SimTK: A Resource-Sharing and Community-Building Platform for Biosimulations

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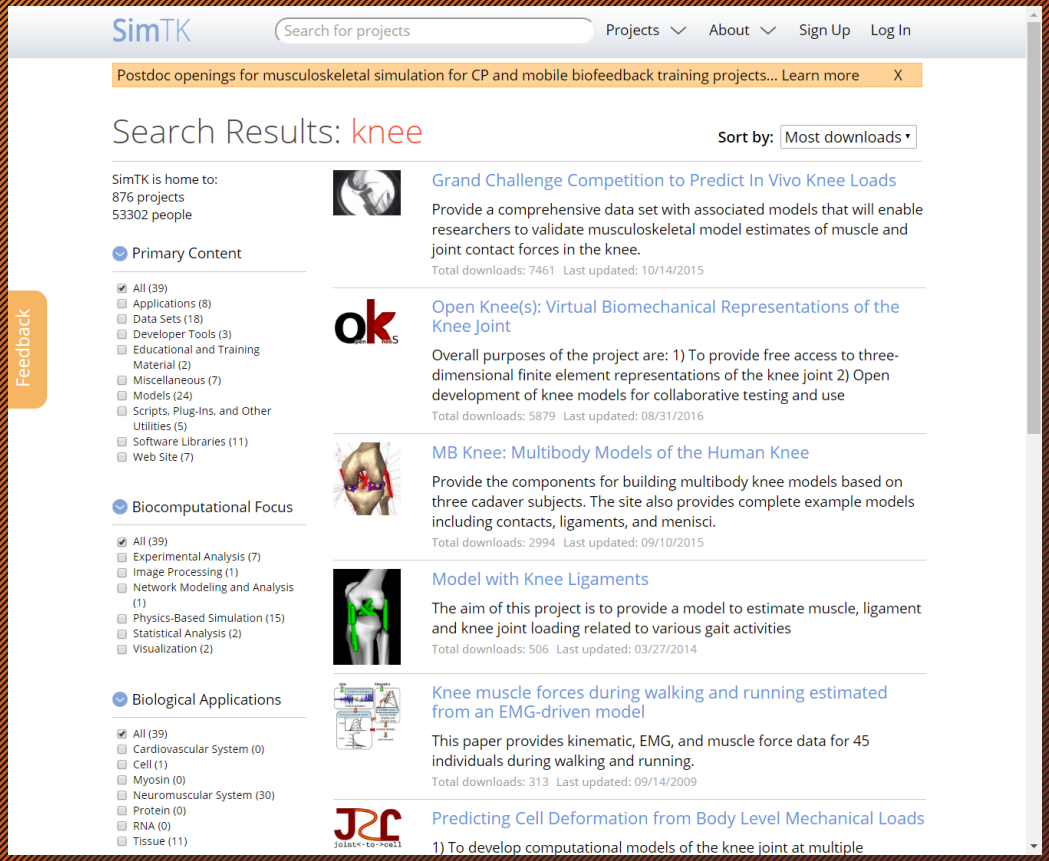
What is SimTK?



- Repository for the biosimulation community to enable collaboration and easy sharing of digital assets
- SimTK projects
  - Each owned and managed independently
  - Multiple levels of privacy control
  - Access to many tools for sharing and building community

http://simtk.org

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SimTK Project Features

Overview Page

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SimTK Project Features

Overview Page

Statistics

Publications

Connections to GitHub, DataMed, and other dissemination platforms

Easy upload/ download of documents

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SimTK Project Features

Mailing Lists

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News

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Discussion Forum

Overview Page

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SimTK Communities

Shoulder Modeling

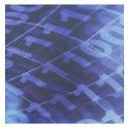
The shoulder modeling community is interested in understanding and utilizing biomechanics knowledge of the shoulder and upper-extremity to advance clinical treatments and diagnoses, ergonomics, and sports performance.

4 total projects 4 projects with downloads

See all community projects

Add project to community

Recently updated projects



Upper Extremity Dynamic Model

Provides the files associated with a dynamic model of the upper limb for use in SIMM or OpenSim.

Total downloads: 2173 | Last updated: 01/26/2017

Dynamic Arm Simulator

Provides a real-time, dynamic simulation of arm movement.

Total downloads: 758 | Last updated: 11/07/2016

Delft Shoulder and Elbow Model

Provides the code base for a musculoskeletal model of the upper limb.

Total downloads: 1288 | Last updated: 09/20/2016

Model of the Scapulothoracic Joint

News

New file added: ShoulderDatabaseV1.1.zip

Delft Shoulder and Elbow Model

Mar 20, 2015

Publications

Seth A, Matias R, Veloso AP and Delp SL. A biomechanical model of the scapulothoracic joint to accurately capture scapular kinematics during shoulder movements. PLOS ONE.

Chadwick, E., Blana, D., Kirsch, R., &

- Collections of projects
- Information from projects automatically summarized on the community page

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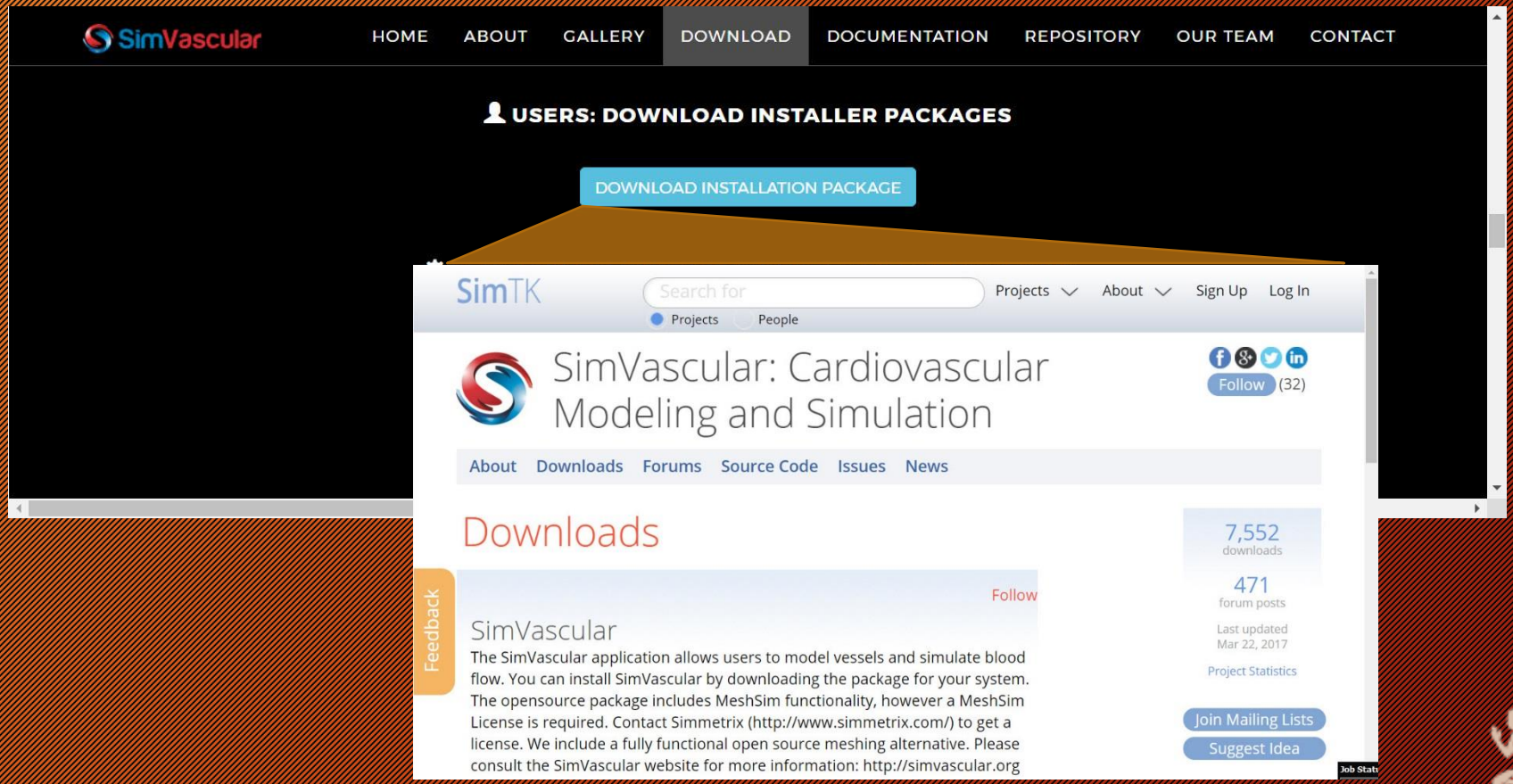
Branding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SimVascular
The SimVascular application allows users to model vessels and simulate blood flow. You can install SimVascular by downloading the package for your system. The opensource package includes MeshSim functionality, however a MeshSim License is required. Contact Simmetrix (http://www.simmetrix.com/) to get a license. We include a fully functional open source meshing alternative. Please consult the SimVascular website for more information: http://simvascular.org
Join Mailing Lists
Suggest Idea
Feedback

Learn More

Current working group projects on SimTK:

- Credible Practice of Modeling & Simulation in Healthcare (https://simtk.org/projects/cpms)
- Population Modeling Working Group (https://simtk.org/projects/popmodwkgrpimag)

Demo working group project & community on SimTK

- https://simtk.org/projects/joytest
- Login: guest1 / guest2 / guest3
- Password: msm10years

Poster: "Democratization of Modeling and Simulation in Biomechanics"

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