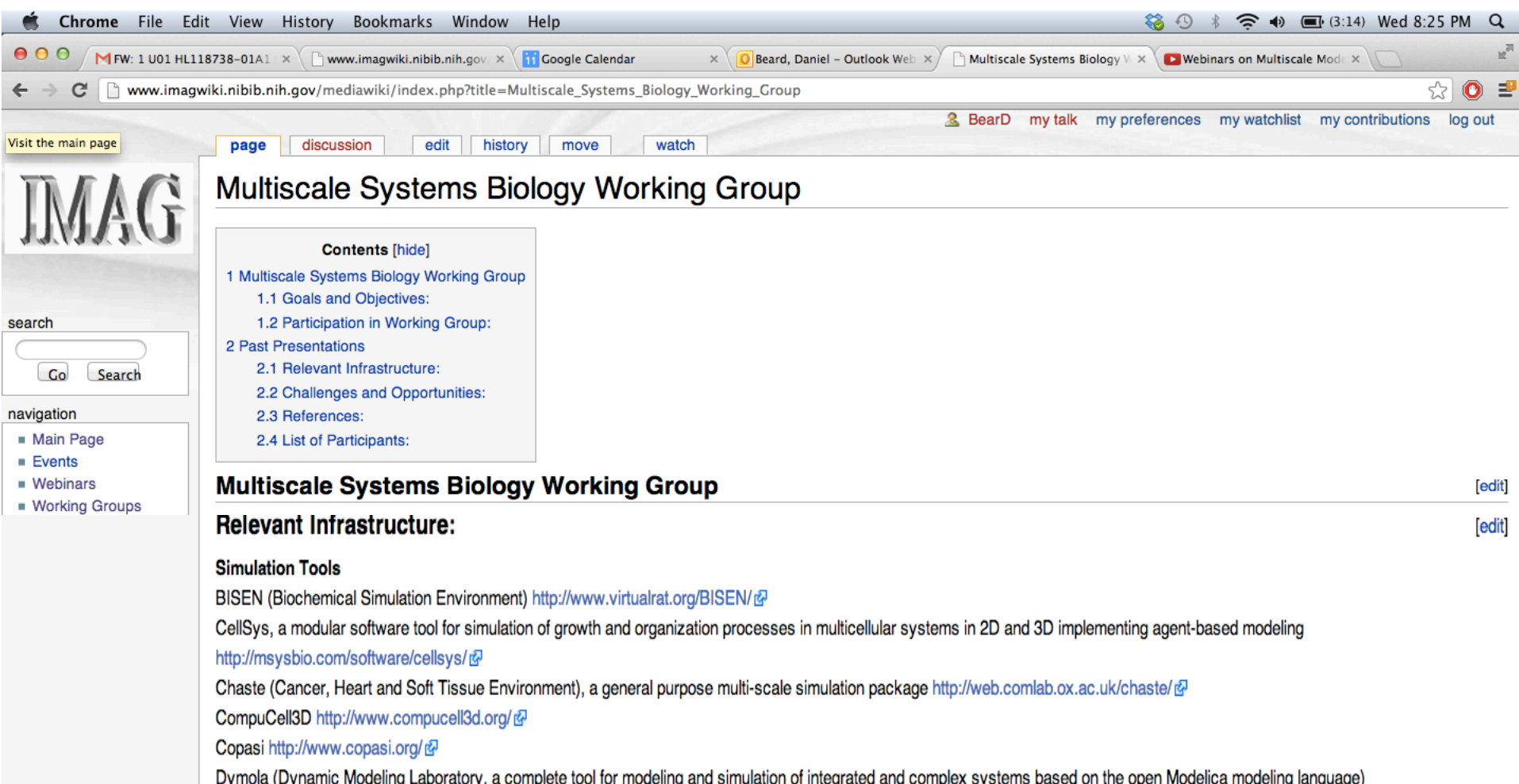


Multiscale Modeling (MSM) Consortium Meeting 2013

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The screenshot shows a web browser window with the URL www.imagwiki.nibib.nih.gov/mediawiki/index.php?title=Multiscale_Systems_Biology_Working_Group. The page title is "Multiscale Systems Biology Working Group". The left sidebar contains a search bar, a navigation menu with links to Main Page, Events, Webinars, and Working Groups, and a "Visit the main page" button. The main content area has a "Contents" table of contents with links to various sections. The "Relevant Infrastructure" section lists several simulation tools with their respective URLs.

Multiscale Systems Biology Working Group

Contents [hide]

- 1 Multiscale Systems Biology Working Group
 - 1.1 Goals and Objectives:
 - 1.2 Participation in Working Group:
- 2 Past Presentations
 - 2.1 Relevant Infrastructure:
 - 2.2 Challenges and Opportunities:
 - 2.3 References:
 - 2.4 List of Participants:

Multiscale Systems Biology Working Group [edit]

Relevant Infrastructure: [edit]

Simulation Tools

BISEN (Biochemical Simulation Environment) <http://www.virtualrat.org/BISEN/>

CellSys, a modular software tool for simulation of growth and organization processes in multicellular systems in 2D and 3D implementing agent-based modeling <http://msysbio.com/software/cellsys/>

Chaste (Cancer, Heart and Soft Tissue Environment), a general purpose multi-scale simulation package <http://web.comlab.ox.ac.uk/chaste/>

CompuCell3D <http://www.compuccell3d.org/>

Copasi <http://www.copasi.org/>

Dymola (Dynamic Modeling Laboratory, a complete tool for modeling and simulation of integrated and complex systems based on the open Modelica modeling language)

Wiki Portal

accessed 5,469 times as of Oct 1, 2011

accessed 13,019 times as of Oct 18, 2012

accessed 22,208 times as of Sept 26, 2013

Webinars

March 21, 2013

Towards predictive quantitative modeling of tissue organization and tumor growth on histological scales by imaging, image analysis and modeling

Dirk Drasdo, Stefan Hoehme, Jan G. Hengstler, Rolf Gebhardt, Ursula Klingmueller, Jens Timmer



November 14, 2012

Modeling cardiac function and dysfunction

Natalia Trayanova, Johns Hopkins University

Fall 2013: Vito Quaranta, Vanderbilt University, on Mathematical oncology, and Anita Layton, Duke University, on Multi-scale modeling of renal function.

www.youtube.com/multiscalemodeling

The screenshot shows a YouTube channel page for 'multiscalemodeling'. The channel has 3 subscribers and 33 views. The video player shows a thumbnail with a diagram of a liver and a heart, with the text 'msm' and 'Webinars on Multiscale Modeling in Physiology'. The left sidebar shows the channel name 'Webinars on Multiscale Modeling', a list of videos, and a subscriptions list including 'VirtualRatProject' and 'Herbert Sauer'. The right sidebar shows a 'Channel Setup Checklist' with items like 'Add channel art', 'Add web links', and 'Describe your channel'. It also shows 'Featured Channels' including 'VirtualRatProject' and 'eVirtualPhysiologyProject', and 'Popular channels on YouTube'.

Coming Soon: Short-video demos and tutorials!