

NIAC Day Breakout Session Outcomes

Session:

Facilitators:

NIAC Day at the University of Washington

- Breakout Session 5: Systems Biology and Medical Big Data
- Facilitators: Herbert Sauro (UW), Ilya Shmulevich (ISB), and Katrina Waters (PNNL)

Common Themes

- Imaging: 4D imaging and analysis in biomedical applications
- Multiscale and subcellular modeling and building trustworthy biomedical models
- On demand computing – spinning up 10,000s of cores on demand:
 - Real time hypothesis testing, not waiting for results, rich visualization of data and results
 - Real time interactive modeling via the cloud or high performance computing on the desktop for biomedical researchers
 - Make it easy!

What we're going to about it

- Imaging:
 - Meet again + NIH proposal, Feb 2014 !, so meet earlier
- Multiscale interest group will meet in Dec. Participants will be invited to join MSM (Multi-scale Modeling Consortium)
- Real-time on demand computing, we'll meet Dec.

- Create mailing list
- Organize meeting at UW in late Feb, more likely mid Dec.
 - Arrange room and email participants.
 - Purpose is to discuss in more depth projects of interest, give demos of software, organize future efforts, grants, meetings etc.
- Exchange summer interns between UW/ISB/PNNL and others
- Joint appointments between organizations