

## Curriculum Vitae

### I. JEREMY D. LONG

### II. EDUCATION

<u>A. Institution</u>	<u>Years Attended</u>	<u>Degree</u>	<u>Major Field</u>
Northeastern University	2005-2009	Postdoc	Biology
Georgia Tech	1999-2004	Ph.D.	Applied Biology
University of San Diego	1993-1998	B.A.	Marine Science

#### B. Title of Dissertation

Long, J.D. (2004). Plasticity of consumer prey interactions in the sea: chemical signaling, learned aversion, and ecological consequences.

### III. TEACHING POSITIONS AND RANKS HELD

<u>Institution</u>	<u>Rank</u>	<u>Date</u>	<u>Major Subject</u>
San Diego State University	Assistant Professor	2009-present	Biology
Northeastern University	Lecturer	2007-2008	Biology

### IV. TEACHING EFFECTIVENESS

#### A. *Curriculum Development and Teaching Innovations*

Trained students to lead discussions: Biol 542 (2012-present).

Modeled the role of a group leader during small group discussions of primary literature using the fish bowl technique.

Developed a new seminar course: Biol 600 (2012).

Graduate seminar designed to explore the connections of current research to classic literature.

Incorporated technology into the classroom: Biol 215 (2012).

Incorporated iClicker to gauge comprehension in this large enrollment lecture course.

Incorporated technology into the classroom: Chemical Ecology Lecture (2010-2011).

Instructed students on the use of Mac editing software (GarageBand and iMovie).

Implemented a writing activity: Chemical Ecology Lecture (2009-2011).

Developed and taught “How to write abstracts” exercises.

Developed a new course: Chemical Ecology Lecture (2009).

Upper division course in chemical ecology that included multiple guest lectures.

### B. Teaching Awards

2) Outstanding Faculty Award (2013). Biology Department, San Diego State University.

1) Most Influential Faculty Award (2012). Biology Department, San Diego State University.

## V. PROFESSIONAL GROWTH

### A. Refereed Journal Articles ( #denotes SDSU graduate student, \*denotes SDSU undergraduate student)

21) #Warneke, A.M. and **J.D. Long** (in prep) Copper pollution influences the elicitation and effectiveness of seaweed inducible defense.

20) **Long, J. D.** and \*L.D. Porturas (2014). Herbivore impacts on marsh production depend upon a compensatory continuum mediated by salinity stress. PLOS ONE. Five year IF=4.015, # of times cited=N/A.

19) Bracken, M. E. S., #R. Dolecal, and **J.D. Long** (2014). Community context mediates the top-down versus bottom-up effects of grazers on rocky shores. Ecology 95: 1458-1463. 2012 Five year IF=6.421, # of times cited=0.

18) #Dolecal, R.E. and **J.D. Long** (2014). Chemically-mediated foraging by subtidal marine predators: a field test of tritrophic signaling. Marine Ecology Progress Series 498: 161-171. Five year IF=3.170, # of times cited=0.

17) **Long, J.D.**, G. Toth, and H. Pavia (2013). Proximate and ultimate causes for transatlantic variation in seaweed defenses. Marine Ecology Progress Series 493: 83-89. Five year IF=3.170, # of times cited=0.

16) **Long, J.D.**, \*L. Porturas, #E. Jones, #C. Kwan, and G.C. Trussell (2013). Seaweed traits linked to wave exposure determine predator avoidance behaviors. Marine Ecology Progress Series 483: 143-151. Five year IF=3.170, # of times cited=1.

15) #Dolecal, R.E. and **J.D. Long** (2013). Ephemeral macroalgae display spatial variation in relative palatability. Journal of Experimental Marine Biology and Ecology 440:233-237. Five year IF=2.540, # of times cited=2.

14) Gutow, L., **J.D. Long**, O. Cerda, I.A. Hinojosa, E. Rothausler, F. Tala, and M. Thiel (2012). Herbivorous amphipods inhabit protective microhabitats within thalli of giant kelp *Macrocystis pyrifera*. Marine Biology 159:141-149. Five year IF=2.569, # of times cited=2.

13) **Long, J.D.**, E. Cochrane, and #R. E. Dolecal (2011). Previous disturbance enhances the negative effects of trampling on barnacles. Marine Ecology Progress Series 437:165-173. Five year IF=3.170, # of times cited=0.

12) **Long, J.D.**, J.L. Mitchell, and E. E. Sotka (2011). Local consumers induce resistance differentially between *Spartina alterniflora* populations in the field. Ecology 92:180-188. Five

year IF=6.421, # of times cited=9.

11) **Long, J.D.**, G.C. Trussell, and T. Elliman (2009). Linking invasions and biogeography: isolation differentially affects exotic and native plant diversity. *Ecology (Report)* 90(4): 863-868. Our photograph was selected for the cover shot. Five year IF=6.421, # of times cited=12.

10) **Long, J.D.**, G.W. Smalley, T.A. Barsby, J.T. Anderson, and M.E. Hay (2007). Chemical cues induce consumer-specific defenses in a bloom-forming marine phytoplankton. *Proceedings of the National Academy of Sciences* 104: 10512-10517. Five year IF=10.727, # of times cited=40.

9) **Long, J.D.**, R.S. Hamilton, and J.L. Mitchell (2007). Asymmetric competition via induced resistance: specialist herbivores indirectly suppress generalist preference and populations. *Ecology* 88(5): 1232-1240. Noted in the ESA Bulletin. Five year IF=6.421, # of times cited=28.

8) **Long, J.D.** and G.C. Trussell (2007). Geographic variation in seaweed induced responses to herbivory. *Marine Ecology Progress Series* 333:75-80. Five year IF=3.170, # of times cited=16.

7) **Long, J.D.**, M.E. Frischer, and C.Y. Robertson (2007). A *Phaeocystis globosa* bloom associated with upwelling in the subtropical South Atlantic Bight. *Journal of Plankton Research* 29: 769-774. Our photograph was selected for the cover shot. Five year IF=2.419, # of times cited=4.

6) Nejstgaard, J.C., K.W. Tang, M. Steinke, J. Dutz, M. Koski, E. Antajan, and **J.D. Long** (2007). Zooplankton grazing on *Phaeocystis*: a quantitative review and future challenges. *Biogeochemistry* 83: 147-172. Five year IF=4.121, # of times cited=43.

5) Whipple, S.J., B.C. Patten, P.G. Verity, J.C. Nejstgaard, **J.D. Long**, J.T. Anderson, A. Jacobsen, A. Larsen, J. Martinez-Martinez, and S.R. Borrett (2007). Gaining integrated understanding of *Phaeocystis* spp. (Prymnesiophyceae) through model-driven laboratory and mesocosm studies. *Biogeochemistry* 83: 293-309. Five year IF=4.121, # of times cited=6.

4) Nejstgaard, J.C., M.E. Frischer, P.G. Verity, J.T. Anderson, A. Jacobsen, M.J. Zirbel, A. Larsen, J. Martinez-Martinez, A.F. Sazhin, T. Walters, D.A. Bronk, S.J. Whipple, S.R. Borrett, B.C. Patten, and **J.D. Long** (2006). Plankton development and trophic transfer in sea water enclosures with nutrients and *Phaeocystis pouchetii* added. *Marine Ecology Progress Series* 321: 90-121. Five year IF=3.170, # of times cited=19.

3) **Long, J.D.** and M.E. Hay (2006). When intraspecific exceeds interspecific variance: effects of phytoplankton morphology and growth phase on copepod feeding and fitness. *Limnology and Oceanography* 51(2): 988-996. Five year IF=4.332, # of times cited=11.

2) **Long, J.D.** and M.E. Hay (2006). Fishes learn aversions to a nudibranch's chemical defense. *Marine Ecology Progress Series* 307: 199-208. Five year IF=3.170, # of times cited=16.

1) Weiss, M.R., E.M. Lind, M.T. Jones, **J.D. Long**, and J.L. Maupin (2003). Uniformity of

leaf shelter construction by larvae of *Epargyreus clarus* (Hesperiidae), the silver spotted skipper. *Journal of Insect Behavior* 16(4): 465-480. Five year IF=1.084, # of times cited=9.

*B. Refereed Book Chapter*

1) **Long, J.D.** and M.E. Hay (2012). The impact of trait-mediated indirect interactions in marine systems. *In* Trait-mediated indirect interactions: ecological and evolutionary perspectives (T. Ohgushi, O. Schmitz, and R. Holt, eds.). Cambridge University Press.

*C. Peer-Reviewed Technical Reports*

2) **Long, J.D.** and B.R. Mitchell (2010). Northeast temperate network long-term rocky intertidal monitoring protocol. National Park Service Natural Resource Report.

1) **Long, J.D.** (2010). 2009 report on monitoring the intertidal zone in Maine coastal islands: Metinic Island and Petit Manan Island. United States Fish and Wildlife Service Report.

*D. Unpublished, Refereed papers Before Professional Conferences ( #denotes SDSU graduate student, \*denotes SDSU undergraduate student)*

38) **Long, J.D.**, C. Muir, and R. Cooper (2014). Defense consequence: previously grazed seaweeds suppress snail growth rate and gamete production. Western Society of Naturalists Annual Meeting (Tacoma, WA).

37) <sup>#</sup>Rinehart, S.A. and **J.D. Long** (2014). Predators going green: flowers reduce the consumptive effects of omnivorous beetles responsible for a trophic cascade. Western Society of Naturalists Annual Meeting (Tacoma, WA).

36) <sup>#</sup>Kwan, C.K., E. Sanford, and **J.D. Long** (2014). Context-dependency of predator non-consumptive effects in an estuarine food chain: impact of copper pollutants and abiotic factors. Western Society of Naturalists Annual Meeting (Tacoma, WA).

35) <sup>#</sup>Jones, E. and **J.D. Long** (2014). Geographic variation in the sensitivity of an herbivore-induced seaweed defense. Western Society of Naturalists Annual Meeting (Tacoma, WA).

34) **Long, J.D.**, <sup>#</sup>S. A. Rinehart, and L. P. Miller (2013). Flip it and reverse it: intertidal elevation switches the impact of herbivores on *Spartina* growth. Western Society of Naturalists Annual Meeting (Oxnard, CA).

33) <sup>#</sup>Jones, E. and **J.D. Long** (2013). The relative strength of an induced seaweed defense varies with herbivore species. Western Society of Naturalists Annual Meeting (Oxnard, CA).

32) <sup>#</sup>Kwan, C. and **J.D. Long** (2013). Copper weakens trait-mediated indirect interactions in a tritrophic system of predatory crabs, invasive whelks, and barnacles. Western Society of Naturalists Annual Meeting (Oxnard, CA).

- 31) <sup>#</sup>Jones, E. and **J.D. Long** (2013). Herbivore specificity of induced defenses in the seaweed *Silvetia compressa*. Benthic Ecology Annual Meeting (Savannah, GA).
- 30) <sup>#</sup>Jones, E. and **J.D. Long** (2012). Herbivore-induced changes in palatability do not alter nutrient uptake rates of the intertidal seaweed *Silvetia compressa*. Western Society of Naturalists Annual Meeting (Monterey, CA).
- 29) **Long, J.D.** and \*L. Porturas (2012). Scale insects: emergent threats to Southern California salt marshes. Ecological Society of America Annual Meeting (Portland, OR).
- 28) **Long, J.D.** (2012). Consequences of rising scale insect infestations and salt stress on cordgrass communities. California Estuarine Research Society Annual Meeting (Long Beach, CA).
- 27) <sup>#</sup>Dolecal, R.E. and **J.D. Long** (2012) Chemically-mediated foraging of the spiny lobster, *Panulirus interruptus* – Which cues are most important? Benthic Ecology Annual Meeting (Norfolk, VA).
- 26) <sup>#</sup>Jones, E. and **J. D. Long** (2012). A multi-species herbivore assemblage reduces palatability of the intertidal seaweed *Silvetia compressa*. Benthic Ecology Annual Meeting (Norfolk, VA).
- 25) <sup>#</sup>R. Dolecal and **J.D. Long** (2011). Signaling seaweeds: can herbivore-induced cues from marine seaweeds facilitate predator foraging. Western Society of Naturalists Annual Meeting (Vancouver, WA).
- 24) <sup>#</sup>E. Jones and **J.D. Long** (2011). Decreased palatability in the brown seaweed *Silvetia compressa* in response to a multi-species herbivore assemblage. Western Society of Naturalists Annual Meeting (Vancouver, WA).
- 23) **Long, J.D.**, <sup>#</sup>C. Kwan, <sup>#</sup>E. Jones, and G.C. Trussell (2011). Seaweed source influences avoidance behaviors in periwinkle snails. Benthic Ecology Meeting (Mobile, AL).
- 22) **Long, J.D.**, E. Cochrane, and <sup>#</sup>R.E. Dolecal (2010). Human exclusion enhances barnacle cover. Western Society of Naturalists Annual Meeting (San Diego, CA).
- 21) <sup>#</sup>Jones, E. and **J.D. Long** (2010). Habitat choice by a marine isopod is related to the presence of a preferred epiphyte. Western Society of Naturalists Annual Meeting (San Diego, CA).
- 20) **Long, J.D.**, J.L. Mitchell, and E.E. Sotka (2010). Dropping science on the variation of inducible resistance between *Spartina* populations in the field. Benthic Ecology Meeting (Wilmington, NC).
- 19) **Long, J.D.**, J.L. Mitchell, and E.E. Sotka (2009). Local consumers induce resistance in southern, but not northern, *Spartina* populations. Western Society of Naturalists Annual Meeting (Monterey, CA).
- 18) **Long, J.D.**, G. Toth, H. Pavia, and E.E. Sotka (2008). Bearing arms: tradeoffs in seaweed

defense strategies. Benthic Ecology Meeting (Providence, RI).

17) Dolecal, R.E. and **J.D. Long** (2008). Variation of algal palatability in space and time. Benthic Ecology Meeting (Providence, RI).

16) Dolecal, R.E. and **J.D. Long** (2008). Geographic variation in algal palatability. Northeastern University Student Research Expo (Boston, MA).

15) **Long, J.D.**, G. Toth, H. Pavia, and E.E. Sotka (2007). Transatlantic variation in seaweed inducible and constitutive defenses. Western Society of Naturalists Annual Meeting (Ventura, CA).

14) **Long, J.D.**, R.S. Hamilton, and J.L. Mitchell (2007). Asymmetric competition via induced resistance. Benthic Ecology Meeting (Atlanta, GA).

13) Dolecal, R.E. and **J.D. Long** (2007). Geographic variation in algal palatability. Western Society of Naturalists Annual Meeting (Redmond, WA).

12) **Long, J.D.**, G.W. Smalley, T.A. Barsby, J.T. Anderson, and M.E. Hay (2006). Consumer-specific inducible defenses: when size matters and bigger isn't necessarily better. Western Society of Naturalists Annual Meeting (Redmond, WA).

11) **Long, J.D.**, R.S. Hamilton, and J.L. Mitchell (2006). Inducible responses in seaweeds and the relevance of laboratory experiments. Ecological Society of America Annual Meeting (Memphis, TN).

10) **Long, J.D.** (2006). Trait-mediated indirect effects of seaweed herbivory. Benthic Ecology Meeting (Quebec City, Quebec).

9) **Long, J.D.** and G.C. Trussell (2005). Seaweeds tell no lies: testing for a chemically-mediated cascade. Benthic Ecology Meeting (Williamsburg, VA).

8) **Long, J.D.**, T.A. Barsby, G.W. Smalley, and M.E. Hay (2004). Effects of grazer cues on algal colony formation: eavesdropping elms of the ocean. Ecological Society of America Annual Meeting (Portland, OR).

7) **Long, J.D.** and M.E. Hay (2004). Variable fecal pellet production of three calanoid copepods: the importance of algal morphology, culture age, and grazer species. ASLO Summer Meeting (Savannah, GA-poster).

6) **Long, J.D.**, G.W. Smalley, T.A. Barsby, J.T. Anderson, P.G. Verity, and M.E. Hay (2004). Chemical cues from grazing copepods suppress colony formation in *Phaeocystis*: when bigger isn't better. ASLO Ocean Sciences Meeting (Honolulu, HI).

5) **Long, J.D.**, G.W. Smalley, T.A. Barsby, J.T. Anderson, P.G. Verity, and M.E. Hay (2004). Grazing, eavesdropping, and the motion of the ocean. 1<sup>st</sup> Annual Southeastern Ecology and Evolution Conference (Atlanta, GA).

4) **Long, J.D.** and M.E. Hay (2003). Learned aversion and retention: how marine fishes avoid

new aversive foods. Ecological Society of America Annual Meeting (Savannah, GA).

3) **Long, J.D.** and M.E. Hay (2002). Moving beyond first impressions: isolation and identification of a chemical associated with learned food aversions. Western Society of Naturalists Annual Meeting (Monterey Bay, CA).

2) **Long, J.D.** and M.E. Hay (2001). Slug defenses and fish responses: eat, puke, learn, avoid. Western Society of Naturalists Annual Meeting (Ventura, CA).

1) Weiss, M., M. Jones, and **J.D. Long** (1998). Good housekeeping: frass ejection and removal behavior in *Epargyreus clarus*, the silver spotted skipper. Entomological Society of America Annual Meeting (Las Vegas, NV).

#### *E. Externally Critiqued Performances or Juried Exhibitions of Works*

Most creative film award. Beneath the Waves Filmfest, 2010 Benthic Ecology Meeting.

#### *F. Book Review*

1) **Long, J.D.** (2013). Merging chemical ecology studies across the salinity divide. *Ecology* 94: 2112-2113.

#### *G. Publications in Progress ( #denotes SDSU graduate student, \*denotes SDSU undergraduate student)*

**Long, J.D.**, \*C. Muir, and \*R. Cooper. Previously grazed seaweeds suppress growth and reproductive output of intertidal snails. Target journal: *Peer J*.

#Jones, E.M. and **J.D. Long**. Specificity of induction and elicitation in the inducible defenses of an intertidal seaweed. Target journal: *Oecologia*.

#Kwan, C.K. and **J.D. Long**. Copper pollution removes the consumptive effects of predators via changes in prey behavior. Target journal: *PLOS One*

#### *H. Scholarly Awards*

3) Best Student Poster Award (2014). Jones, E. and **J.D. Long**. Geographic variation in the sensitivity of an herbivore-induced seaweed defense. Western Society of Naturalists Annual Meeting (Tacoma, WA).

2) Outstanding Student Poster Award (2004). American Society of Limnology and Oceanography Annual Meeting.

1) Graduate Research Fellowship Honorable Mention (1999). National Science Foundation.

#### *I. Participation in Professional Associations*

Ecological Society of America

Marine Biological Association of the United Kingdom  
Western Society of Naturalists

## **VI. SERVICE FOR THE UNIVERSITY, THE PROFESSION, AND THE COMMUNITY**

### *A. Service for the University*

- 7) Interim Director of SDSU Coastal Marine Institute and Laboratory (Spring 2013)
- 6) Ecology Program Area Website Committee Chair (2013-present)
- 5) Faculty advisor for SDSU student organization, Marine Ecology and Biology Student Association (2011-present)
- 4) Participant, SDSU Coastal Marine Institute and Laboratory Annual Open House (2012-2014)
- 3) Judge, SDSU Student Research Symposium (2011-present)
- 2) Participant, SDSU Science & Engineering Sampler, part of the San Diego Science Festival (2011 - 2012)
- 1) Coordinator, SDSU Ecology and Evolutionary Biology Seminar Series (Spring 2010)

### *B. Service for the Community*

#### 1. Invited Seminars

- Scripps Institution of Oceanography (2014)
- University of California, Santa Barbara (2013)
- San Francisco State University (2012)
- California Estuarine Research Society Annual Meeting (2012)
- University of California, San Diego, Biology (2010)
- Scripps Institution of Oceanography, Graduate Student Series (2009)
- Goucher College, Baltimore, Biology (2009)
- San Diego State University, Biology (2007)
- Cal State Fullerton, Biology (2007)
- Chapman University, Orange, CA, Biology (2007)
- Multi-Agency Rocky Intertidal Network Taxonomic Workshop, San Francisco (2007)
- Tjärnö Marine Biological Laboratory, Sweden, (2007)
- Universidad Católica del Norte, Chile, Biology (2007)
- University of South Carolina, Columbia, Biology, (2007)
- Baruch Marine Field Laboratory, Georgetown, SC (2006)
- Bigelow Laboratory for Ocean Sciences, Boothbay Harbor, ME (2006)
- Cal State Long Beach, Biology (2006)
- University of Maine, Orono (2006)
- NPERF Committee Meeting, Chico, MT (2005)
- Acadia National Park Ranger Resource Session, Bar Harbor, ME (2005)
- Mount Desert Island Biological Laboratory, ME (2005)
- ASLO Meeting Field Trip, Savannah (2004)



- Scientific Committee on Oceanic Research (SCOR) Working Group Meeting (WG120), Savannah (2003)
- Skidaway Institute of Oceanography, Savannah (2003)
- University of Bergen, Norway (2002)

## 2. Proposal Panelist

- National Science Foundation, OEI-Plant Integrative Organismal Systems

## 3. Peer Reviewer

Acta Oecologica; Animal Cognition; Aquatic Biology; Ecology; Ecology Letters; Estuarine, Coastal, and Shelf Science; Invertebrate Biology; Journal of Ecology; Journal of Experimental Marine Biology and Ecology; Journal of Phycology; Limnology and Oceanography; Marine Biodiversity Records; Marine Biology; Marine Ecology; Marine Ecology Progress Series; Marine Environmental Research; National Park Service; National Science Foundation; Oecologia; Oikos; Physiological and Biochemical Zoology; PLOS ONE

## 4. Other Community Service Activities

- Presentation to Apple's Distinguished Educator Conference, San Diego, CA (2014)
- Outreach Activity with Mar Vista High School, Imperial Beach, CA (2012-2014)
- Science Fair Judge Urban Discovery Academy, San Diego (2011-2013)
- Associate Editor for JMBA (2010-present)
- Staff training session at the Chula Vista Nature Center (2010)
- Co-organizer of Intertidal Bioblitz in Boston Harbor Islands (2008)
- Guest Scientist at Interpwoods at Acadia National Park (2008)
- Science Fair Judge Boston Public Schools (2007, 2009)
- Intertidal Education Activity, Marine Science Center Open House (2007)
- Deposited two phytoplankton strains at the CCMP (strains 2513 and 2754), 2006
- Intertidal Education Activity, MDIBL Children's Science Night (2005)
- Talk for The Clark Elementary School, Danvers, MA (2005)
- Guest Lecturer Undergraduate Biology Seminar Course, University of San Diego (2004)
- Talk for Hancock Day Elementary School, Savannah, GA (2004)
- Plankton Sink-Off Activity for marine lab open houses (2003, 2005)
- Science Fair Project Consultant, Savannah, GA (2003)
- Science Fair Judge Savannah Regional Science and Engineering Fair, (2002-2004)
- Science Fair Judge Savannah Christian Preparatory Middle School (2001-2002)
- Planning Committee, Southeastern Ecology & Evolution Conference, Georgia Tech (2004)