**Title of Project:** Factors affecting the diffusion of actives in complementary medicines through the dermis in topical products

**(FOR Code/s):** 1104

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**Location of Project:** Campbelltown

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**Project Background**

Topical dosage forms may be intended for local action or for systemic therapy. When a preparation is applied to skin the clinical result arises from a sequence of processes:

a) Release of the medicament from the vehicle.

b) Penetration through the skin barriers.

c) Activation of pharmacological response.

Effective therapy optimizes these steps as they are affected by three components, the drug, the vehicle and the skin.

Various methods have been used to measure the release and skin penetration of an active from a particular topical formulation. Perhaps the best “in vitro” method used is Franz Cell technology where the preparation is placed on a semi permeable membrane and the active diffuses through the membrane into a receptor compartment and the amount released in determined as a function of time. This project will involve comparing the skin penetration of several topical complementary products by calculating the flux.

**Aim of Study:**

To determine the effect of the addition of a skin penetration enhancer to topical products.

**Ethics Application Requirements:**

N/A

**Key References:**


3. Internet references on Franz cells