

CURRICULUM VITAE
KARL F. NORDSTROM
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Academic Degrees

A.B. German, Rutgers University, 1963.
M.S. Geography, Rutgers University, 1970.
Ph.D. Geography, Rutgers University, 1975.

Professional History

Rutgers University, New Brunswick, N.J.
7/1/12 to Present – Distinguished Professor, Department of Marine and Coastal Sciences (DMCS).
7/94 to 6/12 - Professor, DMCS.
7/80 to 6/94 - Associate Professor, DMCS.
7/75 to 6/80 - Assistant Professor, Center for Coastal and Environmental Studies.
6/73 to 6/75 - Research Associate, Marine Sciences Center.
2/69 to 6/71 and 1/73 to 6/73 – Research/Teaching Assistant, Geography Department.

Visiting Positions

3/14 to 7/14 - Visiting Scholar, Dept. of Physics and Earth Science, University of Ferrara, Italy.
5/12 to 6/12 - Visiting Scholar, National Laboratory for Civil Engineering, Lisbon, Portugal.
2/06 to 5/06 and 3/99 to 7/99 - Visiting Scholar, Geography Institute, University of Greifswald, Germany.
2/05 to 5/05 - Visiting Scholar, Dept. of Territorial Studies and Planning, Polytechnic of Turin, Italy.
2/02 - Instructor (short course) Marine Institute (CTTMar), Universidade do Vale do Itajaí, Brazil.
5/98 to 8/98 - Visiting Scholar, Dept. of Geography, University of Western Australia.
5/95 to 7/95 - Visiting Scholar, Dept. of Geography and Soil Science, University of Amsterdam.
5/90 to 7/90 - Visiting Scholar, Geography Institute, University of Kiel, Germany.
9/81 to 12/81 - Visiting Scholar, Geography Dept., University of California, Los Angeles.

Military Service

6/64 to 9/67, U.S. Army, Captain, Armor.

Current Research

I conduct research on the dynamic processes affecting the size, shape and location of beaches and dunes in ocean and estuarine environments. These investigations involve assessment of winds, waves and currents and the effect of these processes on sediments, landforms and biota. Models of beach and dune change have been formulated for both undeveloped and developed coasts. Research has also been directed toward analysis of coastal land use, requiring assessments of the social implications of changes to beaches and dunes. I have conducted research on strategies applicable at the national level, such as management requirements for national seashores and Federal Flood Insurance guidelines. Activities at the state and municipal levels include assessments of the effects of creating or altering dunes and restoring naturally functioning environments in intensively developed municipalities.

Awards

Fellow, Geological Society of America - 2013

Fellow, American Association for the Advancement of Science – 2011.

Fulbright Senior Scholar (two awards to Germany) – 1999 and 2006.

Grove Karl Gilbert Award for Excellence in Geomorphological Research, Association of American Geographers, Geomorphology Specialty Group – 2001.

National Council for Geographic Education award for Best Article Related to Teaching at the College Level in *Journal of Geography* - 1998.

Cook College (Rutgers University) Award for Academic Innovation and Creativity – 1997.

R.J. Russell Award for Contributions to Coastal Geography, Association of American Geographers, Marine Geography Specialty Group – 1996.

List of Publications

Books

National Research Council. 2014. *Reducing Coastal Risks on the East and Gulf Coasts*. Washington, DC: The National Academies Press. (co-authored with 12 other members of the NRC Committee)

Nordstrom, K.F. 2008. *Beach and Dune Restoration*. Cambridge: Cambridge University Press, 187 p.

Nordstrom, K.F. 2000. *Beaches and Dunes of Developed Coasts*. Cambridge: Cambridge University Press, 338 p.

Nordstrom, K.F. and C.T. Roman, eds. 1996. *Estuarine Shores: Evolution, Environments and Human Alterations*. London: John Wiley & Sons, 486 p.

Nordstrom, K.F., 1992. *Estuarine Beaches*. London: Elsevier Science Publishers, 224 p.

Nordstrom, K.F., N.P. Psuty and R.W.G.Carter, eds. 1990. *Coastal Dunes: Processes and Morphology*. London: John Wiley & Sons, 392 p.

Nordstrom, K.F., P.A. Gares, N.P. Psuty, O.H. Pilkey, Jr., W.J. Neal, O.H. Pilkey, Sr., 1986. *Living with the New Jersey Shore*. Durham, NC: Duke University Press, 186 p.

Refereed Journal Articles

Nordstrom, K.F., N.L. Jackson, C.T. Roman. Facilitating landform migration by removing shore protection structures: opportunities and constraints. *Environmental Science and Policy*, in press.

Kaplan, K.L., K.F. Nordstrom, N.L. Jackson. 2016. Constraints on aeolian sediment transport to foredunes within an undeveloped backshore enclave on a developed coast. *Geomorphology*, 271, 13-21.

Nordstrom, K.F., N.L. Jackson, E.J. Farrell, P. Rafferty and C. Tengwall. 2016. Restoring sediment to compensate for human-induced erosion of an estuarine shore. *Geomorphology*, 262: 37-46.

Pelletier, J.D., J.D. Sherman, J.T. Ellis, E.J. Farrell, N.L. Jackson, B. Li, K.F. Nordstrom, L.P. Maia and M. Omidyeganeh. 2015. Dynamics of sediment storage and release on dune slip faces: A field study in Jericoacoara, Brazil. *Journal of Geophysical Research – Earth Surface*, 120: 1911-1934.

Jackson, N.L., K.F. Nordstrom, S. Saini and D.R. Smith. 2015. Influence of configuration of bulkheads on use of estuarine beaches by horseshoe crabs and foraging shorebirds. *Environmental Earth Sciences*, 74: 5749-5758.

Nordstrom, K.F., C. Armaroli, N.L. Jackson and P. Ciavola. 2015. Opportunities and constraints for managed retreat on exposed sandy shores: examples from Emilia-Romagna, Italy. *Ocean and Coastal Management*, 104: 11-21.

Jackson, N.L., M.D. Harley, C. Armaroli and K.F. Nordstrom. 2015. Beach morphologies induced by breakwaters with different orientations. *Geomorphology*, 239: 48-57.

Nordstrom, K.F. 2014. Living with shore protection structures: a review. *Estuarine Coastal and Shelf Science*, 150: 11-23.

Jackson, N.L., K.F. Nordstrom, D.R. Smith and S. Saini. 2014. Delivery and movement of horseshoe crab eggs (*Limulus polyphemus*) in the breaking waves and swash uprush of an estuarine foreshore. *Estuarine Coastal and Shelf Science*, 136: 191-198.

Jackson, N.L., K.F. Nordstrom, R.A. Feagin and W.K. Smith. 2013. Coastal geomorphology and restoration. *Geomorphology*, 199: 1-7.

Nordstrom, K.F. and N.L. Jackson. 2013. Removing shore protection structures to facilitate migration of landforms and habitats on the bayside of a barrier spit. *Geomorphology*, 199: 179-191.

Pranzini, E., V. Rosas, N.L. Jackson, and K.F. Nordstrom. 2013. Beach changes due to sediment delivered by streams to pocket beaches during a major flood. *Geomorphology*, 199: 36-47.

Freire, P., N.L. Jackson, and K.F. Nordstrom. 2013. Defining beaches and their evolutionary states in estuaries. *Journal of Coastal Research* SI65: 482-487.

Jackson, N.L. and K.F. Nordstrom. 2013. Aeolian sediment transport and morphologic change on a managed and an unmanaged foredune. *Earth Surface Processes and Landforms*, 38: 413-420.

Nordstrom, K.F., N.L. Jackson, A.L. Freestone, K.H. Korotky and J.A. Puleo. 2012. Effects of beach raking and sand fences on dune dimensions and morphology. *Geomorphology*, 179: 106-115.

Nordstrom, K.F. and N.L. Jackson. 2012. Physical processes and landforms on beaches in short fetch environments in estuaries, small lakes and reservoirs: a review. *Earth Science Reviews*, 111: 232-247.

Saini, S., N.L. Jackson and K.F. Nordstrom. 2012. Characteristics of sediment in transport in the swash zone of a steep estuarine foreshore. *Sedimentology*, 59: 1001-1013.

Nordstrom, K.F., N.L. Jackson, K.H. Korotky and J.A. Puleo. 2011. Aeolian transport rates across raked and unraked beaches on a developed coast. *Earth Surface Processes and Landforms*, 36: 779-789.

Nordstrom, K.F., N.L. Jackson, N.C. Kraus, T.W. Kana, R. Bearce, L.M. Bocamazo, D.R. Young and H.A. DeButts. 2011. Enhancing geomorphic and biologic functions and values on backshores and dunes

of developed shores: a review of opportunities and constraints. *Environmental Conservation*, 38: 288-302.

Smith, D.R., N.L. Jackson, K.F. Nordstrom and R.G. Weber. 2011. Beach characteristics mitigate effects of onshore wind on horseshoe crab spawning: implications for matching with shorebird migration in Delaware Bay. *Animal Conservation*, 14: 575-584.

Jackson, N.L. and K.F. Nordstrom. 2011. Aeolian sediment transport and landforms in managed coastal systems: a review. *Aeolian Research*, 3: 181-196.

Nordstrom, K.F., N.L. Jackson, and K.H. Korotky. 2011. Aeolian sediment transport across beach wrack. *Journal of Coastal Research*, SI59: 211-217.

Jackson, N.L., K.F. Nordstrom, S. Saini and D.R. Smith. 2010. Effects of nourishment on the form and function of an estuarine beach. *Ecological Engineering* 36: 1709-1718.

Saini, S., N.L. Jackson and K.F. Nordstrom. 2009. Depth of activation on a mixed-sediment beach. *Coastal Engineering*, 56: 788-791.

Nordstrom, K.F., U. Gamper, G. Fontolan, A. Bezzi, and N.L. Jackson. 2009. Characteristics of coastal dune topography and vegetation in environments recently modified using beach fill and vegetation plantings, Veneto, Italy. *Environmental Management* 44: 1121-1135.

Grafals-Soto, R. and K.F. Nordstrom. 2009. Sand fences in the coastal zone: intended and unintended effects. *Environmental Management*, 44: 420-429.

Nordstrom, K.F., N.L. Jackson, P. Rafferty, N.A. Raineault and R. Grafals-Soto. 2009. Effects of bulkheads on estuarine shores: an example from Fire Island National Seashore, USA. *Journal of Coastal Research*, SI56: 188-192.

Bezzi, A., G. Fontolan, K.F. Nordstrom, D. Carrer and N.L. Jackson. 2009. Beach nourishment and foredune restoration: practices and constraints along the Venetian shoreline, Italy. *Journal of Coastal Research*, SI56: 287-291.

Nordstrom, K.F., E. Pranzini, N.L. Jackson and M. Coli. 2008. The marble beaches of Tuscany. *Geographical Review*, 98: 280-300.

Jackson, N.L., D.R. Smith and K.F. Nordstrom. 2008. Physical and chemical changes in the foreshore of an estuarine beach: implications for viability and development of horseshoe crab (*Limulus polyphemus*) eggs. *Marine Ecology Progress Series* 355: 209-218.

Nordstrom, K.F., R. Lampe and N.L. Jackson. 2007. Increasing the dynamism of coastal landforms by modifying shore protection methods: examples from the eastern German Baltic Sea Coast. *Environmental Conservation* 34: 205-214.

Nordstrom, K.F., J.M. Hartman, A.L. Freestone, M. Wong and N.L. Jackson. 2007. Changes in topography and vegetation near gaps in a protective foredune. *Ocean and Coastal Management* 50: 945-959.

Jackson, N.L., D.R. Smith, R. Tiyarattanachi and K.F. Nordstrom. 2007. Evaluation of a small beach nourishment project to enhance habitat suitability for horseshoe crabs. *Geomorphology* 89: 172-185.

Nordstrom, K.F., N.L. Jackson, J.M. Hartman and M. Wong. 2007. Aeolian sediment transport on a

human-altered foredune. *Earth Surface Processes and Landforms*, 32: 102-115.

Nordstrom, K.F., N.L. Jackson, D.R. Smith and R.G. Weber. 2006. Transport of horseshoe crab eggs by waves and swash on an estuarine beach: implications for foraging shorebirds. *Estuarine Coastal and Shelf Science*, 70: 438-448.

Cammelli, C., N.L. Jackson, K.F. Nordstrom and E. Pranzini. 2006. Assessment of a gravel-nourishment project fronting a seawall at Marina di Pisa, Italy. *Journal of Coastal Research*, SI39: 770-775.

Jackson, N.L., D.J. Sherman, P.A. Hesp, A.H.F. Klein and K.F. Nordstrom. 2006. Small-scale spatial variations in aeolian sediment transport on a fine-sand beach. *Journal of Coastal Research*, SI39: 379-383.

Mittegeger, W.A., A. Burke and K.F. Nordstrom. 2006. Restoring natural landscapes on private shorefront properties in New Jersey, USA. *Journal of Coastal Research*, SI39: 891-898.

Nordstrom, K.F., N.L. Jackson, A.H.F. Klein, D.J. Sherman and P.A. Hesp. 2006. Offshore transport of sediment across a low protective foredune on a developed barrier island, Ocean City, New Jersey, USA. *Journal of Coastal Research*, 22: 1260-1267.

Jackson, N.L., D.R. Smith and K.F. Nordstrom. 2005. Comparison of sediment grain size characteristics on nourished and un-nourished estuarine beaches and impacts on horseshoe crab habitat, Delaware Bay, New Jersey. *Zeitschrift für Geomorphologie Supplementband* 141: 31-45.

Nordstrom, K.F. 2005. Beach nourishment and coastal habitats: research needs for improving compatibility. *Restoration Ecology*, 13: 215-222.

Jackson, N.L., K.F. Nordstrom and D.R. Smith. 2005. Influence of waves and horseshoe crab spawning on beach morphology and sediment grain size characteristics on a sandy estuarine beach. *Sedimentology*, 52: 1097-1108.

Nordstrom, K.F., N.L. Jackson and E. Pranzini. 2004. Beach sediment alteration by natural processes and human actions: Elba Island, Italy. *Annals of the Association of American Geographers*, 94: 794-806.

Nordstrom, K.F. and S. Hotta. 2004. Wind erosion from cropland in the USA: a review of problems, solutions, and prospects. *Geoderma*, 121: 157-167.

Jackson, N.L., G. Masselink and K.F. Nordstrom. 2004. The role of bore collapse and local shear stresses on the spatial distribution of sediment load in the uprush of an intermediate-state beach. *Marine Geology*, 203: 109-118.

Aminti, P., C. Cammelli, L. Cappiotti, N.L. Jackson, K.F. Nordstrom and E. Pranzini. 2004. Evaluation of beach response to submerged groin construction at Marina di Ronchi, Italy using field data and a numerical simulation model. *Journal of Coastal Research*, SI33: 99-120.

Nordstrom, K.F., N.L. Jackson, J.R. Allen and D.J. Sherman. 2003. Longshore sediment transport rates on a microtidal estuarine beach. *Journal of Waterway, Port, Coastal, and Ocean Engineering*, 129: 1-4.

Lampe, R., K.F. Nordstrom and N.L. Jackson. 2003. Cross-shore distribution of longshore sediment transport rates on a barred non-tidal estuarine beach. *Estuaries*, 26: 1426-1436.

Conway, T.M. and K.F. Nordstrom. 2003. Characteristics of topography and vegetation at boundaries

between the beach and dune on residential shorefront lots in two municipalities in New Jersey, USA. *Ocean and Coastal Management*, 46: 635-648.

Nordstrom, K.F., N.L. Jackson, M.S. Bruno and H.A. de Butts. 2002. Municipal initiatives for managing dunes in coastal residential areas: a case study of Avalon, New Jersey, USA. *Geomorphology*, 47: 137-152.

Jackson, N.L., K.F. Nordstrom, and D.R. Smith. 2002. Geomorphic-biotic interactions on beach foreshores in estuaries. *Journal of Coastal Research*, SI 36: 414-424.

Jackson, N.L., K.F. Nordstrom, I. Eliot and G. Masselink. 2002. Low energy marine and estuarine beaches: a review. *Geomorphology*, 48: 147-162.

Nordstrom, K.F. and N.L. Jackson. 2001. Using paintings for problem-solving and teaching physical geography: examples from environmental management. *Journal of Geography*, 100: 141-151.

Nordstrom, K.F. and W.A. Mitteager. 2001. Perceptions of natural and restored beach and dune characteristics by high school students in New Jersey, USA. *Ocean and Coastal Management*, 44: 545-559.

Freestone, A.L. and K.F. Nordstrom. 2001. Early evolution of restored dune plant microhabitats on a nourished beach at Ocean City, New Jersey. *Journal of Coastal Conservation*, 7: 105-116.

Nordstrom, K.F. and M.N. Mauriello. 2001. Restoring and maintaining naturally-functioning landforms and biota on intensively developed barrier islands under a no-retreat scenario. *Shore and Beach*, 69(3): 19-28.

Nordstrom, K.F., R. Lampe and L.M. Vandemark. 2000. Re-establishing naturally-functioning dunes on developed coasts. *Environmental Management*, 25: 37-51.

Jackson, N.L., D.P. Horn, V. Spalding and K.F. Nordstrom. 1999. Changes in beach water table elevation during neap and spring tides on a sandy estuarine beach, Delaware Bay, New Jersey, USA. *Estuaries*, 22: 753-762.

Nordstrom, K.F. and N.L. Jackson. 1998. Effects of a high rise building on wind flow and beach characteristics at Atlantic City, New Jersey, USA. *Ocean and Coastal Management*, 39: 245-263.

Jackson, N.L. and K.F. Nordstrom. 1998. Aeolian transport of sediment on a beach during and after rainfall, Wildwood, NJ, USA. *Geomorphology*, 22: 151-157.

Nordstrom, K.F. and S.M. Arens. 1998. The role of human actions in evolution and management of foredunes in The Netherlands and New Jersey, USA. *Journal of Coastal Conservation*, 4: 169-180.

Jackson, N.L. and K.F. Nordstrom. 1997. Effects of time-dependent moisture content of surface sediments on aeolian transport rates across a beach, Wildwood, New Jersey, USA. *Earth Surface Processes and Landforms*, 22: 611-621.

Gares, P.A., R.G.D. Davidson-Arnott, B.O. Bauer, D.J. Sherman, R.W.G. Carter, D.W.T. Jackson and K.F. Nordstrom. 1996. Alongshore variations in aeolian transport: Carrick Finn Strand, Republic of Ireland, *Journal of Coastal Research*, 12: 673-682.

Nordstrom, K.F., B.O. Bauer, R.G.D. Davidson-Arnott, P.A. Gares, R.W.G. Carter, D.W.T. Jackson and

- D.J. Sherman. 1996. Offshore aeolian transport across a beach: Carrick Finn Strand, Ireland, *Journal of Coastal Research*, 12: 664-672.
- Bauer, B.O. R.G.D. Davidson-Arnott, K.F. Nordstrom, J. Ollerhead and N.L. Jackson. 1996. Indeterminacy in aeolian sediment transport across beaches, *Journal of Coastal Research*, 12: 641-653.
- Nordstrom, K.F. 1996. Assessment of collaborative approaches to teaching an undergraduate environmental management course. *Journal of Geography*, 95: 20-28.
- Gares, P.A. and K.F. Nordstrom, 1995. A cyclic model of foredune blowout evolution for a leeward coast – Island Beach, New Jersey, *Annals of the Association of American Geographers*, 85: 1-20.
- Nordstrom, K.F. and N.L. Jackson. 1995. Temporal and spatial scales of landscape change following storms on human-altered coasts. *Journal of Coastal Conservation*, 1: 51-62.
- Nordstrom, K.F. 1995. Multiple-purpose use of a peer review program of course instruction in a multi-disciplinary university department. *Journal on Excellence in College Teaching*, 6: 125-144.
- Sherman, D.J., K.F. Nordstrom, N.L. Jackson and J.R. Allen, 1994. Sediment mixing-depths on a low-energy reflective beach, *Journal of Coastal Research*, 10: 297-305.
- Jackson, N.L. and K.F. Nordstrom, 1994. The mobility of beach fill in front of a seawall on an estuarine shoreline, Cliffwood Beach, New Jersey, USA, *Ocean and Coastal Management*, 23: 149-166.
- Nordstrom, K.F. 1994. Beaches and dunes of human-altered coasts. *Progress in Physical Geography*, 18: 497-516.
- Gares, P.A., D.J. Sherman and K.F. Nordstrom, 1994. Geomorphology and natural hazards. *Geomorphology*, 10: 1-18.
- Sherman, D.J. and K.F. Nordstrom, 1994. Hazards of wind blown sand and sand drifts, *Journal of Coastal Research*, Special Issue 12, 263-275.
- Nordstrom, K.F. and N.L. Jackson, 1994. Aeolian processes and dune fields in estuaries, *Physical Geography*, 15: 358-371.
- Nordstrom, K.F. and N.L. Jackson, 1993. The role of wind direction in eolian transport on a narrow sandy beach, *Earth Surface Processes and Landforms*, 18: 675-685.
- Jackson, N.L. and K.F. Nordstrom, 1993. Depth of activation of sediment by plunging breakers on a steep sand beach, *Marine Geology*, 115: 143-151.
- Nordstrom, K.F. 1993. Intrinsic value and landscape evaluation, *Geographical Review*, 83: 473-476.
- Nordstrom, K.F. and N.L. Jackson, 1993. Distribution of surface pebbles with changes in wave energy on a sandy estuarine beach. *Journal of Sedimentary Petrology*, 63: 1152-1159.
- Jackson, N.L. and K.F. Nordstrom, 1992. Site-specific controls on wind and wave processes and beach mobility on estuarine beaches, *Journal of Coastal Research*, 8:88-98.
- Nordstrom, K.F. and N.L. Jackson, 1992. Two dimensional change on sandy beaches in estuaries, *Zeitschrift für Geomorphologie*, 36:465-478.

- Nordstrom, K.F. and N.L. Jackson, 1992. Effect of source width and tidal elevation changes on eolian transport on an estuarine beach, *Sedimentology*, 39:769-778.
- Bauer, B.O., J.R. Allen, K.F. Nordstrom and D.J. Sherman, 1991. Sediment redistribution in a groin embayment under shore-normal wave approach, *Zeitschrift für Geomorphologie*, Supplementband, 81:135-148.
- Nordstrom, K.F., 1990. The concept of intrinsic value and depositional coastal landforms, *Geographical Review*, 80:68-81.
- Sherman, D.J., B.O. Bauer, K.F. Nordstrom and J.R. Allen, 1990. A tracer study of sediment transport in the vicinity of a groin, *Journal of Coastal Research*, 6:427-438.
- Nordstrom, K.F. and P.A. Gares, 1990. Changes in the volume of coastal dunes in New Jersey, USA, *Ocean and Shoreline Management*, 13:1-10.
- Nordstrom, K.F., N.L. Jackson, and J.P. Tiefenbacher, 1990. Threats to beach resources and park boundaries caused by shoreline migration in an urban estuarine park, *Environmental Management*, 14:195-202.
- Nordstrom, K.F. and N.L. Jackson, 1990. Migration of swash zone, step, and microtopographic features during tidal cycles on an estuarine beach, Delaware Bay, New Jersey, USA, *Marine Geology*, 92:147-154.
- Nordstrom, K.F. and E.L. Lotstein, 1989. Perspectives on resource use of dynamic coastal dunes, *Geographical Review*, 79:1-12.
- Nordstrom, K.F., 1989. Erosion control strategies for bay and estuarine beaches, *Coastal Management*, 17:25-35.
- Nordstrom, K.F., 1989. Downdrift coarsening of beach foreshore sediments at tidal inlets: an example from the coast of New Jersey, *Earth Surface Processes and Landforms*, 14:691-701.
- Gares, P.A. and K.F. Nordstrom, 1988. Creation of dune depressions by foredune accretion, *Geographical Review*, 78:194-204.
- Roman, C.T. and K.F. Nordstrom, 1988. The effect of erosion rate on vegetation patterns of an east coast barrier island, *Estuarine, Coastal, and Shelf Science*, 26:233-242.
- Nordstrom, K.F., 1988. Dune grading along the Oregon coast, USA: a changing environmental policy, *Applied Geography*, 8:101-116.
- Nordstrom, K.F. 1987. Predicting shoreline changes at tidal inlets on a developed coast, *Professional Geographer*, 39:457-465.
- Nordstrom, K.F., 1987. Management of tidal inlets on barrier island shorelines, *Journal of Shoreline Management*, 3:169-190.
- Nordstrom, K.F. 1986. Beach conservation and enhancement: the basis for a national policy on coastal erosion in the United States, *Journal of Shoreline Management*, 2:13-34.
- Nordstrom, K.F., and J.M. McCluskey, 1985. The effects of houses and sand fences on the eolian

sediment budget at Fire Island, New York, *Journal of Coastal Research*, 1:39-46.

Sherman, D.J., and K.F. Nordstrom, 1985. Beach Scarps, *Zeitschrift für Geomorphologie* 29:139-152.

Nordstrom, K.F. and T.A. Terich, 1985. Management considerations for accreting shorelines, *Coastal Zone Management Journal*, 13:131-150.

Nordstrom, K.F., and W.H. Renwick, 1984. A coastal cliff management district for protection of eroding high relief coasts, *Environmental Management*, 8:197-202.

Nordstrom, K.F., 1984. Guidelines for writing term papers in geography courses, *Journal of Geography*, 83:21-25.

Nordstrom, K.F., and J.M. McCluskey, 1984. Considerations for the control of house construction in coastal dunes, *Coastal Zone Management Journal*, 12:385-402.

Nordstrom, K.F., and D.J. Sherman, 1982. Ice effects on mid-latitude marine and estuarine beaches, *Northeastern Geology*, 4:134-138.

Nordstrom, K.F., 1981. Differences in grain size distributions with shoreline position in a spit environment, *Northeastern Geology*, 3:252-258.

Nordstrom, K.F., and N.P. Psuty, 1980. Dune district management: a framework for shorefront protection and land use control, *Coastal Zone Management Journal*, 7:1-23.

Nordstrom, K.F., 1980. Cyclic and seasonal beach response: a comparison of oceanside and bayside beaches, *Physical Geography*, 1:177-196.

Nordstrom, K.F. and J.R. Allen, 1980. Geomorphically compatible solutions to beach erosion, *Zeitschrift für Geomorphologie*, Supplementband 34:142-154.

Nordstrom, K.F., J.R. Allen, D.J. Sherman, and N.P. Psuty, 1979. Management considerations for beach nourishment at Sandy Hook, New Jersey, *Coastal Engineering*, 2:215-236.

Nordstrom, K.F., 1979. An energy-mobility beach classification system as a basis for the management of beach resources, *Coastal Zone Management Journal*, 5:333-351.

Nordstrom, K.F., 1979. The field course in geography: a conceptual framework, *Journal of Geography*, 78:267-272.

Nordstrom, K.F., 1977. The use of grain size statistics to distinguish between high- and moderate- energy beach environments, *Journal of Sedimentary Petrology*, 47:1287-1294.

Nordstrom, K.F., 1977. Bayside beach dynamics: Implications for simulation modeling on eroding, sheltered, tidal beaches, *Marine Geology*, 25:333-342.

Chapters in Books and Edited Symposia

Nordstrom, K.F. 2014. Coastal dunes. In Masselink, G. and Gehrels, R. eds. *Coastal Environments and Global Change*. Wiley-Blackwell, 178-193.

- Nordstrom, K.F. 2013. Developed coasts, In Shroder, J. Jr. and D. Sherman, eds. *Treatise on Geomorphology Vol. 10*. San Diego: Academic Press, 392-416.
- Nordstrom, K.F. and N.L. Jackson. 2013. Foredune restoration in urban settings, In Martinez, M.L., P.A. Hesp and J. Gallego-Fernandez eds. *Restoration of Coastal Dunes*. Heidelberg: Springer Verlag, 17-31.
- Nordstrom, K.F., N.L. Jackson and P. Rafferty. 2010. Mitigating the effects of bulkheads on the bay shore of Fire Island National Seashore. In: Shipman, H., Dethier, M.N., Gelfenbaum, G., Fresh, K.L. and Dinicola, R.S. eds. *Puget Sound Shorelines and the Impacts of Armoring: Proceedings of a State of the Science Workshop, May 2009*. U.S. Geological Survey Scientific Investigations Report 2010-5254, 57-64.
- N.L. Jackson, K.F. Nordstrom and D.R. Smith. 2010. Armoring of estuarine shorelines and implications for horseshoe crabs on developed shorelines in Delaware Bay. In: Shipman, H., Dethier, M.N., Gelfenbaum, G., Fresh, K.L. and Dinicola, R.S. eds. *Puget Sound Shorelines and the Impacts of Armoring: Proceedings of a State of the Science Workshop, May 2009*. U.S. Geological Survey Scientific Investigations Report 2010-5254, 195-202.
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Nordstrom, K.F. and J.R. Allen, 1978. Dynamic geomorphology as a basis for coastal land use planning. *Coastal Zone 78*. New York: American Society of Civil Engineers, pp. 1371-1385.

Nordstrom, K.F., N.P. Psuty and S.F. Fisher, 1978. Empirical models of dune formation as the basis for dune district zoning. *Coastal Zone 78*. New York: American Society of Civil Engineers, pp. 1489-1507.

Allen, J.R. and K.F. Nordstrom, 1977. Beach form changes in the lee of groins at Sandy Hook, N.J. *Coastal Sediments '77*. New York: American Society of Civil Engineers, pp. 33-47.

Other publications

26 Non-refereed articles, notes and book reviews in journals; 18 Technical reports.

Funded Projects

“Channel and marina dredging/restoration of bayside sediment processes at Sailors Haven, Fire Island National Seashore.” Federal Highway Administration, \$34,729, 9/15/14-4/30/17 (Principal Investigator).

“Facilitating natural dune building.” NOAA, NJ Sea Grant College Program, \$199,922, 2/1/14-8/31/17 (Co-Principal Investigator, with N.L. Jackson, PI and M. Boufadel).

“Geomorphic compatibility of shore protection structures.” National Geographic Society, \$9,277, 3/1/14-11/30/14 (Co-Principal Investigator, with N.L. Jackson, PI and P. Ciavola).

“Coastal geomorphology and restoration symposium.” National Science Foundation, \$31,900, 4/1/13-3/31/14 (Co-Principal Investigator, with N.L. Jackson, PI, R. Feagin and W.K. Smith).

“Evaluating the geomorphological and sedimentological effects of a demonstration project for restoring bayside sediment processes at Sailors Haven marina.” National Park Service, \$206,423, 8/26/10-6/30/15 (Principal Investigator, with N.L. Jackson).

“Facilitating migration of coastal landforms and habitats in response to rising sea levels: an adaptation strategy for Northeast Region coastal parks.” National Park Service, \$177,965, 9/13/10-5/31/15 (Principal Investigator, with N.L. Jackson).

“Evaluation of wind and wave processes critical in sustaining beach backshore environments.” NOAA, NJ Sea Grant College Program, \$171,252, 3/1/08-2/28/10 (Principal Investigator, with N.L. Jackson and J. Puleo).

“Spatial and temporal characteristics of entrainment and transport of horseshoe crab (*Limulus Polyphemus*) eggs in the swash zone of estuarine beaches,” National Science Foundation, \$29,354, 3/1/07-2/28/08 (Co-Principal Investigator, with N.L. Jackson, P.I.).

“Restoring naturally functioning dune environments on the Veneto coast of Italy.” National Geographic Society, \$10,200, 8/5/06-8/5/07 (Principal Investigator, with G. Fontolan).

“Effects of bulkheads on horseshoe crab spawning and egg availability to shorebirds.” NOAA, NJ Sea Grant College Program, \$151,000, 3/1/06-2/28/08 (Co-Principal Investigator, with N.L. Jackson, P.I. and D.R. Smith).

“Restoring coastal landforms and habitats in shore protection projects.” Fulbright Scholar Program and German Fulbright Commission, 6,600 Euros, 2/15/06-5/15/06.

“Determining the potential for horseshoe crab habitat restoration using beach nourishment.” NOAA, NJ Sea Grant College Program, \$157,695, 3/1/04-2/28/06 (Co-Principal Investigator, with N.L. Jackson, P.I. and D.R. Smith).

“Assessment of shore protection structures on the bay shore of Fire Island National Seashore.” National Park Service, \$56,950, 6/30/03-9/30/08 (Principal Investigator, with N.L. Jackson).

“Bay shoreline physical processes.” National Park Service, \$7,993, 9/1/03-10/31/04 (Principal Investigator, with N.L. Jackson).

“Restoration of natural landscapes on shorefront properties.” NOAA, NJ Sea Grant College Program, \$5,000, 5/1/03-2/28/04 (Principal Investigator).

“Assessing sediment transport and restoration potential on developed coastal dunes.” NOAA, NJ Sea Grant College Program, \$93,760, 3/1/02-2/28/04 (Principal Investigator, with N.L. Jackson and J.M. Hartman).

“Assessing shore protection on Delaware Bay beaches to restore habitat for horseshoe crab spawning and egg viability” NOAA, NJ Sea Grant College Program, \$6,981, 5/21/02-2/28/03 (Co-Principal Investigator, with N.L. Jackson, PI and D.R. Smith).

“Beach nourishment for re-establishing environmental heritage on Elba Island.” National Geographic Society, \$8,672, 1/25/02-4/30/03 (Principal Investigator, with V. Arrigoni, E. Pranzini and N.L. Jackson).

“Effects of waves and currents on horseshoe crab egg density and availability to shorebirds on sandy estuarine beaches in New Jersey and Delaware.” NOAA, NJ Sea Grant College Program, \$5,000, 3/1/01-2/28/02 (Co-Principal Investigator, with N.L. Jackson, PI and D.R. Smith).

“Study on erosion control on national land.” Capital Administration Office, Nihon University, Tokyo,

Japan, \$11,300, 4/1/01-3/31/02 and 4/1/03-3/31/04 (Principal Investigator).

"Opportunities for nature based tourism on natural, restored and intensively used beaches and dunes in coastal municipalities in New Jersey." NOAA, NJ Sea Grant College Program, \$4,348, 3/1/00-2/28/01 (Principal Investigator).

"Beach processes and shoreline management in estuaries," Fulbright Scholar Program and German-American Fulbright Commission, Germany, \$8,200, 3/1/99-7/15/99.

"An educational program to enhance learning about resource management in coastal resort communities," NOAA, NJ Sea Grant College Program, \$4,213, 3/1/98-2/28/99 (Principal Investigator, with M.J. Bogdon).

"Reestablishment of natural environments in developed coastal communities to enhance ecological and human-resource values," NOAA, NJ Sea Grant College Program, \$4,175, 5/1/97-4/30/98 (Principal Investigator).

"Analysis of effects of high rise tower construction on beach characteristics at Atlantic City, NJ," Sykes O'Connor Salerno Hazaveh Architects, \$1,500, 2/5/96-4/30/96 (Principal Investigator).

"Shoreline change on the developed New Jersey coast," NOAA, NJ Sea Grant College Program, \$154,662, 8/1/95-2/28/99 (Principal Investigator, with M.S. Bruno and N.L. Jackson).

"A coastal hazard vulnerability classification for assessing effects of sea level rise in estuaries," NOAA, NJ Sea Grant College Program, \$3,000, 10/1/95-7/1/96 (Principal Investigator, with N.L. Jackson).

"Dunes of developed coasts," Visiting scholar program. Department of Physical Geography and Soil Science, University of Amsterdam, The Netherlands, \$4,855, 5/15/95-7/16/95.

"Analysis of longshore sediment transport theory using sand tracers," National Science Foundation, \$22,000, 3/1/92-1/28/94 (Principal Investigator).

"Beach hydrodynamics and morphologic changes affecting the bay shoreline at Fire Island, NY," U.S. National Park Service, \$25,000, 3/15/92-4/30/94 (Principal Investigator).

"Shoreline change on the developed New Jersey coast," NOAA, NJ Sea Grant College Program, \$2,000, 5/1/93-8/31/93 (Principal Investigator, with M.S. Bruno and N.L. Jackson).

"Effect of source width on eolian sediment transport," National Geographic Society, \$8,000, 5/1/92-5/1/93 (Co-principal Investigator, with P.A. Gares and B.O. Bauer).

"Beach processes on sheltered bay shorelines in Germany and the United States," Deutsche Akademische Austausch Dienst, Federal Republic of Germany, \$3,600, 5/15/90-7/15/90.

"Assessment of causes of beach loss and solutions for protection of the Cliffwood Beach Shoreline," New Jersey, Division of State Police, Emergency Management Section, \$12,000, 11/9/88-1/6/90 (Principal Investigator).

"Analysis of physical factors affecting designs for Conference House Park," City of New York Department of Parks and Recreation through Jackson and Kihn, Philadelphia, \$12,950, 1/20/88-5/1/89 (Principal Investigator).

"Identification of natural processes and landform changes affecting planning and management decision on the shorelines of Delaware Bay and Raritan Bay," New Jersey, Department of Environmental Protection, \$34,974, 2/88-12/88 (Principal Investigator).

"Sediment transport around a groin at Rockaway Beach, New York," U.S. National Park Service, \$56,744, 7/1/86-9/30/89 (Principal Investigator).

"Workshop on alternative strategies for mitigating erosion problems at the north end of Assateague Island National Seashore," U.S. National Park Service, \$26,984, 1/1/86-6/30/86 (Co-principal Investigator with C.T. Roman).

"A systematic and multidisciplinary identification of national seashore park management issues and research needs," U.S. National Park Service, \$174,439, 7/1/84-6/30/88 (Co-principal Investigator with C.T. Roman and J.G. Ehrenfeld).

"Assessment of alternative measures for mitigating erosion problems at the north end of Assateague Island," U.S. National Park Service, \$114,929, 7/2/84-12/31/87 (Co-principal Investigator with C.T. Roman).

"Living with the New Jersey Shore." Duke University, \$2,000, 8/3/84-8/3/85 (Principal Investigator).

"Analysis of eolian factors, South Shore of Long Island," U.S. National Park Service, \$28,438, 2/2/82-7/31/82 (Principal Investigator).

"The effects of structures on dune dynamics at Fire Island National Seashore," U.S. National Park Service, \$5,000, 3/13/80-7/31/80 (Principal Investigator).

"Procedures for updating policies and methods for interagency interaction for U.S. Army Corps of Engineer activities in the coastal zone of New Jersey," U.S. Army Corps of Engineers, Philadelphia, \$17,299, 3/1/80-9/30/80 (Principal Investigator).

"Shoreline change and land use at tidal inlets," NOAA, NJ Sea Grant College Program, \$24,000, 5/1/80-4/30/81 and 5/1/82-8/30/83 (Principal Investigator).

"Dune management area delineation," New Jersey, Office of Coastal Zone Management, \$30,000, 4/1/79-12/14/79 (Co-principal Investigator with N.P. Psuty).

"An applied geomorphological research program for the management of beach resources at Sandy Hook, New Jersey," U.S. National Park Service, \$95,000, 2/1/76-11/30/81 (Principal Investigator).

"Geomorphological research requirements for Fire Island National Seashore," U.S. National Park Service, \$2,500, 9/1/76-8/30/77 (Co-principal Investigator with N.P. Psuty).

"The coastal geomorphology of New Jersey," New Jersey, Office of Coastal Zone Management, Department of Environmental Protection, \$15,000, 1/1/76-12/31/77 (Principal Investigator).

Funded Teaching Projects

"Evaluating the natural values of beach litter in coastal resorts." Rutgers University Office of the Vice President for Undergraduate Education, Undergraduate Research Fellows Program, \$1,300, 7/1/04-6/30/05, (Principal Investigator, with A. Williams, student).

"Using visual art for problem-solving in an environmental management course," Zimmerli Art Museum, \$500, 12/19/00-4/5/01 (Principal Investigator).

"Re-establishing natural environments in developed coastal communities in New Jersey." Rutgers University Office of the Vice President for Undergraduate Education, Undergraduate Research Fellows Program, \$1,700, 7/1/99-6/30/00, (Principal Investigator, with A.L. Freestone, student).

"Re-establishing naturally functioning dunes on developed coasts: study of coastal plant ecology." NJ Sea Grant College Program, Senior (student) Research Award, \$2,500, 5/1/99-2/30/00, (Principal Investigator on behalf of A.L. Freestone, student awardee).

"A program for creation and use of a department teaching library," Rutgers University Office of the Vice President for Undergraduate Education, \$1,976, 1/1/96-6/30/96, (Principal Investigator).

"A comprehensive program for peer evaluation of faculty teaching," Rutgers University Office of the Vice President for Undergraduate Education, \$4,000, 1/2/95-6/30/95, (Principal Investigator).

"Collaborative student research in applied science," Rutgers University Teaching Excellence Center, \$3,645, 7/1/94-6/30/95, (Principal Investigator).

Plenary Addresses

- 2012 6th International Sandy Beach Symposium, Mpekweni, South Africa
- 2009 International Coastal Symposium, Lisbon, Portugal
- 2005 Maine Beaches Conference, Wells, ME
- 2002 International Coastal Symposium, Templepatrick, Northern Ireland, UK

Other Papers Delivered or Co-authored for Professional Meetings

- 2016 10th Biennial Fire Island Planning Science and Research Conference, Patchogue, NY
- 2015 Geological Society of America Annual Meeting, Baltimore, MD
46th Geomorphology Symposium, Buffalo, NY
- 2014 1st International Forum of the Sea and the Coast, Forte dei Marmi, Italy (invited speaker)
- 2013 44th Geomorphology Symposium, Newark, NJ (co-organizer)
International Coastal Symposium, Plymouth, England
- 2011 Association of American Geographers (AAG) Annual Meeting, Seattle, WA
Delaware Estuary Science and Environmental Summit, Cape May, NJ
42d Geomorphology Symposium, Mobile, AL
- 2010 Association of American Geographers (AAG) Annual Meeting, Washington, DC
7th Biennial Fire Island Planning Science and Research Conference, Patchogue, NY
Restoration Institute, Victoria, BC, Canada (invited speaker)
- 2009 Estuarine Research Federation Conference, Portland, OR
Nicholas C. Kraus Symposium, Melbourne, FL
Delaware Estuary Science and Environmental Summit, Cape May, NJ
- 2008 Association of American Geographers (AAG) Annual Meeting, Boston, MA
American Society of Limnology and Oceanography, Orlando, FL
- 2007 Estuarine Research Federation Conference, Providence, RI
Plant Sciences for Frontal Dunes and Beach Replenishment, Avalon, NJ (invited speaker)
First International Conference on the Horseshoe Crab, Long Island, NY
6th Biennial Fire Island Cultural and Natural Resources Conference, Stony Brook, NY
- 2005 Estuarine Research Federation Conference, Norfolk, VA
36th Geomorphology Symposium, Buffalo, NY

- Delaware Estuary Science Conference 2005, Cape May, NJ
5th Biennial Fire Island Cultural and Natural Resources Conference, Brookhaven, NY
2d Regional Workshop on Dredging, Beach Nourishment and Bird Conservation, Islip, NY
- 2004 International Coastal Symposium, Itapema, Brazil
- 2003 MEDCOAST '03, Ravenna, Italy (invited speaker)
5th International Conference on Environmental Future, Zürich, Switzerland (invited speaker)
Association of American Geographers Annual Meeting, New Orleans, LA
Estuarine Research Federation Conference, Seattle, WA
- 2002 24th Annual Brazilian Zoological Congress, Itajaí, Brazil (invited speaker)
10th Symposium on Global Environment, Tokyo, Japan
132 Annual Meeting of American Fisheries Society, Baltimore, MD
- 2001 Association of American Geographers Annual Meeting, New York, NY
- 1999 16th Annual Meeting of German Oceans and Coasts Working Group, Bremen, Germany
Coastal Sediments 99, Long Island, NY
Annual Meeting of the Geological Association of New Jersey, Pomona, NJ.
30th Geomorphology Symposium, Binghamton, NY (invited speaker)
- 1998 Association of American Geographers Annual Meeting, Boston, MA
29th Geomorphology Symposium, Woods Hole, MA
- 1997 4th International Conf. on Geomorphology, Bologna, Italy
California Shore and Beach Preservation Association Conference, Santa Barbara, CA
- 1996 Association of American Geographers Annual Meeting, Charlotte, NC
3d Marine and Estuarine Shallow Water Conference, Atlantic City, NJ
- 1995 Symposium on Developed Coastlines, Amsterdam, The Netherlands
- 1994 Association of American Geographers Annual Meeting, San Francisco, CA
Coastal Dynamics 94, Barcelona, Spain
25th Geomorphology Symposium, Binghamton, NY
- 1993 Association of American Geographers Annual Meeting, Atlanta, GA
Coastal Zone 93, New Orleans, LA
3d International Conf. on Geomorphology, Hamilton, Canada
- 1992 Association of American Geographers Annual Meeting, San Diego, CA
- 1991 Coastal Zone 91, Long Beach, CA
3d European Congress on Coastal Dunes, Galway, Ireland
2d NPS Conference on Science and Natural Resource Management, Newport, RI.
- 1990 EUROCOAST, Marseilles, France
Symposium on Coastal Dunes, Guelph, Canada
- 1989 Association of American Geographers Annual Meeting, Baltimore MD.
Coastal Zone 89, Charleston, SC
2d International Conf. on Geomorphology, Frankfurt, Germany
- 1988 NE Section, GSA, Portland, ME
International Geographical Union, Sydney, Australia
Association of American Geographers Annual Meeting, Phoenix, AZ
- 1987 Coastal Zone 87, Seattle, WA
Coastal Sediments 87, New Orleans, LA
Association of American Geographers Annual Meeting, Portland, OR
First Conference on Research in Northeastern National Parks, Amherst, MA.
Assateague Research Symposium, Princess Anne, MD.
- 1986 Hydrodynamics and Sediment Dynamics of Tidal Inlets, Woods Hole, MA
Association of American Geographers Annual Meeting, Minneapolis, MN
17th Geomorphology Symposium, Guelph, Ontario.
- 1985 Coastal Zone 85, Baltimore, MD
Cities on the Beach conference, Virginia Beach, VA.
- 1984 Coastal Society, Atlantic City, NJ

- 1983 Association of American Geographers Annual Meeting, Washington, DC
Coastal Zone 83, San Diego, CA
- 1982 Association of American Geographers Annual Meeting, Denver, CO
Coastal Society, Baltimore, MD
NE Section GSA, Washington, DC
Birmingham Applied Geomorphology Conference, Birmingham, England
- 1981 Association of American Geographers Annual Meeting, San Antonio, TX
- 1980 Association of American Geographers Annual Meeting, Los Angeles, CA
Coastal Zone 80, Hollywood, FL
Coastal Society, San Diego, CA
First Pan American Congress on Ocean Engineering, Mexico City
Association of American Geographers Annual Meeting, Louisville, KY
NE Section, Geological Society of America (GSA)
Assateague Shelf and Shore Workshop, Stockton College, NJ.
- 1979 Coastal Structures 79, Alexandria, VA
Applied Geography Conference, Binghamton, NY
American Congress on Surveying and Mapping, New York, NY
Coastal Society, Newport, RI
2d Conference on Scientific Research in the National Parks
Association of American Geographers Annual Meeting, Philadelphia, PA
- 1978 Coastal Zone 78, San Francisco, CA
International Geographical Union, Burlington, Ontario
Middle States Division, AAG, Syracuse, NY
Association of American Geographers Annual Meeting, New Orleans, LA
- 1977 Coastal Sediments 77, Charleston, SC
National Conference on Coastal Erosion, Cape May, NJ
- 1976 First Conference on Scientific Research in the National Parks, New Orleans, LA
Association of American Geographers Annual Meeting, New York, NY)
- 1975 Middle States Division, AAG, Buffalo, NY
New Jersey Academy of Sciences, Madison, NJ
- 1974 Middle States Division, Assoc. of American Geographers, West Point, NY
- 1973 Middle States Division, Assoc. of American Geographers, Philadelphia, PA
- 1972 Middle States Division, Assoc. of American Geographers, Genesee, NY

Courses Taught

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| Introductory Physical Geography | Advanced Physical Geography |
| Introductory Physical Geography Lab | Internship in Geography |
| Coastal Geomorphology | Applied Geomorphology |
| Geographic Research Methods | Field Techniques in Geography |
| Advanced Studies in Geology (with G.M. Ashley) | Seminar in Geography |
| Applied Science in Shoreline Management | Topics in Oceanography (Estuarine Shores) |
| Human Interactions with the Coastal Ocean | |
| Humans and the Coast (Universität Greifswald, Germany) | |
| Restoring Natural Coastal Landforms and Habitats (Short course at Universität Greifswald, Germany) | |
| Coastal Dunes (Short course at Universidade do Vale do Itajaí, Brazil) | |

Graduate Advising

Member of graduate faculty in the Oceanography and Geography programs, Rutgers University.

Chair of committee for Ph.D. dissertations and M.S. theses completed by:

Jonathan D. Phillips (Ph.D. 1985)
James M. McCluskey (Ph.D. 1987)
Nancy L. Jackson (Ph.D. 1992)
Lisa M. Vandemark (Ph.D. 2001)
John F. Dobosiewicz (Ph.D. 2003)
Wendy A. Mitteager (Ph.D. 2005)
Rosana Grafals-Soto (Ph.D. 2010)
Daniel A. Borone (Ph.D. 2016)

Gail A. Kucma (M.S. 1982)
Robert L. Pavlowski (M.S. 1989)
Michelle Pronio (M.S. 1989)
Kenneth J. Corti (M.S. 2000)
Nicole A. Raineault (M.S. 2008)
Katherine Korotky (M.S. 2011)

Committee member on 17 other completed Rutgers theses and dissertations.

Currently serving as principal advisor for Katherine Chibbaro (Ph.D.).

External reviewer for Ph.D. dissertations at University of Western Australia (3), University of Guelph, Canada (1) and MS theses at New Jersey Institute of Technology (3).

Professional and Public Service

Current Professional Affiliations

American Association for the Advancement of Science
Geological Society of America
Coastal Education and Research Foundation
International Geographical Union Commission on Coastal Environments

Committees and Boards (Present)

Associate Editor, Journal of Coastal Research
Coastal Dunes Workshop Steering Committee

Previous Activities on Committees and Boards

National Research Council Committee on US Army Corps of Engineers Water Resources
Science, Engineering and Planning: Coastal Risk Reduction
Editorial Board, Journal of Coastal Conservation
International Advisory Committee, Medcoast '03
USC California Sea Grant Technical Advisory Panel
New Jersey Sea Grant Coastal Processes Advisory Committee
Scientific and Technical Advisory Committee, Delaware Estuary Program
Scientific and Technical Advisory Committee, New York/New Jersey Harbor Estuary Program
Shore Protection Advisory Group, New Jersey Division of Coastal Resources
Board of Directors, Committee on Marine Geography, Association of American Geographers
Advisory Group, Oregon Department of Land Conservation and Development, 1986-1988

Reviewer for refereed journals

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| <i>Journal of Sedimentary Petrology</i> | <i>Sedimentology</i> | <i>Marine Geology</i> |
| <i>Earth Surface Processes & Landforms</i> | <i>Sedimentary Geology</i> | <i>Geomorphology</i> |
| <i>Journal of Geophysical Research</i> | <i>Global and Planetary Change</i> | <i>Earth Science Reviews</i> |
| <i>Journal of Geology</i> | <i>Journal of Geography</i> | <i>Geographical Review</i> |
| <i>Annals, Assn. of Amer. Geographers</i> | <i>Professional Geographer</i> | <i>Physical Geography</i> |
| <i>Canadian Journal of Earth Sciences</i> | <i>Applied Geography</i> | <i>Estuaries</i> |

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| <i>Estuarine Coastal and Shelf Science</i> | <i>Journal of Coastal Research</i> | <i>Shore and Beach</i> |
| <i>Wetlands Ecology and Management</i> | <i>Ocean and Coastal Management</i> | <i>Coastal Management</i> |
| <i>Trans. Inst. British Geographers</i> | <i>National Geographic Research</i> | <i>Restoration Ecology</i> |
| <i>Zeitschrift für Geomorphologie</i> | <i>Coastal Engineering Journal</i> | <i>Coastal Engineering</i> |
| <i>Arid Land Research and Management</i> | <i>Journal of Coastal Conservation</i> | <i>Geo Marine Letters</i> |
| <i>Environmental Science and Technology</i> | <i>Environmental Management</i> | <i>Aeolian Research</i> |
| <i>Frontiers in Ecology and the Environ.</i> | <i>Continental Shelf Research</i> | <i>Environmental Conserv.</i> |
| <i>Geografia Fisica e Dinamica Quatern.</i> | <i>Proc, Royal Society of Edinburgh</i> | <i>Ocean Engineering</i> |
| <i>Environ. Monitoring and Software</i> | <i>Science of the Total Environment</i> | <i>Ecological Engineering</i> |
| <i>Journal of Great Lakes Research</i> | <i>Journal of Environ. Management</i> | <i>Chemistry and Ecology</i> |

Reviewer for proposals

American Chemical Society Petroleum Research Fund
National Geographic Committee for Exploration
National Science Foundation (Career, Geography and Regional/Spatial Sciences, Paleoclimate, Earth Sciences Instrumentation and Facilities, and International Research Fellowship Programs)
Smithsonian Institution
NOAA: California, Delaware, Maine, Maryland, South Carolina, Florida and Texas Sea Grant Programs, CREST and National Centers for Coastal and Ocean Science Programs
Hudson River Foundation
Natural Environment Research Council (U.K.)
Leverhulme Trust (U.K.)
Research Office of University of Ulster (U.K.)
Netherlands Organisation for Scientific Research
NATO
Sigma Xi
NSERC (Canada)
Regional Council for Development of the Gaspé and Magdalen Islands (Canada)
Australian Department of Sport and Territories
Cambridge University Press, Academic Press, Kluwer Academic, John Wiley
Geological Society of America Book Section.

Workshops

Dunes Management Challenges on Developed Coasts, Kitty Hawk, NC (steering committee member)
Improving Acceptance of Natural Infrastructure, Washington, DC 2015 (invited participant)
Future directions for Circeo National Park, Sabaudia, Italy, 2014 (invited speaker).
Enhancing functions and services on backshores and dunes, Avalon, NJ, 2010 (Co-organizer).
Puget Sound Shorelines and the Impacts of Armoring, Union, WA, 2009 (invited speaker).
Coastal Barrier Island Network, Galveston, TX, 2009.
Workshop on Innovative Shore Protection Strategies, Marina di Massa, Italy 2007.
Fire Island Breach Management Plan Workshop, Narragansett, RI, 2006.
Coastal Ecosystems Symposium, US Fish and Wildlife Service, Gulf Shores, AL, 2001 (invited speaker).
Can Humans and Coastal Landforms Co-exist? Sea Grant, Woods Hole, MA, 2001 (keynote speaker).
Northeast Regional Teaching Workshop, North Brunswick, NJ, 2000 (invited speaker).
Sea Grant and the Jersey Shore Partnership, Sea Grant, West Long Branch, NJ, 1999 (invited speaker).
New Jersey Sea Grant Strategic Planning Workshop, Sea Grant, Princeton, NJ, 1997.
Workshop on mitigation of coastal hazards, FEMA, New Brunswick, NJ, 1994.
Techniques in Geomorphology, Univ. Southern California, Catalina Island, CA, 1992 (invited speaker).
Workshop on Coastal Sedimentation, USC, Catalina Island, CA, 1989.
Governor's Conference on the Future of the New Jersey Coast, Atlantic City, NJ, 1988.

Assateague Erosion Control Workshop, National Park Service, Ocean City, MD, 1986 (Co-organizer).
 Barrier Workshop, Coastal Engineering Research Center, Nags Head, NC, 1984.
 Beach Protection Symposium of New Jersey Coastal Counties, Ocean City, NJ, 1983.
 New Jersey Shore Protection Master Plan Workshop II, NJDEP, Stockton College, NJ, 1980.
 Barrier Islands Forum and Workshop, National Park Service, Provincetown, MA, 1980 (invited speaker).
 Governor's Conference on the Future of the NJ Shore, Asbury Park, NJ, 1980.
 Geomorphology Symposium, National Park Service, Patchogue, NY, 1979 (invited speaker).
 Governor's Conference on the Future of the NJ Shore, NJDEP, Point Pleasant NJ, 1979.
 New Jersey Shore Protection Master Plan Workshop I, Stockton College, NJ, 1979.
 Barrier Beach Management Workshop, Sea Grant, Provincetown, MA, 1978, (invited speaker).
 National Conference on Coastal Erosion, Federal Insurance Admin., Cape May, NJ, 1977.

Presentations at Universities and Research Centers

Faculty of Science, University of Lisbon, Portugal.
 Department of Territorial Studies and Planning, Polytechnic of Turin, Italy.
 Department of Environmental Science, University of Bologna at Ravenna, Italy.
 Department of Earth Science, University of Florence, Florence, Italy.
 Department of Geography, University of Sydney, Australia.
 Department of Physical Geography and Soil Science, University of Amsterdam, The Netherlands.
 Bryand Global Science Center, University of Maine, Orono, ME.
 College of Engineering and College of International Relations, Nihon University, Tokyo, Japan.
 Department of Geography, University of Delaware, Newark, DE.
 Department of Geography, University of Southern California, Los Angeles, CA.
 Department of Geography, University of California, Los Angeles, CA.
 Department of Geology, Western Washington University, Bellingham, WA.
 Office of Coastal Studies, University of West Florida, Pensacola, FL.
 Virginia Institute of Marine Science, Gloucester Point, VA.
 Army Corps of Engineers Coastal Engineering Research Center, Fort Belvoir, VA.
 Institute for Marine Studies, University of Washington, Seattle, WA.

Public Presentations

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| Monmouth County Museum | Pleasantville Kiwanis Club | Bay Head Environ. Commission |
| Pemberton Township Lions Club | West Deptford Rotary Club | Town meeting Mantoloking |
| Passaic Valley Kiwanis Club | Madison Historical Society | Rutgers Geology Open House |
| Sea Bright Republican Club | Chemical Technicians Society | Interview, WVNJ radio |
| St. Elizabeth's College | Old Guard Club of Ridgewood | Interview, TV Channel 40 Avalon |
| Puget Sound Partnership | Public television program "Innovations:" | The Tides of Time. |