# Sonia Ibarra

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## **Educational Experience:**

- **Student, Ph.D in Fisheries.** University of Alaska Fairbanks, Juneau, AK. 3.82 GPA. *Anticipated completion in Summer 2020.*
- **B.S. Marine Biology and Zoology with minors in Scientific and Leadership Diving**. Humboldt State University, Arcata, CA. 3.32 GPA. *Dates: 2004-2008*.
- Multicultural initiative in the marine sciences: undergraduate program (MIMSUP). Program focused on courses in the marine sciences and supervised research. Western Washington University (WWU), Anacortes, WA. 3.63 GPA. *Dates: 2008*.
- H.S. Diploma, Corning Union High School, Corning, CA. 4.0 GPA. Dates: 2000-2004

# **Social Justice and Equity Training:**

- UAS Annual Equity Dialogue Training. Training in First Alaskan Institute's Alaska Native Dialogue on Racial Equity (ANDORE) framework. The purpose of this framework is to: "reset and reshape the dialogue on race in Alaska by bringing people together to challenge perceptions through community conversations, seeking to raise the level of awareness and healing around race and racism, and to advance policy solutions towards racial equity". Nov. 2018, Oct. 2019.
- **Lecture.** "Colonial mentality: Manifestations, operation, and mental health". Talk and group discussion led by E.J.R. David focused on the manifestations and psychological implications of internalized oppression as felt and experienced by various communities. Mar. 2019.
- **Haa tóoch lichéech (we believe it is possible) Coalition Gathering**. Eight week class series focused on building connections and healing, strengthening allies, and promoting racial and gender equity within Juneau, AK. Feb.–Mar. 2019.
- **ANDORE Host Reception**. Gathering of Juneau-based ANDORE Host trained community members in order to plan out a years worth of dialogues that can happen in Juneau, AK. Nov. 2018
- **Indigenizing Resource Management Nature Conservancy (TNC) Training.** Helped plan and assisted with invitations to indigenous facilitators, community members, and elders to lead a training for TNC staff on how individuals and the organization as a whole can decolonize conservation. Oct. 2018
- "Social Justice Doers: Partners for the Next 10,000 Years". Social justice summit focused on gathering "passionate community members, advocates, policy makers and all who strive to make Alaska a more equitable, just place". Sept. 2018.

#### Mentorship:

- **Academic Mentor**, Native and Rural Student Center, University of Alaska Southeast (UAS). Mentored and tutored 10 Tlingit, Haida, Yupik, and Athabaskan, Alutiiq, and Unangax students one-on-one, discussed coursework, assist with scholarship and internship applications, providing emotional support and guidance for dealing with historical and intergenerational trauma, and give general advise on planning for their future. Aug. 2012-present.
- **Indigenous Land and Waters Mentor,** Hydaburg City School District. Created an internship, fund-raised, supervised and provided support for two high school Haida students with a focus on participation and assistance with the annual community culture camp, harvesting berries, making drums, Northwest coast

traditional Formline artwork, sampling water quality around their community, practicing self-care techniques, daily journaling of feelings including triggers, and practicing/modeling care of their elders. Summer 2019.

- **Indigenous Land and Waters Mentor,** Sitka Conservation Society. Created an internship, fund-raised, supervised and provided support for Haida high school student in her photography/storytelling internship focused on exploring what indigenous stewardship means to her and her community. Summer 2018.
- **Research Mentor**, University of Alaska Fairbanks. Trained, supervised, and mentored six Tlingit, Haida, and Lummi undergraduate and high school students in intertidal shellfish sampling protocols, recording data, conducting preliminary data analysis, creating and presenting a research poster at a national conference, and harvesting traditional foods and distributing to community members. May-Nov. 2015, 2016, 2017.
- **Hutton Scholar Mentor**, American Fisheries Society. Trained, supervised, and mentored two Tlingit and Haida high school students in intertidal shellfish monitoring, writing grant proposals, and creating and presenting a research poster. Summer 2016.
- **Resume Writing Coordinator,** University of Alaska Southeast (UAS). Developed and implemented weekly resume/scholarship writing workshops for students. Jan. 2013-July 2014.
- **Student Mentor,** SACNAS Meeting. Met with minority students in groups and one-on-one settings to discuss the graduate school application process including: how to apply to, seeking funding sources, and finding the right graduate advisor and degree program. Oct. 2013

#### **Community Engagement:**

- **One-on-one meetings** with tribal leaders, tribal councils, and community members to solicit guidance and feedback, share project updates and preliminary results. Summer 2015-2019.
- **Invited medicinal plant instructor,** Hydaburg Annual culture camp. Co-taught medicinal plants walk with local youth and made soap and tea with medicines we gathered. July 2018, 2019.
- **Volunteer cook and server,** Potlach hosted by Robert and Terrr-Lynn Davidson to honor k'iigaani gwaaygangngee (clans) with a dance screen. Oct. 2018.
- **Presenter**, Organized Village of Kake's Annual and tribal council meetings. Shared dissertation research updates. Feb 2018.
- **Volunteer weaving assistant,** for Becky Frank (Hydaburg). Prepared cedar bark and assisted students in making red and yellow cedar headbands. July 2017.
- **Traditional food gatherer and server,** Memorial Potlatch hosted by Judy Helgesen to honor the life of her son and releasing his soul from family grief. September 2017.
- **Presenter, Prince of Wales Tribal Conservation District meeting. Shared dissertation research updates Aug 2017.**

### Cedar Bark Weaving:

- **Apprentice,** Judy Helgesen (Haida teacher). Gather Judy's yearly cedar bark needs, prepare weaving materials for all of her projects (2014-2015), learning how to select trees for best weaving materials and various Haida weaving techniques. Jul. 2013-currently.
- **Invited volunteer weaving assistant,** Kake Annual Culture Camp. Assisted master weaver, Della Cheney with her weaving class where we helped 25 youth make small plaided and twined cedar baskets at the annual Kake culture camp. I gathered, stripped, and split all the red cedar bark used during the class and found funding to support Della's time and expertise to teach the class. July 2019.
- **Invited weaver,** Kake Annual Culture Camp. Gathered and prepared materials to teach youth how to make rope using yellow cedar. July 2018.
- **Beginning Northwest Coast Basketry**, Dr. Delores and Holly Churchill (Haida instructors). Wove my first Haida-style spruce root basket that incorporated false embroidery techniques. Summer 2018.
- Cedar rose and headband weaver (gifted to opposite clans of hosts), Memorial Potlach hosted by <u>Kaach.adi</u> clan in remembrance of clan members that have passed. Aug. 2017.

#### **Panels and Selected Presentations:**

- **Ibarra**, S., Eckert, G., Langdon, S. "Facilitating greater representation and equity in the voices and data of science: Sea otter impacts on customary and traditional foods in Southeast Alaska" (talk). Alaska Chapter, American Fisheries Society, Mar. 2019.
- **Ibarra, S.**, Eckert, G., Nickerson, D., Jackson, B. "Bringing together UAF researchers and community members: Sea otters in Southeast Alaska" (panel discussion). Alaska Forum of the Environment, Feb. 2019.
- **Ibarra, S.**, Eckert, G., Langdon, S. "Bridging local and traditional knowledge with ecology: Sea otter impacts on subsistence communities in Southeast Alaska" (talk). Western Society of Naturalist, Nov. 2018.
- **Ibarra, S.**, Eckert, G., Langdon, S. "Historical and contemporary intersection of sea otters, people, and shellfish" (talk). Society for Applied Anthropology, Apr. 2018.
- **Ibarra, S.**, Eckert, G., Langdon, S. "Understanding sea otter impacts on tribal subsistence fisheries in Southeast Alaska" (poster). American Indian Science and Engineering Society (AISES), Sept. 2017.
- Smythe, W., **Ibarra**, **S**., Reano, D. Empowering native students through Traditional Knowledge in STEM disciplines (panel discussion). American Indian Science and Engineering Society (AISES), Nov 2016.
- Monteith, D., Figus, E., Chan, M., **Ibarra, S.** Crossroads of history, science, and management of Southeast Alaska fisheries (panel discussion). Alaska Historical Society, Sept. 2016.
- Green, Vanessa. "Building capacity to use science for sovereignty in Native coastal communities" (invited panel speaker). AISES, Nov. 2015.
- **Ibarra, S.,** and Eckert, G. "Can Humans and Apex Predators Coexist? Evaluating the sustainability and resilience of rural coastal communities in Southeast Alaska" (talk). American Fisheries Society Juneau Student Subunit of the Alaska Chapter Annual Student Symposium. Apr. 2014.
- **Ibarra, S.**, Kadinger, L., Eckert, G., Gill, V. and Hoyt, Z. "Sea otter recolonization in Southeast Alaska" (talk). Alaska Native Studies Conference. Mar. 2014.

#### Fellowships/Awards:

- **Andrew W. Mellon Foundation Dissertation Fellowship.** Award for Alaska Native and Pacific Islander scholars and others committed to the advancement of Indigenous Alaskan and Pacific Islander history and culture. Jan.-Dec. 2019.
- **Sequoyah Fellow, AISES.** Award to those that bring honor to AISES by engaging in leadership, mentorship, and other acts of service that support indigenous and minority students and professionals, and lifetime membership in AISES. Oct. 2019 (nominated in 2017).
- Cultural Diversity Travel Award, Alaska Chapter-American Fisheries Society (AFS). Award for an Alaska Native or other minority to cover travel expenses to attend the 2018 Western Division AFS annual meeting. Apr. 2018.
- **Excellence in Biology, AISES.** Award in recognition of best biology poster presentation, Sept. 2017.
- Meritorious Service Award, American Fisheries Society, Alaska Chapter. Award in recognition of loyalty, dedication, and meritorious service to the Society and for recent outstanding contributions to fisheries in Alaska. Mar. 2017.
- Marine Ecosystem Sustainability in the Arctic and Subarctic fellowship, NSF. Interdisciplinary graduate program based on fundamental principles and analytical tools of fisheries science, oceanography,

ecology, economics, management, marine policy, and anthropology to broadly train students in ecosystem-based approaches to living marine resources. 2015-2017

- **Graduate Research Program fellowship, National Science Foundation (NSF).** Financial support of graduate students in NSF-supported science, technology, engineering, and mathematics disciplines who are pursuing research-based master's and doctoral degrees at accredited US institutions. 2012-2015
- Minorities Striving and Pursuing Higher Degrees in the Earth Sciences fellowship, NSF. Program developed for underrepresented minorities with the overall purpose of facilitating our increased participation in Earth system science by providing professional development experiences through conferences and networking. 2008-2009.

# **Research Experience:**

"Bridging traditional knowledge and ecological studies: Understanding sea otter impacts on subsistence fisheries in Southeast Alaska". Advisor: Dr. Ginny Eckert, Univ. of Alaska Fairbanks; Ph.D. Dissertation, Fall 2012-currently.

Currently conducting local and traditional knowledge interviews and intertidal shellfish surveys in four Southeast Alaskan Native communities to document sea otter impacts to shellfish subsistence fisheries, cascading social-ecological effects due to sea otters, and community management strategies in response to increasing competition with sea otters.

"Assessing haplotype diversity in the seastars *Acanthaster plancii* and *Linckia laevigata*". Advisor: Dr. Paul Barber, Old Dominion Univ.; NSF Diversity Project, Summer 2008.

Collected seastar samples from three locations in the Philippines using SCUBA and freediving. Samples were analyzed using standardized PCR (polymerase chain reaction) methods and prepared for DNA sequencing.

- "How does prey availability affect reproductive effort in the sea star *Leptasterias hexactis*?" Advisor: Dr. Brian Bingham, WWU; NSF MIMSUP. Spring 2008.
  - Determined effects of prey availability on embryo mass of brooding females sea stars at three locations in Washington State.
- "Comparing kelp communities in the outer and inner coats of Southeast Alaska". Advisor: Dr. Ginny Eckert, Univ. of Alaska Fairbanks; NSF Research Experience for Undergraduates, Summer 2007. Compared kelp assemblages on the inner coast of southeast Alaska near Juneau, and outer coast near Sitka. Kelp communities were compared using SCUBA survey techniques. Physical (substrate, algal percent cover, and depth) and abiotic parameters (temperature, salinity, and chlorophyll a fluorescence) were measured at each study site.
- "Subtidal monitoring in northern California: exploring the lost coast". Advisor: Dr. Megan Donahue, UHM; HSU Directed study. Sept.-Dec. 2006, summer 2007.

Adapting PISCO/CRANE protocols to northern California habitats, and initiating long-term, subtidal monitoring sites in Mendocino and Humboldt Counties. Quantified fish, invertebrates, algae, and substrate composition at sites with *Nereocystis luetkeana* (bull kelp), and entered survey data.

#### **Publications:**

- Van Riper, C., Landon, A., Kidd, S., Bitterman, P., Fitzgerald, L., Granek, Elise, **Ibarra, S.**, Iwaniec, David, Raymond, C., and Toledo, D (2017). Incorporating social-cultural phenomenon into ecosystem service evaluation: The importance of critical pluralism. *BioScience* 67(3): 233-244.
- Pirtle J, **Ibarra S.,** Eckert G (2012). Nearshore subtidal community structure compared between inner coast and outer coast sites in Southeast Alaska. *Polar Biol* 35:1889-1910.

### **Employment:**

### Research Assistant, University of Alaska Fairbanks

Juneau, AK Aug.-Dec. 2017, May-Dec. 2018

Data analysis on dissertation work focused on sea otter impacts to shellfish subsistence fisheries, including coding in R, setting up and organizing databases, transcribing interviews, digitizing paper maps into GIS digital maps, mentoring and supporting Alaska Native high school and college students, writing funding proposals, creating one pager project flyers for distribution to communities, and organizing and hosting community meetings.

### Teaching Assistant, University of Alaska Southeast

Juneau, AK Jan.-Apr. 2018

Taught Introductory Biology lab including lectures, setting up supplies and equipment for each lab, designing, administering, and grading lab quizzes and practicums, organizing and facilitating a once a month potluck style class and lab study sessions, and soliciting funds to support study sessions.

# **Biological Technician**, Channel Islands National Park Service (CINP)

Ventura, CA May-Nov. 2009, 2010, 2011

Subtidal monitoring of kelp forests within the Channel Islands National Park. Part of a scientific team of divers that monitored 90 kelp forests indicator species using nine standardized protocols. Assist with deck-hand duties (anchoring, deploying buoys and bumpers, etc.), fill tanks, fix surveying gear, data entry and draft trip reports.

# Research Assistant, University of California Los Angeles

Manila, Philippines Jan.-May 2009

Collect various fish, invertebrate and coral samples in the Philippines using SCUBA and freediving. Extract *Linckia laevigata* DNA samples, use standardized polymerase chain reaction (PCR) methods, prepare DNA for sequencing using SAP/EXO, cycle sequencing, sequence editing, and sequence analysis.

### Career Center Representative, Humboldt State University Career Center

Arcata, CA Dec. 2004-May 2007 and Aug.-Dec. 2008

Assisted students in the use of various Career Center programs and services, maintained library resources and handouts. Welcomed and aided students and employers, evaluated student's needs, made appointments, answered phones, helped with projects, and demonstrated the use of computer applications.

#### Marine Naturalist, Humboldt State University Marine Lab

Trinidad, CA Jan 2007

Developed and presented an educational program that included tours of the Marine Lab and information talk for schools and the general public. Planned curriculum for various marine topics to integrate beach walks, arts and crafts activities and presentations. Maintained brochures, displays, slide show and lecture materials used as a marine educator.

#### **References:**

Ronalda Cadiente Brown, Associate Vice Chancellor for Alaska Native Programs and Director of PITAAS (Preparing Indigenous Teachers and Administrators for Alaska's Schools), University of Alaska Southeast. Ph. 907-796-6058. Email: rcadientebrown@alaska.edu

Dr. Ginny Eckert, Professor, University of Alaska Fairbanks, Acting Director-Alaska Sea Grant. Ph. (907) 796-5450. Email: gleckert@alaska.edu

Dr. Stephen Langdon, Anthropology Professor Emeritus, University of Alaska Anchorage. Ph. (907) 786-6848. Email: sjlangdon@alaska.edu