

# National Centers for Biomedical Computing All Hands Meeting

## Simbios Dissemination Event



Wednesday July 19<sup>th</sup>  
9:00 AM Natcher Building, NIH

### Simbios and SimTK: Physics-Based Modeling

#### **Overview of research accomplishments in physics-based modeling of:**

- RNA
- Myosin
- Neuromuscular biomechanics
- Cardiovascular fluid dynamics

#### **SimTK infrastructure web site and its features/uses/purpose**

First generation of SimTK applications include:

- ISIM for electrostatics
- LAPACK for very fast linear algebra
- Simbody for multibody dynamics
- Others...

#### **Round table discussion topics include:**

- Opportunities for interaction with P41 and other efforts
- Opportunities for new mechanics-based simulations at the meso level (lipids, fibers, mitosis, etc...)
- Teaching materials for physics-based simulation
- Textbooks for physics-based simulation

**Interested?** Please contact Jennie Larkin, Lead Science Officer for Simbios  
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