

Hirsch named Ahuja Water Quality Fellow

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Marine science graduate student Matt Hirsch was recently named this year's Ahuja Water Quality Fellow, an award created by Dr. Sut Ahuja two years ago to fund a UNCW student working on some aspect of water quality research.

Hirsch will receive \$12,000 in funding, beginning in January. Under the direction of Dr. B.K. Song, Hirsch is studying anammox bacteria, which can convert ammonium, a common pollutant, to nitrogen gas, a relatively inert gas that makes up most of the atmosphere.

The anammox bacteria were discovered in 1995. Since then, scientists have been working to assess the importance of anammox in various environments, which could help to understand and possibly prevent eutrophication, or excessive nutrients in a lake or other body of water often caused by runoff of nutrients. Eutrophication can ultimately lead to harmful, excessive plant growth.

Hirsch plans to "develop a technique to see how many of the bacteria are in the Cape Fear River, and how much of the ammonium/nitrate [pollutant] they're removing," he said. Hirsch visits the river every other month to get a sediment sample, and analyzes it using technology in the Center for Marine Science laboratories.

A university committee selected Hirsch for the fellowship after reading his thesis proposal entitled, "Molecular Quantification of ANAMMOX N Removal Capacity in the Cape Fear River Estuary."