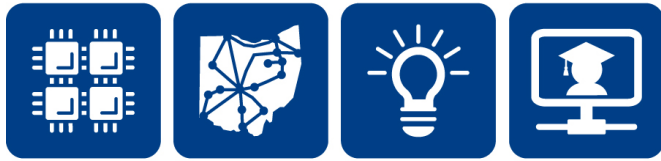


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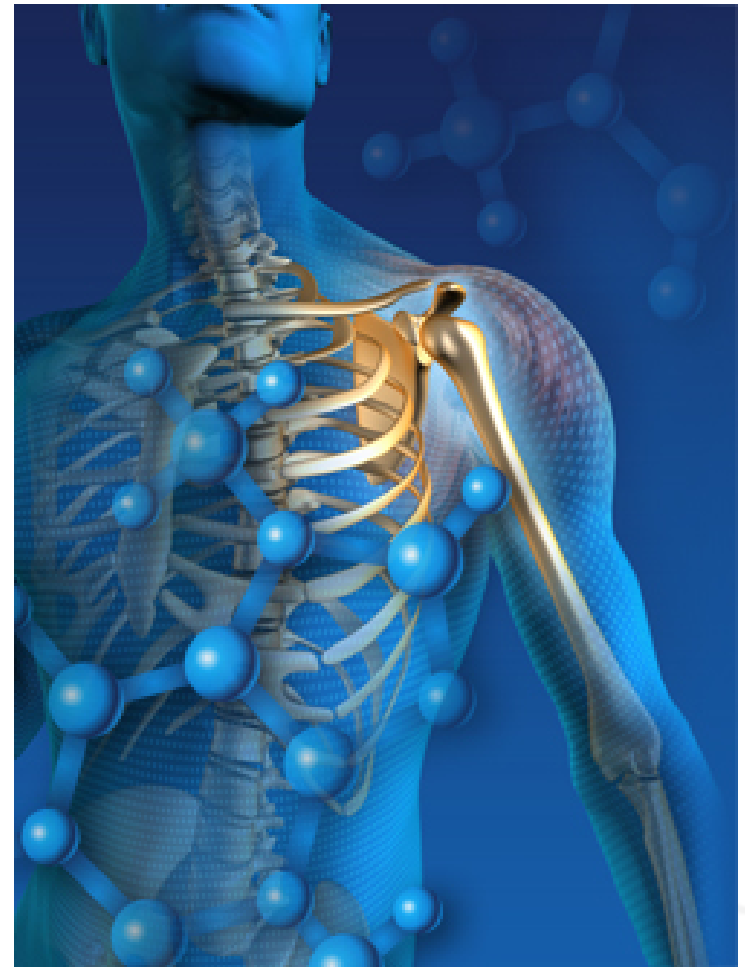


Ohio Supercomputer Center

# Bioscience Cluster Expansion

Friday April 4th, 2008

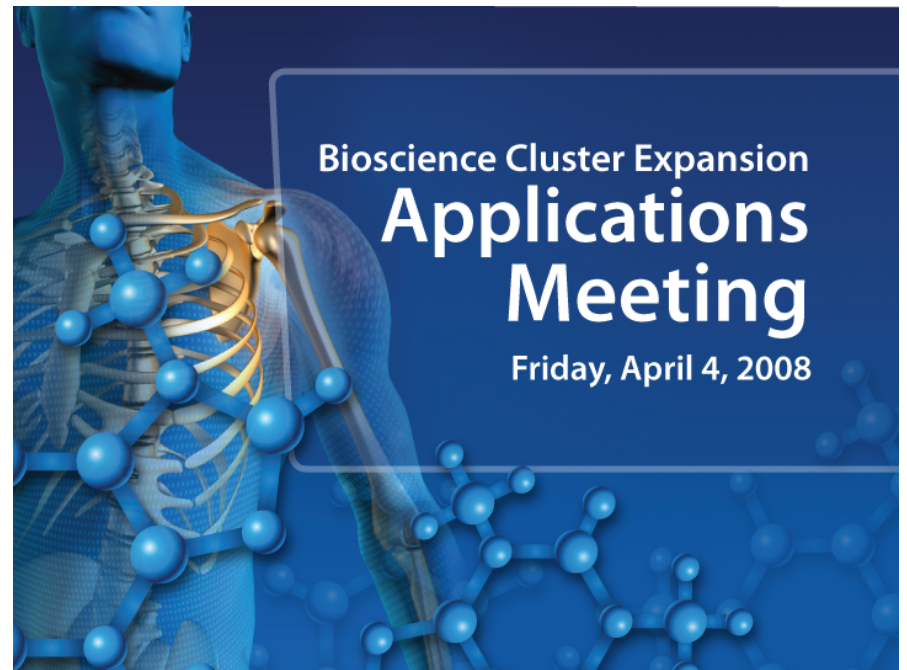
## Software Applications and Code Meeting



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**Welcome and Introductions**

**Stanley C. Ahalt, Ph.D.**

**Executive Director**

[ahalt@osc.edu](mailto:ahalt@osc.edu)

# Supporting Biosciences

- Provide enhanced services to the bioscience community
- Propel Ohio to a leading national position in the biosciences
- Proposed expansion to the recently installed IBM Cluster 1350
- Fully integrated with current system to provide significant benefits to the entire OSC HPC community

# Factors motivating the expansion

- Increased activities (including computation at OSC) in bioscience driven by Ohio's Third Frontier Projects
- Investment trends for computation by NIH
  - caBIG (Saltz, et. al.)
- OCCBIO (Welch, et. al.)

# Factors motivating the expansion (continued)

- Ohio Bioinformatics Consortium (funded through the Choose Ohio First Scholarship)
  - collaboration of 25 statewide groups
  - 345 STEM graduates in 5 year period
- OSC/Nationwide Children's' Research Institute collaborations (VM2M)

# Factors motivating the expansion (continued)

- \$1.7B Building Ohio Jobs
  - \$100M biomedical products
  - \$50M bioproducts
- OSC's 2007 review - 3 "Areas of Excellence"
  - Biosciences
  - Material Sciences
  - Data Exploitation



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**Ashok Krishnamurthy, Ph.D.**

**Director of Research**

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# Purpose of Meeting

Gather requirements for the support of the software stacks required by the bioscience community including:

- codes required and their environments
- databases used and their environments
- required access to instrumentation, analysis codes, etc



# Use of Cluster

Bioscience Cluster Expansion will be used:

- for research
- for teaching
- and, by the bioscience industry