MPS Advisory Committee Meeting July 18, 2013

The meeting began at 1 PM. NSF representatives, Chairman Juan de Pablo, and other guests were present in the room (1235 Stafford I). Other members participated remotely. See Appendix 1 for details.

July 18

1:00 PM: Introductions, Roll Call, State of the Directorate (Fleming Crim)

• Dr. Crim addressed broad scientific achievements, personnel updates (including updates to the MPS-AC), and updates on the NSF's move to Alexandria. Dr. Crim then discussed in further detail programmatic, budget, and facilities updates.

1:50 PM: Briefing on the NRC Magnetic Science report (Bertrand Halperin)

• Dr. Halperin presented the report's 10-year plan, including discussion of the projected timeframe for implementation of recommended changes (10-15 years), the envisioned decommission process, and the anticipated costs (\$20-50 M).

2:10 PM: Report on the NSF Strategic Plan (Alan Blatecky)

• Dr. Blatecky presented elements of the plan and OMB preliminary feedback on strategic goals, specific objectives, and programmatic goals. The report should be submitted to the NSB in May 2013 and to OMB in June 2013. There was extensive discussion, especially of education elements.

2:30 PM: Update from StatsNSF Subcommittee (Iain Johnstone and Fred Roberts)

• Drs. Johnstone and Roberts reiterated the charge and identified draft recommendations.

2:50 PM: Update from Optics and Photonics Subcommittee (Tony Heinz)

• Dr. Heinz summarized the charge, outlined the planned process, and indicated what has been determined so far. Discussion addressed concerns within both industry and the scientific field.

3:25 PM: Update from Food Systems (Michelle Buchanan)

• Dr. Buchanan described the charge and composition of the subcommittee, and outlined its plan of execution, beginning with a first meeting scheduled to happen soon.

3:40 PM: Update from Synchrotron Science Subcommittee (George Crabtree)

• Dr. Crabtree presented the charge, including assessment of the impact of funding variances. He outlined the scope and membership, and some of the information that will serve as background for the subcommittee. Discussion included workshops planed and facilities impacted.

3:55 PM: Briefing on the NRC *Math 2025 Report* (Mark Green)

• Dr. Green briefed the Committee on this report, which addresses (inter alia) workforce, diversity, education, funding, and NSF-enabled leadership.

4:15 PM: Report from the NSF CAREER Program Task Force (Anita La Salle and Theresa Maldonado)

• Drs. La Salle and Maldonado described the background and status of the CAREER Program, and some of the issues and ideas being considered by the Task Force. Lively discussion ensued.

4:35 PM: Advisory Committee on Cyberinfrastructure (ACCI) Interface: Planning for Joint Meeting Nov. 7-8 (Fleming Crim)

• Dr. Crim indicated that the purpose of the joint meeting will be to identify and communicate the cyberinfrastructure needs of MPS research communities, and ways of working with ACCI communities toward realizing those goals. Discussion addressed the role of data science, including modeling and computation, prompting comparison with the charge of StatsNSF.

4:45 PM: Report on *The Materials Genome Initiative* (Juan de Pablo)

• Dr. de Pablo discussed the Materials Genome Initiative and its position at the interface of experiment, theory, and computation. Comments focused on current and potential relationships between MGI and MPS communities.

4:55 PM: New Challenges (Fleming Crim)

• Dr. Crim invited items for discussion at the November face-to-face MPS-AC Meeting. Topics suggested included the merit review system, funding mechanisms, and prioritization in the "Age of Sequestration."

5:15 PM: Adjourn

Attendees of July 18 2013 MPS Advisory Committee meeting:

MEMBERS

James Berger*
Daniela Bortoletto*
Emery Brown*
Paul Butler*

Paul Butler* Emily Carter*

George Crabtree*

Eric Cornell*

Juan de Pablo, Chair Francis DiSalvo* Bruce Elmegreen*

Barbara Finlayson-Pitts*

Irene Fonseca*
Elizabeth Lada*
Dennis Matthews*

Juan Meza*

Michael Norman* Eugenia Paulus* Elsa Reichmanis* Geoffrey West*

GUESTS

Michelle Buchanan

Mark Green

Bertrand Halperin

Tony Heinz
Iain Johnstone
James Murday
Mirian Quintal
Irelene Ricks
Fred Roberts
Keivan Stassun

NSF

Caleb Autrey
Keith Bennett
Alan Blatecky
Denise Caldwell
Kelsey Cook
Clark Cooper
Fleming Crim
Abby Deift

Mary Galvin-Donoghue Jacquelyn Gervay-Hague

Sue Hamm Janice Hicks

Juan de Pablo

Joanna Kania-Bartoszynska

Pat Knezek Anita La Salle Kathy McCloud

Theresa Maldonado

Carlos Murillo Sastry Pantula

Elizabeth Pentacost

Tanja Pietraß*
Claudia Rankins
Celeste Rohlfing
Thomas Russell
Paul Spyropolous
Jim Ulvestad
Henry Warchall
Jim Whitmore

^{*} indicates phone participant