

LASRA

Leather and Shoe Research Association of New Zealand

Meekyung Ahn



LASRA[®] LASRA PROJECTS

- LSRX 0801
 - 7 year MBIE funded project: 2009 - 2016.
 - Improve the strength of the ovine leather for the footwear market.
- LSRX 1301
 - 5 year MBIE funded project: 2014 - 2019.
 - Improve the quality of NZ hides and deer skins for high value market by reducing/ eliminating looseness, which affects 7 % of NZ hides.
 - Improve the strength and lower the weight of the NZ hides.



Ministry of Business,
Innovation & Employment



MASSEY UNIVERSITY
TE KUNENGA KI PŪREHUROA



CallaghanInnovation

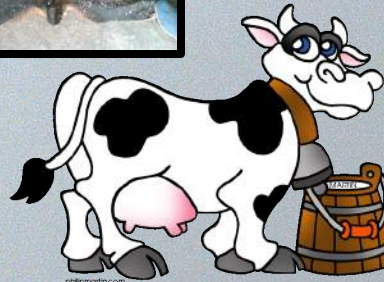
Australian
Synchrotron



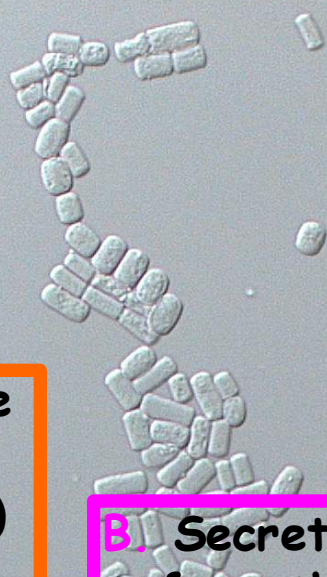
agresearch



The MacDiarmid Institute
for Advanced Materials and Nanotechnology



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Finished leather



Undamaged dehaired skin

A. Raw skins/hides incubate dairy factory/farm waste (non-toxic to environment) for short term preservation.

B. Secreted enzymes from the microorganism(s) for sulphide free de-hairing.

C. Making gelatin from the microorganism.



Gelatinised skin



Isolate



Morphology

Identified the organisms as
- non pathogenic
- natural antibiotics

- waste/byproducts from the leather making can be used.
- can be additional supplement to animal food and introduce antibiotics naturally from the microorganism(s).
- can be used as an alternative to collagen for (bio)materials.

W.Z. Leather & Shoe Research Association