

Memorandum

To: Whom it may concern

From: J. M. Rowe and C. Broholm

Date: 4/21/2003

Re: MACS management structure and project governance

The NIST Center for Neutron Research (NCNR) and Professor Collin Broholm from Johns Hopkins University (JHU) are partners in a project to develop a cold neutron spectrometer, the Multi Analyzer Crystal Spectrometer (MACS). The project is jointly funded by NIST, NSF (under DMR-0116585), and JHU. MACS will be located at the NG-0 cold neutron beam port at the NCNR and is scheduled for completion in June 2005. This memorandum describes the roles of the principal participants in the project. It shall remain in effect through the active period of the corresponding NSF grant or until revised by the signatories.

1. Management Structure

1.1. NCNR Director, Mike Rowe (NIST)

The NCNR Director is responsible for the successful completion and installation of the MACS Spectrometer. The NCNR Director is the final arbiter of any disputes that evolve under the collaboration. Responsibilities include, but are not limited to the direct line supervision of the NCNR Facilities Group Leader.

1.2. NCNR Facilities Group Leader Patrick Gallagher (NIST)

The Facilities Group Leader (FGL) is responsible for the coordination of technical and financial resources such that this plan achieves its objectives. Responsibilities include, but are not limited to the direct line supervision of the NCNR Facilities Engineering Manager, Chief Technician, and other facilities development personnel deemed necessary for the successful completion of this project. The FGL is responsible for communication of all NCNR issues that affect MACS to the Principle Investigator.

1.3. Principal Investigator Collin Broholm (JHU)

The Principal Investigator (PI) is responsible for achieving the instrument performance required for a world class scientific program on MACS as described in the NSF proposal. This responsibility is predominantly discharged through initiation of the top level specification but also through advice to any project participant when it is pertinent to the scientific goals previously set. The PI supervises all JHU personnel dedicated to MACS.

1.4. NCNR Facilities Engineering Manager Paul C. Brand (NIST)

The Facilities Engineering Manager (FEM) is responsible for coordinating the project with other NCNR engineering activities and ensuring that the engineering process and the completed instrument are consistent with NCNR standards. Duties include, but are not limited to the allocation and supervision of NCNR engineering, design, and drafting resources following requests from the PI.

1.5. Project Engineer Timothy Pike (JHU)

The Project Engineer (PE) has technical responsibility for the design, manufacture, and assembly of MACS consistent with the top level specifications. The PE shall define all mechanical and electrical as well as internal control interfaces of the MACS spectrometer. The PE is responsible for providing the PI with an updated schedule and budget that is commensurate with the maturity of the mechanical design. The PE applies to the PI for allocation of either direct or third party resources.

Project Governance

2.1. Design Review

All MACS design work is subject to technical review and approval by the FEM and the PI. Technical drawings and procedures shall conform to NCNR configuration management requirements.

2.2. Contracting and Purchasing Decisions

Major contracting and purchasing decisions (>\$10k) are made by the FGL and the PI. These decisions shall be based on approved designs and the project schedule and budget. Smaller purchasing decisions (<\$10k) are made independently by project participants according to NIST and JHU rules and reviewed at monthly meetings.

2.3. Regularly scheduled meetings

Once a week the PI, the FEM, and the PE meet to review technical progress. Once a month the FGL, the PI, and the FEM meet to discuss progress to schedule and budget. Once a year in the month of September a meeting shall be held to keep NCNR staff and potential users informed of progress.

2.4. Dissemination of technical documentation

The updated project schedule and budget and all approved technical documentation shall be posted on the project web page at <http://www.pha.jhu.edu/~broholm/MACS> with sensitive documents subject to password protection. Updates are announced by email to project participants.