

BRITISH PHARMACOLOGICAL SOCIETY

PROGRAMME OF THE MEETING HELD AT LEEDS

7th to 9th July, 1965

COMMUNICATIONS

A. L. Green and R. Fielden (*Smith Kline & French Research Institute, Welwyn Garden City, Herts.*).
Some actions of sympathetic blocking drugs in mice.

B. Blackwell and E. Marley (*Institute of Psychiatry, Maudsley Hospital, London, S.E.5*).
Action of noradrenaline and of indirectly acting sympathomimetic amines on β -receptors.

T. B. Bolton and C. Raper (introduced by **W. C. Bowman**) (*Department of Pharmacology, School of Pharmacy, University of London*).

The existence of β -adrenotropic receptors in the cardiovascular system of the fowl.

J. Armstrong and J. Farrant (*The National Institute for Medical Research, Mill Hill, London, N.W.7*).
Function and fine structure of smooth muscle after cooling to low temperatures.

H. O. J. Collier and G. W. L. James (*Department of Pharmacological Research, Parke Davis & Co., Hounslow, Middlesex*).

Further analysis by drugs of anaphylactic bronchoconstriction in the guinea-pig.

Helmy Moussa Guirgis (introduced by **P. B. Marshall**) (*Department of Pharmacology and Therapeutics, Queen's College, Dundee*).

The effect of adrenalectomy on serum histaminopexy in the guinea-pig.

R. Hicks (*Pharmacological Laboratories, Bradford Institute of Technology, Bradford 7*).
Influence of mineralocorticoid substances on anaphylactic reactions in the guinea-pig.

M. F. Cuthbert (introduced by **M. Weatherall**) (*Medical Unit, The London Hospital Medical College, London, E.1*).

Assay and pressor activity of renal extracts which increase vascular permeability.

T. J. Sullivan (*Department of Pharmacology and Therapeutics, St. Thomas's Hospital Medical School, London*).

Comparison of the effects of different prostaglandins on rat and guinea-pig uteri.

P. L. Chambers (introduced by **D. E. Stevenson**) ("*Shell*" *Research Ltd., Tunstall Laboratory, Sittingbourne, Kent*).

Some observations on the effects of dimethylsulphoxide on animals.

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

Drug-induced depolarization of superior cervical ganglia.

A. T. Birmingham and J. Szolcsanyi (*Department of Pharmacology, King's College, Strand, W.C.2*).
Blockade of α -receptors in the guinea-pig vas deferens.

B. A. Callingham (*University Department of Pharmacology, Cambridge*).

The interaction between noradrenaline and isoprenaline during uptake into rats' hearts.

B. Collier and J. F. Mitchell (introduced by **A. S. V. Burgen**) (*University Department of Pharmacology, Cambridge*).

The effect of drugs on the release of acetylcholine from the cerebral cortex during stimulation of the optic pathway.

A. W. Cuthbert (*University Department of Pharmacology, Cambridge*).

The effect of some hydrolases on the response of smooth muscle to drugs.

A. D. Smith and H. Winkler (introduced by **H. Blaschko**) (*Department of Pharmacology, Oxford*).
Recent studies on chromaffin granules.

M. L. Aubry, M. J. Davey and H. Reinert (*Department of Pharmacology, Pfizer Ltd., Sandwich, Kent*).

Effect of an adrenergic neurone blocking compound (Guanoxan) on nephrogenic hypertension and retinopathy.

J. Wilson (introduced by **M. J. Rand**) (*Department of Pharmacology, School of Pharmacy, University of London*).

The actions of some antihypertensive drugs on an isolated, sympathetically innervated arterial preparation.

J. D. Cumming and E. H. L. Harries (introduced by **G. L. Brown**) (*University of Reading and Nicholas Research Institute, Wexham Place, Bucks.*).

The possible mode of action of adrenaline and noradrenaline as inhibitors of gastric secretion.

J. B. Farmer and D. N. Lehrer (*Department of Pharmacology, Allen & Hanburys Ltd., Ware, Herts.*).
The antagonism of acetylcholine and histamine by isoprenaline.

K. A. Scott and L. Spero (introduced by **B. A. Callingham**) (*University Department of Pharmacology, Cambridge*).

Some comparisons of activity in a series of homocholine esters.

M. C. Sutter (introduced by **A. W. Cuthbert**) (*University Department of Pharmacology, Cambridge*).

Ouabain-induced changes in the potassium content of smooth muscle in relation to its response to drugs.

A. Hughes and R. S. Tonks (*Nevill Hall Hospital, Abergavenny, Mon., and the Department of Pharmacology, Welsh National School of Medicine, Cardiff*).

Magnesium and blood platelets.

M. S. G. Clark (introduced by **M. J. Rand**) (*Department of Pharmacology, School of Pharmacy, University of London*).

Evidence bearing on the alleged tranquillizing effect of nicotine.

F. Mitchelson (introduced by **M. J. Rand**) (*Department of Pharmacology, School of Pharmacy, University of London*).

Effects of ganglionic stimulants on the guinea-pig taenia.

R. D. N. Birtley, J. B. Roberts, B. H. Thomas and A. Wilson (*Department of Pharmacology and General Therapeutics, The University of Liverpool*).

Fate of [^{14}C]-pyridostigmine in the rat.

E. Beveridge (introduced by **L. G. Goodwin**) (*Wellcome Laboratories of Tropical Medicine, Euston Road, London, N.W.1*).

Variation in sensitivity to drugs of strains of *Leishmania* on passage in hamsters.

W. E. Brocklehurst and V. O. Marquis (*Department of Pharmacology, University of Edinburgh Medical School, Teviot Place, Edinburgh*).

On the purification of SRS-A.

D. Eccleston, G. W. Ashcroft, T. B. B. Crawford and R. Loose (*M.R.C. Unit for Research in Brain Metabolism, Department of Pharmacology, University of Edinburgh*).

Some observations on estimations of tryptamine in brain.

D. F. Tucker and K. Hellmann (*Chemotherapy Unit, Imperial Cancer Research Fund, Lincoln's Inn Fields, London, W.C.2*).

The assay of antitumour drugs on the chorio-allantoic membrane of the chick.

J. Flack and M. S. Stockham (introduced by **G. A. H. Buttle**) (*Department of Pharmacology, School of Pharmacy, University of London*).

Free and bound plasma corticosterone levels in the male and female rat.

E. C. Savini and M. Moulin (*Laboratoire de Pharmacologie, Ecole Nationale de Medecine et de Pharmacie, Caen, France*).

Tachyphylaxis to 5-hydroxytryptamine and life-essential ions.

J. R. Fozard (introduced by **G. D. Leach**) (*Bradford Institute of Technology*).

Some drugs which modify the cardiovascular responses to 5-hydroxytryptamine and noradrenaline in the rat.

D. E. C. Clarke (introduced by **G. D. Leach**) (*Bradford Institute of Technology*).

The effects of infusions of sympathomimetic amines on the cardiovascular responses to tyramine and their modification by bretylium.

W. D. M. Paton and Abu Zar (*Department of Pharmacology, Oxford*).

The use of the denervated longitudinal muscle strip from guinea-pig ileum in analysing drug action.

DEMONSTRATIONS

E. T. Abbs (introduced by **G. A. Moge**) (*School of Pharmacy, College of Technology, Portsmouth*).
Catechol amine release by xylocholine, bretylium and guanethidine.

R. M. Quinton (*Pfizer Ltd., Sandwich, Kent*).

A convenient method of following the effects of various drugs on the heart-rate of anaesthetized rats.

D. Green (introduced by **G. E. O. Cambridge**) (*Wyeth Institute for Medical Research, Taplow, Berks.*).
A rat foot plethysmometer for single-handed operation.

D. B. Morgan, C. R. Paterson, C. G. Woods, C. N. Pulvertaft and P. Fourman (introduced by **D. R. Wood**) (*Departments of Chemical Pathology and Pathology, School of Medicine, Leeds 2, and York County Hospital*).

The effects in man of doses of 100 units of vitamin D₂.

R. E. Oakey and S. R. Stitch (introduced by **D. R. Wood**) (*Steroid Laboratory, Department of Chemical Pathology, School of Medicine, Leeds 2*).

The estimation of urinary oestriol in normal and pathological pregnancies.

P. Bresloff and S. R. Stitch (introduced by **D. R. Wood**) (*Steroid Laboratory, Department of Chemical Pathology, School of Medicine, Leeds 2*).

Biosynthesis of oestrogen by the ovary after irradiation with X-rays.

M. J. Levell (introduced by **D. R. Wood**) (*Steroid Laboratory, Department of Chemical Pathology, School of Medicine, Leeds 2*).

Some results with the fluorimetric estimation of urinary free 11-hydroxycorticosteroids.

A. J. Sharp (introduced by **D. R. Wood**) (*Department of Anatomy, School of Medicine, Leeds 2*).
Time-lapse cinematography equipment constructed from commercially available components.

R. Ballantyne (introduced by **D. R. Wood**) (*Department of Anatomy, School of Medicine, Leeds 2*).
The role of cholinesterase in detoxification.

Julia Fourman and **G. C. Kennedy** (introduced by **D. R. Wood**) (*Department of Anatomy, School of Medicine, Leeds 2 and Department of Experimental Medicine, Cambridge*).

The role of the posterior pituitary in changes of blood flow in the renal medulla of the rat.

S. M. Weidmann and **J. A. Weatherell** (introduced by **D. R. Wood**) (*Biological Research Unit, School of Dentistry, Leeds 1*).

Microsampling by strong acids for the investigation of chemical and physical properties of enamel.

G. A. Nelson (introduced by **D. R. Wood**) (*Department of Pharmacology, School of Medicine, Leeds 2*).

Some British poisonous plants.

G. A. Nelson (introduced by **D. R. Wood**) (*Department of Pharmacology, School of Medicine, Leeds 2*).

Stages in the biosynthesis of hordenine by barley in simulated cow's rumen.

E. R. Clark and **I. E. Hughes** (introduced by **D. R. Wood**) (*Department of Pharmacology, School of Medicine, Leeds 2*).

Estimation of blocking activity in a series of quaternary ammonium compounds, using the transmurally stimulated vas deferens of the guinea-pig.

N. Brookes (introduced by **D. Mackay**) (*Department of Pharmacology, School of Medicine, Leeds 2*).
Factors which influence the rate of onset of neuromuscular blockade.

J. R. Ledsome, **R. J. Linden** and **J. Norman** (introduced by **D. R. Wood**) (*Department of Physiology, School of Medicine, Leeds 2*).

The measurement of pH , PCO_2 and PO_2 and carbon dioxide and oxygen contents of blood using appropriate electrodes, a digital display and print-out method.

R. J. Linden, **J. R. Ledsome** and **C. Kidd** (introduced by **D. R. Wood**) (*Department of Physiology, School of Medicine, Leeds 2*).

Use of an ultra-violet oscillograph for recording "single unit" activity.

J. M. Dodd and **Margaret H. I. Dodd** (introduced by **D. R. Wood**) (*Department of Zoology, University of Leeds*).

Bioassay of TSH using the hypophysectomized *Xenopus* tadpole.

Margaret H. I. Dodd and **Barbara Dainton** (introduced by **D. R. Wood**) (*Department of Zoology, University of Leeds*).

The husbandry of the *Xenopus* tadpole.

P. J. Evennett (introduced by **D. R. Wood**) (*Department of Zoology, University of Leeds*).
Electron microscopic studies on normal and goitrous thyroids.

J. F. Leatherland and **J. M. Dodd** (introduced by **D. R. Wood**) (*Department of Zoology, University of Leeds*).

In situ demonstration of the hypothalamo-neurohypophyseal system of the eel.

M. S. Losowsky and **R. Hall** (introduced by **D. R. Wood**) (*Department of Medicine, University of Leeds, Leeds General Infirmary, Leeds 2*).

Fibrin stabilizing factor deficiency.

O. Peiris and **D. W. Miles** (introduced by **D. R. Wood**) (*Department of Medicine, Leeds General Infirmary, Leeds 2*).

The effect of ethyl alcohol on peripheral nerve conduction.

D. B. Clayson, J. S. M. Pringle and G. M. Bonser (introduced by **D. R. Wood**) (*Department of Experimental Pathology and Cancer Research, School of Medicine, Leeds 2*).

A sulphonamide which induces hyperplasia and ultimately malignancy of the mouse bladder epithelium.

E. R. Clark and Maria Jana (introduced by **D. R. Wood**) (*Department of Pharmacology, School of Medicine, Leeds 2*).

Identification of the impurity responsible for the reported nicotinic activity of xylocholine.

D. Mackay (*Department of Pharmacology, School of Medicine, Leeds 2*).

Simple method for determination of affinity constants of agonists.

A. K. Armitage, A. S. Milton and Cathleen F. Morrison (*Tobacco Research Laboratories, Harlow Hill, Harrogate*).

Effects of nicotine injected into the lateral ventricle of the cat.

G. A. H. Buttle (*Department of Pharmacology, School of Pharmacy, London, W.C.1*).

The effect of mouse pregnancy on the growth of sarcoma 180.

G. A. H. Buttle (*Department of Pharmacology, School of Pharmacy, London, W.C.1*).

The effect of norethisterone on the growth of sarcoma 180.

C. N. Roberts (introduced by **J. E. Olley**) (*Department of Pharmacology, Bradford Institute of Technology*).

Microchemical procedures in toxicity studies.

R. Hicks and D. T. Okpako (*Department of Pharmacology, Bradford Institute of Technology*).

Some quantitative aspects of anaphylaxis in the guinea-pig.

D. E. Clarke and J. R. Fozard (introduced by **G. D. Leach**) (*Department of Pharmacology, Bradford Institute of Technology*).

The effect of bretylium on infusions of 5-hydroxytryptamine and 5-hydroxytryptophan in relation to the actions of tyramine on the cardiovascular responses of the rat.

D. E. Clarke and P. L. Jenkinson (introduced by **G. D. Leach**) (*Department of Pharmacology, Bradford Institute of Technology*).

Extraction and fluorimetric estimation of noradrenaline.

J. R. Fozard and L. M. Taylor (introduced by **G. D. Leach**) (*Department of Pharmacology, Bradford Institute of Technology*).

Extraction and fluorimetric estimation of 5-hydroxytryptamine in the heart.

S. Lodge (introduced by **G. D. Leach**) (*Department of Pharmacology, Bradford Institute of Technology*).

Some properties of pharmacologically active lipids from the gastro-intestinal tract of the guinea-pig.

J. B. Harris (introduced by **G. D. Leach**) (*Department of Pharmacology, Bradford Institute of Technology*).

Modifications of the twitch responses of the rat diaphragm to acetylcholine as a result of alteration in the anionic composition of the bath fluid.

G. D. Leach (*Department of Pharmacology, Bradford Institute of Technology*).

Effect of drugs on the pulmonary arterial and jugular venous pressures of the anaesthetized rat.

G. D. Leach and A. Hiscoe (*Department of Pharmacology, Bradford Institute of Technology*).

A transistorized impulse generator for use in heart rate counting.

J. E. Olley (*Department of Pharmacology, Bradford Institute of Technology*).

Some methods for obtaining profiles of central nervous system activity.