

APPENDIX

The Role of Scientific Societies in STEM Faculty Workshops

May 3, 2012
Marvel Hall, 1155 16th Street
Washington, D.C.

- Noon **Lunch** (optional – get ticket for take-out lunch from CSSP Staff)
- 1:15 pm **Welcome and Introductions** – Expected Outcomes of this Workshop
Marty Apple (Council of Scientific Society Presidents)
Carl Wieman (Office of Science and Technology Policy)
Don Millard (National Science Foundation)
Bob Hilborn (American Association of Physics Teachers)
- 1:30 pm **Workshop Case Study 1** (20 minute presentation, 10 minutes discussion)
National Academy Summer Institutes – Biology
Jay Labov, NRC-NAS
- 2:00 pm **Professional development of faculty: how do we know it is effective?**
Diane Ebert-May, Michigan State University
- 2:30 pm **Small group discussion:** How should we determine the effectiveness of STEM faculty workshops?
- How might we measure the impact of faculty participation in teaching workshops on student learning?
 - What constitutes sufficient, even if incomplete, evidence for the effectiveness of the workshops?
 - How do we determine, on a large-scale, what changes in teaching are implemented as a result of these workshops?
 - Does your discipline have nationally-normed exams for introductory courses?
 - What instruments might be developed to gauge changes in student learning as a result of having faculty attend teaching workshops? Who should pay for this development? Who should pay for the administration of these instruments and the analysis of the data?
 - What role, if any, should scientific societies play in measuring the effectiveness of these workshops?
- 3:00 pm **Workshop Case Study 2**
Physics and Astronomy New Faculty Workshop
Ken Krane, Oregon State University
- 3:30 pm **Evaluation of the Physics and Astronomy New Faculty Workshops**
Charles Henderson, Western Michigan University
- 4:00 pm Break
- 4:15 pm **Keynote Speaker** – “Improving Undergraduate STEM Education,”
Carl Wieman, Associate Director for Science, White House Office of Science and Technology Policy
- 5:00 pm **Workshop Case Study 3**
Mathematics Project NExT
Aparna Higgins, University of Dayton

- 5:30 pm **Workshop Case Study 4**
 Microbiology
 Jacqueline Washington, Nyack College
- 6:00 pm **Workshop Case Study 5**
 Geosciences
 *On the Cutting Edge Workshops and Web Resources for Early Career Geoscience Faculty:
Teaching, Research, and Career Management*
 Heather Macdonald, William and Mary
- 6:30 pm **Working Dinner – General Action Plans to Expand STEM Faculty Workshops**
- How can STEM faculty workshops reach a larger number of STEM faculty members?
 - How can we convince “reluctant” faculty members to attend these workshops?
 - How can the workshops be sustained beyond the initial funding? Who should pay for these workshops?
 - Could a single workshop serve faculty from several disciplines effectively?
- 7:00 pm **Workshop Case Study 6**
 Engineering
 Jeffrey Froyd, Texas A&M
- 7:30 pm **Workshop Case Study 7**
 Chemistry
 Andrew Feig, Wayne State University
- 7:45 pm **Full Group Discussion – Next steps and recommendations for the meeting report**
- What can be done to assist scientific societies in implementing or extending the reach of STEM faculty workshops?
 - What should be part of the report on this meeting and for whom should the report be written?
 - To whom should the report be distributed?
 - Other ideas and suggestions
- 8:15 pm **Adjourn**