




Immunostaining and Super-Resolution Imaging of Structures In Cardiac Myocytes

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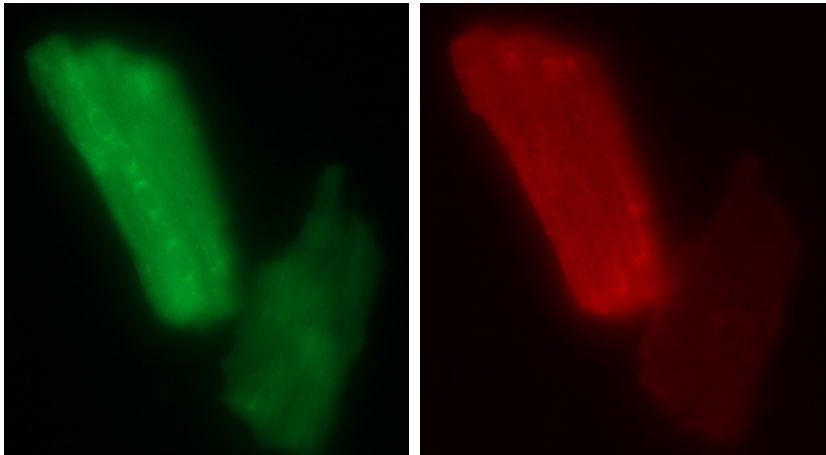
Proposed Research

Three blue circles of increasing size arranged horizontally in the top right corner.

- Super-resolution fluorescent imaging of ryanodine receptors (RyR) and microtubule structures in mouse cardiac myocytes with altered expression of protein junctophilin-II
 - Compare relative positions of labeled structures to wild type samples
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- Three blue circles of increasing size arranged vertically in the bottom right corner.

Progress This Week

- Immunostaining of normal rat cardiomyocytes
- Imaged using confocal microscope



(left) Rat cardiomyocytes stained for beta-tubulin visualized with Alexa488

(right) Rat cardiomyocytes stained for caveolin visualized with Alexa594

- Learned basic protocols, locations of materials in the lab
- Settled in at host site

Future Plans

- Stain and image other cells from different species
 - More practice with protocols
 - Stain some with junctophilin-II knockdown?
 - Investigate presence of striations and other abnormalities seen in last week's images?

Cultural Aspect

- Kia ora! This week was spent mostly settling in and working. More cultural experiences begin this weekend, but so far adjusting to NZ city life:



Rainy winter weather is very different from San Diego at any time of the year; Cars in NZ drive on the other side of the road