



# Scientific Workforce Analysis and Modeling Steering Committee

January 13, 2011  
GWU Biostatistics Center  
6110 Executive Boulevard #750  
Rockville, MD

## MINUTES

**Next Meeting: approximately 6 months by phone**

### Tasks

Irene will set up a teleconference for approximately 6 months.

Irene will set up a call to discuss liaison work with the ACD study.

Howard Garrison will send a list of citations (including the NRC's study of the NRSA and the Ehrenberg studies on persistence in STEM).

### Decisions:

- We need to establish a liaison with the workforce study that Shirley Tilghman will undertake for the NIH Advisory Committee to Director.
- Shiva Singh will be our contact with the activities of the NIGMS efforts on "Research on Interventions that Promote Research Careers." This includes both the grantee meetings and the technical assistance efforts.
- Steve Cohen will keep us abreast of the work that is being done to enhance the Survey of Doctorate Recipients.
- The steering committee should meet at least annually. It would be prudent to identify and schedule a meeting in six months so that we will be able to meet if necessary.

### Summary of January 12 meeting with experts

Several main points emerged:

- It would be useful to understand relationships and interactions among factors influencing the workforce.
- This will require thinking about processes and data in new ways.
- It may be necessary to do some new experiments, for examples to gather longitudinal data or identify natural experiments.
- The postdoctoral transitions are critical.
- There is a need to focus on the demand side of workforce dynamics
- Recommendations may influence what data are gathered

**Scientific Workforce Analysis and Modeling White Paper**

The report by the Sullivan and Larsen research groups was well received. It begins to elaborate a modeling framework and has forged good connections between the research groups. The Steering Committee discussed the value of developing a portfolio of models that can be used to study a variety of questions. There was no enthusiasm among the Steering Committee members, research groups, or NIGMS staff for developing a large “model of everything.” As models are developed and used to address questions, it will be important to look for convergences and divergences among the results since these provide strong guidance for model development. The scales of models will depend in part on the scale of data available.

The Steering Committee appreciated the importance of K-12 education, agreeing that eventually modeling will need to address dynamics in that compartment. For the time being, the program’s work should focus on undergraduate education on up since that is where NIH can have some influence and where data are more readily available.

The committee advised NIGMS to focus research on a small number of questions, especially focusing on transition issues. It is important to include social networking, decision trees/analysis, risk aversion, and other social and behavioral factors