

# SOCIETY FOR EXPERIMENTAL BIOLOGY SOCIETY FOR DEVELOPMENTAL BIOLOGY

## SYMPOSIUM 25

### CONTROL MECHANISMS OF GROWTH AND DIFFERENTIATION

This Symposium will be the One-hundred and Sixtieth Conference of the Society for Experimental Biology. It will be held in conjunction with the Society for Developmental Biology at Eliot College, University of Kent, Canterbury, and Wye College (University of London) Wye, Ashford, Kent from Monday, 7th September to Friday, 11th September 1970, inclusive.

Mr. T. W. J. Wright, of the Department of Horticulture, Wye College, has kindly consented to act as Local Secretary for the Meeting.

**Lectures:** Papers will be read at Eliot College (**except on Wednesday when they will be read at Wye College**).

**Admission:** There will be no admission fee for members of the Societies or for speakers. Non-members must pay an admission fee of £2 10s. 0d. which includes morning coffee and afternoon tea. Non-members who wish to join the Societies should contact one of the Hon. Secretaries.

**Accommodation and Meals:** Owing to major re-organisation of kitchen facilities at Wye College, accommodation throughout the Symposium will be at Eliot College, Canterbury. Accommodation is in approximately 120 single rooms. There are basins and razor points in all bedrooms. Bed linen, soap and towels are supplied. The charge for bed and full board is £3 5s. 0d. per day per person. A bar will be available. A buffet supper will be provided for Members arriving on Sunday night. A Symposium Common Room has been reserved for the duration of the Conference where Members can meet informally.

**Car Parking:** Space is available in the precincts of the University.

**Symposium Dinner and Reception:** The Symposium Dinner will be held at Eliot College on Tuesday, 8th September at 7.00 p.m. A reception will be held at Wye College before lunch on Wednesday, 9th September.

**The Symposium Office** will be located in Eliot College.

**Excursions:** Two excursions are proposed during the Symposium.

**Monday afternoon, 7th September:—**

Tour of historic Canterbury, visiting the Cathedral and precincts and other places of interest with tea to be taken in the City. Total cost, including tea, 15s.

**Wednesday Afternoon and Evening, 9th September:—**

Two alternative excursions by coach are proposed as follows:

- (a) Great Dixter, Northiam (Historic Country House and Garden—by kind permission of Mr. Christopher Lloyd). Rye (Ancient Cinque Port). Tea at Rye.
- (b) Dover Castle and early Roman buildings. Tea at Folkestone.

**Buffet Supper:** It is proposed that both groups will join for an evening meal at historic Lympne Castle (by kind permission of Mr. H. Margery) overlooking Romney Marsh and the English Channel. Total cost of either excursion, including Buffet Supper, £3 0s. 0d. (excluding wines). Those who wish to omit the excursion but would like to attend the Buffet Supper will have to make their own way to Lympne Castle.

**Reservations:** If you wish to attend this Symposium, please fill in **both** the enclosed booking forms to indicate your requirements and return to the Local Secretary **by 10th August 1970**.

**Bookings for accommodation and meals and excursions must be accompanied by payment in full.**

**Instructions for reaching Eliot College, Canterbury and Wye College, Wye** will be sent to those returning the booking forms, together with an acknowledgement of requirements ordered on the booking forms.

*Meetings of the Society are private and must not be reported in the Press without permission of the authors and of the Council.*

D. D. DAVIES } *Symposium Convenors*  
M. A. SLEIGH }  
P. J. SYRETT *Symposium Secretary,*

The Hon. Secretaries of the S.E.B. are:

B. C. LOUGHMAN,

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The Hon. Secretary of the S.D.B. is:

F. S. BILLETT,

Department of Zoology,  
University of Southampton.

Details of membership may be obtained from the Hon. Secretaries.

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## PROGRAMME

### Monday, 7th September, 1970

*Chairman:* Professor A. S. G. CURTIS

9.00 B. C. GOODWIN (Sussex): A model of early amphibian development.

9.55 J. MANDELSTAM (Oxford): Recurring patterns in development in primitive organisms.

10.50 Coffee.

11.10 D. H. NORTHCOTE (Cambridge): Organisation of structure, synthesis and transport within the plant during cell division and growth.

12.10 J. M. ASHWORTH (Leicester): Cell development in the cellular slime mould, *Dictyostelium discoideum*.

1.00 Lunch.

Afternoon excursion.

4.30 Discussion: Slime mould development.

*Chairman:* Dr. F. H. C. CRICK

7.30 M. H. COHEN (Chicago). Models for the control of development.

8.30 R. W. HORNE (Norwich): Electron microscopy applied to the study of components assembled to form complex biological structures.

**Tuesday, 8th September, 1970**

*Chairman: Professor B. EPHRUSSI*

- 9.00 C. F. GRAHAM (Oxford): The effect of cell patterns on nucleic acid and protein synthesis in mammalian early development.
- 10.00 A. MONROY (Naples): Control mechanisms of protein synthesis in the unfertilised egg and in early development of sea urchins.
- 11.00 Coffee.
- 11.30 J. R. TATA (M.R.C. Mill Hill): Hormonal control of metamorphosis.
- 1.00 Lunch.

*Chairman: Dr J. B. GURDON*

- 2.00 H. D. BERENDES (Nijmegen): Gene activation in dipteran polytene chromosomes.
- 3.00 RU. C. C. HUANG (Baltimore): Chromosomal RNA: structure and possible functions.
- 4.00 Tea.
- 4.30 J. PAUL (Glasgow): Transcriptional regulation in mammalian chromosomes.

**Wednesday, 9th September, 1970 (At Wye College).**

*Chairman: Professor H. E. STREET*

- 9.30 J. E. VARNER (East Lansing): Control of enzyme formation in plants.
- 10.30 Coffee.
- 11.00 F. SKOOG (Madison): Cytokinins: structure, localization and function in plant growth and development.
- 12.00 P. F. WAREING (Aberystwyth): The control of differentiation in the whole plant.
- 1.00 Reception.
- 1.30 Lunch.

Afternoon excursion.

**Thursday, 10th September, 1970**

*Chairman: Professor L. WOLPERT*

- 9.00 W. W. SCHWABE (Wye, U. of London): Chemical modifications of phyllotaxis and its implications.
- 9.50 J. A. HESLOP-HARRISON (Madison): Cellular interactions and pattern formation in sporogenesis.
- 10.45 Coffee.
- 11.05 W. S. BULLOUGH and J. U. R. DEOL (London): The pattern of tumour growth.
- 12.05 D. A. EDE (Edinburgh): Control of form and pattern in the vertebrate limb.
- 1.00 Lunch.

*Chairman: Professor H. GRUNEBERG*

- 2.00 L. WOLPERT (London): Pattern regulation and positional information.
- 3.00 B. MINTZ (Philadelphia): Clonal basis of mammalian differentiation.
- 4.00 Tea.
- 4.20 P. LAWRENCE (Cambridge): The insect segmental gradient.
- 5.15 F. H. C. CRICK (Cambridge): A basic theory of the scale of pattern formation.
- 7.30 Meeting for discussion.

**Friday, 11th September, 1970**

*Chairman:* Professor D. R. NEWTH

- 9.00 H. TIEDEMANN (Berlin): Intrinsic and extrinsic information transfer in early differentiation of amphibian cells.  
9.55 L. SAXEN (Helsinki): Inductive interactions in kidney development.  
10.50 Coffee.  
11.15 E. BELL (M.I.T.): The role of informational DNA in differentiating cells.  
12.15 Annual General Meeting of the Society for Developmental Biology.  
1.00 Lunch.

**SYNOPSIS OF PROGRAMME**

- Sunday 6th, 5.00—7.00 p.m. Arrival at Eliot College:  
7.00—8.00 p.m. Buffet Supper  
8.30 p.m. Informal Reception/Bar
- Monday, 7th, 8.30 a.m. Breakfast  
9.00 a.m. Morning Session  
1.00 p.m. Lunch  
2.00—4.00 p.m. Tour of Canterbury  
4.30 p.m. Discussion meeting  
6.30 p.m. Dinner  
7.30 p.m. Evening Session
- Tuesday 8th, 8.00 a.m. Breakfast  
9.00 a.m. Morning Session  
1.00 p.m. Lunch  
2.00 p.m. Afternoon Session  
4.00 p.m. Tea  
4.30 p.m. Afternoon Session (continued)  
7.00 p.m. Symposium Dinner
- Wednesday 9th, 8.00 7.45 a.m. Breakfast  
8.30 a.m. Coach leaves for Wye  
9.30 a.m. Morning Session  
1.00 p.m. Reception  
1.30 p.m. Lunch  
2.15 p.m. Excursions A and B depart  
7.00 p.m. Reception and Buffet Supper at Lympne Castle  
10.00 p.m. Return to Eliot College
- Thursday 10th, 8.30 8.00 a.m. Breakfast  
9.00 a.m. Morning Session  
1.00 p.m. Lunch  
2.00 p.m. Afternoon Session  
4.00 p.m. Tea  
4.20 p.m. Afternoon Session (continued)  
6.30 p.m. Dinner  
7.30 p.m. Special Discussion Meeting
- Friday 11th, 8.00 8.00 a.m. Breakfast  
9.00 a.m. Morning Session  
12.15 p.m. A.G.M. of Society for Developmental Biology  
1.00 p.m. Lunch