

Curriculum Vitae

Demian Alexander Willette

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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

PROFESSIONAL HISTORY:

Assistant Professor, Loyola Marymount University	2018 – Present
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
Post-doctoral research fellow, jointly Old Dominion Univ./UC Los Angeles	2012 – 2013
Post-doctoral research fellow, Dept of Biology, Old Dominion University	2010 – 2012

CURRENT AND RECENT GRANT SUPPORT:

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	US 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	W.E. Keck Foundation Research Gift.

CURRENT AND PAST MENTORED RESEARCH STUDENTS

Student mentees in role as Instructor/Assistant Professor at LMU (2015-present)

Current

13 undergraduates – Mary Balducci (2019, LMU), Candice Cross (2016-2019, Biology, LMU), Sophie Deen (2016-2019, HHSC, LMU), Jacquelyn Galvez (2016-2019, Biology, LMU), Nicholas Pilaud (2015-2019 Env Sciences, LMU), Matthew Sheridan (2018-2019, Biology, LMU), Sydney Lee (2018-2019, Biology, LMU), Kesterlyn Wilson (2017-2019, Biology, LMU), Leonardo Gonzalez-Smith (2018-2019, Biology, LMU), Anna Horvath (2018-2019, Biology, LMU), Stacy Lam (2018-2019, Biology, LMU), Grace Riggs (2017-2019, Biology, LMU), Selena Yuan (2018-2019, Biology, LMU).
3 Masters (Committee member) - Antonio Farchette (2017-2019, Univ of the Virgin Islands), Kyle Jerris (2017-2019, Univ. of the Virgin Islands), Kevin Labrador (2018-2019, Univ. of the Philippines),
1 Doctoral (Committee member) - Kelcie Chiquillo (2015-2019, UC Los Angeles)

Past

6 undergraduates – Sarah Bruce-Eisen (2017-2018, Biology, LMU), Sofia Esteves (2015-2018, Biochemistry, LMU), Alexis Isaev (2017-2018, Biology, LMU), Quinn Landers (2016-2017, Biology, LMU), Sarah Shapiro (2016-2017, Biology, LMU), Armaan Zare (2017-2018, Biology, LMU)

PUBLICATION METRICS:

*Metrics from Google Scholar – February 13, 2019

Publications: **28** (4 since 2018)

Citations: **435** (130 since 2018)

h-index: **11**

i10-index: **13**

PUBLICATIONS:

* indicates student/mentee author

28. 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**.
27. **Willette DA**, Cheng SH, Greenberg JA, Barber PH. (2018) Rethinking solutions to seafood fraud. **Frontiers in Ecology and the Environment**, 16: 499-500.
26. Chiquillo KL*, Barber, PH, **Willette DA**. (2018) Fruits and flowers of the invasive seagrass *Halophila stipulacea* in the Caribbean Sea. **Botanica Marina**, doi.org/10.1515/bot-2018-0052
25. **Willette DA** and Cheng SH. (2018) Delivering on seafood traceability under the new U.S. import monitoring program. **Ambio**, 46: 25-30.
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*, Bumrungsri 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.
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.
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.
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.
18. 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.
17. 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.
16. **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.
15. **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.
14. **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.
13. **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.
12. 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.
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
10. 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.
9. **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.
8. **Willette DA**. (2013) Increasing the conservation yield from molecular fisheries research in the Philippines. **Current Conservation**, 7(2): 7-15.
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.

6. **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.
5. **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.
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.
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.

MANUSCRIPTS CURRENTLY IN PREPARATION/IN REVIEW:

* indicates student/mentee author

1. **Willette, DA**, Muthukrishnan R, Cross C*, et al. Disturbance-mediated areas facilitate rapid local spread of invasive marine plant. Target journal: *Frontiers in Marine Science*.
2. Muthukrishnan, R, **Willette DA**, Cross C*, et al. Displacement of a native foundation species by an invasive alters multiple aspects of ecosystem functioning in a tropical seagrass community. Target journal: *Journal of Ecology*.
3. Cross C*, Engel S, Gillis LG, **Willette DA**. Comparative assessment of the sedimentary carbon stocks of *Halophila stipulacea* beds in Lac Bay, Bonaire. Target journal: *Marine Ecology Progress*.
4. Deen S*, Kuzmenko T, **Willette DA**. Utilizing 3D printing technology and the plasmodial slime mold to approximate efficient transit networks of Los Angeles. Target journal: *Bulletin of the Southern California Academy of Sciences*.
5. Griffiths SP, Leadbitter D, **Willette DA**, Kaymaram F, Chiang WC, Prathibha R. Longtail tuna *Thunnus tonggol*: A global review of population dynamics, ecology, fisheries, and considerations for future conservation management. Target journal: *Reviews in Fish Biology*
6. Gamliel I*, Guy-Haim T, Garval T, Buba Y, **Willette DA**, Rilov G, Belmaker J. Incorporating physiology into species distribution models moderates the projected impact of warming on Mediterranean marine Species. Submitted to: *Ecography*.

JOURNAL REVIEWER:

Biodiversity and Conservation, Biological Conservation, Botanica Marina, Environmental Biology of Fish, Global Ecology and Conservation, Journal of Applied Ichthyology, Journal of Coastal Research, Journal of BioSciences, Journal of Natural History, Journal of Sea Research, Marine Biodiversity Records, Marine Biology Research, Philippine Journal of Fisheries, PLoS ONE, Scientific Reports

ORAL PRESENTATIONS:

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

1. 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. Halophila stipulacea Webinar, Univ of the Virgin Islands, December 6, 2018
2. Seagrass workshop, InterUniversity Institute, Eilat, Israel, May 30, 2018
3. Seagrass workshop, InterUniversity Institute, Eilat, Israel, May 19, 2017
4. 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 21st, 2014
2. Western Society of Naturalists Conference, Oxnard, CA Nov 7-10th, 2013

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

1. Western Society of Naturalists Conference, Seaside, CA, Nov 8-11th, 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 25th, 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. 20th 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, 85th 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 318 – Principles of Ecology
- Biol 398 – Applied Plant Ecology
- Biol 490 – Biological Teaching for TAs
- Biol 598 – SS 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:

2018 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

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)