

## FPHS Strategic Development 2022 – 27

Submission by: EGA Institute for Women's Health

Date: 23rd November 2021

**Please indicate your Institute's 5 years priorities in the below areas:  
(briefly capture 2-3 priorities in each area)**

<b>Education</b>	<p>Aim: to develop the next cadre of clinical academics in O&amp;G, Neonatology and Sexual Reproductive Health by increasing our opportunities for Clinical Academic Trainees through consistent success in securing NIHR ACF and ACL posts at IfWH, and by generation of locally funded NIHR badged posts; conversion of these ACF and CLs into successful competitively awarded PhD fellowship applications.</p> <p>Aim: to grow our postgraduate taught programs in gynaecology through the development of an MSc in Gynaecologic Ultrasound in collaboration with Women's Health Division at UCLH, building on a successful MSc in Obstetric Ultrasound launched in 2021.</p> <p>Aim: to develop our undergraduate taught programs through exploring a BSc programme in Global Women and Child Health (jointly between IGH, ICH and IfWH)</p>
<b>Research</b>	<p>Aim: to become the leading UK centre for pre-clinical &amp; early phase pregnancy clinical trials in, for example, obstetric surgery, preterm birth, fetal growth restriction &amp; placental insufficiency. To translate into the clinic prenatal and neonatal stem cell, gene therapy, extracellular vesicles and nanoparticle treatment of inherited and acquired paediatric pathologies, neonatal pre-clinical and phase I-III neuroprotection trials for neonatal encephalopathy and neonatal outcome assessment.</p> <p>Through this we will make a significant contribution to the field of stem cell and gene therapy translational medicine, transform child health, deepen our understanding of stem cell biology, develop personalised cell therapy, and engineer innovative clinical grade therapeutics with commercialisation potential.</p> <p>Aim: to make a key contribution to Preconception/Interconception Health through securing programme/grant funding, making strong links with stakeholders especially primary care partners to deliver a new national policy of investment in pre-pregnancy health for women and men and create strong links with FemTech, to improve education and personalised knowledge of menstrual health, fertility, and pregnancy.</p> <p>Aim: to consolidate our expertise in non-cancer gynaecology clinical trials in endometriosis, urogynaecology/mesh surgery, paediatric adolescent gynaecology and menopause through evidence synthesis, and close collaboration with UCL Clinical Trials Units.</p> <p>Aim: to make North Central London a hub for excellence in the development and implementation of women's cancer prediction tools, clinical trials and personalised medicine to potentially include breast cancer as well as ovarian, uterine, vulval and vaginal cancers.</p>

<p><b>Enterprise</b></p>	<p>Aim: To successfully spin out a company based upon five gene therapy projects, through collaboration between Gene Transfer Technology Group, GOS ICH and UCL School of Pharmacy.</p> <p>Aim: To bring innovation from UCL Healthcare Engineering to bedside care for obstetric surgery through development and patenting of novel oxygen and pressure sensing and operative imaging devices to improve maternal and neonatal outcome in labour and operative birth.</p> <p>Aim: To progress commercialisation of novel drug development for neonatal chronic lung disease initially through further DPFS funding for phase 2 trials of recombinant human SP-D and subsequent commercial sponsorship.</p>
<p><b>Global</b></p>	<p>Aim: to develop global reach in Medical Education in low-and-middle-income countries for obstetric emergencies improving links between IfWH clinicians and local health care workers in India and Africa.</p> <p>Aim: to further enhance the impact of research on the measurement of pregnancy intention to research groups across the world in particular Central and South America and to develop collaborations in preconception research, with a focus on evidence-based interventions in primary care and public health, with nascent groups in Australia.</p> <p>Aim: to translate novel diagnostic devices: non -invasive smartphone technology to detect anaemia in pregnant women and to screen newborns for jaundice, and pre-clinical neuroprotection studies to clinical neuroprotection trials in low-and-middle-income countries in collaboration with Bill and Melinda Gates Foundation.</p>
<p><b>Engagement and Strategic Partnership</b></p>	<p>Aim: to have launched and part completed a major fundraising campaign to secure new consolidated space for IfWH within UCL Estate, making strong philanthropic links with OVPA donors and UCLH Charity.</p> <p>Aim: to establish and maintain strategic collaborations with academic universities in Egypt, Canada, Greece, Belgium and France to support research and education programmes. eg</p> <ol style="list-style-type: none"> <li>1. Mediterranean University (Egypt) are working on a joint PhD programme focusing on polycystic ovary syndrome and pregnancy outcome</li> <li>2. University of Cairo (Egypt) on better care for women with placenta accreta spectrum.</li> <li>3. University of Athens (Greece) on establishing a national training programme in obstetric emergencies</li> <li>4. establish the Joint Perinatal Research PhD programme with KU Leuven</li> <li>5. Fetal Growth Restriction collaboration and medical student exchange with Paris Descartes, France.</li> </ol> <p>Aim: to consolidate strategic collaborations with European academic institutions in Austria, Sweden and the Czech Republic for women’s cancer prevention to position UCL as a partner in forthcoming HORIZON Europe major grant call.</p>
<p><b>Equality and Diversity</b></p>	<p>Aim: to successfully renew our Athena Swan Gold Award in 2024 demonstrating our ongoing commitment to EDI including disability and race.</p>

	<p>Aim: to address the under-representation of BAME students on our programmes by awarding two BAME scholarship at MSc and PhD levels.</p> <p>Aim: to address our gender imbalance in IfWH (only 30% of our research staff are male and &gt;90% of our students are female) through developing a marketing strategy with UCL over the next five years to attract men to IfWH and to increase take up of male students on our education programmes.</p>
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## Development of faculty priorities in education, research, enterprise, engagement and EDI for the 5 year period:

### 1.a What are the opportunities available to us in relation to areas of existing strengths and/or important gaps we currently do less well that we should explore further?

(consider particularly any cross-institute or cross-faculty work here)

Important gaps:

IfWH does not as yet make the most of opportunities at UCL for analysis of routinely collected clinical datasets for patient care eg at UCLH via EPIC data and nationally in the UK. There is opportunity to link at UCL with IHI, Health Data Research UK, but we have little expertise in this area and insufficient academic workforce to engage. Our staff are engaged with NHS England National Maternity Policy, we have knowledge of the Maternity Services Data Set (MSDS) and there are links with the National Neonatal Research Database held at Imperial College.

We have clinical strengths in menopause, endometriosis, urogynaecology/mesh surgery, reproductive endocrinology and fertility but have difficulty making the most of these opportunities such as clinical trials due to a lack of UCL employed clinical academic staff in this field and suboptimal engagement with trials units. Current staff working in these areas are full-time clinicians at UCLH who deliver on the research in their spare time with suboptimal links to UCL resources.

We do not make the most of the opportunities for collaboration with UCL Cancer Institute in cancer and stem cells and with other UK Stem Cell Institutes (eg Cambridge).

We have great strength in gene therapy and gene transfer technology despite being a small Institute, but we struggle to get UCL recognition for the staff who are bringing in large amounts of commercial funding and industrial opportunities for spin-outs.

### 1.b What would we need to help us develop these?

Better links with HDRUK and fellowship / clinical academic staff / data scientists to drive collaboration in large datasets. Building link with the Institute of Epidemiology / Francis Crick Institute for these data linkages / analyses

Investment in Reproductive Medicine and non-cancer gynaecology / Urogynaecology clinical academic staff and better evidence synthesis links with ICTM.

More strategic investment is needed from UCL Enterprise about the value that innovation and commercialisation within IfWH brings to the university. There is also a need for better recognition from UCL central that staff who are bringing in commercial grants and enterprise scheme grants eg MRC DPFS, LifeArc are delivering equivalent work with comparable impact to those staff awarded fellowships. This would improve succession planning, retention of staff driving innovation and ensure continued commercialisation of advanced therapies which is a key part of UCL enterprise.

WH staff to initiate collaboration with Cancer Institute when the new Professor of Women's Cancer is appointed.

### **2.a What do we do less well that we see as less of a priority?**

Preimplantation Genetic Testing clinical research is now not a priority as the work has moved into the private sector, and the focus has shifted to infertility research.

We have also stopped research in Sexually Transmitted Infection as focus has moved to Preconception Care in general.