

To: Deans, Chairs, Institute/Center Directors,

From: Robert McGrath
Provost and Executive Vice President for Academic Affairs
Vice President for Brookhaven Laboratory Affairs

Subject: Computational Science Initiative

Date: September 21, 2006

Colleagues, I am very pleased to announce an initiative that will strengthen computational science at Stony Brook and also enhance our ties with Brookhaven National Laboratory. Earlier this summer we learned the good news that the New York State budget has \$26 Million set aside for Stony Brook to acquire a supercomputer in the 100 Teraflop class. At present this would be the largest computer in the world available for non-classified research. The plan is to locate the machine at BNL which has appropriate space to house the machine and considerable experience in managing large user facilities.

BNL Director Sam Aronson and I are serving as interim co-directors of what we call the New York Center for Computational Science. We have appointed three interim co-associate directors for the new center: James Glimm (chair of Applied Mathematics and Statistics), Douglas Swesty (research professor in Physics and Astronomy), and James Davenport (senior scientist at BNL and director of BNL's Center for Scientific Computing).

We have devised a draft plan for building up the Center and also for building computational science at our two institutions. More information will be available (still under construction) at <http://www.stonybrook.edu/nyccs>. Our vision is to use this wonderful support from New York State as a stimulus to create a world class education and research activity in computational science. As many of you know, the long range plans in many areas of science, engineering, social sciences, and other disciplines argue future advances will come increasingly from computations using massively parallel supercomputers. We already have a core of strong computational scientists who are eager to help build this center of strength, but we have an opportunity to build added strength by recruiting additional faculty. This brings me to a second piece of good news.

SUNY Chancellor Ryan has created what is called the Empire Innovation Program. The program, supported by new funds from New York State, objective is to recruit outstanding new tenure track faculty to SUNY in disciplines with potential to attract federal research funding (and long term contributions to economic development.) The first year funding of the program was announced earlier this summer and we were required to submit proposals for EIP funds on very short notice.

The deans of CAS, SOM, CEAS, and MSRC working with my office proposed and received funding for new faculty in the following areas: Computational Science; Environmental Sciences; Wireless and Information Technology; Neurobiology; Chemical Biology (Drug Discovery); Infectious Diseases (esp. Avian Influenza); and Diabetes and Endocrinology. You will hear more about these other initiatives in other venues, but I am pleased to announce here that the EIP will support hiring in this year of up to three FTE faculty in Computational Science.

I have asked James Glimm to chair a single recruiting committee for these new hires. The terms of this cluster hiring initiative are that each new hire will have an anchor appointment in a department, and will also be part of the broader computational science effort including seminars and workshops and interdisciplinary approaches to problem solving. Host departments or units will provide funds for 0.5 FTE, so that up to six new faculty can be recruited. The goal is to find the best and the brightest in any of a number of fields. Examples of fields include atmospheric sciences, environmental sciences, biology, materials and nano science, hydrodynamics and nuclear astrophysics, and finance, computer architectures. Depending on the person and area of expertise, joint appointments with BNL may be desirable.

There will be a town meeting on October 4 at 1 PM in Wang Center Room 401 where interested department chairs and other faculty can learn more about the present plans for the NYCCS and for the faculty recruiting process. I hope many will attend!