# Eiren Kate Jacobson

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#### Education

Scripps Institution of Oceanography, University of California, San Diego

La Jolla, CA Anticipated 2017

Ph.D. in Biological Oceanography

Dissertation Title: Developing a passive acoustic monitoring network for harbor

porpoise in California

Advisors: Jay Barlow and Peter Franks

Columbia College, Columbia University in the City of New York

New York, NY 18 May 2010

B.A. in Environmental Biology

Thesis Title: Song sharing between humpback whales of Madagascar and Gabon: Directional demographic exchange between populations in the Southern Hemisphere

Advisor: Meredith Nettles

## Research Experience

Scripps Institution of Oceanography, University of California, San Diego

Graduate Student Researcher

La Jolla, CA

Supervisors: Jay Barlow and Peter Franks

June 2012 - Present

NOAA SWFSC Marine Mammal and Turtle Division

Research Biologist

Santa Cruz, CA

Supervisor: Karin Forney

August 2011 - June 2012

Bio-Waves, Inc.

Acoustic Technician

San Diego, CA

Supervisor: Julie Oswald

February 2011 - August 2011

NOAA SWFSC Marine Mammal and Turtle Division

Acoustic Technician

La Jolla, CA

Supervisor: Jay Barlow

June 2010 - August 2011

Wildlife Conservation Society

Acoustic Technician

New York, NY

Supervisor: Salvatore Cerchio

November 2007 - March 2010

#### Scientific Publications

- **Jacobson**, E. K., K. A. Forney, and J. Barlow. *In Preparation*. Using visual survey data to estimate passive acoustic detection parameters for harbor porpoise abundance estimates.
- **Jacobson, E. K.,** K. A. Forney, and J. T. Harvey. *In Press*. Evaluation of a passive acoustic monitoring network for harbor porpoise in California. California Energy Commission Publication number: CEC-500-2015-XXX.
- **Jacobson, E. K.,** K. A. Forney, and J. T. Harvey. 2015. Acoustic evidence that harbor porpoises (*Phocoena phocoena*) avoid bottlenose dolphins (*Tursiops truncatus*). Marine Mammal Science 31:386-397.
- **Jacobson, E. K.,** T. M. Yack, and J. Barlow. 2013. Evaluation of an automated acoustic beaked whale detection algorithm using multiple validation and assessment methods. U.S. Department of Commerce, NOAA Technical Memorandum NOAA-TM-NMFS-SWFSC-509, 26 pp.

#### Academic Awards and Funding Received

Achievement Rewards for College Scientists Scholarship 2015

SIO Department Graduate Student Excellence Travel Award 2015

E. W. Fager Award for Outstanding Contributions to Quantitative Education at SIO 2015

Mia J. Tegner Memorial Fellowship in Coastal Ecology 2015

California Institute for Energy and Environment Research Grant (with K. Forney and J. Harvey) 2012

National Science Foundation Graduate Research Fellowship 2012

National Science Foundation Integrative Graduate Education and Research Traineeship 2012

Columbia College Dean's List 2007, 2008, 2010

Columbia University Earth Institute Travel Grant 2009

Columbia University Parent and Alumni Internship Fund Grant 2008

Joseph Wood Krutch Scholarship 2007, 2008

National Merit Scholarship 2006

#### Conference Presentations

- Jacobson, E. K., K. A. Forney, and J. Barlow. 2015. Using visual survey data to estimate passive acoustic detection parameters for harbor porpoise abundance estimates. Oral Presentation, Society of Marine Mammalogy Biennial Conference. 14-18 Dec. 2015, San Francisco, CA.
- **Jacobson, E. K.,** and K. A. Forney. 2015. Evaluating the use of C-PODs for passive acoustic studies of harbor porpoises. Oral Presentation, Society of Marine Mammalogy Biennial Conference Workshop on Harbor Porpoise. 12 Dec. 2015, San Francisco, CA.
- Jacobson, E. K., K. A. Forney, and J. Barlow. 2015. Using visual survey data to estimate passive acoustic detection parameters for harbor porpoise abundance estimates. Oral Presentation, 7th International Workshop on Detection, Classification, Localization, and Density Estimation of Marine Mammals. 13-16 Jul. 2015, San Diego, CA.
- Jacobson, E. K., K. A. Forney, and J. T. Harvey. 2014. Acoustic evidence that harbor porpoises avoid bottlenose dolphins. Invited Presentation, Southern California Marine Mammal Workshop. 31 Jan.-1 Feb. 2014, Newport Beach, CA.
- **Jacobson, E. K.,** K. A. Forney, and J. T. Harvey. 2013. Acoustic evidence that harbor porpoises avoid bottlenose dolphins. Poster Presentation, Society of Marine Mammalogy Biennial Conference. 9-13 Dec. 2013, Dunedin, NZ.
- Jacobson, E. K., K. A. Forney, and J. T. Harvey. 2012. Developing a passive acoustic monitoring network for harbor porpoise in central California. Poster Presentation, Southern California Marine Mammal Workshop. 3-4 Feb. 2012, Newport Beach, CA.
- Jacobson, E. K., T. M. Yack, and J. Barlow. 2011. Evaluation of an automated beaked whale detector using multiple validation and assessment methods. Poster Presentation, 5th International Workshop on Detection, Classification, Localization, and Density Estimation of Marine Mammals. 21-25 Aug. 2011, Mt. Hood, OR.

### Field Research Experience

Monterey Bay C-POD Array Development

NOAA SWFSC Marine Mammal and Turtle Division

R/V Sheila B., Monterey Bay Project Lead

Supervisor: Karin Forney 2013 - 2016

Southeast Alaska Harbor Porpoise Survey

NOAA NMML Cetacean Ecology and Assessment Program

M/V Lady Gundy, SE Alaska Field Acoustician July 2015 - August 2015

Supervisor: Marilyn Dahlheim

California Current Cetacean and Ecosystem Assessment Survey NOAA SWFSC Marine Mammal and Turtle Division

Field Acoustician R/V Ocean Starr, U.S. West Coast

Supervisor: Shannon Rankin July 2014 - August 2014

California Cooperative Oceanic Fisheries Investigations Scripps Institution of Oceanography and NOAA SWFSC

Graduate Student Researcher R/V New Horizon, California

Supervisor: James Wilkinson November 2013

Monterey Bay Harbor Porpoise Aerial Surveys NOAA SWFSC Marine Mammal and Turtle Division

Visual Observer Monterey Bay, California

Supervisor: Karin Forney October 2013

Southern California Behavioral Response Study NOAA SWFSC Marine Mammal and Turtle Division

Derek M. Baylis, Channel Islands Field Acoustician Supervisor: Jay Barlow July 2013 - August 2013

Pacific Islands Cetacean and Ecosystem Assessment Survey **NOAA PIFSC Protected Species Division** 

Field Acoustician R/V Oscar Elton Sette, Pacific Islands Supervisor: Erin Oleson April 2012 - May 2012

U.S. West Coast Harbor Porpoise Aerial Surveys NOAA SWFSC Marine Mammal and Turtle Division

Visual Observer California and Oregon Supervisor: Karin Forney September 2011 - December 2011

NRDA Offshore Deep Meso- and Bathypelagic Fish Sampling Survey

Bio-Waves, Inc. and Geo-Marine, Inc.

R/V Pisces, Gulf of Mexico Field Acoustician Supervisor: Tom Norris June 2011 - July 2011

Hawaiian Islands Cetacean and Ecosystem Assessment Survey NOAA SWFSC Marine Mammal and Turtle Division

Field Acoustician R/V McArthur II, Hawaiian Islands Supervisor: Shannon Rankin August 2010 - October 2010

### Teaching Experience

Introduction to R

Scripps Institution of Oceanography

Co-Instructor (with J. Carrière-Garwood)

Spring 2015

### Academic Service and Community Involvement

Marine Mammal Science

Reviewer June 2015 - present

Women and Minorities in Science at SIO

Co-Coordinator January 2013 - present

SIO Ecology Seminar

Co-Coordinator September 2013 - June 2014

Scripps Peers

Mentor August 2014 - August 2015

San Diego Summer Training Academy for Research in the Sciences

Graduate Advocate June 2012 - August 2012

Columbia University Environmental Biology Society

President May 2008 - May 2010

### Other Experience

FISH 558: Decision Analysis in Natural Resource Management

Student Fall 2015

AquaMarina Center for Studies in Marine Science

Field Assistant

January 2009 - February 2009

Argentine Universities Study Abroad Program

Student February 2009 - July 2009

NMFS Marine Resources Population Dynamics Workshop

Instructor: Jim Berkson January 2008

#### Skills and Certifications

Programming Languages: R, SAS, Matlab, LaTex, ArcGIS, HTML

Acoustics Software Programs: PAMGUARD, ISHMAEL, Raven, XBAT, Triton, CPOD

Certifications: Water Ditching and Survival

Languages: Fluent Spanish