IXTH ANGLO-DUTCH ENDOCRINE MEETING

12-14 SEPTEMBER 1984

UNIVERSITY OF LEEDS

The opinions and views within are those of the submitting authors and have not been verified by the societies, who accept no scientific responsibility for the statements made.
GENERAL INFORMATION

VENUE

The meeting will be held in the Worsley Medical and Dental Building, University of Leeds. Plenary Lectures, however, will be delivered in the Rupert Beckett Lecture Theatre which is the principal Lecture Theatre of the University. Symposia and Oral Communication Sessions, plus Poster Sessions, will be held in the Medical Building.

Different sessions of the meeting will proceed on three floors of the Medical Building: please consult the map provided at registration. The Dental Lecture Theatre is on Level 6, the Medical Lecture Theatre is on Level 7 and the Multidiscipline Laboratories are on Level 8. Symposia and Oral Communications will be delivered in either the Dental or Medical Lecture Theatres. Posters will be displayed in the Multidiscipline Laboratories.

REGISTRATION

Registration will take place from 5.00 p.m. to 8.00 p.m. on Tuesday 11th September in Charles Morris Hall, when a buffet supper will be available from 6.30 p.m. to 7.30 p.m. On Wednesday, Thursday and Friday registration will take place outside the Medical Lecture Theatre on Level 7 of the Medical and Dental Building.

The University telephone number is 0532 431751

PROGRAMME/ABSTRACT BOOK

All participants should remember to bring this to the meeting.

LECTURE FACILITIES

Projection facilities are available in all Lecture Theatres, as follows: 5 x 5 cm, slide projector; 25 x 25 cm, overhead projector.

POSTER SESSIONS

Participants are asked to set up their posters on the boards (6ft x 3ft) in the Multidiscipline Laboratories, Level 8, as soon as possible after their arrival. The posters should be attended between 4.00 and 5.00 p.m. on Wednesday 12th September and 4.00 and 5.00 p.m. on Friday 14th September. Posters should be left on the boards throughout the meeting.

TRAVEL

ROAD

Leeds is reached by the M1 from London and the M62 from Manchester and Hull as well as the major trunk roads. The University is one mile north west of the city centre. Ample parking will be provided near the hall of residence (the barrier on the car park next to Charles Morris Hall will not be in operation and participants should park there). There are frequent cheap coach services by National Bus Company and British Coachways from London to Leeds (Wellington Bus Station). The return fare from London (Victoria Coach Station) is currently £11.50.

RAIL

There is an hourly service (until 20.50 h) from London Kings Cross which takes 2 hours 20 minutes. Return fare (second class) is £42. Reduced rail fares are available to those attending this meeting but tickets must be obtained from the British Rail Conference Office, York, not less than two weeks before the date of travel. A leaflet giving details of this concession will be forwarded to all who have indicated on the registration form their intention to travel by rail.

AIR

There are four flights every weekday, two on Saturday and three on Sunday from London Heathrow to Leeds/Bradford Airport. Unfortunately, there is no direct bus service from the airport to Leeds City Centre.
There are three flights every weekday from Amsterdam to Leeds/Bradford Airport at 10.20, 14.40 and 19.55 h.

SEA

In addition to the short sea routes from France and Belgium to southern England, there are ferries from Holland and Belgium into Hull. On many services, cheap combined sea and coach fares are available.

CATERING ARRANGEMENTS

Coffee and tea will be available continually in the Medical School throughout the meeting. Bar facilities will be available every lunchtime in the Senior Common Room and every evening until 11.00 p.m. in Charles Morris Hall. Special arrangements have been made for dinner on 13th and 14th September (see below).

Lunch each day and dinner (Wednesday) will be provided in the University Senior Common Room which is within easy walking distance of the Medical School.

ACCOMMODATION

Accommodation is available in two forms:

(a) Charles Morris Hall: This hall is situated in the University precinct. All rooms are for single occupancy only, although adjoining rooms with a shower unit between them may be allocated to couples. Each room has a washbasin which is fitted with special taps obviating the necessity for plugs. A shower and toilet are shared between two rooms in Dobree and Whetton Houses and between three and four rooms in Marie Ogilvie House. Accommodation in Hall is simple but comfortable. A TV lounge is available and coffee- and tea-making facilities are provided in group kitchens. There is also a laundromat.

A buffet meal will be provided in Hall for residents on Tuesday from 6.30 p.m. Breakfast will be taken in Charles Morris Hall.

(b) St Mark’s Flats: A limited number of flats are available in the University precinct which are particularly suitable for families or groups. Each flat accommodates 4 or 5 persons. The dry ingredients for breakfast will be provided in each flat.

SOCIAL PROGRAMME

The afternoon of Thursday 13th September is free. Three alternative trips will be available, with coach transport to all: (a) Famous Worth Valley Railway (maintained by a preservation society) and visit to Haworth (beautiful moorland village and Bronte Family Parsonage). (b) Harrogate, with stylish shops, beautiful stone buildings and famous Horticultural Gardens. (c) York, with its Minster, City Walls and the Shambles, an area of preserved medieval buildings.

The evening of 13th September is the Annual Dinner of the British Society for Endocrinology and the principal social event of the Anglo-Dutch Meeting. The lavish dinner will be held in Leeds University House and preceded by a reception supported by the University of Leeds.

The dinner on 12th September will be preceded by a Civic Reception supported by the Leeds City Council in their elaborate City Hall.

Two alternative events have been arranged on the evening of Friday 14th September for delegates returning home on Saturday. Coach transport has been organised to both: (a) Harewood House, the seat of the Earl of Harewood, with a visit round the Stately Home, followed by dinner there. (b) Harry Ramsden’s, described as the biggest and best fish-and-chip shop in the world, with a stop en route at a traditional English pub.

BANKING FACILITIES

There is a Lloyds Bank in the basement of University House and there are branches of all the major banks on Woodhouse Lane, opposite Parkinson Building.
SESSION 1  Symposium: Receptor-Independent Responses (Abstracts 1 - 4) 09.30 - 13.00
Medical Lecture Theatre, Level 7

SESSION 2  Symposium: Protein-Hormone Interactions (Abstracts 5 - 10) 09.30 - 13.00
Dental Lecture Theatre, Level 6

SESSION 3  Oral Communications (Abstracts 11 - 18) 14.00 - 16.00
Medical Lecture Theatre, Level 7

SESSION 4  Oral Communications (Abstracts 19 - 26) 14.00 - 16.00
Dental Lecture Theatre, Level 6

SESSION 5  Attended Posters (Abstracts 27 - 59) 16.00 - 17.00
Multidiscipline Laboratories, Level 8

SESSION 6  Plenary Lecture (Abstract 60) 17.15 - 18.15
Rupert Beckett Lecture Theatre
SESSION 1  Medical Lecture Theatre, Level 7  09.30 - 13.00

SYMPOSIUM: RECEPTOR-INDEPENDENT RESPONSES

Chairman: G.J. Boer

1. 09.30 Translational control by 5α-steroids in fetal erythropoiesis
W.I.P. MAINWARING (Leeds)

2. 10.00 Calcium influences on PTH-stimulated bone resorption
M.P.M. HERRMANN-ERLEE (Leiden)

3. 10.30 Non-genomic actions of steroids
D. DUVAL (Paris)

11.00 COFFEE BREAK

11.30 Biological effects of exogenous and endogenous sterols in rats
H.J. DEGENHART (Rotterdam)

4. 12.00 Characteristics of different forms of the androgen receptor
A.O. BRINKMANN (Rotterdam)

12.30 Progesterone effects on the oocyte
E.-E. BAULIEU (Paris)

SESSION 2  Dental Lecture Theatre, Level 6  09.30 - 13.00

SYMPOSIUM: PROTEIN-HORMONE INTERACTIONS

Chairman: M. Peacock

5. 09.30 Free T4 and free T3 measurement in human disease
J.S. WOODHEAD (Cardiff)

6. 10.00 The significance of the free steroid concentration in plasma
M.J. REED (London)

7. 10.30 Euthyroid thyroxine excess: a clinical problem?
R. DOCTER (Rotterdam)

11.00 COFFEE BREAK

8. 11.30 Interactions between plasma lipoproteins and their receptors
N.B. MYANT (London)

9. 12.00 Isolation of a somatomedin binding protein from human amniotic fluid: development of
a radioimmunoassay
S.L.S. DROP (Rotterdam)

10. 12.30 Plasma vitamin D-binding protein
D.E.M. LAWSON (Cambridge)

SESSION 3  Medical Lecture Theatre, Level 7  14.00 - 16.00

ORAL COMMUNICATIONS

Chairman: M.J. Levell

11. 14.00 Physiological role of serum binding proteins. P.R. EDWARDS & R.P. EKINS

13. 14.30 Structural analysis of the effects of enzymatic digestion and reduction on the TSH receptor. P.R. BUCKLAND, Y. KAJITA & B. REES SMITH


15. 15.00 Isolation of an estrogen responsive blast lymphoid cell population containing estrogen receptor (ER) in the fetal thymus of guinea pig. A. GULINO, I. SCREPANTI, M.R. TORRISI, A. SANTONI & L. FRATI

16. 15.15 Inhibition of insulin-dependent amino acid uptake into myoblasts by somatostatin. D.J. HILL & G.S.G. SPENCER

17. 15.30 Studies of cortisol and corticotrophin activity in plasma of human subjects during endurance exercise, following previous partial glycogen depletion. N. WRIGHT & J. SADOW

18. 15.45 Effects of 1,25-dihydroxyvitamin D_3 (1,25D) and retinoic acid (RA) on the cell cycle of promyelocytic leukaemia (HL60) cells. C.P. DANIEL, A. PARREIRA & D.M. McCARTHY

SESSION 4  Dental Lecture Theatre, Level 6  14.00 - 16.00

ORAL COMMUNICATIONS

Chairman: V.A. Randall

19. 14.00 Binding of steroid hormones in saliva. M.A. SHAW


21. 14.30 Tissue sampling technique as a contributory factor to validity of human prostate androgen receptor assays. N. KYPRIANOU, H. WILLIAMS, W.B. PEELING & P. DAVIES

22. 14.45 A comparison of the production rate (CPR) and metabolism of cortisol determined by [13C]- and [3H]-labeled cortisol in the newborn pig. T.E. CHAPMAN, G.P.B. KRAAN, N.M. DRAYER & B. COLENBRANDER

23. 15.00 Monitoring HMG/HCG ovulation induction: a comparison of echoscopy and oestrogen assays. R.E. LAPPÖHN, J.J. PRATT & H.W.A. de BRUIJN


25. 15.30 Heterogeneity of human lutropin; the role of subunit epitopes. J.G. LOEBER & L.A. van GINKEL

26. 15.45 Evidence for the participation of the pituitary neurointermediate lobe in the response to certain stresses in teleosts. I.D. GILHAM & B.I. BAKER

SESSION 5  Multidiscipline Laboratories, Level 8  16.00 - 17.00

ATTENDED POSTERS

27. Insulin receptor status of bendrofluazide treated mild hypertensive patients with and without type II diabetes. J.S. GILL, N. AL-HUSSARY, T.W. ATKINS, K.G. TAYLOR & D.G. BEEVERS

28. Prostaglandin (PG) induced changes in blood pressure, renal function and cortisol production in seawater adapted eels. N.A.M. WALES & T. GAUNT


31. β-Hexachlorocyclohexane (β-HCH) is a persistent estrogen. F.L. van VELESEN, J.H.H. THIJSSSEN & J.G. LOEBER

32. Action of medroxyprogesterone acetate and insulin on MCF-7 cells. H. BRAUNSBERG, R.C. BONNEY & J.C. HOBART


34. Saliva aldosterone concentration in relation to the binding of aldosterone by plasma proteins. J.D. FEW & V.H.T. JAMES

35. Is the metabolism of $^{13}C$-testosterone different from natural testosterone? G.P.B. KRAAN, N.M. DRAYER, J. DANKERT & P.F.G ROMMERTS


37. A comparison of the effects of oral and intravenous glucose administration on renal calcium excretion in the rat. H.J. SINGH & H.O. GARLAND


39. The measurement of phospholipase A2 activity in human endometrium during the menstrual cycle. R.C. BONNEY

40. Some effects of hCG on oestrous cycles, plasma progesterone levels and follicular development in guinea pigs. M.J. PEDDIE & S. INGAMELLS

41. Effects of an antiserum to rat adipocyte plasma membranes on adipocyte metabolism in vitro and in vivo. H. COGRAVE, M.J. GARDNER, T.J. CLARKE & D.J. FLINT

42. Antisera to human pancreatic growth hormone-releasing factor: characterization with GRF fragments and highly purified labelled ligand. B. RAPFERTY & D. SCHULSTER

43. Vitamin D binding protein, its purification and relevance to plasma vitamin D metabolite measurements. W.B. BROWN, G.A. TAYLOR, M. PEACOCK & P.L. SELBY

44. Preparation of a range of vitamin D antigens. A.L. HOLMES, W.B. BROWN, R.B. HERBERT & M. PEACOCK


46. Tightly bound-steroid protein complexes in human breast tumours and a human mammary carcinoma cell line. E. ANDERSON, G.P. VINSON & O.J.A. GILMORE


51. Pulsatile LH patterns in the follicular phase of the menstrual cycle, PCO-like disease (POCD) and non-POCD secondary amenorrhea. C.W. BURGER, T. KORSEN, H. vKESSEL & J. SCHOEMAKER

52. Plasma testosterone, oestradiol, androstenedione and sex hormone binding globulin in post-menopausal women with liver cirrhosis. P. BANNISTER & M.S. LOSOWSKY

53. Gonadotrophin releasing hormone (GnRH) stimulates the production of inositol phosphates in rat pituitary tissue in the presence of lithium. M.P. SCHREY

54. Effect of gossypol on testosterone secretion by isolated Leydig cells. S.B. SUFI, A. DONALDSON & S.L. JEFFCOATE

55. Is noradrenaline excitatory or inhibitory to ACTH secretion? Studies in the rat with 6-hydroxydopamine (6-OHDA). S.A. NICHOLSON, M.C. HOLMES, S.M. WATTS, B. GILLHAM & M.T. JONES


57. Endocrinological confusion arising from the use of commercial labelled analogue free thyroid hormone kits. T.M. JACKSON, H. SISODIA, P.R. EDWARDS & R.P. EKINS

58. Effects of neonatal hemicastration on gonadotrophin secretion and testicular function in the rat. A.M. ULTEE-van GESSEL, F.G. LEEMBOrg, F.H. de JONG & H.J. van der MOLEN

59. The effect of oestradiol-17β-benzoate (OB) injection on the subsequent pituitary LH response to high K+ plus mbcAMP and theophylline (mbcAMP/theo) in vitro. J. de KONING, A.M.I. TIJSSEN & G.P. van REES

SESSION 6  Rupert Beckett Lecture Theatre 17.15 - 18.15

PLENARY LECTURE

Chairman: L.H. Rees

60. Influence of plasma protein on the uptake of hormones by tissues W.M. PARDRIDGE (Los Angeles)
Society for Endocrinology Business Meeting
Medical Lecture Theatre, Level 7

**SESSION 7**
Symposium: Receptors and Cancer (Abstracts 61 - 64)
Medical Lecture Theatre, Level 7

**SESSION 8**
Symposium: Modern Approaches to Hormone Assay and Localization (Abstracts 65 - 70)
Dental Lecture Theatre, Level 6

Social Programme
SESSION 7  Medical Lecture Theatre, Level 7  09.30 - 13.00

SYMPOSIUM: RECEPTORS AND CANCER

Chairman: S.R. Stitch

61. 09.30  Receptor assay and the clinical management of breast cancer
      R.A. HAWKINS (Edinburgh)

       10.00  Are receptors in uterus and mammary tumours identical?
      J.H.H. THIJSSEN (Utrecht)

62. 10.30  Progestin receptors in cytosols and nuclear extracts of human meningioma tissues
         M.A. BLANKENSTEIN (Rotterdam)

63. 11.00  COFFEE BREAK

       11.30  Androgen receptors and other parameters in predicting clinical response in prostate
         adenocarcinoma
      F.K. HABIB (Edinburgh)

64. 12.00  LHRH analogues in the treatment of breast and prostate cancer
         J.G.M. KLIJN (Rotterdam)

65. 12.30  Immunoassay and immunohistochemical assay of oestradiol receptor in human tumours
         R.J.B. KING (London)

SESSION 8  Dental Lecture Theatre, Level 6  09.30 - 13.00

SYMPOSIUM: MODERN APPROACHES TO HORMONE ASSAY AND LOCALIZATION

Chairman: R.E. Oakey

65. 09.30  Radioimmunoassay of anabolic steroids
         R.V. BROOKS (London)

66. 10.00  Immunological purification of PTH from plasma and the advantage of the PTH(1-84)
         assay in studying parathyroid disorders
         W.H.L. HACKENG (Rotterdam)

67. 10.30  HPLC in the measurement of vitamin D and its metabolites
         E.B. MAWER (Manchester)

       11.00  COFFEE BREAK

68. 11.30  Luminescent immunoassays for hormones
         L.J. KRICKA (Birmingham)

69. 12.00  Use of capillary column GCMS in the identification of anabolic steroid residues in
         the horse
         E. HOUGHTON (Newmarket)

70. 12.30  Hormone and neurotransmitter localization by immunocytochemistry
         F.W. van LEEUWEN (Amsterdam)

SOCIAL PROGRAMME  14.00 - 19.00
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SESSION 9  Medical Lecture Theatre, Level 7  
09.30 -13.00

SYMPOSIUM: REGULATORY NEUROPEPTIDES

Chairman: A.D. Care

71. 09.30 Recent developments in the physiology of gastrin and CCK  
G.J. DOCKRAY (Liverpool)

72. 10.00 Neuropeptides in development  
G.J. BOER (Amsterdam)

73. 10.30 The effects of a mini-somatostatin on rat pituitary tumor growth and GH secretion in acromegaly  
S.W.J. LAMBERTS (Rotterdam)

11.00 COFFEE BREAK

74. 11.30 Processing of neuropeptides into active products  
J.P.H. BURBACH (Utrecht)

75. 12.00 LH-RH and analoga in human reproduction  
R. ROLLAND (Nijmegen)

76. 12.30 Regulatory peptides in the peripheral nervous system  
S.R. BLOOM (London)

SESSION 10  Dental Lecture Theatre, Level 6  
09.30 - 13.00

SYMPOSIUM: REPRODUCTIVE ENDOCRINOLOGY

Chairman: H. van der Molen

77. 09.30 Induction of the first menstrual cycles with LH-RH in girls with primary amenorrhea  
J. SCHOEMAKER (Amsterdam)

78. 10.00 Corpus luteum function and the control of LH, FSH and prolactin  
G.A. SCHUILING (Groningen)

79. 10.30 Studies on androgen-sensitive genes in rat seminal vesicles  
S.J. HIGGINS (Leeds)

11.00 COFFEE BREAK

80. 11.30 Corpus luteum function in the rat  
G.H. ZEILMAKER (Rotterdam)

81. 12.00 Ovarian function before in-vitro fertilization  
S.G. HILLIER (London)

82. 12.30 Regulation of vitellogenin gene expression by oestrogen  
J.R. TATA & A.P. WOLFFE (London)

SESSION 11  Medical Lecture Theatre, Level 7  
14.00 - 16.00

ORAL COMMUNICATIONS

Chairman: W.I.P. Mainwaring

83. 14.00 Serum binding of oestradiol in normal women and women with breast diseases.  
M.S. LANGLEY, G.L. HAMMOND, A. BARDSLEY, R.A. SELLWOOD & D.C. ANDERSON

Does androgen play a role in human ovarian carcinoma? R. KÜHNEL, B.R. RAO & J.G. STOLK


Calcium ions and the control of cortisol synthesis by bovine adrenal cells in vitro. E. DAVIES, C.J. KENYON & R. FRASER

Evaluation of a tritiated water assay for the measurement of aromatase activity in human adipose tissue. D. SAMUEL & V.H.T. JAMES

Cortisone reductase deficiency: evidence for a new inborn error in metabolism of adrenal steroids. N.F. TAYLOR, W.A. BARTLETT, D.J. DAWSON & B.A. ENOCH

Dental Lecture Theatre, Level 6

Chairman: S.J. Higgins

Sexual dimorphism of messenger RNA from limbic system of neonatal rat brain. I.M. ADCOCK & B.D. GREENSTEIN


Luteinizing hormone releasing hormone enhances proceptivity in the common marmoset (Callithrix jaccus). K.M. KENDRICK & A.F. DIXSON

Seasonal variation in epitestosterone in the lizard Tiliguca rugosa. A.R. BOURNE, J.L. TAYLOR, B.J. STEWART & T.G. WATSON

Sex steroids modulate the release of calcium regulating hormones. P.L. SELBY & M. PEACOCK

Quantitation of vasopressin-neurophysin mRNA in hypothalamic nuclei: effect of osmotic stress. J.P.H. BURBACH, M.J. de HOOP, H. SCHMALE & D. RICHTER

Testosterone production and metabolism in young men: effect of physical exercise. T.A. CADOUX-HUDSON, J.D. FEW & F.J. IMMS

Multidiscipline Laboratories, Level 8

Attended Posters (see abstracts 27 - 59)
PLENARY LECTURE

Chairman: J.H.H. Thijssen

99. Inhibin: past and present controversies
    F.H. de Jong (Rotterdam)