

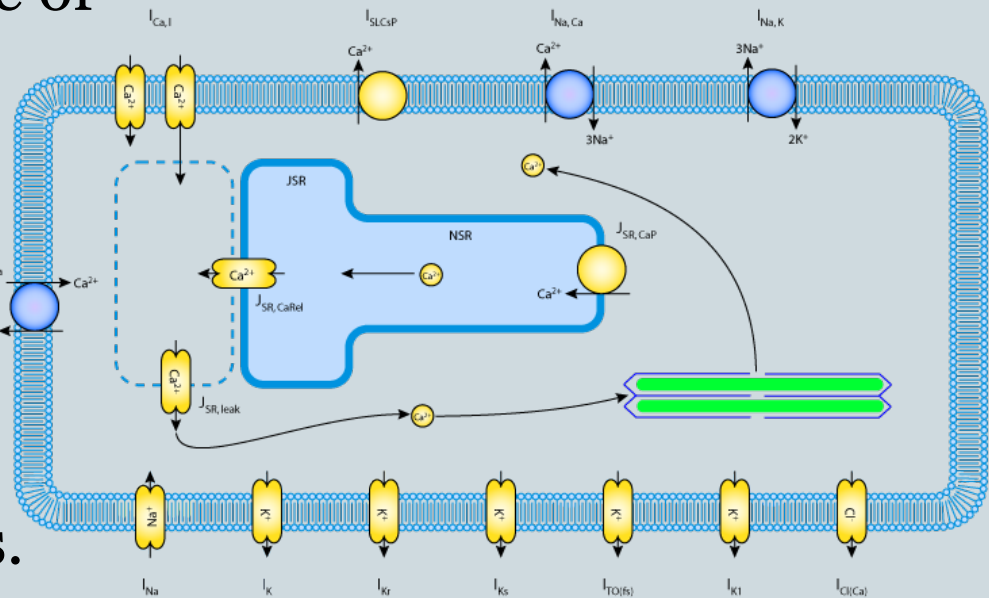
Channel Sensitivity Analysis in a Ventricular Myocyte Model



BRIAN BECERRA
MONASH UNIVERSITY
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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



- Blaire was able to get Nimrod/E working, but analysis still was not possible
- Ran a sweep on I_Ks through Nimrod/E, but had to change the Matlab code to work with /E
- Met up with Neil and David, to get some analysis on the channel
 - Through Neil & David, we started to get some results, but they are just preliminary
 - Daniel & Lenth plots that came from Nimrod/E split up the parameters, so not very useful for now
- Began adjusting the rest of the Matlab code, for each channel, in order to work with Nimrod/E

In the future!



- Since the Nimrod/E analyzer still does not work, we have to go through Neil & David to get analysis on a channel
- After we are able to get the analysis done for this channel, will be able to use as a template for analysis of all other channels
 - Will have to use R to analyze data
- Analyze the data for the rest of the channels

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Healsville & the City one last time!



