Richelle Tanner, Ph.D.

206.310.5967 • richelle.tanner@richelletanner.com

School of Biological Sciences, Washington State University, Pullman, WA 99164

EDUCATION

Year	Degree	
2018	Ph.D. Integrative Biology; University of California, Berkeley	
	Climate change effects on thermal tolerance plasticity and population dynamics in the eelgrass sea hare,	
	Phyllaplysia taylori (Advisors: Jonathon Stillman & Wayne Sousa)	
2015	B.S. Environmental Studies; University of Southern California	
	Correlating secondary productivity and habitat composition in a Southern California Marine Protected	
	Area (Advisors: David Ginsburg & Lisa Collins)	
2015	B.M. Jazz Studies; University of Southern California, Thornton School of Music	
	Piano Performance	

CURRENT POSITIONS

Year	Institution	Details
2019-present	National Network for Ocean and	Science Partnerships Committee Chair, Executive
	Climate Change Interpretation	Committee
2018-present	Washington State University	Postdoctoral Research Associate, School of Biological
-	-	Sciences (Advisor: Wes Dowd)

CERTIFICATES

Year	Description	Organization
2018	Certificate in Teaching and Learning in	University of California, Berkeley
	Higher Education	
2018	Expert Facilitator in Science Communication	National Network for Ocean and Climate
	Instruction	Change Interpretation

CURRICULUM DEVELOPMENT

Course curricula development

Pilot Year	Title	Organization (Role)	Target Audience
2020	Climate change communication: using social science research in framing	NNOCCI (Co-lead)	Graduate students
2018	Expert Level Facilitator Training Course	NNOCCI (Contributor)	Informal science educators & early career academics
2017	Indirect effects of climate change on intertidal invertebrates	Community Resources for Science (Lead)	3 rd grade students
2016 &	National trivia bowl question	National Ocean Sciences Bowl	High school students
2017	development (biology focus)	(Lead)	
2015	Food webs in estuaries	Community Resources for Science (Lead)	3 rd grade students
2015	IB/EPS/GEOG c82 discussion materials	UC Berkeley (Contributor)	Undergraduate students

Pilot Year	Title	Organization (Role)	Target Audience
2018	Science Communication Beginner	NNOCCI (Lead)	Early career
	Workshop		academics

INVITED OUTREACH PRESENTATIONS

Year	Event
2019	Skype A Scientist LIVE
	"Superheroes of our seas: how physiology forecasts climate change effects"
	https://www.youtube.com/watch?v=ayFYJDDQCZE
2018	Skype A Scientist (4 events, nationally)
	"Is it getting hot in here? Sea slug physiology tells us how the oceans are changing"
2017	Point Reyes National Seashore Association "Science at the Seashore", Inverness CA "Do your neighbors make you crabby? Behavioral physiology and climate change"
2017	Instructor Seminar Series, NatureBridge, San Francisco CA
	"Restoration in the Bay Area: what we learn from physiology and ecology"
2017	Deep Dive into Ocean Acidification Workshop, Bay Area Climate Literacy Impact Collaborative,
	San Francisco CA
	"The physiological effects of climate change and ocean acidification on marine invertebrates"
2017	Marin Science Seminar, San Rafael CA
	"How does physiological plasticity shift climate change responses in the eelgrass sea hare?

POPULAR PRESS

Blogs (see personal blog at www.richelletanner.com/blog)

Tanner RL (2019). "Extreme: a word with many meanings and consequences for climate change communicators." *Climate Interpreter*.

Tanner RL (2019). "Surviving extremes or long-term warming? Super sea slugs have made their evolutionary choice." *Climate Interpreter, reprinted in the International Magazine for Heritage Interpretation September/October 2019 issue.*

Tanner RL (2019). "Communicating climate change: what can we learn from informal educators?" *Share Your Sci, cross-*

posted to Climate Interpreter & the University of California Agriculture and Natural Resources Green Blog.

Tanner RL (2016). "Did You Know About Sea Slugs?" *BaySide Magazine Fall 2016, the quarterly newsletter for the San Francisco State University Romberg Tiburon Center.*

Tanner RL & Haw JA (2013). "USC Dornsife Scientific Diving: An analysis of *Sargassum horneri* ecosystem impact." *Scientific American*.

Interviews & Expert Panels

Hot Nudibranch Science!, This Week in Science (2019). Interviewer: Dr. Kiki Sanford.

Earth Day Special Extravaganza!, Science Sucks Podcast (2019). Interviewer: Ive Velikova.

Ask Dr. Universe, Washington State University (2019). Interviewer: Rachel Webber.

Leading Women in Marine Science Interview Series, University of York (2018). Interviewer: Hannah Rudd.

Alumni Spotlight, National Ocean Sciences Bowl (2018). Interviewer: Callan Yanoff.

Scientist & Engineer Panel, Science Education Resource Fair for Teachers, Chabot Space and Science Center / Community Resources for Science (2018). Moderator: Traci Grzymala.

Graduate Student Feature, UC Berkeley Integrative Biology Insight Newsletter (2017). Interviewer: Kirsten Mickelwait.

SYMPOSIA ORGANIZED

Year	Event
2020	Society for Experimental Biology Annual Meeting, Prague, CZ "Science with Impact: Lowering the barriers to science with Open Hardware"
2020	Society for Experimental Biology Annual Meeting, Prague, CZ "Open Electronics in Experimental Biology"
2019	National Network for Ocean and Climate Change Interpretation, online "Extreme Events Webinar"

SELECTED FUNDING

Total funding during graduate school: ~\$143,000 USD

Year	Organization	Description
2019-2020	Society for Integrative and	Travel Funding, NSF-funded complementary session,
	Comparative Biology (NSF)	\$1,300
2019	Company of Biologists	Scientific Meeting Grant, £1,000
2018-pres.	National Science Foundation	Extreme Science and Engineering Discovery
		Environment Startup Allocation, \$1,500
2015-2018	National Science Foundation	Graduate Research Fellowship
2016, 2017	Company of Biologists	Research Travel Grant, administered by the Society for
		Experimental Biology, £500/year
2015-2018	UC Berkeley	Graduate Student Research Funding, Integrative
		Biology Department, ~\$9,000
Grants awaiting decision		
2019	EcoAmerica	American Climate Leadership Award (submitted as
		NNOCCI Leadership), \$50,000

PUBLICATIONS

Google Scholar: https://scholar.google.com/citations?user=Jxy-8a8AAAAJ&hl=en

- § Mentored student
- 6. **Tanner RL**, Obaza AK, & Ginsburg DW (in press). Correlating secondary productivity and habitat composition in a Southern California Marine Protected Area. *Southern California Academy of Sciences Bulletin*.
- 5. Wang T^S, **Tanner RL**, Armstrong EJ, Lindberg DR, & Stillman JH (2019). Thermal plasticity in file limpet, *Lottia limatula*, across oceanic to estuarine gradients in habitat temperature. *Aquatic Biology* 28: 113-125. doi: 10.3354/ab00714
- 4. **Tanner RL** & Dowd WW (2019). Inter-individual variation in responses to environmental variation and environmental change: Integrating across traits and time. *Comparative Biochemistry and Physiology Part A: Molecular and Integrative Physiology* 238. doi:10.1016/j.cbpa.2019.110577
- 3. **Tanner RL**, Faye LE^S, & Stillman JH (2019). Temperature and salinity sensitivity of respiration, grazing, and excretion rates in the estuarine eelgrass sea hare, *Phyllaplysia taylori*. *Marine Biology* 166:109. doi:10.1007/s00227-019-3559-4
- 2. Armstrong EJ, **Tanner RL**, & Stillman JH (2019). Warm-adaptation is negatively correlated with upper thermal tolerance plasticity in North Eastern Pacific nudibranch mollusks. *Physiological and Biochemical Zoology* 92(4): 430-444. https://doi.org/10.1086/704519 **Featured on issue cover.**
- 1. **Tanner RL** (2018). Predicting *Phyllaplysia taylori (Anaspidea: Aplysiidae)* presence in Northeastern Pacific estuaries to facilitate grazer community inclusion in eelgrass restoration. *Estuarine, Coastal and Shelf Science* 214: 110-119. doi:10.1016/j.ecss.2018.09.011

IN REVIEW

- 7. **Tanner RL**, Bowie RCK, & Stillman JH (in review). Parental effects on thermal tolerance plasticity under climate change scenarios in the eelgrass sea hare, *Phyllaplysia taylori*. *Marine Ecology Progress Series*.
- 8. **Tanner RL** & Collins LE (in review). Using publicly-available long-term climate records in undergraduate interdisciplinary big data curriculum. *Journal of College Science Teaching*.

SELECTED SERVICE CONTRIBUTIONS

Year	Organization	Role
2020	Society for Integrative and Comparative Biology	Session Chair, Genome-to-Phenome complementary session
2019	NSF Reintegrating Biology Jumpstart Meeting	Participant
2019-present	Society for Integrative and Comparative Biology	Student Presentation Judge
2018-present	National Network for Ocean and Climate Change	Science Partnerships Committee
	Interpretation (NNOCCI), Boston, MA	
2015-2018	Monterey Bay Aquarium, Exploratorium, CA Science Center	Exhibit advisor
2016-2018	National Ocean Sciences Bowl, Washington D.C.	Competition Judge
2017	NNOCCI, Boston, MA	Science Fellow, Central CA Study Circle