Curriculum Vitae: Adrienne J. Sutton
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RESEARCH INTERESTS: My research centers around the patterns of air-sea CO2 exchange and ocean acidification in open ocean, coastal, and coral reef environments. Specifically, I am interested in using interdisciplinary approaches to explore how physical and biological mechanisms, such as the El Nino/Southern Oscillation and coral reef metabolism, drive variations in ocean carbon chemistry across time and space. These approaches include using autonomous instrumentation on buoys and other platforms to better understand natural variability and long-term trends in ocean carbon.

EDUCATION

Ph.D., University of Maryland Center for Environmental Science (UMCES), Horn Point Laboratory, Cambridge, MD **2000-2006**
GPA 3.7, Area of Study: Oceanography, Advisor: Dr. Thomas Fisher

B.S., University of North Carolina at Wilmington (UNCW), Wilmington, NC **1996-2000**
GPA 3.6, B.S. in Biology and Marine Biology with Chemistry minor, *cum laude*
Honors Directed Individual Study with Dr. Stephen Skrabal **2000**
Research Experience for Undergraduates (REU), Scripps Institution of Oceanography with Dr. Peter J.S. Franks **1999**

PROFESSIONAL AND RESEARCH EXPERIENCE

Oceanographer, National Oceanic and Atmospheric Administration (NOAA) Pacific Marine Environmental Laboratory (PMEL), Seattle, WA **2017-present**
Principal investigator in PMEL Carbon Program; oversee scientific and technical details of NOAA's air-sea CO_2 flux and ocean acidification (OA) mooring network; ocean carbon sensor development

Research Scientist 4, NOAA - University of Washington (UW) Joint Institute for the Study of the Atmosphere and Ocean (JISAO), PMEL, Seattle, WA **2012-2017**
Principal investigator in PMEL Carbon Program; oversee scientific and technical details of NOAA's air-sea CO_2 flux and ocean acidification (OA) mooring network
Cruise experience: R/V Fairweather, West Coast OA Cruise, Co-Chief Scientist and lead DIC analyst, 3 – 14 August 2013; R/V Kilo Moana, Validation Team of Wendy Schmidt Ocean Health XPRIZE competition, 14 – 20 May 2015

National Research Council (NRC) Research Associate, NOAA, PMEL, Seattle, WA **2010-2012**
Postdoctorate researcher with Drs. Richard Feely and Chris Sabine
Cruise experience: R/V Wecoma, West Coast OA Cruise, DIC analyst, 9 August – 3 September 2011; R/V Shimada, West Coast OA Cruise, DIC analyst, 4 – 18 September 2012
Lab work: DIC measurements; use of autonomous sensors (CO_2, pH, SSTC, dissolved oxygen, fluorescence, and turbidity); OA mooring data quality control

Assistant Director of Strategic Planning, Partnership for Interdisciplinary Studies of Coastal Oceans (PISCO), Oregon State University, Corvallis, OR **2008-2009**
Postdoctorate researcher with Drs. Jane Lubchenco and Bruce Menge
Developed PISCO's 5-Year Science Plan

Congressional Affairs Specialist, NOAA Office of Legislative Affairs, Washington, DC 2007-2008
Congressional Affairs Specialist for NOAA's role in the U.S. Climate Change Science Program and the Intergovernmental Panel on Climate Change
Office of Legislative Affairs representative for NOAA's Science Advisory Board
Issue areas: NOAA's Office of Oceanic and Atmospheric Research, including climate science, ocean exploration and undersea research, weather and air quality research, hurricane research, invasive species, NOAA's Laboratories and Cooperative Institutions, National Sea Grant College Program

Knauss Sea Grant Fellow, NOAA Office of Legislative Affairs 2006-2007
Issue areas: harmful algal blooms, hypoxia, oceans and human health, fishery regulations, marine protected areas, coral reefs, northeast and Chesapeake Bay fisheries, sea turtles

Research Assistant, laboratory of Dr. Thomas Fisher, UMCES 2000-2006
Lab work: nutrient analyses (NH_4, NO_{3+2}, NO_2, TN, PO_4, TP, PP, TSS, Si, DOC); gas and liquid chromatography; membrane inlet mass spectrometry; stream water flow measurements; groundwater hydrologic characterizations; soil property characterizations; use of ISCO 3700 portable samplers; use of Solinst automatic temperature and pressure loggers; use of GPS

Undergraduate Honors Student, laboratory of Dr. Stephen Skrabal, UNCW 2000
Lab work: trace metal analyses including cathodic stripping voltammetry

REU Fellow, laboratory of Dr. Peter J.S. Franks, 1999
Scripps Institution of Oceanography (SIO)
Lab work: methods used to culture phytoplankton; fluorometer for analysis of photosynthesis in phytoplankton; water column measurements (e.g., phytoplankton, zooplankton, chlorophyll, CTD)

SELECTED PRESENTATIONS

Sutton, A.J. and 30+ collaborators. 2019. Autonomous Ocean Acidification Observations for Constraining Variability, Detecting Trends, and Predicting Biological Exposure, 4th Global Ocean Acidification Observing Network International Workshop, Hangzhou, China, April 2019.

Sutton, A.J. and 30+ collaborators. 2019. Constraining change and variability in surface ocean CO_2: A global network of autonomous time series, OceanObs'19, Honolulu, Hawaii, September 2019.

Sutton, A.J. and 30+ collaborators. 2018. Ocean Carbon Variability and Change Constrained by Seawater pCO_2 Time Series Observations, AGU Fall Meeting, Washington DC, December 2018.

Sutton, A.J. and 30+ collaborators. 2018. Magnitude and timing of ocean carbon uptake variability constrained by seawater pCO2 time series observations, Synthesis and intercomparison of ocean carbon uptake in CMIP6 models, Ocean Carbon and Biogeochemistry Project, Washington DC, December 2018. (invited)

Sutton, A.J. and 30+ collaborators. 2018. Ocean carbon variability and change constrained by seawater pCO_2 time series observations, UMCES Horn Point Laboratory Cambridge, MD, December 2018 (invited).

Sutton, A. J., R.A. Feely, and C.L. Sabine. 2018. Surface ocean carbon from days to decades: unique signals emerging from moored autonomous time series, Ocean Sciences Meeting, Portland, Oregon, February 2018.

Sutton, A.J., C.L. Sabine, and R.A. Feely. 2017. Moored autonomous observing of air-sea CO_2 flux and ocean acidification: A growing global network, 10th International Carbon Dioxide Conference, Interlaken, Switzerland, August 2017.

Sutton, A.J., C.L. Sabine, and R.A. Feely. 2016. Natural variability and anthropogenic change revealed by moored time series observations of pCO_2 and pH. Oceans in a High CO_2 World, Hobart, Australia, 3 May 2016.

Sutton, A.J., C.L. Sabine, and R.A. Feely. 2016. Using present day observations to detect when ocean acidification exceeds natural variability of surface seawater Ωaragonite. Ocean Sciences Meeting, New Orleans LA, 22-26 Feb 2016.

Sutton, A. J., R.A. Feely, C.L. Sabine, M.J. McPhaden, and T. Takahashi. 2014. Natural and anthropogenic change since 1997: A synthesis of Equatorial Pacific surface ocean pCO_2 observations on the TAO Array. Ocean Sciences Meeting, Honolulu HI, 24-28 Feb 2014.

Sutton, A.J., R.A. Feely, C.L. Sabine, C.E. Cosca, and S. Maenner-Jones. 2012. Rising Atmospheric CO_2 and Ocean Acidification: the Tropical Oceans and Beyond. Tropical Oceans: Challenges of the 21st Century Meeting, Universidade Federal of Pernambuco, Recife, Brazil (invited).

Sutton, A.J., R.A. Feely, C.L. Sabine, S.R. Alin, and J. Mathis. 2012. Rising Atmospheric CO_2 and Ocean Acidification: From the Poles to Puget Sound. NOAA Senior Research Council Meeting, Seattle, WA (invited).

Sutton, A.J., R.A. Feely, C.L. Sabine, and S.R. Alin. 2012. From the global ocean to the Puget Sound: how OA is playing out locally and afar. JISAO Annual Luncheon, Seattle, WA (invited).

Sutton, A.J., M. Conathan, C.A. English, A. Mace, and J.J. Meyer. 2012. Pups in the Shark Tank: skills marine studies graduates develop while navigating Washington's political waters. Ocean Sciences Meeting, Salt Lake City, UT, 19-24 Feb 2012.

Sutton, A.J. 2011. Ocean acidification: the other CO_2 Problem. Institutes for Journalism and Natural Resources Puget Sound Learning Expedition, Quilcene, WA (invited).

Sutton, A.J. 2011. Biogeochemistry overview: global and coastal ocean acidification. National Council for Science and the Environment, Washington, DC (invited).

Sutton, A.J. 2010. Ocean acidification and the Global Carbon Cycle. COSEE Pacific Partnerships - Community College Faculty Summer Teaching Institute: Climate change and eutrophication in coastal and marine ecosystem. Shannon Point Marine Center, Western Washington University, Anacortes, WA (invited).

Regular presentations on ocean and climate policy and legislation to NOAA's Science Advisory Board and other NOAA Leadership panels. 2006-2008.

Sutton, A.J. 2008. Ocean issues in the 110th Congress and why Washington needs more scientists. UMCES Horn Point Laboratory Cambridge, MD (invited).

PEER-REVIEWED PUBLICATIONS

See OCRCID for links to publications.

Bourlès, B., M. Araujo, M.J. McPhaden, P. Brandt, G. Foltz, R. Lumpkin, H. Giordani, F. Hernandez, N. Lefèvre, P. Nobre, E. Campos, R. Saravanan, J. Trotte-Duhà, M. Dengler, J. Hahn, R. Hummels, J. Lübbecke, M. Rouault, L. Cotrim, A.J. Sutton, M. Jochum, and R. Perez (2019): PIRATA: A sustained observing system for tropical Atlantic climate research and forecasting. Earth Space Sci., 6, doi: 10.1029/2018EA000428.

Carter, B.R., N.L. Williams, W. Evans, A.J. Fassbender, L. Barbero, C. Hauri, R.A. Feely, and A.J. Sutton (2019): Time-of-detection as a metric for prioritizing between climate observation quality, frequency, and duration. Geophys. Res. Lett., 46, doi: 10.1029/2018GL080773.

Feely, R.A., R. Wanninkhof, B.R. Carter, P. Landschützer, A.J. Sutton, C. Cosca, and J.A. Triñanes (2019): Global ocean carbon cycle. In State of the Climate in 2018, Global Oceans. Bull. Am. Meteorol. Soc., 100(9), S94–S99, doi: 10.1175/2019BAMSStateoftheClimate.1.

Fennel, K., S. Alin, L. Barbero, W. Evans, T. Bourgeois, S. Cooley, J. Dunne, R.A. Feely, J.M. Hernandez-Ayon, X. Hu, S. Lohrenz, F. Muller-Karger, R. Najjar, L. Robbins, E. Shadwick, S. Siedlecki, N.

Steiner, A. Sutton, D. Turk, P. Vlahos, and Z.A. Wang (2019): Carbon cycling in the North American coastal ocean: A synthesis. Biogeosciences, 16, 1281–1304, doi: 10.5194/bg-16-1281-2019.

Foltz, G.R., P. Brandt, I. Richter, B. Rodriguez-Fonseca, F. Hernandez, M. Dengler, R.R. Rodrigues, J.O. Schmidt, L. Yu, N. Lefevre, L. Cotrim Da Cunha, M.J. McPhaden, M. Cunha de Araujo Filho, J. Karstensen, J. Hahn, M. Martín-Rey, C.M. Patricola, P. Poli, P. Zuidema, R. Hummels, R.C. Perez, V. Hatje, J. Lübbecke, I. Polo, R. Lumpkin, B. Bourlès, F.E. Asuquo, P. Lehodey, A. Conchon, P. Chang, P. Dandin, C. Schmid, A.J. Sutton, H. Giordani, Y. Xue, S. Illig, T. Losada, S. Grodsky, F. Gasparin, T. Lee, E. Mohino, P. Nobre, R. Wanninkhof, N.S. Keenlyside, V. Garcon, E. Sanchez-Gomez, H.C. Nnamchi, M. Drevillon, A. Storto, E. Remy, A. Lazar, S. Speich, M. Pereira Goes, T. Dorrington, W.E. Johns, J.N. Moum, C. Robinson, C. Perruche, R.B. de Souza, A. Gaye, M. Lopez-Parages, P.-A. Monerie, P. Castellanos, N.U. Benson, M.N. Hounkonnou, and Janice Trotte Duha (2019): The Tropical Atlantic Observing System. Front. Mar. Sci., 6, 206, Oceanobs19: An Ocean of Opportunity, doi: 10.3389/fmars.2019.00206.

Le Quéré, C., R.M. Andrew, P. Friedlingstein, S. Sitch, J. Hauck, J. Pongratz, P. Pickers, J.I. Korsbakken, G.P. Peters, J.G. Canadell, A. Arneth, V.K. Arora, L. Barbero, A. Bastos, L. Bopp, F. Chevallier, L.P. Chini, P. Ciais, S.C. Doney, T. Gkritzalis, D.S. Goll, I. Harris, V. Haverd, F.M. Hoffman, M. Hoppema, R.A. Houghton, T. Ilyina, A.K. Jain, T. Johannesen, C.D. Jones, E. Kato, R.F. Keeling, K. Klein Goldewijk, P. Landschützer, N. Lefèvre, S. Lienert, D. Lombardozzi, N. Metzl, D.R. Munro, J.E.M.S. Nabel, S.-I. Nakaoka, C. Neill, A. Olsen, T. Ono, P. Patra, A. Peregon, W. Peters, P. Peylin, B. Pfeil, D. Pierrot, B. Poulter, G. Rehder, L. Resplandy, E. Robertson, M. Rocher, C. Rödenbeck, U. Schuster, J. Schwinger, R. Séférian, I. Skjelvan, T. Steinhoff, A.J. Sutton, P.P. Tans, H. Tian, B. Tilbrook, F.N. Tubiello, I.T. van der Laan-Luijkx, G.R. van der Werf, N. Viovy, A.P. Walker, A.J. Wiltshire, R. Wright, and S. Zaehle (2018): Global Carbon Budget 2018. Earth Sys. Sci. Data, 10, 2141–2194, doi: 10.5194/essd-10-2141-2018.

Meinig, C., E.F. Burger, N. Cohen, E.D. Cokelet, M.F. Cronin, J.N. Cross, S. de Halleux, R. Jenkins, A.T. Jessup, C.W. Mordy, N. Lawrence-Slavas, A.J. Sutton, D. Zhang, and C. Zhang (2019): Public private partnerships to advance regional ocean observing capabilities: A Saildrone and NOAA-PMEL case study and future considerations to expand to global scale observing. Front. Mar. Sci., 6, 448, Oceanobs19: An Ocean of Opportunity, doi: 10.3389/fmars.2019.00448.

Moltmann, T., H.-M. Zhang, J.D. Turton, G. Nolan, C.C. Gouldman, L. Griesbauer, Z. Willis, Á. Muñiz Piniella, E. Charpentier, P. Poli, E.F. Burger, R. Lumpkin, C. Meinig, K. O'Brien, A.J. Sutton, D. Zhang, and Y. Zhang (2019): A Global Ocean Observing System (GOOS), delivered through enhanced collaboration across regions, communities, and new technologies. Front. Mar. Sci., 6, 291, Oceanobs19: An Ocean of Opportunity, doi: 10.3389/fmars.2019.00291.

Pardo, P.C., B. Tilbrook, E. van Ooijen, A. Passmore, C. Neill, P. Jansen, A.J. Sutton, and T.W. Trull (2019): Surface ocean carbon dioxide variability in South Pacific boundary currents and Subantarctic waters. Sci. Rep., 9, 7592, doi: 10.1038/s41598-019-44109-2.

Smith, N., W.S. Kessler, S. Cravatte, J. Sprintall, S. Wijffels, M.F. Cronin, A. Sutton, Y.L. Serra, B. Dewitte, P.G. Strutton, K.L. Hill, A. Sen Gupta, X. Lin, K. Takahashi, D. Chen, and S. Brunner (2019): Tropical Pacific Observing System. Front. Mar. Sci., 6, 31, Oceanobs19: An Ocean of Opportunity, doi: 10.3389/fmars.2019.00031.

Sutton, A.J., R.A. Feely, S. Maenner-Jones, S. Musielewicz, J. Osborne, C. Dietrich, N. Monacci, J. Cross, R. Bott, A. Kozyr, A.J. Andersson, N.R. Bates, W.-J. Cai, M.F. Cronin, E.H. De Carlo, B. Hales, S.D. Howden, C.M. Lee, D.P. Manzello, M.J. McPhaden, M. Meléndez, J.B. Mickett, J.A. Newton, S.E. Noakes, J.H. Noh, S.R. Olafsdottir, J.E. Salisbury, U. Send, T.W. Trull, D.C. Vandemark, and R.A. Weller (2019): Autonomous seawater pCO_2 and pH time series from 40 surface buoys and the emergence of anthropogenic trends. Earth Syst. Sci. Data, 11, 421–439, doi: 10.5194/essd-11-421-2019.

Terlouw, G.J., L.A.C.M. Knor, E.H. De Carlo, P.S. Drupp, F.T. Mackenzie, Y.H. Li, A.J. Sutton, A.J. Plueddemann, and C.L. Sabine (2019): Hawaii coastal seawater CO_2 network: A statistical evaluation

of a decade of observations on tropical coral reefs. Front. Mar. Sci., 6, 226, doi: 10.3389/fmars.2019.00226.

Todd, R.E., F.P. Chavez, S. Clayton, S. Cravatte, M. Goes, M. Graco, X. Lin, J. Sprintall, N.V. Zilberman, M. Archer, J. Arístegui, M. Balmaseda, J.M. Bane, M.O. Baringer, J.A. Barth, L.M. Beal, P. Brandt, P.H.R. Calil, E. Campos, L.R. Centurioni, M.P. Chidichimo, M. Cirano, M.F. Cronin, E.N. Curchitser, R.E. Davis, M. Dengler, B. deYoung, S. Dong, R. Escribano, A.J. Fassbender, S.E. Fawcett, M. Feng, G.J. Goni, A.R. Gray, D. Gutiérrez, D. Hebert, R. Hummels, S.-I. Ito, M. Krug, F. Lacan, L. Laurindo, A. Lazar, C.M. Lee, M. Lengaigne, N.M. Levine, J. Middleton, I. Montes, M. Muglia, T. Nagai, H.I. Palevsky, J.B. Palter, H.E. Phillips, A. Piola, A.J. Plueddemann, B. Qiu, R.R. Rodrigues, M. Roughan, D.L. Rudnick, R.R. Rykaczewski, M. Seraceno, H. Seim, A. Sen Gupta, L. Shannon, B.M. Sloyan, A.J. Sutton, L. Thompson, A.K. van der Plas, D. Volkov, J. Wilkin, D. Zhang, and L. Zhang (2019): Global perspectives on observing ocean boundary current systems. Front. Mar. Sci., 6, 423, Oceanobs19: An Ocean of Opportunity, doi: 10.3389/fmars.2019.00423.

Wanninkhof, R., P. Pickers, A.M. Omar, A. Sutton, A. Murata, A. Olsen, B.B. Stephens, B. Tilbrook, D. Munro, D. Pierrot, G. Rehder, J.M. Santana-Casiano, J. Müller, J. Trinanes, K. Tedesco, K. O'Brien, K. Currie, L. Barbero, M. Telszewski, M. Hoppema, M. Ishii, M. González-Dávila, N.R. Bates, N. Metzl, P. Suntharalingam, R.A. Feely, S.-I. Nakaoka, S.K. Lauvset, T. Takakahshi, T. Steinhoff, and U. Schuster (2019): A surface ocean CO2 reference network, SOCONET and associated marine boundary layer CO_2 measurements. Front. Mar. Sci., 6, 400, Oceanobs19: An Ocean of Opportunity, doi: 10.3389/fmars.2019.00400.

Zhang, D., M. Cronin, C. Meinig, T. Farrar, R. Jenkins, D. Peacock, J. Keene, and A. Sutton (2019): Air-sea flux measurements from a new unmanned surface vehicle compared to proven platforms during SPURS-2 field campaign. Oceanography, 32(2), 122–133, doi: 10.5670/oceanog.2019.220.

Fassbender, A.J., S.R. Alin, R.A. Feely, A.J. Sutton, J.A. Newton, C. Krembs, J. Bos, M. Keyzers, A. Devol, W. Ruef, and G. Pelletier (2018): Seasonal carbonate chemistry variability in marine surface waters of the Pacific Northwest. Earth Syst. Sci. Data, 10, 1367–1401, doi: 10.5194/essd-10-1367-2018.

Feely, R.A., R. Wanninkhof, B.R. Carter, P. Landschützer, A.J. Sutton, and J.A. Triñanes (2018): Global ocean carbon cycle. In State of the Climate in 2017, Global Oceans. Bull. Am. Meteorol. Soc., 99(8), S96–S100, doi: 10.1175/2018BAMSStateoftheClimate.1.

Chatterjee, A., M.M. Gierach, A.J. Sutton, R.A. Feely, D. Crisp, A. Eldering, M.R. Gunson, C.W. O'Dell, B.B. Stephens, and D.S. Schimel. 2017. Influence of El Niño on atmospheric CO2 over the tropical Pacific Ocean: Findings from NASA's OCO-2 mission. Science, 358(6360), eaam5776, doi: 10.1126/science.aam5776.

Sutton, A.J., R. Wanninkhof, C.L. Sabine, R.A. Feely, M.F. Cronin, and R.A. Weller. 2017. Variability and trends in surface seawater pCO_2 and CO_2 flux in the Pacific Ocean. Geophys. Res. Lett., 44(11), 5627–5636, doi: 10.1002/2017GL073814.

Xue, L., W.-J. Cai, A.J. Sutton, and C.L. Sabine. 2017. Sea surface aragonite saturation state variations and control mechanisms at the Gray's Reef time-series site off Georgia, USA (2006–2007). Mar. Chem., 195, 27–40, doi: 10.1016/j.marchem.2017.05.009.

Okazaki, R.R., A.J. Sutton, R.A. Feely, A.G. Dickson, S.R. Alin, C.L. Sabine, P.M.E. Bunje, and J.I. Virmani. 2017. Evaluation of marine pH sensors under controlled and natural conditions for the Wendy Schmidt Ocean Health XPRIZE. Limnol. Oceanogr. Methods, 15, 586–600, doi: 10.1002/lom3.10189.

Fassbender, A.J., S.R. Alin, R.A. Feely, A.J. Sutton, J. Newton, and R.H. Byrne (2017): Estimating total alkalinity in the Washington State coastal zone: Complexities and surprising utility for ocean acidification research. Estuar. Coast., 40(2), 404–418, doi: 10.1007/s12237-016-0168-z.

Reimer, J.J., W.-J. Cai, L. Xue, R. Vargas, S. Noakes, X. Hu, S.R. Signorini, J.T. Mathis, R.A. Feely, A.J. Sutton, C.L. Sabine, S. Musielewicz, B. Chen, and R. Wanninkhof. 2017. Time series pCO_2 at a coastal mooring: internal consistency, seasonal cycles, and interannual variability. Cont. Shelf Res., 145, 95–108, doi: 10.1016/j.csr.2017.06.022

Sutton, A.J., C.L. Sabine, R.A. Feely, W.-J. Cai, M.F. Cronin, M.J. McPhaden, J.M. Morell, J.A. Newton, J.-H. Noh, S.R. Ólafsdóttir, J.E. Salisbury, U. Send, D. Vandemark, and R.A. Weller. 2016. Using present-day observations to detect when anthropogenic change forces surface ocean carbonate chemistry outside preindustrial bounds. Biogeosciences, 13(17), 5065–5083, doi: 10.5194/bg-2016-104.

Fassbender, A.J., C.L. Sabine, M.F. Cronin, and A.J. Sutton. 2017. Mixed-layer carbon cycling at the Kuroshio Extension Observatory. Global Biogeochem. Cycles, 31(2), 272–288, doi: 10.1002/2016GB005547.

Le Quéré, C., R.M. Andrew, J.G. Canadell, S. Sitch, J.I. Korsbakken, G.P. Peters, A.C. Manning, T.A. Boden, P.P. Tans, R.A. Houghton, R.F. Keeling, S. Alin, O.D. Andrews, P. Anthoni, L. Barbero, L. Bopp, F. Chevallier, L.P. Chini, P. Ciais, K. Currie, C. Delire, S.C. Doney, P. Friedlingstein, T. Gkritzalis, I. Harris, J. Hauck, V. Haverd, M. Hoppema, K. Klein Goldewijk, A.K. Jain, E. Kato, A. Körtzinger, P. Landschützer, N. Lefèvre, A. Lenton, S. Lienert, D. Lombardozzi, J.R. Melton, N. Metzl, F. Millero, P.M.S. Monteiro, D.R. Munro, J.E.M.S. Nabel, S.-I. Nakaoka, K. O'Brien, A. Olsen, A.M. Omar, T. Ono, D. Pierrot, B. Poulter, C. Rödenbeck, J. Salisbury, U. Schuster, J. Schwinger, R. Séférian, I. Skjelvan, B.D. Stocker, A.J. Sutton, T. Takahashi, H. Tian, B. Tilbrook, I.T. van der Laan-Luijkx, G.R. van der Werf, N. Viovy, A.P. Walker, A. Wiltshire, and S. Zaehle. 2016. Global Carbon Budget 2016. Earth Sys. Sci. Data, 8, 605–649, doi: 10.5194/essd-8-605-2016.

Fassbender, A.J., S.R. Alin, R.A. Feely, A.J. Sutton, J. Newton, and R.H. Byrne. 2016. Estimating total alkalinity in the Washington State coastal zone: Complexities and surprising utility for ocean acidification research. Estuar. Coast., doi: 10.1007/s12237-016-0168-z.

Courtney, T.A., A.J. Andersson, N.R. Bates, A. Collins, T. Cyronak, S.J. de Putron, B.D. Eyre, R. Garley, E.J. Hochberg, R. Johnson, S. Musielewicz, T.J. Noyes, C.L. Sabine, A.J. Sutton, J. Toncin, and A. Tribollet. 2016. Comparing chemistry and census-based estimates of net ecosystem calcification on a rim reef in Bermuda. Front. Mar. Sci., 3, 181, doi: 10.3389/fmars.2016.00181.

Bakker, D.C.E., B. Pfeil, C.S. Landa, N. Metzl, K.M. O'Brien, A. Olsen, K. Smith, C. Cosca, S. Harasawa, S.D. Jones, S.-I. Nakaoka, Y. Nojiri, U. Schuster, T. Steinhoff, C. Sweeney, T. Takahashi, B. Tilbrook, C. Wada, R. Wanninkhof, S.R. Alin, C.F. Balestrini, L. Barbero, N.R. Bates, A.A. Bianchi, F. Bonou, J. Boutin, Y. Bozec, E.F. Burger, W.-J. Cai, R.D. Castle, L. Chen, M. Chierici, K. Currie, W. Evans, C. Featherstone, R.A. Feely, A. Fransson, C. Goyet, N. Greenwood, L. Gregor, S. Hankin, N.J. Hardman-Mountford, J. Harlay, J. Hauck, M. Hoppema, M.P. Humphreys, C.W. Hunt, B. Huss, J.S.P. Ibánhez, T. Johannessen, R. Keeling, V. Kitidis, A. Körtzinger, A. Kozyr, E. Krasakopolou, A. Kuwata, P. Landschützer, S.K. Lauvset, N. Lefèvre, C. LoMonaco, A. Manke, J.T. Mathis, L. Merlivat, F.J. Millero, P.M.S. Monteiro, D.R. Munro, A. Murata, T. Newberger, A.M. Omar, T. Ono, K. Paterson, D. Pearce, D. Pierrot, L.L. Robbins, S. Saito, J. Salisbury, R. Schlitzer, B. Schneider, R. Schweitzer, R. Sieger, I. Skjelvan, K.F. Sullivan, S.C. Sutherland, A.J. Sutton, K. Tadokoro, M. Telszewski, M. Tuma, S.M.A.C. van Heuven, D. Vandemark, B. Ward, A.J. Watson, and S. Xu. 2016. A multi-decade record of high quality fCO_2 data in version 3 of the Surface Ocean CO_2 Atlas (SOCAT). Earth Syst. Sci. Data, 8, 383–413, doi: 10.5194/essd-8-383-2016.

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http://usclivar.org/newsletter/newsletters.

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Wanninkhof, R., R. Feely, A.J. Sutton, C. Sabine, K. Tedesco, N. Gruber, and S. Doney. 2013. An integrated ocean carbon observing system (IOCOS). In Proceedings of the IOOS Summit, Interagency Ocean Observation Committee (IOOC), Herndon, Virginia, 13-16 November 2012.

Gledhill, D.K., E.B. Jewett, K. Arzayus, J. Newton, J. Salisbury, and A.J. Sutton. 2013. An integrated coastal ocean acidification observing system (ICOAOS). In Proceedings of the IOOS Summit, Interagency Ocean Observation Committee (IOOC), Herndon, Virginia, 13-16 November 2012.

Sutton, A.J., among other contributors. 2012. Puget Sound Marine Waters: 2011 Overview. S.K. Moore, R. Runcie, K. Stark, J. Newton, and K. Dzinbal (eds.), NOAA Northwest Fisheries Science Center for the Puget Sound Ecosystem Monitoring Program's (PSEMP) Marine Waters Workgroup, 54 pp.

Sutton, A.J. 2012. Ocean Acidification – Measurements. In Encyclopedia of Sustainability: Measurements, Indicators, and Research Methods for Sustainability, edited by I. Spellerberg, D. Fogel, and S. Fredericks: Berkshire Publishing. Great Barrington, MA.

Feely, R.A., R. Wanninkhof, J. Stein, M.F. Sigler, E. Jewett, F. Arzayus, D.K. Gledhill, and A.J. Sutton. 2010. NOAA Ocean and Great Lakes Acidification Research Plan. NOAA Special Report, April 2010, 143 pp.

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Sutton, A.J. 2006. Evaluation of agricultural nutrient reductions in restored riparian buffers. University of Maryland Dissertation.

OUTREACH PUBLICATIONS

Sutton, A.J. 2016. Career profiles: Options and insights—Adrienne J. Sutton, Research Scientist, University of Washington Joint Institute for the Study of the Atmosphere and Ocean, NOAA Pacific Marine Environmental Laboratory. Oceanography, 29(2), 298–299. [available online]

Sutton, A.J. 2012. Everyday Scientists: High School Poets, Home Brewers, and Scuba Divers. Sources:

The Journal of Underwater Education 24(4): 56-57. [pdf]

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Sutton, A.J. 2010. Deep-Sea Corals and the Changing Chemistry of the Sea. NOAA National Marine Sanctuary Deep-Sea Coral Expedition online cruise report. [website]

SELECTED AWARDS

UNCW Athletic Hall of Fame inductee (2014)
National Research Council Postdoctoral Research Associate Fellowship (2010)
Colonial Athletic Association's (CAA) Silver Anniversary Team for Women's Swimming and Diving (2009)
NOAA Administrator's Award for outstanding leadership in and dedication to developing U.S. Climate Change Science Program (CCSP) Synthesis & Assessment Products integrating climate research for decision support (July 2008)
NOAA Recognition Award for exceptional performance (July 2007 and Nov 2007)
John A. Knauss Marine Policy Fellowship (Feb. 2006-Jan. 2007)
"Most Outstanding Poster" MEES Colloquium (October 2005)
Horn Point Laboratory Graduate Fellowship (2000-2002)
UNCW Departmental Honors in Biology (2000)
CAA Conference Scholar Athlete (1997-2000)
UNCW Golden Seahawk Academic Award (1997-2000)
Dean's List UNCW (1996-2000)
Athletic scholarship (1996-2000)
NSF Research Experience for Undergraduates Fellowship, SIO (1999)
CAA Conference Rookie of the Year (1997)

COMMITTEES

Co-chair, Biogeochemistry Task Team, Tropical Pacific Observing System 2020, 2015 to present.
Scientific Steering Group, PIRATA, 2018 to present.
Member, United Nation's Sustainable Development Goal 14.3.1 Indicator Development Expert Group, 2017 to present.
Science Steering Committee, OceanSITES, 2011 to present**.**
Advisory Board, Advancing Climate Literacy through Investment in In-service and Pre-service Science Educators, Lawrence Hall of Science at the University of California Berkeley and Western Washington University, 2014 to present.
Advisor, Wendy Schmidt Ocean Health XPRIZE, 2012 to present.
Science Communication Advisory Group, UW College of the Environment, 2012 to 2017.

SCIENCE EDUCATION AND COMMUNITY OUTREACH ACTIVITIES

Mentor, summer undergraduate interns: Isabelle Chan (co-mentored), Research Experience for Undergrads, 2019; Treasure Warren, Research Experience for Undergrads, 2018; Virginia Parker, NOAA College-Supported Internship Program, 2018.
High school student mentor, pilot project of the Educurious Expert Network, Bellevue Big Picture School, 2011.
Workshop presenter, Expanding Your Horizons for Middle School Girls, Bellevue Community College,

semi-annual 2011 to 2016.

Guest speaker/lecturer, UW Marine Pollution class, 2019; UW Chemical Oceanography seminar, 2019; Seattle Art Institute, 2015; Guest Scientist, tOAStER (the Oceanography All Student Educational Retreat), UW School of Oceanography, 2013; Western Washington Univ. Huxley College of the Environment on the Peninsulas, Puget Sound Research course, 2013; Central Washington Univ. Oceans and Atmosphere course, 2013; UW School of Marine and Environmental Affairs, Society and Oceans course, 2012; JISAO summer intern lecture series, 2012; UW School of Marine and Environmental Affairs, Contemporary Issues in Marine Affairs course, 2012; Seattle Girls School science class, 2010; Washington State Ocean Caucus, Westport, WA, 2010.

National Association of Underwater Instructors (NAUI) SCUBA Instructor, 2007-2018.

American Red Cross First Aid and CPR Instructor, 1995-2008.

Swim coach, various teams, 1993-2005.

Summer science camp teacher, Wilmington, NC, 1998.

PROFESSIONAL SERVICE

American Geophysical Union. Member, 2009-present.

American Society of Limnology and Oceanography, Dissertations Initiative for the Advancement of Limnology and Oceanography, 2007-2011.

NOAA Science Advisory Board Congressional Liaison, 2007-2008.

Scientific Session Convener at AGU Fall Meeting 2010, Ocean Sciences 2012, Ocean Sciences 2014.

Reviewer for Nature, Geophysical Research Letters, PLOS ONE, Limnology and Oceanography, Journal of Geophysical Research – Oceans, Progress in Oceanography, Biogeosciences, Aquatic Geochemistry, Journal of Advances in Modeling Earth Systems.

NAUI Member, 2007-present.

POSTGRADUATE-SCHOLAR ADVISOR

Sophie Chu (UW JISAO, 2017-2019); Andrea Fassbender (Postdocs Applying Climate Expertise Postdoctoral Fellowship Program, 2015-2016); Remy Okazaki (Wendy Schmidt Ocean Health XPRIZE Validation Lead, 2014-2016)