



Establishment of a Skin Tissue Bank for the Queensland Skin Culture Centre, part of The Professor Stuart Pegg Adult Burns Centre, RBWH.

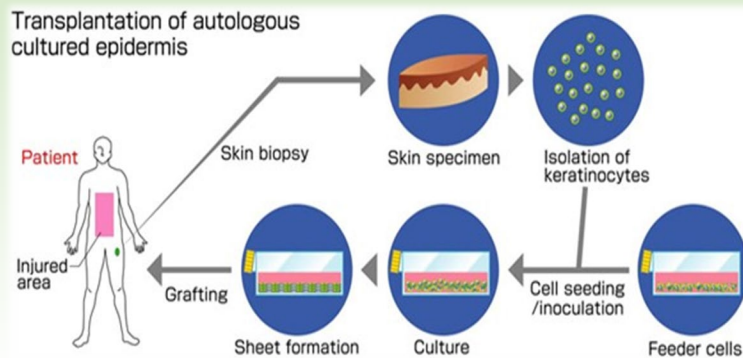
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Background

The Queensland Skin Culture Centre (QSCC) is a purpose built cell culture facility. It is a Royal Brisbane and Women's Hospital initiative that is integral to the **Professor Stuart Pegg Adult Burns Centre** which is the major burns referral centre for Queensland, Northern New South Wales, the Northern Territory and the Pacific Islands.

When called upon, the **QSCC** expands cultures of keratinocytes derived from a patient's skin under precisely controlled conditions to produce Cultured Epithelial Autografts (CEA) that can be safely returned to the patient as part of their wound management plan. Application of CEA sheets to skin graft donor sites greatly reduces the time taken for the donor site to heal and allows skin graft donor sites to be re-harvested more frequently.



Objective

To establish a biobank of de-identified viable cultured skin cells that will promote and support quality research into human skin cell biology and wound healing.

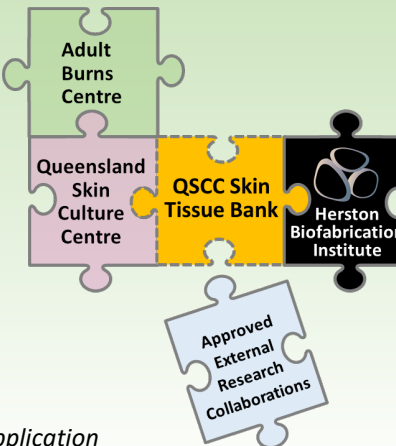
Application

The **QSCC Skin Tissue Bank** will be the central biological resource for advancing burn wound management practice via numerous projects being pursued by the *Burns, Skin & Wounds Program* at the Herston Biofabrication Institute (HBI).

QSCC Skin Tissue Bank resources are also intended to provide Human Research Ethics Approved external research partners with a simplified method for accessing high quality research material.



A skin graft donor site healing after application of a Cultured Epithelial Autograft (CEA)



Methods & Results

In July 2021, Professor Stuart Pegg Adult Burns Centre surgeons commenced prospectively recruiting participants for the newly established QSCC Skin Tissue Bank. To date (mid August 2021), from two participants a total of 300×10^6 keratinocytes have been banked in 130 cryovials alongside matched DNA & RNA reference material.

Human Research Ethics Considerations

All aspects of the QSCC Skin Tissue Bank activities and subsequent research applications are conducted in accordance with approvals from Human Research Ethics Committees of the Metro North HHS.



Cultured Epithelial Autograft (CEA)



Cryovials of keratinocytes