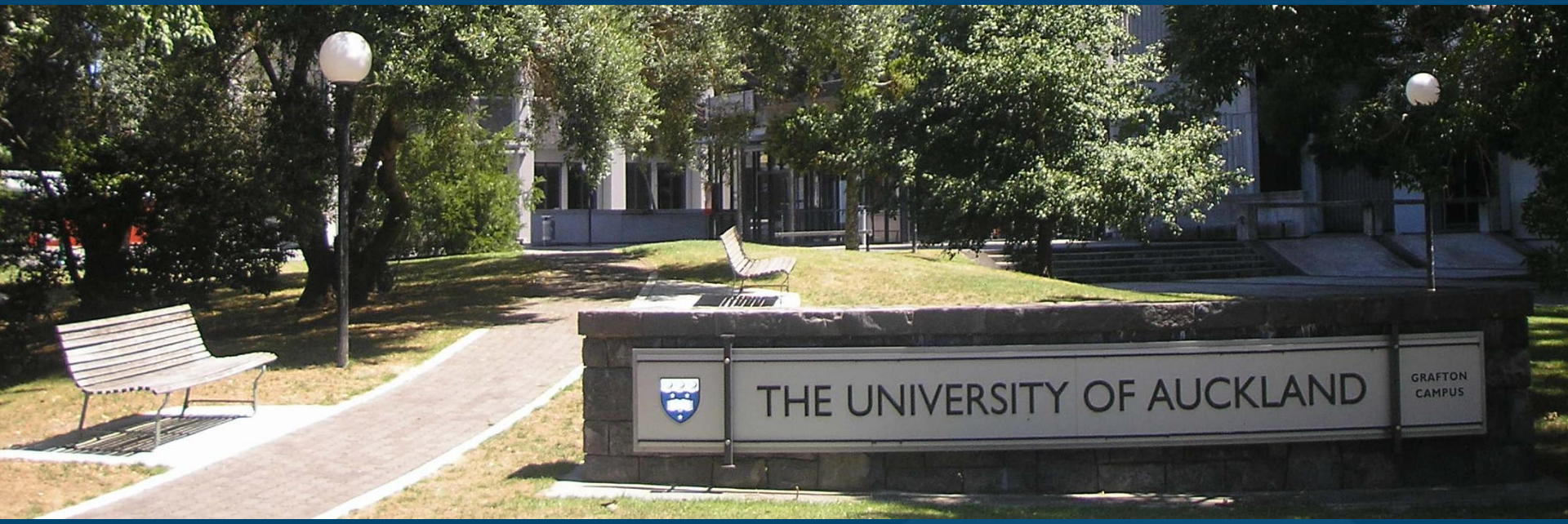

Immunostaining and Super-Resolution Imaging of Structures In Cardiac Myocytes

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Auckland, New Zealand
July 20, 2012

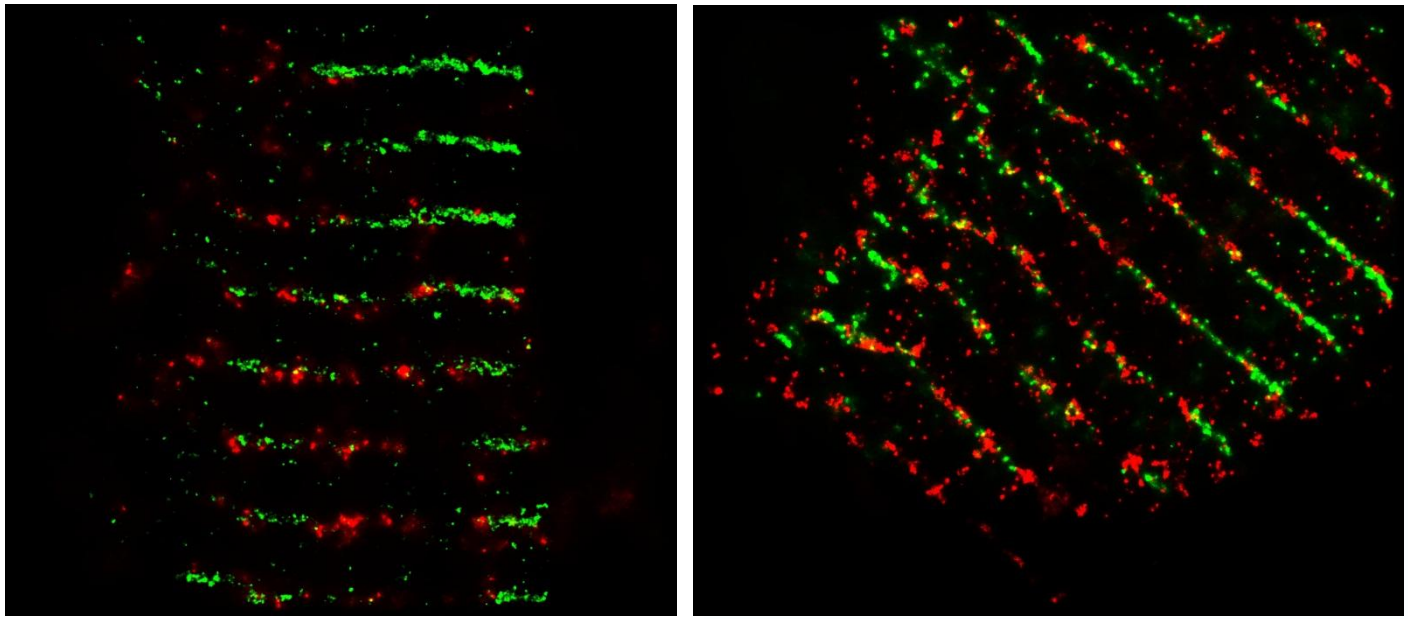
Proposed Research

- 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

Progress This Week

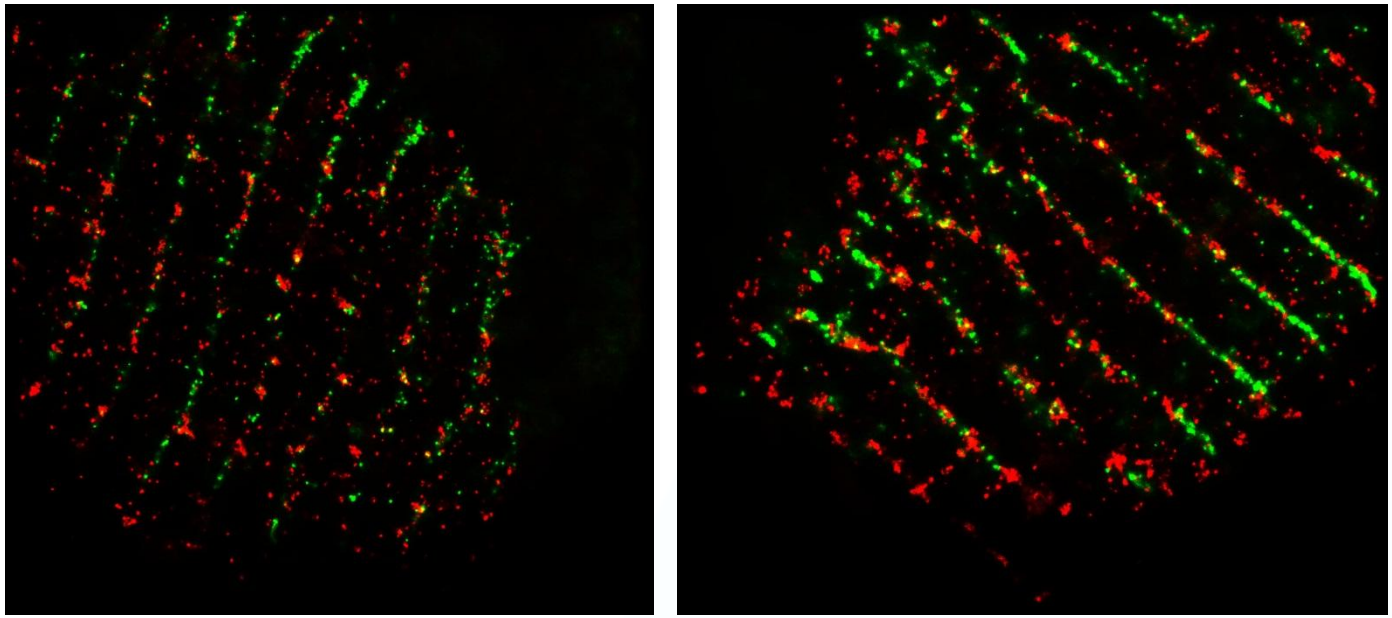
- High resolution imaging of TAC control mouse cells for ryanodine receptors (RyR) and junctophilin-II (JPH)



(left) RyR in green Alexa680, JPH in red Alexa750; **(right)** RyR in red, JPH in green; Switching the secondary antibodies for the two structures seemed to show better results

Progress This Week

- Comparison of TAC1 and TAC2 strains of cells showed no significant differences

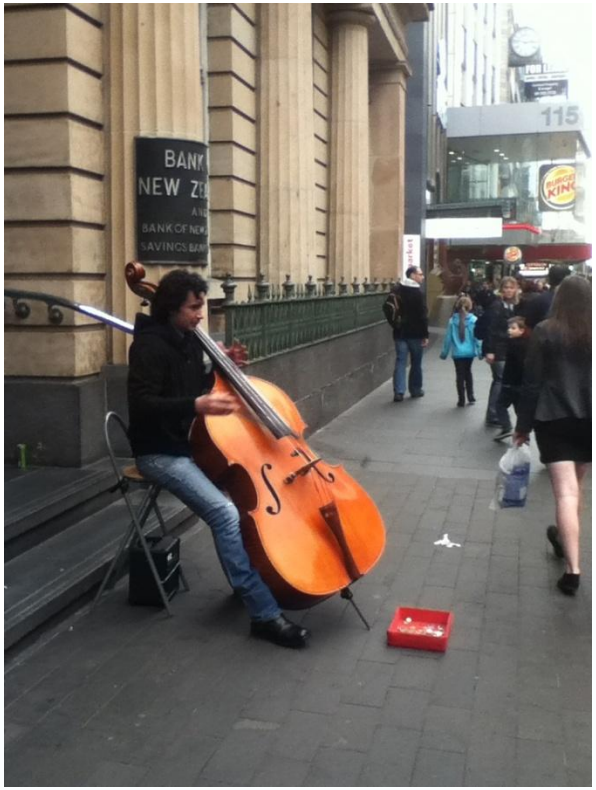


(left) TAC 1; **(right)** TAC 2

Future Plans

- Investigate effectiveness of antibody cocktail in staining tubule system in cells
  - Sample 1: Na/Ca exchange only
  - Sample 2: Caveolin 3 antibody only
  - Sample 3: Both N/C ex and Cav 3

Cultural Aspect



Political protests against the New Zealand government, and street performers downtown

Cultural Aspect

My first bottle of L&P, a famous drink of New Zealand

Acknowledgments

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