Hi from LCRI.
Where are we? Somewhere between Hudson and Beaumont Hall. This year the main offices and some labs are moving to the 4th floor of Beaumont to prepare for construction of a new science complex in Hudson Hall over the next few years. We look forward to our move and more interaction with LCRI affiliates in Beaumont this year.

This past year we are continuing on several projects that have consumed us over the past few years. First we continue plankton identification for the Lake Champlain Monitoring program led by Casey Binggeli (B.S. Ecology 09) with help from Alison Waring (ENV), Sarah Preston (ENV) and Amanda Groves (Biology) and West Nile Virus Monitoring for Clinton County led by Amanda Shannon (B.S. 03, M.A. 05) with help from Bonnie Phillips (Biology).

In addition LCRI is supporting a comprehensive watershed study of nutrient dynamics, hydrology and riparian zones in the Little Chazy River.

A main focus in 2008 and 2009 has been the Adirondack Aquatic Insect biodiversity project funded by USFW service as a State Wildlife Grant. Luke Myers is leading us in that effort having recently completed his Master’s degree at Colorado State University with Dr. Boris Kondratieff. To date Luke has collected over 100 new species records for New York State, mostly caddisflies (Trichoptera).

In other news Tim Mihuc spent the Fall of 2008 on sabbatical leave returning to Yellowstone National Park for the first time since 1997 to study streams 20 years post-fire. This was an exciting research trip, returning to sites from Tim’s Ph.D. work in the 90s when he studied wildfire impacts on Yellowstone stream food webs.

That’s about all for an LCRI update for now. Please don’t forget to keep in touch and if you’re a former LCRI research student to send me an e-mail at: timothy.mihuc@plattsburgh.edu

The LCRI Monitor

LCRI News and Notes
Tim Mihuc, LCRI Coordinator

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Sea Grant Update
Mark Malchoff, Lake Champlain Sea Grant

As part of its outreach and extension mission, Lake Champlain Sea Grant conducts non-formal education for various aquatic resource audience stakeholders in the Champlain Basin. LCRI hosts the Sea Grant office for New York in partnership with the University of Vermont who hosts the Vermont office.

The Plattsburgh office was active in 08-09 with activities including:

Participation in the Adirondack Aquatic Nuisance Species Committee (monthly)
Representation on the Lake Champlain Basin Program (LCBP) Technical Advisory Committee (TAC). Mark Malchoff is the TAC Aquatic Nuisance Subcommittee, and Spread Prevention chair.

In addition Sea Grant works closely with the Lake Champlain Fisheries Technical Committee, Lake Champlain Ecosystem Team, and Northeast Aquatic Nuisance Species Panel on regional issues.
LCRI labs—new additions Jeffry Jones, LCRI lab manager

The LCRI labs are getting high tech and up dated. As part of the construction of a new lab building we are replacing our old worn instrumentation with new equipment. So far we have received and installed a new Perkin Elmer Atomic Absorption Spectrophotometer and a Dionex Ion Chromatograph. The Pe AA is used to determine metal concentrations in water and solid samples down to the sub part per million level and the ion chromatograph is used to determine concentrations of anions such as fluoride, chloride, nitrate, phosphate and sulfate also to the sub ppm levels. The IC is currently seeing considerable use with a research project directed by Env faculty Dr. Dave Franz and Dr. Robert Fuller that seeks to determine the nitrogen and phosphorus chemistries in the Little Chazy river throughout the year. Additional equipment acquisitions are planned and the resulting new water quality lab will be a ‘first class’ facility.

LCRI focus—Dr. Ken Podolak

Dr. Ken Podolak, assistant professor of physics, is one of the newest additions to the LCRI and the first member from physics. He is starting up a magnetic thin films research lab here at SUNY Plattsburgh to improve information storage and reduce energy consumption in the process. Presently, electronics relies exclusively on electronic charge which results in information being lost immediately when you turn off your computer. However, we know that ferromagnetic spins maintain their information at low energy costs. If we incorporate these ferromagnetic spins in a hard drive, booting a computer will become instantaneous. Dr. Podolak’s research lab creates tailored films of ferromagnetic spins by using electrochemical deposition. These films are then studied using an in-house optical absorption method that will provide insights into the efficiency of data storage. Undergraduate research is encouraged in every aspect of the experiments. Recent results have been published at the following link: http://link.aip.org/link/?JAPIAU/105/083918/1

Dr. Podolak’s research involves collaborations with faculty at University of Wisconsin, Penn State University, and Elon University. When not researching, he enjoys spending time with his growing family, volunteering at the Nazarene church, and following all sports (especially Penn State and Plattsburgh teams).

News from the Office

Janet Manor, Office Manager

Hello everyone. Hope you’re life is as busy and productive as LCRI’s has been over the past year. As you have heard, there is a new science building taking the place of the Hudson parking lot (because we all know there is ample parking at Pburgh). Once this is completed Hudson will be gutted and rehabbed. This meant LCRI needed to vacate the basement and set up in Beaumont. I can now look at the “head” all day instead of walls—remember the “head”? In our last newsletter I had asked for any interesting information to share with fellow classmates and I received one reply – Carla Canjar advises that she and her fiancé, Darik, were engaged in December 2008. Congratulations Carla! Carla continues to work for Casella which keeps her very busy. Casey Binggeli graduated in May and will continue in the graduate program this Fall. Guess he didn’t want to leave LCRI after all.

Thanks for the random emails from Chris Stall, Sean Thomas and Kristin Short to just keep in touch. Anyone else out there?

For myself, I continue to enjoy as much time as possible with my grandson, Logan, who will be 2 in August. Such a joy. And of course, I enjoy my time with these LCRI guys!!