University of Birmingham

Professor Wiebke Arlt MD DSc FRCP FMedSci

Professor of Medicine, Theme Lead for Endocrinology, Diabetes and Metabolism, Head of Centre for Endocrinology, Diabetes and Metabolism (CEDAM)

Contact details

Telephone +44 (0)121 414 3826 (Academic PA) (tel:+44 121 414 3826)

Fax +44(0)121 415 8712

Email w.arlt@bham.ac.uk (mailto:w.arlt@bham.ac.uk)

Centre for Endocrinology, Diabetes and Metabolism
School of Clinical and Experimental Medicine
Institute of Biomedical Research, Rm225

About

Wiebke Arlt is Professor of Medicine and Head of the Centre for Endocrinology, Diabetes and Metabolism at the University of Birmingham.

Wiebke Arlt has published over 120 research papers in scientific journals as well as reviews and book chapters in the field of basic, clinical and translational endocrinology, with a special focus on steroid biology and adrenal and gonadal disorders.

Wiebke is a sought after lecturer and has received several prizes and awards, including the Schoeller-Junkmann Award 2004, the European Journal of Endocrinology Prize 2009, The Society for Endocrinology Medal 2010, the Endocrine Society USA Ernst Oppenheimer Award 2010, and the Graham Bull Prize in Clinical Science 2010. She was elected Fellow of the Academy of Medical Sciences in 2010.

Qualifications

- Fellow of the Academy of Medical Sciences 2010
- Fellow of the Royal College of Physicians 2006
- DSc 2001
- CCT in General Medicine and Endocrinology & Diabetes 1998
- MD 1993
- MBChB 1990

Biography

Wiebke Arlt qualified in Medicine at the University of Cologne, Germany, in 1990. Three years later she obtained an academic MD degree with a thesis on the effects of suramin on adrenal function in sleeping sickness and adrenocortical carcinoma. After her core medical training she joined the endocrinology department at the University of Wuerzburg, Germany, where she trained from 1994 to 1998 under the auspices of Professor Bruno Allolio. Supported by a German Research Council Postdoctoral Fellowship Grant she then spent two years in the Molecular Endocrinology Lab of the Dept of Paediatrics at the University of California in San Francisco (UCSF). Following her return to Wuerzburg in 2001 she was appointed Consultant Endocrinologist. She obtained a prestigious Heisenberg Fellowship from the German Research Council and moved to Birmingham in October 2002, initially as a Visiting Senior Research Fellow hosted by Paul Stewart. In 2004, she obtained an MRC Senior Clinical Fellowship and was appointed Senior Lecturer at the University of Birmingham. This was followed by her promotion to Chair of Medicine in 2006 and to Head of Centre in 2008.

Teaching

- MBChB – Endocrinology (Years 1 & 2)
- BMedSc – Molecular Endocrinology (Years 2&3)
- MRes Hormones & Genes

Postgraduate supervision

- Wellcome Trust Combined Clinical/Basic PhD Training Programme
- PhD Consortium “Translational Endocrinology/Translational Steroid Physiology”
- BBSRC Targeted Priority Studentship Programme “Neuroimmunoendocrine interactions in Ageing”
- Marie Initial Training Network “Neuroendocrine Immune Networks in Ageing (NINA)”

Research

Wiebke is interested in disorders of the adrenal and the gonads, with a specific focus on sex steroids and the regulation of their metabolism and action. Her group has identified human mutations in co-factor generating enzymes playing a crucial role in steroidogenesis, PAPS synthase and P450 oxidoreductase, and are interested in their role in the pathophysiology of androgen excess and androgen deficiency.

A major focus of the work addresses the role of mass spectrometry in steroid analysis including its use as a discovery tool in adrenal and gonadal disorders and in the diagnosis and monitoring of steroid-producing and steroid-dependent tumours.

Wiebke Arlt’s research group is supported by the Medical Research Council, the Wellcome Trust, the European Commission (FP7 Health, Marie Curie), the European Science Foundation, the European Society of Paediatric Endocrinology, the Society for Endocrinology and the Birmingham Children’s Hospital Research Foundation.

Other activities

Local committees (selected):

- Member, Strategic Research Committee of the College of Medical Sciences (2010-)
- Member, Academic Clinical Training Operation Group (2009-)
- Member, Executive Committee, School of Clinical & Experimental Medicine (2008-)
- Member, Research Committee, School of Clinical & Experimental Medicine (2008-)
- Head, Centre for Endocrinology, Diabetes and Metabolism (CEDAM) (2008-)
- Laboratory Director, Wellcome Trust Clinical Research Facility at the Queen Elizabeth Hospital Birmingham (2008-)

Clinical activities:

- Honorary Consultant with the following NHS Foundation Trusts:
- University Hospital Birmingham NHS Foundation Trust (General Endocrine Clinic, Pituitary Clinic, Adrenal Tumour Specialist Service, Endocrine Genetics)
- Birmingham Women's Hospital NHS Foundation Trust (Reproductive Endocrinology Clinic, Reproductive Endocrine Genetics)
- Birmingham Children's Hospital (Disorder of Sex Development Clinic)

National Committees (selected):

- Wellcome Trust Investigator Award Expert Review Group (2010-)
- Chair, Society for Endocrinology Clinical Update Course (2010-)
- Member, Society for Endocrinology Programme Committee (2009-)
- Member, Medical Research Society (2009-)
- Medical Research Council Training & Career Group (2008-)

International Activities (selected):

- Member, Executive Committee of the European Society of Endocrinology (2009-)
- Editor, European Journal of Endocrinology
- Member, Steering Committee of the European Network for the Study of Adrenal Tumours (**www.ensat.org (http://www.ensat.org/)**)
- Member, European Network for the Investigation of Disorder of Sex Development (**www.eurodsd.eu (http://www.eurodsd.eu/)**)

Publications

Idkowiak J, O'Riordan S, Reisch N, Malunowicz EM, Collins F, Kerstens MN, Koehler B, Graul-Neumann LM, Szarras-Czapnik M, Silink M, Dattani MT, Shackleton CHL, Maiter D, Krone N, Arlt W. (2010) Pubertal presentation in seven patients with congenital adrenal hyperplasia due to P450 oxidoreductase deficiency.**J Clin Endocrinol Metab** Dec 29 [epub ahead of print]

Arlt W, Willis DS, Wild SH, Krone N, Doherty EJ, Hahner S, Han TS, Carroll PV, Conway GS, Rees DA, Stimson RH, Walker BR, Connell JMC, Ross RJ. (2010) Health status of adults with congenital adrenal hyperplasia: a cohort study by the United Kingdom Congenital adrenal Hyperplasia Adult Study Executive (CaHASE). **J Clin Endocrinol Metab**, 95(11): 5110-21.

Radford DJ, Wang K, McNelis JC, Taylor AE, Hechenberger G, Hofmann J, Chahal H, Arlt W, Lord JM. (2010) Dehydropeiandrosterone sulphate directly activates protein kinse C-β to increase human neutrophil superoxide generation. **Mol Endocrinol**, 24(4): 813-21.

Noordam C*, Dhir V*, McNelis JC, Schlereth F, Hanley NA, Krone N, Smeitink JA, Smeets R, Sweep FC, Claahsen-van der Grinten HL, Arlt W. (2009) Inactivating PAPSS2 mutations in a patient with premature pubarche.**N Engl J Med**, 360(22): 2310-2318. **These authors contributed equally*

Debono M, Ghobadi C, Rostami-Hodjegan A, Huatan H, Campbell M, Newell-Price J, Darzy K, Merke D, Arlt W, Ross RJ. (2009) Modified-release hydrocortisone to provide circadian cortisol profiles. **J Clin Endocrinol Metab,** 94(5): 1548-1554.

Dhir V, Ivison HE, Krone N, Shackleton CHL, Doherty AE, Stewart PM, Arlt W. (2007) Differential inhibition of CYP17A1 and CYP21A2 activities by the P450 oxidoreductase mutant A287P. **Mol Endocrinol**, 21:1958-1968.

Hammer F, Subtil S, Lux P, Maser-GluthC, Stewart PM, Allolio B, Arlt W. (2005) No evidence for hepatic conversion of dehydroepiandrosterone sulfate (DHEAS) to DHEA – *in vivo* and *in vitro* studies. **J Clin Endocrinol Metab,** 90: 3600-3605.

Arlt W, Walker EA, Draper N, Ivison HE, Ride JP, Hammer F, Chalder SM, Borucka M, Hauffa BP, Malunowicz EM, Stewart PM, Shackleton CHL. (2004) Congenital adrenal hyperplasia caused by mutant P450 oxidoreductase and human androgen synthesis: analytical study. **Lancet**, 363: 2128-2135.

Expertise

Sex hormones, specifically male sex hormones, their production by the adrenal glands and the gonads and their associated disorders; too much androgen (such as polycystic ovary syndrome) and not enough androgen; adrenal tumours

Alternative contact number available for this expert: **contact the press office (http://www.birmingham.ac.uk/news/contacts/index.aspx)**

© University of Birmingham 2015