Center for Scientific Computation in Imaging

(csci.ucsd.edu)

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CSCI Center For Scientific Computation in Imaging
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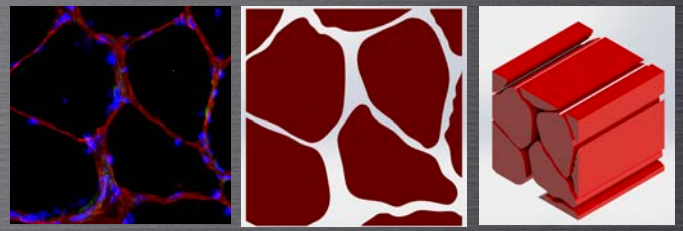
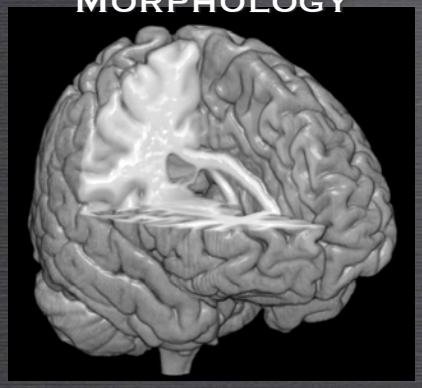
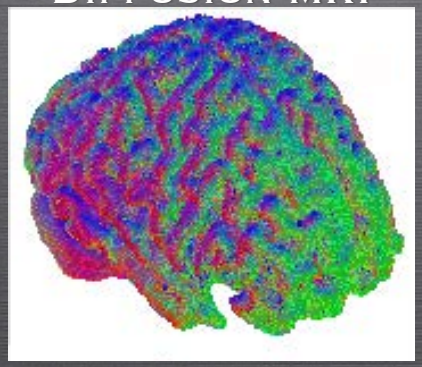
Muscle biophysics



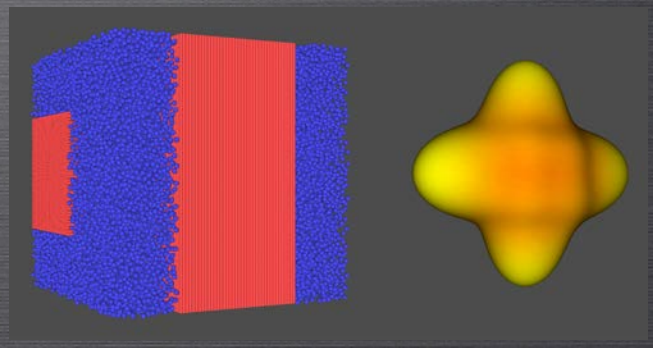
Computational Morphology



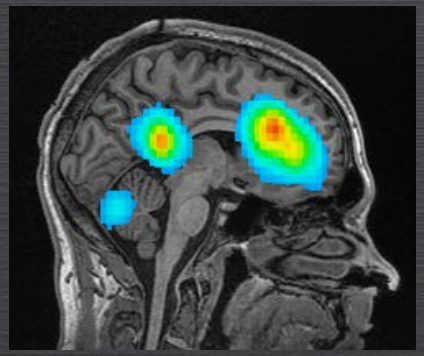
Diffusion MRI



Computational Physics

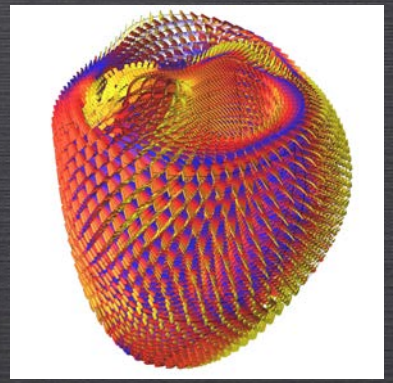


Functional MRI



Evolutionary Biology

Cardiac Biomechanics



Significant funding sources
NIH and NSF

- Development of MRI acquisition, analysis, and visualization methods for quantitative neuroimaging, including morphology, diffusion imaging, and functional MRI
- Generalized imaging and computational methods
- Evolutionary biology
- Muscle structure and function (with Ward Group)
- Cardiac biomechanics (with McCulloch and Omens Groups)
- Novel pulse sequence development for diffusion MRI
- Computational modeling of tissue biophysics and imaging physics
- Ongoing clinically related research in traumatic brain injury and Alzheimer's disease.