National Science Foundation Biosketch Dr. Teresa Greely

Contact Information

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(a) Professional Preparation

New College	Major: Natural Sciences	BA	1985
University of South Florida	Major: Marine Science	MS	1994
University of South Florida	Major: Science Education	PhD	2008

(b) Appointments

Faculty Coordinator Education and Outreach University of South Florida, College of Marine Science, St. Petersburg, FL (8/1995 – present)

Adjunct Faculty Science Education University of South Florida, College of Education, St. Petersburg, FL (8/2009 – present)

Adjunct Faculty Biology University of South Florida, College of Arts and Sciences, St. Petersburg, FL (8/2009 – present)

Faculty Instructor of Marine Science University of South Florida, Honors College, Tampa, FL (8/2000–present)

Science Writer Holt, Rhinehart & Winston Publishing, 2004-2005

Research Associate Department of Marine Science, University of South Florida (1993-1995)

Research Scientist Marine Fisheries Florida Marine Research Institute-FWCC (1987-93)

(c) Products- Five most related to current project

- Miller-Way, Greely, Bracken, Ippolito (2014) Setting the Record Straight: Debunking Myths and Misconceptions about Oil in the Gulf and Promoting Ocean Literacy. Gulf of Mexico Oil Spill and Ecosystem Science Conference workshop session 001, January 26-29, Mobile AL
- Adventures at Sea (2012). Teaching Ocean Sciences from Sea. This teaching tool includes an
 educational blog series, Skype in the Classroom ship to shore teaching events and sharing the
 research story via Teachers at Sea in Gulf of Mexico; formal K-20 students, informal science
 learners, and the public.
- Greely, T. (2012). JOIDES Resolution Expedition 340 Volcanoes and Landslides, Education
 Officer; 30 video-broadcasts to 5 countries and 50 blog entries documenting onboard research,
 Deep Earth Academy
- **Greely, T.** (2010). Ocean Literacy and Reasoning about Ocean Issues: The Influence of Content, Experience and Morality. Saarbrucken, Germany: Lambert Academic Publishing.
- **Greely T.** (1996-1999). Three sets of 6-part video series: Plankton Ecology, Fish Ecology and Year of the Ocean, *Project Oceanography*, USF College of Marine Science, St. Petersburg, FL

Five additional products

- Fisher, E., T. Greely, K. Barnes, 2007. The Biological Budget, Science Scope, 30 (5): 57-60
- **Greely, T.** 2006. Introduction to Ecology and Caring for Florida's Environments, two Book chapters. Austin, TX: Holt, Rinehart and Winston Publishing.
- Greely, T. and K. Thoms, 2006. Oceanography Camp for Girls, Currents, 22 (1): 14-17

- Spector, B., **T. Greely**, and G. Kingsley (2004). Engaging stakeholders in productive meetings to reform science education. *Science Education*, 13(1):58-65
- Tebbens S.F., P. Coble, and **T. Greely.** 1998. Teaching Marine Science to the Next Generation: from summer camps to weekly nationwide distance learning broadcasts. *EOS, Transactions, American Geophysical Union* 79 (1):137-141

(d) Synergistic Activities

- Teaching and training: OCEANS Teaching Fellowships provided graduate level scientists with the pre-professional skills to effectively (as measured via program evaluation) communicate and teach ocean sciences to students and teachers in K-12 settings; In-service Teacher Oceanography Professional Development Workshops (12 ocean themes). GLOBE Environmental Science Protocols Training (Atmosphere, Hydrology, Soils); developed and teach four graduate courses Scientist in the Classroom, Teaching Marine Science I and II, Experiential Learning in Marine Science. Initiated GoMRI/C-IMAGE Teacher at Sea GOM program and Skype broadcasts during research at sea to K-12 classrooms, aquaria and other free choice learning venues.
- **Development teaching materials:** Co-developed, piloted, and evaluated two Marine Science curricula for school districts; co-developed and piloted 150 middle and high school level lesson plans and in-class labs to demonstrate the role of the ocean in sciences and society; developed three-part series teaching manuals for the Oceanography Camp for Girl an NSF model science education program. Two chapters in Science & Technology and Earth Science Textbooks, Holt, Rinehart and Winston Publishers. Initiated GoMRI/C-IMAGE Blog site to communicate research at sea to audiences ashore and share research stories by graduate students and postdocs
- Broadening the participation of groups underrepresented in science through a number of
 diversity inclusive programs. The Oceanography Camp for Girls, which actively recruits,
 educates, and inspires all young women including minority (25-30%) and non-minority girls of all
 learning abilities (e.g. high achieving, average, and high potential). OCEANS Teaching Fellowship
 Program supports minority and nonminority graduate level scientist-teacher mentor teams to
 teach in minority serving K-12 schools. The CMS E&O programs provide critically needed
 minority role models pursuing STEM careers to encourage all students to participate in science.
- Pedagogical methods: developed three-course series on how to teach and communicate ocean sciences including pedagogical methods, inquiry and experiential learning for scientists and teachers.
- **Development of research tools in science education**: contributions to emerging research field of ocean literacy and reasoning about ocean issues; doctoral research findings provided baseline data for high school aged youth, as well as four ocean literacy instrument validated using Rasch model

(e) Collaborators and Other Affiliations

Collaborators and Co-authors: Joachim Dengg (IFM-GEOMAR - Leibniz-Institut f. Meereswissenschaften, Kiel, Germany); Teresa Kennedy (GLOBE International Programs), Tim Short, Friso Van Amerom (SRI International); Lisa Robbins (USGS); Sharon Cooper (Deep Earth Academy); Susan Haynes, Melissa Ryan (NOAA, Ocean Exploration); Alejandro Gutierrez (IOI, Costa Rica); Dana Zeidler, Al Hine, John Paul, Steve Murawski, Pam Hallock-Muller, Paula Coble (USF); Steve Lang (USFSP); Peter Betzer (USF, ret.)

Graduate Advisors: PhD Advisor, Dana Zeidler (USF), MS Advisor, Jose Torres (USF, ret.)

Thesis Advised Students: Emara Ahmad (USF Honors College), Katherine Rozar (USF Honors College), Morgan Goldstein (USF Honors College)