CURRICULUM VITA - ROSANNA 'ANOLANI ALEGADO

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EDUCATION Stanford University School of Medicine, Stanford CA 2007 Ph.D. Microbiology and Immunology 2000 Massachusetts Institute of Technology, Cambridge MA S.B. Biology, Minor in Toxicology and Environmental Health PROFESSIONAL HISTORY 2019-University of Hawai'i Mānoa, Associate Professor Department of Oceanography and Sea Grant Regular Graduate Faculty, Marine Biology Graduate Program Affiliate Faculty, Pacific Biosciences Research Center Affiliate Faculty, Water Resources Research Center Cooperating Graduate Faculty, Department of Zoology Cooperating Graduate Faculty, Department of Microbiology 2016-2019 Assistant Professor, Oceanography and Sea Grant College Program, UH Manoa Director, Sea Grant Center of Excellence for Integrated Science, Knowledge 2018and Culture 2018-Director, SOEST Maile Mentoring Bridge Program Associate Director, Sea Grant Center of Excellence for Integrated Science, 2017-2018 Knowledge and Culture Assistant Researcher, Oceanography and Sea Grant College Program, UH Mānoa 2013-2016 Faculty, Pacific Biosciences Center, UH Mānoa 2015-2014-Associate Regular Graduate Faculty, Oceanography, UH Manoa Affiliate Faculty, Marine Biology Graduate Program, UH Manoa 2014-2013-2019 Associate Cooperating Graduate Faculty, Zoology, UH Mānoa 2012-2013 Associate Affiliate Graduate Faculty, Oceanography, UH Manoa Associate Specialist, Dept. of Molecular and Cell Biology, UC Berkeley 2012-2013 2007-2012 Postdoctoral fellow, Dept. of Molecular and Cell Biology, UC Berkeley 2009-2011 National Research Service Award, NIH Postdoctoral Training Fellowship 2000-2007 Graduate research assistant, Microbiology and Immunology, Stanford Med School 2003-2007 NIH Stanford Human Genome Training Grant 2000-2003 Ford Foundation Predoctoral Fellowship 2000 NSF Graduate Research Fellowship, Honorable Mention 1999 Undergraduate researcher, Dept. of Physiology, UC San Francisco 1998 Undergraduate researcher, Dept. of Mechanical Engineering, MIT

Undergraduate researcher, Dept. of Matrix Pathobiology, UH Mānoa

1997

PUBLICATIONS

(* authors contributed equally; §corresponding author, trainees)

Refereed publications

Post-tenure (2019-)

- (21) Nakahara BA, Demopoulos AWJ, Rii YM, **Alegado RA**, Fraiola K, Smith CR. (2021) Novel introduced mangrove habitats support distinct megafaunal communities along the coast of Moloka'i, Hawai'i. *Pacific Science*, in press.
- (20) Mateo-Matriano D, **Alegado RA**, Conaco CC[^]. (2021) Detection of Horizontal Gene Transfer in the Genome of *Salpingoeca rosetta*. *Scientific Reports* 11 (1), 1-11.
- (19) McGregor DP[^], Aluli NE, **Alegado RA.** (2020) "Hulihia: Visioning and Planning for our Islands and Communities in the Wake of COVID-19: Lessons from Aloha 'Āina Activism" in The *Value of Hawai* 'i *III: Hulihia*, Honolulu: University of Hawai' Press and Center for Biographical Research.
- (18) Winter KB[§], Rii Y, Reppun F, Hintzen K, **Alegado RA**, Bowen BW, Bremer LL, Coffman M, Deenik JL, Donahue MJ, Falinksi KA, Frank KL, Franklin EC, Kurashima N, Lincoln NK, Madin E, McManus MA, Nelson C, Okano R, Olegario A, Oleson K, Pascua P, Price MR, Rivera MAJ, Rodgers K, Sabine C, Smith CM, Ticktin T, Hewitt A, Kaluhiwa R, Cypher M, Leong JA, Thomas B, Kekuewa K, Kukea-Shultz K, Kawelo H, Kotubetey K, Neilson B, Tonimoto J, Lee T, Toonen RJ. (2020) Collaborative research to inform adative co-management: A framework for the He'eia National Estuarine Research Reserve. *Ecology and Society*. In press.
- (17) Winter K[§], Lincoln N, Berkes F, **Alegado RA**, Kurashima N, Frank K, Pascua P, Rii Y, Reppun F, Knapp I, McClatchey W, Ticktin T, Smith C, Franklin E, Oleson K, Price M, McManus MA, Donahue M, Rodgers K, Bowen B, Nelson C, Thomas B, Leong J, Madin E, Rivera MA, Falinski K, Bremer L, Deenik J, Gon III S, Neilson B, Okano R, Olegario A, Nyberg B, Kawelo AH, Kotubetey K, Kukea-Shultz JK, Toonen R. (2020) Eco-mimicry in Indigenous Resource Management: Optimizing ecosystem services to achieve resource abundance with examples from Hawaii. *Ecology and Society*. 25(2).
- (16) <u>Shuler C</u>, Amato DW, <u>Gibson V</u>, <u>Baker L</u>, <u>Olguin AN</u>, Dulai H, Smith CM, **Alegado RA** (2019) Assessment of Terrigenous Nutrient Loading to Coastal Ecosystems Along a Human Land-Use Gradient, Tutuila, American Samoa. *Hydrology*, 6(1):18.
- (15) Mohlenkamp P, Beebe CK, McManus MA, Kawelo AH, Kotubetey K, Lopez-Guzman M, Nelson CE, Alegado RA§. (2019) Kū Hou Kuapā: Cultural Restoration Improves Water Budget and Water Quality Dynamics in He'eia Fishpond. *Journal of Sustainability: Special Issue "New Approaches to Fisheries and Aquaculture Sustainability"*, 11(1):161 doi.org/10.3390/su11010161

Pre-tenure (2013-2019)

- (14) Hynson N§, Frank K, **Alegado R**, Amend A, Arif M, Bennett G, Jani A, Medeiros M, Mileyko Y, Nelson C, Nguyen N, Nigro O, Prisic S, Takagi D, Wilson S, Yew J, Shin S. (2018) Synergy among microbiota and their hosts: leveraging the Hawaiian archipelago and local collaborative networks to address pressing questions in microbiome research. *mSystems*, 3:e00159-17. doi.org/10.1128/mSystems.00159-17.
- (13) McCoy D*, McManus MA, Kotubetey K, Kawelo AH, Young C, D'Andrea B, Ruttenberg KC, Alegado RA§. (2017) Large-scale climatic effects on a traditional Hawaiian fishpond. *PLoS One*, 16 Nov, 12(11):e0187951, doi: 10.1371/journal.pone.0187951.
- (12) Lynch J[§] and **Alegado RA**[§]. (2017) Spheres of hope, orbs of doom: the good and bad of outer membrane vesicles in interspecies dynamics. *Journal of Bacteriology*, 17 April, doi: 10.1128/JB.0012-17.
- (11) Xie G, Wang X, Ji J, Zhao A, Yan J, Chen W, Jiang R, Huang F, Zhang Y, Lei S, Ge K, Zheng X, **Alegado RA**, Liu J, Liu P, Nicholson J, Jia W, Jia W§. (2017) Sex-dependent effects on gut

- microbiota regulate carcinogenic outcomes. *Scientific Reports*, Mar 27;7:45232. doi: 10.1038/srep45232
- (10) <u>Baker LJ</u>, **Alegado RA**, Kemp PF. (2016) Response of diatom-associated bacteria to host growth state, nutrient concentrations, and viral host infection in a tripartite model system. *Environmental Microbiology Reports*, doi: 10.1111/1758-2229.12456.
- (9) Xie G, Wang X, Liu P, Chen W, Hernandez BY, **Alegado RA**, Dong B, Li D and Wei J. (2016) Alterations in gut microbial ecology and progression of liver pathology. *Oncotarget*, 7(15): 19355.
- (8) Beemelmanns CB, <u>Woznica SA</u>, **Alegado RA**, King N, Clardy J. (2014). Synthesis of the rosette-inducing factor RIF-1 and analogs. *Journal of the American Chemical Society*, 136(29):10210-3, doi: 10.1021/ja5046692.

Prior to faculty appointment

- (7) Alegado RA*, Brown LW*, Cao S, Dermenjian RK, Zuzow R, Fairclough SR, Clardy J, King N. (2012) A bacterial sulfonolipid triggers multicellular development in the closest living relatives of animals. *eLife* 1:e00013 (Epub October 15, 2012, doi: 10.7554/eLife.00013)
 - Selected by F1000
 - Featured in Science News & Views, The Scientist, Discover Magazine's Not Exactly Rocket Science blog, The Naked Scientist podcast, HHMI Bulletin
- (6) **Alegado RA**[§], Grabenstatter JD, Zuzow R, Morris A, <u>Huang S</u>, Summons RE, King N[§]. (2012) *Algoriphagus machipongonensis* sp. nov., co-isolated with a colonial choanoflagellate. *International Journal of Systematic and Evolutionary Microbiology* (ijs.0.038646-0; published ahead of print February 24, 2012, doi:10.1099/ijs.0.038646-0)
- (5) Dayel MJ, **Alegado RA***, Fairclough SR*, Levin T, Nichols SA, McDonald K, King N[§]. (2011) Cell differentiation and morphogenesis in the colony-forming choanoflagellate *Salpingoeca rosetta*. *Developmental Biology* 357 (1): 73-82.
- (4) **Alegado RA**§, Ferriera S, Nusbaum C, Young SK, Zeng Q, Imamovic A, Fairclough SR, King N. (2011) Complete genome sequence of *Algoriphagus* sp. PR1, Bacterial Prey of a Colony-Forming Choanoflagellate. *Journal of Bacteriology* 193(6): 1485-1486.
- (3) **Alegado RA**, Chin, CY, Monack D, Tan MW[§]. (2011) The two-component sensor kinase KdpD is required for *Salmonella typhimurium* colonization of *Caenorhabditis elegans* and survival in macrophages. *Cellular Microbiology* 13(10): 1618-1637
- (2) **Alegado RA** and Tan MW[§]. (2008) Resistance to antimicrobial peptides contributes to persistence of *Salmonella typhimurium* in the *C. elegans* intestine. *Cellular Microbiology* 10(6): 1259-1273.
- (1) **Alegado RA**, Campbell MC, Chen WC, Slutz SS, Tan MW[§]. (2003) Characterization of mediators of microbial virulence and innate immunity using the *C. elegans* host-pathogen model. *Cellular Microbiology* 5(7): 435-44.

Reviews

- (2) **Alegado RA**. (2019). Opponents of the Thirty Meter Telescope fight the process, not science. *Nature*, *572*(7767), 7.
- (1) Alegado, RA and King N. Bacterial influences on animal origins. (2014) *Cold Spring Harbor Perspectives in Biology*, doi: 10.1101/cshperspect.a016162

Pre-print/In-progress

- (4) Mateo-Matriano D, **Alegado RA**, Conaco CC. (2020) Detection of Horizontal Gene Transfer in the Genome of *Salpingoeca rosetta*. *BioRxiv* doi: https://doi.org/10.1101/2020.06.28.176636
- (3) Freckelton ML, Nedved BT, Cai Y-S, Cao S, Turano H, **Alegado RA**, Hadfield MG[§]. (2020) Bacterial lipopolysaccharide induces settlement and metamorphosis in a marine larva. *Proceedings of the National Academy of Science*, in revision.
- (2) Kahanamoku S, **Alegado RA**, Kagawa-Viviani A, Kamelamela KL, Kamai B, Walkowicz LM, . Prescod-Weinstein C, de los Reyes MA, Neilson H. (2020). A Native Hawaiian-led summary of the

- current impact of constructing the Thirty Meter Telescope on Maunakea. *arXiv* preprint *arXiv*:2001.00970. https://doi.org/10.6084/m9.figshare.11434494.v1
- (1) Freckelton ML, Nedved BT, Cai Y-S, Cao S, Turano H, **Alegado RA**, Hadfield MG[^]. (2019) Bacterial lipopolysaccharide induces settlement and metamorphosis in a marine larva. *bioRxiv* 851519. doi: https://doi.org/10.1101/851519

Policy/White papers

- (6) City & County of Honolulu Climate Change Commission. (2020) <u>Climate Change and Financial Risk Guidance</u>, Honolulu: City & County of Honolulu Office of Climate Change, Sustainability and Resilience
- (5) City & County of Honolulu Climate Change Commission. (2019) <u>Guidance on Revisions to the Revised Ordinance of Honolulu Chapter 23, Regarding Shoreline Setbacks</u>, Honolulu: City & County of Honolulu Office of Climate Change, Sustainability and Resilience
- (4) City & County of Honolulu Climate Change Commission. (2018) <u>Climate Change Brief</u>, Honolulu: City & County of Honolulu Office of Climate Change, Sustainability and Resilience
- (3) City & County of Honolulu Climate Change Commission. (2018) <u>Sea Level Rise Guidance</u>, Honolulu: City & County of Honolulu Office of Climate Change, Sustainability and Resilience.
- (2) Kūlana Noi'i Working Group. (2018) <u>Kūlana Noi'i v. 1</u>. Honolulu: Hawai'i Sea Grant. https://doi.org/10.6084/m9.figshare.11540289.v1
- (1) Hawaiian Place of Learning Implementation Task Force. (2016) Ka Hoʻokō Kuleana: Fulfilling Our Responsibility to Establish the University of Hawaiʻi at Mānoa as a Hawaiian Place of Learning. Honolulu: University of Hawaiʻi Mānoa.

<u>Conference proceedings</u> (‡ presenter other than R. Alegado, <u>trainee</u>) *Post-tenure (2019-)*

Alegado RA. Evolution, ecology and equity: Insights from community-embedded microbiology in Indigenous spaces. mSystems Thinking Series: DEI in Microbiology. Online. March, 2021

Hintzen KD‡, Alegado RA, Tamaha M, Ascusion B. Kūlana Noi'i: Developing a Process for Equitable Community-Researcher Partnerships. "Honoring the Power of Indigenous Science Data to Revitalize Ecosystems, Communities, and Cultures" Symposium, Ecological Society of America 2020. Online. August, 2020. *Talk*

Lensing B, Frank K, Tognachini C, Branco M, Pi'iohi'a K, Pizarro K, Kotubetey K, Lopez-Guzman M, Beebe CA, McManus MA, **Alegado RA**. Perturbation of bacterioplankton assemblages during a stochastic event in a tropical esturaine ecosystem. ASM Microbe, Microbial Communities: Diversity Matters' Session. Online. July, 2020. *Invited talk*

Alegado RA. (2020) Our Science, Our Way: toward equitable community-embedded science. UH Hilo 'Aha Haumāna Native Hawaiian Student Leadership Conference. Online. September, 2020. *Invited talk*

Alegado RA. (2020) Our Science, Our Way: toward equitable community-embedded science. Theme: Diversity and Inclusion in the Geosciences – Pitfalls, Unconscious Bias and Practical Solutions. Goldschmidt Virtual 2020. Online. June, 2020. *Invited talk*. https://doi.org/10.46427/gold2020.35

<u>Beebe C</u>‡, **Alegado R.** E ulu ke kai momona: restoring abundance to He'eia Fishpond. Conference of Biological Oceanography Graduate Students, Honolulu, HI., April 2020. Virtual Talk

<u>Lensing B</u>‡, Frank K, <u>Tognacchini C</u>, <u>Branco M</u>, Pi'iohi'a K, Pizarro K, Kotubetey K, Lopez-Guzman M, Beebe A, McManus MA, and **R Alegado**. Perturbation of bacterioplankton assemblages during a

stochastic event in a tropical estuarine system. Conference of Biological Oceanography Graduate Students, Honolulu, HI., April 2020. Virtual Talk

<u>Mareko I</u>, <u>Thomas WH</u>‡, **Alegado R**. Quantifying Summer Zooplankton Biodiversity and Abundance in He'eia Fishpond. Conference of Biological Oceanography Graduate Students, Honolulu, H., April 2020. Virtual Talk

<u>Lensing B</u>‡, Frank K, <u>Tognacchini C</u>, <u>Branco M</u>, Jaber A, Pi'iohi'a K, Pizarro K, Kotubetey K, Lopez-Guzman M, Beebe A, McManus MA, **Alegado R**. Bacterioplankton community response to a stochastic event in a tropical estuarine system. Pacific Risk Management 'Ohana (PRiMO), Honolulu, HI, March 2020. Poster

<u>Mareko I</u>‡, <u>Thomas WH</u>, **Alegado R**. Quantifying zooplankton biodiversity and abundance in He'eia Fishpond Ocean Sciences Meeting, San Diego CA, February 2020. Poster

Guidry M‡, **Alegado R**, McManus MA, Castillo-Trujillo AC, Kane HH, Hatta M, Sindorf V, Mayfield KK, Grand M. A place-based, oceanography summer bridge course as part of an academic and curricular pathway from 2YCs to a 4YC for Native Hawaiian and other underrepresented students in the geosciences. Ocean Sciences Meeting, San Diego CA, February 2020.

Lopera D, Rii YM ‡, McManus MA, Kotubetey K, Maurin P. **Alegado R**. Understanding change: The effect of invasive algae removal on water circulation in a Native Hawaiian Fishpond. Ocean Sciences Meeting, San Diego CA, February 2020. Talk

YM Rii‡, Falinski KA, Robertson JA, **Alegado R**, Angel Hi'ilei Kawelo AH, Kukea-Shultz K, Toonen RJ, Winter KB. Towards 'āina momona: Tracking biological response to changes in sediment and nutrient flow through restoration of an urban estuary in He'eia, O'ahu. Ocean Sciences Meeting, San Diego CA, February 2020. Talk

Asuncion B‡, **Alegado R**, Chang K, Enomoto S, Frank K, Hintzen K, Ito W, Laursen S, Lerner D, Tamanaha M, Walton M, Yogi D, Ziegler-Chong S. Articulating needs to empower practitioner-led management of loko i'a (Hawaiian fishpond) resources and practices. Aquaculture America 2020, Honolulu, HI. February 2020. Talk

Alegado RA, McCoy D, McManus DA, Kotubetey K, Kawelo AH, Young C, D'Andrea B, Ruttenberg KC. Large-scale effects on traditional Hawaiian fishpond aquaculture. Aquaculture America 2020, Honolulu, HI. February 2020. Talk

Alegado RA. Our Science, Our Way: toward equitable community-embedded science. 8th Conference on STEAMM Education and Social Justice: Creating Balance in an Unjust World Conference on STEM Education and Social Justice. January, 2020, Honolulu, HI. *Keynote*

Alegado RA. Integrating knowledge systems to understand coastal ecosystems. Traditional ecological knowledge and the intersection between science, community and culture/Indigenous stewardship of ocean resources Workshop. Pew Marine Fellows Annual Meeting, December 2019, Hilo, HI. *Invited talk*.

Kagawa-Viviani A, Puniwai N, Kahanamoku S‡, Kawamata Ryan T, Kamelamela K, <u>Tong E</u>, **Alegado R**. (2019) Native Scientists in Action: Networks to Reduce Indigenous STEM Grad Student Isolation, Facilitate Peer-to-Peer Exchange, and Advance Visions of "Pono Science". AGU Fall Meeting, San Francisco CA, December 2019. Talk

Kauahi C, Heu, Asuncion B, Tamanaha W, Hintzen K, Puniwai N, **Alegado R**. Luna'ikehala: A framework for practicing concientious community-embedded science. SACNAS National Diversity STEM Meeting, Honolulu, HI. October 2019 Workshop

McLeod K, Valdez-Ward E, Kroeker K, Matsuda S, **Alegado R**. If not now, then when? Strateies for effective scicomm in a changing environment. SACNAS National Diversity STEM Meeting, Honolulu, HI. October 2019. Panel

Alegado RA. Ecological drivers of choanoflagellate life history shifts. Society for Developmental Biology Symposium: Development of Organisms in a Changing Climate. SACNAS National Diversity STEM Meeting, Honolulu, HI. October 2019 *Invited Talk*

Alegado RA. Effect of large-scale climatic events on traditional Hawaiian fishpond aquaculture. Climate Smart Islands: Adapting Island Agriculture and Communities to Climate Change Session. SACNAS National Diversity STEM Meeting, Honolulu, HI. October 2019 *Invited Talk*

Glazer B and **Alegado R**. He'eia Fishpond. 2019 Future Focus Conference, Honolulu HI, October 2019. *Invited talk*.

Alegado R, Hintzen K, Tamanaha M, Asuncion B, Walton M. Kūlana Noi'i: Guidance for building and sustaining long-term relationships between community and researchers. National Academies Keck Futures Iniative Co-Production Workshop, Duke University, Chapel Hill, NC, September 2019. *Invited Talk.*

Pre-tenure (2013-2019)

Fox LK, **Alegado RA**, Kagawa-Viviani A, Kane H, Nu'uhiwa AN, Puniwai N. Kāne and Kanaloa are coming: A kānaka take on climate change and indigenous resilience 26th Hawai'i Conservation Conference, Honolulu, HI. July 2019. *Plenary keynote panel*

<u>Nichols P</u>‡, La Valle F, **Alegado R**, Kawelo H, Kotubetey K, Philippoff J, Laliberte J. Stable Isotopes Reveal Food Web Dynamics for Native and Invasive Mullet Species in He'eia Fishpond. Traditional and Contemporary Approaches to Ahupua'a Management in the He'eia National Estuarine Research Reserve Symposium. 26th Hawai'i Conservation Conference, Honolulu, HI. July 2019. Talk

<u>Machado N</u>‡, Selph K, <u>Beebe C</u>, Kotubetey K, **Alegado R**. Correlation of He'eia Fishpond plankton community abundance and distribution in response to environmental conditions. 26th Hawai'i Conservation Conference, Honolulu, HI. July 2019. Poster

<u>Lensing B</u>‡, **Alegado R**. "Phylogenetic curation of the Choanoflagellata: Building a better eukaryotic reference database." The 44th Albert L. Tester Memorial Symposium. Honolulu, HI. April 2019. Talk

<u>Thomas WH</u>‡, **Alegado R.** "Identifying extrinsic conditions favoring multicellularity in natural populations of choanoflagellates". The 44th Albert L. Tester Memorial Symposium. Honolulu, HI. April 2019. Talk

<u>Lensing B</u>‡, **Alegado R**. "Phylogenetic curation of the Choanoflagellata: Building a better eukaryotic reference database." (2019). Conference of Biological Oceanography Graduate Students. Honolulu, HI. April 2019. Talk

<u>Beebe C</u>‡, **Alegado R**. (2019). "He'eia Fishpond: changes in biogeochemistry and future analyses." Conference of Biological Oceanography Graduate Students. Honolulu, HI. April 2019. Talk

<u>ThomasWH</u>‡, **Alegado**, **R.** (2019). "Identifying extrinsic conditions favoring multicellularity in natural populations of choanoflagellates". Conference of Biological Oceanography Graduate Students. Honolulu, HI. April 2019. Talk

Guidry M‡, Eschenberg A, Lee K, Taylor SV, **Alegado RA**, McManus MA, Krupp D, DeLay JK, McCoy FW, Dempsie B, Nathan M, Srsen P, Tanigawa A, Kaakua J. (2018) Creating and maintaining a successful geoscience pathway from 2YC to 4YC for Native Hawaiian Students: A Progress Update. AGU Fall Meeting, San Francisco CA, December 2018. Poster

Alegado R and Hintzen K. Kūlana Noi'i: Guidance for building and sustaining long-term relationships between community and researchers. Pīko'oko'o Conference, Honolulu, HI, September 2019. Poster

Kawelo AH and **Alegado RA**. Climate change and the future of loko i'a (Native Hawaiian Fishponds). 2018 'Aimalama Conference: A Mauliauhonua Experience, Maui HI, August 2018. *Invited keynote*.

<u>Beebe C</u>‡, **Alegado RA**, <u>Moehlenkamp P</u>, Paepae o He'eia. Dynamic Waters of He'eia Fishpond 25th Hawai'i Conservation Conference, Honolulu, HI. July 2018. Poster

<u>Beebe C</u>‡, Frank K, Nelson C, **Alegado RA**. Ka Papa Loʻi ʻo Kānewai. Investigating Ecosystem Services of a Hawaiian Flooded Agroecosystem. 25th Hawaiʻi Conservation Conference, Honolulu, HI. July 2018. Talk

<u>Moehlenkamp</u> P‡, <u>Beebe C</u>, Paepae o He'eia, McManus M, **Alegado RA**. Water budget and water quality dynamics in He'eia fishpond during restoration regimes. 25th Hawai'i Conservation Conference, Honolulu, HI. July 2018. Poster

Kotubetey K, Tamanaha M, **Alegado RA**, Falinski K, Perez K, Hintzen K. Kūlana Noi'i: Building and Sustaining Equitable Partnership between Researchers and Community. 25th Hawai'i Conservation Conference, Honolulu, HI. July 2018. Forum Panel

<u>Bennett EK</u>, Nogelmeier M, Timmermann A, and **Alegado RA**. Kilo Lani: Reconstructing Climate Patterns in Hawai'i. 7th International Conference on Ecological Futures: Humans and Island Environments, Honolulu, HI, April 2018. Talk

McCoy D, McManus MA, Kotubetey K, Kawelo AH, Young C, <u>D'Andrea B</u>, Ruttenberg KC, **Alegado RA**. Large-scale Climatic Effects on Traditional Hawaiian Fishpond Aquaculture. 7th International Conference on Ecological Futures: Humans and Island Environments, Honolulu, HI, April 2018. Talk

<u>Moehlenkamp P[‡], Beebe CA</u> and **Alegado RA**. Water dynamics of He'eia Fishpond. 7th International Conference on Ecological Futures: Humans and Island Environments, Honolulu, HI, April 2018. Poster

<u>Beebe CA</u>[‡] and **Alegado RA**. Water dynamics of He'eia Fishpond. 7th International Conference on Ecological Futures: Humans and Island Environments, Honolulu, HI, April 2018. Poster

Alegado RA. Influence of bacterial signaling on multicellular development of choanoflagellates. 6th ASM Conference on Cell-Cell Communication in Bacteria, Athens GA, October 2017. *Invited talk*

<u>McCoy D</u>, McManus MA, Kotubetey K, Kawelo AH, Young C, <u>Bennett EK</u>, <u>D'Andrea B</u>, Ruttenberg KC, **Alegado RA**. Large-scale Climatic Effects on Traditional Hawaiian Fishpond Aquaculture. Hawaii Sea Grant-Japan Conference. Honolulu HI, September 2017. *Invited talk*

- **Alegado RA**, <u>Woznica A</u>, Li C, Turano H, Beemelmans C, Cao S, Clardy J, King N. Membrane vesicles traffic developmental cues from prey bacteria to the closest living relatives of animals. Gordon Research Conference on Animal-Microbe Symbioses, West Dover VT, June 2017. Poster.
- **Alegado RA**, Woznica W, Cao S, Beemelmanns C, Turano H, Clardy J, King N. Membrane vesicles traffic choanoflagellate developmental signals from prey bacteria. 2017 International Choanoflagellate Workshop, Berkeley CA, June 2017. *Invited talk*
- **Alegado RA**, Mirielle Lopez-Guzman M[‡], <u>Betin V</u>, Beemelmanns C, King N. Identification of *Algoriphagus machipongonensis* genes necessary for rosette colony formation in the choanoflagellate species *Salpingoeca rosetta*. 2017 International Choanoflagellate Workshop, Berkeley CA, June 2017. Poster
- <u>Frank K, Branco M, Thomas WH</u>[‡], **Alegado RA**. Influence of physical and anthropogenic forcing on microbial community dynamics in a subtropical estuarine system. 2017 International Choanoflagellate Workshop, Berkeley CA, June 2017. Poster
- <u>Bennett EK</u>[‡], Nogelmeier M, Timmermann A, and **Alegado RA**. Kilo Lani: Reconstructing Climate Patterns in Hawai'i. 2017 Island Sustainability Conference, Guam. April 2017. Talk
- **Alegado RA**. Bacterial lipids regulate multicellular development in the closest living relatives of animals. 2017 American Society for Limnology and Oceanography Meeting, Honolulu, HI, February 2017. Talk
- <u>Shuler CK</u>[‡], Amato D, <u>Gibson V</u>, Baker L, <u>Olguin AN</u>, Dulai H, Smith, CM, **Alegado RA**. Assessment of terrigenous nutrient loading to coastal ecosystems on Tutuila, American Samoa. American Society for Limnology and Oceanography Meeting, Honolulu, HI, February 2017. Talk
- <u>Beebe CA</u>[‡], <u>Frank KL</u>, Nelson CE, **Alegado RA**. Investigating ecosystem services of a Hawaiian flooded agroecosystem. American Society for Limnology and Oceanography Meeting, Honolulu, HI, February 2017. Poster
- Nelson CE, **Alegado RA**. Ridge to reef: incorporating authentic place-based and community-engaged research experiences into undergraduate environmental science curricula. American Society for Limnology and Oceanography Meeting, Honolulu, HI, February 2017. Poster
- <u>Frank, KL</u>[‡], Rogers KL, Wheat CG, **Alegado RA.** Linking benthic microbial community dynamics to diel redox variations in a near shore costal environment, He'eia Fishpond. American Geophysical Union Fall 2016 Conference. San Francisco, CA, December 2016. Poster.
- **Alegado RA**. Influence of anthropogenic and climatic forcing on water quality within a tropical coastal ecosystem. Eco-DAS X: Ecological Dissertations in the Aquatic Sciences. Honolulu, HI. December 2016. *Invited talk.*
- **Alegado RA**. Membrane vesicles traffic choanoflagellate developmental signals from prey bacteria. 6th ASM Conference on Beneficial Microbes. Seattle, WA. September 2016. *Invited talk*.
- <u>Amato DW</u>[‡], Smith CM, <u>Schuler C</u>, Dulai H, Glenn CR, <u>Gibson V</u>, <u>Baker L</u>, and **Alegado RA**. Algal bioassays identify sources of land-based nutrient pollution in Hawai'i and American Samoa. 13th International Coral Reef Symposium. Honolulu, HI, June 2016. Talk

- **Alegado RA**. Bacterial sphingolipids regular multicellular development in choanoflagellates. "Emergent Behaviors from Bacterial Interactions" Session, ASM Microbe. Boston, MA. June 2016. *Invited talk*
- <u>Amato D</u>‡, <u>Shuler C</u>, <u>Gibson V</u>, <u>Baker L</u>, Smith CM, and **Alegado RA**. Detecting hot spots for algal blooms in shallow waters around Tutuila, American Samoa. Water Resources Research Center Sustainability Issues on Tropical Islands Conference. Honolulu, HI, Dec 2015. Talk
- <u>Frank KL</u>, <u>Branco M</u>[‡], <u>Jaber A</u>, Kotubetey K, **Alegado RA**. Spatial and Temporal Microbial Variability in a Native Hawaiian Fishpond, 23rd Hawai'i Conservation Conference. Hilo HI, August 2015. Poster
- <u>Uenten R</u>[‡], <u>Beebe CA</u>[‡], Timmermann A, **Alegado RA.** Reconstructing Historical Climate of Hawai'i through Substantiated Traditional Observations, 23rd Hawai'i Conservation Conference. Hilo HI, August 2015. Poster.
- **Alegado RA.** Bacterial sphingolipids regulate multicellular development in choanoflagellates. Gordon Research Conference on Animal-Microbe Symbioses, Waterville Valley, NH, June 2015. *Invited talk*
- <u>Frank KL</u>‡ and **Alegado RA**. Environmental drivers of microbial community dynamics in marine environments. 3rd Joint Symposium on Ocean, Coastal and Atmospheric Sciences. Honolulu, HI March 2015. Talk
- **Alegado RA**. 'A'ohe pau ka 'ike i ka hālau ho'okahi: Think not that all wisdom resides in your school of knowledge. Eco-DAS IX. Honolulu, HI, October 2014. *Invited talk*.
- <u>Woznica A</u>‡, Beemelmanns C, Cantley A, **Alegado RA**, Clardy J, N King. Diverse bacterial molecules regulate multicellular development in the choanoflagellate. Canadian Institute for Advanced Research, Integrated Microbial Diversity Division Meeting. Liblice, Czech Republic, June 2014. Talk.
- **Alegado RA**, Wieland-Brown L, Cao S, Woznica A, Beemelsmann C, <u>Betin V</u>, Clardy J, N King Bacterial sulfonolipid signaling choanoflagellates. Howard Hughes Medical Institute Scientific Meeting. Bethesda, MD, April 2014. *Invited presenter*.
- **Alegado RA**, Wieland-Brown L, Cao S, Woznica A, Beemelsmann C, <u>Betin V</u>, Clardy J, N King. Bacterial sulfonolipid signaling choanoflagellates. 2014 Ocean Sciences Meeting. Honolulu, HI, Feb 2014. Poster.

Prior to appointment

- **Alegado RA**, <u>Betin V</u>, Beemelsmann C, Richter DJ, Clardy J and N King. Bacterial sphingolipid signaling in choanoflagellates. 4th International Choanoflagellate Workshop. Cologne, Germany, May 2013. Talk.
- **Alegado RA**, <u>Betin V</u>, Beemelsmann C, Richter DJ, Clardy J and N King. Signaling between choanoflagellates and bacteria. Genetics, Development and Evolution Symposium. Berkeley, CA May 2013. Talk.
- **Alegado RA,** Wieland Brown L, R Kontnik, Cao S, Zuzow R, Fairclough S, Clardy J, N King. A bacterial sphingolipid triggers multicellular development in the closest living relatives of animals. 112th ASM General Meeting, "Symbiosis as a Driver of Ecology and Evolution" Session. San Francisco, CA, May 2012. **Young investigator talk.**
- **Alegado RA**, R Kontnik, Wieland Brown L, Zuzow R, Fairclough S, Clardy J, N King. Regulation of choanoflagellate colony development by a bacterial sphingolipid. Transitions to Multicellularity Session.

Society for General Microbiology Autumn 2011 Conference. York, UK, September 2011. Invited talk.

Alegado RA and N King. A bacterial sphingolipid induces choanoflagellate colony development. 3rd International Choanoflagellate Workshop. Berkeley, CA June 2011. Talk.

Alegado RA and N King. A bacterial sphingolipid induces choanoflagellate colony development. The Role of Beneficial Microbes in Host Development and Physiology Session. 3rd ASM Conference on Beneficial Microbes. Miami, FL October 2010. Talk.

Alegado RA, Kontnik R, Fairclough SR, Zuzow R, Clardy J, N King. A bacterial sphingolipid induces choanoflagellate colony development. Gordon Research Conference on Sphingolipid and Glycolipid Biology. Ventura, CA. February 2010. Poster.

Alegado RA and N King. Influence of Bacteria on Choanoflagellate Morphogenesis. 2nd International Choanoflagellate Workshop. Berkeley CA, June 2009. Talk.

Kontnik R‡, **Alegado RA**, Fairclough S, Clardy J and N King. Identifying bacterial inducers of choanoflagellate colony formation. 2nd International Choanoflagellate Workshop. Berkeley CA, June 2009. Poster.

Alegado, RA and King N Choanoflagellate-Bacterial Interactions. Canadian Institute for Advanced Research, Integrated Microbial Diversity Division Meeting. Lac Carling, Quebec, Canada, May 2008. *Invited talk.*

Alegado, RA and Tan MW Identification and characterization of *Salmonella typhimurium* genes required for persistence in the gut of *Caenorhabditis elegans*. Bay Area Worm Meeting. California State University East Bay, Hayward, CA, March 2007. Poster.

Alegado, RA and Tan MW Identification and characterization of *Salmonella typhimurium* genes required for persistence in the gut of *Caenorhabditis elegans*. Plenary talk (Non-human infections). 2nd ASM Conference on Salmonella. Victoria, British Columbia, Canada, September 2006. Talk.

• Highlighted in Boyle EC, Bishop JL, Graassi, GA, Finlay BB (2007) *Salmonella*: From pathogenesis to therapeutics. J Bacteriol 189 (5): 1489-95

Alegado RA and Tan MW. Resistance to antimicrobial peptides contributes to bacterial persistence of *Salmonella typhimurium* in the gut of *Caenorhabditis elegans*. 106th ASM General Meeting. Orlando, FL, June 2006. Poster.

Alegado RA and Tan MW. Early events in *Salmonella typhimurium* infection of *Caenorhabditis elegans* that lead to bacterial persistence. Pathogenesis Parallel Session. 15th Biennial International *C. elegans* Conference. Los Angeles, CA, June 2005. Talk.

Alegado RA, Falkow S, Tan MW. Identification of *Salmonella typhimurium* genes required for persistence int eh gut of *C. elegans*. 2004 West Coast Worm Meeting. Santa Barbara, CA, August 2004. Poster.

Alegado RA, Falkow S, Tan MW. *Caenorhabditis* elegans as an early infection model for *Salmonella enterica* serovar Typhimurium. Stanford Microbiology Symposium, Stanford, CA. October 2003. Poster.

Alegado RA, Falkow S, Tan MW. *Caenorhabditis* elegans as an early infection model for *Salmonella enterica* serovar Typhimurium. Cold Spring Harbor Meeting on Microbial Pathogenesis and Host Response. Cold Spring Harbor, NY, September 2003. Poster.

Invited seminars (as of May 2021)

- 2021 University of Michigan, Department of Microbiology and Immunology (online)
- 2021 Woods Hole Institute for Oceanography, MIT, Department of Biological Oceanography (online)
- 2021 Scripps Institute of Ocenaography, Growing up in Science Seminar (online)
- 2020 Boston University, Department of Biology (online)
- 2020 University of Delaware, School of Marine and Science Policy (online)
- 2020 Woods Hole Institute for Oceanography, MIT, Department of Chemical Oceanography (online)
- 2020 Wake Forest University, Department of Biology (online)
- 2019 Inclusive SciComm Workshop, SACNAS and the Kavli Foundation
- 2019 UH Hilo Kīpuka Native Hawaiian Student Center STEM Talk Story, "Pono Science"
- 2019 UH Hilo Eia Hawai'i Lecture Series
- 2019 Duke University, Microbiome Center, Chapel Hill, NC
- 2019 University of North Carolina Chapel Hill, Department of Microbiology, Chapel Hill, NC
- 2017 University of British Columbia Department of Microbiology & Immunology, Vancouver, Canada
- 2017 ASLO Meeting: Multicultural Program, Keynote, Honolulu, HI
- 2015 Developmental Biology Center Symposium, University of Minnesota, Minneapolis MN
- 2014 Society for Advancement of Hispanics/Chicanos and Native Americans in Science, 'Ilima Chapter Science Symposium (*Keynote*), Honolulu, HI
- 2012 University of Hawai'i Department of Oceanography and Sea Grant College Program, HI

Campus/departmental talks

- 2019 Department of Natural Resources and Environmental Management Seminar
- 2019 Moku o Lo'e Student Association, Hawai'i Institute of Marine Biology
- 2019 UH Biocultural Initiative of the Pacific Seminar
- 2017 Department of Microbiology Seminar
- 2016 College of Engineering Seminar in Renewable Energy and Island Sustainability
- 2016 Hanohano Mānoa Native Hawaiian Faculty Seminar Series
- 2015 Pacific Biosciences Research Center Seminar
- 2015 Minority Access to Research Careers Seminar
- 2014 John A. Burns School of Medicine COBRE/Tropical Medicine Seminar
- 2014 Hawai'i Institute of Marine Biology Seminar
- 2014 2nd Annual Conference of Biological Oceanography Grad Students, Department of Oceanography (*Plenary*)
- 2014 Department of Oceanography Seminar
- 2013 Department of Biology/Zoology Seminar
- 2013 UC Berkeley Genetics, Development and Evolution Symposium.

PUBLICATION CITATION INDEX

	All	2013	2014	2015	2016	2017	2018	2019	2020
Citations	984	70	65	63	100	123	128	119	146
h-index	12	7	7	7	9	10	11	12	12

FELLOWSHIPS & HONORS

2013	eLife Sciences, Selected Early Career Author
2009-2011	National Research Service Award, NIH Postdoctoral Training Fellowship
2011	Best Talk, UC Berkeley Genetics, Development and Molecular Evolution
	Supergroup Symposium
2011	American Society for Microbiology (ASM) Minority Mentor Newsletter, Profile
2010	ASM, Postdoctoral Travel Award
2003	Katherine McCormick Fund for Women, Travel Fellowship
2000-2003	Ford Foundation Predoctoral Fellowship
2000	National Science Foundation Graduate Research Fellowship, Honorable Mention

RESEARCH SUPPORT

Current

Funding agency: National Science Foundation

Project title: HRD1641298 "Collaborative Research: PAGE: Halau Ola Honua Our living world, living

laboratory"

Project period: 2016-2021 Amount of Award: \$810,422

PI: M. Guidry (SOEST/OCN), Co-PI: M McManus (SOEST/OCN); R. Alegado (SOEST/OCN)

Funding agency: Hawai'i State Department of Health, Clean Water Branch

Project title: He'eia Fishpond Mangrove Removal and Water Quality Improvement

Project period: 2017-2022 Amount of Award: \$283,474

PI: M. Walton (SOEST/Sea Grant), Co-I: R. Alegado (SOEST/OCN)

Funding agency: NOAA-OAR-SG-

Project title: Microbial biogeochemical cycling across a chronosequence of mangrove introductions

across Hawai'i

Project period: 02/01/2020 – 01/31/2022

Amount of Award: \$31,072

PI: R. Alegado UHM SOEST/OCN

Funding agency: NOAA-OAR-SG-2019-2005963 Advanced Aquaculture Collaborative Programs

Project title: Catalyzing a Cross-Pacific Regional Collaborative Hub to Advance Indigenous Aquaculture

Practices and Enhance Marine Food Production for Cultural-Ecological Benefits.

Project period: 09/2019 – 08/2022

Amount of Award: \$203,282 subaward to Hawai'i Sea Grant

PI: K. Hintzen (SOEST/Sea Grant); co-PI: R. Alegado (SOEST/OCN)

Funding agency: Kamehameha Schools

Project title: 'Opae and 'Opelu: Comparative Analysis of the Makalawena Anchialine Pool Complex with Other Hawaiian Epigeal Systems and a Historical Review of 'Opelu Fisheries from Hawaiian

Language Sources

Project Period: 04/15/2020 – 09/15/2022

Amount of Award: \$95,487

PI: R. Alegado UHM SOEST/OCN

Funding agency: Rockefeller Foundation

Project title: Lab for COVID-19 Testing Innovation in Hawai'i

Project Period: 06/01/2020 - 06/30/2021

Amount of Award: \$228,044

PI: V. Nerurkar (JABSOM/Tropical Medicine); Co-PI: R. Alegado UHM SOEST/OCN

Pending

Funding agency: NSF Coastlines and People (CoPe)

Project title: Large-Scale CoPe: Rising Voices, Changing Coasts: The National Indigenous and Earth

Sciences Convergence Hub Project Period: 08/2021 – 07/2026 Amount of Award: \$629,591 subaward

PI: D. Wildcat, Haskell Indian Nations U; Co-PI: Blanchard, Haskell Foundation; Co-PI: S. Iaukea,

LiKEN; Co-PI: Holland, NCAR; Key Personnel: R. Alegado UHM SOEST/OCN

Completed

Funding agency: City and County of Honolulu

Project title: Lab for COVID-19 Testing Innovation in Hawai'i

Project Period: 06/01/2020 – 3/5/2021 Amount of Award: \$ 3,998,204

PI: V. Nerurkar (JABSOM/Tropical Medicine); Co-PI: R. Alegado UHM SOEST/OCN

Funding agency: Pacific Islands Climate Adaptation Science Center.

Project title: Science Needs Assessment to support management of Loko I'a (Hawaiian Fishpond)

resources and practices critical to the Native Hawaiian community

Project period: 02/2019 – 07/2020 Amount of Award: \$80,000 PI: R. Alegado (SOEST/OCN)

Funding agency: National Institutes of Health, National Cancer Institute U01

Project title: Gut microbiota mediated bile acid alternations in hepatic carcinogenesis

Project Period: 08/1/2015-7/31/2020

Amount of Award: \$31,008.36 (of \$2,684,065) to R Alegado

PI: W. Jia (UHM Cancer Research Center); Co-I: R Alegado (UHM SOEST/OCN)

Funding agency: NSF IOS-01558169

Project title: Deciphering the role of bacterial sphingolipids in host-microbe interactions

Project Period: 01/01/2016-02/28/2019

Amount of Award: \$662,019 PI: R. Alegado UHM SOEST/OCN

Funding agency: Hawai'i State Department of Health, Clean Water Branch

Project title: He'eia Fishpond Mangrove Removal and Water Quality Improvement

Project Period: 03/01/2017-02/28/2019

Amount of Award: \$26,940.33 (of \$189,504.70) to R. Alegado

PI: M. Walton (UHM SOEST/Sea Grant), Co-I: Alegado (UHM SOEST/OCN)

Funding agency: Gordon and Betty Moore Foundation

Project title: The bacterial basis of larval recruitment for marine invertebrate animals

Project Period: 11/01/2015-05/31/2019

Amount of Award: \$260,457 (of \$870,506) to R. Alegado

PI: M. Hadfield (UHM SOEST/PBRC), co-PI: B. Nedved (UHM SOEST/PBRC), R. Alegado (UHM

SOEST/OCN), S. Cao (UH Hilo, Pharmacology)

Funding agency: USGS State Water Resources Research Institute Program

Project title: Likely hotspots for algal blooms: A multi-dimensional analysis to evaluate seasonal impacts

of land-based sources of pollution on the health of American Samoa's coasts

Project Period: 02/01/2016-9/30/2018

Amount of Award: \$40,000

PI: R. Alegado (UHM SOEST/OCN), co-PI: C. Smith (UHM/CNS/Botany)

Funding agency: USGS State Water Resources Research Institute Program

Project title: Influence of anthropogenic and climatic forcing on water quality within a tropical coastal

ecosystem

Project Period: 02/01/2016-09/30/2018

Amount of Award: \$20,000

PI: R. Alegado (UHM SOEST/OCN)

Funding agency: NOAA Sea Grant College Program NA09OAR4170060

Project title: Water Budget and Pathogen Dynamics in He'eia Fishpond During Restoration Regimes

Project Period: 01/01/2017-12/31/2017

Amount of Award: \$9,982

PI: M. McManus (UHM SOEST/OCN), Co-PI: R Alegado (UHM SOEST/OCN)

Funding agency: USGS Pacific Island Climate Science Center

Project title: Kilo lani: Reconstructing climate patterns in Hawai'i using traditional knowledge and

dendrology

Project Period: 02/01/2016 - 01/031/2017

Amount of Award: \$24,000

PI: PI: R Alegado (UHM SOEST/OCN), co-PI: A. Timmerman (UHM SOEST/OCN)

Funding agency: USGS State Water Resources Research Institute Program

Project title: Identifying future hotspots for algal blooms: A multi-dimensional analysis evaluating impacts of potential land-based sources of pollution on the health of American Samoa's coasts

Project Period: 03/01/2015-02/29/2016

Amount of Award: \$25,000

PI: R Alegado (UHM SOEST/OCN), co-PIs: C. Smith (UHM CNS/Botany), A. Alvarez (UHM CTAHR/PEPS).

Funding agency: NOAA Joint Institute for Marine and Atmospheric Research

Project title: Kilo lani: Reconstructing climate patterns in Hawai'i using traditional knowledge and

dendrology

Project Period: 02/04/2015 – 02/03/2016

Amount of Award: \$10,000

PI: PI: R. Alegado (UHM SOEST/OCN), co-PI: A. Timmerman (UHM SOEST/OCN)

Funding agency: Hawai'i Community Foundation, Victoria S. and Bradley L. Geist Foundation

Project title: Elucidating the *de novo* bacterial sphingolipid biosynthetic pathway

Project Period: 05/2014-11/2015 Amount of Award: \$49,997

PI: R. Alegado (UHM SOEST/OCN)

Funding agency: NOAA Sea Grant College Program NA09OAR4170060 Project title: The Role of Microbes in Nutrient Cycling in He'eia Fishpond

Project Period: 01/2014-12/2014

Amount of Award: \$9,982

PI: R Alegado (UHM SOEST/OCN)

Funding agency: NOAA UH Sea Grant College Program

Project title: SOEST Maile Mentoring Bridge

Project Period: 02/2014-08/2014 Amount of Award: \$9,967

PI: B. Bruno, co-I: R. Alegado, co-I: A. Choy (UHM SOEST/OCN)

Funding agency: NIH NIGMS 1F32GM086054-01A1

Project title: Molecular basis of bacterial-dependent colony formation in choanoflagellates

Project Period: 03/2009-04/2011 Amount of Award: \$102, 208 PI: R. Alegado (UC Berkeley)

Funding agency: NIH T32HG000044

Project title: Stanford Genome Training Grant

Project Period: 10/1/2003-9/30/2006

Amount of Award: \$61,512 (of \$4,767,241) to R. Alegado PI: Richard Myers (Stanford University School of Medicine)

Funding agency: Ford Foundation Predoctoral Fellowship

Project title: n/a

Project Period: 10/1/2000-9/30/2003

Amount of Award: \$60,000

PI: R. Alegado (Stanford University School of Medicine)

Unfunded proposals

Funding agency: NIH National Institute on Minority Health and Health Disparities Special Emphasis Panel Specialized Center of Excellence on Environmental Health Disparities Research (P50) Project title: 1P50MD015476-01Center of Interdisciplinary Research for Community-Led Equity (CIRCLE)

Project Period: 07/01/2020 – 06/30/25

Amound of Award: \$828,000 (of \$4,750,000) to R. Alegado

PI: M. Mau (JABSOM), A. Maunakea (JABSOM); co-PI: R. Alegado (SOEST/OCN)

Funding agency: Gordon and Betty Moore Foundation Symbiosis in Aquatic Systems Initiative New

Investigator Award

Project title: Ecology of choanoflagellate-bacterial interactions inform animal origins

Project Period: 03/01/2019 – 02/29/2024

Amound of Award: \$ 635,363 PI: R. Alegado (SOEST/OCN)

Funding agency: National Science Foundation

Project title: CAREER: Ecology of choanoflagellate-bacterial interactions inform animal origins

Project Period: 03/01/2019 – 02/29/2024

Amound of Award: \$ 635,363 PI: R. Alegado (SOEST/OCN)

Funding agency: NOAA FY18 Saltonstall-Kennedy Competition

Project title: Understanding and Adapting to Environmental Change in Native Hawaiian Aquaculture

Systems

Project Period: 9/01/2018 – 8/31/2020

Amount of Award: \$300,000

PI: R. Alegado (UHM SOEST/OCN), C. Smith (UHM CNS/Botany); E. Franklin (UHM SOEST/HIMB)

Funding agency: NOAA Sea Grant 2017 Aquaculture Initiative: Integrated Projects to Increase Aquaculture Production

Project title: Increasing Food Security in the Hawaiian Islands by Increasing Capacity for Traditional

Coastal Aquaculture

Project Period: 9/01/2017 – 8/31/2020

Amount of Award: \$171,246.66 of \$704,252.88

PI: Darren Lerner (UHM SOEST/Sea Grant); co-PI: R Alegado (UHM SOEST/OCN), C Smith (UHM CNS/Botany); E Franklin (UHM SOEST/HIMB); H Kawelo (Paepae o He'eia)

Funding agency: NSF Research Trainee Program

Project title: E Ho'owaiwai i ka Mana'o Pono: Enriching Understanding through Integrated STEM

Education

Project period: 01/02/2018 – 01/01/2023

Amount of award: \$2,855,757

PI: Idol (UHM CTAHR/NREM), co-PIs: Alegado (SOEST/OCN), Lincoln (CTAHR/TPSS), Tsang

(CTAHR/NREM), Vaughn (CTAHR/NREM)

Funding agency: Simons Foundation, 2016 Simons Early Career Investigator in Marine Microbial

Ecology and Evolution Award

Project title: The role of bacterial sphingolipids in host-microbe interactions

Project period: 2016-2019 Amount of award: \$540,000 PI: Alegado (UHM SOEST/OCN)

Funding agency: Rosalind Franklin Young Investigator Award. Genetics Society of America

Project title: n/a

Project Period: 2015 – 2018 Amount of Award: \$75,000

PI: R Alegado (UHM SOEST/OCN)

Funding agency: National Institutes of Health, National Cancer Institute R21 Project title: Metabolomics of gut microbiota metabolites in chronic liver disease

Project Period: 01/01/2016-12/31/2018

Amount of Award: \$10,205 (of \$423,500) to Alegado

PI: Xia (UHM Cancer Research Center); Co-I: Alegado (UHM SOEST/OCN)

Funding agency: Mellon-Hawaii Fellows Program. Andrew Mellon Foundation/The Kohala Center

Project title: n/a

Project Period: 08/2015 – 8/2016 Amount of Award: \$55,000

PI: R Alegado (UHM SOEST/OCN)

Funding agency: UHM Sea Grant College Program 2016-2018 Biennial Grant Awards

Project title: Submarine groundwater discharge (SGD) links agricultural practices to health of tropical

reefs

Project Period: 02/2016 – 2/2018 Amount of Award: \$70,334

PI: Alegado (UHM SOEST/OCN), co-PIs: Smith (UHM CNS/Botany), Al-Kadi (UHM SOEST/GG), Alvarez (UHM CTAHR/PEPS).

Funding agency: UHM Sea Grant College Program 2016-2018 Biennial Grant Awards

Project title: Microbially-mediated arsenic cycling in Hawaiian watersheds

Project Period: 02/2016 – 2/2018 Amount of Award: \$48,405

PI: Frank (UHM SOEST/OCN), co-PI: Alegado (UHM SOEST/OCN).

Funding agency: UHM Sea Grant College Program 2016-2018 Biennial Grant Awards

Project title: Building capacity state-wide for fishpond water quality data collection, interpretation, and

intercomparison

Project Period: 02/2016 – 2/2018 Amount of Award: \$89,994

PI: Ruttenberg (UHM SOEST/OCN), co-PIs: McManus (UHM SOEST/OCN), Alegado (UHM SOEST/OCN), Ascuncion (Kua'āina Ulu 'Auamo), Makaiau (Alu Like, Inc).

Funding agency: NSF OCE PA13-606

Project title: OCE-RIG: Microbial community dynamics in a tropical coastal estuary in response to

seasonal climate anomalies

Project Period: 07/01/2015 – 6/30/2017

Amount of Award: \$99,589

PI: R. Alegado (UHM SOEST/OCN).

Funding agency: Pew Trusts, Pew Scholars in the Biomedical Sciences Project title: Deciphering the chemical ecology of bacterial-host interactions

Project Period: 07/2015 – 6/2019 Amount of Award: \$240,000

PI: R. Alegado

Funding agency: USDA NIFA Water for Agriculture Challenge Area

Project title: The impact of agriculture-contaminated groundwater on Pacific Island Coastal ecosystems

Project Period: 07/2015 – 06/19

Amount of Award: \$576,495 of \$1,211,819 to R. Alegado

PI and co-PIs: PI: A Alvarez (UHM CTAHR/PEPS), C Smith (UHM CNS/Botany), A Al-Kadi (UHM SOEST/GG), R Alegado (UHM SOEST/OCN)

Funding agency: NIH NIGMS P20GM103516 Centers for Biomedical Research Excellence: UH Pacific

Center for Emerging Infectious Diseases Research Pilot Projects Project title: Host-microbiome response to bacterial sphingolipids

Project Period: 11/2014 – 11/2015 Amount of Award: \$49,973

PI: Rosanna Alegado

Funding agency: NSF OCE PA13-606

Project title: "OCE-RIG: Mapping microbial diversity and function underlying biogeochemical processes

in a Native Hawaiian fishpond" Project Period: 8/1/2014-7/31/2016

Amount of Award: \$99,960

PI: R Alegado

Funding agency: Alfred P. Sloan Foundation, Sloan Research Fellowship

Project title: Influence of bacteria on animal evolution

Project Period: 7/1/2014-6/30/2016

Amount of Award: \$50,000

PI: R Alegado

Funding agency: NOAA NMFS-PIRO-2014-2003960

Project title: The microbial impact on the speciation and distribution of iron and sulfur in the sediment of

He'eia Loko I'a

Project Period: 7/1/2014 – 6/30/2015

Amount of Award: \$14,876

PI and co-PIs: K Frank (UH), R Alegado (UH), K Ruttenberg (UH), M McManus (UH)

FIELD WORK

Extensive small boat operations and equipment deployments in inter- and sub-tidal coastal environments

2013- He'eia Fishpond, O'ahu, Hawai'i

2015-2017 Tutuila, American Samoa 2015 Big Island, Hawai'i

TEACHING

Full 3 credit courses (WI writing intensive, * formal evaluation score not available)

Course	Semester/Year	# students	Contribution	Evaluation
OCN320 (WI): Aquatic Pollution	Spring 2014	22	100%	4.22/5.00
	Spring 2015	25	100%	4.27/5.00
	Spring 2016	25	100%	4.50/5.00
	Spring 2018	21	100%	4.52/5.00
	Spring 2019	25	100%	4.80/5.00
	Spring 2020		100%	*
	Spring 2021	23	100%	*
OCN331: Living Resources of the Sea/ Mai ke	Fall 2015	43	50%	3.91/5.00
kai mai ke ola	Fall 2016	42	50%	4.57/5.00
	Spring 2018	45	50%, Lead	4.35/5.00
	Spring 2019	46	50%, Lead	4.67/5.00
	Spring 2020	54	50%, Lead	4.64/5.00
	Spring 2021	51	50%, Lead	*
OCN105: Sustainability in a	Fall 2016	112	Guest	4.50/5.00
Changing World	Spring 2017	124	Guest	4.43/5.00
	Fall 2017	111	10%	4.60/5.00
	Spring 2018	123	10%	4.42/5.00
	Fall 2018		10%	*
	Spring 2019		10%	*
	Fall 2019		10%	*
	Spring 2020		10%	*
OCN201 + Lab: SOEST Mauka to Makai	Summer 2018	13	11%	*
Summer Bridge	Summer 2019	11	11%	*

Guest lectures

Course	Semester/Year	# students
NSF URM: Environmental Biology in the Pacific Islands	Summer 2014	25
MICRO401: Marine Microbiology	Spring 2015	~60
	Fall 2015	~40
	Fall 2016	~40
	Spring 2017	~100
	Fall 2017	~40
OCN320: Aquatic Pollution	Spring 2017	~20
BIOL404: Advanced Topics in Marine Biology	Spring 2017	~20
Honors 101: Introduction to Research and Creative Work	Fall 2017	~20
ZOOL450: Natural History of the Hawaiian Islands	Spring 2018	~50
	Spring 2019	~50
	Spring 2020	~50
	Spring 2021	~50
PLAN 661: Collaboration between Sectors	Spring 2018	~20

Directed Reading/Seminars

Course (credits)	Semester/Year	# students	Contribution	Evaluation
OCN399: Geomicrobiology of He'eia Fishpond (1)	Spring 2015	2	100%	5.00/5.00
OCN399: Microbial Physiology (3)	Fall 2015	1	100%	5.00/5.00
OCN750: Contemporary Topics in	Fall 2016	4	50%, Lead	*
Coastal Microbial Oceanography (1)	Fall 2018	2	50%, Lead	*

UH graduate advisory committees 2016- Charles Aka Beebe (Advisor, MSc, candidate, Oc

2016-	Charles Aka Beebe (Advisor, MSc. candidate, Oceanography)
2017-2019;	Eric Tong (co-Thesis advisor with Rob Toonen, MSc. candidate, OCN)
2021	
2017-	W. Hoaka Thomas (Advisor, MSc. Candidate, Marine Bio)
2018-	Becca Lensing (Advisor, PhD candidate, Marine Biology)
2019-	Nalani Olguin (Advisor, MSc. Candidate, Marine Bio)
2020-	M. Ku'i Keliipuleole (Advisor, MSc. Candidate, Marine Bio)
2016-2018	Paula Moehlenkamp (co-Thesis advisor with Margaret McManus, MSc, Oceanography)
2015-	Narissa Spies, MSc (Dissertation Committee, PhD candidate, Zoology)
2018-	Zhenxin Sun (Dissertation Committee, PhD candidate, Microbiology)
2019-	Kalei Lum Ho, MSc (Dissertation Committee, PhD candidate, Education)
2019-	Andrian Gagigan, MSc (Comprehensive Exam Committee, Dissertation committee,
	PhD candidate, Oceanography)
2015-2020	Kaleonani Hurley, MSc (Dissertation Committee, PhD candidate, Marine Bio)
2020	Alanna Tseng (Dissertation Committee, PhD candidate, Molecular Biosciences &
	Bioengineering)
2019	Jamal Hassan (Dissertation Committee, PhD candidate, Mathematics)
2019	Bella Tobin (Dissertation Committee, PhD candidate, Mathematics)
2017-2019	Kelsea Hosoda, MSc (Dissertation Committee, PhD, Communication Studies)
2016-2019	Eric Koch (Dissertation Committee, PhD, Zoology)

2014-2017	Lydia Baker, MSc (Dissertation committee, PhD, Oceanography)
2019-2020	Eric Shimabukuro (Interim Advisory Committee, MSc. candidate, Oceanography)
2018-2020	Andreas S. Estrada (Interim Advisory Committee, MSc. candidate, Oceanography)
2018-2019	Jessica Bullington (Interim Advisory Committee, MSc. candidate, Oceanography)
2018	Gabrielle Weiss (Comprehensive Exam Committee, PhD candidate, Oceanography)
2015-2018	Morgan Linney (Interim Advisory Committee, MSc. candidate, Oceanography)
2014-2016	Emily Young (Interim Advisory Committee, MSc. candidate, Oceanography)
2014-2016	Jonathan Sharp (Interim Advisory Committee, MSc. candidate, Oceanography)
2014-2015	Claire Lager (Interim Advisory Committee, MSc. candidate, Marine Biol)
2013-2014	Victoria Sindorf (Interim Advisory Committee, MSc. candidate, Marine Biol)
2013-2014	Mackenzie Gerringer (Interim Advisory Committee, MSc. candidate, Marine Biol)
2013	Kaitlin Prugger (Interim Advisory Committee, MSc. candidate, Oceanography)

Postdoctoral fellows

Kiana Frank, PhD (currently Assistant Professor, UHM PBRC)
SOEST Young Investigator (2014-2016); NSF Postdoctoral Fellowship (2014-2016);
Kamehameha First Nations Fellow (2015-2016)
Daniel Amato (currently scientist at EnviroServices and Training Center)
Co-advised with Celia Smith (UHM Botany)

GES undergraduate advisees

Kelsey Nichols (Junior)
Han Quach (Junior)
Alex Quiroz (Senior)
Frankie Ramirez (Sophomore)
Arisa Barcinas (graduated 2020)
Melanie Keli'ipule'ole (graduated 2019)
No'eau Machado (graduated 2019)
Caleb Hsu (Leave of absence)
Kealohi Sabate (graduated 2019)
Alana Smutz (transferred out of UH)
Kammie Tavares (graduated 2018)
Sierrah Teramura (transferred out of UH)
Jennifer Wong-Ala (graduated 2017)
Taylor Anderson (switched advisors, graduated 2018)
Charles Aka Beebe (graduated 2016)
Tamara Allen (transferred out of GES)

Undergraduate and high school mentoring

hip)
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2016-2017 2015-2016	Nalani Olguin (UHM, Native Hawaiian Science & Engineering Mentoring Program) Charles Aka Beebe (UHM, GES Thesis, Hulili Career Development Grant, Louis Stokes Alliance for Minority Participation Program, C-MORE Scholar Intern)
2015-2016	Ryan Ueunten (UHM, GES Thesis)
2013-2015	Mikela Branco (UHM, Native Hawaiian Science & Engineering Mentoring Program, Hulili Career Development Grant, Ke Ola Mau Scholar, NSF Tribal REU)
2015	Leah Shizuru (Kapi'olani Community College, NSF Tribal REU)
2015	Kyle Yoshida (Harvard College, NSF Tribal REU)
2015	Hope Ushiroda-Garma (Kamehameha School, C-MORE Summer Fellowship)
2014-2015	Akamu Jaber (UHM, C-MORE Scholar)
2014	Damian Nakoa Farrant (Harvard University, C-MORE Summer Undergraduate)
2011-2013	Vika Betin (UC Berkeley, Undergraduate Honors Thesis, Rosehill Scholar)
2012	Rachel Hood (UC Berkeley, PhD candidate)
2011	Arielle Woznica (UC Berkeley, PhD candidate)
2010-2011	Sherri Huang (BS, Washington University of St. Louis, Post-baccalaureate)
2009	Rachel Ross (UC Berkeley, Undergraduate)
2008	Jenice Arevalo (CSU-Stanislaus, NSF-REU Undergraduate)
2005-2006	Grant Holz (Stanford University, Undergraduate)
2005	Shumin Tan (Stanford University School of Medicine, PhD candidate)
2004	Gwen Liu (Stanford University School of Medicine, PhD candidate)
2003 2002	Jaime McKinney (Xavier University OH, NSF-REU Undergraduate) Stacie Schmidt (Xavier University LA, NSF-REU Undergraduate)
2002	Stacle Schillid (Navier University LA, INST-REO Undergraduate)
Donautmantal	OUTREACH & SERVICE
Departmental 2020-	Fundraising Committee, Member
2014-	Global Environmental Science Major Steering Committee, Member
2014-	Global Environmental Science Major, Undergraduate Advisor
2020-	Development and Fundraising Committee, Member
2017	Strategic Plan, Research Coordinator
	Strategie i ian, research coordinator
2017	"Hawaiian Fishponds" Interview on ThinkTech Hawai'i Show. Research at UH
2017 2015	"Hawaiian Fishponds" Interview on ThinkTech Hawai'i Show, Research at UH C-MORE NSF Science and Technology Center Review, Year 9
2015	C-MORE NSF Science and Technology Center Review, Year 9
	C-MORE NSF Science and Technology Center Review, Year 9 UHM Sea Grant College Program External Review Site Visit, Presentation
2015 2014	C-MORE NSF Science and Technology Center Review, Year 9
2015 2014 2014	C-MORE NSF Science and Technology Center Review, Year 9 UHM Sea Grant College Program External Review Site Visit, Presentation C-MORE NSF STC Review, Year 8. Washington D.C, Presentation
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2012 2010	
2013, 2018	Sea Grant Ka Pili Kai Magazine, Contributor
2015	L. Stephen Lau Water Research Endowed Scholarship, Review Committee
2013	Sea Grant Training Academy, Participant
University	
2013-	Kuali'i Native Hawaiian Advisory Council, SOEST Representative
2014, 2016-	Lā Pūkoʻa: promoting Native Hawaiian SOEST programs at HI legislature
2020 -	UH Fall Planning Working Teams, Health and Wellness Team
2020 -	Search Advisory Committee, Dean of School of Nursing and Dental Health
2019-2020	Search Advisory Committee, Dean of William S. Richardson School of Law
2017-2020	Search Advisory Committee, Dean of Hawai'inuiakea School of Hawaiian
2017-2010	Knowledge
2017	Search Advisory Committee, UHM Native Hawaiian Program Officer
2015-2016	Search Advisory Committee, Dean of College of Natural Sciences
2015-2016	UH Strategic Plan, Native Hawaiian Task Force
2017-	Kūlana Noi 'i: Guidance Process for Equitable Community Embbeded Science
2020	Sea Grant Graduate Fellow Training
2018, 2019	UHM Center for Teaching Excellence Series "Why Place-based Research Matters", Co-
,	Coordinator
2019	SACNAS National Diversity STEM Meeting Workshop "Luna'ikehala"
2019	National Academies Keck Futures Iniative Co-Production Workshop
2019	UH Hilo Tropical Conservation Biology and Environmental Science Program Workshop,
	co-organized with KUA and Kamehameha Schools
2019	UH Biocultural Initiative of the Pacific Seminar
2018	Sea Grant Principal Investigator Training
2018	Hawai'i Conservation Conference Forum
2018	University of Hawai'i EPSCoR ('Ike Wai) Workshop
2018	Sea Grant Graduate Trainee Workshop
2017	He'eia Fishpond Researcher Workshop
2018-	Sea Grant Center of Excellence in Integrated Knowledge Systems
2019	Science of the Sea, "Adapting Culture to Climate Change", Interview
2019-2020	Sciences and the Sacred: Conversations on Maunakea Seminar Series, Coordinator
	Co-sponsors: UH Mānoa Provost's Office, Hawai'i Sea Grant Center of Excellence in
• • • •	Integrated Knowledge Systems, and the Biocultural Initiative of the Pacific
2018	Sea Grant Celebrates 50: A Ho'olaule'a of Knowledges, Organizing Committee
2017-	Lāhui Hawai'i Research Center, Faculty Advisory Board
2017, 2019	Office of Hawaiian Affairs STEM Scholarship Committee
2018	SENCER 2nd Annual Grand Challenges Summer Institute (GC18) Grand Challenges of
2015	Mālama 'Āina and Conservation, Plenary Panelist
2017	5 th Annual Hawai'i Sustainability in Higher Education Summit <i>Meeting of Wisdoms</i> ,
2017	Panelist
2017	UHM Center for Teaching Excellence, "Connecting Science and Culture", Panelist
2016	UHM Graduate Women in Science Luncheon Series, Invited Speaker
2016	UHM Biocultural Initiative Panel, "Lands, Seas and Skies— Conversations with
2014	Science, Tradition and the Sacred", Moderator
2014-	Nā Pua No eau Center for Gifted and Talented Hawaiian Children, Faculty collaborator
2015	Malama Kanaloa, Host lab
2014	STEM Summer Institute, Host lab
2014	EH&S BSP2/Permitting Steering Committee, Ad hoc member

2013-	Kamehameha Schools
2014-2019	High School Science Fair, Judge
2016	High School Marine Science class, Guest lecturer
2015	Summer Science Institute, Host lab
2013	Biotechnology Advisory Committee, Member
2013-	Heʻeia watershed (Koʻolaupoko, Oʻahu)
2013-	Na Kilo Honua o He'eia— He'eia Coastal Ocean Observing System
2015	(nakilohonuaoheeia.org)
2016-	He'eia Science to Management Symposium, Participant/Session Moderator
2015	NOAA Hawai'i Sentinel Site Science to Management Symposium, Planning Group
2014-	Paepae o He'eia (community stewards of the He'eia Fishpond)
2014-	Science Night, Organizer and Speaker
2016-2019	Research Coordinator
2010-2017	Science Communicators 'Ohana, "From Pond to Press: the Uniqueness of Science
2019	Communication Within & About Hawiian Fishponds"
2014-	Kua'āina Ulu 'Auamo (community-based advocacy organization)
2020	Hui Mālama Loko I'a/Indigenous Aquaculture Hub, Logistics Team
2019	Hui Mālama Loko I'a Annual Meeting, Facilitation Team
2019	Hui Mālama Loko I a Alinuai Meeting, Facilitation Team Hui Mālama Loko I a Sensor Workshop, Participant
2017	Research Advisory Committee, Member
2014	Hui Mālama Loko I'a Water Quality Workshop, Presenter
2014	Loea Limu (Gathering of Traditional Limu Experts), Participant
2016 -	'Aimalama (Kaulana Mahina traditional practice, Kumu: Kalei Nu'uhiwa)
2016	Koʻolaupoko Training Workshop, Invited Participant
2018	Papa Ho'onui 'Ike – Teacher Training
2017-	City and County of Honolulu Climate Change Commission
2021	Native Hawaiian Law Training Panel
2020	Urban Sustainability Directors Network, Equity in action Peer Learning Group
	Session – Cultural Knowledge and Indigenous Ways of Knowing in Sustainability
2020 2021	and Climate Action Work, Presentation
2020-2021	Vice Chair
2019	Interview, "Cost of Climate Change in Hawai'i" Hawai'i Business Magazine
2017-	Hawai'i Community Foundation, Medical Research Advisory Committee
2019-	State of Hawai'i Department of Agriculture, Advisory Subcommittee on Bacteria
2020-	John A. Burns School of Medicine Tropical Medicine Clinical Labortatory, Co-Founder
2020	Interview, Bytemarks Cafe Epidsode 613: COVID-19 Testing
2019	"Kapu Aloha: Maunakea & the Thirty Meter Telescope" Panel, Native Hawaiian Law
2010	Training for Federal Agencies
2019	RAMSAR World Wetlands Day Climate Change Panel, Moderator
2018	Interview, Hawai'i Business News "Native Hawaiian Culture is Science", April 2018
2017	March for Science Hawai'i, Speaker Organizing Committee
2011-2015	Native Hawaiian Health Care Systems Institutional Review Board
2013-2015	Standing member
2011-2013	Ad hoc reviewer
2010	Kaho'olawe Island Reserve Commission, Ad hoc consultant

National/International

2014-	National Science Foundation, <i>Ad hoc</i> BIO-IOS and DEB grant reviewer
2014-	International Journal of Systematic and Evolutionary Microbiology, Ad hoc reviewer
2014-	Environmental Microbiology and Environmental Microbiology Reports, Ad hoc
	reviewer

2016-	7 th ASM Beneficial Microbes Meeting, Organizing committee
2019-	mSystems ASM Journal, Editor
2021	Asian American Pacific Islander in Geosciences, Roundtable panel: Intersectionality and Agency in Geosciences
2019	Ocean Obs 2019, Breaking Waves, Breaking Barriers: Celebrating Women's Instrumental Role in Ocean Science, Leaderhsip and Mentorship, Panel Host
2019	Society for the Advancement of Chicanos and Native Americans in Science 2019 National Diveristy in STEM Annual Meeting, Cultural Advisory Committee 1st Annual SACNAS High School STEM day, Organizing committee
2019	NPR Science Friday Interview, "The Planned Thirty Meter Telescope Raises Ethical Concerns" (aired August 2, 2019)
2018	Science Magazine, Ad hoc reviewer
2017	Featured on Colors of STEM, I am STEM blog (http://colorsofstem.org/ralegado/)
2017	ASLO Aquatic Sciences Meeting Art Exhibition, Contributor
	ASLO Aquatic Sciences Meeting "Flushing our Future" Town Hall, co-organizer
2017	4 th U.S. National Climate Assessment report, Hawai'i and US-Affiliated Pacific Islands,
	Technical Contributor
2017	International Choanoflagellate Workshop, Session Chair
2017	Hūlili Journal, Ad hoc reviewer
2016	Participant, Documentary "Ces microbes qui nous gouvernent". Director: Stephane Begoin, ARTE
2016	Highlighted in PNAS: Ravindran, Sandeep. "Inner Workings: Tiny organisms could reveal how animals evolved." <i>Proceedings of the National Academy of Sciences</i> 113.46 (2016): 12889-12890.
2016	American Indian Science and Engineering Society Annual Meeting, Featured Video Highlight (https://vimeo.com/190948503)