# Richelle Tanner, Ph.D. richelle.tanner@richelletanner.com Environmental Science & Policy Program, Chapman University

## **RESEARCH FIELD**: Effects of climate change on human and ecological communities

#### **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, <i>Phyllaplysia taylori</i> (Advisors: Jonathon Stillman & Wayne Sousa)
2015	<b>B.S. Environmental Studies</b> ; University of Southern California Correlating secondary productivity and habitat composition in a Southern California Marine Protected Area (Advisors: David Ginsburg & Lisa Collins)
2015	<b>B.M. Jazz Studies</b> ; University of Southern California, Thornton School of Music Piano Performance

#### PROFESSIONAL EXPERIENCE

Year	Institution	Details
2021-present	Chapman University	Assistant Professor of Environmental Science & Policy, Schmid & Wilkinson Colleges
2020-present	Journal of Zoology	Reviews Editor
2019-present	National Network for Ocean and Climate Change Interpretation	Science Director
2020-2021	University of California, Davis	CA Sea Grant Delta Science Postdoctoral Fellow (Advisor: Anne Todgham)
2018-2020	Washington State University	Postdoctoral Research Associate, School of Biological Sciences (Advisor: Wes Dowd)
2015	Naval Postgraduate School	Naval Research Enterprise Internship Program (Advisor: Wendell Nuss, IDEA Lab)

#### **HONORS & AWARDS**

Year	Organization	Description
2015-2018	National Science Foundation	Graduate Research Fellowship (\$132K)
2015	University of Southern Californi	a Renaissance Scholar, Discovery Scholar
2013-2015	University of Southern Californi	a Provost Research Fellowship (\$4K)
2011-2015	University of Southern Californi	a Presidential Scholar (\$100K)
2011-2015	USC Thornton School of Music	Thornton Faculty Fellowship:
		Stan Kenton Endowed Award (\$100K)
GRANTS		
Year	Source	Details
2021-2023	Delta Stewardship Council	Delta Science Award, \$152K
2021	Company of Biologists	Scientific Meeting Grant, £3,000

2020	Company of Biologists	Scientific Meeting Grant, £2,000
2020-2022	California Sea Grant	Delta Science Fellowship, \$230K
2020-2021	Evolving Seas Research	Junior Professional Development Exchange,
	Coordination Network	\$2,000
2020	Society for Integrative and	Travel Funding, NSF-funded complementary
	Comparative Biology (NSF)	session, \$1,300
2019	Society for Integrative and	Travel Funding, NSF-funded complementary
	Comparative Biology (NSF)	session, \$300
2018-2020	NSF	Extreme Science and Engineering Discovery
		Environment Startup Allocation, \$1,500
2016, 2017	Company of Biologists	Research Travel Grant, administered by the
		Society for Experimental Biology, £500/year
2016-2018	UC Berkeley	Graduate Student Research Funding,
		Integrative Biology Department,
		\$300/semester
2017	UC Berkeley	Graduate Student Summer Research Funding,
		Integrative Biology Department, \$1,750
2015	UC Berkeley	Student Technology Fund, \$5,000
2014	USC	Undergraduate Research, \$1,500
2013	USC	Undergraduate Research, \$1,500

#### **PUBLICATIONS & PRESENTATIONS**

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

#### PEER REVIEWED

 $\underline{s}$  Mentored student

- 13. Bonanno A, Ennes M, Hoey J, Moberg E, Nelson SM, Pletcher N, & **Tanner RL** (in press). Empowering hope-based climate change communication techniques for the Gulf of Maine. *Elementa*. **Invited submission** to special issue "Gulf of Maine 2050".
- 12. Burnett NP, Armstrong EJ, Romero R, Runzel C, & **Tanner RL** (in press). Kelp morphology and herbivory are maintained across latitude despite geographic shift in kelp-wounding herbivores. *Biological Bulletin*.
- 11. McAlpine-Bellis L<sup>S</sup>, Stillman JH, & **Tanner RL** (2021). Acclimation to future climate exposes vulnerability to cold extremes in intertidal sea hares. doi: 10.1093/icab087 **Invited submission** to *Integrative and Comparative Biology*.
- 10. **Tanner RL**, Grover N, Anderson ML, Crocker KC, Dutta S, Horner AM, Hough LE, Moore TY, Rosen GL, Stack-Whitney K, Summers A (2021). Examining Cultural Structures and Functions in Biology. *Integrative and Comparative Biology*. doi:10.1093/icb/icab140 **Invited submission** to special issue from the NSF Reintegrating Biology Jumpstart Meeting.
- 9. **Tanner RL** & Collins LE (in press). Using publicly-available long-term climate records in undergraduate interdisciplinary big data curriculum. *Journal of College Science Teaching*.
- 8. Burnett NP, King EE, Salcedo MK, **Tanner RL**, & Wilsterman K (2020). Conference scheduling undermines diversity efforts. *Nature Ecology & Evolution*. 4: 1283-1284. doi: 10.1038/s41559-020-1276-5

- 7. **Tanner RL**, Bowie RCK, & Stillman JH (2020). Parental effects on thermal tolerance plasticity under climate change scenarios in the eelgrass sea hare. *Marine Ecology Progress Series*. 634: 199-211. doi: 10.3354/meps13207
- 6. Tanner RL, Obaza AK, & Ginsburg DW (2019). Secondary Production of Kelp Bass Paralabrax clathratus in Relation to Coastal Eelgrass Zostera marina Habitat in a Southern California Marine Protected Area. Southern California Academy of Sciences Bulletin. 118(3): 158-172. doi: 10.3160/0038-3872-118.3.158
- 5. Wang T<sup>S</sup>, **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 **Invited submission** to special issue "Mechanisms of biological sensitivity and resistance to a rapidly changing ocean".
- 3. **Tanner RL**, Faye LE<sup>S</sup>, & 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**

- 14. **Tanner RL**, Bowie RCK, Wang-Claypool CY, & Stillman JH (in revision). High thermal tolerance, but not its plasticity are driven by habitat temperature and genotype in an intertidal sea hare. *Functional Ecology*.
- 15. **Tanner RL**, Gleason LU, & Dowd WW (in revision). Stressful environments unmask interindividual variation within subnetworks of the mussel transcriptome and proteome. *Molecular Ecology*.
- 16. Oellermann M, Jolles JW, Ortiz D, Seabra R, Wenzel T, Wilson H, & **Tanner RL** (in review). Harnessing the Benefits of Open Electronics in Science. *Methods in Ecology & Evolution*.

#### **REPORTS**

- Anderson M, Crocker K, Dutta S, Grover N, Horner A, Hough L, Mangiamele L, Moore T, Rosen G, Stack-Whitney K, Summers A, & **Tanner R** (2020). Knowledge hidden in nuances: from molecules to society. *NSF Reintegrating Biology Jumpstart Meeting*.
- Oellermann M, Jolles JW, Ortiz D, Seabra R, Wenzel T, Wilson H, & **Tanner RL** (2021). Harnessing the Benefits of Open Electronics in Science. <a href="https://arxiv.org/abs/2106.15852">https://arxiv.org/abs/2106.15852</a>

#### **HANDLING EDITOR** as Reviews Editor at JoZ

- Córdoba-Aguilar, A (in review). Dragon colors: the nature, function, and evolution of Odonata (dragonfly and damselfly) coloration. *Journal of Zoology*.
- Schalz, S (retracted). Local Adaptation or Phenotypic Plasticity? A Systematic Review of Common Garden Experiments with Avian Populations. *Journal of Zoology*.

# SYMPOSIA ORGANIZED

Year	Event
2022	Society for Integrative and Comparative Biology Annual Meeting, Phoenix, AZ
	"Open Source Solutions in Experimental Design"
2021	Society for Experimental Biology Annual Meeting, Antwerp, BE
	*RESCHEDULED FROM 2020 DUE TO COVID-19
	"Science with Impact: Lowering the barriers to science with Open Hardware"
2021	Society for Experimental Biology Annual Meeting, Antwerp, BE
	*RESCHEDULED FROM 2020 DUE TO COVID-19
	"Open Electronics in Experimental Biology"
2020	NNOCCI, Annual Planning Retreat, virtual
	"Incorporating Justice, Equity, Diversity, and Inclusion Moving Forward"
2020	NNOCCI, Annual Conference, virtual
	"Ask a Scientist"
2019	NNOCCI, virtual
	"Extreme Events Webinar"

# INVITED PRESENTATIONS

Year	Event
2021	Department seminar series, Chapman University
	"Socio-ecological effects of climate on communities"
2020	McGuire Seminar Series, University of Florida *VIRTUAL DUE TO COVID-19
	"The effects of environmental variation on ecosystem function in nearshore habitats"
2020	Barrows Lecture, Project Dragonfly, University of Miami *VIRTUAL DUE TO
	COVID-19
	"Climate change effects and community-level solutions"
2020	Department seminar series, Biology Program, University of Alaska Southeast
	*VIRTUAL DUE TO COVID-19
	"How does environmental variation influence physiology in intertidal invertebrates?"
2020	Department seminar series, Chesapeake Biological Laboratory, University of
	Maryland *CANCELED DUE TO COVID-19
	"Climate change effects: from society to evolutionary biology"
2020	Department seminar series, Biology Department, University of Mississippi
	"How does environmental variation influence physiology in nearshore invertebrates?"
2019	Department seminar series, Biological Sciences Department, Sacramento State
	University
	"How does environmental variation influence physiology in intertidal invertebrates?"
2019	Biolunch, School of Biological Sciences, Washington State University
	"Inter-individual variation in <i>Mytilus</i> mussel physiology"
2019	Science Talk, Portland OR
	"Social strategies for climate communication" (workshop)
2019	Department seminar series, Department of Biology, Walla Walla University
	"How does environmental variation influence physiology in intertidal invertebrates?"
2018	Department seminar series, School of Biological Sciences, Washington State University
	"Thermal tolerance plasticity of the eelgrass sea hare in a changing climate"
2018	Special seminar, Monterey Bay Aquarium, Monterey CA

- "The eelgrass sea hare: super slugs in a changing climate"
- 2018 Department seminar series, Estuary and Ocean Science Center, Department of Biology, San Francisco State University
  - "Climate change effects on thermal tolerance plasticity and population dynamics in the eelgrass sea hare, *Phyllaplysia taylori*"
- Department seminar series, Integrative Biology, UC Berkeley "Climate change effects on thermal tolerance plasticity and population dynamics in the eelgrass sea hare, *Phyllaplysia taylori*"
- 2017 Department seminar series, Estuary and Ocean Science Center, Department of Biology, San Francisco State University
  - "Ask me about climate change: a strategic approach to talking about climate change with the public"
- 2017 Summer seminar series, Roskilde University, Søeminestationen "Physiological effects of climate change on a sea slug in San Francisco Bay"
- 2016 50 years of research on Catalina Island, Southern California Academy of Sciences annual meeting, Los Angeles CA

#### CONTRIBUTED CONFERENCE PRESENTATIONS (ORAL)

Year	Event
2021	Society for Experimental Biology (SEB), virtual
	Tanner R.L., Bowie R.C.K., Wang-Claypool C.Y., & Stillman J.H. "High thermal
	tolerance, but not its plasticity are driven by habitat temperature and genotype in an
	intertidal sea hare"
2021	Society for Integrative and Comparative Biology (SICB), virtual
	Tanner R.L., Bowie R.C.K., Wang-Claypool C.Y., & Stillman J.H. "High thermal
	tolerance, but not its plasticity are driven by habitat temperature and genotype in an
2020	intertidal sea hare"
2020	Western Society of Naturalists (WSN), virtual
	<b>Tanner R.L.</b> "Sea slugs safeguard seagrasses: an overview of thermal tolerance in
2020	epiphyte grazers"
2020	SICB, Austin TX <b>Tanner R.L.</b> , Gleason L.U., & Dowd W.W. "Pathway-dependent patterns of gene
	and protein variation exposed by thermal stress in the intertidal mussel"
2019	SICB, Tampa FL
2017	Tanner R.L., Gleason L.U., & Dowd W.W. "Transcriptomic and proteomic
	analyses of inter-individual variation among intertidal mussels"
2019	SICB, Tampa FL
	Tanner R.L. "Social change for climate change: communication tactics from the
	National Network for Ocean and Climate Change Interpretation"
2018	SEB, Florence, Italy
	Tanner R.L. & Stillman J.H. "Parent-specific plasticity in reproduction and
	development limit population response to climate change in the eelgrass sea hare,
	Phyllaplysia taylori"
2018	SICB, San Francisco CA
	Tanner R.L. & Stillman J.H. "Transgenerational thermal tolerance plasticity may
	play a role in maintaining seasonal differences between populations of <i>Phyllaplysia</i>
	taylori with climate change"

Protected Area"

of mentored students, not listed.

2017 Western Society of Naturalists (WSN), Pasadena CA Tanner R.L., Sousa W.P., & Stillman J.H. "Local extirpation of *Phyllaplysia* taylori from San Francisco Bay after heavy winter rains" 2017 SEB, Göthenburg Sweden **Tanner R.L.** & Stillman J.H. "The role of developmental plasticity under temperature and pH stress in locally adapted *Phyllaplysia taylori* populations" 2017 SICB, New Orleans LA Tanner R.L., Armstrong E.J., Sousa W.P., & Stillman, J.H. "Locally adapted Phyllaplysia taylori populations in Central California show higher thermal tolerance plasticity potential" 2016 Beyond the Golden Gate Symposium, Tiburon CA Tanner R.L. "Incorporating the invertebrate grazer, *Phyllaplysia taylori*, into the eelgrass restoration framework: physiological and ecological investigations" 2016 WSN, Monterey CA Tanner R.L., Sousa W.P., & Stillman J.H. "Acute thermal stress during embryonic development influences hatching success differently based on maternal origin in the sea hare, Phyllaplysia taylori" SICB, Portland OR 2016 Tanner R.L., Obaza A.K., & Ginsburg D.W. "Correlating Secondary Productivity and Habitat Composition of Eelgrass Beds in a Southern California Marine Protected Area" WSN, Tacoma WA 2014

#### CONTRIBUTED CONFERENCE PRESENTATIONS (POSTER)

Year	Event
2021	SEB, virtual
	Tanner R.L., LeClair T.A., Langrell J., & Dowd W.W. "Manipulating body
	temperatures of individual mussels in the laboratory using Arduino-based solutions"
2020	SICB, Austin TX
	Tanner R.L. "Building a network of science communicators for change: strategies
	from the National Network for Ocean and Climate Change Interpretation"
2018	SEB Special Session (The height, breadth, and depth of physiological plasticity),
	Florence Italy
	Tanner R.L., Armstrong E.J., Sousa W.P., & Stillman J.H. "Plasticity of upper
	critical limits in the eelgrass sea hare, <i>Phyllaplysia taylori</i> , not correlated with habitat
	thermal history"
2014	Southern California Academy of Sciences, Camarillo CA
	Staniec K.J., Tanner R.L., Obaza, A.K. & Ginsburg D.W. "Correlating Secondary
	Productivity and Habitat Composition of Eelgrass Beds in a Southern California
	Marine Protected Area"

\*Only first (and first co-)author presentations listed. Eleven co-authored presentations, including those

Tanner R.L., Obaza A.K., & Ginsburg D.W. "Correlating Secondary Productivity

and Habitat Composition of Eelgrass Beds in a Southern California Marine

# TEACHING AND MENTORING

## UNIVERSITY COURSES TAUGHT

Term	Course #	Title	Section
Fall 2021	Chapman University, ENV101	Introduction to	Lecture
		<b>Environmental Science</b>	
Fall 2021	Chapman University, ENV329	Environmental Advocacy	Lecture
		Through Story	
Spring 2018	UC Berkeley, IB 103LF (Graduate	Invertebrate Zoology	Laboratory
	Student Instructor)		
Fall 2015	UC Berkeley, IB/EPS/GEOG c82	Oceans	Discussion
	(Graduate Student Instructor)		(3)
Summer 2014	USC, ENST 320A (Teaching	Water and Soil	Laboratory
	Assistant)	Sustainability	-

#### **GUEST LECTURES**

Term	Course (University)	Topic
Fall 2020	Life at the Extremes (University of	Intertidal invertebrate physiology
	Alaska Southeast)	
Fall 2018	Field Ecology (St. Mary's College)	Sea hare ecophysiology
Spring 2016	Invertebrate Zoology (UC Berkeley)	Nudibranchs and climate change
Fall 2015	Oceans (UC Berkeley)	Marine community ecology

## **CERTIFICATES**

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

# CURRICULUM DEVELOPMENT

## **Course curricula development**

Pilot Year	Title	Organization (Role)	Target Audience
2021	Climate change communication: using social science research in	NNOCCI (Co-lead)	Graduate students
	framing		
2021	Suisun Food Webs Research Experience for Undergraduates	UC Davis (Lead)	Undergraduate 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 <sup>rd</sup> grade students
2016 & 2017 2015	National trivia bowl question development (biology focus) Food webs in estuaries	National Ocean Sciences Bowl (Lead) Community Resources	High school students 3 <sup>rd</sup> grade students

		for Science (Lead)	
2015	IB/EPS/GEOG c82 discussion materials	UC Berkeley (Contributor)	Undergraduate students

## **Training workshop development**

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

# Workshop for teaching newly developed curricula

Pilot Year	Title	Organization (Role)	Target Audience
2017	Environmental Literacy Summer	Lawrence Berkeley Hall	K-5 teachers
	Institute	of Science (Contributor)	
2016	Indirect effects of climate	San Francisco State	Middle school
	change on intertidal invertebrates	University (Contributor)	teachers

#### STUDENTS MENTORED

<sup>&</sup>lt;sup>+</sup>Graduate student; all others undergraduate students

Dates	Name	School (Department)	Role	Current Position
2021-	Allison Grygar	UC Davis (Wildlife, Fish,	Thesis	Undergraduate
pres.		and Conservation Biol.)	advisor	student
2020-	Alma Meckler-	UC Davis (Coastal &	Research	Undergraduate
pres.	Pacheco	Marine Sciences)	advisor	student
2020-	Joyce Mok	UC Davis	Research	Post-bacc.
pres.			advisor*	student
2020-	Susan Landa	UC Davis (CMS)	Research	Undergraduate
pres.			advisor	student
2020-	Ava Pacheco	UC Davis (CMS)	Research	Undergraduate
pres.			advisor	student
2020-	Lorna Haworth	UC Davis (Env. Science	Research	Undergraduate
pres.		and Management)	advisor	student
2020-	Cameron Gilbert	UC Davis (Wildlife	Research	Undergraduate
pres.		Biology)	advisor	student
2020-	Charles Woidat	UC Davis (CMS)	Research	Undergraduate
pres.			advisor	student
2019-	John Langrell	Washington State	Research	Undergraduate
2020		University (School of	advisor	student
		Biological Sciences)		
2018-	Thomas LeClair	Washington State	Research	Fulbright
2020		University (SBS)	advisor*	Scholar
2018-	Grace Chan <sup>+</sup>	Washington State	Research	Graduate student
2019		University (SBS)	advisor	
2016-	Elizabeth	UC Berkeley (Integrative	Research	Graduated
2018	McAlpine	Biology)	advisor*	
2016-	Terrance Wang	UC Berkeley (College of	Thesis	NOAA GIS

<sup>\*</sup>Resulted in manuscripts for submission to peer-reviewed journals

2017		Natural Resources)	advisor*	Analyst
2015-	Valerie Bednarski	UC Berkeley (Earth &	Thesis	National Parks
2018		Planetary Science)	advisor*	Service Intern
2016-	Shiran	UC Berkeley (IB)	Research	Lab coordinator
2018	Hershcovich	-	advisor*	
2016-	Chandler Shaeffer	UC Berkeley (CNR)	Thesis co-	Graduated
2017			advisor	
2015-	Lindsay Gilkerson	UC Berkeley (CNR)	Research	Outdoor
2018	•	-	advisor	education
				specialist
2017-	Laura Mackenzie	UC Berkeley (IB)	Research	Graduated
2018		-	advisor	
2016-	Morgan	UC Berkeley (CNR)	Research	Graduate student
2017	Ziegenhorn	- 1	advisor	

## Students mentored as part of a short-term research experience

Winter 2021 (UC Davis, Univ. of Washington, CSU Sacramento): Amanda Kindel, Malak Saleh, Shuqi Ren, Rose Surdyk, Kelly Weihrauch, Jesse Schroeder, Luis Zialcita, Brenna Scott, Aurora Nelson, Yiyu Sun, Aina Hori, Jessica Pineda, Madison Weise, Emily Schwabe, Mei Suilistio, Mia Perez

Fall 2020 (UC Davis): Suzanne Quiroz, Miri Kim, Jacqueline Rajerison, Y Nguyen, Lauryn Tsang

# **PUBLIC OUTREACH**

#### INVITED OUTREACH PRESENTATIONS

Year	Event
2020	Suisun Adaptive Management Advisory Team "Phragmites stress impacting community function in Tule Red"
2020	Suisun Resource Conservation District Landowner Meeting "Phragmites stress impacting community function in Tule Red"
2020	Washington State University Wildlife Society "How does environmental variation influence physiology in nearshore invertebrates?"
2020	Skype A Scientist (2 events, internationally) "Climate change effects on our oceans"
2019	Skype A Scientist LIVE "Superheroes of our seas: how physiology forecasts climate change effects" <a href="https://www.youtube.com/watch?v=ayFYJDDQCZE">https://www.youtube.com/watch?v=ayFYJDDQCZE</a>
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 (2020). "Fresh ideas for talking about ocean acidification." Climate Interpreter.

Ennes M & Tanner RL (2020). "NNOCCI Climate Science Fundamentals." Climate Interpreter.

**Tanner RL** (2020). "Ask a Scientist session summary from the NNOCCI Virtual Conference 2020." *Climate Interpreter*.

Tanner RL (2019). "The science of extremes." Climate Interpreter.

**Tanner RL** (2019). "Sea slugs make climate evolutionary choices." *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*

STEM Cool Careers Panel, Santa Monica College (2020). Moderator: Muriel Walker.

Sustainability Leader Challenge, Miami University (2020). Interviewer: Ariannah Lambert.

Mentoring Matters, University of Florida (2020). Interviewer: Paris Grey.

Ask Dr. Universe, Washington State University (2020). Interviewer: Jaime Chambers.

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, Univ 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.

#### **SERVICE CONTRIBUTIONS**

Year	Organization	Role
2021	Frontiers in Physiology Journal	Peer Reviews Editor
2020	Western Society of Naturalists	Student Presentation Judge,
		Session Moderator

2020	"Asking Different Questions" Scholars, UC Davis Feminist Research Institute	Participant
2020	NSF "Organismal System-type Modeling Network" RCN	Participant, *CANCELED FOR COVID-19
2020	NSF "Genome-to-Phenome" RCN	SICB Session Chair, complementary session
2019	NSF Reintegrating Biology Jumpstart Meeting	Participant
2019-present	NSF "Evolving Seas" RCN	Participant, *CANCELED FOR
		COVID-19
2019-present	Society for Integrative and Comparative Biology	Student Presentation Judge
2018-present	National Network for Ocean and Climate Change	Science Committee
	Interpretation (NNOCCI), Boston, MA	
2018	Monterey Bay Aquarium, Monterey CA	Exhibit advisor
2016-2018,	National Ocean Sciences Bowl, Washington D.C.	Competition Judge
2021		
2017	NNOCCI, Boston, MA	Science Fellow
2016	Exploratorium, San Francisco CA	Exhibit advisor
2015	womENST (undergraduate professional development series at USC)	Co-founder
2015	California Science Center, Los Angeles CA	Exhibit contributor
2013-2015	USC Joint Education Project, Los Angeles CA	Presenter

Peer reviewer since 2016 for journals including the Proceedings of the Royal Society B, Evolutionary Applications, Journal of Applied Ecology, Biological Reviews, Journal of Evolutionary Biology, Physiology & Behavior, Hydrobiologia, Journal of Comparative Physiology A, Journal of Sea Research, Frontiers Physiology, Scientific Reports, and EvoDevo.

#### MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS

Year	Organization
2015-present	Society for Integrative and Comparative Biology (SICB)
2016-present	Society for Experimental Biology (SEB)
2019-2020	American Physiological Society (APS)
2017-2018	Graduate Women in Science
2016-present	500 Women Scientists
2014-present	Western Society of Naturalists (WSN)
2014-2016	Southern California Academy of Sciences
2014-present	Phi Beta Kappa Honor Society
2013-present	American Academy of Underwater Sciences