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EDUCATION:

Ph.D., University of Michigan, Coastal Engineering, 1992
M.S.E., Coastal Engineering, University of Michigan, 1989
B.S., Ocean Science, University of Michigan, 1987

PROFESSIONAL EXPERIENCE:

Professor, Department of Ocean Sciences, 2014-present
Director, Alfred C. Glassell Jr. SUSTAIN laboratory, 2014-present
Chair, Division of Applied Marine Physics, 2011-2014
Associate Professor 2008-2013
Research Associate Professor 2004-2008
Associate Scientist, 1998-2004
Assistant Scientist, 1995-1998
Post-doctoral Associate, 1993-1995
Division of Applied Marine Physics,
Rosenstiel School of Marine and Atmospheric Science, University of Miami.
Secondary Appointment, 2009-present, Civil, Architectural and
Environmental Engineering.

Postdoctoral Associate, 1992-1993,
Research Associate, 1987-1992
Department of Naval Architecture and Marine Engineering
University of Michigan, Ann Arbor, MI

PUBLICATIONS

Feng, Z., A Reniers, B.K. Haus, HM Solo-Gabriele, JD Wang, LE Fleming, 2015.
A predictive model for microbial counts on beaches where intertidal sand is the
primary source. *Mar. Poll. Bull.* 94 (1), 37-47.

Laxague, N.J. M., B. K .Haus, D. Bogucki, T. Özgökmen, 2015. Spectral
characterization of fine-scale wind waves using shipboard optical polarimetry.
J. Geophys. Res.: Oceans, 120, 3140-3156, doi:10.1002/2014JC010403.

Bogucki D. J., K. Huguenard, B. K. Haus, T. M. Özgökmen, A. Reniers, N. J. M.
Laxague, 2015, "Scaling Laws for the Upper-Ocean Temperature Dissipation
Rate", *Geophys. Res. Letts.*, 42 (3), 839-846, DOI:10.1002/2014GL062235.

Ortiz-Suslow, D. G., B. K. Haus, N. J. Williams, N. M. Laxague, A. J. H. M. Reniers, and H. C. Graber, 2015, "The spatial-temporal variability of air-sea momentum fluxes observed at a tidal inlet", *J. Geophys. Res. Oceans*, 120 (2), 660-676, DOI:10.1002/2014JC010412.

Coelho, E.F. P Hogan, G Jacobs, P Thoppil, HS Huntley, BK Haus, 2015. Ocean current estimation using a Multi-Model Ensemble Kalman Filter during the Grand Lagrangian Deployment experiment (GLAD). *Ocean Modelling*, 87, 86-106.

Jacobs G. A., BP Bartels, DJ Bogucki, FJ Beron-Vera, SS Chen, EF Coelho, 2014. Data assimilation considerations for improved ocean predictability during the Gulf of Mexico Grand Lagrangian Deployment (GLAD), *Ocean Modelling* 83, 98-117.

Poje A. C., T. M. Özgökmen, B. L. Lipphardt, B. K. Haus, E. H. Ryan, A. C. Haza, G. A. Jacobs, A. J. H. M. Reniers, M. J. Olascoaga, G. Novelli, A. Griffa, F. J. Beron-Vera, S. S. Chen, E. Coelho, P. J. Hogan, A. D. Kirwan, Jr., H. S. Huntley and A. J. Mariano; 2014, "Submesoscale dispersion in the vicinity of the Deepwater Horizon spill" *Proceedings of the National Academy of Sciences*, 201402452.

Soloviev, A.V., Lukas, R., Donelan, M.A., Haus, B.K. & Ginis, I. 2014, The air-sea interface and surface stress under tropical cyclones. *Scientific Reports*, 4, 5306; DOI:10.1038/srep05306.

Carrier, M., H. Ngodock, S. Smith, P. Muscarella, G. Jacobs, T. Özgökmen, B.K. Haus, and B. Lipphardt. Impact of ocean velocity observations inferred from Lagrangian drifter data using the NCOM-4DVAR. 2014, *Monthly Weather Review*, 142 (4), 1509-1524.

Phillips, M. C. Z. Feng, L. J. Vogel, A. J.H.M. Reniers, B. K. Haus, A. A. Enns, Y. Zhang, D. B. Hernandez, H. M. Solo-Gabriele. 2014. Microbial release from seeded beach sediments during wave conditions. *Marine Pollution Bulletin* 79, 1-2, 114-122.

Olascoaga, M. J., F. J. Beron-Vera, G. Haller, J. , M. Iskandarani, E. F. Coelho, B. K. Haus, H. S. Huntley, G. Jacobs, A. D. Kirwan, Jr., B. L. Lipphardt, Jr., T. Ozgokmen, A. J. H. M. Reniers and A. Valle-Levinson. 2013. Drifter motion in the Gulf of Mexico constrained by altimetric Lagrangian coherent structures, *Geophysical Research Letters* , 40(23), 6171-6175.

Feng Z., A. Reniers, B. K. Haus, and H. M. Solo-Gabriele, 2013. Modeling enterococci release, transport and inactivation at an embayed non-point source beach. *Water Resour. Res.* 49, 1–20, doi:10.1029/2012WR012432.

Criales, M. M., I. C. Zink, B. K. Haus, J. Wylie, and J. A. Browder, 2013, "Effect

of turbulence on the behavior of pink shrimp postlarvae and implications for STST behavior", *Marine Ecology Progress Series*, 477, 161-176.

Leatherman, S. B, S. P. Leatherman, and B. K. Haus, 2013. "Bar Height and Rip Current Presence and Strength", *Shore and Beach*, 81(1), 19-22.

Jeong, D., B. K. Haus and M. A. Donelan, 2012, "Enthalpy Transfer across the air-water interface in high winds including spray " *Journal of Atmospheric Sciences*, 69(9). 2733-2748.

Galchenko. A.V., A. V. Babanin, D. Chalikov, I.R. Young, B. K. Haus, 2012, "Influence of wind forcing on modulation and breaking of deep-water wave groups". *Journal of Physical Oceanography*, 42, 928-935.

Enns A. A., L. J Vogel, A. M Abdelzaher, H.M. Solo-Gabriele, L. R W Plano, M. L Gidley, M. C Phillips, J. S Klaus, A. M. Piggot, Z. Feng, A. J. H. M. Reniers, B. K Haus, S. M. Elmir, Y. Zhang, N. H Jimenez, N. Abdel-Mottaleb, M. E. Schoor, A. Brown, S. Q. Khan, A. S Dameron, N. C Salazar, L. E Fleming, Ph.D., 2012, "Spatial and Temporal Variation in Indicator Microbe Sampling is Influential in Beach Management Decisions", *Water Research*, 46, 2237 – 2246.

Toffoli, A., A. V. Babanin, D. Jeong, B.K. Haus and M. A. Donelan, 2011, "Estimate of sea spray concentration with a laser altimeter", *Journal of Atmospheric and Oceanic Technology*, 28 (9), 1177-1183.

Savelyev, I., B. K. Haus and M. A. Donelan. 2011, "Experimental study on wind-wave momentum flux in strongly forced conditions", *Journal of Physical Oceanography*, 41, 1328-1344.

Donelan, M. A., B. K. Haus, W. J. Plant and O. Troianowski, 2010, "The modulation of short wind- waves by long waves", *Journal of Geophysical Research*, 115, C10003, doi:10.1029/2009JC005794.

Haus, B.K. P. Work, G. Voulgaris, N. K. Shay, R. Ramos and J. Martinez, 2010, "Wind speed dependence of single site wave height retrievals from phased-array HF radars". *Journal of Atmospheric and Oceanic Technology*, 27, 1381-1394, DOI: 10.1175/2010JTECHO730.1.

Haus, B. K., D. Jeong, M. A. Donelan, J. A. Zhang and I. Savelyev, 2010, "The relative rates of sea-air heat transfer and frictional drag in very high winds", *Geophysical Research Letters*, 37, L07802, doi:10.1029/2009GL042206.

Gremes-Cordero, S., B. K. Haus and H. C. Graber, 2009, "Surface Signature of the Chesapeake Bay outflow variability observed with Coastal Radar", *Journal of Coastal Research*, 25 (6), 1254-1263.

Babanin, A. V. and B. K. Haus, 2009, "On the existence of Water Turbulence Induced by Non-breaking Surface Waves", *Journal of Physical Oceanography*, 39 (10), 2675-2679, 10.1175/2009JPO4202.1.

R. Ramos, H. C. Graber, B. K. Haus, 2009, "Observation of Wave Energy Evolution in Coastal Areas using HF Radar". *Journal of Atmospheric and Oceanic Technology*, vol. 26, pp 1891-1909.

Zhang, F., W. M. Drennan, B. K. Haus, H. C. Graber. 2009. "On wind-wave-current interaction during the Shoaling Waves Experiment", *Journal of Geophysical Research*, VOL. 114, C01018, doi:10.1029/2008JC004998.

G. Voulgaris, Haus, B. K., P. Work, L. K. Shay, H. Seim, R. H. Weisberg and J. R. Nelson, 2008. "Waves initiative within SEACOOS" *Marine Technology Society Journal*, 42(3), 68-80.

Fiechter J., B.K. Haus, N. Melo, and C. N.K. Mooers, 2008. "Physical processes impacting coral larvae transport and reef connectivity in the Upper Florida Keys", *Continental Shelf Research*, 28, 1261-1272.

Soloviev, A., M. Donelan, H. Graber, B. Haus and P. Schlüssel, 2007. An Approach to Estimation of Near-Surface Turbulence and CO₂ Transfer Velocity from Remote Sensing Data. *Journal of Marine Systems*, 66, 182-194.

Haus, B.K., 2007. "Surface Current effects on the fetch limited growth of wave energy". *Journal of Geophysical Research*, 112, C03003, doi:10.1029/2006JC003924.

Shay, L. K., J. Martinez-Pedraja, T. M. Cook, B. K. Haus and R. Weisberg, 2007. High Frequency Radar Mapping of Surface Currents using WERA. *Journal of Atmospheric and Oceanic Technology*, 24 (3), 484-503.

Haus, B. K., R. Ramos, H. C. Graber, L. K. Shay and Z. R. Hallock, 2006. Remote Observation of the Spatial Variability of Surface Waves Interacting with an Estuarine Outflow. *IEEE Journal of Oceanic Engineering*, 31(4), 835-849.

Fiechter, J., K. L. Steffen, C. N. K. Mooers and B. K. Haus, 2006. Hydrodynamics and Sediment Transport in a South Florida Tidal Inlet. *Estuarine Coastal and Shelf Sciences*, 70, 297-306, doi:10.1016/j.ecss.2006.06.21.

Wyatt, L., G. Liakhovetski, H. Graber and B.K. Haus. 2005. Factors affecting the accuracy of Showex HF radar wave measurements. *Journal of Atmospheric and Oceanic Technology*, 22, 847-859.

Donelan, M. A. B. K. Haus, N. Reul, W. J. Plant, M. Stiassne, H. C. Graber, O. B. Brown, E .S. Saltzman. 2004. On the limiting aerodynamic roughness in very

strong winds. *Geophysical Research Letters*, Vol. 31, No. 18, L18306, doi:10.1029/2004GL019460.

Haus, B. K., J. D. Wang, J. Martinez-Pedraja and N. Smith. 2004. Southeast Florida Shelf Circulation and Volume Exchange, Observations of km-scale variability. *Estuarine Coastal and Shelf Sciences*, 59 (2), 277-294.

Haus, B. K., H. C. Graber and L. K. Shay and T.M. Cook. 2003. Alongshelf variability of a coastal buoyancy current during the relaxation of downwelling favorable winds. *Journal of Coastal Research*, 19 (2), 409-420.

Shay, L. K., T. M. Cook, B. K. Haus, H. C. Graber, J. Martinez and Z. R. Hallock, 2001. The strength of the M2 tide at the mouth of the Chesapeake Bay. *Journal of Physical Oceanography*, 31, 427-449.

Haus, B. K., J. D. Wang, J. Rivera, N. Smith and J. Martinez-Pedraja, 2000. Remote Radar Measurement of Shelf Currents off Key Largo, Florida. *Estuarine, Coastal and Shelf Sciences*, 51, 553-569.

Shay, L. K., T. M. Cook, B. K. Haus, J. Martinez, H. Peters, A. J. Mariano, J. VanLeer, P. Edgar An, S. Smith, A. Soloviev, B. Weisberg and M. Luther. 2000, VHF Radar Detects Oceanic Submesoscale Vortex along Florida Coast. *EOS, Transactions* 81: 209, 213.

Marmorino, G. O., L. K. Shay, B.K. Haus, R. A. Handler, H. C. Graber, and M. P. Horne, 1999: An EOF analysis of HF Doppler radar current measurements of the Chesapeake Bay buoyant outflow, *Cont. Shelf Res.* 19, 271-288.

Shay, L. K., S. Lentz, H. C. Graber and B. K. Haus. 1998. Current structure variations detected by high frequency radar and vector measuring current meters. *J. Atmos. Oceanic Tech.*, 15:1(2), 237-256.

Graber, H. C., B. K. Haus, L. K. Shay, and R. D. Chapman, 1997: HF radar comparisons with moored estimates of current speed and direction: Expected differences and implications. *J. Geophys. Res.*, 102(8), 18,749-18,766.

Haus, B. K., H. C. Graber and L. K. Shay, 1997: Synoptic measurements of dynamic oceanic features. *Oceanography*, 10(2), 45-48.

BOOK CHAPTERS

Haus, B. K., 2011, Remote sensing applied to Rip Current Forecasts and Identification, in *Rip Currents: Beach Safety, Physical Oceanography, and Wave Modeling*. Eds. S. Leatherman and J. Fletemeyer. CRC Press, Taylor and Francis Group, Boca Raton FL.

Soloviev, A. V., S. Matt, M. Gilman, H. Hühnerfuss, B. Haus, D. Jeong, I.

Savelyev and M. Donelan, 2011: Modification of Turbulence at the Air-Sea Interface Due to the Presence of Surfactants and Implications for Gas Exchange. Part I: Laboratory Experiment. In: "GAS TRANSFER AT WATER SURFACES 2010", Kyoto University Press.

COURSES TAUGHT

ECS 372, "Water Science and Policy", through the Center for Ecosystem Science and Policy, Spring 2009, 2010.
MSC 302, "Physical Oceanography Laboratory", Spring 2015.
MSC 430, "Introduction to Ocean Engineering", Spring 2013,2014.
AMP 509, "Coastal Engineering", Spring 2015.
AMP 690, "Mechanics and Thermodynamics of the Air-Sea Interface", Jointly taught in the Spring term 2005,2006,2008,2009,2010, 2012, 2014 with M. Donelan and H. Graber.
AMP/MPO 650, "Coastal Ocean Circulation", Jointly taught in Spring 2009 with A. Reniers and V. Kourafalou.

STUDENTS ADVISED

Nathan Laxague, PhD in progress, advisor.
Patrick Rynne, PhD in progress co-advisor.
Matthew Gough, PhD in progress co-advisor
David Ortiz-Suslow PhD in progress, advisor.
Ming Shao, PhD in progress, advisor.
Sanchit Mehta, PhD In progress, advisor.
Amin Sarafraz, PhD 2013, CAE, University of Miami
Zhixuan Feng, PhD, 2013, co-advisor, RSMAS/AMP
Silvia Gremes-Cordero, MS, 2004, PhD 12/2010, RSMAS/AMP, University of Miami.
Cesar R.B. Morais, M. Sc. 12/2010, committee member, RSMAS/MPO
Dahai Jeong- M.Sc., 06-2008, thesis advisor, University of Miami.
Mei Wang- M.Sc. 12-2008, thesis advisor, University of Miami.
Ivan Savelyev, PhD 06/2009, co-advisor, University of Miami.
Sarah Woods, PhD 12/2009, committee member, University of Miami.
Eduardo Cruz, PhD 06/2008, committee member, University of Miami.
Rafael Ramos, committee member, PhD, 12/2005, University of Miami.
Brad Parks, M. Sc., 12-2008, committee member, University of Miami.
Fei Zhang, MS 2005, PhD 12/2008, committee member, University of Miami
Chad Whelan, MS, 1997. Committee member, University of Miami
Spectra".

EXTERNAL COMMITTEES

NOAA/IOOS, National HF radar plan, review panel member.
NDBC/ACT, National Waves Plan, review panel member.
Radar Oceanography Working Group Steering Committee. 2004- present.
Wind over Water III, Conference Organizer.
1st International Rip Current Symposium, organizing committee member.

Oregon Sea Grant, proposal review panel member.

Membership in Professional Organizations

American Geophysical Union, 1989 – present.

American Meteorological Society, 2008-present

Coastal Education and Research Foundation, 2003-present.

IEEE Oceanic Engineering Society, 2004-present