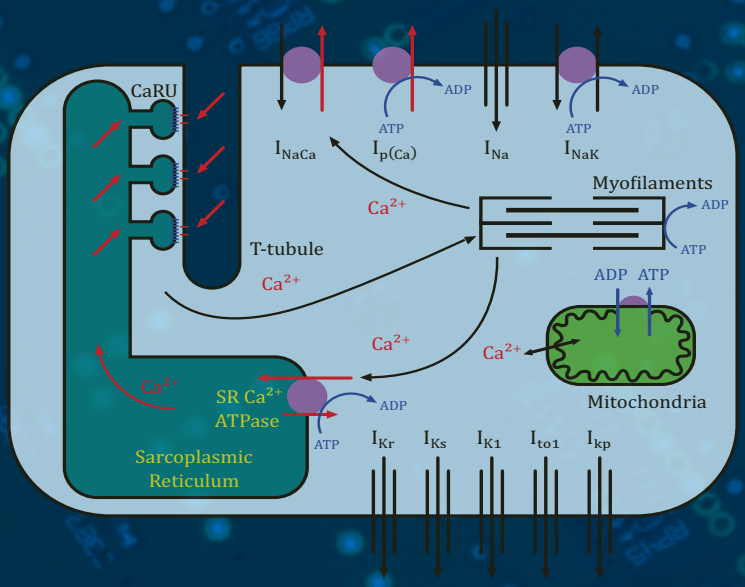
THE JOHNS HOPKINS UNIVERSITY
NHLBI T15 SHORT COURSE

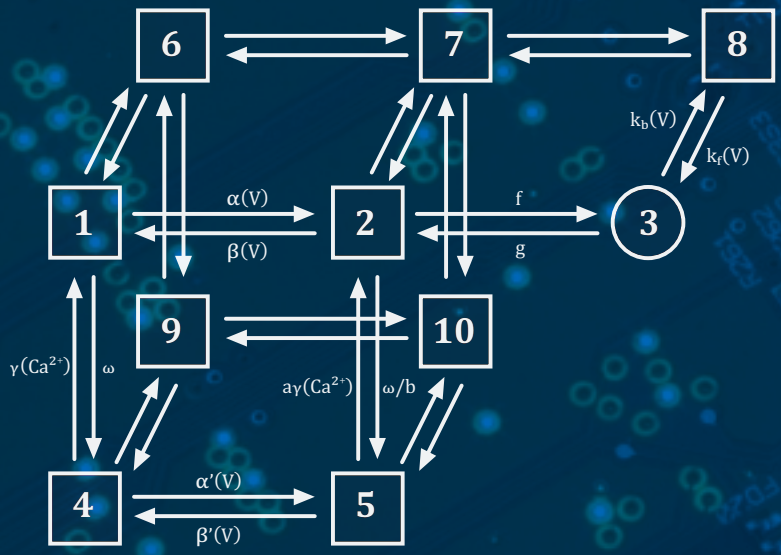
INTEGRATIVE COMPUTATIONAL MODELING OF THE CARDIAC MYOCYTE

July 20—July 24, 2009

Mt. Washington Conference Center
Baltimore, Maryland

INSTITUTE *for* COMPUTATIONAL MEDICINE





Target Audience

Biomedical researchers and clinician-scientists with a strong interest in understanding the process of developing, implementing, and applying mathematical biological system models. Programming experience is recommended.

Course Description

Using the cardiac myocyte as a paradigm, participants will be introduced to key concepts that underlie development of mathematical mechanistic models of biological systems. Participants will learn how to apply such models to the interpretation of experimental data and to make biological predictions. Core concepts in mathematics, numerical programming, and cardiac myocyte physiology and modeling will be covered in a set of online courses to be completed prior to the short course. The intensive 5-day short course will cover the implementation of existing myocyte models, the development of a new model based on experimental data, and an overview of future directions in biological modeling.

For application and course information, please visit http://www.icm.jhu.edu/shortcourse

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