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ACADEMIC APPOINTMENTS

- 2006 Assistant Professor, Department of Geology
University of California, Davis
- 2004-2006 UC President's Postdoctoral Fellow
University of California Davis, Department of Geology
- 1999-2004 Graduate Researcher, Interdepartmental Graduate Program in Marine
Science, University of California, Santa Barbara

EDUCATION

- 2004 Ph.D., Interdepartmental Graduate Program in Marine Science, University of
California, Santa Barbara. Major Professor: Dr. James P. Kennett
- 1999 Bachelor of Science with Honors, Marine Science, Eckerd College, FL

ACADEMIC HONORS AND AWARDS

University of California Davis Hellman Fellowship. To support "promising faculty at the Assistant Professor rank who exhibit potential for great distinction in their research." August 2008.

University of California President's Postdoctoral Fellowship. For postdoctoral research on: "*The oceanic response to abrupt climate change: California margin sediment and coral records.*"

UCSB Award of Distinction. Given to graduates who have contributed greatly to the campus quality of life by giving unselfish service to others. June 2004.

UCSB Affiliates Nancy Brown Environmental Graduate Dissertation Fellowship. Given by the UCSB Graduate Division and UCSB Affiliates to a graduate student whose dissertation research has strong potential for environmental impact. May 2003.

Joseph A. Cushman Award. Given by the Cushman Foundation for Foraminiferal Research to students conducting exceptional investigations. November 2002.

Geological Society of America Gretchen L. Blechschmidt Award. To support research by women pursuing a Ph.D. in the geological sciences and a career in academic research. Spring 2002.

PEER-REVIEWED PUBLICATIONS

- Hill, T.M., Kennett, J.P., Spero, H.J. (2003). *Foraminifera as indicators of methane rich environments: A study of modern methane seeps in Santa Barbara Channel, California.* Marine Micropaleontology, v. 49, p. 123-138.

- Hill, T.M., Brooks, G.R., Duncan, D.S., Medioli, F.S. (2003). *Benthic foraminifera of the Holocene transgressive west-central Florida inner shelf: paleoenvironmental implications*. Marine Geology, v. 200, p. 263-272.
- Hill, T.M., Kennett, J.P., Spero, H.J. (2004). *High-resolution records of methane hydrate dissociation: ODP Site 893, Santa Barbara Basin*. Earth & Planetary Science Letters, v.223 (1-2), p. 127-140.
- Hill, T.M., Kennett, J.P., Valentine D.L. (2004). *Isotopic evidence of methane-derived carbon into living foraminifera from modern methane seeps, Hydrate Ridge, OR*. Geochimica et Cosmochimica Acta, v. 68 (22), p. 4619-4627.
- *Hopkins, S., Kennett, J., Nicholson, C., Pak, D., Sorlien, C., Behl, R., Normark, W., Sliter, R., Hill, T., Schimmelmann, A., Cannariato, K. (2006). *Santa Barbara Basin study extends global climate record*. EOS Transactions, American Geophysical Union, v. 87 (21) p. 205,208.
- Hill, T.M., Kennett, J.P., Pak, D.K, Behl, R.J., Robert, C., Beaufort, L. (2006). *Pre-Bolling warming in Santa Barbara Basin, California: Surface and intermediate water records of early deglacial warmth*. Quaternary Science Reviews. V. 25 (21-22), p. 2835-2845.
- Hill, T.M., Kennett, J.P, Valentine, D.L., Yang, Z., Reddy, C., Nelson, R., Behl, R. J. Robert, C., Beaufort, L. (2006). *Climatically driven emissions of hydrocarbons from marine sediments during deglaciation*. Proceedings of the National Academy of Sciences, v. 103 (37), p. 13570-13574.
- Keller, E.A., Duffy, M., Eichhubl, P.E., Kennett, J.P., Hill, T.M., Kamerling, M.J. (2007). *Tectonic geomorphology and hydrocarbon induced topography of the Mid-Channel Anticline, Santa Barbara Basin, CA*. Geomorphology, v. 89 (3-4), p. 274-286.
- Paull, C.K., Ussler III, W., Holbrook, W.S., Hill, T., Keaten, R., Mienert, J., Halfidison, H., Johnson, J. Winters, W., Lorenson, T. (2007). *Origin of pockmarks and chimney structures on the flanks of the Storegga Slide*. Geo-Marine Letters, v. 28 (1), p. 43-51.
- *Ricketts, E.R., Kennett, J.P., Hill, T.M., Barry, J.P. (in press). *Effects of carbon dioxide sequestration on California margin deep-sea foraminiferal assemblages*. Marine Micropaleontology.
- Paull, C.K., Ussler, W. III, Holbrook, W.S., Hill, T.,M. Hafliason, H., Winters, W., Lorenson, T., Aiello, I., Johnson, J., Lundsten, E. (in review). *The Tail of the Storegga Slide*. Sedimentology.
- Valentine, D.L., Reddy, C.M., Farwell, C., Nelson, R.K., Peacock, E., Clark, B., Hill, T.M., Roman, C.N., Soloway, M. (in review). *Extinct asphalt volcanoes discovered along Southern California margin*. Nature Geoscience.
- *Critser, R.B., Hill, T.M., Paull, C.K. (in review). *Timing of sea floor methane emissions from a pockmark region on the northern flank of the Storegga Slide complex*. Marine Geology.
- Hill, T. M., Saraceno, J., Spero, H.J., Guilderson, T.P., Neumann, A.C. Meischner, D. (in review). *Deep-sea corals from the subtropical Atlantic indicate intensified surface productivity during MIS 3*. Quaternary Science Reviews.

*student first authors

INVITED RESEARCH PRESENTATIONS

Lawrence Livermore National Laboratory, Center for Accelerator Mass Spectrometry

“Deep sea sediments and corals: How mysteries of the deep may solve riddles of climate change” December 7, 2004.

California State University Los Angeles, Department of Geology

“Deep sea sediments and corals: How mysteries of the deep may solve riddles of climate change” February 25, 2005.

University of North Carolina, Chapel Hill, Marine Science Department

“Intermediate waters, oceanic methane and rapid climate change: Insights from the paleoceanographic record”, April 13, 2005.

American Geophysical Union Spring Meeting

“New perspectives on methane hydrates in late Quaternary climate change” May 25, 2005.

American Geophysical Union, Fall Meeting

“North Pacific ventilation changes and expansion of the Oxygen Minimum Zone during deglaciation” December 2006.

Mills College Environmental Science Seminar Series

“Climate records from the California margin”, October 31, 2007

San Francisco State Romberg Tiburon Center

“Impacts of ocean acidification: Lessons from oceanographic time series, laboratory cultures, and paleo records”, October 23, 2008

UC Santa Cruz Whole Earth Seminar Series, Department of Earth Sciences

“Deep sea bamboo coral records of modern oceanographic change”, May 12, 2009

RECENT RESEARCH PRESENTATIONS & ABSTRACTS (past 2 years)

*Myrvold, C.R., **Hill, T.M.**, Spero, H.J., Guilderson, T.P. (2007). *Bamboo coral gorgonin: Surface water geochemical records from the organic nodes of a deep water coral*. American Geophysical Union Fall meeting, December 2007.

Rademacher, L.K., **Hill, T.M.**, Bean, J.R., Fisher, A., Myrvold, C.R. (2007). *Bringing the ocean to the classroom: Using real scientific data to engage students in environmental stewardship*. American Geophysical Union Fall meeting, December 2007.

*Bean, J.R., **Hill, T.M.**, Guerra, C. (2007). *Growth patterns of an intertidal gastropod as revealed by oxygen isotope analysis*. American Geophysical Union Fall meeting, December 2007.

*Critser, R.B., **Hill, T.M.**, Paull, C.K. (2007). *Chronology of methane venting from pockmarks on the northern flank of the Storegga slide complex*. American Geophysical Union Fall meeting, December 2007.

*Flores, S.C., **Hill, T.M.**, Hernes, P.J., Spencer, R.G. (2007). *A paleoenvironmental record from Tomales Bay, California: Organic and geochemical proxy records of anthropogenic impacts*. American Geophysical Union Fall meeting, December 2007.

Rademacher, L.K., **Hill, T.M.** (2008). *Establishing a long-term record of coastal erosion along Sonoma Coast State Beaches, California*. Geological Society of America Cordilleran Section and Rocky Mountain Section Joint Meeting, March 2008.

- *Critser, R.B., **Hill, T.M.**, Paull, C.K. (2008). *Persistence of methane seepage from pockmarks in the Storegga Slide region*. Poster, American Geophysical Union Fall Meeting, Dec. 2008.
- *McLaughlin, K.N., Rademacher, L.K., **Hill, T.M.**, Faul, K.L., Myrhe, S.B., Spero, H.J. (2008). *U/Ca ratios in deep-sea corals: Testing the relationship with carbon dioxide in seawater*. Poster, American Geophysical Union Fall Meeting, Dec. 2008.
- *LeRoy, S.L., **Hill, T.M.**, Faul, K.L., Rademacher, L., Spero, H.J., Myhre, S.B. (2008). *Developing a proxy for intermediate/deep seawater phosphorous concentrations using bamboo coral from California coastal seamounts*. Poster, American Geophysical Union Fall Meeting, Dec. 2008.
- *Peterson, C.D., Behl, R.J., Rodrigue, C.M., Zeleski, C.M., **Hill, T.M.** (2008). *Statistical relationships among proxies of climate, productivity, and the carbon cycle across climatic regimes, Santa Barbara Basin, California*. Poster, American Geophysical Union Fall Meeting, Dec. 2008.
- Hill, T.M.**, Spero, H.J., Guilderson, T., Clague, D.A., Macalello, S. (2008). *Vital effects and deep sea bamboo coral (Isididae) stable isotopic composition*. Oral presentation, American Geophysical Union Fall Meeting, Dec. 2008.
- *Hettinger, A., Hoey, J.A., Sanford, E., Gaylord, B., **Hill, T.M.**, Russell, A.D. (2008). *Ocean acidification impacts larval and juvenile growth in the native oyster *Ostrea lurida**. Poster, American Geophysical Union Fall Meeting, Dec. 2008.
- Russell, A.D., Flores, S. Jacobs, L., **Hill, T.**, Paytan A. (2008). *Controls over carbonate saturation in temperate estuaries: Insights from historical records*. Poster, American Geophysical Union Fall Meeting, Dec. 2008.
- *Whitehouse, C., **Hill, T.M.** (2009). *Carbon isotope variability of foraminifera from the Storegga submarine landslide*. UC Davis Undergraduate Research Conference.
- *Fisher, A., Rademacher, L. **Hill, T.M.** (2009). *What coastal marsh sediments reveal about land use changes*. Geological Society of America Cordilleran Section Meeting, May 2009.

*student first authors

TEACHING EXPERIENCE

Instructor, GEL/ESP 150C, *Biological Oceanography*, Summer 2009

Instructor, GEL 16, *The Oceans*, Winter Quarter 2009

Instructor, GEL/ESP 116N, *Oceanography*, Winter Quarter 2009

Instructor, GEL 285, *Field Studies in Marine Geochemistry*, Fall 2008.

Guest Lecturer and Trainer, UCD REACH IGERT (PBG 250A) Sept 30 and Oct 2, 2008. *Rapid climate change, carbon cycling and the geologic record*.

Instructor, GEL/ESP 150C, *Biological Oceanography*, Summer 2008

Guest Lecturer, Ecology 200B, *Principles of Ecology*, Feb 20 & 25, 2008. *Climate and the carbon cycle*.

Instructor, GEL 228, *Topics in Paleoceanography: Ocean Circulation*, Winter Quarter 2008.

Instructor, GEL 16, *The Oceans*, Winter Quarter 2008

Field Trip Co-Instructor, *University of Pacific Environmental Science* trip to Bodega Marine Laboratory: Beach erosion, beach profiling, and sediment transport. Nov 16-17, 2007.

Instructor, GEL 16, *The Oceans*, Winter Quarter 2007.

Guest Lecturer, ECL 200B, Principles of Ecology, Feb 14 and 21, 2007. Climate and the carbon cycle.

Guest Lecturer, GEL 281, Instrumental Methods, Nov. 9, 2006. Stable isotopic methods and research.

STUDENT ADVISING & MENTORING

Graduate student advising (3 current):

Sarah White, M.S. advisor (2009-present)

Sarah Flores, M.S. advisor (2008-present)

Sarah Myhre, Ph.D. advisor (2008-present)

Christopher Myrsvold, Ph.D. advisor, UCD (2006-present)

Raymond (Bart) Critser, M.S. advisor, UCD (2006-2008; now at *Schlumberger*)

Undergraduate interns and senior thesis students (including 10 underrepresented minorities and/or women):

Shane Downing, Allegheny College, REU program (Summer 2009)

Carlie Whitehouse, UCD Geology Sr. Thesis (2008-2009)

Sverre LeRoy, Mills College, REU (Summer 2008)

Kari McLaughlin, University of the Pacific, REU (Summer 2008)

Sarah Flores, UCD Geology Sr. Thesis (Spring 2007- Winter 2008)

Clarity Guerra, Mt. Holyoke, REU program (Summer 2007)

Anne Fisher, University of Pacific summer project (Summer 2007 & 2008)

Stephanie Ho, UC Irvine, REU (Summer 2006; now at USC -- M.S. program)

Johnfranco Saraceno, UCD Geology Sr. Thesis (2005-2006; now at Sac State - M.S. program)

Karen Chan, UCD Geology Sr. Thesis (2005-2006; now at UW – Ph.D program)

Steve Macallelo, UCD Geology Sr. Thesis (2004-2006; now at Colorado School of Mines – M.S. program)

Zuag Yang, UCSB Geological Sciences (Summer 2004)

Juliette White, UCSB Geological Sciences (Summer 2003)

SELECTED PROFESSIONAL SERVICE

Session Chair, AAPG Pacific Section Meeting, May 2009: “New Insights in to Global Climate Change Past & Present”, Ventura, CA.

Convener, American Geophysical Union Fall 2008 Meeting, Session OS21A & OS33E, “Ocean Acidification: Impacts from the Coast to Open Ocean Based on Laboratory Studies, Proxy Data and Instrumental Records”, Oral & Poster Session.

Faculty Advisor, UC Davis Oceanography Club, Fall 2008-current

NSF IGERT Trainer: Rapid Environmental Change (REACH), UCD, Fall 2008-Current

Member, Advisory Committee on the Site Survey of Global Climate Change Impacts for the Gulf of the Farallones and Cordell Bank National Marine Sanctuaries, November 2008-current.

Coalition for National Science Funding exhibition: Presenter and representative from UC Davis; June 24, 2008.

Moderator, First Biennial Ocean Climate Summit; moderated session on Ocean Impacts, Ecosystem Response and Human Adaptation. April 29, 2008, sponsored by the Gulf of the Farallones National Marine Sanctuary.

National Science Foundation review panel member, OCE Marine Geology and Geophysics, Nov 13-16, 2007

Workshop Facilitator: Fall Meeting of the UC President's Postdoctoral and Dissertation Year Fellowship Programs, led 2 workshops on CV writing, Sept 28, 2007.

Member, Steering Committee for Mathematics and Science Teaching (MAST) Program, July 1 2007-current.

SELECTED COMMUNITY OUTREACH AND SERVICE

Invited speaker: The Evolution of a Career in Science, hosted by Association for Women in Science Sacramento Chapter, Dec 4, 2008.

Featured on San Francisco ABC news, "Tracking climate change through ocean currents" by Wayne Freedman, Feb 14, 2007.

Invited Speaker, UCSB Workshop on Gender Diversity in the Sciences. May 2003.

Cofounder, UCSB Women in Science and Engineering (WISE)

Established a campus organization which now includes over 400 students, faculty and staff. Recruited and hosted speakers, organized monthly events, fundraised, published e-newsletter and website. Spring 2001-Summer 2004.