Shared Research Computing Policy Advisory Committee

November 9, 2011

(Submitted to Research Computing Executive Committee)

## Proposed Mandate

Reporting to the Research Computing Executive Committee (RCEC), the Shared Research Computing Policy Advisory Committee (SRCPA) will be a faculty-dominated group focused on a variety of policy issues related to shared research computing on the Morningside campus. As the use of computational tools spreads to more disciplines to create, collaborate, and disseminate knowledge, there is a commensurate rise in the costs of establishing and maintaining these resources. Shared resources have proven to leverage those available to individuals or small groups, but require careful consideration of the policies governing the shared resource and the basis of the operating model. While final authority and responsibility for such policies customarily rests with the senior administrators of the University, it is vital that the research faculty examine and recommend the policies and practices they deem best suited to accomplishing the research objectives.

It is anticipated that this SRCPA would work primarily through tasked sub-committees, meeting periodically to craft policies, appoint sub-committees, review proposals and adjudicate issues that subcommittees were unable to resolve themselves. Membership of these subcommittees may well draw on the expertise available throughout the university to complement that of SRCPA committee members.

A particular concern will be the emerging shared computational resource for research located in a dedicated portion of Columbia's central data center. An NIH G20 construction award will increase power and space there for shared research computing. Although construction will not be complete until early 2013, planning for effective allocation of this resource, together with a sustainable operating plan should commence now. For example, a pilot shared High Performance Computing Cluster (HPC) exists in the Data Center that has recently doubled in size. The SRCPA might form an HPC sub-committee to develop policies and practices that scale with this important resource. The NIH G20 also calls for a pilot shared Research Storage system. The SRCPA might form a Research Storage sub-committee to refine the planning for this piloted shared resource.

Other examples of issues that the SRCPA may wish to address include the challenges created by the new NSF required Data Management Plans and the potential opportunities presented by cloud computing and other off-campus alternatives. It is anticipated that an SRCPA sub-committee will build and maintain an inventory of shared research computing resources and the policies and procedures that govern them, as well as gather data on similar facilities at peer institutions.

The SRCPA will make a formal report to the RCEC no less than annually that reviews the recommended policies and practices, and updates the RCEC on the status of shared computing resources.

Chair – David Madigan, Chairman of the Department of Statistics

## Proposed Initial Membership

- All Basic Science and Engineering Chairs or Designee
- Three Designees of Social Sciences Compute Cluster who will be initially the equal partners
  - $\circ \quad \text{Chair of Economics} \quad$
  - Executive Director of PER (Program for Economic Research)
  - o Co-Director of CPRC (Columbia Population Research Center)
- Designee of Columbia Libraries
- Designee of A&S
- Designee of SEAS
- Designee of Computer Science Department
- Designee of CUIT
- Designee of EVPR
- Designee of LDEO