Dana Kathryn Savidge
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Overarching Goals: To effectively observe and understand physical processes controlling, affecting or modulating biogeochemical processes on continental shelves and adjacent ocean regimes. To communicate findings to facilitate decision-makers abilities to conserve resources and improve lives. To foster learning and intellectual maturity in the next generation of scientists, decision-makers and citizens. To improve access and education opportunities for all citizens to increase prosperity and contribute to the public good.

Education:

Ph.D. in Marine Sciences, 1997, University of North Carolina at Chapel Hill, Emphasis in Physical Oceanography. Dissertation: "Cyclogenesis in the Deep Ocean Associated with Gulf Stream Trough Formation", J. M. Bane, Jr., committee chairman. Ph.D. Candidate, Fall 1991 – Spring 1997.

M.S. in Geophysical Sciences, 1989, Georgia Institute of Technology, Emphasis in Physical Oceanography. Thesis: "Evidence of Gulf Stream Bimodality on a Several Month Timescale", J. O. Blanton, committee chairman. M.S. Candidate, Fall 1985 – Spring 1989.

B.A. in Physics, 1982, Hanover College, Physics major, Mathematics minor. Senior Project: "Applications of Fourier Transforms to Optical Imaging", R. L. Conklin, major advisor.

Positions Held:

NSF Program Manager, Geosciences Directorate, Division of Ocean Sciences, Physical Oceanography Program, Alexandria, Va, Apr 2019 – Mar 2023.

Faculty, Skidaway Institute of Oceanography, Savannah, Ga, Oct 2003 – present. Merged into UGA Marine Sciences faculty Aug 2013. Retired Feb. 2024.

Adjunct Professor, School of Civil and Environmental Engineering, Georgia Institute of Technology, Atlanta Ga, Jun 2009 – May 2012.

Research Assistant Professor, The Center for Coastal Physical Oceanography, Old Dominion University, Norfolk, Va, Jan 2001 – Oct 2003,

National Research Council Post-Doctoral Research Associate, NOAA/PMEL, Seattle, Wa, Aug 1999 – Dec 2000.

Post-Doctoral Research Fellow, Marine Sciences Curriculum, University of North Carolina, Chapel Hill, NC, May 1997 – Mar 1999.

Research Analyst, Department of Marine, Earth and Atmospheric Sciences, North Carolina State University, Raleigh, NC, Sept. 1990 – Aug. 1991.

Research Technician, Skidaway Institute of Oceanography, Savannah, Ga, Nov 1988 – Aug 1990.

External Funding:

Projects have been largely motivated by interests in physical influences on biogeochemical processes on the continental shelf. NSF OCE, OPP and OTIC projects listed below have relevance to episodic nutrient input, bloom response, larval transport and export of organic carbon from continental shelves. An important subset focused on small-scale turbulent Langmuir storm responses, with specific relevance to sediment transport, benthic fluxes and organic carbon transport. NSF ship equipment grants funded shared use equipment across disciplines. NOAA and ONR funded National Observatory projects are relevant to societal interests in Marine Operations, Coastal Hazards and Climate Variability, and Ecosystems: Water Quality and Living Marine Resources.

NSF OCE 1930116 Intergovernmental Mobility Assignment (04/01/19 - 03/31/23), **PI: D Savidge**, Year 1: $148,315, Year 2 supplement: $152,866, Year 3 supplement: $152,986, Year 4 supplement: $153,252. Supports DKS salary and benefits during tenure as rotator in PO program. Within OCE; **Core PO Program; OCE Postdoctoral Research Fellowship Program; co-reviews with BO, CO, MG&G; informal PO liaison for co-reviews with the Office of Polar Programs.**

Shelf and Shelf-Adjacent Studies: South Atlantic Bight, Cape Hatteras, West Antarctic Peninsula

NSF OCE-1908230 "International Workshop on Subtropical Shelf Ecosystems - Western Boundary Current Interactions: Savannah, GA: Winter 2019-2020", Co-PI before becoming a rotator at NSF, which required passing role to colleague C Edwards, 4/1/2019 through 3/31/2021 $49,932.

NSF OCE-1559476, "Collaborative Research: An Observational and Modeling Study of the Physical Processes Driving Exchanges between the Shelf and the Deep Ocean At Cape Hatteras (Informally referred to as 'PEACH': Processes Driving Exchange at Cape Hatteras", Four institution effort, 4/2016 through 3/2020 (with NCEs through 3/2022), **lead-PI: D Savidge**. Upon going to NSF as a rotator at start of year 4, overall lead was passed to H Seim (UNC), SkIO lead to C Edwards. $5M total, $1.2M SkIO budget. Examining shelf exchange under wind, Gulf Stream and density forcing. Savidge role was partnering with Helzel Messtk GmbH, Hamburg DE, to deploy experimental Multiple Input Multiple Output WERA radars.

NSF OCE-1132135, "RAPID: Collaborative Research: HF Radar Surface Current Measurements in Support of Constraining Shelf Edge Exchange in the SAB under Wind, Tidal and Gulf Stream Influence", PIs: G Voulgaris (USC) and D Savidge, Summer 2011 through Summer 2012, $38,743. HF-radar measurements in support of in-situ field work examining nutrient sources of wintertime phytoplankton blooms in Long Bay, South Carolina (NSF-OCE biological and physical awards 1032285 and 1032276 to J Nelson and C Edwards at SkIO and H Seim at UNC).

NSF OPP-0944553, "Shelf-Edge Circulation on the West Antarctic Peninsula from Archived ADCP Data: Follow-on Analyses", **PI: D Savidge**, 7/2010 through 6/2015, $319,576. Continuing analysis of archived shipboard ADCP data, CTD, and regional model output to examine processes and variability at biological hot-spots on the West Antarctic Peninsula.

NSF OCE-1010591, "EAGER: Saltmarsh Circulation, Inundation and Bathymetric Mapping using HF-radar", **PI: D Savidge** with M Heron. 3/2010 through 2/2014, $275,865. Proof of concept collaboration with Mal Heron, Townsville AU, using his PortMap VHF radar systems to explore potential for salt-marsh measurements in intertidal areas.

NSF OCE-0536326, "Collaborative Research: Benthic Observatory and Technology Testbed On the Mid Shelf – Understanding Processes.", PIs: W Savidge, J Nelson, D Savidge, R Jahnke, A Gargett,

G Voulgaris, T Short. 1/2006 through 12/2008, $1,308,822 with supplement through 12/2010, $219,348, and graduate student stipend supplement $104,000. 51 *R/V Savannah* days. Establish oceanographic setting on water-column to shelf scale.

NSF OCE-0406543, "Collaborative Research: Cross-shelf Transport and Alongshelf Exchange Processes in Regions of Multiple Mesoscale Fronts", aka "Frontal Interactions Near Cape Hatteras (FINCH)", **lead PI: D.K. Savidge** with J Austin, G Gawarkiewicz and J Churchill. 9/2003 through 8/2006, NCE through 8/2007, $367,804 (SkIO, including ∼$75K subcontract to ODU) + $736,425 (WHOI). 21 *R/V Savannah* days. Summer and winter cruises off Cape Hatteras to study the Hatteras Front.

NSF OPP-0404533, "Shelf-Edge Circulation on the West Antarctic Peninsula: An Analysis Utilizing Existing Data and Regional Model Output.", **PI: D Savidge**. 3/2003 through 2/2006, NCE through 2/2007, $75,718. Analysis of an existing data archive.

NSF OCE-1013119 "Oceanographic Instrumentation for R/V Savannah", **PIs: D Savidge**, J Sanders. 7/2010 through 6/2011 $48,246.

NSF OCE-0903584 "Oceanographic Instrumentation for R/V Savannah", **PIs: D Savidge**, J Sanders. 7/2009 through 6/2010 $44,564.

NSF OCE-0822603 "Oceanographic Instrumentation for R/V Savannah", PIs: J Sanders, **PIs: D Savidge**. 4/2008 through 3/2009, $48,951.

Langmuir Turbulence Studies

NSF OCE-1756675, "Collaborative Research: Characterization of Langmuir Supercells in the Coastal Ocean", Lead PI: A Tejada-Martinez, USF, **SkIO PI: D Savidge**, before becoming a rotator at NSF, passed role to colleague CB Woodson, 6/1/2018 through 5/31/2021, $298,707. Observations of full-depth Langmuir cells (Langmuir Supercells, or LS) at three disparate shelf locations will be analyzed, and used to constrain large eddy model simulations (LES) of LS flows. The parallel data analysis and modeling approach will elucidate the dynamics by which tidal and geostrophic flows, surface buoyancy and misaligned wind and waves combine to affect LS and associated vertical transport.

NSF OCE-1540648, "EAGER: Langmuir Turbulence Measurements at 35-40m Depth off Cape Hatteras in Fall 2015", **PI: D Savidge**, 5/2015 through 4/2017, $200,001, NCE through 4/2018. Savidge joined the ONR-funded CASPER-East intensive field sampling project on the shelf off Cape Hatteras in October 2015. A Nortek 5-beam ADCP and taut-line conductivity-temperature string (CT-chain) will be deployed at 35-40m depth, to find if full depth Langmuir cells exist there.

NSF OCE-0926852, "Collaborative Research: LES and Modeling of Turbulence on Shallow Shelves under Combined Langmuir, Tidal & Convective Forcing with Comparison to VADCP Observations", PIs: C Grosch, A Gargett, A Tejada-Martinez and **PIs: D Savidge**. 9/2009 through 8/2014, $207,450. Determine and provide ranges of forcing from observations for modeling.

Funding in support of Societal Goals

NOAA IOOS, "SECOORA - Partnering to meet the needs of coastal communities for actionable information to protect lives and property". Multi-Institutional, 5 year effort, $619K for SkIO HF-radar component. (Annual funds awarded are subject to fluctuating NOAA yearly budget) for the operation and maintenance of two long-range WERA radars installations on the Georgia coast and two more being installed immediately north of Cape Canaveral Fl, for measuring surface currents on the

Georgia and Florida shelf and adjacent Gulf Stream. Administered by C Edwards during Savidge's tenure at NSF.

NOAA IOOS, "SECOORA - FY2018 IOOS Non-competitive Hurricane Supplemental RFA Repairs". PI: D Savidge, 9/15/2018 through 9/14/2020, $33.7K. One time supplement for repairs to JEK radar installation following damage from hurricanes in 2016 and 2017.

NOAA IOOS, "SECOORA - Coordinated monitoring, prediction, and assessment to support decision-makers needs for coastal and ocean data and tools, HF-radar component". Multi-Institutional, 5 year effort, target budgets: $2.7M total, $450K for SkIO PI D Savidge's HF-radar component. Annual funds awarded (subject to fluctuating NOAA yearly budget) to SkIO thus far are FY17: $90K; FY18: $91.8K; FY19: $91K; FY20: $91K, for the operation and maintenance of two long-range WERA radars installations measuring surface currents on the Georgia shelf and adjacent Gulf Stream.

NOAA IOOS, "Southeast Coastal Ocean Observing Regional Association (SECOORA) — HF-radar component" Primary-P.I.s: H Seim, L Shay, R Weisberg, D Savidge and G Voulgaris. Yearly renewals 2008-2014, $29,000 in FY09, $37,500 in FY10, $100,000 in FY11, $87,000 in FY12, $104,000 in FY13, $104,000 in FY14, $110,000 in FY15, $155,000 in FY16. For operation of two HF-radar systems and ongoing data Q/A/delivery.

ONR, "Southeast Atlantic Coastal Ocean Observing System (SEACOOS)", Primary-P.I.s: J Nelson, R Jahnke, H Seim, C Werner, C Mooers, L Shay, W Johns, R Weisberg, M Luther, D Savidge and others. Yearly renewals, 11/03-10/08. HF-radar deployment and operation, and data Q/A/delivery.

Georgia Research Alliance, "High Frequency Radar Salt Marsh Circulation, Inundation and Bathymetric Mapping using HF-radar" P.I.s: J Sanders, D Savidge. Spring 2010, $48,400 for Rx antennas and in-situ fluorometers to facilitate dye-release validation procedures.

Georgia Research Alliance, "High Frequency Radar Technology for Measurement of Waves and Currents in the Georgia Coastal Ocean" P.I.s: J Sanders, D Savidge. Spring 2008, $180,000 to purchase WERA HF-radar equipment and software.

Georgia Research Alliance, "Acquisition and Development of High Frequency Radar Technology for the Georgia Coast" P.I.s: J Sanders, D.Savidge, J Nelson. Spring 2006, $120,000 to purchase WERA HF-radar equipment.

Georgia Institute of Technology, "Environmental Conditions at potential offshore Wind Farm sites" P.I.s: R Jahnke, D Savidge, J Blanton, C Alexander. April-June 2006, $37,500.

Refereed Publications:

Savidge W, **D Savidge**, F Brandini, A Greer, E Hofmann, M Roughan, I da Silveira, I Suthers (In Press Spring 2024): Western Boundary Current – Subtropical Continental Shelf Interactions, *Oceanography* 37(3): pp 64 - 69, doi: 10.5670/oceanog.2024.502.

Andres M, M Muglia, H Seim, JM Bane, **D Savidge** (2023): Observations of Shelf-Ocean Exchange in the Northern South Atlantic Bight Driven by the Gulf Stream, *J. Geophys. Res. — Oceans*, doi: 10.1029/2022JC019504.

Han, L, H Seim, JM Bane, **D Savidge**, M Andres, G Gawarkiewicz, M Muglia (2022): Ocean Circulation near Cape Hatteras: Observations of Mean and Variability, *J. Geophys. Res. — Oceans*, doi: 10.1029/2022JC019274.

Seim H, **DK Savidge**, M. Andres, J. Bane, C. Edwards, G. Gawarkiewicz, R. He, R.E. Todd, M. Muglia, J. Zambon, L. Han, S. Mao (2022): Overview of the Processes driving Exchange At Cape Hatteras program, *Oceanography* 35(2):617, doi: 10.5670/oceanog.2022.205.

Savelyev, IB, PJ Martin, Y Fan, **DK Savidge**, RK Shearman, T Haack, T de Paolo, EJ Terrill, Q Wang (2022): An empirical evaluation of turbulence closure models in the coastal ocean, *J. Geophys. Res. — Oceans, 127*, doi: 10.1029/2021JC017588.

Gargett, AE and **DK Savidge** (2020): Winds, waves and turbulence on a shallow continental shelf during passage of a Tropical Storm, *J. Phys. Oceanogr.*, V. 50, pp 1341-1364, doi: 10.1175/JPO-D-20-0024.1.

Savelyev, Ivan, W. David Miller, Mark Sletten, Geoffrey Smith, **Dana Savidge**, Glendon Frick, Steven Menk, Trent Moore, Tony de Paolo, Eric Terrill, Qing Wang, R. Kipp Shearman (2018): Airborne Remote Sensing of the Upper Ocean Turbulence during CASPER-East, *Remote Sensing* 10, 1224; doi:10.3390/rs10081224.

Wang Q.; DP Alappattu, S Billingsley, B Blomquist, RJ Burkholder, AJ Christman, ED Creegan; T de Paolo; DP Eleuterio; HJS Fernando; KB Franklin; AA Grachev; T Haack; TR Hanley; CM Hocut; TR Holt; K Horgan; HH Jonsson; RA Hale; JA Kalogiros; D Khelif; LS Leo; RJ Lind; I Lozovatsky; J Panella-Morato; S Mukherjee; WA Nuss; J Pozderac; LT Rogers; I Savelyev; **DK Savidge**; RK Shearman; L Shen; E Terrill; AM Ulate; RT Wendt; R Wiss; RK Woods; L Xu; RT Yamaguchi; C Yardim (2018): CASPER: Coupled Air-Sea Processes and Electromagnetic (EM) Ducting Research, *Bull. Amer. Meteoro. Soc.* V99, N7. DOI: 10.1175/BAMS-D-16-0046.1

Savidge, DK and AE Gargett (2017): Langmuir Supercells on the middle shelf of the South Atlantic Bight: 1. Cell Structure , *J. Mar. Res.*, V. 75, pp 49-79, doi: 10.1357/002224017821352641.

Savidge, DK (2016): Comment on: Structure, Transport, and Vertical Coherence of the Gulf Stream from the Straits of Florida to the Southeast Newfoundland Ridge, by Meinen and Luther, *Deep Sea Res. I*, (invited) V. 112, pp155-157, doi:10.1016/j.dsr.2016.02.005.

AE Gargett and **DK Savidge** (2016): Separation of tide, low-frequency evolution and high frequency fluctuations in short observational records, *J. Atmos. Ocean Tech.*, V. 33(5), pp1089-1095, DOI: 10.1175/JTECH-D-15-0232.1

Gong, Y, R He, G Gawarkiewicz and **DK Savidge** (2015). Numerical Investigation of Coastal Circulation Dynamics near Cape Hatteras, North Carolina in Jan. 2005, *Ocean Dynamics*, V65 1-15.

Gargett, AE, **DK Savidge** and JR Wells (2014): Anatomy of a Langmuir supercell event, *J. Mar. Res.*, V72, 127-163.

Savidge, DK and WB Savidge (2014): Seasonal Export of South Atlantic Bight and Mid-Atlantic Bight Shelf Waters at Cape Hatteras, *Cont. Shelf Res.*, V74C, 50-59, doi: 10.1016/j.csr.2013.12.008.

Savidge, DK, JA Austin, and BO Blanton (2013): Variation in the Hatteras Front Density and Velocity Structure Part 1: High Resolution Transects from three seasons in 2004-2005, *Cont. Shelf Res.*, V54, 93-105, doi: 10.1016/j.csr.2012.11.005.

Savidge, DK, JA Austin, and BO Blanton (2013): Variation in the Hatteras Front Density and Velocity Structure Part 2: Historical Setting, *Cont. Shelf Res.*, V54, 106-116, doi: 10.1016/j.csr.2012.11.006.

Savidge, DK, JA Amft, AE Gargett, M Archer, D Conley, G Voulgaris, L Wyatt, K-W Gurgel (2011): Assessment of WERA Long-Range HF-radar performance from the User's Perspective, *Proceedings of the IEEE/OES/CWTM 10th Working Conference on Current Measurement Technology*, 31-38. **Awarded 'Best Paper of Conference'** by session leaders, abstracts were peer-reviewed for acceptance.

Savidge, DK, J Norman, C Smith, JA Amft, T Moore, C Edwards and G Voulgaris (2010): Shelf Edge Tide Correlated Eddies along the Southeastern United States, *Geophys. Res. Lett.*, 37, L22604, doi: 10.1029/2010GL045236.

Savidge, DK and JA Amft (2009): Circulation on the West Antarctic Peninsula Derived from 6 Years of Shipboard ADCP Transects, *Deep-Sea Research I, 56*, doi: 10.1016/j.dsr.2009.05.011, 1633-1655.

Savidge, WB, AE Gargett, RA Jahnke, JR Nelson, **DK Savidge**, and RT Short (2008): Dynamics of Seafloor-Water column Exchange on a Broad Continental Shelf, *Oceanography, 21(4)*, 130-135.

Shay, LK, H Seim, **D Savidge**, R Styles, R Weisberg, (2008): HF radar during the Southeast Atlantic Coastal Ocean Observing System: Lessons Learned 2002-2007, *Marine Tech. Soc. J., 42(3)*, 55-67.

Savidge, DK and JA Austin, (2007): The Hatteras Front: August 2004 Velocity and Density Structure, *J. Geophys. Res. — Oceans, 112*, C07006, doi:10.1029/2006JC003933, 1-16.

Savidge, DK, CR Edwards and M Santana (2007): Baroclinic Effects and Tides on the Cape Hatteras Continental Shelf, *J. Geophys. Res. — Oceans, 112*, C09016, doi:10.1029/ 2006JC003832, 1-16.

Savidge, DK (2004): Gulf Stream Meander propagation past Cape Hatteras, *J. Phys.Oceanogr., 34*, 2073-2085.

Savidge, DK (2002): Wintertime Shoreward Near-Surface Currents South of Cape Hatteras, *J. Geophys. Res. — Oceans, 107*, doi 10.1029/2001JC001193, 1-18.

Savidge, DK and JM Bane, Jr (2001): Wind and Gulf Stream Influences on Alongshelf Transport and Off-Shelf Export at Cape Hatteras, North Carolina, *J. Geophys. Res. — Oceans, 106*, 11,505-11,527.

Savidge, DK and JM Bane, Jr (1999): Cyclogenesis in the Deep Atlantic Associated with Gulf Stream Trough Formation, 1) Description, *J. Geophys. Res. — Oceans, 104*, 18,111-18,126.

Savidge, DK and JM Bane, Jr (1999): Cyclogenesis in the Deep Atlantic Associated with Gulf Stream Trough Formation, 2) Dynamics, *J. Geophys. Res. — Oceans, 104*, 18,127-18,140.

Savidge, DK (1997): *Cyclogenesis in the Deep Atlantic Associated with Gulf Stream Trough Formation*, Doctoral Dissertation, UNC-CH, 83 pp.

Savidge, DK, JO Blanton, TN Lee, RH Evans (1992): Influence of an Offshore Shift in Gulf Stream Position on Waters of the South Carolina Continental Shelf, *J. Phys.Oceanogr., 22*, 1085-1094.

Blanton, J, F Werner, C Kim, L Atkinson, T Lee, **D Savidge** (1994): Transport and fate of low-density water in a coastal frontal zone, *Cont. Shelf Res., 14(4)*, 401-427.

Werner, FE, JO Blanton, DR Lynch, **DK Savidge** (1993): A numerical study of the continental shelf circulation of the U.S. South Atlantic Bight during the autumn of 1987, *Cont. Shelf Res., 13(8/9)*, 971-997.

Blanton, JO, JA Amft, **DK Lee**, A Riordan (1989): Wind Stress and Heat Fluxes Observed During Winter and Spring 1986, *J. Geophys. Res., 94*, 10,686-10,698 (DK Lee = DK Savidge).

Lee, DK (1989): *Evidence of Gulf Stream Bimodality on a Several Month Timescale*, Masters Thesis, GIT, 48 pp., (DK Lee = DK Savidge).

Other Publications:

Seim H, **D Savidge**, M Muglia S Haines, L Han, (2022): Surface current observations from a combined CODAR/WERA high-frequency radar array along the North Carolina coast during the Processes Driving Exchange at Cape Hatteras (PEACH) Project, *Proceedings: IEEE Oceans, Hampton Roads VA, Nov 2022*, doi:10.1109/OCEANS47191.2022.9977057.

Gomez, R, A Dzvonkovskaya, T Helzel, **D Savidge**, et al. (2019): First Results On Measuring Surface Current Velocities with WERA HF Radar in MIMO Configuration at Cape Hatteras, *Proceedings: 12th IEEE/OES Current, Waves and Turbulence Measurement, San Diego, CA, Mar. 2019*.

Heron, ML, **DK Savidge**, JO Blanton, 2008: VHF Radar Measurements of Flow in a Salt Marsh Creek, *Proceedings of the MTS/IEEE Oceans Conference, Virginia Beach, VA, Oct., 2012*.

Seim, H, L Leonard, **D Savidge**, M Fletcher and C Edwards, 2008: Observing system depiction of circulation in the SE US coastal ocean, *Proceedings of the IEEE US/EU Baltic Symposium, Tallin, Estonia, May, 2008*.

Savidge, DK and JA Austin (2007): Frontal Interactions Near Cape Hatteras (FINCH): Results From High Resolution Sampling in Winter and Summer, *Proceedings, Pioneering Studies of Young Scientists on Chemical Pollution and Environmental Change, Coastal Marine Environmental Research, Ehime University, Matsuyama, Japan.*

Savidge, W, R Jahnke, J Nelson, **D Savidge**, G Voulgaris, RT Short, A Gargett (2007): Development of a Coastal Ocean Benthic Observatory to Study Sediment-Water Exchange Processes, *Proceedings, Pioneering Studies of Young Scientists on Chemical Pollution and Environmental Change, Coastal Marine Environmental Research, Ehime University, Matsuyama, Japan.*

Helzel, T, **D Savidge**, R Styles, T McKisseck, H Bull, M Kniephoff, S Rehder, First Results from Long Range WERA Sites (2006): *Proceedings, Radiowave Oceanography Workshop, Hamburg, Germany*.

Savidge, DK, TJ Shay, JM Bane (1993): *Synoptic Ocean Prediction Experiment, EN216 CTD Section Data Report, UNC Technical Report CMS-93-1*, 19 pp.

Savidge, DK, JM Bane, TJ Shay (1992):, The Deep Cyclones at 68^o *The SYNOPtician, 3(5)*, 1-2.

Teaching Experience:

Co-Mentor (with C Edwards) of UGA post-doctoral scholar Lequan Chi, Aug 2020-Mar 2022.

Mentoring of graduate students: co-Chair (with CB Woodson) for UGA Engineering PhD candidate Yargo Teixeiro Gomes De Melo (graduated 2023); Committee member for: UNC-CH Marine Sciences PhD candidate Lu Han (graduated 2022), H Seim Chair; USC Geology PhD candidate Douglas Cahl (graduated 2023), G Voulgaris Chair; USC Geology PhD candidate Zaid Al Attabi (graduated 2020), G Voulgaris Chair; SSU Marine Science MS candidate Simeon Abidari (graduated 2022), A Kaltenberg Chair.

Mentoring of paid undergraduate interns, ∼2 per year 2003-2014 — 24 individuals, 34 term equivalents.

Mentoring of undergraduate intern, MARS4960R, Fall 2023; SkIO Seminar Scheduler, MARS8130 Fall 2023; continuing as volunteer after retirement, Spring 2024.

Development and teaching of team-taught UGA Marine Science Coastal Summer Semester, offered June 2015. Courses include MARS 4500 (Field Study in Oceanography and Marine Methods, - 3h), and MARS 3510 (Field Study in Oceanography and Marine Methods: Independent Research, - 4h) or BIOL 4960 (4h).

Member of 3-person faculty team conducting a summer lecture/research experience for 8 Georgia Institute of Technology Engineering students, Summer 2012. The effort was funded as an education supplement to the BOTTOMS-UP project (NSF-0536326). (These students are not included in the undergraduate intern numbers above.)

Developed and taught Coastal Physical Oceanography for graduate level engineering students, Georgia Institute of Technology — Savannah, Spring Term 2009.

Member of 5-person faculty team for Biological Oceanography for undergraduates, Kennesaw University/SkIO, in May 2007 and 2008.

Taught graduate Core Physical Oceanography, UNC-CH, Fall 1997.

Taught one third term of Geophysical Fluid Dynamics, UNC-CH, Spring 1994.

Taught biology section of Undergraduate Introductory Oceanography, UNC-CH, Spring 1993.

Developed computer homework for Introductory Physical Oceanography, and served as TA for various other classes during graduate career at UNC-CH.

Presentations:

Invited Keynote Address, 2023 Gordon Research Symposium, Coastal Ocean Circulation, "Proposal Writing in Context: the System, the Science, the Self", Bryant University, Springfield RI, June 17-18, 2023.

Invited Keynote Speaker and Panelist, 2023 Western Boundary Current - Subtropical Continental Shelf Interactions Workshop May 22-24 2023, Savannah Ga. "Scaling of processes in the South Atlantic Bight"

Invited Keynote Speaker and Panelist, 2020 Western Boundary Current-Subtropical Continental Shelf (WBC-STCS) Interactions Workshop, "Gulf Stream Meander Induced Intrusions on the South Atlantic Bight Continental Shelf", Skidaway Institute, Savannah GA, delivered virtually Nov 3, 2020, panelist on follow-up 90 minute discussions integrating knowledge of global WBC-STCS environments, Nov 2020.

Invited Speaker, Marine Sciences Dept at UNC-CH, as part of their 50th anniversary, "Access to a Range of Scales: Tools and Targets", Oct 2018.

Invited Speaker, 2013 Gordon Research Conference, Coastal Ocean Circulation, "Radar Research: Access to a range of scales", University of New England, Biddeford, Maine, June 2013.

Invited Seminar, Center for Coastal Physical Oceanography, Old Dominion University, as part of their 20th Anniversary, "Turbulent processes affecting the seabed and sediment transport on the mid-shelf: Langmuir Supercells, convection and tides from a two year VADCP deployment", D Savidge, A Gargett, G Voulgaris, Norfolk, Va., Apr 2012.

Invited Speaker, 'Best Paper of Conference' award, IEEE/OES Current, Waves and Turbulence Measurement Workshop, "Assessment of WERA Long-Range HF-radar performance from the User's Perspective", D Savidge, J Amft, A Gargett, M Archer, et al, Monterey CA., Mar 2011.

Invited Lecturer and Panel Member, National Marine Educators Association Annual Meeting, "Principle 7: The Ocean is Largely Unexplored", Savannah Ga., Jul 2008.

Invited Lecturer, Georgia Marine Educators Association Annual Meeting, "Principle 7: The Ocean is Largely Unexplored", Savannah Ga., Oct 2007.

Invited Keynote Address, International Symposium, Pioneering Studies of Young Scientists on Chemical Pollution and Environmental Change, Coastal Marine Environmental Reseach, "Frontal Interactions Near Cape Hatteras (FINCH): Results From High Resolution Sampling in Winter and Summer", Ehime University, Matsuyama, Japan, Nov 2006.

Invited Panelist for "Expert, Advocate, or Critic?: the Scientist as Citizen in the 21st Century", a symposium of the Center for Free Inquiry, Hanover College (Indiana), Nov 4-6, 2001.

Representative Presentations at AGU Meetings

These selections are a subset of a total of 26. A full catalogue is available upon request.

"Shelf export at Cape Hatteras Observed in high resolution HF-radar surface currents and mooring data", D Savidge, M Muglia, H Seim and others, Feb 2020.

"Circulation connectivity on the West Antarctic Peninsula from shipboard ADCP", J Amft, D Savidge, G Dwyre, Feb 2014.

"Turbulent processes affecting the seabed and sediment transport on the mid-shelf: Langmuir Supercells, convection and tides from a two year VADCP deployment", D Savidge, A Gargett, G Voulgaris, Mar 2012.

"Shelf Edge Tide Correlated Eddies in the South Atlantic Bight", D Savidge, C Edwards, J Norman and others, Feb 2010.

"The Role of Langmuir Supercells in Seasonally Tuned Cross-Shelf Transport of Bioactive Material", A Gargett, D Savidge, Mar 2008.

"Physical Controls on Benthic Exchanges on the Mid-Shelf of the South Atlantic Bight: Ripple Evolution and Turbulence Measurements G Voulgaris, D Savidge, A Gargett and others, Mar 2008.

"Integrating Seafloor Irradiance Measurements into Benthic Biogeochemistry: Demonstrating the Need for Coastal Ocean Observatories", D Jahnke, J Nelson, D Savidge and others, Mar 2008.

Representative Presentations at Small Focused Meetings

These selections are a subset of a total of 19. A full catalogue is available upon request.

"Experimenting with Saltmarsh Inundation and Circulation Mapping using VHF-radar", D Savidge and M Heron, Radio Oceanography Workshop, Toulon, France, April, 2012.

"Uses of Computational Intelligence Techniques in HF-radar Quality Control and Data Analysis", D Savidge, J Blondin, A Saad, Radio Oceanography Workshop in Portland Or, Sep 2010.

"Circulation on the West Antarctic Peninsula from six years of shipboard ADCP data", D. Savidge, SO GLOBEC Circulation and Modeling workshop at ODU/CCPO in Norfolk Va, Oct 30-Nov 1, 2007.

Seminars at universities are also not listed. A full catalogue is available upon request.

Activities and Honors:

Session Organizer and Moderator for "Ocean-Coastal Seas Interactions", Gordon Conference, Coastal Ocean Circulation, June 8 -13, 2025, Colby-Sawyer College, New London, NH.

Co-organizer for Western Boundary Current - Subtropical Continental Shelf Interactions workshops - virtual November 2020, in-person in Savannah Ga, May 2023. https://www.skio.uga.edu/international-workshop-on-western-boundary-current-subtropical-continental-shelf-interactions

Organizing Committee for AGU/ASLO/TOS Ocean Sciences Meetings in February 2016 and February 2018.

Host for the Radiowave Oceanography Workshop 2014, held in Savannah Ga, May, 2014. ROW meetings provide opportunities for the scientific community to exchange progress and results in using shore-based high frequency (HF) radar systems to map ocean currents, waves, and other parameters.

State of Knowledge on the SW Atlantic Ocean Margin Workshop, Montevideo, Uruguay, Nov 2008.

Hosted and collaborated with Dr. Atsushi Kaneda during his extended visit to SkIO (10/05-7/06). Dr. Kaneda was an Assistant Professor at the Center of Excellence for Coastal Marine Environmental Research, Ehime University, Matsuyama, Japan.

Alliance for Coastal Technologies (ACT) Seabed Sensor Workshop, Feb 1-3, 2006.

Participant in Ocean Research Interactive Observatory Networks (ORION) activities: workshops in San Juan, Puerto Rico, Jan. 2004 and Salt Lake City, Utah, March 2006, and co-author (with H. Seim, J. Bane, C. Martens, J. Nelson and others) of "An Ocean Observatory on the South Atlantic Bight Shelf and Slope", the SAB response to ORION's request for observatory designs in early 2005.

Co-Convener (with J. A. Austin) of the 2002 Mid-Atlantic Bight Physical Oceanography and Meteorology Meeting (MABPOM) at Old Dominion University, Norfolk, Va., Oct 24-25, 2002.

Gordon Research Conference, Coastal Circulation, New Hampshire, June 2001.

NSF U.S. Polar Programs New Investigator Proposal Workshop, Washington, D.C., April 2001.

Great Australian Bight Study Planning Workshop, Port Lincoln, South Australia, Sept. 1998.

Frank Porter Graham Graduate and Professional Honorary Society, UNC-CH. Inducted May 1, 1996.

Graduate and Professional Research and Creative Arts Forum, UNC-CH. **First place award for Visual Presentation**, 1994.

Coastal Ocean Transport Processes Class, Ned Smith, instructor, Harbor Branch Oceanographic Institution, August 1993.

Graduate School Merit Assistantship, UNC-CH, 1991-1992 Academic Year.

Also please note Invited Presentations.

Service:

Member, Search Committee, NSF rotator positions for OCE MG&G and OCE CO (while at NSF).

Chair, SkIO Ship Mid-life Refit Recommendations Committee, Sept 2018 — Mar 2019, R/V Savannah.

Chair, SkIO Ship Committee, Oct 2007 — Dec 2012, Member, SkIO Ship Committee, Sept 2017.

Member, MARS Department By-laws Committee, May — Dec 2018, meetings and writing to construct new version of Department Bylaws.

SkIO's UNOLS representative, 2016-2018. Attended annual meetings in Washington D.C.

Member, MARS Department Graduate Action Committee, fall 2013 — summer 2018. Graduate student recruitment event planning, student applicant assessment and acceptance decisions.

Served on three Gulf of Mexico Research Initiative panels (2014, 2015, 2017).

Member of NSF site review teams (2008, 2012), and follow-up review of scope (2012).

Served on NSF review panels for three programs (2009, 2011, 2015), ad hoc mail reviews for three programs.

Reviewer: Progr. Oceanogr., JGR-O, JPO, J. Atmos. Ocean Tech, CSR, DSR-I, DSR-II and ECSS.

Chair of SkIO Search Committee for new faculty hires in Fall of 2008 and 2023, and member of SkIO Search Committees for new faculty searches in Fall of 2006, 2009, 2012. Member of UGA-Marine Science Search Committee for new faculty hire, starting Mar., 2008, prior to the merger. Member of ODU/CCPO Search Committees for Captain of ODU's *R/V Fay Slover* and for CCPO Grants Administrator (both 2003).

Session Convener for 2010 AGU/ASLO Ocean Sciences Meeting in Portland OR.

Board of Advisors for the Center for Free Inquiry, Hanover College (Indiana), beginning Oct 2006.

SEACOOS Water level Product Interface Committee (PIC), Spring 2005.

SECOORA Committees: Observations and Data Transmission Subworking Group, Data Analysis and Data Products Sub-working group, both beginning Oct. 2006.

Participant in SouthEast Center for Ocean Sciences Education Excellence (SE COSEE) sponsored teacher workshops at MECA in June 2004 and Feb. 2005.

Instructor in AASU teacher training workshops at SkIO in June, 2005-2007.

National Ocean Sciences Bowl Technical Advisory Panel for Physical Oceanography, Dec. 10-11, 2001.

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