

### Prof. Philippa Saunders



#### Biodata:

Philippa Saunders is a biomedical scientist and Professor of Reproductive Steroids at the University of Edinburgh where she is co-Director of the EXPPECT (Excellence in Pelvic Pain and Endometriosis Care and Treatment) Centre which brings together discovery scientists and clinicians conducting research to improve therapies for endometriosis.

She has published more than 270 papers with major contributions to our understanding of the impact of sex steroids on reproductive and other systems. The excellence of her research contribution has been recognised by Fellowships of the Academy of Medical Sciences (FMedSci), the Royal Society of Edinburgh (FRSE) and a prestigious Fellowship ad eudem of the Royal College of Obstetricians and Gynaecologists (FRCOG) an honour only rarely bestowed on Scientists who are not active Clinicians. Her current research is focused on developing new treatment paradigms to treat neuroinflammatory pain in women with endometriosis. Her research benefits from extensive collaborations with Clinical and Non-clinical colleagues and engagement with Pharma.

Website: <http://www.cir.ed.ac.uk/investigator/professor-philippa-saunders>

ORCID: [orcid.org/0000-0001-9051-9380](http://orcid.org/0000-0001-9051-9380)

#### Topic of Presentation:

Pathogenesis and aetiology of endometriosis: new insights and translational potential

#### Outline:

Endometriosis is a chronic, neuro-inflammatory condition associated with debilitating chronic pelvic pain. Hormonal, neurological and immunological factors are all implicated in its pathogenesis. To establish a link between endometriosis and steroid hormone action, several lines of enquiry have been pursued including: the impact of ovarian endocrine hormones (menstrual cycle) on cell function, evidence for local hormone metabolism within the lesions and cell-specific patterns of expression of steroid receptors. Analysis of peritoneal fluid and lesion samples has identified a key role for immune cells and inflammatory mediators as well as interactions with nerves in development of pain symptoms. New opportunities for the development of novel therapeutics are being explored.