

JESSICA KENDALL-BAR

Schmidt AI in Science Postdoctoral Fellow

Scripps Institution of Oceanography - Center for Marine Biotechnology & Biomedicine

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I. EDUCATION

- 2022-present** **Postdoctoral Scholar - University of California, San Diego** (Scripps Institution of Oceanography)
Lessons from the deep: Engineering tools that leverage the comparative physiology of extreme divers to advance translational medicine
Advisor: Dr. Paul Ponganis; Artificial Intelligence Co-Mentor: Dr. Ilkay Altintas
- 2017-2023** **PhD - University of California, Santa Cruz** (Ecology & Evolutionary Biology)
Sleeping while diving: tools to detect, analyze, and visualize sleep in wild seals.
Advisors: Drs. Daniel Costa & Terrie Williams
- 2012-2016** **BA - University of California, Berkeley** (Marine Science & Integrative Biology, Honors)
Eye state asymmetry during unihemispheric slow wave sleep in northern fur seals.
Advisors: Drs. Jim Bishop & Oleg Lyamin

II. AWARDS & GRANTS

1. Awards

- 2022 \$40,000 **National Academies of Science - Schmidt Excellence in Science Communication Award**
- 2022 \$5,000 **Laurel Clark Sea to Space Physiology Research Grant- Women Divers Hall of Fame**
- 2022 \$1,500 **UCSC Grad Slam 2nd Place**
- 2020 \$10,000 **National Geographic Early Career Grant**
- 2019 \$2,000 **Fairfield Memorial Award - World Marine Mammal Conference 2019**
- 2018 \$5,000 **Sooy Graduate Research Fellow**
- 2018 \$8,000 **Special Research Grant Committee on Research** (PI: DP Costa)*
- 2018 \$2,500 **Norris Center for Natural History Art Residency**
- 2017 \$1,000 **Monterey Shootout Underwater Photography Finalist**
- 2016 \$5,000 **Summer Undergraduate Research Fellowship Rose Hills Fellow**
- 2016 \$1,000 **UC Berkeley Regents' and Chancellors' Research Fellowship**

2. Fellowships

- 2023-2024 \$85,000 **Schmidt Artificial Intelligence in Science Postdoctoral Fellowship**
- 2022-2023 \$70,000 **Scripps Postdoctoral Scholar Award**
- 2017-2020 \$138,000 **NSF Graduate Research Fellow**
- 2021-2022 \$10,000 **Achievement Rewards for College Scientists Fellowship**
- 2021-2022 \$21,000 **UC Santa Cruz President's Dissertation Year Fellowship**
- 2014-2016 \$20,000 **NOAA Ernest F. Hollings Scholar**
- 2014-2016 \$6,000 **Charles H. Ramsden Endowed Scholarship**
- 2012-2016 \$10,000 **UC Berkeley Regents' & Chancellors' Scholar**

3. Grants >\$50,000

- 2022-2023 **Burroughs Wellcome Fund Data-Driven Science Communication Grant** (PI: E Check Hayden)*
- 2019-2022 **ONR Defense University Research Instrumentation Program** (PI: TM Williams)*

*Written with and awarded to the principal investigator listed.

III. PUBLICATIONS

Peer reviewed publications

*Mentored students

1. [2023] **JM Kendall-Bar**, TM Williams, R Mukherji*, DA Lozano*, JK Pitman, RR Holser, T Keates, RS Beltran, PW Robinson, DE Crocker, T Adachi, OI Lyamin, AL Vyssotski, & DP Costa. Brain activity of diving seals reveals short sleep cycles at depth. *Science*. 380(6642). DOI: 10.1126/science.adf0566
2. [2022] **JM Kendall-Bar**, R Mukherji*, J Nichols*, C Lopez*, DA Lozano*, JK Pitman, RR Holser, RS Beltran, M Schalles, CL Field, SP Johnson, AL Vyssotski, DP Costa & TM Williams. Eavesdropping on the brain at sea: development of a surface-mounted system to detect weak electrophysiological signals from wild animals. *Animal Biotelemetry* 10(16). DOI: 10.1186/s40317-022-00287-x
3. [2021] **JM Kendall-Bar**, NX Kendall-Bar, AG Forbes, G McDonald, PJ Ponganis, C Williams, M Horning, A Hindle, H Klinck, RS Beltran, AS Friedlaender, D Wiley, DP Costa, & TM Williams. Visualizing Life in the Deep: a creative pipeline for data-driven animations to facilitate marine mammal research, outreach, and conservation. *IEEE VIS*. DOI: 10.1109/VISAP52981.2021.00007
4. [2021] RS Beltran, **JM Kendall-Bar**, E Pirotta, T Adachi, Y Naito, A Takahashi, J Cremers, PW Robinson, DE Crocker, and DP Costa. Lightscares of Fear: How Mesopredators Balance Starvation and Predation in the Open Ocean. *Science Advances* 7(12). DOI: 10.1126/sciadv.abd9818
5. [2019] **JM Kendall-Bar**, AL Vyssotski, LM Mukhametov, JM Siegel, and OI Lyamin. Eye State Asymmetry during Aquatic Unihemispheric Slow Wave Sleep in Northern Fur Seals (*Callorhinus Ursinus*). *PLoS ONE* 14(5): 1–13. DOI: 10.1371/journal.pone.0217025
6. [2017] **JM Kendall-Bar** & VK Iyengar. Sexual Selection by the Seashore: The Roles of Body Size and Weaponry in Mate Choice and Competition in the Maritime Earwig (*Anisolabis Maritima*). *Behavioral Ecology and Sociobiology* 71(1). DOI: 10.1007/s00265-016-2233-9
7. [2016] **JM Kendall-Bar**, D Weller, H Fearnbach, S Shane, GS Schorr, EA Falcone, J Calambokidis, A Schulman-Janiger, and J Barlow. Movement and Occurrence Patterns of Short-Finned Pilot Whales (*Globicephala Macrorhynchus*) in the Eastern North Pacific. *Aquatic Mammals* 42(300): 300-305. DOI: 10.1578/AM.42.3.2016.300

Non-peer reviewed publications

2022 **JM Kendall-Bar**. Sleeping while diving: Tools to detect, analyze, and visualize sleep in wild seals (Accession No. 29215006). [Doctoral dissertation, University of California, Santa Cruz]. ProQuest Dissertations Publishing.

IV. TEACHING

Course Design & Instruction

2023	Instructor & Course Designer <i>SCIC110/210: Data-Driven Animation for Science Communication</i>	UC Online (UC-wide; host institution - UC Santa Cruz)
2022	Instructor & Course Designer <i>SCIP395-33_SU22: Data-Driven Animation for Science Communication</i>	CSU Monterey Bay (Science Illustration Program)
2022	Instructor & Course Designer <i>Visualizing Life in the Deep: data-driven animation using animal-borne sensors at sea</i>	Pixar University
2021	Instructor & Course Designer <i>Art 199/299: <u>Data Visualization Collective</u></i>	UC Santa Cruz

2019	Teaching Assistant <i>BIOE 129L: Marine Mammals.</i>	UC Santa Cruz <i>Instructor: Dr. Dan Costa</i>
2014-16	Teaching Assistant & Course Designer <i>Oceans C82</i>	UC Berkeley <i>Instructor: Dr. Jim Bishop</i>
2016	Teaching Assistant & Collector <i>IB103LF: Invertebrate Zoology Instructor</i>	UC Berkeley <i>Instructor: Dr. Jenna Judge</i>

V. MENTORING

2020-23	Ritika Mukherji	Rhodes Scholar 2022
2019-23	Daniel Lozano	UCSC CAMINO Intern & RMI Scholar
2020-23	Catherine Lopez	Scripps Institute Technician
2020-22	Jordan Nichols	UCSC Neuroscience
2022	Cara Munro	UCSC Ecology & Evolutionary Biology
2021	Christina To	UCSC Biology
2021	Avalon Conklin	UCSC Ecology & Evolutionary Biology
2021	Jacqueline Toscano	UCSC Ecology & Evolutionary Biology
2021	Haoran (Sara) Li	High School Science Internship Program (SIP) Intern
2021	Jatin Das	High School Science Internship Program (SIP) Intern
2021	Radha Srinivasan	High School Science Internship Program (SIP) Intern

VI. RESEARCH EXPERIENCE

2022-present	Postdoctoral Research on Comparative Physiology of Diving Animals <i>Advisor: Dr. Paul Ponganis, UC San Diego; Artificial Intelligence Co-Mentor: Dr. Ilkay Altintas</i>
2017-2022	PhD Thesis Research on Comparative Neurophysiology of Marine Mammals <i>Advisors: Drs. Dan Costa & Terrie Williams, UC Santa Cruz</i>
2015-2016	Electrophysiological sleep study of northern fur seals in Russia <i>Advisor: Dr. Oleg Lyamin, UCLA Center for Sleep Research</i>
2015-2016	Sleep deprivation research - Undergraduate Research Apprenticeship Program <i>Advisor: Dr. Matthew Walker, Center for Human Sleep UC Berkeley</i>
2015-2016	Pilot Whale Photo Identification Project NOAA Hollings Internship <i>Advisor: Dr. Jay Barlow, NOAA Southwest Fisheries Science Center</i>
2016, '12, '13	Chemical Oceanography Cruises aboard RV Oceanus, Point Sur, & New Horizon <i>Advisor: Dr. Jim Bishop, UC Berkeley</i>
2014-2015	Behavior and den fidelity in moray eels - Moorea, French Polynesia <i>Advisor: Dr. Jonathon Stillman, UC Berkeley</i>
2014-2015	Sexual selection in arthropods - Research Experience for Undergraduates (REU) <i>Advisor: Dr. Vikram Iyengar, Villanova University / University of Washington</i>
2013-2015	Cephalopod behavior - Undergraduate Research Apprenticeship Program (URAP) <i>Advisor: Dr. Roy Caldwell, UC Berkeley</i>
2013-2014	Deep-sea wood falls - Undergraduate Research Apprenticeship Program (URAP) <i>Advisor: Dr. Jenna Judge, UC Berkeley</i>
2013-2014	Madagascar Marine Protected Areas - Undergraduate Research Apprenticeship Program (URAP) <i>Advisor: Dr. Jenna Judge, UC Berkeley</i>
2009-2012	Teach and test ocean water quality testing program <i>Advisor: Benjamin Kay, Santa Monica High School</i>

VII. GUEST LECTURES

- 2023 **UC San Diego: Perspectives on Ocean Sciences** – *Lessons from the deep: electrophysiology & visualization to learn how the brain survives at sea amidst a changing climate*
- 2023 **UC Santa Cruz: Queer Ecologies** – *Art & science: queering disciplines to foster innovation & inclusivity*
- 2022 **Colby College: Queer Feminist Engagements with Lab & Field Science** – *Art & Science for Inclusivity*
- 2021 **UC Berkeley: Marine Mammals** – *Sleep, art, and science communication*
- 2021 **UC Santa Cruz Science Communication Program** – *Art & Science Communication*
- 2021 **California College of the Arts** - *Art & Science Communication*
- 2021 **California Ocean Alliance** - *Art & Science Communication*
- 2021 **Baylor University** - *Art & Science Communication*
- 2021 **Moss Landing Marine Labs** - *Art & Science Communication*
- 2015-20 **(5X) UC Berkeley Oceans C82** - *Marine animals: metazoan diversity*

VIII. PRESENTATIONS

Refereed conference presentations:

- 2023 **American Physiological Summit (USA)**
Sleeping while diving: seals at sea drift in and out of sleep at depth ([Abstract](#))
- 2022 **Society for Marine Mammalogy (USA)**
Sleeping while diving: the first recordings of marine mammal sleep in the wild
- 2021 **IEEE Visualization Conference (USA)**
Visualizing Life in the Deep: A Creative Pipeline for Data-Driven Animations to Facilitate Marine Mammal Research, Outreach, and Conservation
- 2021 **International Biologging Symposium (USA)**
Sleeping while diving: the first recordings of marine mammal sleep in the wild.
***Award for presentation that provided the greatest leap forward in bio-logging & science communication.**
- 2020 **American Academy of Sleep Medicine – SLEEP 2020 (USA)**
Sleeping while Diving: Non-Invasive Sleep Recordings in Wild Marine Mammals.
- 2019 **World Marine Mammal Conference (Spain)**
*Sleeping beneath the surface: developing novel, non-invasive methods to investigate sleep in wild marine mammals. *Awarded the Frederic Fairfield Memorial Award for innovative research by students pioneering techniques or research tools to study marine mammals - \$1,000.*
- 2019 **ArtScientific Medical Systems (Netherlands)**
Novel, non-invasive methods for neurophysiological monitoring during rest behavior in phocid seals.
- 2016 **Western Society of Naturalists (USA)**
Novel, non-invasive methods for neurophysiological monitoring during rest behavior in phocid seals.
- 2016 **9th International Conference on the Marine Mammals of the Holarctic (Russia)**
Association between eye state and unihemispheric sleep and waking in the fur seal while in water.
- 2016 **Society for Integrative and Comparative Biology (USA)**
*Using photo-identification data to investigate movement and occurrence patterns of short-finned pilot whales (*Globicephala macrorhynchus*) in the eastern north pacific.*
- 2015 **Society for Integrative and Comparative Biology (USA)**
Sexual selection by the seashore: Mate choice and competition in the maritime earwig. Integrative & Comparative Biology.

Invited academic seminars

- 2023 **Polar Center** – Scripps Institution of Oceanography, CA
- 2023 **Institute of Arctic Biology** – University of Alaska Fairbanks, AK
- 2022 **Centre de Recherche en Neurosciences de Lyon** – Neuroscience Institute – Lyon, FRANCE
- 2022 **Washington University** – Systems Neuroscience – St Louis, MO
- 2021 **Sleep Ecophysiology Group** – La Trobe University, Melbourne, AUS
- 2021 **Max Planck Institute** – Research Group Avian Sleep, DE
- 2021 **Stanford University** – Goldbogen Lab – Monterey, CA
- 2021 **Stanford University** – Heller Lab – Palo Alto, CA
- 2020 **UC Santa Cruz** – Qualifying Defense – Santa Cruz, CA
- 2020 **University of Michigan** – Mechanical Engineering Department; Ann Arbor, MI
- 2019 **The Marine Mammal Center** – Sausalito, CA
- 2019 **National Marine Mammal Foundation** - San Diego, CA
- 2015 **NOAA Science and Education Symposium** – Washington, DC
- 2014 **UC Berkeley Bio-Geomorphology of Tropical Islands** – Berkeley, CA
- 2014 **Friday Harbor Laboratories** – Friday Harbor, WA

Public Talks & Workshops

Online Learning Portal: <https://www.jessiekb.com/artforsciomm>

- 2023 **UC Love Data Week** – UC-wide data visualization workshop (200 attendees)
- 2022 **UC Santa Cruz** - Dissertation Public Seminar
- 2021 **Seymour Marine Discovery Center: *Labside Chat with Jessica Kendall-Bar***
- 2017-22 **UC Santa Cruz** - Art & Science Communication
 - UC Santa Cruz - Introduction to Animation in PowerPoint
 - UC Santa Cruz - Introduction to Animation & 2D Data Visualization in Adobe After Effects
 - UC Santa Cruz - Introduction to Animation & 3D Data Visualization in Autodesk Maya
- 2020 **UC Santa Barbara** - Art & Science Communication
- 2020 **San Francisco State University** - Art & Science Communication
- 2019 **Santa Cruz Museum of Art & History** - *Sex in Nature: the science behind the story of Looking for Marla*
- 2015 **San Francisco Exploratorium: “Everything Matters: Tales from the Periodic Table”**
How Poop Sinks: The Importance of Feces in the Open Ocean

IX. PRESS

See other press coverage here: <https://www.jessiekb.com/in-the-press>

See >170 news stories related to 2023 Science paper here: <https://www.altmetric.com/details/146228395>

- 2023 **The Atlantic: Meet the World’s Most Hard-Core Nappers**
- 2023 **The New York Times: Elephant Seals Take Power Naps During Deep Ocean Dives**
- 2023 **The Washington Post: Scientists crack the mystery of elephant seals’ extreme sleep habits**
- 2023 **CNN: Elephant seals enter ‘sleep spiral’ during deep ocean dives**
- 2023 **NPR: Think you're tired? This animal goes for months with only two hours of sleep a day**
- 2023 **National Geographic: 2 hours of sleep a day? How this animal can survive is a mystery.**
- 2023 **BBC: Northern elephant seals sleep in the deep to avoid predators**
- 2022 **UC Santa Cruz: “Two UCSC alumni win awards for excellence in science communication”**
- 2022 **National Academies: “National Academies Announce Inaugural Recipients of Eric and Wendy Schmidt Awards for Excellence in Science Communications”**
- 2021 **UC Santa Cruz: “Data-driven animations of marine mammals combine biology, art, & computation”**
- 2021 **The Conversation: “Risk versus reward on the high sea.”** By RS Beltran & JM Kendall-Bar
- 2019 **UC Santa Cruz: “Dream job: Combining science and illustration”**
- 2019 **Santa Cruz Sentinel: “Looking for Marla’ teaches inclusivity”**
- 2019 **UC Santa Cruz News Public Affairs** – Launch party for children’s book ‘Looking for Marla’
- 2021 **Seymour Marine Discovery Center – Labside Chat with Jessica Kendall-Bar**
- 2019 **KSQD Radio interview with Ventana Surfboards and Event Santa Cruz**

2020 **Salted Spirit Podcast Interview: An enchanted tour of the kelp forest (May 15, 2020)**

2020 **KQSD Santa Cruz Naturalist Podcast Interview**

X. SCIENCE COMMUNICATION

2019-present **Freelance Science Communication Animations**

Current contracts (past animations listed below):

- **Indigenous Knowledge Project: Other Ways of Knowing**
Client: P Raimondi & T White, Funding: North Pacific Research Board
Diverse knowledge systems for the examination of localized dynamics of sea otters and abalone populations in Sitka Sound, Alaska
- **Extreme diving physiology of emperor penguins in Antarctica**
Client: P Ponganis, Funding: National Science Foundation
- **Fear response of wild narwhals in Greenland**
Client: TM Williams, Funding: Office of Naval Research
- **Simulating cooperative bubble feeding humpbacks**
Client: A Szabo & L Bejder, Funding: Alaska Whale Foundation & Marine Mammal Research Program (UH Manoa)

2019-23 **Science Communication Strategist - Coastal Resilience Lab, UCSC**

Graduate Student Research [GSR] Assistantship

Developed visual science communication strategies for scientist Dr. Michael W. Beck to communicate the protective benefits of natural infrastructure such as coral reefs and mangroves.

Videos and animations

* Work performed as Science Communication Strategist for the Coastal Resilience Lab 2019-2023.

2022 **Visualizing Life in the Deep: Teaser video for 4-part animation series**

2021 **Lightscaapes of Fear: Skinny seals trade safety for sustenance.**

Accompanied co-authored manuscript in Science Advances (>100,000 views)

Publication: *Beltran, R. S., Kendall-Bar, J. M., Pirotta, E., Adachi, T., Naito, Y., Takahashi, A., ... & Costa, D. P. (2021). Lightscaapes of fear: How mesopredators balance starvation and predation in the open ocean. Science advances, 7(12), eabd9818.*

2020- **Humpback Alliance: 3D Animation of Cooperative Benthic Foraging Behavior**
Commissioned by Dr. David Wiley, National Marine Sanctuary Foundation

3D visualizations of inertial motion sensing data and foraging behavior.

2021-22 **Sounds of Fear: 3D Animation of the Fear Response of Northern Elephant Seals**
Commissioned by Dr. Gitte McDonald, Moss Landing Marine Laboratories

3D visualizations of inertial motion sensing data and sonification of heart rate data.

2021-22 **Paradox of Fear: 3D Animation of Anthropogenic Disturbance to Narwhals.**
Commissioned by Dr. Terrie Williams, UC Santa Cruz

3D visualizations of inertial motion sensing data and sonification of heart rate data.

2021 ***UCSC News: Value of US Reefs for Flood Risk Reduction.**

Animation by Jessica Kendall-Bar. *Scientific advisor: Michael Beck*

2020 ***USGS: How Our Reefs Protect Us: Valuing the Benefits of U.S. Reefs.**

Cinematography & graphics by Jessica Kendall-Bar. *Scientific advisors: Michael Beck & Curt Storlazzi.*

2020 ***UCSC News: Introduction to the Coastal Resilience Lab & Approach.**

Video Editing & Animation by Jessica Kendall-Bar. *Scientific advisor: Michael Beck*

2020 ***Flood Protection Benefits of Mangroves**

Animation by Jessica Kendall-Bar. *Scientific advisor: Michael Beck.*

Maps and data visualizations

See more [maps and data visualizations](#).

- 2021 ***Million Dollar Reefs of O'ahu**
Map by Jessica Kendall-Bar & Chris Lowrie Reguero
Appeared in [UCSC News Story](#), [Honolulu Star Advertiser News Story](#)
- 2021 ***Million Dollar Reefs of Florida**
Map by Jessica Kendall-Bar & Chris Lowrie
- 2021 ***Million Dollar Reefs of Puerto Rico**
Map by Jessica Kendall-Bar & Chris Lowrie

Infographics

- 2021 ***Cascading effects in kelp forests**: Graphical abstract published in PNAS
Smith et al. 2021. "Behavioral Responses across a Mosaic of Ecosystem States Restructure a Sea Otter–Urchin Trophic Cascade." PNAS March 16, 2021 118 (11) e2012493118;
<https://doi.org/10.1073/pnas.2012493118>
- 2020 ***A year in the life of Phyllis, an adult female northern elephant seal**
10ft by 6ft interpretive panel for display at Seymour Marine Discovery Center & Año Nuevo Visitor's Center
- 2019 ***Wave Power Project: inspiring coral reef conservation through art**
4ft by 3ft poster for display at 42nd US Coral Reef Task Force Meeting in Palau, Santa Cruz Museum of Art & History: The Norris Center Science & Art Showcase, and a High-Level Dialogue Event: Resilient Atoll Nations
- 2021 ***Coral Reef Flood Protection Benefits Infographic** for Reguero et al. 2021
<https://news.ucsc.edu/2021/04/coral-reefs.html>

Website Design

- 2019-21 ***Coastal Resilience Lab Website: coastalresiliencelab.org**
- 2022 ***Data Visualization Portal**
*User experience and user interface design (CSS & javascript).
Web development and data management by Chris Lowrie.*

Technical Reports - Graphic design & data visualization

Design and layout by Jessica Kendall-Bar; Maps by Jessica Kendall-Bar and Chris Lowrie.

- 2021 ***USGS Report Summary: Rigorously valuing the role of U.S. coral reefs in coastal hazard risk reduction.**
Rigorously valuing the role of U.S. coral reefs in coastal hazard risk reduction: U.S. Geological Survey Open-File Report 2019–1027, doi: 10.3133/ofr20191027
- 2021 ***The Social and Economic Benefits of Coral Reef Restoration in Florida.**
Rigorously valuing the coastal hazard risks reduction provided by potential coral reef restoration in Florida and Puerto Rico. U.S. Geological Survey Open-File Report 2021–1054
- 2021 ***The Social and Economic Benefits of Coral Reef Restoration in Puerto Rico.**
Rigorously valuing the coastal hazard risks reduction provided by potential coral reef restoration in Florida and Puerto Rico. U.S. Geological Survey Open-File Report 2021–1054

- 2021 ***Hurricane Damage to Coral Reefs in 2017 Increases Future Flood Risk in Puerto Rico and Florida.** Rigorously valuing the impact of Hurricanes Irma and Maria on coastal hazard risks in Florida and Puerto Rico. U.S. Geological Survey Open-File Report 2021-1056
- 2021 ***Future Flooding Impacts from Projected Coral Reef Degradation in Florida.** Design and layout by Rigorously valuing the impact of projected coral reef degradation on coastal hazard risk in Florida. U.S. Geological Survey Open-File Report 2021-1055

XII. FREELANCE ARTWORK

Freelance Animation

- 2020 **Kool & the Gang Pursuit of Happiness Music Video.**
Animation & editing by Jessica Kendall-Bar. Producer: One Foot Productions & Momma Googa Show.
- 2020 **Apollo Sound Introductory Animation.**
Apollo Theater Harlem, New York. Animation by Jessica Kendall-Bar. Producer: One Foot Productions. [View the animation here](#) or the [full benefit show on Apollo Theater's site here](#).
- 2019 **Selkie Dreams Watercolor Animation.**
Installation featured at Burning Man 2019 on 35mm film within manual

Illustrated Children's Books

- 2019 **Looking for Marla**
P Medina, **JM Kendall-Bar (illustrator)**, A Ford, and K Ross. ***Looking for Marla.***
Publisher: Self-Published, 2019. ISBN 0578523922, 9780578523927
- Looking for Marla tells the story of a clownfish in transition from fatherhood to motherhood as they explore the diverse approaches to underwater parenthood.*
- Associated Grants:** UCSC Norris Center Art & Science Residency (\$1,500), Science & Justice Research Center, and the Santa Cruz Arts Council, and Kickstarter Campaign (\$4,500)
- Outreach & Public Readings:** SF Exploratorium STARS Program (2021), What Makes Us Human (Exhibit 2020), LGBTQ+ Story Time in the Park with Trans Families, Boys & Girls Club, & Santa Cruz Public Libraries (2019), Queer Trans Mixer (2019), Capitola Art & Wine (2019), SF Zine Fest (2019), LA Tiny Tech Zines (2019), Pajaro Valley Pride (2019), Walnut Ave Family & Women's Center (2019), Norris Center Alumni Event (2019), & Ales for Whales (2019)
- 2019 **The Castor Oil Rig Tales**
S Partenheimer and **JM Kendall-Bar (illustrator)**. ***The Castor Oil Rig Tales.***
Publisher: AzBukiVeri LLC, Publishing agency, 2019. ISBN 1732426562, 9781732426566.
- The Castor Oil Rig Tales details the journey of dozens of marine creatures as they find sanctuary in an abandoned oil rig off the coast of Louisiana.*

Large-scale exhibit design

- 2021 **"Photos from the Field" at Seymour Marine Discovery Center**
Graphic design and contributed photography for large-scale 22 panel, 100-foot photo exhibit displayed at Seymour Marine Discovery Center.
- 2021 **"From Data to Art: Data Visualization Virtual 3D Gallery"**
6-room virtual gallery displaying final projects for 10 students from the Data Visualization Collective in Winter 2021. Exhibit & gallery website designed by Instructor Jessica Kendall-Bar.
- 2020 **"A year in the life of Phyllis, an adult female northern elephant seal"**
10ft by 6ft interpretive panel for display at Seymour Marine Discovery Center & Año Nuevo Visitor's Center

Gallery shows

Exhibitions of fine art including woodburnings, surfboards, paintings, & animations.

- 2020 **Forbes Art Gallery, Santa Monica, CA. Solo Show;** Unitarian Universalist Church of Santa Monica.
- 2019 **Capitola Art & Wine Festival, Santa Cruz, CA** - Art show with Ventana Surfboards
- 2019 **Burning Man, Black Rock City, NV** with India Block Arts - "Morphoscope" [Selkie Dream Animation](#)
- 2019 **The Rose Room, Venice Beach, CA** - *Life Beneath the Waves; Surfrider LA Fundraiser*
- 2018, '19 **Humble Sea, Santa Cruz, CA** - *Ales for Whales; CA Ocean Alliance Fundraiser*
- 2018 **Monterey Bay National Marine Sanctuary Exploration Center - Solo Show;** *First Friday*
- 2018 **Ocean Dream Fair, Santa Cruz, CA** - *Art show with Ventana Surfboards*

XIII. SERVICE

- 2022- **National Geographic Grant Reviewer**
- 2017- **Volunteer at the Año Nuevo State Reserve**
- 2016- **Reviewer for Aquatic Mammals Journal**
- 2017- **Art Donations for Non-Profit Conservation-Focused Organizations**
- 2017-20 **Scientific Diver for UC Santa Cruz**
- 2012-16 **Co-President of the Ocean Society of Berkeley**
- 2015-16 **Scientific Diver for Instructional Support, Integrative Biology UC Berkeley**

XIV. QUALIFICATIONS

Skills & Languages

- **French** - fluent (dual citizenship, year abroad in French high school, 5 in AP French)
- **Spanish** - proficient (3 years of study)
- **Russian** - basic conversational (immersive research experience abroad)
- **Diving** (>200 dives: Friday Harbor, Monterey, Catalina, Channel Islands, San Diego, Florida, & Tahiti)
 - AAUS Scientific Diver with UC Santa Cruz Scientific Diving Program
 - AAUS Scientific Diver Certification through the UC Berkeley Scientific Diving Program
 - NAUI Nitrox, Rescue, and Master Certifications
 - PADI Advanced Certification (specialties: Buoyancy, Navigation, Deep Dive, and Fish ID)
- **Scientific Computing & Programming:** Python, R, MATLAB, LabChart, JMP, ImageJ
- **Video Editing/Graphics:** Adobe Creative Suite (especially After Effects, Premiere Pro, Illustrator, and Photoshop), Final Cut Pro, Autodesk Maya