

PhD project: Omega-3 Fatty Acid Biosynthesis in Fish

This PhD scholarship represents an exciting opportunity for a highly qualified, passionate student to work as part of a large and comprehensive Australian Research Council (ARC) funded project investigating fish fatty acid metabolism. Fish are the major edible source of the fundamental long chain omega-3 fatty acids. However, natural fish reserves cannot sustain the increasing human consumption, and aquaculture (fish farming) is viewed as the solution to overcome this problem. Farmed fish can be a good source of omega-3, but only if their feed contains fish oil. Unfortunately, fish oil is only derived from wild fisheries. The major aim of this project is to boost the ability of fish to produce their own omega-3, by a biological route that already exists, but has become dormant. The specific objective of the project is to generate new knowledge about the mechanisms of fatty acid bioconversion (desaturation and elongation).

The PhD program will primarily involve fish *in vitro* cell culture and related bio-molecular and biochemical analyses. The primary location of the successful PhD candidate will be the Waurm Ponds (Geelong) and/or Burwood (Melbourne) campuses. Passion, dedication and commitment towards achieving significant scientific outputs and interest in aquaculture and fish/animal nutrition is highly desired. Previous experience in cell culture and/or fatty acid analysis or related bio-molecular analysis is desired, but not essential.

For further information and how to apply please contact:

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