

Jessica Lopez

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EDUCATION

Masters of Science in Marine Science

September 2009 – May 2012

Hawaii Pacific University, Kaneohe, Hawaii

- GPA 3.67
- Thesis topic: Patterns and trends of persistent organic pollutants in the endangered Hawaiian monk seal (*Monachus schauinslandi*) from the Main Hawaiian Islands: looming threat or benign concern?

- NOAA Nancy Foster Fellowship recipient

August 2010 – May 2012

Worked with Olympic Coast National Marine Sanctuary in a collaborative project to determine spatial distribution of sea birds within the OCNMS.

Relevant Coursework

- Chemical Oceanography
- Physical oceanography
- Biometry
- Multivariate Statistics
- Marine Mammal Biology
- Marine Ecology
- Geographic Information Systems (GIS)
- Toxicology

Bachelor of Science in Marine Biology, Minor in Psychology

September, 2000 - December, 2004

University of California Santa Cruz, Santa Cruz, California

- GPA 3.76, Graduated with Honors
- University of California Regents Scholar

Relevant Coursework

- Ecology
- Marine Conservation Biology
- Marine Mammal Biology
- Tropical Community Ecology
- Ocean Ecosystems
- Vertebrate Physiology
- Organic Chemistry
- Biochemistry
- Invertebrate Zoology

Monteverde Tropical Biology and Conservation Program

October - December 2004

Monteverde Institute, UC Education Abroad Program, Monteverde, Costa Rica

- Participated in field research, courses, and independent research project to satisfy undergraduate course requirements.

PROFESSIONAL EXPERIENCE

Field Research Supervisor

January 2006 – present

Joint Institute for Marine and Atmospheric Research (JIMAR) in cooperation with NOAA Fisheries, Pacific Islands Fisheries Science Center, Honolulu, HI

Field and marine mammal responsibilities:

- 2007-2009: Lead remote field camp of 3-4 people in the Northwest Hawaiian Islands for the Hawaiian monk seal population assessment program for periods of 3-4 months. Collect census and life history data on Hawaiian monk seals, collect of biological samples including scats and spews for foraging ecology analysis, tissue samples for DNA analysis, tag and measure weaned pups. Provide *in situ* training of field assistants in all aspects of remote field camps including research activities, boating, equipment and camp maintenance.
- 2006-2009: Conducted surveys, photo identification, and assisted in biopsy sampling of Hawaiian spinner dolphins (*Stenella longirostris*). Edit, analyze, and match photos upon return to Honolulu.
- 2008: Assisted State of Hawaii personnel with field research on resident sea birds.
- 2006-present: Participate in additional monk seal and cetacean field research and response projects as needed including disentanglement and de-hooking responses, field health and disease sampling, and tracking device deployments. Participate as part of seal handling and response team in emergency field responses.

Operational and training responsibilities:

- Serve as Chief Scientist and/or operations lead aboard the NOAA research vessel Oscar Elton Sette. Responsible for up to 20 scientific personnel and all scientific operations during 14 day deployment project. Coordinate with operations officer and commanding officer to conduct effective and safe operations in the remote Northwestern Hawaiian Islands.
- Responsible for supply and maintenance of all equipment and supplies for remote seasonal and year-round field camps.
- Coordinate loading and offloading of research vessel, field team preparation, and training activities for remote field camp deployment.
- 2007 – present: Serve as small boat instructor for 1-3 NOAA motorboat operator certification courses per year.
- Serve as small boat and jet ski driver for emergency seal response activities.

Research responsibilities:

- Preparation and publication of scientific manuscripts.

Field Biological Technician

April - September 2005 & April 2006 – August 2006

Aquatic Farms Ltd, contractor for NOAA Fisheries, Pacific Islands Fisheries Science Center, Honolulu, Hawaii

- Lived and worked in remote field camp conducting research on Hawaiian monk seals. Participated in daily research activities, maintenance and operation of field camp including boating operations at multiple-island atoll.
- Participated in training and packing activities prior to field season including wilderness first aid training, small boat operation training, and HAZCOM training.
- Assisted with return, repair, and clean up of field equipment and supplies at the end of field season as well as packing and preparation for the following field season.

Marine Mammal Trainer and Research Assistant

December 2001 – August 2004

Long Marine Laboratory, University of California, Santa Cruz, Santa Cruz, California

- Responsible for the care and training of Atlantic bottlenose dolphins (*Tursiops truncatus*), California sea lions (*Zalophus californianus*), and Southern sea otters (*Enhydra lutris*).
- Implemented classical and operant conditioning techniques in the training of research, and husbandry behaviors.
- Fed, restrained, and assisted with research and medical procedures for wild California sea lions, Guadalupe fur seals (*Arctocephalus tonnsendi*), and Pacific harbor seals (*Phoca vitulina*).
- Assisted with the collection of various data for conservation research including metabolics, blood analysis, morphometrics, and ultrasound.
- Prepared food and equipment for training sessions and data collection.
- Supervised and trained junior staff on all husbandry and facility maintenance activities.

Veterinary Technician

The Animal Clinic, Santa Fe, NM,

October 2005 - January 2006

Aptos Animal Hospital, Aptos, California,

March - August 2004

Adobe Animal Hospital, Santa Cruz, California

July 2002 - December 2003

- Performed and assisted with various veterinary procedures and diagnostics including microscopy, radiology, dentistry, phlebotomy, wound care, catheter placement, subcutaneous, intramuscular, and intravenous injections, intubation, anesthesia induction, maintenance, and monitoring, surgical assistance, and collection of blood and tissue samples for diagnostic testing.
- Obtained patient histories and other relevant information from owner prior to exam. Provided instructions for post-visit care of patients, and for maintaining communication with client regarding at home recovery and treatment regimen.

OTHER RELEVANT EXPERIENCE

Richmond Bridge Harbor Seal Project Volunteer

January 2005

Moss Landing Marine Laboratories, Moss Landing, California

- Member of boat crew for capture of harbor seals using tangle nets. Set nets near haul-out sites, recovered entrapped seals, transferred seals to beach crew.
- Assisted in restraint of seals for blood and tissue samples as well as flipper tagging and radio/satellite tag placement.

Oil Spill Response Volunteer

December 2001 - March 2002

Long Marine Laboratory, University of California Santa Cruz, Santa Cruz, CA

- Participated in beach searches for oiled birds and mammals.
- Provided medical care and husbandry for oiled sea birds in association with the California Department of Fish and Game during the San Mateo mystery spill of 2001-2002.

PUBLICATIONS AND PRESENTATIONS

- **Lopez JU**, Boyd D, Ylitalo GM, Littnan C, Pearce R. 2012. Persistent organic pollutants in the Hawaiian monk seal from the main Hawaiian Islands. *Marine Pollution Bulletin* 64: 2588-2598.
- Schultz JK, Johanos TC, Becker BL, **Lopez JU**, Kashinsky L. 2011. Dizygotic twinning in the Hawaiian monk seal. *Journal of Mammalogy* 92: 336-341.
- Society for Marine Mammalogy 18th Biennial Conference. 2009. Poster presentation: *Dizygotic twinning in the Hawaiian monk seal*.
- **Lopez, J**, Guerin, S, White, L. 2009. Chapter 5: The Hawaiian monk seal on Pearl and Hermes Reef IN Johanos, TJ and Baker, JD NOAA Technical memorandum. The Hawaiian monk seal in the northwestern Hawaiian islands, 2009.
- **Lopez, J**, Baker, J, Gobush, K, Hill, M. 2008. Chapter 5: The Hawaiian monk seal on Pearl and Hermes Reef and Chapter 7: The Hawaiian monk seal on Kure Atoll IN Johanos, TJ and Baker, JD NOAA Technical memorandum. The Hawaiian monk seal in the northwestern Hawaiian islands, 2008.
- **Lopez, J**, MacKenzie, M, Rivera, J. 2007. Chapter 5: The Hawaiian monk seal on Pearl and Hermes Reef IN Johanos, TJ and Baker, JD NOAA Technical memorandum. The Hawaiian monk seal in the northwestern Hawaiian islands, 2007.
- Finn, H., **Lopez, J**, Reuland, K. 2006. Chapter 5: The Hawaiian monk seal on Pearl and Hermes Reef IN Johanos, TJ and Baker, JD NOAA Technical memorandum. The Hawaiian monk seal in the northwestern Hawaiian islands.
- EAP Tropical Biology Student Symposium. 2005. Presentation: *The Effect of Shape on Fruit Choice of Frugivorous Bats of the Monteverde Area.*

PROFESSIONAL AFFILIATIONS

- Associate member of Society for Marine Mammalogy - September 2005 to Present
- Active member of International Marine Animal Trainers Association - 2003 to 2005

CERTIFICATIONS AND TRAINING

- WMI wilderness first aid training - April 2005, March 2006, April 2007, April 2009
- NOAA Emergency Aviation Dunker training – December 2006
- NOAA small boat operator training - April 2005, September 2006
- NOAA motorboat operator certification course instructor training – October 2007
- HAZCOM training – January 2002, April 2005, May, 2007, April 2009
- Completion of lecture series on animal training, Long Marine Lab – March 2003
- NAUI Scuba Certified - March 2002 to Present
- IATA Dangerous goods shipping training – August 2012
- Forklift operator certification January 2006, January 2009, January 2012

SKILLS

- **Computer:** Experience with PC and Macintosh systems. Software/Applications: MS Word, Excel, Access, PowerPoint, ArcGIS, ACDsee, SPSS, Aperture, PC-ORD, R.
- **Supervisory:** Field camp leader, NOAA Fisheries: 2007-2009; Supervisor in animal husbandry and training, Long Marine Lab: 2002-2004.
- **Photography:** Photo ID of Hawaiian spinner dolphins off of small boats. Photo ID of Hawaiian monk seals.
- **GPS:** Proficient at use of GPS handheld receivers.

REFERENCES

K. David Hyrenbach
Assistant Professor
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Chad Yoshinaga
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