Research Letters, Geology, Marine Micropaleontology, G^3, Paleoceanography, Paleo^3*

4. Outreach

- ***Invited Panel Member***, Careers Conference, UCL Horizons Outreach (2010)
- ***Mentor,*** MentorSET, UKRC GetSET Women (2009-present)
- ***Invited Presenter***, Bright Club, UCL Public Engagement Unit (2009)
- ***ADHD Coach/Writing Tutor,*** Santa Barbara (2003-2004)
- ***Volunteer,*** UCSB Scienceline, online outreach to school children (1999-2004)
- ***Volunteer,*** UCSB Marine Science Institute (1999-2000)
- ***Tutor,*** UCSB Campus Learning Assistance Service (1999-2000)

PROFESSIONAL AFFILIATIONS

- Geological Society of America
- American Geophysical Union
- European Geophysical Union
- Association for Women Geoscientists
- American Polar Society
- GetSETWoman/UK Resource Centre for Women

PUBLICATIONS

In preparation

- **Shevenell, A.E.,** Jaccard, S., Brzezinski, M., Swann, G., and S. Emerson, *in preparation*, Deglacial changes in nutrient utilization and stratification in the subarctic North Pacific, *Science, Nature Geoscience, or Geology*.

- **Shevenell, A.E.,** Emerson, S.R., and S. Keever, *in preparation*, Holocene ventilation and productivity history of Palmer Deep, Antarctica, *Earth Planet. Sci. Lett.*.

- Gray, W., **Shevenell, A.,** Jaccard, S., and I. Hendy, *in preparation*, The deglacial ventilation history of the Subarctic North Pacific derived from stable isotopes and foraminiferal faunas, *Earth Planet. Sci. Lett*.

2011

- **Shevenell, A.E.,** Ingalls, A.E., Domack, E.W., and C. Kelly, *2011*, Holocene Southern Ocean surface temperature variability west of the Antarctic Peninsula, *Nature,* **470**, 250-254 (citations: 1; Featured in News and Views).

- Thompson, L., Perez, R.C., and **A.E. Shevenell**, *2011,* Closed ranks in oceanography, *Nature Geoscience*. **4**.

2010

- **Shevenell, A.E.** J.P. Kennett, and G. Simpson, *submitted (November, 2010)*. Middle Miocene evolution of high latitude Southwest Pacific vertical water column structure as revealed by planktonic foraminifer faunas and stable isotopes, *Marine Micropaleontology*.

2009

- Tian, J., **Shevenell, A**., Wang, P., Zhao, Q., Li, Q., and X. Cheng, 2009. Reorganization of Pacific Deep Waters linked to middle Miocene Antarctic cryosphere expansion: A perspective from the South China Sea. *Palaeogeogr. Palaeoclimatol. Palaeoecol.,* doi:10.1016/j.palaeo.2009.10.019. (Citations: 2)

2008

- **Shevenell, A.E.**, Kennett, J.P., and D.W. Lea, 2008. Middle Miocene ice sheet dynamics, deep-sea temperatures, and carbon cycling: A Southern Ocean perspective, *Geochem. Geophys. Geosystem.,* 9, doi:10.1029/2007GC1736. (Citations: 12)

2007

- **Shevenell, A.E.** and J.P. Kennett, 2007. Cenozoic Antarctic Cryosphere Evolution: Tales from Deep-Sea Sedimentary Records, *Deep Sea Research II,* 54*,* 2308-2324. (Citations: 2)

- **Shevenell, A.E.,** Ingalls, A.E., and E.W. Domack, 2007. Orbital and atmospheric forcing of western Antarctic Peninsula climate in the Holocene: The TEX_{86} paleotemperature record of Palmer Deep, *in* Antarctica: A Keystone in a Changing World-Online Proceedings of the 10th ISAES X, A.K. Cooper and C.R. Raymond et al., eds., USGS Open-File Report 2007-1047 Extended Abstract 131, 4p.

- Leventer, A., Domack, E., Dunbar, R., ***et al.***, 2007. Marine sediment record from the East Antarctic margin reveals dynamics of ice sheet recession. *GSA Today*, 16, 4-10.

2005

- Filippelli, G., Warnke, D., Flores, J.A., Marchitto, T., and the **Southern Ocean Synthesis Group**, 2005. Paleoceanography and Paleoclimatology of the Southern Ocean. *EOS*, 86: 193, 195.

2004

- **Shevenell, A.E.**, Kennett, J.P., and D.W. Lea, 2004. Middle Miocene Southern Ocean Cooling and Antarctic Cryosphere Expansion. *Science*, 305, 1766-1770. (Citations: 106)

- **Shevenell, A.E.** and J.P. Kennett, 2004. Paleoceanographic Change during the Middle Miocene climate revolution: An Antarctic stable isotope perspective, *Geophys. Mon. Ser. 151,* AGU, Washington DC, pp. 235-252. (Citations: 11)

- Touchard, Y., Fuller, M., and **Shipboard Scientific Party**, 2004. Magnetostratigraphy of the Pliocene-Pleistocene sequence and of the Eocene-Oligocene transition at ODP Leg 189 Hole 1168. *In* Exon, N.F., Kennett, J.P., and Malone, M.J. (Eds.), *The Cenozoic Southern Ocean: Tectonics, Sedimentation and Climate Change between Australia and Antarctica.* Am. Geophys. Union, Geophys. Monogr., 151:79-92.

2002

- Exon, N.F., Kennett, J.P., Malone, M.J., and **the Leg 189 Shipboard Scientific Party**, 2002. Drilling reveals climatic consequences of Tasmanian Gateway opening. *EOS,* 83: 253-258.

- **Shevenell, A.E.** and J.P. Kennett, 2002. Antarctic Holocene climate change: A benthic foraminifer stable isotope record from Palmer Deep. *Paleoceanography*, 17, 10.1029/2000PA000596. (Citations: 17)

2001

- Robert, C.M., Exon, N.F., Kennett, J.P., Malone, M.J., and **the Leg 189 Shipboard Scientific Party**, 2001. Paleogene ocean opening south of Tasmania, and paleoceanographic implications: preliminary results of clay mineral analyses [ODP Leg 189]. *Comptes-Rendus de l'Academie des Sciences de Paris,* 332: 323-329.

2000

- Exon, N.F., Kennett, J.P., Malone, M.J., **et al**., 2000. *Proc. ODP, Init. Repts.*, 189 [CD-ROM]. Available from: Ocean Drilling Program, Texas A&M University, College Station, TX 77845-9547, USA.

- Exon, N., Kennett, J., Malone, M., and the **Leg 189 Shipboard Scientific Party**, 2000. The opening of the Tasmanian gateway drove global Cenozoic paleoclimatic and paleoceanographic changes: results of Leg 189, *JOIDES J.,* 26 (2): 11-17.

1996

- **Shevenell, A.E.**, Domack, E.W., and G.M. Kernan, 1996. Record of Holocene climate change along the Antarctic Peninsula: Evidence from glacial marine sediments, Lallemand Fjord, in *The climate of the Southern Ocean, Papers and Proceedings of the Royal Soc. Tasmania*, 130, 55-64. (Citations: 52)

Conference Abstracts

- Huck, C., John, C.M., **Shevenell, A.E.,** and the IODP Expedition 317 Shipboard Scientific Party, 2010. Identifying glacio-eustatic forcing of unconformities in the Canterbury Basin (IODP Exp 317) based on oxygen isotope analysis of the fine fraction, *EOS Trans., AGU, 91, Fall Meet. Suppl.*

- **Shevenell, A.E.,** Emerson, S.R., Brzezinski, M.A., Swann, G., and Jaccard, S., 2010. Glacial-Interglacial changes in silicon cycling in the subarctic North Pacific: Insights from diatom δ^{30}Si over Termination 1, *10th International Conference on Paleoceanography Program and Abstracts*, San Diego, CA.

- **Shevenell**, **A.E.,** Emerson, S.R., Brzezinski, M.A., Swann, G., and Jaccard, S., 2009. Glacial-Interglacial changes in silicon cycling in the subarctic North Pacific: Insights from diatom δ^{30}Si over Termination 1. *EOS Trans., AGU, 90 (52), Fall Meet. Suppl.,* Abstract PP14B-07.

- Bart, P., DeSantis, L., Charlotte, F.F., Warney, S., Rack, F., **Shevenell, A.E.**, Domack, E.W., Florindo, F., Bartek, L., Davey, F., Barrett, P., and J. Anderson, 2008. Late Neogene history of the Ross Sea continental margin IODP proposal: The missing link between the inner shelf and the Southern Ocean, *Geophysical Research Abstracts*, *10*, Abstract EGU2008-A-12063.

- **Shevenell, A.E**., Domack, E.W., Ingalls, A.E., 2008. Atmospheric modulation of western Antarctic Peninsula Holocene climate variability: Insights from the TEX_{86} record of Palmer Deep, *EOS Trans., AGU, 89, Fall Meet. Suppl.* Abstract PP41C-1472.

- Griffin, H., **Shevenell, A.E.,** Hendy, I.L., Emerson, S.R., 2008. An Extreme Expression of the California Current during the Holocene: New Evidence from the Washington Margin, *EOS Trans., AGU, 89, Fall Meet. Suppl*., Abstract PP41B-1457.

- **Shevenell, A.E.,** Ingalls, A.E., Domack, E.W., and S.R. Emerson, 2006. Atmospheric forcing of Holocene climate variability along the western Antarctic Peninsula: Novel insights from the TEX_{86} paleotemperature record of Palmer Deep, *EOS Trans., AGU, 87 (47), Fall Meet. Suppl.,* Abstract PP02-0648.

- **Shevenell, A.E.**, Kennett, J.P., and D.W. Lea, 2006. Climate feedbacks and the middle Miocene climate Transition: Southern Ocean Foraminifer geochemical and faunal investigations, *Towards an Integrated Data-Modeling Perspective of Miocene Climate Change: ECOM Workshop*, Bremen Germany, June, 2006.

- **Shevenell, A.E.**, Kennett, J.P., and D.W. Lea, 2005. Middle Miocene ice sheet dynamics, deep-sea temperatures, and carbon cycling: A Southern Ocean perspective, *EOS. Trans., AGU*, 86 (47), *Fall Meet. Suppl.*, Abstract PP02-5496.

- **Shevenell, A.E.**, Kennett, J.P., and D.W. Lea, 2005. The role of climate feedbacks in the middle Miocene climate transition, *JOI Southern Ocean Synthesis Workshop*, Boulder, CO, January, 2005.

- **Shevenell, A.E.**, Kennett, J.P., and D.W. Lea, 2004. Orbitally paced climate change across the middle Miocene climate transition, *EOS. Trans., AGU*, 85 (47), *Fall Meet. Suppl.*, Abstract PP11A-0542.

- **Shevenell, A.E.**, Kennett, J.P., and D.W. Lea, 2003. Estimates of Middle Miocene Ice Volume and Temperature Change from Southern Ocean Benthic Foraminiferal Mg/Ca and $\delta^{18}O$, *EOS. Trans., AGU*, 84 (47), *Fall Meet. Suppl.*, Abstract PP02-2761.

- **Shevenell, A.E.** Kennett, J.P., and D.W. Lea. 2002. Deconvolving Middle Miocene Antarctic ice sheet expansion from temperature change: Mg/Ca and $\delta^{18}O$ records from the Southern Ocean, *EOS Trans.*, *AGU,* 83 (47), *Fall Meet. Suppl*., Abstract PP11C-07.

- **Shevenell, A.E.** and J.P. Kennett, 2001. Antarctic Holocene Climate Change: Stable Isotopic Record from Palmer Deep. *7th International Conference on Paleoceanography Program and Abstracts,* Sapporo, Japan.

- **Shevenell, A.E.** and J.P. Kennett, 2001. Antarctic Holocene Climate Change: Benthic Foraminifer Stable Isotope Record from Palmer Deep. *EOS Trans. AGU,* 82 (47), *Fall Meet. Suppl*., Abstract PP21A-0462.

- Leventer, A., **et al.,** 2001. Preliminary Report on Cruise NBP01-01, East Antarctic Margin. *Eos Trans., AGU,* 82 (47), *Fall Meet. Suppl.*, Abstract PP51A-0535.

- **Shevenell, A.E.** and J.P. Kennett, 2000. The Strength of the East Australian Current through the middle Miocene Climate Reorganization: Stable isotopic and foraminifer investigations from the South Tasman Rise (ODP Site 1171). *EOS Trans., AGU*, 81 (48), *Fall Meet. Suppl.*, Abstract OS22A-07.

- **Shevenell, A.E.** and J.P. Kennett, 1999. Late Holocene Paleoceanographic Oscillations along the Western Antarctic Peninsula: Stable Isotopic Evidence from the Palmer Deep (ODP Hole 1098B). *EOS Trans., AGU*, 80 (49), *Fall Meet. Suppl.*, Abstract OS31B-02.

- **Shevenell, A.E.**, LoPiccolo, M.H., Straten, B.T., and E.W. Domack, 1996. Holocene Paleoenvironmental Studies within Antarctic Fjords along the Western Side of the Antarctic Peninsula: Understanding Hypsithermal and Neoglacial Fluctuations. *Geol. Soc. Am. Poster and Abstracts, Northeast Regional Meeting,* Buffalo, NY.

TEACHING

- **First Year Tutor,** UCL Geography, (2008-present)
- **Convenor,** *Environmental Systems and Processes* (GEOG1002)*,* UCL Geography (2008 (Lecturer)-present)
- **Lecturer,** *Past Global Environmental Change* (GEOG3007)*,* UCL Geography/Earth Sciences (2008-present)
- **Lecturer,** *Geological and Environmental Mapping** (GEOL3042), UCL Earth Sciences (2008- present)
- **Convenor,** *Paleoclimate* (Postgraduate)*,* Royal Holloway/UCL Quaternary Science MSc (2008-present)
- **Lecturer,** *Paleoceanography* (Postgraduate), UCL Earth Sciences MSci (2010)

- **Convenor,** *Oceanography* (Postgraduate), UCL Geography Climate Change MSc (commencing 2011)
- **Guest Lecturer,** *Oceanography 450*, University of Washington (2006)
- **Teaching Assistant**, *Antarctica* (GS10), University of California Santa Barbara (2001-2003)
  Responsibilities: Head TA, lecture preparation, developed laboratory sections and assignments, taught four sections (~100 students), wrote exams, managed TAs, graded assignments/exams, office hours.
- **Teaching Assistant,** *History of Life* (GS 30), University of California Santa Barbara (1998)
- **Teaching Assistant,** *Intro. to Oceanography** (GS 4), University of California Santa Barbara (1999-2000)
- **Teaching Assistant,** *Sedimentology and Stratigraphy** (GS 122), University of California Santa Barbara (1998)
- **Teaching Assistant,** *Earth Systems History*,* Hamilton College (1994-1995)
- **Teaching Assistant,** *Paleontology**, Hamilton College (1994)

*Involved field instruction

STUDENTS SUPERVISED

UCL regulations state that that Probational Lecturers (in the first three years of employment) are not allowed to supervise Ph.D. students

Ph.D. Students:
- *William Gray,* University College London, awarded the only Geography Department NERC Studentship (started October, 2010)
- *Claire Huck,* Imperial College (co-supervised with Dr. Cedric John, Imperial College; Started 2010)
- *Anna Drury,* Imperial College (co-supervised with Dr. Cedric John, Imperial College; Started October 2010)

MSc Students:
RHUL/UCL Quaternary Science MSc
- *William Gray* (2010; Elsevier prize for best dissertation; now NERC-funded PhD student at UCL), Foramininfer stable isotopes and chronology across Termination 1 in the Subarctic Pacific (ODP Site 882).
- *Matthew Clarkson* (2010; now Ph.D. student, Edinburgh University), Plio-Pleistocene TEX_{86} and Alkenone SST record from the Benguela region, co-supervised with Prof. M. Maslin and Prof. R. Pancost (Bristol).
- *Jon Hancock* (2010), Foraminiferal assemblage and isotope evidence for changes in the Benguela-Agulhas interaction over the Mid-Pleistocene Revolution, co-supervised with Prof. M. Maslin.
- *Emma Kahdun* (2009; now Paleoceanography PhD student, Christian Albrecht Universitat Kiel), ^{14}C dating of Missoula Flood Interval in NE Pacific Sediments.
- *Rachel Downy* (2008), Trace metals in sediments from the subarctic Pacific (ODP Site 882).

UCL Micropaleontology M.Sc./ Earth Science M.Sc.
- *Mel Green* (2009; now Research Assistant in UCL Earth Sciences), Orbital scale changes in Middle Miocene foraminiferal fragmentation and $CaCO_3$, Shatsky Rise, co-supervised with Dr. Stuart Robinson.

- *Helen Griffin* (2008; now PhD student, Southampton University), Holocene expression of the California current: ^{14}C, stable isotope, and foraminifer assemblages in Cascadia Basin.
- *Nick Harvey* (2008; now consulting geologist), NE Pacific Holocene benthic foraminifer assemblage changes.

Undergraduates

- *Stefanie Keever,* (2005-2007; now at Northcreek Analytical Laboratories, Bothell, WA), Chemical Oceanography, University of Washington.
- *Celia Kelly* (2006-2007; deceased), Chemical Oceanography, University of Washington.
- *Maureen Davies* (2006; now a Ph.D. student at Oregon State University (Advisors: A. Mix and J. Stoner)), Geological Oceanography, University of Washington.
- *Justine Kimball* (2002), now a Ph.D. student at Stanford University (Advisor: R. Dunbar), Geological Sciences, University of California Santa Barbara.

COLLABORATORS

P. Bart, L. Bartek, M Brzezinski, R. Deconto, E. Domack, R Dunbar, S. Emerson, T. Guilderson, M. Greaves, S. Hautala, I. Hendy, A. Ingalls, S. Jaccard, C. John, P. Johnson, K. Kryc, D. Lea, J. Latimer, A. Leventer, B. Luyendyk, P. Manley, M. Maslin, R. Murray, D. Ostermann, D. Pak, F. Rack, G. Swann, J. Tain, L. Thompson, S. Wise, E. Nisbett.