

## Reaction Diffusion System can Describe Follicle Initiation

Produced for the CRC for Premium Quality Wool undergraduate program by;

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## CRC

for

Premium

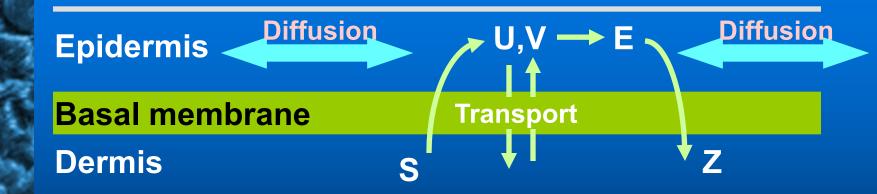
Quality

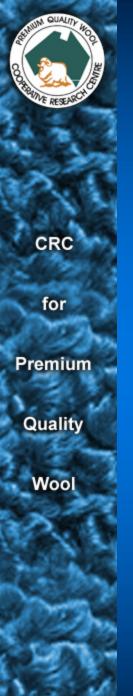
Wool

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## RD systems in the skin

- Patterns generated by RD system may regulate cellular differentiation and mitotic rates in the epidermis and dermis
  - eg if U>specific threshold
    - mitotic activity increases and epidermal cells differentiate into follicle cells





## RD system can predict most follicle patterns

- New generations of follicles
- Increasing density
- Patterns within the follicle can explain
  - growth on angles
  - sweat gland formation