

## Peer-reviewed Journal Publications

D. Bruce, P. Pathmanathan, J. Whiteley. Modelling the effect of gap junctions on tissue-level cardiac electrophysiology, *Bulletin of Mathematical Biology* (accepted for publication).

**P. Pathmanathan** & R. Gray, Ensuring reliability of safety-critical clinical applications of computational cardiac models, *Frontiers in Physiology*, vol 4(358), 2013.

**P. Pathmanathan** & R. Gray, Verification of computational models of cardiac electro-physiology, *Int. Journal for Numerical Methods in Bioengineering* (published online), 2013.

R. Gray, D. Mashburn, V. Sidorov, B. Roth, P. Pathmanathan, J. Wikswo. Transmembrane current imaging in the heart during pacing and fibrillation, *Biophysical Journal*, vol 105(7), 1710-1719, 2013.

G. Mirams, C. Arthurs, M. Bernabeu, R. Bordas, J. Cooper, A. Corrias, and others, Chaste: An open-source C++ library for computational physiology and biology, *PLOS Computational Biology*, vol 9(3), e1002970, 2013.

N. Zemezmi, M. Bernabeu, J. Saiz, J. Cooper, P. Pathmanathan, G. Mirams, J. Pitt-Francis, B. Rodriguez, Computational assessment of drug-induced effects on the electrocardiogram: from ion channel to body surface potentials, *British Journal of Pharmacology*, vol 168(3), 718-733, 2013.

A. Corrias, P. Pathmanathan, D. Gavaghan, M. Buist. Modelling tissue electrophysiology with multiple cell types: applications of the extended bidomain framework, *Integrative Biology*, 4(2), 192-201, 2012.

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