### Jennifer J. Batryn, California Polytechnic State University

Self noise testing and passive acoustic sensor integration on a RENUS-100 AUV Advisor: Michael Purcell, AOPE

**Abhimanyu Belani**, MIT *Towards coordinated surface and subsea autonomous survey* Advisor: Michael Jakuba, AOPE

**Stephan A. Bitterwolf**, University of the Virgin Islands Abundance and vertical distribution of Squalus acanthias at Stellwagon Bank: Daily and interannual patterns from 2008 – 2012 Advisor: Jesus Pineda, BIO

#### Isaiah W. Bolden, Bowdoin College

*Variability in nutrient concentrations of Waquoit Bay: A 12-year time series analysis* Advisor: Matthew Charette, MC&G

# Elizabeth Q. Brannon, Coastal Carolina University

Investigating time variations in DOC concentrations for salt marsh carbon budgets: Testing continuous CDOM measurements as a proxy for DOC Advisor: Kevin Kroeger, USGS

# Billionrosannae C. Chhouk, San Diego State University

The Imaging Flow-Cytobot and the Environmental Sample Processor: New advances in remote sensing that will shape our understanding of harmful algal blooms Advisor: Donald Anderson, BIO

Eve R. Eisemann, Temple University

Holocene sea-level change in southern New England and its influence on the barrier dynamics of Martha's Vineyard Advisor: Jeff Donnelly, G&G

**Angelica R. Gilroy**, University of California San Diego *An estimated eddy heat flux near Pine Island Glacier, Antarctica* Advisor: Kurt Polzin, PO

**Arielle A. Gomes-Williams**, Smith College *The export of particles in low-productivity waters* Advisor: Ken Buesseler, MC&G

**Camil Hamel**, University of Sherbrooke *Hydrographic observations beneath land-fast ice offshore of Barrow, Alaska* Advisor: Albert Plueddemann, PO

**Grant Jiang**, University of Maryland *Biogeochemical variation along the West Antarctic Peninsula through time and space* Advisor: Scott Doney, MC&G

**Christopher S. Kelly**, Lafayette College *Climate controls on western tropical Pacific coral growth: Implications for coral reef management and conservation* Advisor: Anne Cohen, G&G

**Paul E. Lerner**, University of California Berkeley *Mysteries under the ice: Bio-optical measurements in the central Arctic* Advisor: Samuel Laney, BIO

**Nicole R. Marshall**, Dalhousie University Analysis of ocean responses to storms off of Fire Island, New York, USA Advisor: John Warner, USGS

Julia G. Mason, Harvard University Integrated aquaculture as water quality management: Toward a decision-making model for Waquoit Bay, MA Advisor: Hauke Kite-Powell, MPC

**Kimberley K. Mayfield**, University of Hawaii at Manoa *The chemical profiling of four Rhode Island rivers* Advisor: Bernhard Peucker-Ehrenbrink, MC&G

**Brenna J. McGann**, Grove City College *Weakly-inertial particle motions in turbulence* Advisor: Karl Helfrich, PO

**Catherine D. Phillips-Smith**, University of Toronto Submesoscale variability of Moderate Resolution Imaging Spectroradiometer (MODIS) ocean color: Regional and temporal patterns of Hawaii and the surrounding area Advisor: David Glover, MC&G

Barbara M. Ramon, California State University Dominguez Hills

*The impact of ocean acidification on larval surf clams and the mitigating effects of nutrition* Advisor: Daniel McCorkle, G&G

# Xiaoyuan (Charlene) Ren, Vassar College

Tracer stirring in the ocean: Characterizing small-scale ocean current movements through tracer dispersion Advisor: Jim Ledwell, AOPE

**Mallory C. Ringham**, Syracuse University An autonomous sampler for multi-time scale river chemistry observations Advisor: John 'Chip' Breier, AOPE

**Yolimar Rivera-Vázquez**, University of Puerto Rico at Humacao *Physiology of* Synechococcus spp. *isolated from Martha's Vineyard Coastal Observatory* Advisor: Heidi Sosik, BIO

# Danielle P. Santiago Ramos, Amherst College

*Sulfur isotopic variations during subduction of hydrated lithosphere: The Erro-Tobbio case* Advisor: Nobumichi Shimizu, G&G

**Amy M. Streets**, University of Maryland, College Park *Can copepods choose their bacteria? Interactions between copepods and bacteria* Advisor: Ann Tarrant, BIO

Matthew A. Takata, Northwestern College Interesting findings concerning the Pregnane Xenobiotic Receptor in zebrafish Advisor: John Stegeman, BIO

**Tara M. Thean**, Princeton University Signature whistle models in free-ranging bottlenose dolphins, Tursiops truncates Advisor: Laela Sayigh, BIO

**Samantha E. Tufano**, The Pennsylvania State University *Passive acoustic whale localization in Cape Cod Bay in the spring of 2011* Advisor: Dr. James Lynch, AOPE

**Sebastian M. Vivancos**, Columbia University Influence of the AMOC on tropical hydrology during the deglaciation: Insight from the Demerara Rise Advisor: Delia Oppo, G&G

### Megan K. Ware, Boston University

Modeling the economics of beach nourishment decisions in response to coastal erosion Advisor: Porter Hoagland, MPC

## Joseph B. Wenig, University of Victoria

*Exploring the interaction between the Filchner-Ronne ice shelf and large scale circulation* Advisor: Geoffrey 'Jake' Gebbie, PO

## Samantha J. Whitmore, Harvard University

Poleward shift of the Southern Hemisphere Westerlies during the satellite era (1988 - 2011) Advisor: Lisan Yu, PO

# Qingjun (Judy) Yang, Zhejiang University

*Experimental evaluation of a model based nonlinear observer for underwater vehicle navigation* Advisor: James Kinsey, AOPE