# BIOGRAPHICAL SKETCH

**Harvey E. Seim**

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**A. PROFESSIONAL PREPARATION:**

University of South Carolina Columbia, SC Marine Sciences B.Sc., 1981

University of South Carolina Columbia, SC Geology M.Sc., 1985

University of Washington Seattle, WA Oceanography Ph.D., 1993

University of Washington Seattle, WA Oceanography Postdoc, 1994

Woods Hole Ocean. Inst. Woods Hole, MA Oceanography Postdoc, 1995

**B. APPOINTMENTS:**

2019-2021 Chair, Marine Sciences, UNC Chapel Hill

2019-presentDirector, Marine Sciences Program, UNC Chapel Hill

2013-2018 Chair, Marine Sciences, UNC Chapel Hill

2013-2018Director, Marine Sciences Program, UNC Chapel Hill

2008-present Professor, UNC Chapel Hill

2003-2008 Associate Professor, UNC Chapel Hill

2000-2003 Assistant Professor, UNC Chapel Hill

1998-2003 Adjunct Assistant Professor, University of Georgia

1996-2000 Assistant Professor, Skidaway Institute of Oceanography

**C. RECENT PRODUCTS:**

Muglia, M., H. Seim and T. Patterson, 2021. Gulf Stream Position, Width, and Orientation Estimated from HF Radar Radial Velocity Maps off Cape Hatteras, N.C., submitted to *J. Atmos. Ocean. Tech*.

Neave,E., H. Seim, S. Gifford, O. Torano, Z. I. Johnson, D. Páez-Rosas and A. Marchetti, 2021. Protistan plankton communities in the Galápagos Archipelago respond to changes in deep water masses resulting from the 2015/16 El Niño**,** submitted to *Environmental Microbiology*.

Páez-Rosas, D., J. Torres, E. Espinoza, A. Marchetti, H. Seim, M. Riofrío-Lazo,2021. Abundance, distribution and population trends of endangered Galapagos pinnipeds, *Scientific Reports*, 11:8785, doi.org/10.1038/s41598-021-88350-0.

Han, L., H. Seim, J. Bane, R. Todd and M. Muglia, 2021. A shelf water cascading event near Cape Hatteras, *J. Phys. Oce.,* doi.org/10.1175/JPO-D-20-0156.1.

Muglia, M., H. Seim, P. Taylor, 2020. Gulf Stream marine hydrokinetic energy off Cape Hatteras, North Carolina, *MTS Journal*, 54(6), 24-36.

Gifford, S., A. Zhao, B. Stemple, K. DeLong, P. Medeiros, H. Seim, A. Marchetti, 2020. The Microbiome of the Galápagos Archipelago and its Response to El Niño, *Frontiers in Microbiology*, 11:575194. doi: 10.3389/fmicb.2020.575194

Roarty, H., S. Glenn, J. Brodie, L. Nazzaro, M. Smith, Handel, E, J. Kohut, T. Updyke, L. Atkinson, W. Boicourt, W. Brown, H. Seim, M. Muglia, D. Gong, 2020. Annual and Seasonal Surface Circulation over the Mid Atlantic Bight Continental Shelf derived from a Decade of High Frequency Radar Observations, *J. Geophys. Res.,*125, e2020JC016368. https://doi.org/10.1029/2020JC016368

Schutt M, Seim H., 2020. Assessment of Stability-Based Characterizations of North Carolina’s Offshore Wind Resource Using a Nested Boundary Layer Method. *Journal of Energy and Power Technology,* 2(2):19; doi:10.21926/jept.2002006.

Gawarkiewicz, G., K. Chen, J. Forsyth, F. Bahr, A. Malek Mercer, A. Ellertson, P. Fratantoni, H. Seim, S. Haines, L. Han, 2019. An advective marine heatwave in the Middle Atlantic Bight: shelfbreak exchange driven thermohaline anomalies in early 2017, *Frontiers in Marine Sciences,* 6, 712, doi: 10.3389/fmars.2019.00712.

Todd, R., F. Chavez et al., 2019. Global Perspectives on Observing Ocean Boundary Current Systems, *Frontiers in Marine Sciences*, 6, 423, doi: 10.3389/fmars.2019.00423.

Seim, H. and C. Edwards, 2019. Upper slope jets and Gulf Stream filaments inshore of the Charleston Bump during winter 2012, *J. Phys. Oce.,* 49, 1423-1438, doi: 10.1175/JPO-D-18-0205.1

Haines, S., H. Seim and M. Muglia, 2017. Implementing Quality Control of High-Frequency Radar Estimates and Application to Gulf Stream Surface Currents, *J. Atmos. Ocean Tech*., **34**, 1207-1224, DOI: 10.1175/JTECH-D-16-0203.1

Thomas, N., H. Seim and S. Haines, 2015. An observational, spatially explicit, stability-based estimate of the wind resource offshore of North Carolina, *J. Applied Met. and Clim.*, **54**, 2407-2425, DOI: 10.1175/JAMC-D-15-0090.1

**D. SYNERGISTIC ACTIVITIES:**

2018-*present* Member, Galapagos Council, UNC Center for Galapagos Studies

2010-2015; 2021-*present:* Member, US Bureau of Ocean Energy Management North Carolina Offshore Wind Energy Task Force (appointed by Gov. Perdue)

2010-2013*:* Member, Joint Analysis Group, Deepwater Horizon Oil Spill Response

2009-2012: Editor for the Journal of Geophysical Research – Oceans

2009-2012: Chairman, SECOORA Executive Committee

2007-2011: Director, National Federation of Regional Associations (now IOOS Association)