

## **David C. Fugate**

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Department of Marine and Ecological Sciences  
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### **Education**

B.S., 1983, School of Public Health, University of North Carolina at Chapel Hill, NC,  
Biostatistics

M.A., 1996, School of Marine Science, Virginia Institute of Marine Science, College of  
William and Mary, Biological Sciences,

Ph.D., 2002, School of Marine Science, Virginia Institute of Marine Science, College of  
William and Mary, Physical Sciences, advisor: Carl Friedrichs

Postdoctoral, 2003-2005, Institute of Marine and Coastal Science, Rutgers University,  
advisor: Robert Chant

### **Mentoring and Training**

Classes: Marine Systems, Scientific Processes, Physical Oceanography, Coastal and  
Estuarine Sediment dynamics

Advising graduate and undergraduate students at Florida Gulf Coast University

Summer 2000, 2001, Co-mentored undergraduate students

### **Grants Awarded**

2009, MRI-R2: Acquisition of a Laboratory Research and Teaching Flume for Estuarine  
Sediment Bed and Ecological Research and Education, co-PI Mike Parsons, \$220,525

2007, South Florida Water Management District, Dynamics of the Estuarine Turbidity  
Maximum (ETM) in the St Lucie Estuary, \$49900

2007, South Florida Water Management District, Dynamics of the Estuarine Turbidity  
Maximum (ETM) in the Caloosahatchee River, \$25550

2007, Charlotte Harbor National Estuarine Program, "Fate of Caloosahatchee River ETM  
Associated Sediment", \$15000

2006, New Jersey Sea Grant, "Estimation of the fall velocity of suspended sediment in  
the Passaic R., NJ", \$76,000

### **Professional Affiliations**

American Geophysical Union.  
Estuarine Research Federation.

## Publications

Chant, R.J., **Fugate, D.C.** and Garvey, E., 2011, The shaping of an estuarine superfund site: roles of evolving dynamics and geomorphology, *Estuaries and Coasts* (34)1, pp 90-1-5.

Hunt, H.L., **Fugate, D.C.**, and Chant, R.J., 2009. Modeling bedload transport of juvenile bivalves: predicted changes in distribution and scale of postlarval dispersal, *Estuaries and Coasts* 32(6), 1090-1102

**Fugate, D.C.**, and C.T. Friedrichs, 2007, Lateral dynamics and associated transport of sediment in the upper reaches of a partially mixed estuary, Chesapeake Bay, USA, *Continental Shelf Research* 27, 679-698.

**Fugate, D.C.**, R.J. Chant, 2006, Aggregate settling velocity of combined sewage overflow. *Marine Pollution Bulletin* 52, pp 427-432

**Fugate, D.C.**, C.T. Friedrichs, A. Bilgili, 2006, Estimation of Residence Time in a Shallow Back Barrier Lagoon, Hog Island Bay, Virginia, USA., in, *Estuarine and Coastal Modeling, Proceedings of the Ninth International Conference, October 31-November 2, 2005*, Charleston, SC, ed. Spaulding, ML, American Society of Civil Engineers, 864 pp.

**Fugate, D.C.**, and R.J. Chant, 2005, Near bottom stresses in a small highly stratified estuary, *Journal of Geophysical Research* 110, C03022, doi:10.1029/2004JC002563.

**Fugate, D.C.**, and C.T. Friedrichs, 2003, Controls on Suspended Aggregate Size in Partially Mixed Estuaries, *Estuarine Coastal and Shelf Science*, 58, pp 389-404.

**Fugate, D.C.**, and C.T. Friedrichs, 2002. Determining concentration and fall velocity of estuarine particle populations using ADV, OBS, and LISST. *Continental Shelf Research* 22, pp. 1867-1886.

Lawson, S.E., P.L. Wiberg, K.J. McGlathery and **D. Fugate**, 2007, Wind-driven sediment suspension controls light availability in a shallow coastal lagoon, *Estuaries and Coasts*(30)1, pp 102-112.

Conrad, C.F., **Fugate, D.C.**, Daus, J., Chisholm-Brouse, C.J., Kuehl, S.A., 2007, Assessment of the historical trace metal contamination of sediments in the Elizabeth River, Virginia, *Marine Pollution Bulletin* 54, pp 385-395.

Sanford, L.P., P.J. Dickhudt, L. Rubaiano-Gomez, M. Yates, S.E. Suttles, C.T. Friedrichs, **D.C. Fugate** and H. Romine, 2005. Variability of suspended particle concentrations, sizes and settling velocities in the Chesapeake Bay turbidity maximum. In: I.G. Droppo, G.G. Leppard, P. Liss, and T. Milligan (eds.) *Flocculation in Natural and Engineered Environmental Systems*. CRC Press, Boca Raton, FL..

Kuehl, S.A., Brunskill, G.J., Burns, K., **Fugate, D.C.**, and Kniskern, T., 2004. Nature of sediment dispersal off the Sepik River, Papua New Guinea: Preliminary sediment budget and implications for margin processes. *Continental Shelf Research* 24. pp 2417-2429.

Hunt, H.L., and Maltais, M.J., **Fugate, D.C.**, and Chant, R.J., 2007, Spatial and temporal variability in juvenile bivalve dispersal: effects of sediment transport and flow regime, *Marine Ecology Progress Series* 352, pp 145-159.