Hot Springs

It was a gray and stormy afternoon. Eight courageous souls ventured forth to the Hot Springs. Rain drizzled down, the fog created the perfect ambiance, and the stage was set for an afternoon of mystery and discovery.

The MMBIO Club sponsored this trip to the Hot Springs located next to Utah Lake, near Saratoga Springs. A half an hour trip by van, snacks, and swim suits was all that was required. The air temperatures were cool, but the water was a balmy 42 degrees centigrade. It was a good time to connect with other students and organisms.

Those attending were Brian Early, Rebecca and Houston Tanner, Jordan Kitchen, Pradip Baj-gain, Glen Olay Collett, Brianna Teerlink, and Nathan Roth.

Grants

Congratulations to Dr. Bill McCleary, who received an R-15 grant from the National Institute of Health. The title of his grant is “Molecular Mechanisms of phosphate signaling in e.coli.”

Presentations

Dr. Julianne Grose presented a paper at the University of Utah on January 14th, 2011. She spoke to the Protein Aggregation Disease interest group. The title of her presentation was "S. cerevisiae as a model organism for the study of protein aggregation cardiomyopathy." The Grose lab recently began this collaboration and the research, performed primarily by five undergraduates, is looking very promising.

..."It was nice to be back in familiar territory talking about a new research project I have begun with investigators at the U of U.,” said Dr. Grose. Students involved in this project are Kent Jarvis, Kevin Wiest, Steve Van De Graff, Casey Cutler and Kylie Chapman.

RIC Facility

The RIC facility has a new and improved website. Check it out:

http://ricfacility.byu.edu
Another collaboration in the making is the Phage Hunters program which is negotiating a contract with Omnilytics to “hunt” down phage that will be used for agriculture. Omnilytics is a SLC-based phage company that produces phage for the treatment of agricultural diseases. Farmers send samples of their diseased crops to Omnilytics, they determine the bacterial culprit of the disease and ship out a custom made phage cocktail that farmers spray onto their crops to battle the bacteria. It is a battle of the microbes. Go Phage Hunters!

**Drs. Julianne Grose, Don Breakwell, and Sandra Burnett** in the MMBIO Department are instrumental in implementing this program.

### 2010 Graduating Students

This past year, 70 students graduated with degrees in clinical lab science (28), microbiology (26), and molecular biology (16). Thirty four percent had been accepted into post-graduate programs and thirty one percent had accepted job offers prior to graduating. We’re pleased that 56% were involved in mentored research, 38% did an internship, a wonderful 31% participated in presentations of research they did at BYU and 16% were involved in papers that were published.

The exiting students gave us some suggestions and comments. We share a few samples:

- “Get students involved in research early.”
- “Keep the BBQ’s.”
- “I would suggest that lab classes be worth more than one credit.”
- “My favorite classes were those with <20 students in the class, where we were all able to talk to the instructor one-on-one.”
- “It was not uncommon for teachers to relate the scientific principles that we were learning about to gospel principles. I really enjoyed being able to look at subjects like evolution from a religious point of view with teachers who wove the two views together.”
- “Studying the mechanisms of life, especially the human body, has repeatedly led me to ponder on the wonder of creation and the blessings of God in giving us such a miraculous earth.”

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**Dr. Sandra Burnett** in the MMBIO Department and Drs. Larry Howell and Brian Jensen in the Mechanical Engineering Department are collaborating with David Seeley, President of the Nano Injection Technologies company. Six graduate students, 12 undergrads and a technician are also involved. They include **Aubrey Wilson** (PhD Molecular Bio), **Camden Bair, Jordan Kitchen, Matthew Murphy** (undergrad molecular), and **John Jeppson** (undergrad micro).