



CRC

for

Premium

Quality

Wool

In vitro follicle culture

Produced for the CRC for Premium Quality Wool undergraduate program by;
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In vitro studies

- growth of follicles/fibre after removal from the animal.
- skin strips
 - short-term (hours)
- follicle culture
 - medium term (maximum 10 days)

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Follicle culture

- follicle culture model for hair and wool
- maintain growth for 7-10 days at *in vivo* rates of growth
- useful for determining
 - effects of polyamines, hormones, growth factors
 - essential nutrients for growth
 - responsive to amino acids and energy

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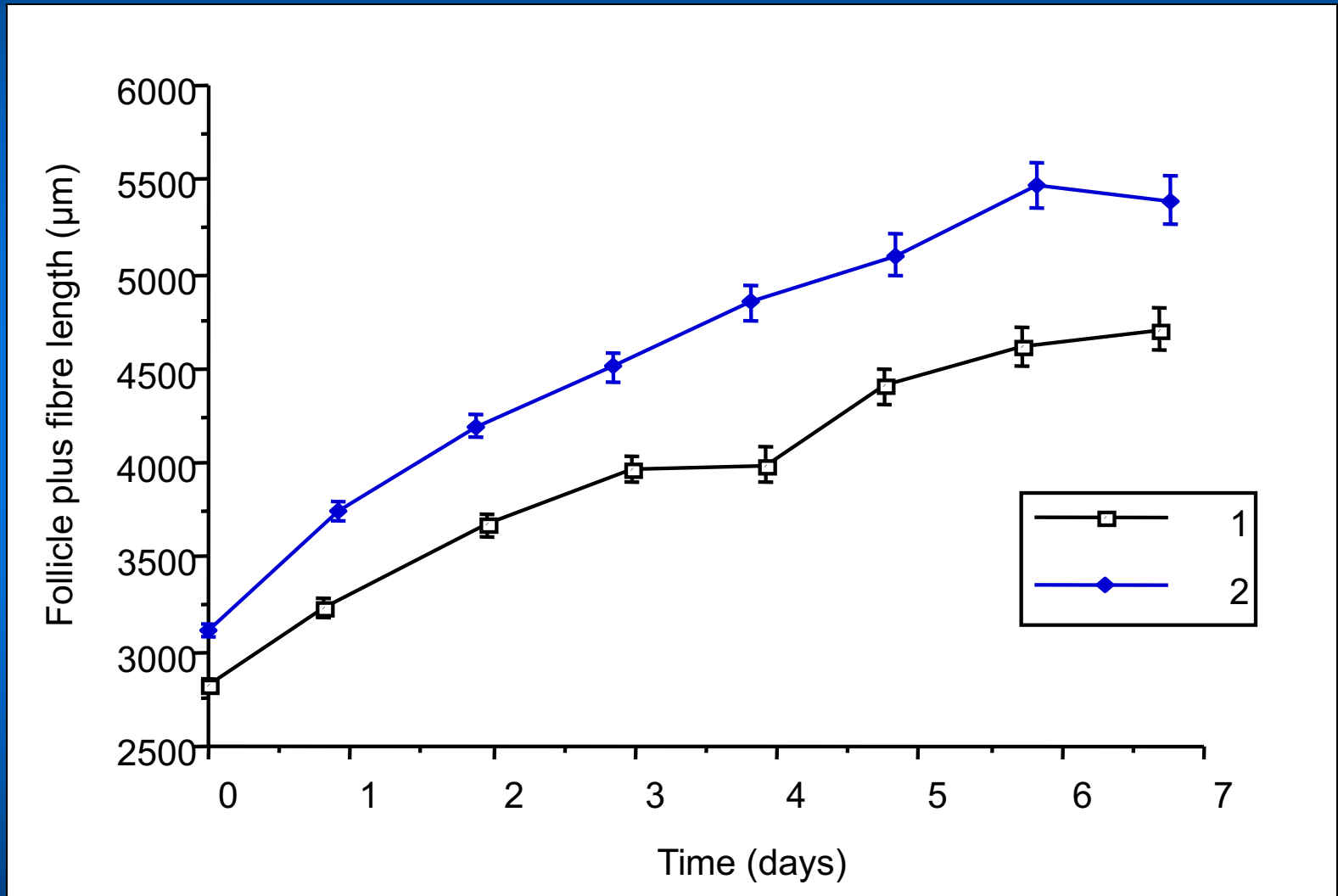
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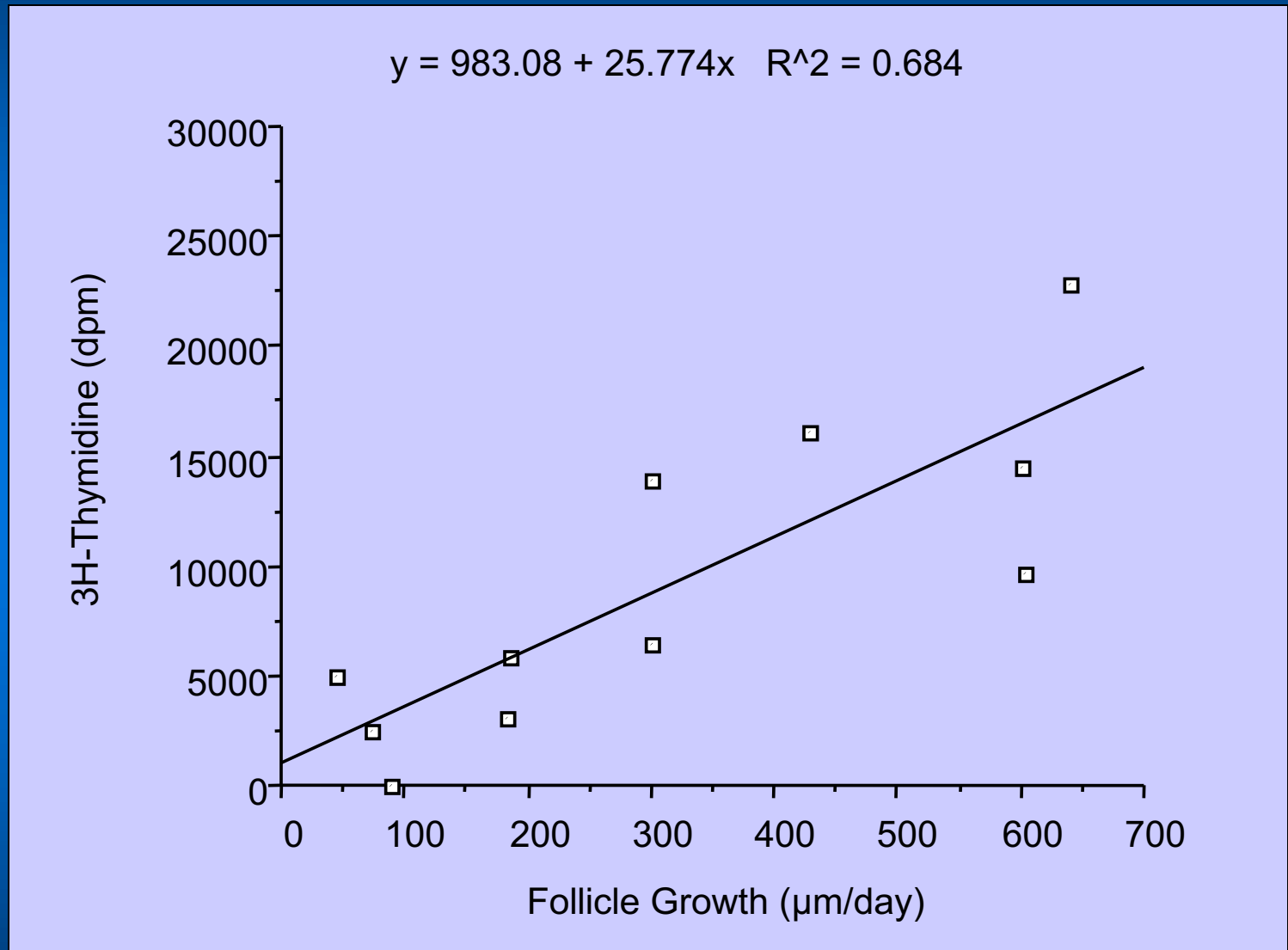


Longevity of cultured follicles





Follicular DNA synthesis *in vitro*



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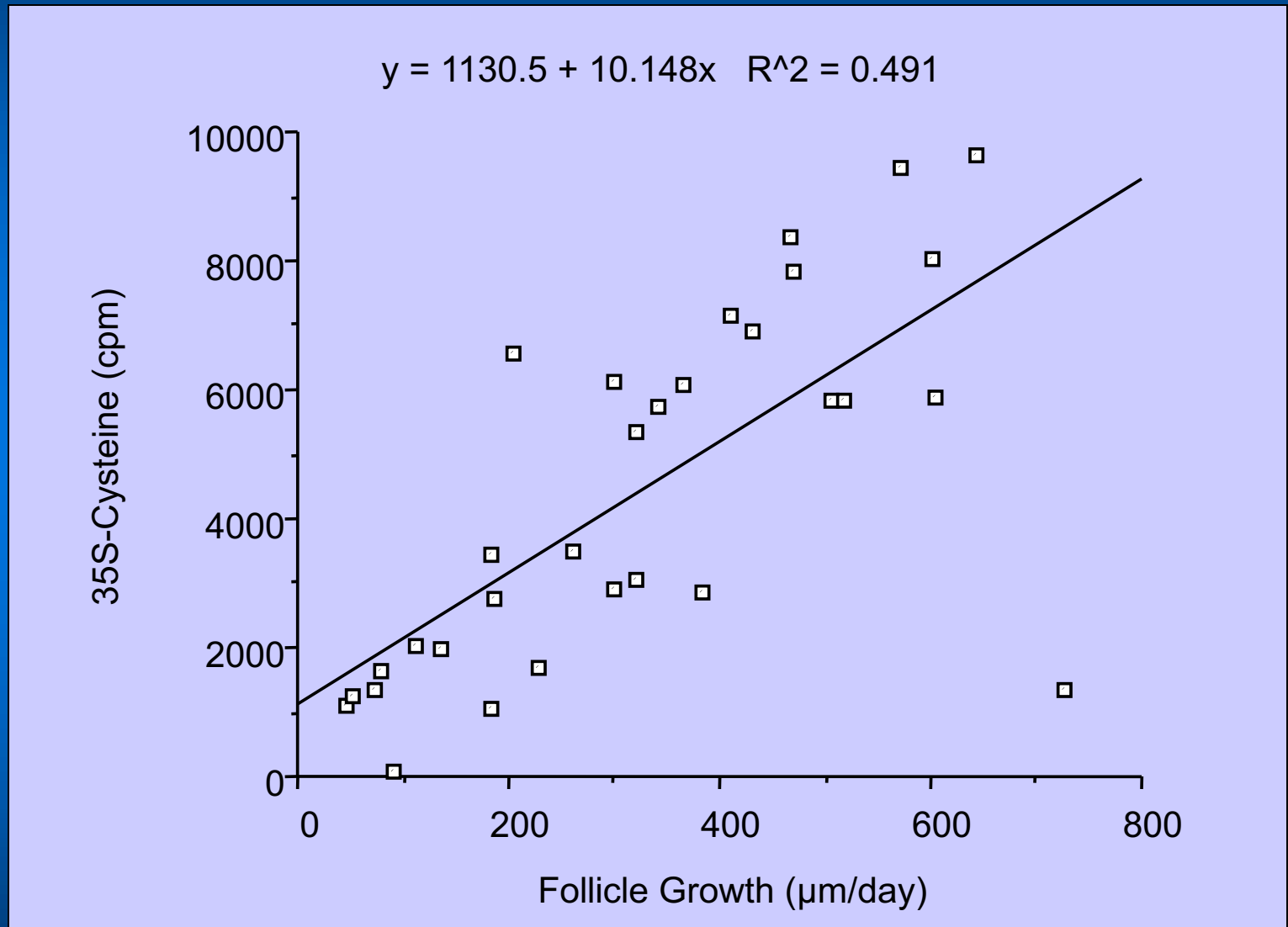
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Fibre keratinisation in culture



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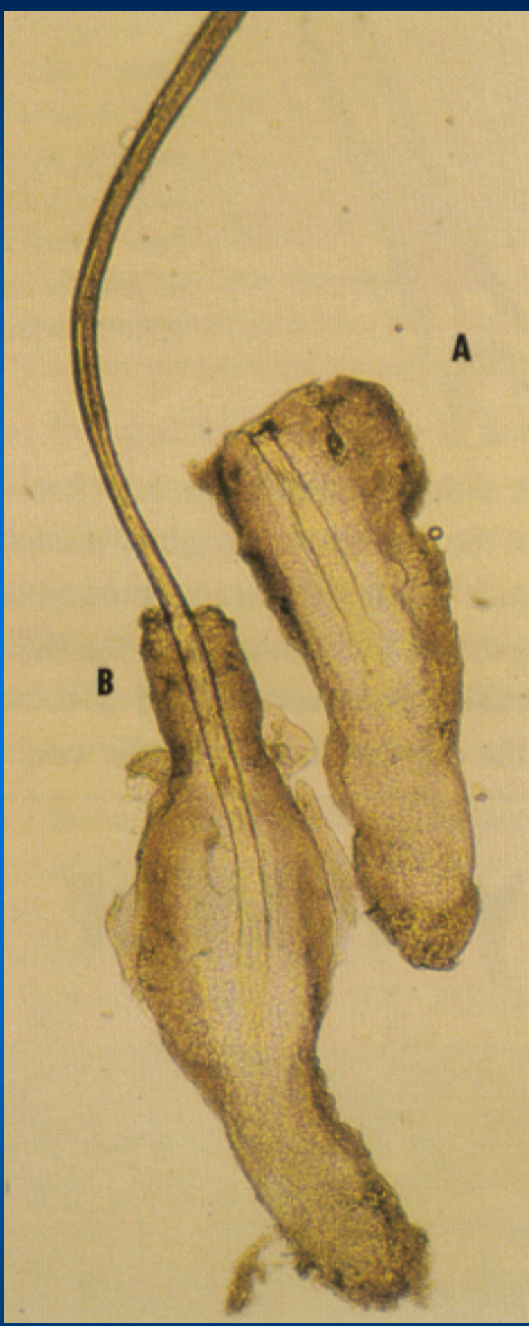
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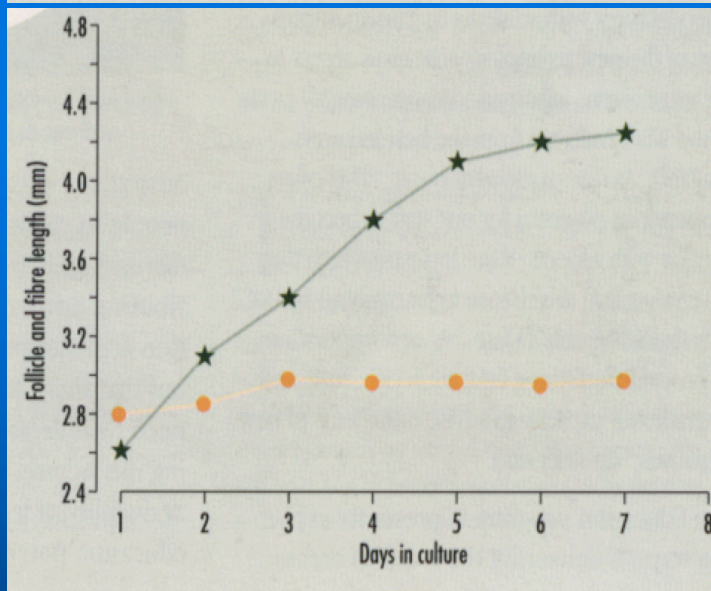
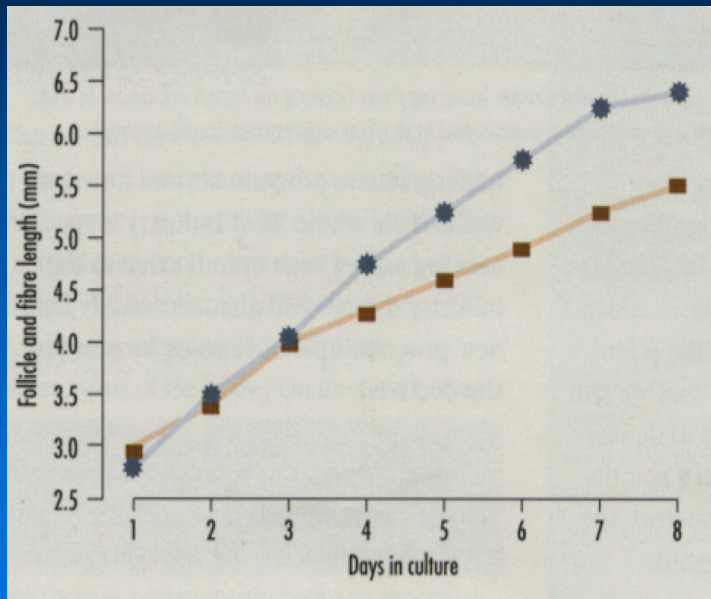
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Follicle & fibre length (mm)



Days in Culture