

## BRITISH PHARMACOLOGICAL SOCIETY

PROGRAMME OF THE MEETING HELD AT  
ST. BARTHOLOMEW'S HOSPITAL MEDICAL COLLEGE, LONDON.

5th to 7th January, 1965

### COMMUNICATIONS

**J. J. Lewis and D. Pollock** (*Experimental Pharmacology Division, Institute of Physiology, Glasgow University, Glasgow, W.2*).

Effects of some centrally acting drugs on brain levels of NAD and NADH<sub>2</sub> in the rat.

**G. Blane** (introduced by **K. E. V. Spencer**) (*Wyeth Laboratories, Havant, Hants*).

The absorption of insulin in the adult intestinal tract.

**P. J. Watson** (introduced by **W. C. Bowman**) (*Department of Pharmacy, Portsmouth College of Technology*).

The effect of guanethidine on sensory C fibres.

**D. J. Roberts** (introduced by **W. C. Bowman**) (*School of Pharmacy, Brighton College of Technology*).  
Chromatographic studies on the formation of an isoprenaline-like substance from adrenaline *in vitro*.

**D. R. Maxwell and A. H. Loveless** (*Research Laboratories, May and Baker Ltd., Dagenham, Essex*).  
Interaction between monoamine oxidase inhibitors and other centrally acting drugs.

**M. L. Aikman, A. L. A. Boura, A. E. Fitzgerald and R. E. Lister** (*Pharmacology Laboratory, Reckitt & Sons Ltd., Hull*).

Potent and long lasting analgesics and antianalgesics.

**M. J. Neal and J. M. Robson** (*Pharmacology Department, Guy's Hospital Medical School, London, S.E.1*).

Analgesic effects produced by sub-anaesthetic doses of some fluorinated compounds.

**H. O. J. Collier, A. R. Hammond and C. Schneider** (*Department of Pharmacological Research, Parke Davis & Co., Hounslow, Middlesex*).

A nociceptive response of the rat to intraperitoneal injection of noxious agents, and its inhibition by analgesic drugs.

**J. M. Robson and F. M. Sullivan** (*Pharmacology Department, Guy's Hospital Medical School, London, S.E.1*).

Teratogenic effects of substances normally present in the body.

**Anne U. Tothill** (introduced by **J. M. Robson**) (*Pharmacology Department, Guy's Hospital Medical School, London, S.E.1*).

Inhibition of pregnancy and of the oestrous cycle by a series of phenelzine analogues.

**E. R. Clark and Stella R. Gregory** (introduced by **D. R. Wood**) (*Department of Pharmacology, University of Leeds*).

Methylated stilboestrols as possible anti-oestrogens.

**J. R. Hodges and M. T. Jones** (*Department of Pharmacology, Royal Free Hospital School of Medicine, London, W.C.1*).

The effect of corticosteroids on corticotrophic activity in the rat.

**H. Barnard and D. F. Hawkins** (*Obstetric Unit, University College Hospital Medical School, London, W.C.1*).

Some actions of isoxsuprine on the human subject in late pregnancy.

**K. Lederis and A. R. Daniel** (introduced by **H. Heller**) (*Department of Pharmacology, University of Bristol, Bristol 8*).

Effects of ether anaesthesia and haemorrhage on hormone release from the neurohypophysis.

**D. Mackay** (introduced by **D. R. Wood**) (*Department of Pharmacology, University of Leeds*).

An improved method for the analysis of receptor-agonist interactions.

**H. P. Rang** (introduced by **W. D. M. Paton**) (*University Department of Pharmacology, Oxford*).

The uptake of acetylcholine-like substances by smooth muscle.

**J. M. Telford and P. A. Nasmyth** (*Department of Pharmacology, St. Mary's Hospital Medical School, London, W.2*).

Drugs affecting 3',5'-AMP metabolism: their influence on uterine responses to catechol amines

**E. Proctor** (introduced by **J. B. E. Baker**) (*Department of Pharmacology, Charing Cross Hospital, University of London, W.C.2*).

Adrenergic receptors in the coronary vessels of the isolated heart of the rabbit and rat.

**Alison Jowett and Anne Stafford** (*Department of Pharmacology, London Hospital Medical College*).

Can blockade of uptake of catechol amines explain their potentiation?

**A. M. Barrett** (*Research Department, Pharmaceuticals Division, Imperial Chemical Industries Ltd., Alderley Park, Cheshire*).

The effects of some autonomic blocking agents on the heart rates of anaesthetized and pithed rats.

**Rosemary I. Hawkins and K. Hellman** (*Chemotherapy Unit, Imperial Cancer Research Fund, Lincoln's Inn Fields, London, W.C.2*).

Anticoagulants from blood feeders.

**R. H. Poyser** (introduced by **G. B. West**) (*Pharmacology Department, Brighton College of Technology*).

Studies on the mechanism of action of yeast polysaccharides in producing the anaphylactoid reaction in the rat.

**M. Maureen Dale** (introduced by **H. O. Schild**) (*Department of Pharmacology, University College, London, W.C.1*).

Anaphylactic tests in tumour antigen studies.

**B. B. Newbould and G. E. Davies** (introduced by **A. Spinks**) (*Research Department, Pharmaceuticals Division, Imperial Chemical Industries Ltd., Alderley Park, Cheshire*).

Chemotherapeutic studies on adjuvant-induced arthritis and allergic encephalomyelitis in rats.

**P. A. Berry and H. O. J. Collier** (*Department of Pharmacological Research, Parke Davis & Co., Hounslow, Middlesex*).

Effect of aspirin and related drugs on the anaphylactic contraction of guinea-pig isolated trachea.

**Elizabeth E. Shillito** (introduced by **K. E. V. Spencer**) (*Wyeth Laboratories, Havant, Hants*).

The effect of drugs on the activity of small mammals living in a wall cage.

**P. B. Bradley, B. N. Dhawan and J. H. Wolstencroft** (*Medical Research Council, Neuropharmacology Research Unit, The Medical School, Birmingham 15*).

Some pharmacological properties of brain-stem neurones.

**H. W. Kosterlitz and D. I. Wallis** (*Physiology Department, University of Aberdeen*).

The effect of morphine on transmission in the superior cervical ganglion of the rabbit.

**P. S. J. Spencer and R. T. Brittain** (*Research Division, Allen & Hanburys Ltd., Ware, Herts.*).  
Reserpine-induced depression and its antagonism in the mouse.

**W. Dawson, A. Gecse, S. Karady, M. Starr and G. B. West** (*Pharmacology Department, School of Pharmacy, University of London*).  
Bradykinin release in rats subjected to shock.

**P. M. Keen** (introduced by **H. Heller**) (*Department of Pharmacology, University of Bristol*).  
The displacement of anionic drugs from their binding to serum albumin.

**S. J. Corne and R. W. Pickering** (*Department of Pharmacological Research, Parke Davis & Co., Hounslow, Middlesex*).  
A possible correlation between drug-induced hallucinations in man and a behavioural response in mice.

**A. S. V. Burgen** (*Department of Pharmacology, Cambridge*).  
The role of ionic interaction in the muscarinic action of acetylcholine.

**B. A. Callingham** (*University Department of Pharmacology, Cambridge*).  
The uptake of ( $\pm$ )-isoprenaline into rat hearts.

**K. A. Scott** (introduced by **A. S. V. Burgen**) (*Department of Pharmacology, Cambridge*).  
Pharmacological actions of sulphur and selenium analogues of compounds related to choline.

**A. W. Cuthbert** (*University Department of Pharmacology, Cambridge*).  
The action of atropine on the responses of the guinea-pig ureter to direct electrical stimulation.

**E. K. Matthews** (introduced by **H. F. Grundy**) (*Department of Pharmacology, Cambridge*).  
The effects of some quaternary ammonium compounds on acetylcholine synthesis and release.

**T. J. Biscoe and R. A. Millar** (introduced by **J. H. Gaddum**) (*A.R.C. Institute of Animal Physiology, Babraham, Cambridge*).  
The effect of inhalation anaesthetics on the baroreceptor reflex arc.

**D. V. Maudsley and N. Dawson** (introduced by **G. B. West**) (*Department of Pharmacology, School of Pharmacy, London*).  
A possible role of folic acid in histamine metabolism.

**P. I. Akubue** (introduced by **G. Brownlee**) (*Department of Pharmacology, King's College, Strand, W.C.2*).  
The mechanism of action of nicotine and 5-hydroxytryptamine on the circular muscle preparation from the guinea-pig caecum.

**D. F. Biggs** (introduced by **G. Brownlee**) (*Department of Pharmacology, King's College, Strand, W.C.2*).  
The resting release of acetylcholine from the rectus abdominis muscle of the frog.

**J. S. Gillespie and T. C. Muir** (*Institute of Physiology, University of Glasgow, Glasgow, W.2*).  
Desensitisation of vascular smooth muscle to infused noradrenaline and to tyramine.

**D. J. Boullin, B. B. Brodie and E. Costa** (introduced by **J. P. Quillam**) (*Laboratory of Chemical Pharmacology, National Heart Institute, Bethesda, Md., U.S.A.*).  
Release of [ $^3\text{H}$ ]-noradrenaline, [ $^3\text{H}$ ]-tyramine and [ $^3\text{H}$ ]-guanethidine from sympathetic nerve endings by electrical stimulation.

**B. W. Payton** (introduced by **J. P. Quillam**) (*Department of Pharmacology, Medical College of St. Bartholomew's Hospital, London, E.C.1*).  
A pre-synaptic action of gallamine.

**D. G. Shand** (introduced by **J. P. Quilliam**) (*Department of Pharmacology, Medical College of St. Bartholomew's Hospital, London, E.C.1*).

Effects of depolarizing drugs on the superior cervical ganglion of the rat.

**J. R. Tata** (introduced by **W. D. M. Paton**) (*National Institute for Medical Research, Mill Hill, London*).

The effect of thalidomide on induced amphibian metamorphosis.

**D. A. Chamberlain** (introduced by **D. F. J. Mason**) (*Department of Cardiology, St. Bartholomew's Hospital, London, E.C.1*).

Some haemodynamic effects of  $\beta$ -sympathetic blockade.

**K. A. P. Edman** and **E. Nilsson** (*Department of Pharmacology, The University of Lund, Sweden*).

Effects of digitalis on the dynamics of myocardial contraction.

**F. W. Wolff**, **R. Yabo**, **J. Viktora**, **M. Staquet**, **J. Nabwangu** and **A. Drash** (*Division of Clinical Pharmacology, New York Medical College and the Harriet Lane Home, Johns Hopkins Hospital, Baltimore, Md., U.S.A.*).

The effects of diazoxide on insulin release and its use in hypoglycaemic states.

**W. Linford Rees** (introduced by **J. P. Quilliam**) (*Department of Psychological Medicine, St. Bartholomew's Hospital, London, E.C.1*).

A double-blind controlled clinical trial of nortryptiline in depressive states.

**P. V. Cole** and **R. C. Birt** (introduced by **J. P. Quilliam**) (*Department for the Administration of Anaesthetics, St. Bartholomew's Hospital, London, E.C.1*).

The effects of closed-circuit halothane anaesthesia.

**P. Turner** (introduced by **J. P. Quilliam**) (*Department of Medicine, St. Bartholomew's Hospital, London, E.C.1*).

The action of centrally acting drugs on critical flicker fusion frequency.

**J. A. McKinna**, **J. D. Griffiths** and **J. E. Ind** (introduced by **J. P. Quilliam**) (*Department of Surgery, St. Bartholomew's Hospital, London, E.C.1*).

The use of intra-arterial nitrogen mustard in the palliation of inoperable malignant disease.

**D. A. Brown** (introduced by **J. P. Quilliam**) (*Department of Pharmacology, Medical College of St. Bartholomew's Hospital, London, E.C.1*).

Some effects of staphylococcal  $\alpha$ -toxin on the cardiovascular system.

**D. A. Willoughby**, **M. N. I. Walters** and **W. G. Spector** (introduced by **J. P. Quilliam**) (*Department of Pathology, St. Bartholomew's Hospital, London, E.C.1*).

The pharmacological basis of the irritant action of dimethyl sulphoxide.

**R. L. Hodge** and **G. C. S. Croop** (introduced by **D. R. Laurence**) (*Department of Human Physiology and Pharmacology, University of Adelaide, S. Australia*).

The use of angiotensin and studies of vascular sensitivity in phaeochromocytoma.

#### DEMONSTRATIONS

**F. O'Grady** and **Barbara Smith** (introduced by **J. P. Quilliam**) (*Bacteriology Department, St. Bartholomew's Hospital, London, E.C.1*).

The effect of nitroxoline on the neuromuscular system of the mouse.

**D. G. Green** (introduced by **K. E. V. Spencer**) (*Wyeth Laboratories, Havant, Hants*).

Improved method for measuring rat paw volume.

**A. Herxheimer** (*Department of Pharmacology, London Hospital Medical College, London, E.1*).

A new class experiment using eyedrops.

**G. Brownlee and P. L. V. Spriggs** (*Department of Pharmacology, King's College, Strand, W.C.2*).  
A simplified method for the routine measurement of dopamine in brain.

**P. M. G. Bell** (introduced by **N. D. Edge**) (*Department of Pharmacology, Medical College of St. Bartholomew's Hospital, E.C.1*).  
An electrically controlled circulation pump.

**G. M. Besser** (introduced by **J. P. Quilliam**) (*Departments of Pharmacology and Medicine, St. Bartholomew's Hospital, E.C.1*).  
Methods for assessment of the psycho-pharmacology of perception in man.

**D. A. Brown** (introduced by **J. P. Quilliam**) (*Department of Pharmacology, Medical College of St. Bartholomew's Hospital, London, E.C.1*).  
Response of sympathetic ganglion cells to drugs after degenerative section of the preganglionic trunk.

**R. C. Elliott** (introduced by **J. P. Quilliam**) (*Department of Pharmacology, Medical College of St. Bartholomew's Hospital, London, E.C.1*).  
The action of phenothiazine and diphenylmethane derivatives on the medullary vasopressor response.

**D. B. Pixner and A. Richens** (introduced by **J. P. Quilliam**) (*Department of Pharmacology, Medical College of St. Bartholomew's Hospital, London, E.C.1*).  
A comparison of two methods of cooling the isolated spinal cord of the frog to allow electrical recording at a controlled low temperature.

**J. T. Hamilton** (introduced by **R. B. Barlow**) (*Department of Pharmacology, Medical School University of Western Ontario, London, Ont., Canada*).  
The role of the adrenal medulla in the blood pressure response to carbon dioxide following hexamethonium.

**D. L. Tamarind** (introduced by **J. P. Quilliam**) (*Department of Pharmacology, Medical College of St. Bartholomew's Hospital, London, E.C.1*).  
Electron microscopy of superior cervical ganglion.

**J. D. Gasking** (introduced by **J. P. Quilliam**) (*May & Baker Research Institute, Dagenham*).  
A microscope warm stage with a transistorized control of temperature.

**B. N. Davies and P. G. Withrington** (introduced by **J. P. Quilliam**) (*Department of Physiology, Medical College of St. Bartholomew's Hospital, London, E.C.1*).  
The isolated blood-perfused spleen of the dog; volume changes and output of transmitter in response to sympathetic nerve stimulation.

**E. W. Horton and I. H. M. Main** (*Department of Physiology, Medical College of St. Bartholomew's Hospital, London, E.C.1*).  
Central nervous effects of prostaglandins.

**G. R. Molson and J. A. Mackey** (introduced by **J. P. Quilliam**) (*Department of Ophthalmic Optics, Northampton College, London, E.C.1*).  
An assessment of the effect of normal therapeutic dosage of promethazine hydrochloride on hand-eye co-ordination.

**A. J. Salsbury and J. A. McKinna** (introduced by **J. P. Quilliam**) (*Departments of Pathology and Surgery, St. Bartholomew's Hospital, London, E.C.1*).  
The role of certain substances in the release of malignant cells from carcinoma of the large intestine.

**B. N. Catchpole** (introduced by **J. P. Quilliam**) (*Department of Surgery, St. Bartholomew's Hospital, London, E.C.1*).  
Experiments on the effects of sympathetic blocking agents on intestinal motility in the cat.

**D. E. Clarke, A. Hiscoe, L. N. Hulley, K. Jackson and G. D. H. Leach** (introduced by **J. E. Olley**) (*Departments of Electrical Engineering and Pharmacy, Bradford Institute of Technology, Bradford 7*).  
The use of a transistorized impulse generator for recording the heart rate from isolated and intact preparations.

**J. R. Fozard and G. D. H. Leach** (introduced by **J. E. Olley**) (*Department of Pharmacy, Bradford Institute of Technology, Bradford 7*).

A method for studying drug responses on the pulmonary blood vessels of the anaesthetized rat, and their contribution in interpreting the effects of 5-hydroxytryptamine on the circulation.

**A. Miller** (introduced by **P. A. Young**) (*Wellcome Research Laboratories, Beckenham, Kent*).  
The measurement of ptosis in mice.

**D. M. Brown, B. O. Hughes and K. Wiggins** (*Beecham Research Laboratories, Brockham Park, Surrey*).

An automatic gut bath.

**A. W. Lessin** (*Pharmacology Laboratory, Roche Products Ltd., Welwyn Garden City, Herts.*).  
An apparatus for the determination of blood pressure in the untrained unanaesthetized animal.

**A. W. Lessin** (*Pharmacology Laboratory, Roche Products Ltd., Welwyn Garden City, Herts.*).  
Apparatus for measuring heart rate in groups of mice and its application to the study of various types of drug action.

**J. D. P. Graham** (*Department of Pharmacology, Institute of Preventive Medicine, Cardiff*).  
Epidemiology of acute poisoning.

**M. Curwen** (introduced by **J. P. Quilliam**) (*Department of Statistics, St. Bartholomew's Hospital, London, E.C.1*).

The design and analysis of a clinical trial. An experiment in class teaching.

**D. J. Boullin** (introduced by **J. P. Quilliam**) (*Laboratory of Chemical Pharmacology, National Heart Institute, Bethesda, Md., U.S.A.*)

Apparatus for perfusion of isolated tissues with radio-isotopes.