

# Demian Alexander Willette

Assistant Professor of Biology

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## EDUCATION:

B.S., 1999-2003	Biology, Iowa State University, Ames, IA
M.S., 2003-2006	Biology, California State University, Los Angeles, Los Angeles, CA
Ph.D., 2006-2010	Environmental Health Sciences, University of California, Los Angeles, CA
Postdoc, 2010-2012	Fisheries/Genetics, Old Dominion University, Norfolk, VA
Postdoc, 2012-2013	Population Genetics, University of California, Los Angeles, CA

## PROFESSIONAL HISTORY:

Associate Professor, Loyola Marymount University	2022 – Present
Assistant Professor, Loyola Marymount University	2018 – 2022
Assistant Project Scientist II, UC Los Angeles	2015 – 2018
Instructor, Loyola Marymount University, Los Angeles	2015 – 2018
Adjunct teaching faculty, UC Los Angeles	2013 – 2016
Adjunct teaching faculty, Cal State LA	2009 – 2016
Adjunct teaching faculty, Loyola Marymount University, Los Angeles	2013 – 2015

## CURRENT AND RECENT GRANT SUPPORT:

<b>\$833,495</b>	<b>Total grant support since appointment in 2018</b>
2021-2022	National Science Foundation Convergence Accelerator Grant, PI
2021	LMU Seaver College Summer Community Service in Los Angeles internal grant. PI
2019-2022	Borchard Foundation International Education Center grant, PI
2019-2021	Responsible Sourcing Program, Santa Monica Seafood Foundation, PI
2019	LMU Biology Department Kadner-Pitts Grant, PI.
2018	LMU Seaver College Summer Community Service in Los Angeles internal grant. PI.
2017	LMU Seaver College Summer Continuing Faculty Research internal grant. PI.
2017-2018	United States Fulbright Global Scholar Award, PI
2016-2017	Sol Leshin Program for BGU-UCLA Academic Cooperation Grant. co-PI.
2016-2017	US National Park Service (US NPS), Risk Management of Invasive Species. PI.
2016	LMU Seaver College Summer Community Service at Ascot Hills Park internal grant. PI.
2015-2016	Sol Leshin Program for BGU-UCLA Academic Cooperation Grant. Co-PI.
2014-2015	US NPS, Invasive Mediterranean seagrass in the Virgin Island National Park Grant. PI.
2014	WE Keck Foundation Research Gift.

## PUBLICATION METRICS:

\*Metrics as of September 2022

Peer-reviewed publications: **46**

Citations: **1,127**

h-index: **18**

## PEER-REVIEWED PUBLICATIONS

\* indicates undergraduate co-author, \*\* graduate student co-author

46. Wilson, K, **Willette DA**. (2022) Valuation of ecosystem services of a nascent urban park in east Los Angeles. **Urban Ecosystems**, <https://doi.org/10.1007/s11252-022-01267-y>
45. Kuzmenko T, Raetz-Vigon J\*, **Willette DA**. (2022) At home yogurt-making to investigate microbiology concepts: A remote biology laboratory. **American Biology Teacher**, 84, 290-296.
44. Winters G, Teicheberg M, Reuter H, Viana IG, **Willette DA**. (2022) Seagrasses under times of change – Editorial. **Frontiers in Marine Science**, <https://doi.org/10.3389/fpls.2022.870478>
43. Gleadall I, Sauer WHH, Moustahfid H, Ames CL, **Willette DA**. (2022) Sustainable seafood using octopus as a model. **Ocean Monthly**.
42. Forero GN, Escardo ADS, Cordova EA, Andrade S, **Willette DA**. (2021) Transboundary marine conservation and fisheries management in Ecuador and Northern Peru. In **Challenges in Tropical Coastal Zone Management: a global review**. Editors: Matthias Wolff, Hugh Govan and Sebastian Ferse, Accepted.
41. **Willette DA**, Navarrete-Forero G, Gold Z, Lizano AMD, Gonzalez-Smith L\*, Sotil G. (2021) Characterizing industrial and artisanal fishing vessel catch composition using environmental DNA and satellite-based tracking data. **Foods**, 10, 1425. <https://doi.org/10.3390/foods10061425>
40. **Willette DA**, Esteves SC\*, Fitzpatrick B, Smith ML\*, Wilson K\*, Yuan X\* (2021). The last mile challenge: Certified seafood and federal labeling laws out of sync at the end of the supply chain in Los Angeles, CA. **Marine Policy**, 125, 104380. <https://doi.org/10.1016/j.marpol.2020.104380>
39. Kuzmenko T, Sharma A, **Willette DA**. (2021) Plant-derived drug discovery in an introductory biology laboratory course. **American Biology Teacher**, 4, 214-221. <https://doi.org/10.1525/abt.2021.83.4.214>
38. Smulders FOH, Chiquillo KL\*\*, **Willette DA**, Barber PH, Christianen MJA. (2020) Inconclusive evidence of sexual reproduction of invasive *Halophila stipulacea*: a new field guide to encourage investigation of flowers and fruit production throughout its invasive range. **Botanica Marina**, 63, pp.537-540. <https://doi.org/10.1515/bot-2020-0046>
37. **Willette DA**, Chiquillo KL\*\*, Cross C\*, Fong P, Kelley T, Toline CA, Zweng R\*\*, Muthukrishnan R. (2020) Growth and recovery after small-scale disturbance of a rapidly-expanding invasive seagrass in St. John, U.S., Virgin Islands. **Journal of Experimental Marine Biology and Ecology**, 523: 151265. <https://doi.org/10.1016/j.jembe.2019.151265>
36. Muthukrishnan R, Chiquillo KL\*\*, Cross C\*, Fong P, Kelley T, Toline CA, Zweng R, **Willette DA**. (2020) Little giants: a rapidly invading seagrass alters ecosystem functioning relative to native foundation species. **Marine Biology** 167: 81. <https://doi.org/10.1007/s00227-020-03689-8>

35. Gamliel I, Buba Y, Guy-Haim T, Garval T, **Willette DA**, Rilov G, Belmaker J. (2020) Incorporating physiology into species distribution models moderates the projected impact of warming on selected Mediterranean marine species. **Ecography**, 43: 1090-1106. <https://doi.org/10.1111/ecog.04423>
34. Deen SH\*, Kuzmenko T, Asghari H, **Willette DA**. (2020) Investigating Los Angeles' urban roadway network from a biologically-formed perspective. **PeerJ**, e8238. <https://doi.org/10.7717/peerj.8238>
33. Winters G, Beer S, **Willette DA**, Viana IG, Chiquillo KL\*\*, Beca-Carretero P, Villamayor B, Azcarate-Garcia T, Shem-Tov R, Mwabvi B, Migliore L, Rotini A, Oscar MA, Belmaker J, Gamliel I, Alexandre A, Engelen A, Procaccini P, Rilov G. (2020) The tropical seagrass *Halophila stipulacea*: Reviewing what we know from its native and invasive habitats, alongside identifying knowledge gaps. **Frontiers in Marine Science**. 10.3389/fmars.2020.00300 <https://doi.org/10.3389/fmars.2020.00300>
32. Griffiths SP, Leadbitter D, **Willette D**, Kaymaram F, Moazzam M. (2020) Longtail tuna, *Thunnus tonggol* (Bleeker, 1851): A global review of population dynamics ecology, fisheries, and consideration for future conservation and management. **Reviews in Fish Biology and Fisheries**, doi.org/10.1007/s11160-019-09589-5
31. Chan AFO, Luczon AU, Fontanilla IKC, Ong PS, Santos MD, **Willette DA**, Quiland JP. (2019) DNA barcoding cannot discriminate between *Sardinella tawilis* and *S. hualiensis*. **Mitochondrial DNA Part B**, 4: 2499-2503. <https://doi.org/10.1080/23802359.2019.1638839>
30. Chiquillo KL\*\*, Barber, PH, **Willette DA**. (2019) Fruits and flowers of the invasive seagrass *Halophila stipulacea* in the Caribbean Sea. **Botanica Marina**, doi.org/10.1515/bot-2018-0052
29. **Willette DA**. (2019) Competition under the Sea: Exploring the competitive interaction between native and non-native seagrasses in the Caribbean. SimBio FMN, **QUBES Educational Resources**. doi:10.25334/Q4TM9D
28. **Willette DA**. (2019) The tale of two fish: A case study on vicariance and allopatric speciation. SimBio FMN, **QUBES Educational Resources**. doi:10.25334/Q4ZB3M
27. Viana IG, Siriwardane-de Zoysa R, **Willette DA**, Gillis LG. (2019) Exploring how non-native seagrass species could provide essential ecosystems services: A perspective on the highly invasive seagrass *Halophila stipulacea* in the Caribbean Sea. **Biological Invasions**, 21:1461-1472. <https://doi.org/10.1007/s10530-019-01924-y>
26. **Willette DA**, Cheng SH, Greenberg JA, Barber PH. (2018) Rethinking solutions to seafood fraud. **Frontiers in Ecology and the Environment**, 16: 499-500. <https://doi.org/10.1002/fee.1964>
25. **Willette DA** and Cheng SH. (2018) Delivering on seafood traceability under the new U.S. import monitoring program. **Ambio**, 46: 25-30. <https://doi.org/10.1007/s13280-017-0936-4>
24. **Willette DA**, Simmonds SE, Cheng SH, Esteves S\*, Kane TL, Neutzel H, Pilaud N\*,

- Rachmawati R, Barber PH. (2017) Using DNA barcoding to track seafood mislabeling in Los Angeles restaurants. **Conservation Biology**, doi:10.1111/cobi.12888.
23. Ith S\*\*, Bumrungrersri S, Thomas NM, Bates PJJ, **Willette DA**, Khan FAA, Wonglapsuwan M, Soisook P, Maryanto I, Huang JCC, Furey NM. (2016) Geographic variation of *Rhinolophus affinis* (Chiroptera: Rhinolophidae) in the Sundaic Subregion of Southeast Asia, including the Malay Peninsula, Borneo and Sumatra. **Acta Chiropterologica**, 18: 141-161. <https://doi.org/10.3161/15081109ACC2016.18.1.006>
22. **Willette DA**, Santos MD, Leadbitter D. (2015) Longtail tuna *Thunnus tonggol* (Bleeker, 1851) shows an atypical partitioning into multiple stocks across the Indo-Pacific based on mitochondrial DNA. **Journal of Applied Ichthyology**, 32: 318-323. <https://doi.org/10.1111/jai.12991>
21. **Willette DA**, Iniguez AR\*\*, Kupriyanova EK, Starger C, Varman T, Toda AH, Maralit BA, Barber PH. (2015) Christmas tree worms of Indo-Pacific coral reefs: untangling the *Spirobranchus corniculatus* complex, **Coral Reefs**, 34: 899-904. <https://doi.org/10.1007/s00338-015-1294-y>
20. Steiner SCC and **Willette DA**. (2015) Dimming sand halos on coral reefs in Dominica: new expansion corridors for the invasive seagrass *Halophila stipulacea*. **Reef Encounters**, 41:43-45.
19. Steiner SCC and **Willette DA**. (2015) *Halophila stipulacea* (Hydrochoritaceae, Angiospermae) is changing the seagrass landscape in the Commonwealth of Dominica, Lesser Antilles. **Caribbean Naturalist**, 22:1-19. <https://doi.org/10.3389/fpls.2018.00950>
18. Sienes PM\*\*, **Willette DA**, Romena L, Alvior C\*\*, and Estacion J. (2014) Biodiversity and the discovery of a cryptic species within a valued crab fishery in the Philippines. **Philippine Science Letters**, 7 (2): 317-323.
17. **Willette DA** and Padin JIM\*\*. (2014) Identifying the biodiversity of marine jacks (Carangidae) in the freshwater Taal Lake, Philippines using phenotypic features and mitochondrial DNA. **Journal of Applied Ichthyology**, 30: 490-495. <https://doi.org/10.1111/jai.12411>
16. **Willette DA**, Chaifour J, Debrot AO, Engel S, Miller J, Oxenford HA, Short FT, Steiner SCC, and Vedio F. (2014) Continued expansion of the trans-Atlantic invasive marine angiosperm *Halophila stipulacea* in the Eastern Caribbean. **Aquatic Botany**, 112: 98-102. <https://doi.org/10.1016/j.aquabot.2013.10.001>
15. **Willette DA**, Carpenter KE, and Santos MD. (2014) Evolution of the freshwater sardinella, *Sardinella tawilis* (Clupeiformes: Clupeidae), in Lake Taal, Philippines and phylogeography of its sister-species, *Sardinella hualiensis*. **Bulletin of Marine Science**, 90: 455-470. <https://doi.org/10.5343/bms.2013.1010>
14. Thomas RC Jr\*\*, **Willette DA**, Carpenter KE, and Santos MD. (2014) Hidden diversity in sardines: Genetic and morphological evidence for cryptic species in the Goldstripe sardinella, *Sardinella gibbosa* (Bleeker 1849). **PLoS One**, 9(1): e84719. <https://doi.org/10.1371/journal.pone.0084719>
13. Rogers C, **Willette DA**, Miller J. (2014) Rapidly spreading seagrass invades the Caribbean with unknown ecological consequences. **Frontiers in Ecology and the Environment**, 12:546-547.

<http://doi:10.1890/14.WB.016>

12. **Willette DA**, Allendorf FW, Barber PH, Barshis DJ, Carpenter KE, Cresko WA, Fernandez-Silva I, Matz MV, Meyer M, Santos MD, Seeb LW and Seeb JE. (2014) So, you want to use next-generation sequencing in marine systems? **Bulletin of Marine Science**, 90: 79-122. <https://doi.org/10.5343/bms.2013.1008>
11. Barber PH, Ablan M, Ambariyanto, Berlinck R, Cahyani D, Crandall E, Gotanco R, Junio-Menez A, Mahardika N, Shankar K, Starger C, Toha H, Wahyu A, and **Willette DA**. (2014) Advancing biodiversity research in developing countries: the need for a new paradigm. **Bulletin of Marine Science**, 90: 187-210 <https://doi.org/10.5343/bms.2012.1108>
10. **Willette DA**. (2013) Increasing the conservation yield from molecular fisheries research in the Philippines. **Current Conservation**, 7(2): 7-15.
9. Maralit BA\*\*, Aguila RD\*\*, Ventolero MFH\*\*, Perez SKL, **Willette DA**, and Santos MD. (2013) Detection of mislabeled commercial fishery products in the Philippines using DNA barcodes and its implication to food traceability and safety, **Journal of Food Control**, 33: 119-125. <https://doi.org/10.1016/j.foodcont.2013.02.018>
8. **Willette DA** and Santos MD. (2013) Correcting the widespread misidentifications of a highly abundant and commercially important sardine species *Sardinella lemuru* in the Philippines. **Journal of Applied Ichthyology**, 29: 881-885. <https://doi.org/10.1111/jai.12051>
7. **Willette DA** and Ambrose RF. (2012) Effects of the invasive seagrass *Halophila stipulacea* on the native seagrass and fish community in the Eastern Caribbean. **Aquatic Botany**, 103: 74-82. <https://doi.org/10.1016/j.aquabot.2012.06.007>
6. **Willette DA**, Santos MD, and Aragon MA. (2011) First report of the Taiwan sardinella *Sardinella hualiensis* (Clupeiformes: Clupeidae) in the Philippines, **Journal of Fish Biology**, 79: 2087-2094. <https://doi.org/10.1111/j.1095-8649.2011.03133.x>
5. **Willette DA**, Bognot EDC, Mutia TM, and Santos MD. (2011) Biology and Ecology of sardines in the Philippines: A review. **NFRDI Technical Paper Series**, Vol 13 (1), August 2011.
4. Steiner SCC and **Willette DA** (2010) The distribution and size of benthic marine habitats in Dominica, Lesser Antilles. **Revista de Biologia Tropical**, 58 (2): 589-602.
3. Steiner SCC, MacFarlane KJ\*, Price LM\*, and **Willette DA** (2010) The distribution of seagrasses in Dominica, Lesser Antilles. **Revista de Biologia Tropical**, 58 (3) 89-98.
2. **Willette DA** and Ambrose RF (2009) The distribution and expansion of the invasive seagrass *Halophila stipulacea* in Dominica, West Indies, with a preliminary report from St. Lucia. **Aquatic Botany**, 91: 137-142. <https://doi.org/10.1016/j.aquabot.2009.04.001>
1. **Willette DA**, Janzen FJ, and Tucker JK (2005) Linking climate and physiology at the population level for a key life-history stage of turtles. **Canadian Journal of Zoology**, 83: 845-850. <https://doi.org/10.1139/z05-078>

## UNDERGRADUATE RESEARCH ADVISEES:

1. Sofia Esteves, Biochemistry B.S., LMU, 2015-2018, Graduated  
Project – *Accuracy of certified seafood in Los Angeles*; three presentations, two publications
2. Nicholas Pilaud, Environmental Science B.S., LMU, 2015-2018, Graduated  
Project – *Assessing brush piles to mitigate temperature for habitat enhancement*; three local and regional presentations, one publication
3. Candice Cross, Biology B.S., LMU, 2016-2019, Senior Capstone, Graduated  
Project – *Impact of invasive *Halophila stipulacea* on sedimentary carbon stocks in Bonaire*, five local and international presentations, two publications
4. Jacquelyn Galvez, Biology B.S., LMU, 2016-2019, Senior Capstone, Graduated  
Project – *Linking climate & seed germination rate for threatened California Black Walnut Tree*, three local and regional presentations
5. Sophie Deen, Health & Human Science B.S., LMU, 2016-2019, Graduated  
Project – *Investigating Los Angeles' urban roadway network from a biologically formed perspective*, four presentations, one publication
6. Sarah Shapiro, Biology B.S., LMU, 2016-2017, Graduated  
Project – *Ornithological conservation in Ascot Hills Park*, one presentation
7. Quinn Landers, Biology B.S., LMU, 2016-2017, Switched major and Graduated
8. Sarah Bruce-Eisen, Biology B.S., LMU, 2017-2018, Senior Capstone, Graduated  
Project – *Mosquito larvae population density in the Ballona Freshwater Marsh*, one presentation
9. Alexis Isaev, Biology B.S., LMU, 2017-2018, Senior Capstone, Graduated  
Project – *Genetic diet analysis of coyote scat*, one presentation
10. Armaan Zare, Biology B.S., LMU, 2017-2018, Senior Capstone, Graduated  
Project – *Genetic diet analysis of coyote scat*, one presentation
11. Grace Riggs, Biology B.S., LMU, 2017-2019, Graduated  
Project – *Molecular identification of prey in coyote diets in Long Beach*, one presentation
12. Kesterlyn Wilson, Biology B.S., LMU, 2017-2019, Senior Capstone, Graduated  
Project – *Valuation of ecosystem services of a nascent urban park in east Los Angeles*, six presentations, one publication + one currently in review
13. Sydney Lee, Biology B.S., LMU, 2017-2019, Senior Capstone, Graduated  
Project – *Linking climate & seed germination rate for threatened California Black Walnut Tree*
14. Matthew Sheridan, Biology B.S., LMU, 2018-2019, Senior Capstone, Graduated  
Project – *Molecular identification of prey in coyote diets in Long Beach*, one presentation
15. Mary Balducci, Biology B.S., LMU, 2018-2019, Senior Capstone, Graduated  
Project – *The Los Angeles Seafood Monitoring Project*
16. Xiaoya Yuan, Biology, B.S., LMU, 2018-2019, Transferred  
Project – *Certified seafood & federal labeling laws out of sync at the end of the supply chain in Los Angeles*, one publication
17. Fatimah Alghamen Biology, B.S., LMU, 2019, Summer research intern  
Project – *Accuracy of certified seafood in Los Angeles*
18. Marie Smith, Biology B.S., LMU, 2019, Senior Capstone, Graduated  
Project – *Verifying species identification of *Zostera marina* and *Zostera pacifica* seagrasses*, one publication
19. Anna Horvath, Biology B.S., LMU, 2018-2021, Graduated  
Project – *Cracking the mystery behind germination rates of *Juglans californica* at different cold stratification temperatures*, two presentations
20. Leonard Gonzalez-Smith, Biology B.S., LMU, 2018-2021, Graduated  
Project – *Cracking the mystery behind germination rates of *Juglans californica* at different cold stratification temperatures*, plus other projects, four presentations, one publication

21. Stacy Lam, Biology B.S., LMU, 2018-2021, Graduated.  
Project – *Managing invasive plants and enhancing native species survival via grassland mowing*
22. Evan Shen, Biology B.S., LMU, 2019-2021  
Project – *Seed germination rates under temperatures of the Northern California black walnut*
23. Evie Chokler, Chemistry, B.S., LMU, 2019-2020, 2021-2022  
Project – *Assessing tumor suppression potential of Chinese motherwort plant extract, one presentation*
24. Rukhbaan Hayer, Biochemistry B.S., LMU, 2019 – present  
Project – *A case for further research of the Chumash medicinal system: physiological, ecological and cultural value, three presentations*  
Project - *Identifying an effective and accessible instrument for passive eDNA collection. One presentation*
25. Amberly Hershewe, Biology B.S., LMU, 2020 – 2022  
Project – *Genetic & morphometric assessment testing reveals mistaken identity of introduced species in tree restoration, one presentation*
26. Eric Scharberg, Environmental Science, B.S., LMU, 2021-2022  
Project – *Relationship between flammability and leaf functional traits of native and non-native plants species in a Coastal Sage Scrub ecosystem, one presentation*

### **GRADUATE RESEARCH ADVISEES:**

1. Kelcie Chiquillo, Doctoral degree, Ecology, UCLA, 2016-2021, Graduated  
Dissertation title – *Understanding the successful invasion of *Halophila stipulacea*, six presentation, four publications + one in review*
2. Antonio Farchette, M.Sc., Marine Biology, Univ. of the Virgin Islands, 2019-2020, Graduated  
Thesis title – *Growth and competition of the introduced seagrass *Halophila stipulacea*, two presentations*
3. Kyle Jerris, M.Sc., Marine Biology, Univ. of the Virgin Islands, 2017-2019, Graduated  
Thesis title – *The effects of Hurricane Irma and Maria on the invasion of the seagrass *Halophila stipulacea* on St. Thomas, United States Virgin Islands, two presentations*
4. Kevin Labrador, M.Sc. Marine Biology, Univ. of the Philippines, 2018-2019, Graduated  
Thesis title – *Population genetics of *Bali sardinella* along the northern coast of Mindanao*
5. Max Hushahn, M.E. Electrical Engineering, LMU, 2019, Graduated  
Thesis title – *Multi-probe photonic time-stretch optical coherence tomography*
6. Kelsey Vaughn, M.Sc. Marine Biology, Univ. of the Virgin Islands, 2020-2021, Graduated  
Thesis title – *Impact of *Halophila stipulacea* shoot density and water depth on sediment carbon density in St. Thomas, USVI, one presentation*
7. Sophie Costa, M.Sc. Marine Biology, Univ. of the Virgin Islands, 2020-2022, Graduated  
Thesis title – *Evaluating the impact of non-native seagrass *Halophila stipulacea* on growth and survival of juvenile yellowtail snapper *Ocyurus chrysurus* in St. Thomas, USVI*

### **ORAL PRESENTATIONS:**

- Willette, DA.** Et al. ‘Seafood Tracer: Co-designing a new traceability tool for validating octopus identity and origin’
1. Sustainable Fisheries Partnership Roundtable, Seafood Expo 2022, Boston, MA March 13, 2022
  2. National Fisheries Institute Board, Seafood Expo 2022, Boston, MA, March 14, 2022
  3. AOAC Mid-year Conference, Gaithersburg, MD, March 15, 2022
  4. Future of Food Authenticity Methods Workshop, Gaithersburg, MD, March 18, 2022
  5. Office of Marine Conservation, U.S. State Department, Washington DC, August 4, 2022
  6. AOAC Annual Meeting, Future Technology Session, Scottsdale, AZ, August 28, 2022

**Willette** DA. ‘Seagrass ecosystems and their significance’

1. Blue BioTechnology Hybrid training School, Limassol, Cyprus, May 2, 2022

**Willette**, DA ‘Leveraging molecular genetics tools to modernize seafood traceability at multiple levels of the global supply chain’

1. 5<sup>th</sup> Environmental DNA Technical Exchange Workshop, Virtual, October 19-21, 2021
2. Pacific Fisheries Technologists Conference, Long Beach, CA, March 1-4, 2020

**Willette**, DA, et al. The last mile challenge: Certified seafood and federal labeling laws out of sync at the end of the supply chain in Los Angeles California

1. Kadner-Pitts Seminar, LMU Biology Department, January 22, 2021
2. Western Society of Naturalists Virtual Conference, November 5-8, 2020

**Willette**, DA ‘Seafood, City Streets, & Slime Mold: Applying emerging technologies in applied ecology research’

1. LMU Imagine If Conference, November 8, 2019

**Willette**, DA ‘Resilience to disturbance and rapid fragment growth facilitate the spread of an invasive seagrass’

1. Aquatic Sciences ASLO Conference, San Juan, Puerto Rico, 2019
2. LMU Junior Faculty Seminar Series, February 8, 2019

**Willette**, DA ‘Leveraging actionable science to help combat illegal fishing’

1. LMU Junior Faculty Seminar Series, February 8, 2019
2. Western Society of Naturalists, Pasadena, CA, November 19, 2017
3. California Association of Criminalists, Newport Beach, CA, September 26-27, 2017
4. Escuela Superior Politenica del Litoral, August 2, 2017
5. U.S. Embassy, Manila, Philippines, June 15, 2017
6. University of the Philippines Diliman, Quezon City, June 14, 2017

**Willette**, DA ‘Urban Land, Urban Sea: Applied Research in Los Angeles.

1. CUREs Sustainability Lecture Series, LMU, February 28, 2018
2. Fulbright Scholar Day, Loyola Marymount University, March 9, 2017

**Willette**, D.A. “Invasiveness of *Halophila stipulacea* in the Caribbean”.

1. Seagrass workshop, InterUniversity Institute, Eilat, Israel, May 25, 2022
2. Seagrass workshop, InterUniversity Institute, Eilat, Israel, May 31, 2021
3. Seagrass workshop, InterUniversity Institute, Eilat, Israel, June 4, 2019
4. Halophila stipulacea Webinar, Univ of the Virgin Islands, December 6, 2018
5. Seagrass workshop, InterUniversity Institute, Eilat, Israel, May 30, 2018
6. Seagrass workshop, InterUniversity Institute, Eilat, Israel, May 19, 2017
7. EuroMarine workshop, InterUniversity Institute, Eilat, Israel, July 4, 2016

**Willette**, D.A. “Investigating top-down and bottom-up ecological change in threatened and exploited marine populations”.

1. Loyola Marymount University, Los Angeles, Feb 12, 2016

**Willette**, D.A. et al “Ahead of the Spread: Predicting the introduction and impact of invasive species



before they arrive”.

1. University of the Virgin Islands, St. Thomas, July 21<sup>st</sup>, 2014
2. Western Society of Naturalists Conference, Oxnard, CA Nov 7-10<sup>th</sup>, 2013

**Willette**, D.A. et al “Centrifugal speciation and the origin of a freshwater sardine”.

1. Western Society of Naturalists Conference, Seaside, CA, Nov 8-11<sup>th</sup>, 2012

**Willette**, D.A. et al “Towards a sustainable fishery: Molecular genetics approaches to sardine management in the Philippines”.

1. Pan-Pacific Advanced Studies Institute, Dumaguete, Philippines, July 25<sup>th</sup>, 2012
2. Nha Trang University, Nha Trang, Vietnam, April 6, 2012
3. University of the Philippines, Quezon City, Philippines, December 5, 2011
4. Philippine Association of Marine Science Conference, Tagaytay, Philippines, Oct 20, 2011
5. Conservation International – Philippines, Sardine workshop, Quezon City, Sept 14, 2011
6. NSAP-BFAR Annual Conference, Quezon City, Philippines, Sept 14, 2011
7. PIRE Project Symposium, Silliman University, Dumaguete, Philippines, August 12, 2011
8. Biodiversity Lecture Series, Ateneo de Manila University, Philippines, May 5, 2011
9. US AID – Philippines, Pasay City, Philippines, January 19, 2011
10. Bureau of Fisheries Regional Directors meeting, Quezon City, Philippines, Dec 16, 2010
11. NSAP-BFAR Workshop, Quezon City, Philippines, December 13-17, 2010
12. FishCon 2010, Quezon City, Philippines, October 11-12, 2010

**Willette**, DA “Phylogeography of the freshwater sardine *Sardinella tawilis* in Taal Lake, Batangas and Implications for a sustainable management strategy.”

1. Protection Area Management Board – Taal Volcano Protected Landscape Executive Committee meeting, Batangas, Philippines, March 31, 2011
2. National Lake Congress of the Philippines, Laguna, Philippines, April 27, 2011

**Willette**, D.A., E.D.C. Bognot, and M.D. Santos “The biology, ecology and identification of Philippine sardines”

1. NSAP-BFAR Workshop, Quezon City, Philippines, December 13-17, 2010
2. BFAR Small Pelagic Workshop, Puerto Princesa, Philippines, March 14-15, 2011

**Willette**, D.A. and R.F. Ambrose. “The impact of the invasive seagrass *Halophila stipulacea* on the native seagrass *Syringodium filiforme*.”

1. World Seagrass Conference, Phuket, Thailand, November 20-25, 2010
2. AMLC Scientific Meeting, Roseau, Dominica, May 25-29, 2009

**Willette**, D.A. and P.J. Krug. “Identity Crisis: Using DNA to identify native and invasive species in coastal habitats.”

1. CSULA Student Research Symposium, Los Angeles, Feb 24, 2006
2. 20<sup>th</sup> CSU Student Research Competition, Camarillo, CA, May 5-6 2006
3. Joint meeting of Western Society of Malacologists and American Malacological Society, Pacific Grove, CA, June 26-30, 2005

**Willette**, D.A. and P.J. Krug. “Shallow surf riders: small-scale larval distribution in Estuarine Waters.”

1. Larval Biology Symposium 2006, Coos Bay, Oregon, Aug 27 – Sept 1, 2006
2. Southern California Acad of Sci Annual Meeting, Los Angeles, May 20- 21, 2005.
3. CSULA Department of Biological Sciences seminar series, May 26, 2005
4. CEA-CREST Environmental Science Conference, Los Angeles, May 6, 2005
5. CSULA Student Research Symposium, Los Angeles, Feb 24, 2005

6. Western Society of Naturalists, 85<sup>th</sup> Annual Meeting, Rohnert Park, CA, Nov 11-14, 2004.

## **COURSES TAUGHT AS INSTRUCTOR-OF-RECORD:**

### **Loyola Marymount University, Los Angeles**

BIOL 111 – General Biology Laboratory I  
BIOL 112 – General Biology Laboratory II  
BIOL 190 – Orientation to the Biology Major  
BIOL 304 – Biostatistical Analysis  
BIOL 309 – Applied Plant Ecology  
BIOL 318 – Principles of Ecology + field laboratory  
BIOL 398 – Quantifying Biodiversity Field Laboratory  
BIOL 491 – Biological Teaching for TAs  
BIOL 518 – Senior Capstone Research in Applied Ecology  
BIOL 598 – Senior Seminar - Ecology, Policy, and Pirate Fishing  
HHSC 150 – Human Anatomy and Physiology  
HHSC 255 – Human Anatomy and Physiology

### **University of California Los Angeles**

M1W Seminar – The Ocean’s Response to the Human Element  
EEB 109 – Introduction to Marine Science  
EEB 109L - Introduction to Marine Science Laboratory

### **California State University, Los Angeles (^ as Teaching Assistant)**

BIOL 100A – Introduction to Biology  
BIOL 100C – Animal/Plant Anatomy and Physiology^  
BIOL 155 – Animal Biology^  
BIOL 200A/B – Human Anatomy and Physiology I & II^  
BIOL 300 – Biostatistics  
BIOL 320 – Writing for Biologists^  
BIOL 360 – General Ecology  
HONORS 331 – Global Climate Change

### **Institute for Tropical Marine Ecology (Dominica)**

AC 301 – Natural History & Identification of Marine Organisms  
AC 303 – Marine Research Methodology and Practicum  
AC 305 – Tropical Marine Ecology & Conservation

### **Silliman Univ. (Philippines)/Nha Trang Univ. (Vietnam)/Prince of Songkla Univ. (Thailand)**

Marine Molecular Ecology and molecular laboratory techniques

## **WORKSHOPS DEVELOPED/HOSTED:**

2022 eDNA workshop using MinION technology, LMU, Organizer  
2017-19 LMU-UCLA Seafood Traceability Workshop, LMU, Organizer  
2018 *Halophila stipulacea*, Univ of the Virgin Islands, Webinar workshop, Co-organizer  
2014–18 Genetic workshops at Catalina, Catalina Island, CA, Co-developer and coordinator  
2017 eDNA method for monitoring of fish catches, Univ of Philippines, Developer and coordinator  
2017 eDNA method for monitoring of fish catches, ESPOL Ecuador, Developer and coordinator

- 2012 Pan-Pacific Advanced Studies Institute, National Science Foundation supported, Dumaguete, Philippines, Co-developer and principle workshop coordinator
- 2012 Coral Triangle Partnerships for International Research and Education synthesis meeting, National Science Foundation supported, Manila, Philippines, co-developer and coordinator
- 2009 Assoc of Marine Laboratories of the Caribbean meeting, Roseau, Dominica, Co-coordinator

## **AWARDS AND SOCIETIES:**

### Awards/Honors

- 2019 Ascending Scholar Award, LMU, Provost Office
- 2017 Fulbright Global Award, US State Department
- 2017 New Investigator Award, LMU Office of Research and Sponsored Projects
- 2013 APEC Prize for Innovation, Research & Education, US Nominee – US State Department
- 2013 APEC Prize for Innovation, Research & Education, Campus Nominee – UCLA
- 2011 Best Biological Sciences Poster – National Research Council of the Philippines
- 2010 Dean’s Outstanding Student Award – UCLA School of Public Health
- 2010 Delta Omega Public Health Honorary Society – UCLA School of Public Health
- 2009 Best Presentation – Assoc. of Marine Laboratories of the Carib. Sci. Meeting
- 2008 CSU Chancellor’s Doctoral Incentive Program recipient
- 2007 Celia and Joseph Blann Fellowship – UCLA 1-year doctoral support
- 2006 Eugene Cota Robles Diversity Fellowship – UCLA 3-year doctoral support
- 2006 Best Graduate Paper in Biology – California State University Research Competition
- 2006 Best Graduate Paper in Biology – CSULA Student Research Symposium
- 2003 CEA-CREST Diversity Fellowship – CSULA 2-year Masters degree support

### Professional Societies

AAAS, Association of Marine Laboratories of the Caribbean, Association for the Sciences of Limnology and Oceanography, Philippine Association of Marine Science, World Seagrass Association, Western Society of Naturalists, The Crustacean Society

## **RESEARCH FIELD EXPEDITIONS:**

**Ecuador:** Guayaquil (2017), Manta (2017), Santa Rosa (2017)

**Israel:** Red Sea (2016)

**U.S. Virgin Islands:** St. John/U.S. Virgin Island National Park, Coral Reef Monument (2014/2017)

**Thailand:** Koh Samui (2011), Trang (2011), Songkla (2013)

**Vietnam:** Nha Trang (2011), Phu Quoc Island (2012)

**Taiwan:** Yilan County (2012)

**Philippines:** Manila (2010), Batangas (2011), Palawan (2011), Negros (2011), Bohol/Siquijor (2012)

**Indonesia:** Bali (2010)

**Florida:** Florida Keys (2010)

**Eastern Caribbean:** Dominica (2006), St. Lucia (2006), Antigua (2007), Guadeloupe (2007), Puerto Rico (2007)

**California:** Catalina Island (2005), Central Coast (2006)

**Alaska:** Kodiak Island (2005)

**Panama:** Bocas del Toro, Panama City (2004)

**Honduras:** Roatan (2000)

## **SERVICE:**

### **INSIDE LMU**

Faculty Affiliate, Environmental Sciences Program - 2018-present

Faculty Fellow, LMU Coastal Research Institute – 2019-present

Faculty Affiliate, Center for Urban Resilience, 2018-2019

Biology Faculty Affiliate, iSTEM (Interdisciplinary Seaver Transition, Engagement & Mentoring) Program 2020-2021

LMU Annual Undergraduate Research Symposium Selection Committee – 2018-2021

Biology Search Committee (Marine Biology Faculty 2018, Laboratory Associate 2018)

### **OUTSIDE LMU**

#### **Journal Reviewer**

**27** – Aquatic Botany, Biodiversity and Conservation, Biological Conservation, BioInvasion Reports, Biological Invasions, Botanica Marina, Comprehensive Reviews in Food, Current Research in Food Science, Environmental Biology of Fish, DNA Barcodes, Fisheries Science, Food Analytical Methods, GeoForum, Global Ecology and Conservation, Journal of Applied Ichthyology, Journal of Coastal Research, Journal of BioSciences, Journal of Molluscan Studies, Journal of Natural History, Journal of Sea Research, Marine Biodiversity Records, Marine Biology Research, Philippine Journal of Fisheries, PeerJ, PLoS ONE, Thalassas, Scientific Reports

#### **Journal Editorial Board**

2020-Present – The Philippine Journal of Fisheries

2020-2021 – Frontiers in Marine Science (Special issue guest editor)

#### **Technical Advisory Board**

2017-present – Los Angeles Ascot Hills Park Advisory Board (Chair 2021-present)

2021 - present – Los Angeles Living Shoreline Technical Advisory Committee

2021 – present – Urban Waters Federal Partnership – Los Angeles River

2018 – present – STEM curriculum committee, All Souls World Language Catholic School (co-chair)