

BYRON C. CRUMP

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Professional Preparation

Oberlin College	Biology	Bachelor of Arts, 1990
University of Washington	Biological Oceanography	Master of Science, 1996
University of Washington	Biological Oceanography	Doctor of Philosophy, 1999
Marine Biological Laboratory	Microbial Ecology	Postdoc. Scientist, 1999-2003

Appointments

Assistant Professor, University of Maryland Center for Environmental Science, Horn Point Laboratory, Cambridge, MD. 2003 to present

Publications in the last 3 years

- Crump BC**, Koch EW (2008) Diversity of leaf-attached and root-attached bacteria from four species of aquatic angiosperms. *Applied and Environmental Microbiology* 74:5948-5957
- Bowen JL, **Crump BC**, Deegan LA, Hobbie JE (In Press) Increased supply of ambient nitrogen has minimal effect on salt marsh bacterial production. *Limnology and Oceanography*.
- Crump BC**, Peranteau, C, Beckingham B, Cornwell JC (2007) Respiratory succession and community succession of bacterioplankton in seasonally anoxic estuarine waters. *Applied and Environmental Microbiology* 73:6802-6810
- Crump BC**, Adams HE, Hobbie JE, Kling GW (2007) Biogeography of bacterioplankton in lakes and streams of an Arctic tundra catchment. *Ecology* 88(6):1365-1378
- Judd KE, **Crump BC**, Kling GW (2007) Bacterial responses in activity and community composition to photo-oxidation of dissolved organic matter from soil and surface waters. *Aquatic Sciences* 69:96-107
- Kan J, **Crump BC**, Wang K, Chen F (2006) Bacterioplankton community in Chesapeake Bay: Predictable or random assemblages. *Limnol and Oceanogr* 51:2157-2169
- Judd KE, **Crump BC**, Kling GW (2006) Variation in dissolved organic matter controls bacterial production and community composition. *Ecology* 87:2068-2079

Five other relevant papers

- Crump BC**, Hobbie JE (2005) Synchrony and seasonality in bacterioplankton diversity of two temperate rivers. *Limnol and Oceanogr* 50:1718-1729
- Bahr M, **Crump BC**, Hobbie JE, Teske A (2005) Molecular characterization of sulfate-reducing prokaryotes during an annual cycle in a New England salt marsh. *Environmental Microbiology* 7(8):1175-1185.
- Crump BC**, Hopkinson CS, Sogin ML, Hobbie JE (2004) Microbial biogeography along an estuarine salinity gradient: the combined influences of bacterial growth and residence time. *Appl Environ Microbiol* 70:1494-1505

Klepac-Ceraj V, Bahr M, **Crump BC**, Teske AP, Hobbie JE, Polz MF (2004) High overall diversity and dominance of microdiverse relationships in salt marsh sulphate-reducing bacteria. *Environ Microbiol* 6:686-698

Crump BC, Bahr M, Kling GW, Hobbie JE (2003) Bacterioplankton community shifts in an arctic lake correlate with seasonal changes in organic matter source. *Appl Environ Microbiol* 69:2253-2268.

Synergistic Activities

Advised Research Experience for Undergraduate Fellows (7) while they designed and carried out independent research projects and participated in the Semester in Environmental Science program at Marine Biological Laboratory (2001-2003) and the Maryland Seagrant REU program (2003-2008).

Advised Research Experience for Teachers Fellows (3; 2005-2008) who conducted independent research projects and designed related high school lesson plans.

Developed a greenhouse gas inventory for UMCES Horn Point Laboratory and Central Administration campuses.

Designed lesson plans for 8th grade students on genetics and microbial ecology.

Organized construction of a website for the NSF-funded Plum Island Sound Microbial Observatory project for the purpose of disseminating data and presenting new discoveries to the public (<http://ecosystems.mbl.edu/pimo/>)

Participated in workshop entitled Outcomes of Genome-Genome Interactions sponsored by the Bay Paul Center of the Marine Biological Laboratory.

Collaborators and Co-Editors

Baross JA, U. Washington (Graduate school advisor)

Baptista AM, OHSU

Cornwell JC, UMCES

Herfort L, OHSU

Hobbie JE, MBL (Post-doc advisor)

Hood RR, UMCES

Hopkinson CS, Georgia Sea Grant

Klepac Ceraj V, Harvard

Kling GW, University of Michigan

Koch EW, UMCES

North EW, UMCES

Raymond PA, Yale

Roman MR, UMCES

Sanford LP, UMCES

Sogin ML, MBL

Stoecker DK, UMCES

Teske AP, UNC

Zuber P, OHSU