



CRC

for

Premium

Quality

Wool

Stem Cells in the Follicle

Produced for the CRC for Premium Quality Wool undergraduate program by;
Prof. Phil Hynd, The University of Adelaide.



Identifying the stem cells in mice follicles

- mice infused with ^3H -thymidine for 14 days
- tumour-promoting agent on skin for 4 days
- 'chase' period of 4 weeks
- identification of label by autoradiography
- **Cotsarelis et al. (1990) Cell 61: 1329-1337**

CRC

for

Premium

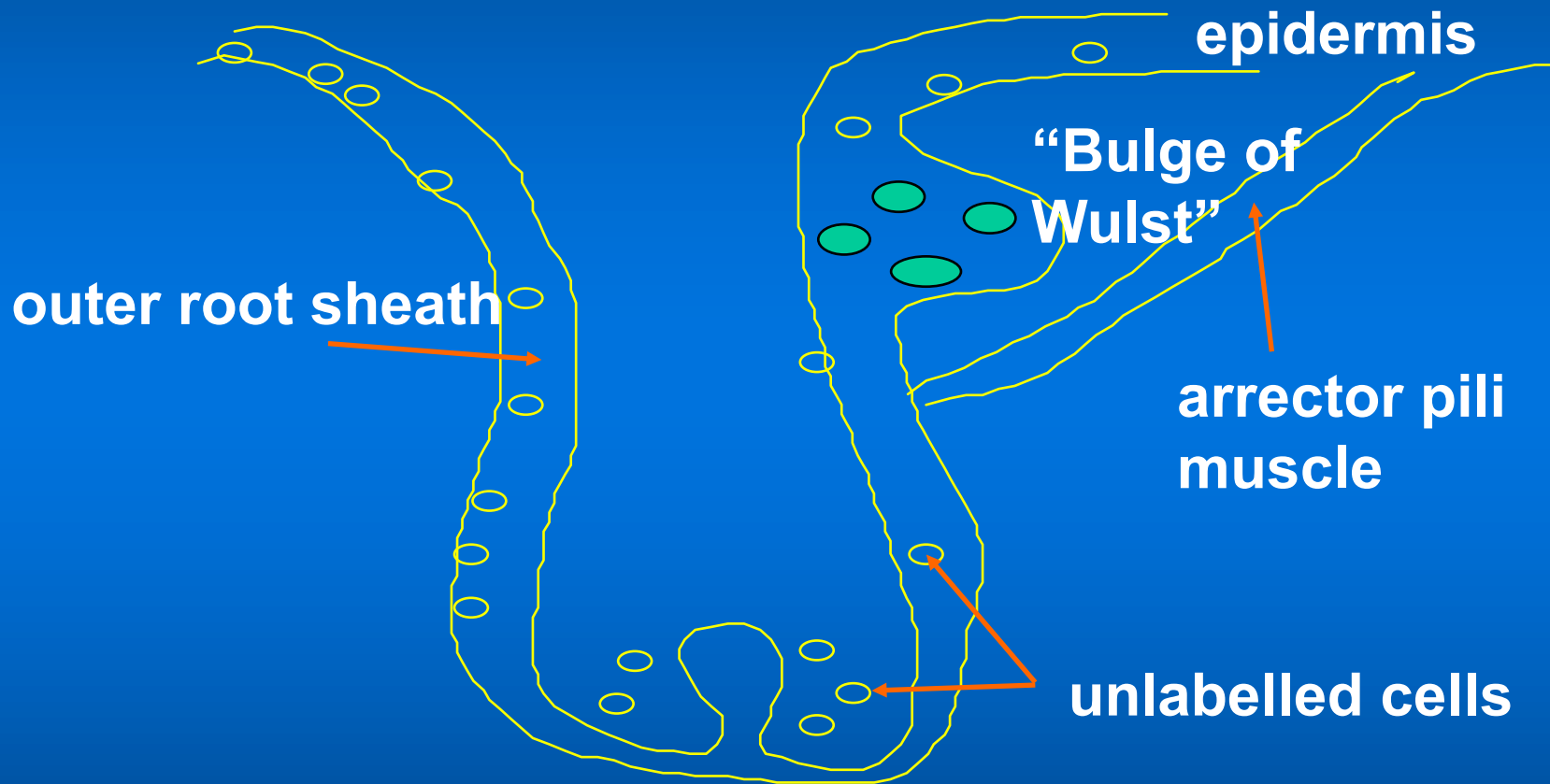
Quality

Wool



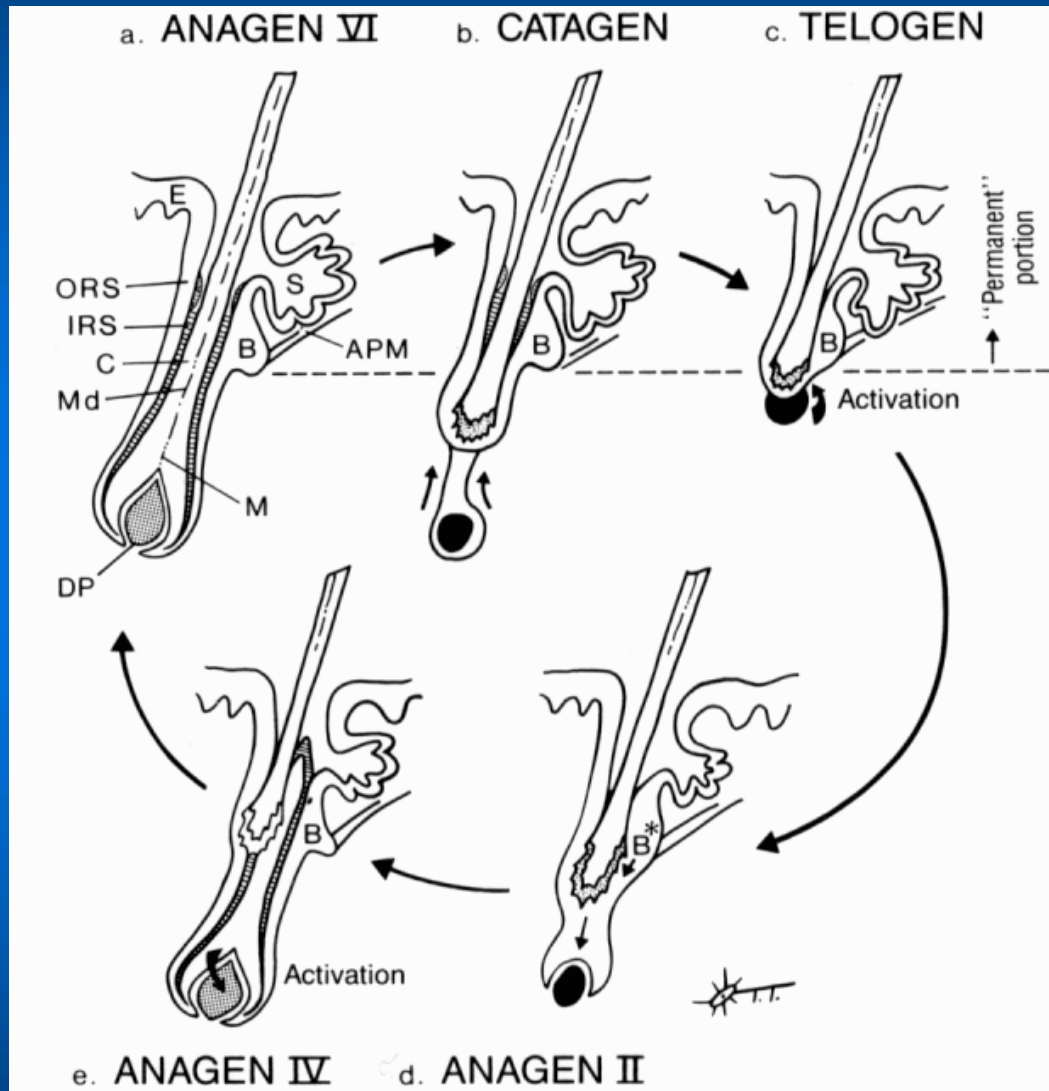
Location of hair follicle stem cells

CRC
for
Premium
Quality
Wool



no labelled cells in follicle bulb!!

'Bulge activation' hypothesis



- APM = arrector pili muscle
- B = bulge
- * = activated bulge cells
- C = cortex
- DP = dermal papilla
- E = epidermis
- M = matrix
- Md = medulla
- S = sebaceous gland

CRC
for
Premium
Quality
Wool