Laurel A. Zahn Curriculum Vitae

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EDUCATION2009M.S. in Biology, California State University, Long Beach2005B.S. in Marine Biology, University of California, Santa Cruz

WORK/RESEARCH POSITIONS

1	/2023 - Present	Riologist	Paua Marine	Research Group
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5/2017 – Present Principal Marine Ecologist, Tidal Influence LLC

11/2015 – Present Field Research Associate, Vantuna Research Group, Occidental College

8/2010-5/2019 & Fall 2020 NTT Assistant Professor, Biology Department, Occidental College Teaching *Biology 105 'Introduction to Marine Biology'*

11/2011 - 7/20	D15 Research Associate, Vantuna Research Group, Occidental College			
2011 – 2015	Assistant Dive Safety Officer for Occidental College's AAUS Dive Program			
2009 – 2011	Southern California Volunteer Coordinator, Reef Check California			
2008 – 2011	Field Research Assistant, Vantuna Research Group, Occidental College			
2009 – 2010	Independent Contractor, Ocean Science Trust			
2006 – 2009	Teaching Associate, California State University, Long Beach			
2007 – 2008	Graduate Student Intern, Santa Monica Bay Restoration Commission			
2007 Assistant Educator, Roundhouse Marine Aquarium, Manhattan Beach, CA				

RESEARCH INTERESTS

Kelp forest ecology; marine ecosystem management and conservation; coastal habitat and eelgrass restoration; marine education and outreach; MPA monitoring; environmental toxicology and marine pollution

PEER-REVIEWED PUBLICATIONS

Claisse, J.T., Blanchette, C.A., Dugan, J.E., Williams, J.P., Freiwald, J., Pondella, D.J. II, Schooler, N.K., Hubbard, N.K., Davis, K., **Zahn, L.A.,** Williams, C.M., Caselle, J.E. 2018. Biogeographic patterns of communities across diverse marine ecosystems in southern California. Marine Ecology 2018; 39:e12453. DOI: 10.1111/maec.12453

Zahn, L.A., Claisse, J.T., Williams, J.P., Williams, C.M., Pondella, D.J. II. 2016. The biogeography and community structure of kelp forest macroinvertebrates. Marine Ecology 37: 770-785. Doi: 10.1111/maec.12346

Pondella, D.J., **L.A. Zahn**, M. Love, D. Siegel and B.B. Bernstein. 2015. Modeling Fish Production for Southern California's Petroleum Platforms. Integrated Environmental Assessment and Management 11:4. 584-593 <u>.pdf</u>

Claisse, J.T., D.J. Pondella, II, M. Love, **L. A. Zahn,** C.M. Williams and A.S. Bull. 2015. Impacts from Partial Removal of Decommissioned Oil and Gas Platforms on Fish Biomass and Production on the Remaining Platform Structure and Surrounding Shell Mounds. PLoS ONE 10(9): e0135812. doi: 10.1371/journal.pone.0135812 .pdf

Claisse, J.T., Pondella, D.J., Love, M., **Zahn, L.A.,** Williams, C.M., Williams, J.P. and Bull, A.S. 2014. Oil platforms off California are among the most productive marine fish habitats globally. Proceedings of the National Academy of Sciences. 112(3): 217-227. <u>.pdf</u>

Williams, C.M., J.P. Williams, J.T. Claisse, D.J. Pondella II, M.L. Domeier, and **L.A. Zahn.** 2013. Morphometric Relationships of Marine Fishes Common to Central California and the Southern California Bight. Bulletin of the Southern California Academy of Sciences 112(3): 217-227. <u>.pdf</u>

Fink, L.A. and S.L. Manley. 2011. The use of kelp sieve tube sap metal composition to characterize urban runoff in southern California coastal waters. Marine Pollution Bulletin 62: 2619-2632. <u>.pdf</u>

REPRESENTATIVE TECHNICAL REPORTS

Daniel J. Pondella, Jennifer E. Caselle, Jeremy T. Claisse, Jonathan P. Williams, Kathryn Davis, Chelsea M. Williams and **Laurel A. Zahn**. South Coast Baseline Program Final Report: Kelp and Shallow Rock Ecosystems. Baseline Characterization of the Shallow Rocky Reef and Kelp Forest Ecosystems of the South Coast Study Region. January 30, 2015.

Pondella, D.J. II, Williams, J.P., **Zahn, L.A.** 2014. Quarterly Receiving Water Monitoring Report. Chevron Products Company, El Segundo Refinery. Summer 2014.

Pondella, D.J. II, Williams, J.P., **Zahn, L.A.** 2013. Annual Receiving Water Report. Chevron Products Company, El Segundo Refinery. Summer 2013.

Pondella, D.J. II, Williams, J.P., **Zahn, L.A.** 2013. Semi-annual Water Quality and Chemistry Monitoring Report. Chevron Products Company, El Segundo Refinery. Winter 2013.

Pondella, D.J. II, Williams, J.P., **Fink, L.A.** 2012. Annual Receiving Water Report. Chevron Products Company, El Segundo Refinery. Summer 2012.

SELECT PROFESSIONAL PRESENTATIONS

L.A. Zahn, J.T. Claisse, J.P. Williams, C.M. Williams, D.J. Pondella. Invertebrate community structure along the Palos Verdes Peninsula in relation to areas of increased sedimentation. *Western Society of Naturalists, Oxnard, CA*, 11/2013

L.A. Zahn, J.T. Claisse, J.P. Williams, C.M. Williams, D.J. Pondella. Kelp and Shallow Rock Ecosystems: MPA Baseline Data Collection for the South Coast Region (2011-2012); An overview. *Southern California Academy of Sciences, CSU Long Beach*, 5/2013.

Zahn (Fink), L.A. J.T. Claisse, J.P. Williams, D.J. Pondella II. Patterns in the distribution of common kelp forest macroinvertebrates and algae on southern California rocky reefs. *Channel Islands Symposium 2012, Ventura.* 10/2012

L.A. Fink, J.T. Claisse, J.P. Williams, D.J. Pondella II. Patterns in the distribution of common kelp forest macroinvertebrates and algae on southern California rocky reefs. *Southern California Academy of Sciences, Occidental College*, 5/2012

Fink, L.A. A new method to assess water quality and urban impact in California rocky reef systems: Measuring metal concentrations in kelp (*M. pyrifera*) sieve tube sap. *Southern California Academy of Sciences, CSULA,* 5/2010

Fink, L.A. Identifying and Characterizing Metal Pollution Using Kelp (*Macrocystis pyrifera*) Sieve Tube Sap: A New Technique for Biomonitoring. *Public thesis defense for M.S. degree, CSU Long Beach.* 4/2009

Fink, L.A., and Manley, S.L. Metal pollution reflected in kelp sap: A new tool to assess the health of the kelp forest ecosystem. *Western Society of Naturalists, Vancouver, BC, Canada*. 11/2008

OTHER PAST RESEARCH EXPERIENCE

2014-2015, Participating Scientist in Kelp Watch 2014,

2010, Department of Fish and Wildlife's (DFW) Scientific Diving Course completion, *Wrigley Institute of Environmental Studies, Santa Catalina Island*

2009 – **2010**, Seafood for the Future program Intern, *Aquarium of the Pacific, Long Beach, CA* **2007** – **2009**, Volunteer Diver for the Kelp Restoration and Monitoring Project, *Santa Monica Baykeeper (now LA Waterkeeper), Los Angeles, CA.*

2007 – **2009**, Research diver and project assistant for Chris Lowe, Ph.D., *California State University, Long Beach*

2006 – 2006, Member of volunteer scientific dive team for the Monterey Bay Aquarium, *Monterey, CA*

2005, UC Santa Cruz Scientific Diving course completion, Santa Cruz, CA

2004 – 2005, Research assistant in Pinniped behavior/physiology Lab (Daniel Costa, Ph.D.) *Long Marine Lab, University of California, Santa Cruz*

OTHER TRAINING AND CERTIFICATIONS

AAUS Scientific Diver with extensive (>1000 logged dives) research diving experience

AAUS Diving Control Board Member, Occidental College (2011-2016)

NAUI Master Diver and PADI Divemaster (#268568)

Completion of boating safety course (2006) and experience operating small research vessels

CPR, first aid, AED, and DAN Oxygen administration certifications (since 2005)

Caulerpa taxifolia Control Protocol Certification (since 2011)