

CURRICULUM VITAE

Arthur J. Miller

Climate, Atmospheric Science and Physical Oceanography (CASPO) Division
Oceans and Atmosphere Section
Scripps Institution of Oceanography
University of California, San Diego
La Jolla, CA 92093-0224
(858) 534-8033
ajmiller@ucsd.edu
<http://meteora.ucsd.edu/~miller>

BIRTH: July 6, 1958 Cleveland, Ohio

DEGREES: 1980 B.S. in Physical Oceanography
Florida Institute of Technology

1986 Ph.D. in Physical Oceanography
Scripps Institution of Oceanography, UCSD

POSITIONS HELD:

2000-present Research Oceanographer
Senior Lecturer in Climate Sciences

2010-present Director, CASPO Division

2009-2010 Associate Director, CASPO Division

2008-2009 Director, CASPO Division

2007-2008 Associate Director, CASPO Division

2000-2007 Associate Director, Climate Research Division
Scripps Institution of Oceanography

1996-2000 Associate Research Oceanographer
Lecturer in Climate Sciences
Climate Research Division
Scripps Institution of Oceanography

1988-1996 Assistant Research Oceanographer
Climate Research Division
Scripps Institution of Oceanography

1992-1994 Scientist (while on leave from SIO)
SACLANT Undersea Research Centre, La Spezia, Italy

1991 Orson Anderson Visiting Scholar
IGPP, Los Alamos National Laboratory, Los Alamos, NM

- 1988 Lecturer (while at SIO)
Department of Geography, San Diego State University
- 1986-1988 Andrew W. Mellon Foundation Postdoctoral Fellow
Climate Research Group
Scripps Institution of Oceanography
- 1980-1986 Research Assistant
Institute of Geophysics and Planetary Physics
Scripps Institution of Oceanography
- 1980 Physicist
Naval Research Laboratory, Orlando, Florida

PROFESSIONAL

SOCIETIES: American Meteorological Society, American Geophysical Union,
The Oceanography Society

RESEARCH

INTERESTS: Ocean and Coupled Ocean-Atmosphere Modeling and Dynamics,
Pacific Decadal Variability, Marine Ecosystem Response to Climate,
Ocean Data Assimilation, Predictability, Rossby Waves, Long-Period Tides

PUBLICATIONS

SUMMARY: Refereed publications: 88
Total citations: over 2800 (Web of Science); over 4400 (Google Scholars)
H-Index (N papers with N citations): 27 (WoS); 33 (GS)
Papers exceeding 100 citations: 8 (WoS); 13 (GS)

DISSERTATION:

Miller, A. J., 1986: Barotropic planetary-topographic oscillations in ocean basins. Ph.D. dissertation. Scripps Institution of Oceanography, University of California, San Diego, 133 pp.

REFEREED PUBLICATIONS:

- Miller, A. J., 1986: Non-divergent planetary oscillations in mid-latitude ocean basins with continental shelves. *Journal of Physical Oceanography*, **16**, 1914-1928.
- Miller, A. J., W. R. Holland and M. C. Hendershott, 1987: Open-ocean response and normal mode excitation in an eddy-resolving general circulation model. *Geophysical & Astrophysical Fluid Dynamics*, **37**, 253-278.
- Miller, A. J., 1989: On the barotropic planetary oscillations of the Pacific. *Journal of Marine Research*, **47**, 569-594.
- Miller, A. J. and J. O. Roads, 1990: A simplified coupled model of extended-range predictability. *Journal of Climate*, **3**, 523-542.

- Miller, A. J., 1992: Large-scale ocean-atmosphere interactions in a simplified coupled model of the midlatitude wintertime circulation. *Journal of the Atmospheric Sciences*, **49**, 273-286.
- Miller, A. J., 1992: On forced barotropic vorticity oscillations. *Journal of Physical Oceanography*, **22**, 808-810.
- Miller, A. J., J. M. Oberhuber, N. E. Graham and T. P. Barnett, 1992: Tropical Pacific Ocean response to observed winds in a layered ocean general circulation model. *Journal of Geophysical Research-Oceans*, **97**, 7317-7340.
- Miller, A. J., D. S. Luther and M. C. Hendershott, 1993: The fortnightly and monthly tides: Resonant Rossby waves or nearly equilibrium gravity waves? *Journal of Physical Oceanography*, **23**, 879-897.
- Miller, A. J., T. P. Barnett and N. E. Graham, 1993: A comparison of some tropical ocean models: Hindcast skill and El Nino evolution. *Journal of Physical Oceanography*, **23**, 1567-1591.
- Miller, A. J., D. R. Cayan, T. P. Barnett, N. E. Graham and J. M. Oberhuber, 1994: Interdecadal variability of the Pacific Ocean: Model response to observed heat flux and wind stress anomalies. *Climate Dynamics*, **9**, 287-302.
- Miller, A. J., D. R. Cayan, T. P. Barnett, N. E. Graham, J. M. and Oberhuber, 1994: The 1976-77 climate shift of the Pacific Ocean. *Oceanography*, **7**, 21-26.
- Miller, A. J., H. G. Arango, A. R. Robinson, W. G. Leslie, P.-M. Poulain and A. Warn-Varnas, 1995: Quasigeostrophic forecasting and physical processes of Iceland-Faroe Frontal variability. *Journal of Physical Oceanography*, **25**, 1273-1295.
- Miller, A. J., P.-M. Poulain, A. R. Robinson, H. G. Arango, W. G. Leslie and A. Warn-Varnas, 1995: Quantitative skill of quasigeostrophic forecasts of a baroclinically unstable Iceland-Faroe Front. *Journal of Geophysical Research-Oceans*, **100**, 10,833-10,849.
- Cayan, D. R., A. J. Miller, T. P. Barnett, N. E. Graham, J. N. Ritchie and J. M. Oberhuber, 1995: Seasonal-interannual fluctuations in surface temperature over the Pacific: Effects of monthly winds and heat fluxes. In: *Natural Climate Variability on Decadal-to-Century Time Scales*, National Academy Press, pp. 133-150
- Robinson, A. R., H. G. Arango, A. J. Miller, P.-M. Poulain, A. Warn-Varnas and W. G. Leslie, 1996: Real time operational forecasting on shipboard of the Iceland-Faroe frontal variability. *Bulletin of the American Meteorological Society*, **77**, 243-259.
- Robinson, A. R., H. G. Arango, A. Warn-Varnas, W. G. Leslie, A. J. Miller, P. J. Haley and C. J. Lozano, 1996: Real-time regional forecasting. In: *Modern Approaches to Data Assimilation in Ocean Modeling*, P. Malanotte-Rizzoli, ed., Elsevier Science, B.V., pp. 377-410.
- Miller, A. J., 1996: Recent advances in California Current modeling: Decadal and interannual thermocline variations. In: *California Cooperative Oceanic Fisheries Investigations Reports*, **37**, 69-79.
- Nese, J. M., A. J. Miller and J. A. Dutton, 1996: The nature of predictability enhancement in a low-order ocean-atmosphere model. *Journal of Climate*, **9**, 2167-2172.
- Miller, A. J., P. F. G. Lermusiaux and P.-M. Poulain, 1996: A topographic-Rossby mode resonance over the Iceland-Faeroe Ridge. *Journal of Physical Oceanography*, **26**, 2735-2747.

- Miller, A. J., W. B. White and D. R. Cayan, 1997: North Pacific thermocline variations on ENSO time scales. *Journal of Physical Oceanography*, **27**, 2023-2039.
- Miller, A. J., D. R. Cayan and W. B. White, 1998: A westward intensified decadal change in the North Pacific thermocline and gyre-scale circulation. *Journal of Climate*, **11**, 3112-3127.
- Auad, G., A. J. Miller and W. B. White, 1998: Simulation of heat storages and associated heat budgets in the Pacific Ocean - 2. Interdecadal timescale. *Journal of Geophysical Research-Oceans*, **103**, 27,621-27,636.
- Auad, G., A. J. Miller and W. B. White, 1998: Simulation of heat storages and associated heat budgets in the Pacific Ocean - 1. El Nino Southern Oscillation timescale. *Journal of Geophysical Research-Oceans*, **103**, 27,603-27,620.
- Schneider, N., A. J. Miller, M. A. Alexander and C. Deser, 1999: Subduction of North Pacific temperature anomalies: Observations and dynamics. *Journal of Physical Oceanography*, **29**, 1056-1070.
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- Miller, A. J., and B. D. Cornuelle, 1999: Forecasts from fits of frontal fluctuations. *Dynamics of Atmospheres and Oceans*, **29**, 305-333.
- Miller, A. J., J. C. McWilliams, N. Schneider, J. S. Allen, J. A. Barth, R. C. Beardsley, F. P. Chavez, T. K. Chereskin, C. A. Edwards, R. L. Haney, K. A. Kelly, J. C. Kindle, L. N. Ly, J. R. Moisan, M. A. Noble, P. P. Niiler, L. Y. Oey, F. B. Schwing, R. K. Shearman, and M. S. Swenson, 1999: Observing and modeling the California Current System. *Eos, Transactions, American Geophysical Union*, **80**, 533-539.
- Miller, A. J., and Schneider, N., 2000: Interdecadal climate regime dynamics in the North Pacific Ocean: Theories, observations and ecosystem impacts. *Progress in Oceanography*, **47**, 355-379.
- Miller, A. J., E. Di Lorenzo, D. J. Neilson, B. D. Cornuelle and J. R. Moisan, 2000: Modeling CalCOFI observations during El Nino: Fitting physics and biology. *California Cooperative Oceanic Fisheries Investigations Reports*, **41**, 87-97.
- Auad, G., A. J. Miller, J. O. Roads, D. R. Cayan: Pacific Ocean wind stresses and surface heat fluxes from the NCEP Reanalysis and observations: Cross-statistics and ocean model responses. *Journal of Geophysical Research-Oceans*, **106**, 22,249-22,265
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- Di Lorenzo, E., A. J. Miller, D. J. Neilson, B. D. Cornuelle, and J. R. Moisan, 2004: Modeling observed California Current mesoscale eddies and the ecosystem response. *International Journal of Remote Sensing*, **25**, 1307-1312.
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- Grosch, S. R. Hare, G. L. Hunt, J. Jahncke, N. B. Kachel, H.-J. Kim, C. Ladd, N. J. Mantua, C. Marzban, W. Maslowski, R. Mendelssohn, D. J. Neilson, S. R. Okkonen, J. E. Overland, K. L. Reedy-Maschner, T. C. Royer, F. B. Schwing, J. X. L. Wang and A. J. Winship, 2007: Bottom-up forcing and the decline of Steller sea lions (*Eumetopias jubatus*) in Alaska: Assessing the ocean climate hypothesis. *Fisheries Oceanography*, **16**, 46-67.
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- Alexander, M., A. Capotondi, A. Miller, F. Chai, R. Brodeur and C. Deser, 2008: Decadal variability in the Northeast Pacific in a physical-ecosystem model: Role of mixed layer depth and trophic interactions. *Journal of Geophysical Research-Oceans*, **113**, C02017, doi:10.1029/2007JC004359.
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- Moore, A. M., H. G. Arango, E. Di Lorenzo, A. J. Miller and B. D. Cornuelle, 2009: An adjoint sensitivity analysis of the Southern California Current circulation and ecosystem. *Journal of Physical Oceanography*, **39**, 702-720.
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- Song, H., A. J. Miller, B. D. Cornuelle and E. Di Lorenzo, 2011: Changes in upwelling and its water sources in the California Current System driven by different wind forcing. *Dynamics of Atmospheres and Oceans*, **52**, 170-191.
- Subramanian, A. C., M. Jochum, A. J. Miller, R. Murtugudde, R. B. Neale and D. E. Waliser, 2011: The Madden Julian Oscillation in CCSM4. *Journal of Climate*, **24**, 6261-6282.
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- Subramanian, A. C., A. J. Miller, B. D. Cornuelle, E. Di Lorenzo, R. A. Weller and F. Straneo, 2013: A data assimilative perspective of oceanic mesoscale eddy evolution during VOCALS-REx *Atmospheric Chemistry and Physics*, **13**, 3329-3344.
- Putrasahan, D. A., A. J. Miller and H. Seo, 2013: Regional coupled ocean-atmosphere downscaling in the Southeast Pacific: Impacts on upwelling, mesoscale air-sea fluxes, and ocean eddies. *Ocean Dynamics*, **63**, 463-488.
- Putrasahan, D. A., A. J. Miller and H. Seo, 2013: Isolating mesoscale coupled ocean-atmosphere interactions in the Kuroshio Extension region. *Dynamics of Atmospheres and Oceans*, **63**, 60-78.
- DeFlorio, M. J., D. W. Pierce, D. R. Cayan and A. J. Miller, 2013: Western U.S. extreme precipitation events and their relation to ENSO and PDO in CCSM4. *Journal of Climate*, **26**, 4231-4243.
- Franks, P. J. S., E. Di Lorenzo, N. L. Goebel, F. Chenillat, P. Riviere, C. A. Edwards and A. J. Miller, 2013: Modeling physical-biological responses to climate change in the California Current System. *Oceanography*, **26**, 26-33.
- Ohman, M. D., K. Barbeau, P. J. S. Franks, R. Goericke, M. D. Landry and A. J. Miller, 2013: Ecological transitions in a coastal upwelling ecosystem. *Oceanography*, **26**, 210-219.
- Freeman, L. A., J. A. Kleypas and A. J. Miller, 2013: Coral reef habitat response to climate change scenarios. *PLoS ONE*, **8**, e82404. doi:10.1371/journal.pone.0082404.
- Moon, J.-H., Y. T. Song, P. D. Bromirski and A. J. Miller, 2013: Multi-decadal regional sea level shifts in the Pacific over 1958-2008. *Journal of Geophysical Research-Oceans*, **118**, doi:10.1002/2013JC009297.
- Subramanian, A., M. Jochum, A. J. Miller, R. Neale, H. Seo, D. Waliser and R. Murtugudde, 2014: The MJO and global warming: A study in CCSM4. *Climate Dynamics*, **42**, 2019-2031.
- Miller, A. J., H. Song and A. C. Subramanian, 2014: The physical oceanographic environment during the CCE-LTER years: Changes in climate and concepts. *Deep-Sea Research II*, in press.
- Cavanaugh, N. R., T. Allen, A. Subramanian, B. Mapes, H. Seo and A. J. Miller, 2014: The skill of atmospheric linear inverse models in hindcasting the Madden-Julian Oscillation. *Climate Dynamics*, in press.
- DeFlorio, M. J., S. J. Ghan, B. Singh, A. J. Miller, D. R. Cayan, L. M. Russell and R. C. J. Somerville, 2014: Semi-direct dynamical and radiative effect of North African dust transport on lower tropospheric clouds over the subtropical North Atlantic in CESM 1.0. *Journal of Geophysical Research-Atmospheres*, in press.

SCIENTIFIC SERVICE:

Associate Editor, *Atmospheric Science Letters* (Royal Meteorological Soc.), 2000-present

Associate Editor, *Journal of Geophysical Research-Oceans* (AGU), 2007-2013

Special Issue Editorial Board, *Dynamics of Atmospheres and Oceans*, 2010-11

Special Issue Editorial Board, *Journal of Oceanography* (The Oceanographic Society of Japan), 2002

Advisory Board, *The Sea, Volume 17: The Science of Ocean Prediction*, 2013-present

Reviewer for *Journal of Physical Oceanography*, *Journal of Climate*,
Journal of Geophysical Research-Oceans, *Geophysical Research Letters*,
Journal of Geophysical Research-Atmospheres, *Tellus-A*, *Tellus-B*,
Dynamics of Atmospheres and Oceans, *Journal of the Atmospheric Sciences*,
Fisheries Oceanography, *Journal of Marine Systems*, *Progress in Oceanography*,
Oceanologica Acta, *EOS*, *Deep-Sea Research*, *Conservation Biology*,
Canadian Journal of Fisheries and Aquatic Sciences, *Journal of Marine Research*,
International Journal of Remote Sensing, *Journal of Oceanography*, *Oceanography*,
Bulletin of the American Meteorological Society, *Climate Dynamics*,
Atmosphere-Ocean, *Journal of Oceanic and Atmospheric Technology*,
CalCOFI Reports, *Atmospheric Research*, *Monthly Weather Review*,
International Journal of Climatology, *ICES Journal of Marine Science*,
Continental Shelf Research, *Proceedings of the National Academy of Sciences*,
Journal of Coastal Research, *Ocean Science*, *Marine Geodesy*, *Fish and Fisheries*,
PLoS ONE, *Limnology and Oceanography: Fluids and Environments*,
Ocean Modeling, *Nature Scientific Reports*, *Marine and Freshwater Research*,
United Nations University Press and Cambridge University Press.

Reviewer for NSF, NOAA, NASA, PFRP, NPRB, California Sea Grant, Oregon Sea Grant, CEC, IRI, NCAR, EVOSTC, CRDF, NERC (UK), Marsden Fund (New Zealand), Marine National Facility (Australia), ARC (Australia), OSR (Netherlands), AXA (EU) and BSF (Israel-USA)

Panelist for NSF Ocean Sciences Division, NSF GLOBEC, NOAA CLIVAR, NASA MAP, NOAA-NSF CAMEO, GoMRI "Theme 1", and University of Wisconsin "Research Growth Initiative"

Review Board Member for NOAA Joint Institute for the Study of the Atmosphere and Ocean (JISAO), University of Washington, and NSF Life Cycle Objectives for Ocean Observing Initiative Cyberinfrastructure Implementing Organization

Member, U.S. CLIVAR Panel on Phenomena, Observations and Synthesis (2013-present)

Member, American Meteorological Society, Committee on Coastal Environment (2013-present)

Member, U.S. GLOBEC Scientific Steering Committee (2004-2012)

Member, VAMOS Ocean-Cloud-Atmosphere-Land Study (VOCALS) Modeling Group (2004-present)

Member, PICES Evaluations of Climate Change Projections Working Group (2006-2010)
Member, Bering Ecosystem Study (BEST) Scientific Steering Committee (2005-2007)
Member, U.S. CLIVAR Pacific Sector Implementation Panel (2002-2005)
Member, Overview Advisory Group, GLOBEC Climate Impacts on Open Ocean Top
Predators Program (2003-2004)

Co-Organizer: Surfside Climate Workshop, SIO:

“California Current Modeling: Do Observations Corroborate the Modeled
Phenomena?” (1999)

“Climate Forcing of Oceanic Ecosystems: Are Significant Biological Feedbacks
Possible on Interdecadal Timescales?” (2001)

Co-Organizer: Climate-Culture Workshop, SIO-UCSD Department of Anthropology:

“Impacts of El Nino Climate Variability on Cultural Development in Peru and the
Andes” (2003)

Co-Organizer: NOAA-CIFAR Synthesis Workshop:

“The Climate Regime Shift Hypothesis and the Decline of the Steller Sea Lion
Population” (2003)

Co-Organizer: SIO-UCSD Department of Music Workshop:

“The Confluence of Art, Music, Science and the Environment” (2006)

Organizer: “Hendershott Symposium” Career Recognition Event (2007)

Co-Organizer: “LTER Cross-Site Regional Ocean Modeling Workshop” (2011)

Co-Organizer and Acting Workshop Chair, “GLOBEC/PICES/ICES Workshop on
Forecasting Ecosystem Indicators with Process-Based Models (ECOFOR)” (2012)

Numerous invited seminars, keynote lectures, and talks at universities, research
institutions, conferences and workshops around the world.

Interviewed by numerous local, national, and international newspaper, magazine, radio,
and television reporters

UNIVERSITY SERVICE:

Director of CASPO, 2008-2009, 2010-present

Associate Director of CASPO, 2007-2008, 2009-2010

Associate Director of CRD, 2000-2007

SIO Committee on Academic Personnel, 1998-2001, 2005-2008

Administrator, SIO Climate Computing Facility, 2000-2011

SIO CRD/CASPO Seminar Series Coordinator, 1998-present

Birch Aquarium/Museum Panel, 2005-06, 2007-present

SIO Staff Council nominations committee, 2001

Chair, SIO Alumni Network Leadership Team, 2006-07

SIO Heritage Committee, 2008-present

SIO Committee on Committees, 2009-2011

Frieman Prize Committee, 2011

Chair, Keeling Memorial Lecture Committee, 2013

Chair, SIO Institutional Post-doctoral Fellowship Selection Committee, 2009, 2010

Supervisor to Programmer/Analyst Jack Ritchie, 1990-1992, 2010-present

Supervisor to Programmer/Analyst Bill Higgins, 1999-01

Supervisor to Programmer/Analyst Martin Olivera, 2001-2011

Supervisor to Assistant Project Scientist Dr. Guillermo Auad, 1999-2011

Supervisor to Assistant Project Scientist Dr Doug Neilson, 1999-2006

IRDAC "Coastal" Assistant Professor Search Committee, 1999-00

COMPAS Researcher (Triple) Search Committee, 2000-03

NHBO MSO Search Committees, 2001-2002, 2004-05

Chair, OA Section Researcher Search Committee, 2005-2006

Dynamic Meteorology and Data Assimilation (Double) Assistant Professor Search Committee, 2007-08

Physical Oceanography and Climate Assistant Professor Search Committee, 2008-09

OA Section "Unfunded Researchers" (Triple) Search Committee Chair, 2011-12

Climate Sciences Open House Coordinator, 1998, 1999, 2004-2011

Climate Sciences Departmental Exam Committee, 1998 (Chair), 2003, 2006-07, 2009-11

EDUCATIONAL SERVICE:

Currently Doctoral Advisor/Co-Advisor to:

Mr. Michael DiFlorio, Climate Sciences, SIO (2009-present)

Mr. Nicholas Cavanaugh, Climate Sciences, SIO (2010-present)

Formerly Doctoral Advisor/Co-Advisor to:

Dr. Emanuele Di Lorenzo, Climate Sciences, SIO (Ph.D. 2003)

Post-doc: SIO/UCSD

Currently: Full Professor, Georgia Tech

Dr. Hyodae Seo, Climate Sciences, SIO (Ph.D. 2007)

Post-doc: NOAA Climate and Global Change Program Postdoctoral Fellow,
UCLA/University of Hawaii

Currently: Assistant Scientist, Woods Hole Oceanographic Institution

Dr. Hey-Jin Kim, Climate Sciences, SIO (Ph.D. 2008),

Post-doc: Monterey Bay Aquarium Research Institute Postdoctoral Fellow

Currently: Programmer/Analyst, SIO

Dr. Hajoon Song, Climate Sciences, SIO (Ph.D. 2011)

Post-docs: University of California, Santa Cruz, and M.I.T.

Dr. Dian Putrasahan, Climate Sciences, SIO (Ph.D. 2012)

Post-doc: University of Miami

Dr. Aneesh Subramanian, Climate Sciences, SIO (Ph.D. 2012)

Post-doc: SIO/UCSD

Dr. Linghan Li, Physical Oceanography, SIO (Ph.D. 2013)

Dr. Lauren Franck, Climate Sciences, SIO (Ph.D. 2013)

Post-doc: NRC Fellow, Naval Research Laboratory, Washington, DC

Masters Advisor to:

Ms. Chelsey Nieman, Biodiversity and Conservation, SIO (M.A.S. 2014)

Mr. Ankur Gupta, Climate Sciences, SIO (M.S. 2012)

Currently: Graduate Student Researcher, National University of Singapore

Mr. Gino Passalacqua, Climate Sciences, SIO (M.S. 2009)

Currently: Graduate Student Researcher, CICESE, Ensenada, Mexico

Doctoral Committee Member to:

Dr. Xiang San Liang, Applied Mathematics, Harvard University (Ph.D. 2002)

Dr. Thomas Reichler, Climate Sciences, SIO (Ph.D. 2002)

Dr. Catherine Johnson, Biological Oceanography, SIO (Ph.D. 2003)

Dr. David Field, Biological Oceanography, SIO (Ph.D. 2004)

Mr. Ehecatl Munoz-Mejia, Fisheries Ecology, CIBNOR, La Paz, Mexico, (2002-2005)

Dr. Chih-Hao Zac Hsieh, Biological Oceanography, SIO (Ph.D. 2006)

Dr. Elena Brambilla, Physical Oceanography, SIO (Ph.D. 2006)

Dr. Alex Ruane, Climate Sciences, SIO (Ph.D., 2007)

Dr. Elizabeth Douglass, Physical Oceanography, SIO (Ph.D., 2007)

Dr. Daniel Birch, Physical Oceanography, SIO (Ph.D., 2007)

Mr. Miles Woodard, Climate Sciences, SIO (M.S. 2008, pending submission of thesis)

Ms. Xue Fan, Physical Oceanography, SIO (Ph.D. candidate, 2010-present)

Mr. Ethan Deyle, Biological Oceanography, SIO (Ph.D. candidate, 2012-present)

Mr. Cotton Rockwood, Biological Oceanography, SIO (Ph.D. candidate, 2013-present)

Masters Committee Member to:

Mr. Tony Shiao, Biodiversity and Conservation, SIO (M.A.S. 2013)

External Thesis Examiner, Griffith University (2009 and 2010)

Research Experiences for Undergraduates (REU) Advisor to:

Ms. Emma Nuss, UCSD (2012-13)

Ms. Ana-Patricia Lopez, SDSU (2013-present)

Science Olympiad Event Coach for “Compute This: Ocean-Atmosphere,”

“Oceanography” and “Remote Sensing”, University City High School (2005-2008)

National Ocean Science Bowl (NOSB) Science Judge (2013 and 2014)

Participant, "Exploring Ocean Careers Night" at Birch Aquarium (2014)

Founding Member, Stay Cool for Grandkids (2013-present)