PCL/19/01 - Precision treatment and drug repurposing to reduce endometriosis-associated pain in women

Endometriosis is associated with debilitating pelvic pain and affects ~176 million women worldwide. It is a complex, heterogeneous disorder of unknown aetiology defined by the presence of endometrial-like tissue ('lesions') outside the uterus. Management options for endometriosis-associated pain include surgical removal of lesions and medical treatment with ovarian suppressive drugs. However, the recurrence of endometriosis-associated pain is up to 50% within five years following surgery, and drug treatments are contraceptive and/or have menopausal-like side-effects. There is an unmet need to have clarity around the effectiveness of surgery for women with endometriosis and to assess the effectiveness of non-hormonal medical treatments.

During the lectureship, I will lead a feasibility trial to inform a future large definitive trial to determine if surgical treatment of the commonest subtype of endometriosis, superficial peritoneal disease, is effective. I will also lead two multicentre clinical trials to determine the effectiveness of re-purposed non-hormonal treatments (dichloroacetate and Omega-3 polyunsaturated fatty acids) for endometriosis-associated pain.

This lectureship will allow me to:

(a) Address clinically relevant research questions in endometriosis.
(b) Gain leadership skills and methodological expertise in clinical trial design/delivery so that I can develop as an independent Chief Investigator leading a portfolio of Women's Health studies