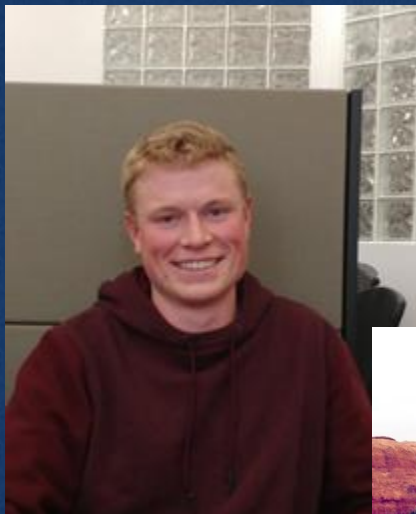




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Computational Biosciences Lab

Micron Engineering Center (MEC) 402

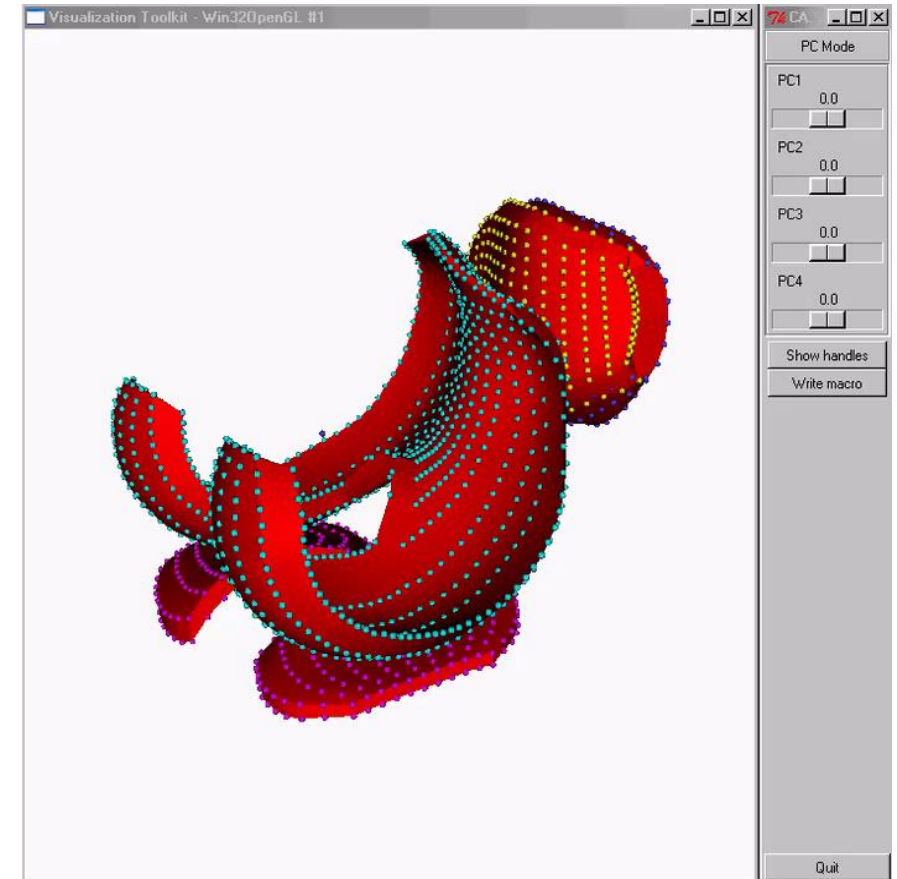
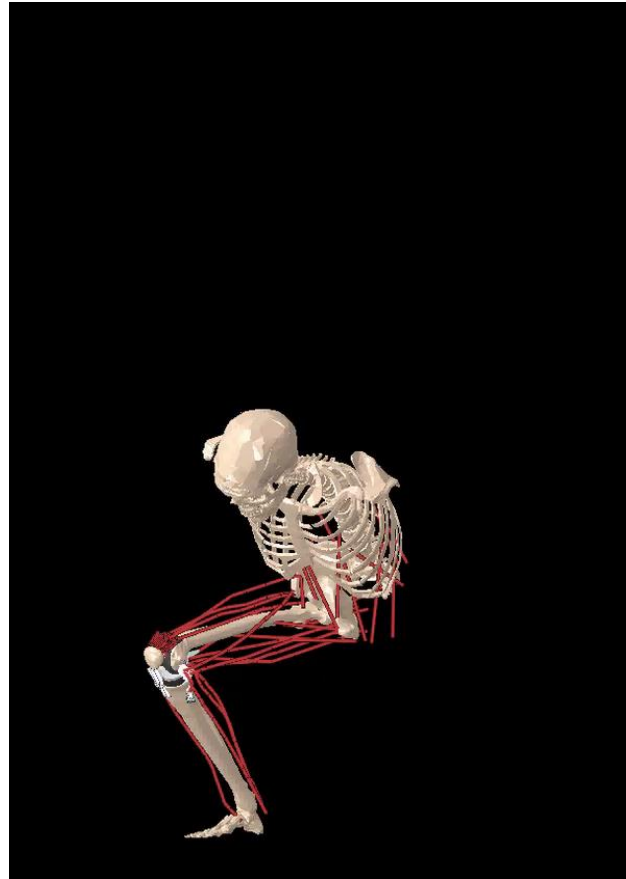
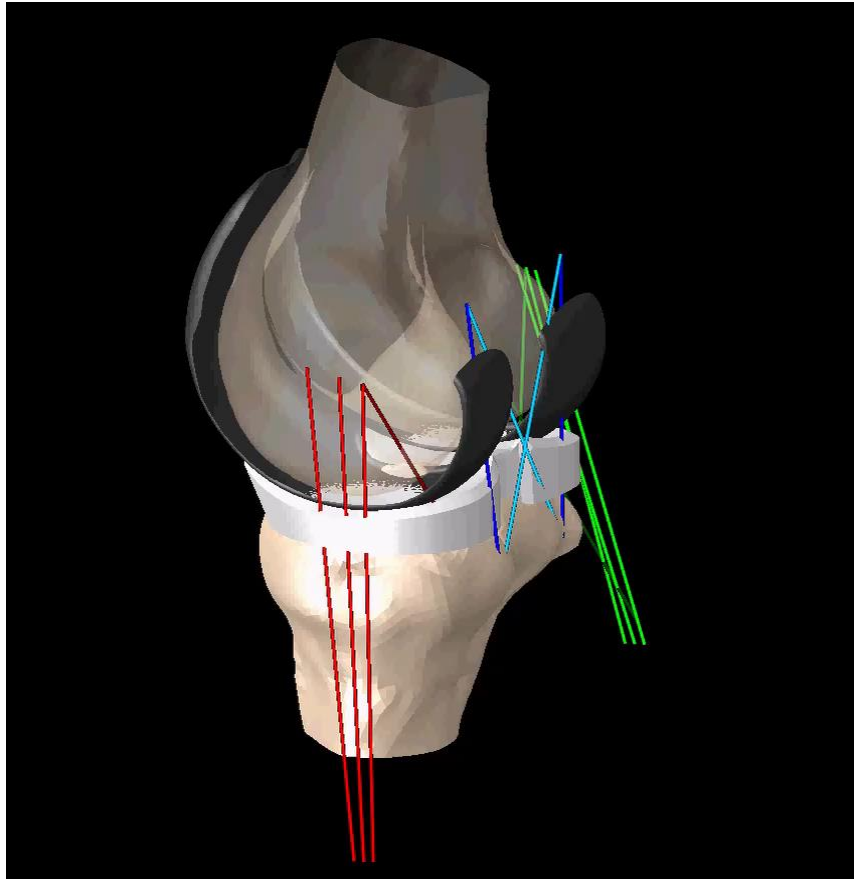


Clare Fitzpatrick, Director

Website: coen.boisestate.edu/cbl/

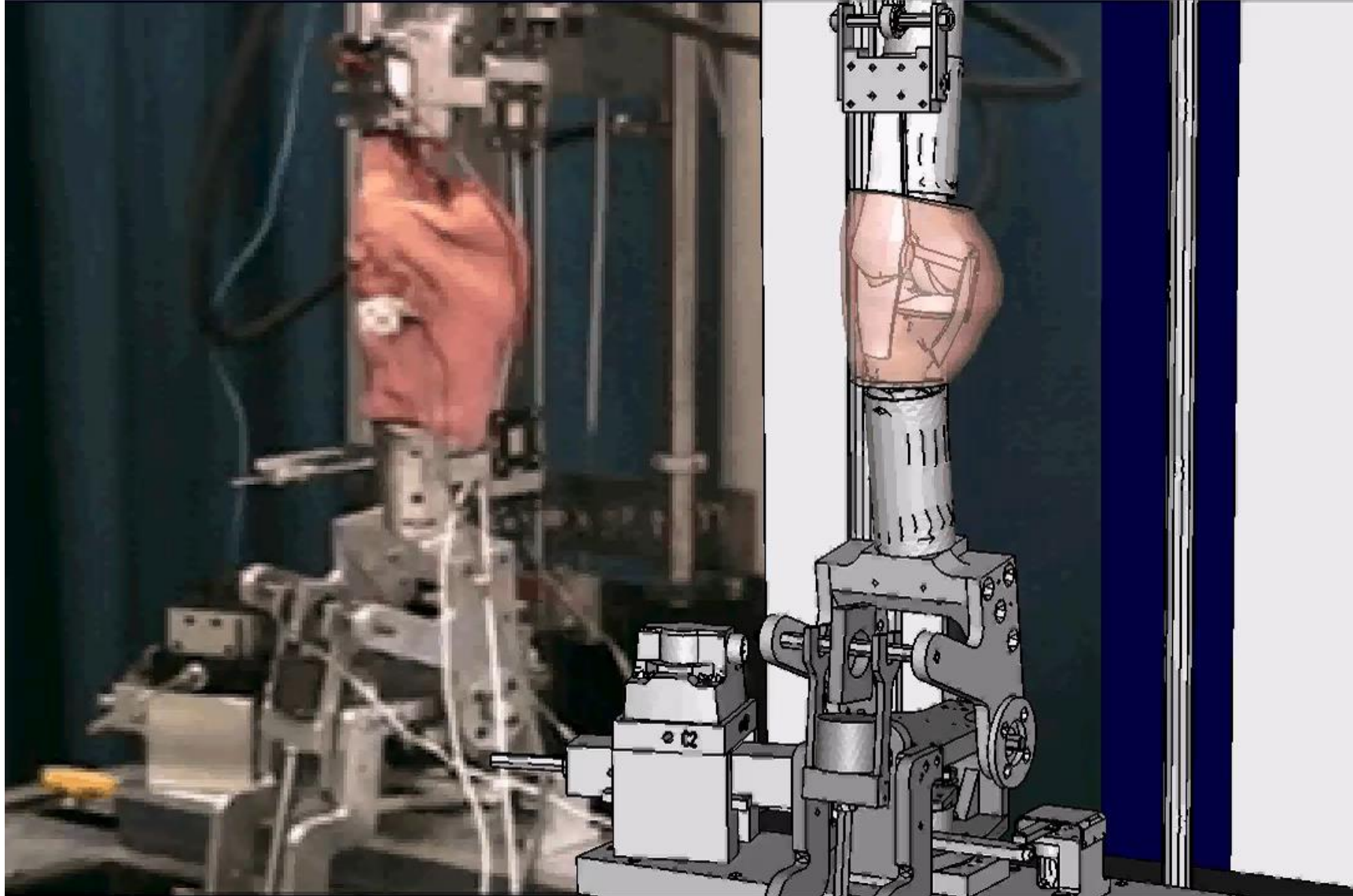
Email: clarefitzpatrick@boisestate.edu

Our Research Focus: Apply computational models to understand the mechanisms of disease, injury and degeneration





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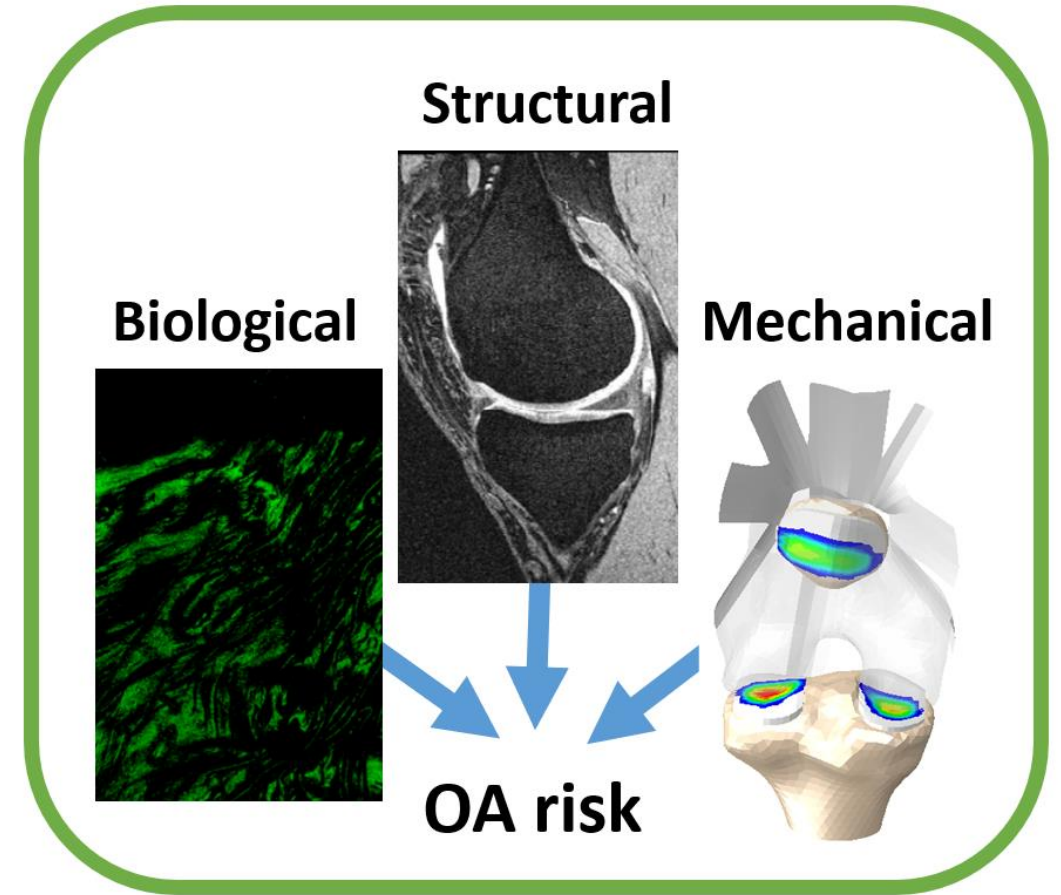


Research Areas

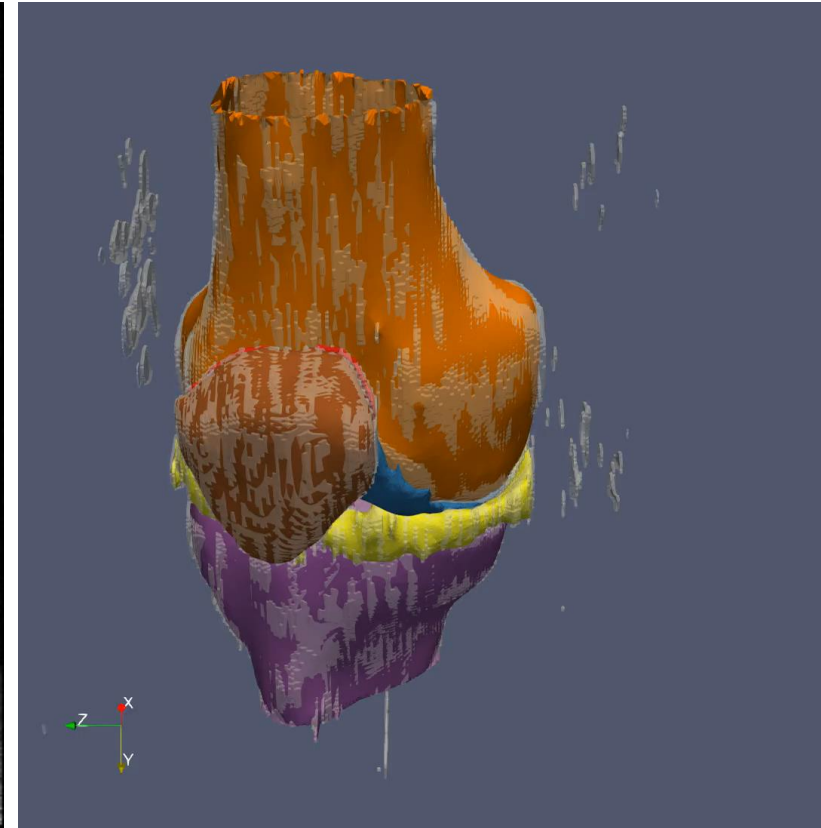
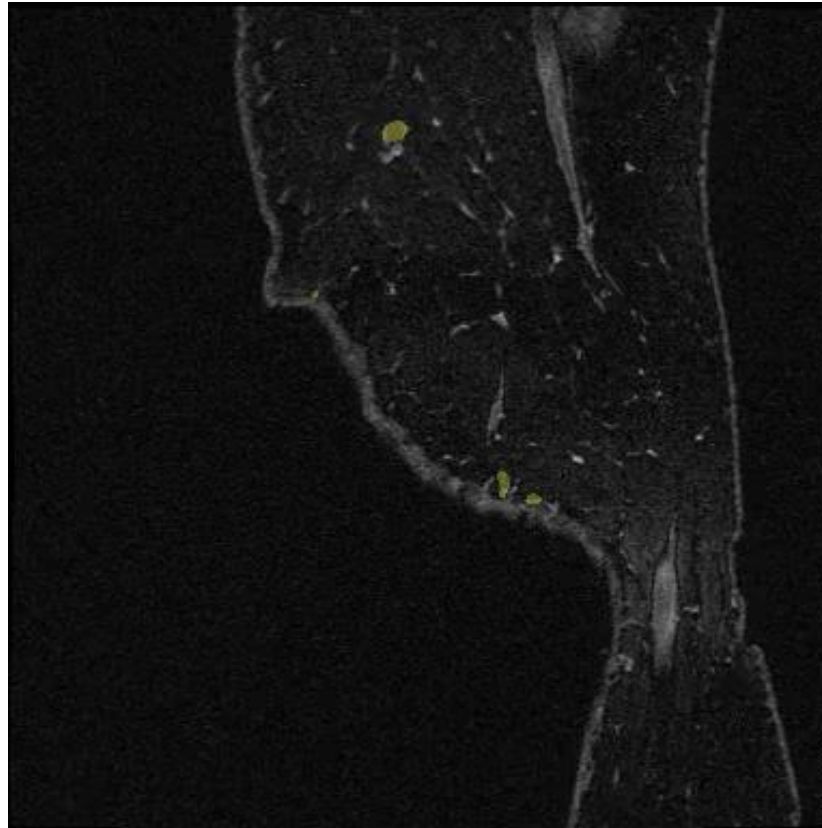
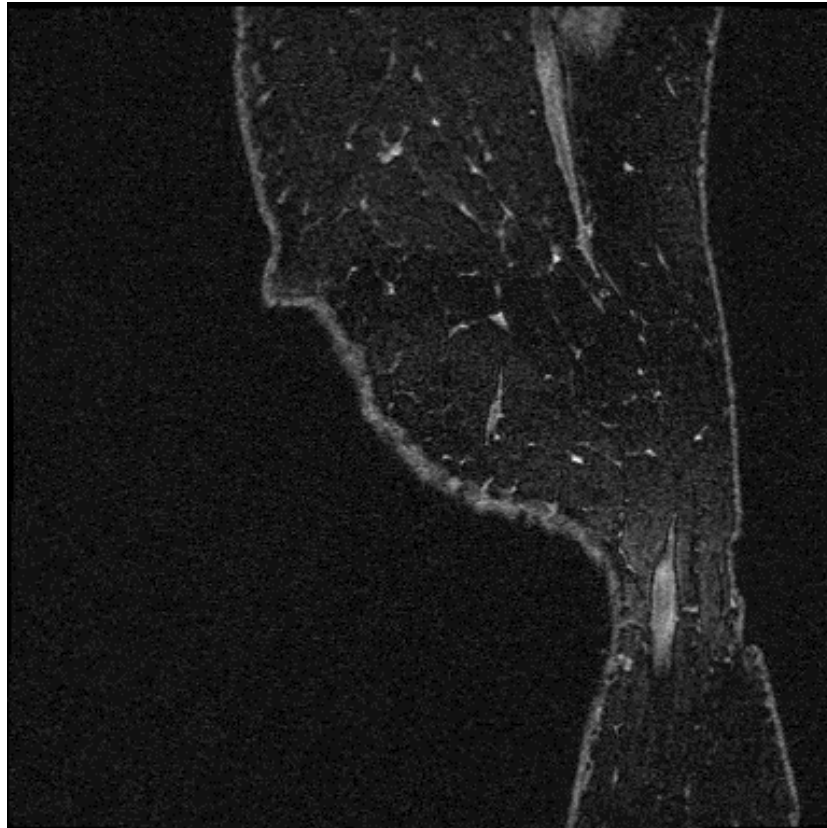
- Automated generation of osteoarthritic finite element models from medical images
- Multiscale neuromuscular model of the lower limb

Automated development of FE models

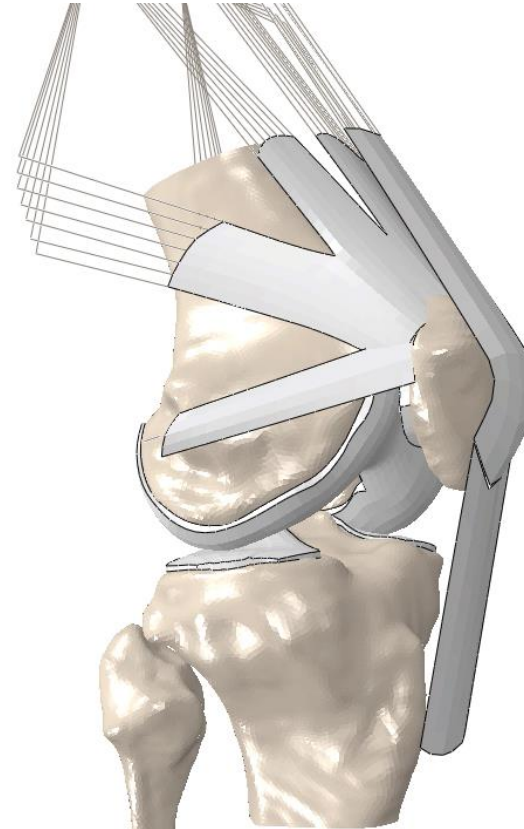
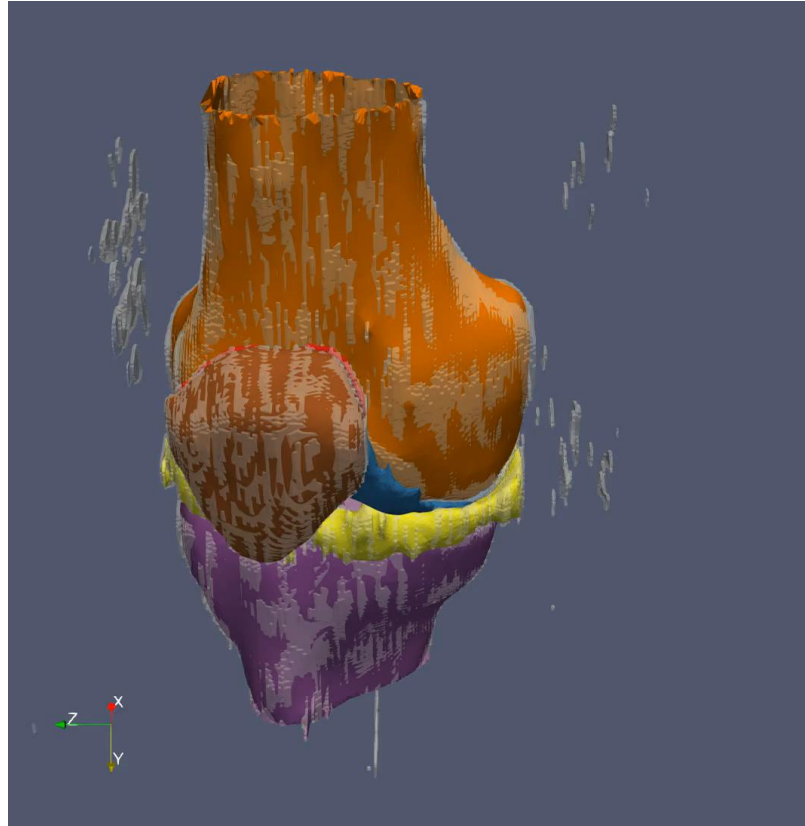
- Develop 1,000's of subject-specific models
- Evaluate effects of geometry, biological and joint mechanics of risk of OA



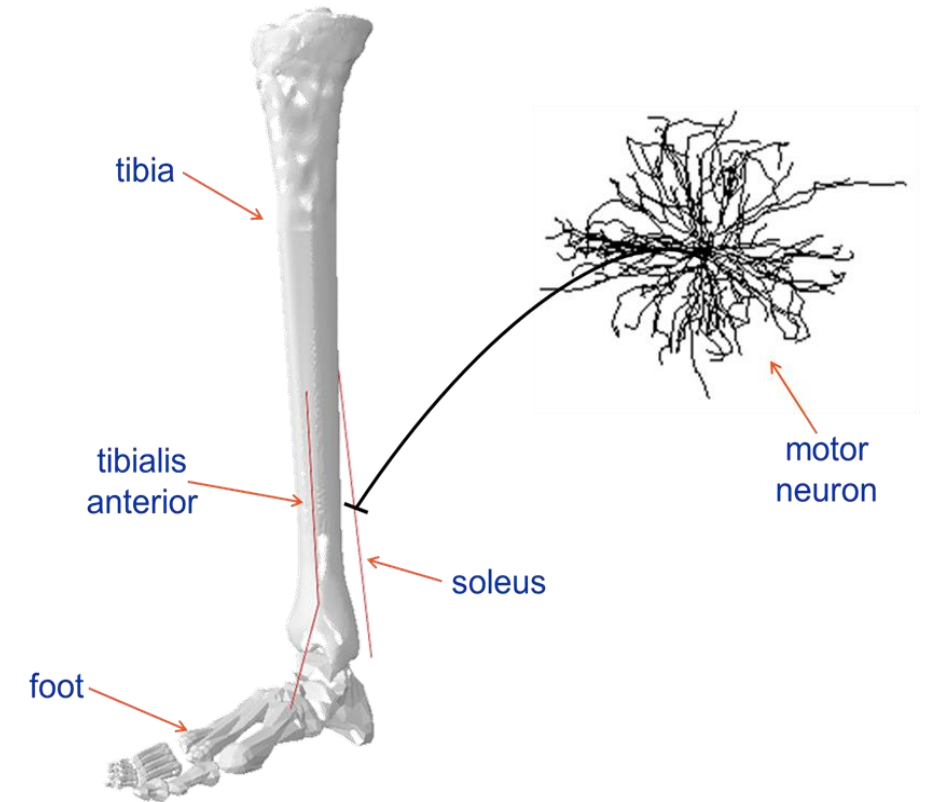
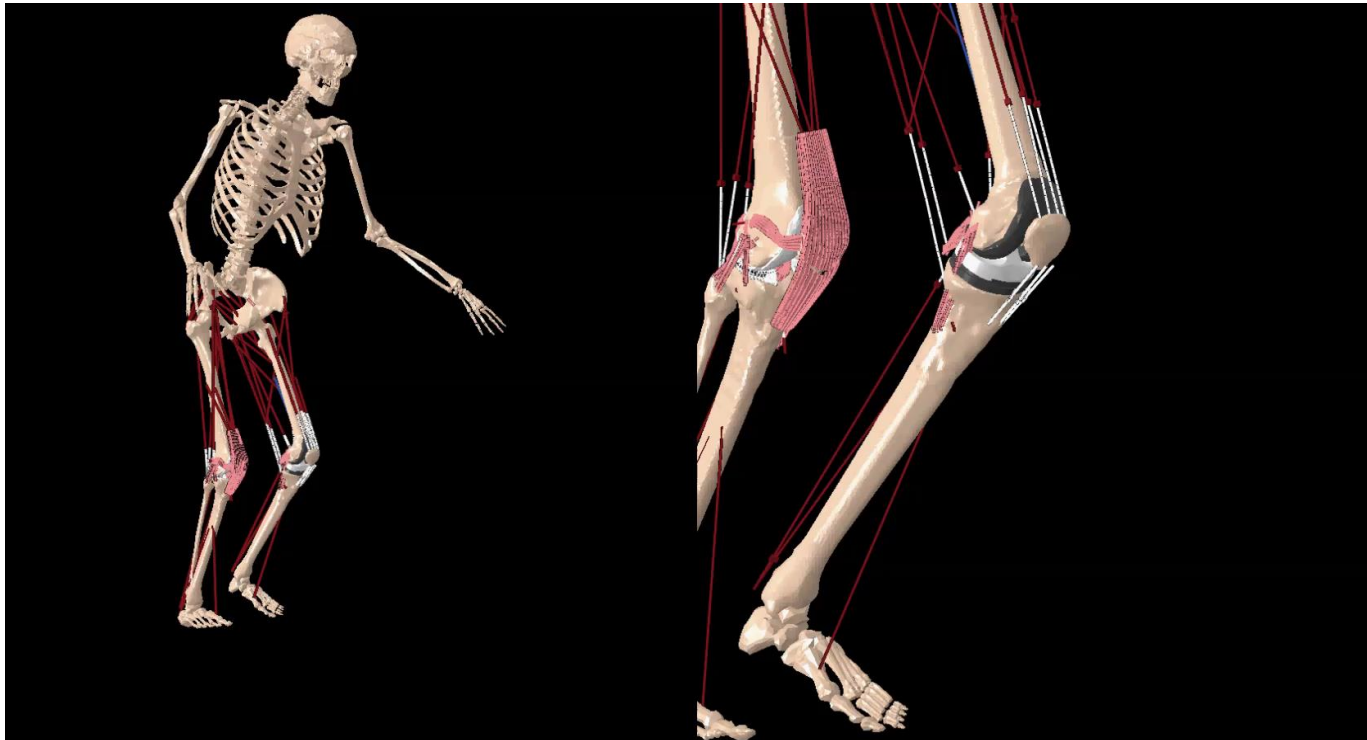
Automated development of FE models



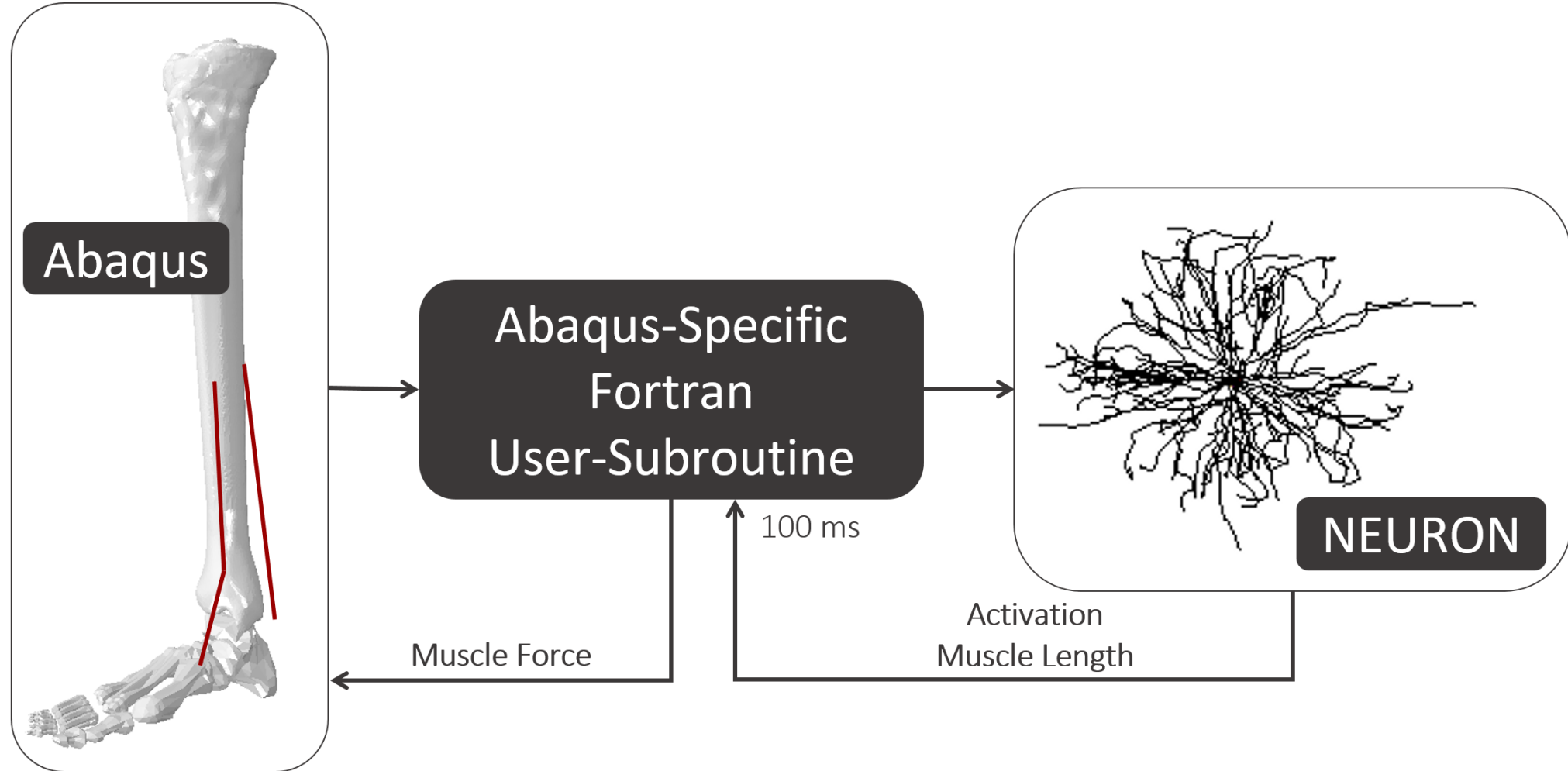
Automated development of FE models



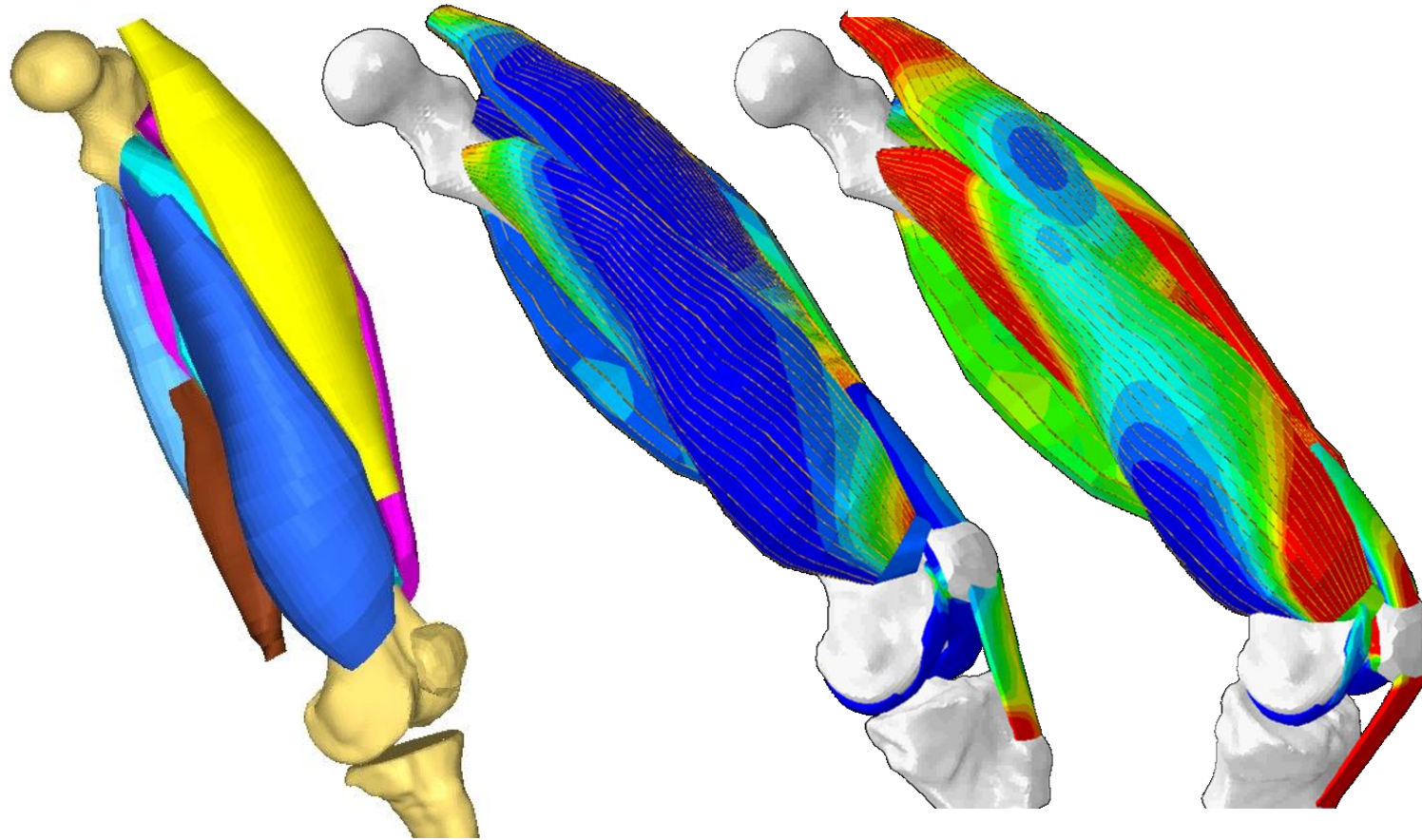
Neuromuscular model of the lower limb



Neuromuscular model of the lower limb



Neuromuscular modeling of the lower limb





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THANK YOU

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