

## Lectures proposed by the Boards of the Faculties of Earth Sciences and Geography, Physics and Chemistry, Biology, and Mathematics, and the Board of History and Philosophy of Science

For particulars of the University Composition Fee and of the fees payable for attendance at separate courses of lectures see p. 2.

### MEDICAL AND VETERINARY SCIENCES TRIPOS, PART IA

#### *Introduction to the Course*

W. 12 (7 Oct.) Professor Sir Keith Peters and Dr A. L. R. Findlay (Medical Students) *Anatomy Lecture Theatre*  
W. 12 (7 Oct.) Mr J. Grandage and Professor L. B. Jeffcott (Veterinary Students) *Biffen Lecture Theatre*

MICHAELMAS 1998

LENT 1999

EASTER 1999

#### ANATOMY (Medical Students)

#### *At the Anatomy School unless otherwise stated*

Course Organiser: Dr R. E. J. Dyball E-mail: red1000@cus.cam.ac.uk

#### Lectures. M. F. 9

DR I. G. PARKIN  
Introduction and Course Aims (One lecture, 9 Oct.)  
PROF. M. H. JOHNSON  
Ethics and Attitudes in Anatomy (One lecture, 12 Oct.)  
DR I. G. PARKIN  
Principles of Body Systems (Four lectures, 16, 19, 23 Oct., 16 Nov.)  
DR S. EDGLEY  
Limbs (Four lectures, 26, 30 Oct., 2, 6 Nov.)  
DR I. G. PARKIN  
Vertebral Column, Posture, Gait and Nerve Injuries (Two lectures, 20, 27 Nov.)  
MR R. H. WHITAKER  
Lymph Drainage and Breast. Thyroid Gland (Two lectures, 23, 30 Nov.)

#### Special Periods

PROF. M. H. JOHNSON, DR R. J. KEYNES AND OTHERS  
Basic Sciences in Clinical Problems W. 9 (One Symposium, 14 Oct.)

DR I. G. PARKIN  
Clinical Demonstration. 3 Dec. 10–12 or 2–4

#### Practical Work

Dissection and Prosections\*. Times according to options.  
Allocation of Places. 7 Oct. at 10  
Introduction. 8 Oct. 10–12 or 9 Oct. 2–4.  
Anatomy of Procedures: W. 10–12 or 2–4 (fortnightly)

#### Lectures. M. F. 9

MR R. H. WHITAKER  
Cranial Cavity and Nerves (Two lectures, 15, 18 Jan.)  
DR S. J. BRAY  
Embryology and Body Form: Head, Thorax and Abdomen (Four lectures, 22, 25 Jan., 15, 22 Feb.)  
DR I. G. PARKIN  
Upper Respiratory and Digestive Systems (Five lectures, 29 Jan., 1, 5 Feb., 1, 5 Mar.)  
DR G. J. BURTON  
Lower Respiratory and Cardiovascular Systems (Two lectures, 19, 26 Feb.)  
MR R. H. WHITAKER  
Urinary System (One lecture, 8 Mar.)

#### Special Periods

DR I. G. PARKIN, DR R. J. BARNES, DR N. CARY AND DR L. SHAPIRO  
Coronary Arterial Disease W. 9 (One Symposium, 24 Feb.)

DR I. G. PARKIN  
Clinical Demonstration. 12 Mar. 2–4

#### Practical Work

Dissection and Prosections\*  
  
Anatomy of Procedures: The same continued

#### Lectures. M. F. 9

MR R. H. WHITAKER  
Urinary and Faecal Continence. Male Reproductive System (Three lectures, 23, 26, 30 Apr.)  
DR I. G. PARKIN  
Female Reproductive System. Anterior Abdominal Wall and Inguinal Region (Three lectures, 3, 7, 10 May)

#### Practical Work

Dissection and Prosection\*  
  
Anatomy of Procedures: The same continued

\* = The Dissection Room is available to students between 10 and 12; and 2 and 4, and students should attend in accordance with their options.

**MEDICAL AND VETERINARY SCIENCES TRIPOS, PART IA (continued)**

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**VETERINARY ANATOMY** (Veterinary Students)*In the Biffen Lecture Theatre, Department of Genetics, unless otherwise stated*

Course Organiser: Mr J. Grandage E-mail: jg3@mole.bio.cam.ac.uk

**Lectures.** M. W. F. 9DR D. J. CHIVERS, MR J. GRANDAGE AND  
PROF. L. B. JEFFCOTTIntroduction to the Veterinary Course W. 12 (One  
lecture, 7 Oct.)Domestic Animals in Perspective (One lecture, 9 Oct.)  
(DJC)

Introduction to Anatomy (One lecture, 12 Oct.) (JG)

DR J. H. BRACKENBURY, DR D. J. CHIVERS, MR J. GRANDAGE  
AND DR J. M. HOLMESThe Locomotor System (Twelve lectures, 14, 16, 19, 21,  
23, 26, 28, 30 Oct., 9, 11, 13, 16 Nov.)PROF. W. A. HARRIS, DR P. SCHOFIELD AND DR D. TANNAHILL  
Developmental Biology (Four lectures 2, 4, 6, 18 Nov.)

DR J. M. HOLMES

The Nervous System (Six lectures, 20, 23, 25, 27, 30 Nov.,  
2 Dec.)**Practical Work**Dissection of the domestic animals, examination of live  
animals, fresh viscera, radiographs, laboratory work  
and other activities. (Tu. and Th. 10-12 and  
F. 10-12 or 2-4 and occasionally Tu. or Th. 2-4  
(*In the Veterinary Dissecting Room and other venues*)**Lectures.** M. W. F. 9

DR J. M. HOLMES

The Nervous System (continued – two lectures,  
15, 18 Jan.)DR S. J. BRAY, DR J. H. BRACKENBURY,  
MR J. GRANDAGE AND DR J. M. HOLMESThe Cardiovascular System (Seven lectures,  
20, 22, 27, 29 Jan., 1, 3, 5 Feb.)

DR J. H. BRACKENBURY

The Respiratory System (Four lectures,  
8, 10, 15, 17 Feb.)

DR D. J. CHIVERS

The Digestive System (Five lectures,  
22, 24 Feb., 1, 3, 8 Mar.)**Practical Work**

The same continued

**Lectures.** M. W. F. 9

DR D. J. CHIVERS

Digestive System (continued – three lectures,  
23, 26, 28 Apr.)

DR S. J. BRAY AND MR J. GRANDAGE

The Urinary System (Three lectures,  
3, 5, 10 May)**Practical Work**

The same continued

**SECOND M.B. EXAMINATION****POPULATION SCIENCES**

Course organiser: Dr T. Davies E-mail: twd10@medschl.cam.ac.uk

**Lectures**

M. 12 (9, 16, 23, 30 Nov.)

F. 12 (13, 20, 27 Nov., 4 Dec.)

*Department of Anatomy Lecture Theatre*

DR T. W. DAVIES AND INVITED LECTURERS

**Lectures**

M. 12 (18, 25 Jan., 1, 8, 15, 22 Feb., 1, 8 Mar.)

F. 12 (15, 22, 29 Jan., 5, 12, 19, 26 Feb., 5 Mar.)

**SECOND VET.M.B. EXAMINATION****ANIMAL HUSBANDRY, AGRICULTURAL ECONOMICS AND ANIMAL BEHAVIOUR**

(Veterinary Students)

**Lectures**DR S. S. LLOYD, \*DR M. A. HOLMES, DR C. J. C. PHILLIPS AND  
OTHERSAnimal Husbandry and Agricultural Economics (Twelve  
lectures). M. 12 (26 Oct., 2, 9, 16, 23, 30 Nov.)

F. 12 (30 Oct., 6, 13, 20, 27 Nov., 4 Dec.)

*Biffen Lecture Theatre***Lectures**

\*PROF. D. M. BROOM

Animal Behaviour (Ten lectures).

M. 12 (18, 25 Jan., 1, 8, 15 Feb.)

F. 12 (15, 22, 29 Jan., 5, 12 Feb.)

*Biffen Lecture Theatre*

\* Course Organisers. Dr Holmes telephone no. 37636 or 37632, Professor Broom telephone no. 37697 or 37632.

**ANIMAL HANDLING AND HUSBANDRY** (Veterinary Students)All first year veterinary students are strongly advised to attend the practical course in Animal Handling and Husbandry held at the *Department of Clinical Veterinary Medicine* from M. 7 Dec. to Th. 10 Dec. 1998. There is also the opportunity to attend a two-week course in Livestock Management at the Berkshire College of Agriculture during the summer vacation.

## MEDICAL AND VETERINARY SCIENCES TRIPOS, PART IA (continued)

MICHAELMAS 1998

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EASTER 1999

### BIOCHEMISTRY

Course Co-ordinator: Dr P. H. Rubery E-mail: phr2@cam.ac.uk

#### Biochemistry

**Lectures.** Tu. Th. 9, S. 10.30 *Department of Physiology*  
 DR A. R. C. RAINE  
 Macromolecules of life: how proteins and enzymes work  
 (Eleven lectures, 8–31 Oct.)  
 DR P. H. RUBERY  
 Carbohydrate and lipid metabolism; interconversion of  
 molecules; breakdown, build-up and integrated  
 control (Nine lectures, 3–21 Nov.)  
 DR I. ARKIN  
 Membranes and transmembrane signalling  
 (Four lectures, 24 Nov.–1 Dec.)

**Practical Work** *Department of Genetics, top floor*  
 M. or Tu. or W. or Th. or F. 10 (Four hours)

#### Biochemistry

**Lectures.** Tu. Th. 9, S. 10.30 *Department of Physiology* unless otherwise stated  
 DR C. J. R. THORNE  
 Bioenergetics: energy from metabolism  
 (Four lectures, 14–21 Jan.)  
 The metabolism of several important  
 molecules that contain nitrogen  
 (Four lectures, 23–30 Jan.)  
 Nutrition: foods, fuels and their fate (Three  
 lectures, 2–6 Feb., **Medical Students**)  
 MRS P. J. WATSON  
*Department of Biochemistry, Downing Site building*  
 Veterinary nutrition (Three lectures, 2–6 Feb.,  
**Veterinary Students**)  
 DR N. M. STANDART  
 The genetic code: its molecular nature,  
 creation and expression as protein  
 (Five lectures, Feb. 9–18)  
 DR R. J. JACKSON  
 The control of gene expression: how this  
 allows life as we know it (Four lectures,  
 20–27 Feb.)  
 DR I. ARKIN  
 Membrane biogenesis and the way proteins  
 cross the membrane barriers  
 (Four lectures, 2–9 Mar.)

**Practical Work** *Department of Genetics, top floor*  
 The same continued

#### Medical Genetics

**Lectures.** Tu. Th. 9, S. 10.30 *Department of Physiology* unless otherwise stated  
 DR J. BARRETT, DR D. M. CARRINGTON AND  
 DR D. W. MACDONALD  
 Medical and biochemical genetics (Twelve  
 lectures, 22 Apr.–8 May; some of these  
 lectures, for **Veterinary Students**, will be  
 held in the *Department of Biochemistry, Downing Site Building*)

**Practical Work** *Department of Genetics, top floor*  
 The same continued

### PATHOLOGY

(Medical and Veterinary Students who previously offered Physiology in Natural Sciences Tripos Part IA)  
 The timetable for Pathology is given under MVST Part IB, (page 177)

### PHYSIOLOGY

Course organizer: Dr R. H. S. Carpenter E-mail: rhsc1@cam.ac.uk

**Lectures.** Tu. Th. S. 12 *Babbage Lecture Theatre*  
 DR R. H. S. CARPENTER  
 Cellular electrophysiology and nerve (Eight lectures,  
 8–24 Oct.)  
 DR C. L-H. HUANG  
 Physiology of muscle (Six lectures, 27 Oct.–7 Nov.)  
 DR R. J. BARNES  
 Cardiovascular system and autonomic nervous system  
 (Ten lectures, 10 Nov.–1 Dec.)

**Practical Work**  
 Experimental physiology. M. or W. or F. 10–12 (1) or  
 M. 2–4 (5)  
 The first two weeks, Experimental classes will last for  
 three hours.  
 Histology. M. 10–12 or 2–4 or W. 2–4 or F. 2–4

**Lectures.** Tu. Th. S. 12 *Babbage Lecture Theatre*  
 DR R. L. TAPP  
 Breathing and blood gases (Nine lectures,  
 14 Jan.–2 Feb.)  
 DR J. W. FAWCETT  
 Renal Physiology and body fluid homeostasis  
 (Eleven lectures, 4–27 Feb.)  
 DR M. P. MAHAUT-SMITH  
 Temperature regulation and the control of  
 body weight (Four lectures, 2–9 Mar.)

**Practical Work**  
 The same continued

**Lectures.** Tu. Th. 12 *Babbage Lecture Theatre*  
 DR R. L. TAPP  
 Digestion (Seven lectures, 22 Apr.–13 May)

**Practical Work**  
 The same continued

**MEDICAL AND VETERINARY SCIENCES TRIPOS, PART 1B**

MICHAELMAS 1998

LENT 1999

EASTER 1999

**ANATOMY (Medical Students)***Tu. Th. 9 at the Anatomy School, M. W. F. 9 in the Physiology Lecture Theatre*

Course Organiser: Dr R. E. J. Dyball Email: red1000@cus.cam.ac.uk

**Lectures**

MR R. WHITAKER AND DR I. G. PARKIN  
Functional and Applied Anatomy of Head and Neck  
(Six lectures, 8, 15, 22, 27 Oct., 5, 12 Nov.)

PROF. M. H. JOHNSON AND OTHERS  
Reproductive Biology – A Joint Course of Anatomy and  
Physiology, see page 164.

DR R. J. KEYNES  
Development of Face, Head and Neck. (Four lectures,  
13, 20, 29 Oct, 3 Nov.)

PROF. W. A. HARRIS  
Development of Ear and Eye (Two lectures, 19, 26 Nov.)

**Special Periods**

Clinical Demonstration. Head and Neck. 3 Dec. 10–12  
or 2–4, at *Clinical School, Hills Road*

**Practical Work**

Head and Neck Prosections\*  
Allocation of places. 7 Oct. at 2  
Laboratory Classes. M. 10–12 or 2–4

**Lectures**

Neurobiology – A Joint Course of Anatomy  
and Physiology, see page 162.

**Special Periods**

Clinical Demonstration. Neurological  
Disorders. 11 Mar. 10–12 or 2–4 at  
*Clinical School, Hills Road*

**Practical Work**

Examination and Microscopy of the Brain  
Laboratory classes. M. 10–12 or 2–4  
Th. 2–4 or F. 10–12

**Lectures**

Neurobiology – A Joint Course of Anatomy  
and Physiology, see page 162.

**Practical Work**

Class times as for Lent Term

\* = The Dissecting Room is available to students between 10–12 and 2–4, and students should attend in accordance with their options.

**VETERINARY ANATOMY (Veterinary Students)***In the Biffen Lecture Theatre, Department of Genetics unless otherwise stated*

Course Organiser: Mr J. Grandage Email: jg3@mole.bio.cam.ac.uk

**Lectures.** Tu. Th. 9 *Biffen Lecture Theatre*; S. 11  
*Department of Anatomy*

DR R. E. J. DYBALL, MR J. GRANDAGE, PROF. W. A. HARRIS  
AND DR J. M. HOLMES  
The Nervous System (Eleven lectures, 8, 10, 13, 15, 17,  
20, 22, 24, 27, 29, 31 Oct.)

DR G. J. BURTON AND MR J. GRANDAGE  
The Reproductive System (Nine lectures, 3, 5, 7, 12, 14,  
19, 21, 26, 28 Nov.)

**Practical Work**

Dissection of the domestic animals, examination of live  
animals, fresh viscera, radiographs and other  
activities (M. W. 10–12 and W. 2–4. *In the Veterinary  
Dissecting Room and other venues*)

**Lectures.** Th. 9

DR J. H. BRACKENBURY  
Comparative Vertebrate Anatomy (Eight  
lectures, 14, 21, 28 Jan., 4, 11, 18, 25, Feb.,  
4 Mar.)

**Practical Work**

The same continued at the following times  
(M. W. 10–12. *In the Veterinary Dissecting  
Room and other venues*)

**Lectures.** Tu. 9 *Biffen Lecture Theatre*;

M. W. 10, S. 11 *Department of Anatomy*  
MR J. GRANDAGE  
Regional Anatomy (Six lectures, 24, 26, 27,  
28 Apr., 1, 4 May.)

**Practical Work**

The same continued at the following times  
(M. W. 10–12. *In the Veterinary  
Dissecting Room and other venues*)

## MEDICAL AND VETERINARY SCIENCES TRIPOS, PART 1B (continued)

MICHAELMAS 1998

LENT 1999

EASTER 1999

### NEUROBIOLOGY (Medical Students)

Course Organiser: Dr H. R. Matthews E-mail: hrm1@cam.ac.uk

**Lectures.** M. Tu. W. F. 9 *Babbage Lecture Theatre*; Th. 9, S. 10.30 *Department of Anatomy*  
 DR R. J. KEYNES  
 Introduction to the brain (One lecture, 14 Jan.)  
 PROF. R. C. THOMAS  
 The excitable cell. Sensory receptors (Four lectures, 15, 16, 18, 20 Jan.)  
 DR A. L. R. FINDLAY  
 The somatic sensory system. Pain (Five lectures, 21, 23, 25, 27, 28 Jan.)  
 DR S. A. EDGLEY  
 The motor system (Nine lectures, 30 Jan., 1, 3, 4, 6, 8, 10, 11, 13 Feb.)  
 DR R. C. HARDIE  
 The visual system (Seven lectures, 15, 17, 18, 20, 22, 24, 25 Feb.)  
 PROF. A. C. CRAWFORD  
 The auditory system (Three lectures, 27 Feb., 1, 3 Mar.)  
 DR A. ROBERTS  
 Neurobiology of emotion (Three lectures, 4, 6, 8 Mar.)  
 DR R. J. KEYNES  
 Blood-brain barrier. Cerebrospinal fluid and cerebral blood flow (Two lectures, 9, 10 Mar.)

**Lectures.** M. F. 9 *Babbage Lecture Theatre*; Tu. Th. 9 *Department of Anatomy*  
 DR H. R. MATTHEWS  
 Olfaction and taste (One lecture, 22 Apr.)  
 DR J. ROGERS  
 Development, plasticity and repair of the nervous system (Four lectures, 23, 26, 27, 29 Apr.)  
 DR A. ROBERTS  
 Neurobiology of cognition (Two lectures, 30 Apr., 3 May)

**Lectures.** Tu. Th. 12 *Department of Physiology*; M. W. 12 *Department of Anatomy*  
 PROF. B. J. EVERITT  
 Cerebral cortex and thalamus. Reticular formation and sleep (Five lectures, 22, 26, 27, 28, 29 Apr.)  
 DR A. ROBERTS  
 Neurobiology of cognition (Two lectures, 3, 4 May)

### PATHOLOGY

Course Organiser: Dr D. E. Bowyer E-mail: david.bowyer@mole.bio.cam.ac.uk

**Lectures.** M. W. F. 12 *Chemical Laboratory Lecture Theatre*

DR Y. W. LOKE  
 Mechanisms of Acute Inflammation  
 Healing  
 Persistent Inflammation (Four lectures, 9–16 Oct.)  
 DR N. HOLMES  
 The Immune System: Organs and Cells  
 B Cells and Antibodies  
 The Major Histocompatibility Complex  
 T Cells  
 Cellular Interactions: Cytokines  
 The Complement System  
 Tolerance  
 Autoimmunity  
 Hypersensitivity and Chronic Inflammation  
 (Nine lectures, 19 Oct.–6 Nov.)  
 DR Y. W. LOKE  
 Transplantation. Blood Groups (One lecture, 9 Nov.)  
 DR N. HOLMES  
 Immunity and Immunisation (One lecture, 11 Nov.)  
 PROF. A. C. MINSON  
 The Nature of Viruses  
 Virus replication  
 Host Cell Modification  
 Acute Virus Infection  
 The Response to Infection  
 Persistent and Latent Infection  
 Mechanisms of Viral Pathogenesis  
 Control of Virus Infection  
 Spongiform Encephalopathy: BSE and CJD  
 (Nine lectures, 13 Nov.–2 Dec.)

**Lectures.** M. W. F. 12 *Chemical Laboratory Lecture Theatre*

DR R. W. LE PAGE  
 Bacterial Agents of Infectious Diseases  
 Bacterial Cells and Populations  
 Transmission of Bacterial Infections  
 Bacterial Pathogenicity: Concepts  
 Bacterial Diseases: Mechanisms of Pathogenicity I  
 Bacterial Diseases: Mechanisms of Pathogenicity II  
 Bacterial Diseases: Mechanisms of Pathogenicity III  
 Combating Bacterial Diseases  
 (Eight lectures, 13–29 Jan.)  
 DR N. COLEMAN  
 Tuberculosis. Granulomatous Disease  
 (One lecture, 1 Feb.)  
 DR D. DUNNE  
 Introduction to Parasite Infections  
 Host-Parasite Interactions  
 Metazoan Parasite Diseases  
 Protozoan Parasite Diseases  
 (Four lectures, 3–10 Feb.)  
 DR N. COLEMAN  
 Disorders of Red Blood Cells  
 Thrombosis and Embolism  
 Arterial Disease  
 Heart Failure and Hypertension  
 Ischaemia and Infarction  
 (Five lectures, 12–22 Feb.)

## MEDICAL AND VETERINARY SCIENCES TRIPOS, PART IB (continued)

MICHAELMAS 1998

LENT 1999

EASTER 1999

## PATHOLOGY (continued)

## Lectures. (continued)

DR M. A. STANLEY  
 Alterations in Tissue and Organ Growth  
 Nomenclature and Behaviour of Neoplasms  
 Experimental Tumour Biology  
 Cancer as a Genetic Disease I  
 Cancer as a Genetic Disease II  
 Mechanisms of Invasion and Metastasis  
 Causes of Human Cancer: Chemical and  
 Physical Carcinogens  
 Causes of Human Cancer: Biological  
 Carcinogens  
 (Eight lectures, 24 Feb.–12 Mar.)

**Practical Work** *Department of Pathology*  
 Tu. 10–12 and Th. 2–4 or Tu. 2–4 and Th. 10–12 or  
 W. F. 10–12 or 2–4

**Practical Work** *Department of Pathology*  
 Tu. 10–12 and Th. 2–4 or Tu. 2–4 and  
 Th. 10–12 or W. F. 10–12 or 2–4

**Practical Work** *Department of Pathology*  
 Revision classes. Tu. 10–12 and  
 Th. 2–4 or Tu. 2–4 and Th. 10–12 or  
 W. F. 10–12 or 2–4

## PHARMACOLOGY

Course Organiser: Dr P. Thorn E-mail: pt207@cam.ac.uk

Lectures. Tu. Th. S. 12 *Physiology Main Lecture Theatre*

DR J. M. EDWARDSON  
 Introduction (One lecture, 8 Oct.)  
 Drug interactions with receptors and ion channels  
 (Eight lectures, 10–27 Oct.)  
 DR R. M. HENDERSON  
 Pharmacology of peripheral neural transmission  
 (Six lectures, 29 Oct.–10 Nov.)  
 DR C. R. HILEY  
 Cardiovascular and renal pharmacology  
 (Nine lectures, 12 Nov.–1 Dec.)

**Practical Work.** M. 2–5 or F. 2–5.  
 A detailed timetable will be posted in the Department

Lectures. Tu. Th. S. 12 *Physiology Main Lecture Theatre*

DR S. B. HLADKY  
 Pharmacokinetics and drug metabolism  
 (Five lectures, 14–23 Jan.)  
 DR E. K. MATTHEWS  
 Pharmacology of inflammation and  
 immunosuppression (Five lectures,  
 26 Jan.–4 Feb.)  
 DR M. A. BARRAND  
 Chemotherapy (Five lectures, 6–16 Feb.)  
 DR A. J. MORTON\*  
 Central nervous system (Medical students)  
 (Nine lectures, 18 Feb.–9 Mar.)  
 DR R. J. EVANS†  
 Anthelmintics (Veterinary students)  
 (Two lectures, 18, 20 Feb.)  
 DR C. BRYANT†  
 Veterinary Pharmacology (Two lectures,  
 23, 25 Feb.)  
 DR P. THORN†  
 Central nervous system (Veterinary students)  
 (Five lectures, 27 Feb.–9 Mar.)

**Practical Work.** The same continued

## PHYSIOLOGY

Course organiser: Dr J. C. Hickson E-mail: jcdh1@cus.cam.ac.uk

Lectures. M. W. F. 9 *Main Physiology Lecture Theatre*  
 except where otherwise stated

DR A. P. HILLIER  
 Endocrinology (Ten lectures, 9–30 Oct.)  
*Babbage Lecture Theatre*  
 DR W. H. COLLEDGE  
 Reproduction (Eight lectures, 2–18 Nov.)  
 DR J. C. D. HICKSON  
 Fetal, neonatal and maternal physiology (Six lectures,  
 20 Nov.–2 Dec.)

**Practical Work**  
 Tu. 10–12 or Th. 2–4

Lectures. M. W. F. 9 *Main Physiology Lecture Theatre*

DR H. R. MATTHEWS  
 Synapses and sensory receptors (Four lectures,  
 15–22 Jan.)  
 DR D. J. TOLHURST  
 Somatic sensation and pain (Four lectures,  
 25 Jan.–1 Feb.)  
 DR H. R. MATTHEWS  
 Neurophysiology of vision (Six lectures,  
 3–15 Feb.)  
 DR D. J. TOLHURST  
 Control of movement and posture  
 (Six lectures, 17 Feb.–1 Mar.)  
 DR I. M. WINTER  
 Hearing (Four lectures, 3–10 Mar.)

**Practical Work**  
 Tu. 10–12

Lectures. M. W. F. 9 *Main Physiology Lecture Theatre*

DR H. R. MATTHEWS  
 Taste and smell (One lecture, 23 Apr.)  
 DR R. H. S. CARPENTER  
 Higher functions of the nervous system  
 (Five lectures, 26 Apr.–5 May)  
 DR J. H. ROGERS  
 Developmental neurobiology (Four lectures,  
 7–14 May)

**Practical Work**  
 Tu. 10–12 or Th. 2–4

\* Medical students.

† Veterinary students. *These lectures will be given in the Lecture Theatre, Department of Pharmacology.*

**MEDICAL AND VETERINARY SCIENCES TRIPOS, PART IB (continued)**

MICHAELMAS 1998

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**SPECIAL VETERINARY PHYSIOLOGY**

Course organiser: Dr J. C. D. Hickson E-mail: jcdh1@cam.ac.uk

**Lectures.** Tu, 9, S, 11 *Biffen Lecture Theatre*

DR A. V. EDWARDS

Introduction; Motility of the ruminant stomach (Four lectures, 16, 19, 23, 26 Jan.)

DR J. C. D. HICKSON

Digestion, absorption and intermediary metabolism in ruminant and non-ruminant herbivores (Seven lectures, 30 Jan., 2, 6, 9, 13, 16, 20 Feb.)

DR A. L. FOWDEN

Reproduction, pregnancy and parturition in domestic species (Five lectures, 23, 27 Feb., 2, 6, 9 Mar.)

**Demonstration classes**W. 2.15 *Main Physiology Lecture Theatre*, except where otherwise stated

Details will be posted in the Physiological Laboratory at the start of the Lent Term

**Lectures.** Th, 9 *Biffen Lecture Theatre*

DR R. J. BARNES

Reproduction and lactation in marsupials (One lecture, 22 Apr.)

PROF. A. D. CARE

Calcium metabolism in ruminants – physiological basis of milk fever. (One lecture, 29 Apr.)

DR R. J. BARNES

Lactation and transfer of passive immunity (Two lectures, 6, 13 May)

**Demonstration classes***Main Physiology Lecture Theatre*

PROF. A. D. CARE

Acute ruminant hypomagnesaemia – its physiological basis. W. 3.30 (One class, 28 Apr.)

Revision Seminar. W. 2.15 (12 May)

**PSYCHOLOGY**

Course Organiser: Professor B. J. Everitt E-mail: bje10@cus.cam.ac.uk

**Lectures.** Tu, 9 *Anatomy School*; F, 9 *Babbage Lecture Theatre*

PROF. B. J. EVERITT

Psychobiology of Emotion, Anxiety and Depression (Four lectures, 19, 22, 26, 29 Jan.)

DR S. BARON-COHEN

Psychopathology (Four lectures, 2, 5, 9, 12 Feb.)

DR T. DALGLIESH

Experimental Psychopathology of Anxiety and Depression (Two lectures, 16, 19 Feb.)

DR J. RUSSELL

Cognitive and Social Development (Two lectures, 23, 26 Feb.)

PROF. N. J. MacKINTOSH

Intelligence (Two lectures, 2, 5 Mar.)

**Lectures.** W, 9, F, 12 *Anatomy School*

DR R. A. McCARTHY

Neuropsychology (Three lectures, 28, 30 Apr., 5 May)

DR S. MONSELL

Attention and Memory (Three lectures, 7, 12, 14 May)

**REPRODUCTIVE BIOLOGY**

Course Organiser: Professor M. H. Johnson E-mail: mhj@mole.bio.cam.ac.uk

**Lectures.** M, W, F, 9 *Babbage Lecture Theatre*; Tu, 9 *Department of Anatomy*

PROF. A. SURANI

Sexual differentiation

Gametogenesis

Structure and function of the male and female reproductive organs

Reproductive cycles and their neuroendocrine control (Six lectures, 2, 4, 6, 9, 10, 11 Nov.)

DR G. BURTON

Fertilization and implantation

Placentation

Maternal Physiology during pregnancy

Fetal development

Assisted conception

Contraception (Five lectures, 13, 16, 17, 18, 20 Nov.)

DR R. J. BARNES

Preparations for birth

Parturition.

Neonatal physiology

Parental behaviour and lactation (Four lectures, 23, 25, 27, 30 Nov.)

**MEDICAL AND VETERINARY SCIENCES TRIPOS, PART II (GENERAL)**

MICHAELMAS 1998

LENT 1999

EASTER 1999

A candidate must offer

- either* two special Subjects and one Elective Subject  
*or* one Special Subject, one subject from Part IB of the Natural Tripos (listed below) and one Elective Subject  
*and* a dissertation or project report associated with either one of the Special Subjects or one of the Elective Subjects

Details of the restrictions on offering certain combinations of subjects and of which subjects offer a Dissertation or project report are published in *Reporter*, 11 March 1998, p. 491.

**SPECIAL SUBJECTS****Cellular and Molecular Pharmacology**

Course Organiser: Dr B. A. Callingham E-mail: bac5@cam.ac.uk

This course will consist of lectures from N.S.T. Part II Pharmacology (see p. 192), and must be taken together with the Pharmacology of Integrated Systems course.

**Cellular Pathology: Pathology A**

Course Organiser: Dr M. Clark E-mail: mrc7@cam.ac.uk

This course consists of lectures from N.S.T. Part II Pathology on M. W. F. 9 (see p. 190).

**Clinical Physiology and Neurobiology**

This course consists of lectures from N.S.T. Part II Physiology, Modules 6 and 7 (see p. 194).

**History of Medicine, Body and Mind***Department of History and Philosophy of Science, Free School Lane*

This course will consist of Papers 6 and 7 from Part II History and Philosophy of Science (see p. 188).

Prof. Lipton would like to see all Part II students on Wednesday, 7 October at 2.15 p.m. in *Seminar Room 2, Department of History and Philosophy of Science, Free School Lane.*

**Human Genetics and Ecology**

This course will consist of Papers B4 and B5 from Part IIB (New Regulations), Biological Anthropology (see p. 211).

**Human Impact on the Environment**

Course Organiser: Dr J. R. Flowerdew E-mail: j.r.flowerdew@zoo.cam.ac.uk

**Lectures**

DR P. ROHANI, DR P. GRUBB, DR W. AMOS, PROF. T. CLUTTON-BROCK, DR T. COULSON, DR H. JONES AND DR A. HECTOR  
 Population and Community Ecology. M. W. F. 5  
 (Twenty-four lectures)  
*Department of Plant Sciences*

DR M. BROOKE, DR W. AMOS, DR P. GRUBB, DR A. BALMFORD, DR D. BRIGGS AND DR I. HODGE  
 Conservation Biology. M. W. F. 5 (Twenty-four lectures) *Department of Zoology*

DR J. R. FLOWERDEW AND DR A. CHEPSTOW-LUSTY  
 Human Impact on the Environment.  
 M. W. F. 5 (Twelve lectures)  
*Department of Zoology*

**Mechanisms of Disease: from Process to Patient, (A) and (B)**

Course Co-ordinator: Dr J. H. Xuereb E-mail: jhx1000@cus.cam.ac.uk with Dr S. Thiru and Dr N. Coleman

*Lectures will start at 10.30 a.m. in Department of Pathology Lecture Theatre*

DR J. XUEREBS  
 Introductory Lecture (6 Oct.)

**Pathogens and Disease**

DR A. LEVER  
 Molecular biology of Human Immunodeficiency Virus (7 Oct.)  
 Pathogenesis of AIDS (8 Oct.)  
 DR A. CARMICHAEL  
 Immunological controls of HIV infection (9 Oct.)  
 DR A. LEVER  
 HTLV-1 infection and pathogenesis (12 Oct.)  
 DR N. BROWN  
 Sepsis and the host's response to infection (13 Oct.)  
 DR M. FARRINGTON  
 Pneumonia – racing against the escalator (14 Oct.)  
 DR N. COLEMAN  
 Immunopathological response to mycobacterial infection (15 Oct.)  
 DR D. WIGHT  
 Helicobacter and associated pathophysiology (16 Oct.)  
 Viral hepatitis I and II (19, 20 Oct.)  
 DR A. LEVER  
 Mechanisms and consequences of microbial invasion of the central nervous system (21 Oct.)  
 PROF. A. MINSON  
 Prions (22 Oct.)

**Tumour Biology**

PROF. E. D. WILLIAMS  
 Carcinogenesis, environment and growth control (12 Jan.)  
 DR M. STANLEY  
 Infection and cancer – molecular biology of cervical cancer (13 Jan.)  
 DR C. CALDAS  
 Molecular biology of breast cancer (14 Jan.)  
 DR P. RABBITS  
 Molecular biology of lung cancer (15 Jan.)  
 DR A. GREEN  
 Leukaemia I: Transcriptional regulation of haemopoiesis (18 Jan.)  
 Leukaemia II: Molecular Pathology (19 Jan.)  
 DR N. COLEMAN  
 The Langerhans cell and histiocytic disorders (20 Jan.)  
 Biology of neoplasms in children (21 Jan.)  
 PROF. V. P. COLLINS  
 Cerebral gliomas: pathology and molecular biology (22 Jan.)  
 DR N. COLEMAN  
 Tumour immunology (25 Jan.)

**Pathophysiology of some organ-based/systemic diseases**

**Kidney**  
 DR S. THIRU  
 Pathophysiology of progressive renal disease (20 Apr.)  
 Mechanism of renal damage in Diabetes Mellitus (21 Apr.)

**The Circulation**

DR N. CARY  
 Biology of myocardium hypertrophy (22 Apr.)  
 DR J. BOYLE  
 Primary dysfunction of myocardium: cardiomyopathy, myocarditis (23 Apr.)  
 DR N. CARY  
 Molecular basis of drug action on the heart (26 Apr.)  
 PROF. P. WEISSBERG  
 Atherosclerosis I and II (27, 28 Apr.)  
 DR T. BAGLIN  
 Biology and molecular pathology of haemostasis (29 Apr.)  
 Disseminated intravascular coagulation (30 Apr.)

**MEDICAL AND VETERINARY SCIENCES TRIPOS, PART II (GENERAL) (continued)**

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**Mechanisms of Disease: from Process to Patient, (A) and (B) (continued)**

**Immune responses, Inflammation and Disease**

- DR J. BRADLEY  
Vascular endothelium – physiology and pathophysiology I and II (23, 26 Oct.)
- DR K. SMITH  
Immune mechanisms of disease (27 Oct.)
- DR D. BROWN  
Immunodeficiency (28 Oct.)  
Function and dysfunction of gut associated lymphoid tissue (29 Oct.)
- DR J. ARNO  
Immune disorders of the GI tract – I and II (30 Oct., 2 Nov.)
- PROF. J. GASTON  
The role of HLA antigens in the pathogenesis of arthritis (3 Nov.)  
Cytokines in arthritis – potential therapeutic targets (4 Nov.)  
Infectious agents and arthritis: Lyme disease and reactive arthritis (5 Nov.)  
T lymphocytes and joint inflammation (6 Nov.)
- DR D. WIGHT  
Immunopathology of cholestasis (9 Nov.)  
Mechanisms of fibrosis in the liver (10 Nov.)
- DR K. SMITH  
Medication of immune renal injury – I and II (11, 12 Nov.)
- DR J. XUERE B  
Inflammation in the central nervous system (13 Nov.)  
Aetiology and pathogenesis of demyelinating diseases (16 Nov.)
- DR J. ANDERSON  
Autoimmune myopathies and myasthenia gravis (17 Nov.)

**Endocrine and Metabolic Disease**

- PROF. K. CHATTERJEE  
Principles of hormone action (18 Nov.)
- PROF. S. O'RAHILLY  
How insulin works and how it goes wrong (19 Nov.)
- PROF. K. CHATTERJEE  
Molecular pathology of hormone receptors and G proteins I and II (20, 23 Nov.)
- DR T. KEALEY  
The kidney as an endocrine organ (24 Nov.)
- PROF. S. O'RAHILLY  
Understanding human obesity (25 Nov.)
- DR J. COMPSTON  
Bone cell physiology (26 Nov.)  
Pathology of metabolic bone disease (27 Nov.)
- DR S. MIDDLETON  
Gastrointestinal hormones and peptides (30 Nov.)
- PROF. T. COX  
Formation of blood pigment: Porphyrin (1 Dec.)  
The Lysosome – a gateway to treatment (2 Dec.)  
Iron – a noxious essential (3 Dec.)
- DR J. XUERE B  
Mitochondrial encephalomyopathies (4 Dec.)

**Transplantation**

- DR S. THIRU  
Immunobiology of transplantation and rejection I and II (26, 27 Jan.)
- DR C. TAYLOR  
Blood transfusion effect (28 Jan.)
- DR S. METCALFE  
Molecular basis of immunosuppression (29 Jan.)
- DR D. WHITE  
Xenotransplantation: Concordant (1 Feb.)  
Xenotransplantation: Discordant (2 Feb.)
- DR S. THIRU  
Long term outcome of transplantation (3 Feb.)

**Gestational, Paediatric and Inherited Diseases**

- DR A. KING  
Immunopathology of reproduction (4 Feb.)  
Pathogenesis of pre-eclampsia (5 Feb.)  
Immunogenetics of gestational trophoblastic disease (8 Feb.)
- PROF. M. BOBROW  
Genetic factors in disease (9 Feb.)
- DR I. HUGHES  
Genetic control and disorders of sex development (10 Feb.)  
Endocrine regulation of growth and its disorders (11 Feb.)  
Disorders of steroid biosynthesis and metabolism (12 Feb.)
- DR N. COLEMAN  
Pathophysiology of disease in the premature baby (15 Feb.)
- DR R. ILES  
Molecular and cell biology of cystic fibrosis (16 Feb.)
- DR R. SANDFORD  
Aspects of inherited renal disorders (17 Feb.)
- PROF. M. BOBROW  
Dystrophin-related myopathies (18 Feb.)
- DR D. RUBINSZTEIN  
Molecular genetics and pathology of Huntington's disease (19 Feb.)
- DR E. REID  
Hereditary ataxias (22 Feb.)
- PROF. R. CARRELL  
Haemoglobinopathies – I and II (23, 24 Feb.)

**Pathophysiology of some organ-based/systemic diseases Brain**

- DR J. XUERE B  
The pathology of the neuronal cytoskeleton (25 Feb.)  
Amyloid deposition in the brain (26 Feb.)  
Excitotoxicity in neurodegeneration (1 Mar.)
- DR M. GODDARD  
Pathophysiology of pulmonary microvasculature (2 Mar.)
- DR S. STEWART  
Respiratory tract hypersensitivity (3 Mar.)  
Irreversible airways narrowing and alveolar wall destruction. (4 Mar.)

**Skin**

- DR J. STERLING  
Normal and abnormal skin structure (5 Mar.)  
Skin as an organ of immunity (8 Mar.)  
Disorders of the skin immune system (9 Mar.)  
Skin as a renewable organ (10 Mar.)

**Liver**

- DR G. ALEXANDER  
Pathophysiology of liver failure (11 Mar.)

**MEDICAL AND VETERINARY SCIENCES TRIPOS, PART II (GENERAL) (continued)**

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**Pharmacology of Integrated Systems**

Course Organiser: Dr B. A. Callingham E-mail: bac5@cam.ac.uk

This course will consist of lectures from N.S.T. Part II Pharmacology, under the section named Pharmacology of Integrated Systems (see p. 191).

**Primate and Human evolutionary Biology and Behaviour**

The course will consist of Papers B6 and B7 from Part IIB (New Regulations), Biological Anthropology (see p. 211).

**THE FOLLOWING SPECIAL SUBJECT IS NOT AVAILABLE IN 1998-1999:**

**Immunology: Pathology B**  
**Microbial and Parasitic Disease: Pathology C**  
**Virology: Pathology D**  
**Genetic Pathology: Pathology E**

**ELECTIVE SUBJECTS****4. Human Genetics and Variation**

See Biological Anthropology, Part IIB, Paper B4 (New Regulations) (see p. 211).

**5. Human Nutrition****Lectures**

DR E. L. MILLER AND STAFF OF DUNN NUTRITION UNIT AND  
 ADDENBROOKE'S HOSPITAL  
 Tu. Th. 12 (Sixteen lectures) *Mill Lane Lecture Room 4*

**Lectures**

The same continued. Tu. Th. 12  
 (Sixteen lectures)  
*Mill Lane Lecture Room 4*

**Lectures**

The same continued. Tu. Th. 12  
 (Four lectures, 22, 27, 29 Apr., 4 May)  
*Mill Lane Lecture Room 4*

A detailed topic list will be available from the Course Organiser, Dr E. L. Miller, *Nutrition Laboratory, Department of Clinical Veterinary Medicine, 307 Huntingdon Road*. Tel. (3)37056/8, E-mail: elm1@cam.ac.uk.

**6. Medical Aspects of Neurobiology**

Course Organiser: Dr J. W. Fawcett E-mail: jf108@cam.ac.uk

Tu. Th. 10 *In the Physiology Main Lecture Theatre*  
 (Dr J. W. Fawcett)

DR J. MORTON

Neurodegeneration. (Four lectures, 8, 13, 15, 20 Oct.)

DR J. W. FAWCETT

Recovery from injury and regeneration. (Three lectures, 22, 27, 29 Oct.)

DR S. DUNNETT

Brain Grafting. (Two lectures, 3, 5 Nov.)

PROF. J. PICKARD AND MR P. KIRKPATRICK

Cerebrospinal fluid, raised intracranial pressure, Stroke, CNS injury. (Four lectures, 10, 12, 17, 19 Nov.)

DR J. HUNTER

Development of CNS pharmaceutical compounds (One lecture, 24 Nov.)

DR R. FRANKLIN

Demyelination and remyelination (Two lectures, 26 Nov., 1 Dec)

Tu. Th. 10 *In the Physiology Main Lecture Theatre* unless otherwise stated  
 (Dr J. W. Fawcett)

DR I. M. WINTER

Hearing disorders (Three lectures, 14, 19, 21, Jan.)

DR D. J. TOLHURST

Disorders of vision and visual assessment (Three lectures, 26, 28 Jan., 2 Feb.)

DR R. BARKER

Relief of acute and chronic pain (Two lectures, 4, 9 Feb.)

DR A. ROBERTS

Cognitive disorders in neurological disease (Two lectures, 18, 23 Feb.)

PROF. I. GOODYEAR, DR A. HOLLAND AND

DR P. BOLTON

Scientific basis and treatment of psychiatric disorders (Four lectures, 25 Feb., 2, 4, 9 Mar.)

**7. Medicine, Ethics and the Law**

Course Co-ordinator: Mr J. L. Caddick E-mail: jlc24@cam.ac.uk, tel. (3)34264

*Lectures and seminars take place on Tu. Th. 4 in the Department of Genetics on the Downing Site, and in the Law Faculty, as indicated*

DR J. KEOWN

Medical Law. Th. 4 *Law Faculty Lecture Theatre LG17*  
 Introduction to Medical Law. Tu. 4 (Two lectures, 13, 20 Oct.) *Biffen Lecture Theatre*

MR J. L. CADDICK

Medical Ethics. Tu. 4 (Six seminars, 27 Oct., 3, 10, 17, 24 Nov., 1 Dec.) *Department of Genetics, Room G6*

The same continued. Th. 4 *Law Faculty*

The same continued. Tu. 4  
*Department of Genetics*

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**9. Medicine, Health and Illness**

Course Organiser: Dr C. Todd E-mail: cjt@cam.ac.uk

*All lectures take place in Room 606, Centre for Family Research unless otherwise stated*

DR C. TODD Introduction to Medicine, Health and Illness. F. 1 (week 1)		
DR C. POPE Introduction to Sociology of Health and Illness. F. 1-3 (weeks 5-8)		
DR G. LEWIS Introduction to Medical Anthropology. W. 9 <i>Social Anthropology</i>		
DR F. BARBIRA-FREEDMAN	Childbirth and the Ritual Process. W. 9 (weeks 1-4)	
DR T. SHAKESPEARE	The Politics of Disability. F.2-4 (weeks 1 and 3)	
DR C. TODD	Health Psychology. Th. 4	
DR D. PENCHEON	Health Politics and Policy. Tu. 12 (weeks 5-8)	The same continued. M. 5
JULIET MITCHELL	Hysteria - a gendered illness. Tu. 12 (weeks 1-4)	The same continued. Tu. 11

**10. Topics in Clinical Physiology**

Course Organiser: Dr R. J. Barnes E-mail: rbj4@cam.ac.uk

W. F. 10 *In the Biffen Lecture Theatre*

DR R. J. BARNES Cardiovascular physiology, regulation of cardiac output, reflex control of the circulation, hypoxia and chemoreceptors (Six lectures, 9, 14, 16, 21, 23, 28 Oct.)	DR J. BRADLEY, DR K. SMITH AND DR J. FIRTH Physiological aspects of renal disease (Six lectures, 15, 20, 22, 27, 29 Jan., 3 Feb.)	
PROF. J. T. FITZSIMONS Oedema, shock and heart failure (Five lectures, 4, 6, 11, 13, 18 Nov.)	PROF. J. T. FITZSIMONS Hypertension (Four lectures, 5, 10, 12, 17 Feb.)	
DR A. ODURO Myocardial protection and re-perfusion injury (Two lectures, 25 Nov., 2 Dec.)	DR M. C. PETCH The abnormal physiology of cardiac ischaemia, left ventricular overload and pulmonary hypertension (Five lectures, 24, 26 Feb., 3, 5, 10 Mar.)	