

Jillian Wisse

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EDUCATION

University of North Carolina, Chapel Hill, NC, 2011
B.Sc. in Biology, Minor in Chemistry

PUBLICATIONS

Javier delBarco-Trillo, Lydia K. Greene, Ines Braga Goncalves, Miriam Fenkes, **Jillian H. Wisse**, Julian A. Drewe, Marta B. Manser, Tim Clutton-Brock, and Christine M. Drea, 2016. Beyond aggression: androgen-receptor blockade modulates social interaction in wild meerkats. *Hormones and Behavior* 78, 95-106.

TALKS AND PRESENTATIONS

- Wisse, J.**, Boggs, A., Foley, H., Swaim, Z., Waples, D., Read, A., Nowacek, D. 2019 Baseline variation of steroid hormones in short-finned pilot whales (*Globicephala macrorhynchus*). Oral presentation at the World Marine Mammal Conference, Barcelona, Spain.
- Wisse, J.** 2019 Pilot whale endocrinology: sex, stress, and steroids. Invited talk at UNC's Institute of Marine Sciences Think Tank series, Morehead City, NC
- Wisse, J.**, Nowacek, DP., Boggs, ASP. 2019 Novel Liquid Chromatography Tandem Mass Spectrometry Method for Steroid Hormone Analysis of Pilot Whale Blubber. Oral presentation at the Southeast and Mid-Atlantic Marine Mammal Symposium, Washington, DC
- Wisse, J.**, Krzyszczyk, E., Arnold, J., Clayton, L., Ginsburg, A. & Mann, J. 2017. Measurement of cortisol in blow: biological and methodological validation. Oral presentation at the 22nd Biennial Conference on the Biology of Marine Mammals (Society of Marine Mammalogy), Halifax, Nova Scotia
- Wisse, J.**, Krzyszczyk, E., Patterson, E., Arnold, J., Clayton, L., Ginsburg, A. & Mann, J. 2017. Measurement of cortisol in blow: biological and methodological validation. Oral presentation at the Southeast and Mid-Atlantic Marine Mammal Symposium, Beaufort, NC
- Wisse, J.**, Sandberg, K., Krzyszczyk, E., Patterson, E.M., Clayton, L., Ginsburg, A. & Mann, J. 2015. Touch and Blow: Finding success with a novel hormone method. Oral presentation at the 21st Biennial Conference on the Biology of Marine Mammals (Society of Marine Mammalogy), San Francisco, California
- Wisse, J.**, Sandberg, K., Krzyszczyk, E. Patterson, E.M., Clayton, L., Ginsburg, A. & Mann J., 2015. Blown out of the water: Using a novel method to measure cortisol in dolphins (*Tursiops truncatus*). Poster presented at the Southeast and Mid-Atlantic Marine Mammal Symposium, Virginia Beach, Virginia
- Wisse, J.**, Sandberg, K., Krzyszczyk, E. Patterson, E.M., Hunter, S., Clayton, L., Ginsburg, A. & Mann J., 2014. Blown out of the water: Success with a novel technique to measure cortisol levels in bottlenose dolphins (*Tursiops truncatus*). Poster presented at the 51st Annual Conference of Animal Behavior Society, Princeton, New Jersey

PROFESSIONAL FELLOWSHIPS AND GRANTS

Duke University Domestic Travel Fellowship, 2019
Duke University Summer Research Fellowship, 2018 & 2019
Student Travel Grant, Society for Marine Mammalogy biennial meeting, 2015 & 2017
Graduate Student Training Enhancement Grant, Duke University, 2017
Data Expeditions, Duke University, 2017 & 2016
Christine Stevens Wildlife Award, Animal Welfare Institute, 2014
Grant-in-Aid, Georgetown University, 2013

RESEARCH POSITIONS AND PROJECTS

Graduate Student Researcher, Atlantic Behavioral Response Study, June 2016- present

PIs: Dr. Douglas Nowacek, Dr. Brandon Southall, and Dr. Andrew Read

Analysis of remote blubber biopsies for stress and reproductive steroid hormones to investigate the impacts of naval sonar on short-finned pilot whales (*Globicephala macrorhynchus*)

Co-PI and Research Affiliate, Dept. of Biology, Georgetown University, June 2013-present

PI: Dr. Janet Mann

Non-invasive hormone monitoring in captive and wild bottlenose dolphins: Collection and analysis of blow as a novel stress test (Co-PI on project). Collection of behavioral data of bottlenose dolphins (*Tursiops aduncus*)

Research Associate, Dept. of Evolutionary Anthropology, Duke University, May 2010-Oct 2012

PI: Dr. Christine Drea

Data collection and sample analysis on projects involving the neuro-endocrine correlates of female social dominance in lemurs (*Eulemur* genus) and wild meerkats (*Suricata suricatta*), and olfactory communication of reproductive state and allelic diversity in ring-tailed lemurs, *Lemur catta*

FIELD EXPERIENCE

Atlantic Behavioral Response Study, August 2017, May 2018, August 2019

Conducting acoustic experiments on short-finned pilot whales (*Globicephala macrorhynchus*) and Cuvier's beaked whales (*Ziphius cavirostrus*)

Marine Mammal Passive Acoustics and Spatial Ecology, January and February 2019

Conducting acoustic and visual surveys of offshore cetacean species

Startle Response Study, January and June 2017

Conducting acoustic experiments on humpback whales (*Megaptera Novaeangliae*) and Cuvier's beaked whales (*Ziphius cavirostrus*). Assisting with photo and data entry during sightings and experiments. Assisting with acoustic and photo data processing.

US Navy Marine Mammal Monitoring Project, July 2016

Conducting marine mammal transect surveys from a research vessel, assisting with photo and biopsy during sightings, and processing samples and recording sighting data.

Shark Bay Dolphin Project, Aug 2014-January 2015

Working with a small team in a remote location to conduct behavioral focal follows on bottlenose dolphins, *Tursiops aduncus*. Identifying individuals by dorsal fins and driving a small boat during marine mammal observations.

TEACHING EXPERIENCE

Teaching Assistant, Duke University, Spring 2017, 2018, 2019

Bioacoustics, Dr. Doug Nowacek

Undergraduate Mentor, Duke University, Spring 2018

Student: Aurora Ross, Data integration of pilot whale physiological and behavioral data
Data Expeditions Instructor, Duke University, Fall 2016 & Fall 2017

R instruction module paired with Biology of Marine Mammals course

Teaching Assistant, Duke University, Fall 2016

Biology of Marine Mammals, Dr. Andy Read

Teaching Assistant, Duke University, Spring 2016

Geospatial Analysis for Coastal and Marine Management, Dr. Pat Halpin

Teaching Assistant, Duke University, Fall 2015

Introduction to Environmental Studies, Dr. Rebecca Vidra

PROFESSIONAL SERVICE

Symposium organizer, “Measuring hormones in marine mammals: Current methods, alternative sample matrices, and future directions”, 22nd Biennial Conference on the Biology of Marine Mammals (Society of Marine Mammalogy), Halifax, Nova Scotia, 2017

Conference organization team, Southeast and Mid-Atlantic Marine Mammal Symposium, Beaufort, NC, April 7-9, 2017

Event organization team, Primate Palooza, Duke University, 2011

UNIVERSITY SERVICE

Outreach Coordinator, Duke Marine Lab, 2018-2019 Academic year

Seminar Series Coordinator, Duke Marine Lab, 2017-2018 Academic year

Ecology Program Representative, Nicholas PhD Advocacy Council (NPAC), Duke University, Small Grants Committee, Fall 2017- Spring 2018

Sutherland Speaker Coordinator, Duke Marine Lab, Fall 2016-Spring 2017

OUTREACH

Scientific presenter, Girls Exploring Science & Technology (GEST), UNC Marine Lab, 2019

Team Coordinator, GEST, Duke Marine Lab, 2018 & 2019

Scientific presenter, middle school visit, Duke Marine Lab, 2016

Scientific speaker, Cross Country Elementary School, Baltimore, MD, 2015

Research speaker, Monkey Mia Weekly Kid’s Talk, Shark Bay, Western Australia, 2014

PROFESSIONAL AFFILIATIONS

Society for Marine Mammalogy