# **Eiren Kate Jacobson**

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#### **EDUCATION**

Scripps Institution of Oceanography, University of California, San Diego

La Jolla, CA Ph.D. in Biological Oceanography Anticipated 2017 M.S. in Biological Oceanography March 2014

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 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

#### PEER-REVIEWED PUBLICATIONS

Jacobson, E. K., K. A. Forney, and J. Barlow. Submitted. Using visual survey data to estimate passive acoustic detection parameters for harbor porpoise abundance estimates. Journal of the Acoustical Society of America.

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. DOI: 10.1111/mms.12154.

## OTHER PUBLICATIONS

Jacobson, E. K., K. A. Forney, and J. T. Harvey. 2016. Evaluation of a passive acoustic monitoring network for harbor porpoise in California. California Energy Commission. Publication number: CEC-500-2016-008.

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.

## 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 August 2011 - June 2012 Supervisor: Karin Forney

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

#### ACADEMIC AWARDS AND FUNDING RECEIVED

2016 Edna Bailey Sussman Foundation Internship

Oliver Chair in Marine Biodiversity and Conservation Science Travel Award

2015 Kenneth E. Hill Endowed Fund for Marine Conservation Award

Achievement Rewards for College Scientists Scholarship SIO Department Graduate Student Excellence Travel Award

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

Mia J. Tegner Memorial Fellowship in Coastal Ecology

2012 California Institute for Energy and Environment Research Grant

National Science Foundation Graduate Research Fellowship

National Science Foundation Integrative Graduate Education and Research Traineeship

Pre-2010 Columbia College Dean's List

Columbia University Earth Institute Travel Grant

Columbia University Parent and Alumni Internship Fund Grant

Joseph Wood Krutch Scholarship

National Merit Scholarship

## **CONFERENCE PRESENTATIONS**

- **Jacobson, E. K.,** K. A. Forney, and J. Barlow. 2016. Using visual survey data to estimate passive acoustic detection parameters for harbor porpoise abundance estimates. Oral Presentation, International Statistical Ecology Conference. 28 Jun.-1 Jul. 2016, Seattle, WA.
- **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.

#### POSTER PRESENTATIONS

- **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

Project Lead R/V Sheila B., Monterey Bay Supervisor: Karin Forney 2013 - 2016

Southeast Alaska Harbor Porpoise Survey NOAA NMML Cetacean Ecology and Assessment Program

Field Acoustician M/V Lady Gundy, SE Alaska Supervisor: Marilyn Dahlheim July 2015 - August 2015

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

Field Acoustician Derek M. Baylis, Channel Islands
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

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NRDA Offshore Deep Meso- and Bathypelagic Fish Sampling Survey Bio-Waves, Inc. and Geo-Marine, Inc.

Field Acoustician R/V Pisces, Gulf of Mexico
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

**UW FISH 558: Decision Analysis in Natural Resource Management** 

Instructor: Andre Punt 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, Matlab, LaTex, HTML, SAS, ArcGIS

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

Certifications: Water Ditching and Survival

Languages: Fluent Spanish

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