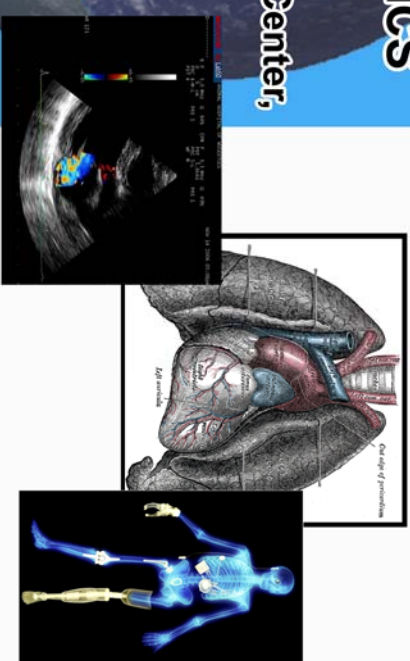


# VCU/NHLBI INTERNATIONAL CONFERENCE ON MATHEMATICAL MODELING & COMPUTER SIMULATION OF CARDIOVASCULAR AND CARDIOPULMONARY DYNAMICS

31 May 2011 – 3 June 2011

College of William and Mary Conference Center,  
Williamsburg, Virginia



## Overview

In April of 1994, the conference chair organized the First World Congress on Computational Medicine and Public Health at what then the University of Texas System Center for High Performance Computing now known as the Texas Advanced Computing Center. That three day conference attracted some 550 people from nearly 50 countries worldwide and became a three volume book set available through World Scientific Press. Since that time, advanced computing and mathematical models have become ubiquitous in the life sciences and medicine. This conference serves as bring a focus on the state of the art research work in the field of advanced mathematical modeling and computer simulation of cardiovascular and cardiopulmonary dynamics, a field that has grown rapidly since 1994. We bring together the world's best researchers in numerous arenas of research and invite participants interested in interacting with these individuals to participate. There will be focused workshops, poster sessions, invited presentations and submitted papers. To find out more, please go to <http://www.vcu.edu/csbc/hhbi>

## Areas of Interest (including but not limited to )

- High Performance Multiscale Modeling/Simulation of Cardiovascular and Cardiopulmonary Dynamics
- Pharmacological Dynamics of Cardiovascular Systems
- Demography, Epidemiology and Biostatistics of Cardiovascular Problems
- Cardiovascular Disease Modeling/Simulation
- Biofluid Models/Simulations of Cardiovascular and Cardiopulmonary Systems
- Cardiovascular and Cardiopulmonary Imaging and Visualization
- Modeling/Simulation of Pediatric Cardiovascular Issues
- Modeling/Simulation of Geriatric Cardiovascular Issues
- Surgical Modeling/Simulation
- Cardiovascular/Cardiopulmonary Signal Processing and Interpretation
- Calcium Signaling Models
- Neurobiological/Neurophysiological Models/simulations and their Interface to Cardiovascular Models
- Modeling/Simulation in Electrophysiology
- Calcium Sparks and Waves

## Contact and Register

To register for the conference please go to <http://www.vcu.edu/csbc/hhbi/register.html> For detailed conference information, please visit the conference website at <http://www.vcu.edu/csbc/hhbi>. For specific questions concerning financial aid, paper sessions, mini-workshop suggestions and participation, contact the conference chair: Dr. Tarynn M. Witten at [tmwitten@vcu.edu](mailto:tmwitten@vcu.edu). If you believe that you are going to attend, please register so that we can obtain a preliminary count of the attendees.

## Support

Participants interested in financial support to attend this conference must apply online via the conference registration form located at <http://www.vcu.edu/csbc/hhbi/register.html>. Support for graduate students (at all levels), medical students and their upper-level bioscience students is available. Students interested in mathematical modeling and computer simulation in the biosciences and medicine are also encouraged to apply and request support. Some support for advanced undergraduate students may be available.

For faculty support, please contact the conference chair Dr. Tarynn M. Witten at [tmwitten@vcu.edu](mailto:tmwitten@vcu.edu) directly. This conference is supported by grant NHLBI T15 to Virginia Commonwealth University, partial support from the VCU Center for Life Sciences as well as additional support from the William & Mary Biomathematics Initiative.

