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Education
Ph.D. (Oceanography), University of Washington, Seattle, 1997
M.Sc. (Oceanography), Hebrew University, Jerusalem, Israel, 1991
B.Sc. (Physics, Mathematics with a minor in Atmospheric Sciences), Hebrew University, Jerusalem, Israel, 1990

Professional history

2010-present	Professor, School of Marine Sciences, University of Maine
2005-2010	Associate Professor, School of Marine Sciences, University of Maine
2002-2005	Assistant Professor, School of Marine Sciences, University of Maine
1999-2002	Assistant Professor (Sr. Res.), College of Ocean and Atmospheric Sciences, Oregon State University.
1998	Postdoc, College of Ocean and Atmospheric Sciences, Oregon State University.
1997	Postdoc, School of Oceanography, University of Washington.

Class taught at UMaine since 2008 on (See: http://misclab.umeoce.maine.edu/education.php):
SMS 204 (3cr): Integrative Marine Sciences II (seven week module on physics). Every year except 2009.

SMS 303 (3cr): Integrative Marine Sciences III (a five week module on waves, tides, Coriolis and mixing. 2009 & 2010.

SMS 491/EDW 472 (3cr): Teaching sciences by ocean inquiry (with Lee Karp-Boss and H. Weller). 2008.

SMS 491/HON 303 (3cr): Engineering literacy for the 21st century. Every year except 2009.

SMS 491 (2-3cr): Sounds in the Sea. 2012.

SMS 598 (1cr): Instrumentation seminar. 2012.

SMS 598 (2cr): Calibration and Validation for Ocean Color Remote Sensing. 2011. Externally funded 5-week summer class at the DMC, co-taught with MJ Perry, C. Roesler and C. Mobley.

SMS 618 (3cr): Particle dynamics. 2009.

Peer-reviewed Journal publications (See: http://misclab.umeoce.maine.edu/index.php):

1. Behrenfeld, Michael J. Scott C. Doney, Ivan Lima, Emmanuel S. Boss, David A. Siegel, 2013. Annual cycles of ecological disturbance and recovery underlying the subarctic Atlantic spring plankton bloom. Global Biogeochemical Cycles, 27, 1–15, doi:10.1002/gbc.20050

2. Leeuw, T., E. Boss, D.L. Wright, 2013. In situ measurements of phytoplankton fluorescence using low cost electronics. Sensors, 13, 7872-7883.
3. Kalenak D., E. Boss and S. Efler. Inherent optical properties of suspended particulates in four temperate lakes: application of in situ spectroscopy. Hydrobiologia. DOI:10.1007/s10750-013-1498-5.
4. Boss, Emmanuel, Hezi Gildor, Wayne Slade, Leonid Sokoletsky, Aharon Oren, and James Loftin, 2013. Optical properties of the Dead Sea. Journal of Geophysical Research, Vol 118, Nos. 1–9, doi:10.1002/jgrc.20109.
5. Leeuw, T., S. O. Newburg, E. S. Boss, W. H. Slade, M. G. Soroka, J. Pederson, C. Chryssostomidis, and F. S. Hover, 2013. Remote identification of the invasive tunicate Didemnum vexillum using reflectance spectroscopy. Appl. Opt. 52, 1758-1763.
6. Martinez-Vicente, V., G. Dall'Olmo, G. Tarran, E. Boss, and S. Sathyendranath, 2013. Optical backscattering is correlated with phytoplankton carbon across the Atlantic Ocean. Geophysical Research Letters, 40, 1–5, doi:10.1002/grl.50252.
7. Siegel, D.A., M.J. Behrenfeld, S. Maritorena, C.R. McClain, D. Antoine, S.W. Bailey, P.S. Bontempi, E.S. Boss, H.M. Dierssen, S.C. Doney, R.E. Eplee Jr., R.H. Evans, G.C. Feldman, E. Fields, B.A. Franz, N.A. Kuring, C. Mengelt, N.B. Nelson, F.S. Patt, W.D. Robinson, J.L. Sarmiento, C.M. Swan, P.J. Werdell, T.K. Westberry, J.G. Wilding, J.A. Yoder, 2013 Regional to global assessments of phytoplankton dynamics from the SeaWiFS mission. Remote Sensing of Environment, 135, 77–91.
8. Werdell, P. Jeremy, Bryan A. Franz, Sean W. Bailey, Gene C. Feldman, Emmanuel Boss, Vittorio E. Brando, Mark Dowell, Takafumi Hirata, Samantha J. Lavender, ZhongPing Lee, Hubert Loisel, Stéphane Maritorena, Fréderic Mélin, Timothy S. Moore, Timothy J. Smyth, David Antoine, Emmanuel Devred, Odile Hembise Fanton d'Andon, and Antoine Mangin, 2013. Generalized ocean color inversion model for retrieving marine inherent optical properties. Appl. Opt. 52, No. 10, 2019-2037.
9. Bergamaschi, Brian A., Jacob A. Fleck, Bryan D. Downing, Emmanuel Boss, Brian A. Pellerin, Neil K. Ganju, David H. Schoellhamer, Amy A. Byington, Wesley A. Heim, Mark Stephenson, and Roger Fujii, 2012. Mercury dynamics in a San Francisco estuary tidal wetland: Assessing dynamics using in situ measurements, Estuaries and Coasts, doi: 10.1007/s12237-012-9501-3.
10. Boss, E., and J. Loftin. 2012. Spotlight on education — Engineering literacy for undergraduates in marine science: A case for hands on, Oceanography 25(2):219–221, http://dx.doi.org/10.5670/oceanog.2012.61
11. Dall'Olmo, G., E. Boss, M.J. Behrenfeld, and T.K. Westberry, 2012. Particulate optical scattering coefficients along an Atlantic Meridional Transect, Opt. Express 20, No. 19, 21532-21551.
12. Estapa, M., E. Boss, L. M. Mayer, and C. S. Roesler, 2012. Role of iron and organic carbon in mass-specific light absorption by particulate matter from Louisiana coastal waters, Limnol. Oceanogr., 57(1), 2012, 97-112, doi:10.4319/lo.2012.57.1.0097
13. Mobley, Curtis D. and Emmanuel S. Boss, 2012. Improved irradiances for use in ocean heating, primary production, and photo-oxidation calculations, Applied Optics, Vol. 51, No. 27, 6549-6560.
14. Russo, C.R. and E.S. Boss, 2012. An evaluation of acoustic doppler velocimeters as sensors to obtain the concentration of suspended mass in water, Journal of Atmospheric and Oceanic Technology, 29, 755-761.

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16. Bergamaschi, B.A., J.A. Fleck, B.D. Downing, E. Boss, B. Pellerin, N.K. Ganju, D.H. Schoellhamer, A.A. Byington, W.A. Heim, M. Stephenson, and R. Fujii, 2011. Methyl mercury dynamics in a tidal wetland quantified using in situ optical measurements. Limnol. Oceanogr., 56(4), 1355-1371.
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Book chapters (peer-reviewed)

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Service 2008 to present (See: http://misclab.umeoce.maine.edu/outreach.php)

International

- Co-Chief Editor, Biogeosciences, 2009-present.
- Member, expert committee of GIS COOC, GIS-COOC, A scientific interest group dedicated to ocean colour, 2011-present.
- Advisor, OceanoScientific oceanoscientific, 2009-present.
- Member, IOCCG Bio-ARGO Working Group, 2007-2011.
- Foreign Expert, BELCOLOUR Steering Committee, 2007-2011.
- Member, Ocean Optics Planning Committee, 2005-2008.
- Member, ASLO Publication Committee, 2005-2008.
- Initiator of the Hands-On Oceanography section of The Oceanography Society.

National

- Member, UNOLS Ocean Observing Scinece Committee, 2010-present.
- Member, NOAA-CREST External Advisory Board Committee, 2007-present.
- Member, Alliance for Coastal Technologies (ACT) Hydrocarbon detection Working Group, 2010-present.
- Member, PACE science definition team, 2011-2012.
- Participant, Mentoring Physical Oceanography Women to Increase Retention (MPOWIR), Pattullo conference, Oct. 2011.
- Member, organizing committee USGS-CUAHSI In Situ Optical Sensor Network Workshop, 2010-2011.
- Member, National Academy of Sciences (Ocean Studies Board's) committee on: An Ocean Infrastructure Strategy for U.S. Ocean Research in 2030, 2009-2011. Click image, at right, to access Critical Infrastructure for Ocean Research and Societal Needs in 2030

University of Maine

- Co-Chair, UMaine Faculty Senate, Service Committee, 2012-2013.
- Member, UMaine's president round-table, 2012-2013.
- Member, UMaine Faculty Senate, Research Committee, 2011.
- Member, University Research Council, 2010-2011.
- Chair, UMaine Faculty Senate, Library Committee, 2008.
- Member, UMaine Faculty Senate, Library Committee, 2008.
- Member, UMaine Faculty Senate, 2008, 2011-present.
- Member, UMaine Diving Board, 2006-present.
- Faculty Advisor, UMaine's Student Diving Club, 2005-present.

UMaine's School of Marine Sciences (SMS)

- SMS Chair Graduate Admission Committee, 2009-present.
- SMS Peer Committee, 2008.

Local Community

- Advisor, Maine Shellfish Working Group, Darling Marine Center, 2007-present.
- Member, Education Committee, Challenger Learning Center, 2007-2009.
- Swim referee for YMCA and Maine High School