

Charles D. Amsler

Education:

- B.A. Duke University, 1980
- M.S. University of North Carolina at Wilmington, 1983
- Ph.D. University of California at Santa Barbara, 1989

Academic Positions:

- Assistant Research Biologist, University of California at Santa Barbara, 1990
- Postdoctoral Research Associate, University of Illinois at Chicago, 1990-1994
- Assistant Professor, University of Alabama at Birmingham, 1994-2000
- Associate Professor, University of Alabama at Birmingham, 2000-2004
- Professor, University of Alabama at Birmingham, 2004-2025
- Program Officer (rotator), National Science Foundation, 2013-2015
- Professor Emeritus, University of Alabama at Birmingham, 2025-present

Selected Awards and Honors:

- Tyge Christensen Prize in Phycology (International Phycological Society), 2002
- Council for Advancement and Support of Education (CASE), District III Award of Excellence for Overall Website Design and Implementation (Antarctic educational outreach), 2005
- US Board of Geographic Names designated “Amsler Island” Antarctica, 2007
- National 2008 Silver Medal in the CASE Circle of Excellence Awards Program for Creative Use of Technology and New Media (Antarctic educational outreach), 2008
- President, Phycological Society of America, 2009
- Overseas Vice President, British Phycological Society, 2013-2015
- United States Representative to Scientific Committee on Antarctic Research Life Sciences Group, 2016-2025
- Caroline P. and Charles W. Ireland Prize for Scholarly Distinction, UAB, 2016
- Elected Fellow, American Association for the Advancement of Science, 2016
- Graduate Dean’s Award for Excellence in Mentorship, UAB, 2019
- Chair, Board of Trustees, Phycological Society of America, 2023-2027
- Award of Excellence (lifetime achievement), Phycological Society of America, 2024

Publications (Peer-Reviewed): *Except for natural products chemistry publications, author order is usually by contribution, not “PI last” and graduate students are usually corresponding authors on papers resulting from their dissertation research.*

Oswalt, H.E., M.O. Amsler, **C.D. Amsler**, J.B. McClintock, & J.B. Schram. 2025. Impacts of ocean acidification on the palatability of two Antarctic macroalgae and the consumption of a grazer. [Antarctic Science 37: 124-133.](#)

Oswalt, H.E., M.O. Amsler, **C.D. Amsler**, J.B. Schram, J.B. McClintock, & P.A. Baker. 2025. Ocean acidification decreases molting but not survival of Antarctic amphipods *Djiberboa furcipes*, *Gondogeneia antarctica*, and *Prostebbingia gracilis*. [Polar Biology 48: 80.](#)

Oswalt, H.E., J.B. Schram, M.O. Amsler, **C.D. Amsler**, & J.B. McClintock. 2025. Macroalgal-associated amphipod assemblages exhibit short term resistance to ocean acidification. [PeerJ 13: e19368.](#)

Amsler, C.D., M.O. Amsler, A.G. Klein, J.B. McClintock, K. Iken, & A.W.E. Galloway. 2025. Substantial short-term increases in brown macroalgal cover and total macroalgal biomass with decreased sea ice on the Western Antarctic Peninsula. [Marine Ecology Progress Series 759: 17-34.](#)

- Oswalt, H.E., M.O. Amsler, **C.D. Amsler**, K. Iken, J.B. McClintock, A.G. Klein, & A.W.E. Galloway. 2025. Nutritional consistency of macroalgae across a sea ice cover gradient along the Western Antarctic Peninsula. [Journal of Phycology 61: 218-230](#).
- Heiser, S., **C.D. Amsler**, A.J. Shilling, H.M. Higginbotham, M.O. Amsler, S. Stoeckel, J.B. McClintock, B.J. Baker, & S.A. Krueger-Hadfield. 2025. Linking phenotypic variation to patterns of genetic isolation along a speciation continuum. [Journal of Phycology 61: 3-19](#).
- Stancheva, R., M. Cantonati, K. Manoylov, P.C. Furey, A.B. Cahoon, R.C. Jones, P. Gillevet, **C.D. Amsler**, J.D. Wehr, J.L. Salerno, & S.A. Krueger-Hadfield. 2024. The importance of integrating phycological research, teaching, outreach, and engagement in a changing world. [Journal of Phycology 60: 1335-1348](#).
- Olsen, S.S.H., S.K. Morrow, J.L. Szabo, M.N. Teng, K.C. Tran, **C.D. Amsler**, J.B. McClintock, & B.J. Baker. 2024. New sesterterpenes from the Antarctic sponge *Suberites* sp. [Marine Drugs 22: 551](#).
- Fernández, P.A., **C.D. Amsler**, C.L. Hurd, P.A. Diaz, J.D. Gaitán-Espitia, A. Schmider, I. Garrido, P. Murua, E.C. Macaya, & A.H. Buschmann. 2024. Diverse inorganic carbon uptake strategies in Antarctic seaweeds: Revealing species-specific responses and implications for Ocean Acidification. [Science of the Total Environment 945: 174006](#).
- Galloway, A.W.E., J.B. Schram, A.T. Lowe, R. Whippo, S. Heiser, K. Iken, J.B. McClintock, A.G. Klein, M.O. Amsler, & **C.D. Amsler**. 2024. Trophic stability and change across a sea ice cover gradient on the western Antarctic Peninsula. [Marine Ecology Progress Series 735: 43-61](#).
- Whippo, R., K. Iken., **C.D. Amsler**, A.T. Lowe, J.B. Schram, A.G. Klein, S. Heiser, M.O. Amsler, J.B. McClintock, & A.W.E. Galloway. 2024. Fatty acid profiles and stable isotope composition of Antarctic macroalgae: A baseline for a combined biomarker approach in food web studies. [Polar Biology 47: 367–386](#).
- Amsler, C.D.**, M.O. Amsler, S. Heiser, J.B. McClintock, K. Iken, A.W.E. Galloway, K. Iken, & A.G. Klein. 2024. Vertical distribution of brown and red macroalgae along the central Western Antarctic Peninsula. [Botanica Marina 67: 1-10](#).
- Iken, K., **C.D. Amsler**, K. Gorman, A.G. Klein, A.W.E. Galloway, M.O. Amsler, S. Heiser, R. Whippo, A.T. Lowe, J.B. Schram, Z.X. Schneider, & J.B. McClintock. 2023. Macroalgal input into the coastal food web along a gradient of seasonal sea ice cover along the Western Antarctic Peninsula. [Marine Ecology Progress Series 718: 1-22](#).
- Heiser, S., **C.D. Amsler**, S. Stoeckel, J.B. McClintock, B.J. Baker, & S.A. Krueger-Hadfield. 2023. Tetrasporophytic bias coupled with heterozygote deficiency in Antarctic *Plocamium* sp. (Florideophyceae, Rhodophyta). [Journal of Phycology 59: 681-697](#).
- Amsler, C.D.**, M.O. Amsler, A.G. Klein, A.W.E. Galloway, K. Iken, J.B. McClintock, S. Heiser, A.T. Lowe, J.B. Schram, & R. Whippo. 2023. Strong correlations of sea ice cover with macroalgal cover along the Antarctic Peninsula: Ramifications for present and future benthic communities. [Elementa: Science of the Anthropocene 11 \(1\): 00020](#).
- Heiser, S., **C.D. Amsler**, & S.A. Krueger-Hadfield. 2023. Microsatellite locus development in the seaweed *Plocamium* sp. [Antarctic Science 35: 43-45](#).
- Heiser, S., A.J. Shilling, **C.D. Amsler**, J.B. McClintock, & B.J. Baker. 2023. To change or not to change: drivers of defensive secondary metabolite distribution in the red macroalga *Plocamium* sp. [Marine Biology 170: 31](#).

- Bracegirdle, J., S.S. Olsen, M. Teng, K. Tran, **C.D. Amsler**, J.B. McClintock & B.J. Baker. 2023. Neosuberitenone, a new sesterterpenoid carbon skeleton; new Suberitenones; and bioactivity against Respiratory Syncytial Virus, from the Antarctic sponge *Suberites* sp. [Marine Drugs 21: 107](#).
- von Salm, J.L., C.G. Witowski, M.O. Amsler, **C.D. Amsler**, J.B. McClintock, & B.J. Baker. 2022. Amphipod diversity and metabolomics of the Antarctic sponge *Dendrilla antarctica*. [Antarctic Science 34: 349-360](#).
- Bracegirdle, J., S.J. Kennedy, C. Shan, L. Wojtas, L.N. Shaw, **C.D. Amsler**, J.B. McClintock & B.J. Baker. 2022. Tongalides, halogenated butenolides from an Antarctic *Delisea* sp. rhodophyte. [Journal of Natural Products 85: 1886-1891](#).
- Amsler, C.D.**, L.R. Miller, R.A. Edwards, M.O. Amsler, W. Engl, J.B. McClintock, & B.J. Baker. 2022. Gastropod assemblages associated with *Himantothallus grandifolius*, *Sarcopeltis antarctica*, and other subtidal macroalgae. [Antarctic Science 34: 246–255](#).
- Heiser, S., **C.D. Amsler**, C.J. Brothers, M.O. Amsler, A.J. Shilling, L. Bozarth, C.B. Davis, J.B. McClintock, B.J. Baker. 2022. Who cares more about chemical defenses – the macroalgal producer or its main grazer? [Journal of Chemical Ecology 48: 416-430](#).
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- Amsler, C.D.**, J.B. McClintock, & B.J. Baker. 2020. Chemical mediation of Antarctic macroalga-grazer interactions. In: Gómez, I. & P. Huovinen (eds.), *Antarctic Seaweeds: Diversity, Adaptation and Ecosystem Services*. Springer. [pp. 339-363](#).
- McClintock, J.B., **C.D. Amsler**, M.O. Amsler, & W.R. Fraser. 2020. Intertidal foraging by Gentoo penguins in a macroalgal raft. [Antarctic Science 32: 43-44](#).
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- Schram, J.B., M.O. Amsler, A.W.E. Galloway, **C.D. Amsler**, & J.B. McClintock. 2019. Fatty acid trophic transfer of Antarctic algae to a sympatric amphipod consumer. [Antarctic Science 31: 315-316](#).
- Küpper, F.C., **C.D. Amsler**, S. Morley, B. de Reviers, A. Reichardt, L.S. Peck, & A.F. Peters. 2019. Juvenile morphology of the large Antarctic canopy-forming brown alga, *Desmarestia menziesii* J. Agardh. [Polar Biology 42: 2097-2103](#).

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- Shilling, A.J., J.L. von Salm, A.R. Sanchez, Y. Kee, **C.D. Amsler**, J.B. McClintock, & B.J. Baker. 2019. Anverenes B-E, new polyhalogenated monoterpenes from the Antarctic red alga *Plocamium cartilagineum*. [Marine Drugs 17: 230](#).
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- Schram, J.B., K.M. Schoenrock, J.B. McClintock, **C.D. Amsler**, & R.A. Angus. 2016. Testing Antarctic resilience: the effects of elevated seawater temperature and decreased pH on two gastropod species. [ICES Journal of Marine Science 73: 739-752](#).
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- Young, R.M., K.M. Schoenrock, J.L. von Salm, **C.D. Amsler**, & B.J. Baker. 2015. Structure and function of macroalgal natural products. In: D.B. Stengel & S. Connan (eds.) *Natural Products from Marine Algae: Methods and Protocols*. Springer, New York. [pp. 39-73.](#)
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