Institute of Medical Biology
A*STAR

Skin Research Institute of Singapore

Seminar Announcement

- All Are Welcome -



UNIVERSITY of BRADFORD
School of Medical Sciences

Speaker: **Dr Julie Thornton**
Senior Lecturer in Biomedical Sciences
University of Bradford, The UK

Title : **"Programmed ageing -consequence of menopause on skin structure and function"**

Date : **25 July 2016 (Monday)**
Time : **4.00pm – 5.00pm**
Venue : **IMB seminar room (Neuros, level 6) Biopolis**
Host : **Dr Tom Dawson**
(Tel: 6407 0166, email: thomas.dawson@imb.a-star.edu.sg)

Abstract of the Seminar:

Multiple endocrine changes are associated with ageing, but the best example of programmed ageing is demonstrated by menopause in females, characterized by complete lack of ovarian estrogen biosynthesis around the age of 50yrs. While the ovaries are the exclusive source of estrogen in lower mammals, humans have evolved to secrete precursor steroids (DHEA-S) from the adrenal cortex, which provide target tissues that express the relevant steroidogenic enzymes to adjust estrogen levels to local requirements. This ability for intracrine metabolism of estrogen by peripheral tissues has evolved to support postmenopausal life. However, levels of DHEA-S vary considerably between women and will decline significantly with age, with an estimated 75% of women suffering from symptoms of hormone deficiency. Human skin is an estrogen target tissue that also expresses all the steroidogenic enzymes required for the synthesis of estrogen from precursors. However, following menopause many women report atrophic skin changes and a marked acceleration of ageing of the skin and associated appendages. This talk will give an overview of how estrogen modulates skin function and the age related changes associated with estrogen deficiency.

About the Speaker:

Dr. Thornton's laboratory is a member of the Centre of Skin Sciences (CSS), which is a leading centre of excellence in skin and hair follicle research
Main areas of research include:

- The mechanism of steroid hormone metabolism and cellular mechanisms of action in wound healing
- The role of hair follicle cells in wound healing
- The effect of estrogen on melanocyte biology
- The mechanism of androgen action in regulating hair growth