CIBC External Advisory Board
Annual Meeting 2019

https://internal.sci.utah.edu/cibc/EAB/2019.html

Schedule

https://internal.sci.utah.edu/cibc/EAB/2019.html
The NIH/NIGMS Center for Integrative Biomedical Computing

The Center for Integrative Biomedical Computing (CIBC) is dedicated to producing open-source software tools for biomedical image-based modeling, biomedical simulation and visualization, and the visualization of biomedical data. The Center works closely with software users and collaborators in a range of scientific domains to produce user-optimized tools and provide advice, technical support, workshops, and education to enhance user success. Biological projects and collaborations drive our development efforts, all with a single unifying vision: to develop the role of image-based modeling and analysis in biomedical science and clinical practice.

CIBS Software Suite

Upcoming Events

International Society for Computational Electrophysiology & Imaging (ISCEI) 2019, April 10-14, 2019 in Atlantic Beach, FL.


Image Based Biomedical Modeling Summer Course

Welcome to the Summer Course on Image-based Biomedical Modeling

iBBM will not be taking place in 2019. We will soon announce our plans for 2020.

This course offers field-specific expertise and hands-on experience solving bioelectric or biomechanical problems that arise in current biomedical research and clinical practice. Participants will receive training in numerical methods, image analysis, and computational tools necessary to carry out end-to-end, image-based, subject-specific simulations in bioelectricity or biomechanics, using freely available software.

Presented by the Scientific Computing and Imaging (SCI) Institute, the Center for Integrative Biomedical Computing (CIBC), and the Musculoskeletal Research Laboratories (MSRL).

We particularly invite participation from students in health-related sciences belonging to underrepresented groups as defined by the NIH (find out more on the NIH website).

ibbm.sci.utah.edu
Center Vision

Image & Data Acquisition

Integrated Software Tools

Geometry Processing

Lab/Clinic

Visualization

Modeling, Simulation & Validation

Image and Geometric Analysis

Simulation and Estimation

Integrated Software Tools
Software Downloads > 150k (55k App Store)

Downloads 2004-2017: 48,068
Downloads in 2018: 549

Downloads 2004-2016: 8,407
Downloads in 2017: 170

Downloads 2008-2016: 28,750
Mobile App Store 2009-2016: 55,718
Downloads in 2018: 14
Mobile App Store 2017: ??

Downloads 2007-2017: 51,559
Downloads in 2017: 2,732

Downloads 2014-2017: 3,799
Downloads in 2018: 768

Downloads to 2009-2017: 4,703
Downloads in 2018: 941

Vimeo Videos: vimeo.com/sciinstitute
CIBC Software Strategy

Training Impact: Since 2010

Postdoctoral Fellows:
- Jeroen Sinstra—NVIDIA
- Josh Levine—Assistant Professor of Computing Science, University of Arizona
- Erik Anderson—Research Scientist, Philips Medical
- Paul Rosen—Assistant Professor of Computer Science, USF
- Yaniv Gur – IBM Research
- Brad Hollister – Lecturer at CalPoly
- Moritz Dannauer – Postdoctoral Fellow, Duke Univ.
- Shireen Elhabian – Research Asst. Professor
- Shankar Sastry – Postdoctoral Fellow

Graduated PhD Students:
- Fangxiang Jiao – Senior Research Scientist, VA, University of Utah
- Burak Erem – Postdoc, Boston Children’s Hospital
- Dafang Wang – Assistant Research Scientist, Johns Hopkins University
- Sarah Geneser—Medical Physics Resident, UCSF
- Sila Kurugol - Postdoc, BWH, then Postdoc, Boston Children’s Hospital
- Josh Cates—Research Scientist CARMA and SCI Institute, Director of the BIDAC Core
- Darrell Swenson – Medtronic
- Greg Gardner – Medical Residency
- Jonathan Bronson – Google
- Zhisong Fu - SYSTAP, LLC
- Gopal Veni – IBM
- Yong Wan — Research Computer Scientist, SCI
- Josh Blauer – Medtronic
- Kedar Aras – Postdoc at George Washington U.
- Seyhmus Guller – Boston Children’s Hospital
- Jaume Coll Font – Boston Children’s Hospital
- Brett Burton — Leonhardt's Launchpads Utah
- Jess Tate — CIBC Technical Manager
Training Impact - Current

Postdoctoral Fellows:
• Tushar Athawale, Ph.D.
• Yong Wang, Ph.D.

Graduate Students:
• Praful Agrawal
• Jake Bergquist
• Chantel Charlesbois
• Kara Johnson
• Kimia Shayestehfard (NU)

Impact

NIH/NCRR Center
Awarded for 3 years.
Sept, 1999

NIH/NCRR Center Renewal for 3 years.
Sept, 2002

NIH/NCRR CIBC Renewal for 5 years
Feb. 2005

NIH/NCRR CIBC Renewal for 5 years.
July 2010

NIH/NCRR CIBC Renewal for 5 years.
August 2015

46 Publications
First Workshop
map3d v3.0 - 6.2
BioPSE/SCIRun v1.0.0 - v1.6.0

49 Publications
Second Workshop
map3d v6.4 - 6.5
BioPSE/SCIRun v1.20.0
First release: BioFEM
BioTensor
BioImage

159 Publications
5 Workshops
BioPSE/SCIRun v1.20.0 - v4.2
BioFEM
BioTensor
BioImage
New BioMesh3D
map3d v6.4 - 6.5
ImageVis3D v1.0
Seg3D v1.12
ShapeWorks

141 Publications
13 Workshops
NIH/BTR Portal
BioPSE/SCIRun v4.2 - v4.7
SCIRun v5.0 alpha
BioMesh3D
BioMesh3D Client v1.0
BrainStimulator
Forward/Inverse Toolkit
map3d v7.1
ImageVis3D v2.0.1 - v3.1
Seg3D v2.15
ShapeWorks v0.3.0 - v1.2
Cleaver v2.0

70 Publications
5 IBBM Summer School
NIH/BTR Portal
EDGAR Repository
SCIRun v6.0
BioMesh3D
BioMesh3D Client v1.0
BrainStimulator
Forward/Inverse Toolkit
map3d v7.2.5
ImageVis3D v3.2 alpha
Seg3D v2.4
ShapeWorks v2.2
Cleaver v2.3.1
FluoRender 2.2.2

2020