Channel Sensitivity Analysis in a Ventricular Myocyte Model

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Project Proposal

• Utilizing Shannon-Bers' ventricular myocyte model, through Matlab and Nimrod, this project aims to analyze the various parameters that are associated with each ionic channel in the cell. This analysis will be used to determine the effect and importance of

each parameter on each channel. This analysis can eventually be used to aid in determining the best targets for pharmacological systems.

Progress

- Set up Nimrod Portal account
- Began tweaking plan file to run experiments
- Began setting up a preliminary test experiment
- Started to adjust Matlab code to run through Nimrod
- Looked at single parameter adjustments, running though Matlab, for one channel

Tentative Plans

- Adjust Matlab code to work through Nimrod for my project
- Begin running experiments, testing parameters for a single channel
- Continue to learn how to use Nimrod/G to run experiments

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Melbourne Adventures

