Second year brings change to Institute

Participants returning to the BBSI next summer will greeted by a somewhat different world from the one they left last August.

“The focus will remain on research,” said a usually reliable source who preferred to speak off the record (to give the illusion that the reporter had actually done some research). “However, last summer, 30 to 40% of the summer was spent sitting in a computer lab. That will change.”

The plan is for second year participants to have almost all of their time free to devote to their laboratory projects. In this way, participants will have the greatest chance of leaving the Institute having reached satisfying points of conclusion.

Group meetings will not be abandoned, however. Participants will meet approximately two hours per week to discuss research articles of interest and to explore graduate programs and funding opportunities. The time will be coordinated with presentations by outside speakers so as to minimize travel by those whose

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BBSI sees last of summer dormitory

[RICHMOND] “We’re good to go!” said an ebullient Tom Huff, Vice Provost of Life Sciences at VCU after speaking with Bernie Mann, Director of University Housing.

With that, the BBSI committed itself to moving all housing operations out of Rhoads Hall and into Gladding I Apartments, as of Summer 2004. Dissatisfaction with Rhoads was widespread amongst participants in the BBSI’s first summer.

The move had nothing to do with the destruction of Rhoads Annex, slated to begin early 2004. Rhoads Annex, a three-story structure adjacent to Rhoads Hall, is being leveled to make room for a second dismal tower.

Gladding I Apartments are located next to the Engineering Building, in close proximity to the Life Sciences building (and far proximity to the medical campus). Each apartment houses four to six inhabitants in bedrooms that open up onto a common living room and kitchen/dining room. Each kitchen is equipped with a unit that cooks food based on the principle of resistive heating.

Last summer’s residents had to rely solely on the absorption of microwave energy to heat their food.

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BBSI Across America: News from participants

Fifteen lives that briefly connected last summer have resumed their separate trajectories. This page will be devoted to offering a glimpse into these different worlds. You can learn more by contacting participants directly. See the BBSI web page (www.vcu.edu/csb/bbsi) for e-mail addresses.

DAVID BLACK is trying to juggle a normal academic load with continuing his project of expressing large amounts of U1A protein and eventually the Phe56Ala mutant. Progress is frustratingly slow at the rate of one induction profile a week. He’s thinking of lessening his class load to allow more time for the project. Background principle: graduate schools will weigh a publication more heavily than a transcript stuffed with classes.

LUKE CHANEY was on one of two teams Hiram College sent to the ACM programming contest. His team solved two problems, the best outing a Hiram team has had in a number of years.

EMILY COLBY somehow found time to write despite a schedule that includes six classes and 24 hours per week at her job. (If you know anyone who needs a good web page, think of Emily). She’s officially out of engineering and into the liberal arts college and enjoying taking classes outside of math/science (e.g. European history). One casualty of all this has been her project, but it will rise again!

MARK DELBOY devised a schedule that left all day Tuesday and Thursday free to work out methods to assay monoamine oxidase from human platelets. Sarah Rutan visited him at Virginia Tech in November. He’s also enjoying TA’ing a microbiology class.

REBECCA GANETZKY participated in the same ACM competition as LUKE as part of the Oberlin Foo Two team. She’s also been active in various organizational activities, particularly helping in the birth of a bioinformatics concentration. She’s focusing her research on the computational analysis of functional connections between genes, drawing on different forms of information. The four-week January term has been earmarked for coding.

JOSH GRANT is gearing up to resume work on the myelination of gold wires. He doesn’t have an ECIS setup at Gaucher, but he has plenty to do trying to find conditions to increase the interaction of Schwann cells with a wire, as judged by light microscopy.

CHRIS HEFFELFINGER left last summer with an incredibly complicated program written in Excel (!) and designed to identify networks of genes from gene (note that REBECCA, just a few miles down the interstate, has a similar goal). He’s spending much of this semester learning C so that he can work within a more flexible programming environment.

The substantive focus of his work this semester is to overcome a problem in the use of microarray analysis to identify cancer types. If the product of one gene regulates the expression of several other genes, then unknowingly giving independent weight to the expression of these genes may lead to unwarranted conclusions. The solution is to recognize the regulatory connections before assigning weights.

Ever since returning home to Oregon, DANIELLE KING has been trying to virtually get back into VCU. She has had a Kafkaesque adventure trying to gain access to a VCU server housing a sequence assembly program she wants to use to put together the phage sequences she got the last week of summer.

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Changes

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base of operations is in the medical school.

The Institute is also considering offering a mini-course (perhaps 2 hrs per week) that would give breadth in particular areas of bioinformatics or bioengineering. A questionnaire will be distributed to second-year participants to identify areas of interest for such a course.

The biggest change in the Institute will be the arrival of approximately 12 new participants, who will follow a similar schedule as took place Summer 2003. The Institute will seek to attract more students with a primary interest in bioengineering, to balance the tilt towards bioinformatics in the first class.

BBSI Across America

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One administrator admitted that he had thrown away her application for an account (“Oh we get requests from off-campus all the time. I just trash them.”). But all dragons have been vanquished and Danielle is now happily assembling.

PETER LIKARISH has remained beyond radar detection but surfaces on the web periodically in reports on the progress of the Grinnell swim team. Peter swims 100-yard and 200-yard freestyle and relays on a team that is now 3-0, having just beaten University of Chicago.

ROBERT MULLOWNEY has had his hands full this semester. In addition to a normal overload of courses (including a nonofficial course in Perl/Python), he has served as assistant coach of the women’s volleyball team while still running the men’s club volleyball team. The women’s team won the first ever Seven Sisters Volleyball championship this fall, beating (amongst other teams) LYNDSEY’s Mt. Holyoke team. Plans to continue constructing primers to detect alien genes in prophages will wait until the season’s over.

TOM MURPHY’s transition from VCU back home to Monmouth also meant moving from the computer to the lab. He’s trying to isolate protein from Anabaena to determine if the weird repeated sequences he found computationally are protein binding sites.

GAURAV RANA is devoting intermission to working on his project to simulate the workings of T.cruzi. Much of this semester has been occupied with graduate school applications.

LYNDSEY SCHUTTE is gearing up to teach her annual course on stained glass. In the meantime, she is continuing in her roll-your-own bioinformatics major, but her heart has been hijacked by tissue engineering, which she plans to pursue next summer and in graduate school. She is trying to get to the PTEI Pittsburgh Tissue Engineering Initiative meeting, March 15, 2004.

YUE ZHAO has decided to stay around VCU another year before moving on to a post-graduate program. He’s gotten very interested in small inhibitory RNA.

Two participants have slipped off the radar screen, i.e.: PETER LIKARISH, and GREG ZIEGLER. If you know the comings and goings of any of these two (or, better, if you ARE any of these two), please contact this publication!

Apartments

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"It will cost more," said Greg Buck, Principle Investigator for the Institute, speaking off the record. “But hey, they’re worth it. We’ll find the money somehow.”

The VCU Supercomputing Facility boasts an expensive 64-node Beowulf cluster with 32 gigabytes of SDRAM and 1 terabyte of disk storage.

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2004-2005 Virginia Commonwealth University Bioinformatics and Bioengineering Summer Institute

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