

Pathogen Workshop Series



www-cyanosite.bio.purdue.edu

**Public Lecture by
Dr. Gregory
Boyer, SUNY &
Dr. Juli Dyble,
GLERL**

**Date: Friday, March
2, 2007**

**Time: 9:00-10:30 am
(coffee at 8:30)**

**Location: James B.
Henry Center,
Lansing**

This lecture is the second in a series of seminars focusing on pathogen issues in Michigan. For more information on the series please visit the Center for Water Sciences website at cws.msu.edu

Questions? Contact Dr. Erin Dreelin
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Harmful Algal Blooms

Cyanobacteria (or blue-green algae) are often prolific in freshwater environments, including the Great Lakes region. Some genera of cyanobacteria grow to high concentrations of toxin-producing cells in the water column and thus are termed Harmful Algal Blooms (HABs). HABs can be detrimental to drinking and recreational water supplies. In this talk, we will discuss the factors controlling the growth and toxin production in blooms, distribution of cyanobacterial HABs in the Great Lakes region, the types of cyanobacterial toxins, human and animal health effects, tools and techniques for studying HABs, and management strategies for controlling blooms.

About the Speakers

Dr. Gregory Boyer is a professor in the Department of Chemistry at the State University of New York- College of Environmental Science and Forestry. Dr. Boyer is working on harmful algal blooms that occur in both freshwater and marine ecosystems. This includes the toxic red tides that occur along the North Atlantic coast, brown tides that occur off Long Island, and toxic blue-green algae that can be found in freshwaters ponds and lakes throughout the world. Dr. Boyer runs an analytical facility for the study of algal toxins at ESF and is actively developing monitoring methods for the toxins in the Great Lakes. He is interested in developing both new and novel analytical methods to detect these toxins, as well as understanding the biochemical function these compounds play in the algae themselves.

Dr. Juli Dyble is a Research Biologist with the NOAA Great Lakes Environmental Research Laboratory. Her research focuses on the ecology and toxin production of cyanobacterial harmful algal bloom (HAB) species. This includes environmental factors that control cyanobacterial growth and toxin production, genetic regulation of toxicity, development of molecular methods for the detection of HAB species and the genetic diversity of cyanobacterial bloom communities.

