

British Society for Developmental Biology

TRENT PARK MEETING 5/6th SEPTEMBER 1985

Thursday 5th

New Hall

9 00am - 12 30am

Joint BSCB/BSDB Symposium on "Epithelial
maintenance and wound healing"

Session 1

Discussion Leader

John Couchman (Unilever, Colworth)

9 00 Ian Mackenzie (Iowa) "Epithelial mesenchymal interactions in wound healing"

9 30 Marilyn Baltz (Hammersmith) "Serum amyloid P component - a plasma
and tissue component"

10 00 Julia Pollack (Hammersmith) "Regulatory peptides and the skin"

10 30 Coffee

11 00 Martin Green (Unilever) "Role of the EGF receptor in epithelial maintenance"

11 30 John Couchman (Unilever) "Basement membrane function in epidermal growth
and repair"

1 00	Lunch
------	-------

2 00pm - 4 05pm

New Hall

Contributed Papers

Session 2a

2 00 G J Swanson and J H Lewis (Kings College) "Paths followed by sensory
nerve fibres in embryonic chick wings"

2 25 P P Monro and J R Shearer (Southampton) "The control of shape in
the embryonic chick epiphysis"

2 50 Karen M Bell (Oxford) "Division stimulating activity of the ZPA and AER"

3 15 D Amanze and J Cohen (Birmingham) "Maternal effects on the early development of zebra fish, *Brachydanio rerio*"

3 40 R Raizada (Kanpur) "Studies on the action of certain chemosterilands
on reproductive organs of the squirrel"

4 05 Tea

2 00 onwards

Student Union Bar

Session 2b

Poster Demonstrations

Thursday 5th

The Theatre

Mammalian Get Together

Session 3

Organiser: M H Johnson (Cambridge)

Session 1

10 30am - 1 00pm Discussion leaders: Anne McLaren and Mary Lyon

Azim Surani (Cambridge)	Pronuclear origin and development
Bruce Cattanach (Harwell)	Chromosomal imprinting
David Whittingham (Carshalton)	Functional germ cells from ethanol activated mouse oocytes
Robb Krumlauf (Mill Hill)	Transgenic mice
Sarah Howlett (Cambridge)	Cell cycle dependent synthesis of a set of proteins in the one-cell mouse embryo

Lunch

1 00 - 2 00pm

Session 2

2 00 - 4 00pm Discussion leaders: Brigid Hogan and Chris Graham

Claudio Stern (Oxford)	Somite formation and spatial organisation
Simon Hunt and Gillian Morriss-Kay (Oxford)	A new skeletal mutant in the rat
Peter Holland (Mill Hill)	Phylogenetic distribution of homoeo-box sequences
Ian Jackson (London)	The homoeo-box in mammals

Tea

4 00 - 4 30pm

Session 3

4 30 - 6 30pm Discussion leaders: Keith Willison and Marilyn Monk

Jose McConnell (Cambridge)	Probing the early mouse embryo
Philippe Brûlet (Paris)	Distribution of repetitive sequences
Nick Hastie (Edinburgh)	B2 - repetitive sequences in post-implantation development

Dinner

6 30 - 8 00pm

Session 4

8 00 - 10 30pm

Discussion leaders: Richard Gardner and Anne Warner

- | | |
|-----------------------------|--|
| Tom Fleming (Cambridge) | A new, non-invasive lineage marker |
| Sammy Lee (London) | Gap junctional interaction in mice |
| John Heath (Oxford) | Growth factors in development |
| Alan Handyside (Carshalton) | Regulation of size |
| Martin Johnson (Cambridge) | How is the timing of compaction regulated? |

Friday, 6th

New Hall

Towards a molecular basis for
morphogenetic signalling

Session 4

Organiser: R R Kay (LMB)

- | | | |
|-------|-------------------------------------|---|
| 9 30 | P C Newell (Oxford) | cAMP signalling and cell movement in <u>Dictyostelium</u> |
| 10 05 | R R Kay (LMB) | <u>Dictyostelium</u> morphogens |
| 10 45 | Coffee | |
| 11 15 | S Hoffmeister (Heidelberg) | <u>Hydra</u> head peptides and other morphogens |
| 11 50 | W Müller (Heidelberg) | Retinoic acid and morphogens in <u>Hydra</u> |
| 12 25 | S Keeble and M Maden (NIMR, London) | Evidence for the presence of
cytoplasmic retinoic acid binding proteins in
amphibian limb tissues, and their possible
role in regeneration |

(Abstract in Session 5).

1 00 Lunch

- | | | |
|------|----------------------------|---|
| 2 05 | M Wilcox (LMB) | <u>Drosophila</u> position-specific antigens |
| 2 40 | P Ingham (ICRF, Mill Hill) | Localisation of transcripts of segmentation
genes in <u>Drosophila</u> |

- 3 15 D Hames (Leeds) Cell type specific gene expression in Dictyostelium
- 3 50 Tea
- 4 20 J G Williams (ICRF) Developmental gene expression in Dictyostelium
- 4 55 J B Gurdon (Cambridge) Cytoplasmic specification in amphibian eggs

Friday, 6th

The Theatre

Session 5

Pattern formation and limb development

Organisers: J R Hinchliffe and D Summerbell

Chairman: D Summerbell

- 9 ¹⁵~~00~~ S A Newman (Valhalla, New York) Matrix dynamics and the developing limb

1) Molecular aspects of limb development

- 9 30 S Keeble and M Maden (Mill Hill, London) ~~Evidence for the presence of cytoplasmic retinoic acid binding proteins in amphibian limb tissues, and their possible role in regeneration~~

Transfer to Session 4.

- 9 45 J Lee and C Tickle (Middlesex Hospital Medical School, London) The early effects of retinoic acid on the outgrowth of chick wing buds

- 10 00 S Wilde (Mill Hill, London) Location and metabolism of ara-C after administration to early limb bud stage chick embryos

- 10 15 J A Bee (Royal Veterinary College, London) Cell-cell interactions during prechondrogenic condensation

- 10 30 C P Cottrill (Middlesex, London) and P T Sharpe (Sheffield) The application of aqueous two-phase partition to the study of chick limb bud

10 45 - 11 15 - COFFEE

Chairman: C Tickle

2) Cellular aspects of limb development

- 11 15 K Muneoka (Univ. of California, Irvine, USA) Cellular contribution and pattern formation in amphibian limbs

- 11 45 C W Archer (Institute of Orthopaedics, Stanmore), M T Bayliss (Kennedy Institute, London) and C P Cottrill (Middlesex, London) Proteoglycan synthesis by populations of limb mesenchyme cells in vitro

- 12 00 K K H Lee and D A Ede (Glasgow) Evidence of chick limb myogenic cell movement using autoradiography
- 12 15 P Martin and J Lewis (King's College, London) Normal development of the skeletal pattern in chick wing buds denuded of dorsal ectoderm from an early stage
- 12 30 P Rooney (St Andrews) and C W Archer (Stanmore) Cell proliferation in the developing ulna of the chick embryo

12 45 - 2 00 LUNCH

Chairman: J R Hinchliffe

3) Experimental aspects of limb development

- 2 00 V French and T Rowlands (Edinburgh) The insect limb and the rest of the thoracic segment
- 2 15 L Wolpert and A Hornbruch (Middlesex, London) Positional signalling does not account for the development of the humerus: evidence for an isomorphic prepattern model
- 2 30 G Müller (Vienna, Austria) Ancestral muscle patterns in the chick hind limb
- 2 45 N G Stephens and N H K Holder (King's College, London) How may a specific pattern of neuromuscular connections be reformed?
- 3 00 R V Stirling and D Summerbell (Mill Hill, London) The innervation of duplicated chick wings

3 30 - 4 00 TEA

Chairman: M Maden

4) General aspects of pattern in the limb

- 4 00 B K Hall (Halifax, Canada) Critical periods, growth rate and atavisms in limb development and evolution
- 4 25 J M Hurle and Y Gañan (Badajoz, Spain) Interdigital tissue chondrogenesis induced by surgical removal of the ectoderm in the embryonic chick leg
- 4 40 B C Goodwin and H Sawitzki (Open University) Modelling the frequency of supernumerary limbs
- 4 55 T H Horder and M Reeve (Oxford) Aspects of the evolution of the pentadactyl limb

From newsletters

AUTUMN 1985 Dates and venue to be confirmed. Topics will include

- Pattern formation
- Limb development
- Mammalian Development
- Cell Recognition
- Slime mould development

AUTUMN 1985 LONDON

This will also be a joint meeting with the BSCB. It will be held on September 5th and 6th at Middlesex Polytechnic, Trent Park, in North London.

Topics

Thursday 5th - "Wound Healing" organizers J. Couchman and B. Hogan.
- "Mammalian Development" organizer Martin Johnson
Friday 6th - "Cell recognition" organizer R. Kay.
- "Limb development and patterning" organizers D. Summerbell and R. Hincliffe.

The BSCB component of the meeting will be as follows:-

"The Extracellular Matrix: receptors, genes and signals" - Organizers B. Hogan and C. Hughes. 1 - 5 September, 1985

Topics

Molecular genetic analysis of matrix components, receptors for matrix molecules, cell adhesion molecules and neural development, matrix modifications in development and neoplasia, epithelial maintenance and wound healing.

Speakers

F. Barelle (Oxford), B. Olsen (Rutgers), Y. Courtois (Paris), M. Pope (London), J. Couchman (Bedford), E. Ruoslahti (La Jolla), G. edelman (New York), M. Sumper (Regensburg), D. Edgar (Munich), C. Tickle (London), M. Johnson (Cambridge), R. Timpl (Munich), P. Liesi (Mill Hill), R. Trelstead (Rutgers), K. Von der Mark (Munich), A. Vaheri (Helsinki).

The meeting will be limited to 150 participants. In addition to talks by invited speakers, time will be available for short free communications and posters. Applications should be sent, including title of proposed free communication or poster, to either organiser BEFORE 1st April, 1985. The registration fee is £20 for BSCB members or £25 for non-members. Full board and accommodation is £20 per day.

1) BSDB/BSCB Autumn Meeting, Trent Park 5th and 6th September, 1985

Trent Park is a conference centre, part of Middlesex Polytechnic, just North of London. This two day meeting will follow the BSCB Meeting on 2nd-4th September. (Details below).

Thursday 5th

(i) Joint BSCB/BSDB Symposium on "EPITHELIAL MAINTENANCE AND WOUND HEALING" Organiser: John Couchman (Unilever). Speakers include: I. Mackenzie (Iowa), M. Pepys, J. Polack (Hammersmith), M. Green (Unilever).

(ii) "MAMMALIAN DEVELOPMENT". Organiser: Martin Johnson (Cambridge).

This discussion meeting will be in four sessions. Topics and speakers include:

Repeat sequences in development - P Brulet (Paris), N. Hastie (Edinburgh), C. Watson (London), J. McConnell (Cambridge).

Homoeo-boxes and somites - I. Jackson (London), B. Hogan (Mill Hill), G. Morriss-Kaye (Oxford), R. Keynes (Cambridge), C. Stern (Oxford).

Imprinting - Azim Surani (Cambridge)

Cell Interactions - S. Lee (London), J. Heath (Oxford), A. Handyside (Carshalton).

Transgenic Mice - Robb Krumlauf (Mill Hill).

Cycling proteins - S. Howlett (Cambridge).

Cell lineages - R. Beddington (Oxford).

Also taking part:- Chris Graham, Richard Gardner, Marilyn Monk, Anne Warner, Anne McLaren and many others.

Discussion is informal, everyone welcome. Further enquiries to Martin Johnson, Anatomy Dept., Downing Street, Cambridge, CB2 3DY.

N.B. Members are invited to contribute papers and posters for this meeting. Please send abstracts (before 7th July) to: Mike Snow, MRC Mammalian Devt. Unit, 4 Stephenson Way, London, NW1 2HE.

The BSCB Meeting at Trent Park immediately precedes ours, and begins on Monday 2nd Sept. 1985.

Sessions Include:

Molecular and genetic analysis of matrix components
Cell surface receptors for matrix components
Matrix modification in development and neoplasia.

Registration forms for the BSCB meeting are available from: Colin Hughes, NIMR, The Ridgeway, Mill Hill, London NW7 1AA.