

Ensuring better lives for women and babies across the world

Supporting the UCL Elizabeth Garrett Anderson Institute for Women's Health





Women make up half of the human race

And yet all over the world — in developing countries and in post-industrial nations — they suffer more ill health than men, and receive substandard or gender-biased healthcare. Women's health needs, so distinct from those of men, simply aren't being met. The UCL Elizabeth Garrett Anderson Institute for Women's Health (IfWH) was established in 2004 with the objective of tackling this challenge, and has made a major contribution to the health of women in the UK and internationally.

Globally, issues of women's health and rights are poorly addressed — if addressed at all. From Australia to Zimbabwe, women and babies die from common and preventable diseases. Women are less likely to have their pain treated, their symptoms taken seriously or to be given a disease diagnosis than men.

In many countries, women's healthcare has traditionally been restricted to obstetrics and gynaecology. This approach fails to take into account the full range of health issues facing women and their babies.

The scope of women's healthcare has changed. There is a recognised need to work with models of health, illness and healthcare that move beyond the traditional. The health and wellbeing of women is essential to ending extreme poverty and promoting societies that are resilient. When women are healthy, and their health needs are listened to and treated, communities and economies thrive.

In a world rocked by a global pandemic that has disproportionately affected women, and in particular women of colour, the work of world-leading, interdisciplinary centres of excellence like the IfWH has never been more important.

"In 2020, threats to women's health come from all directions, including COVID-19, pervasive inequality, gender violence, lack of choice in planning their families, and environmental changes.

Now more than ever, women's health requires an institute such as this to provide a broad holistic approach to medicine, improving outcomes for women and their babies."

Professor Anna David Director, UCL EGA Institute for Women's Health

A moment of profound global reflection for our global community

2020 has been a year of seismic shifts in health, systemic inequality, geopolitical conflict, and environmental emergency. The combined power of the COVID-19 pandemic and the Black Lives Matter movement is shining an unflinching light on the stark inequalities that persist in societies all around the world.

Women are at the heart of these crises, disproportionately affected by the fallout of COVID-19 and even more so when they are of Black, Asian and minority ethnic (BAME) backgrounds. According to McKinsey, women make up 39% of global employment but account for 54% of overall job losses. In the UK, a third of working mothers reported having lost work or hours due to a lack of childcare during the pandemic. This rises to 44% when it came to mothers from BAME communities.

Women tend to earn less than men, have fewer savings, and are employed more in the informal economy. And in making up 70% of health workers and first responders globally, women also face a higher risk of COVID-19 transmission and fatalities.

We stand at a crossroads where the considerable gains won for women's health are not just potentially stalling, but are at threat of being undone. The IfWH, and its committed people, are more determined than ever to redouble efforts to drive forward progress in improving the lives of women and girls around the world.

UCL has long been at the forefront of pioneering medical innovations

The IfWH is bold, the only one of its kind in Europe, and attracts leading expertise from all over the world. Housed at UCL — one of the world's foremost research universities with a 194-year track record in groundbreaking medicine and healthcare — the Institute has been advocating for better healthcare for women for more than a century. Since 2004, the Institute has consolidated its pioneering role to become a powerful force in women's health research, education and teaching, responsible for important breakthroughs across the spectrum of women's health.

The IfWH's unique Life-Course Approach, looking holistically and strategically at the full range of health issues that women face in every stage of their lives, has driven much-needed progress: from shaping national and international sexual health policy to performing the first spina bifida surgeries on babies in the womb in the UK.

Globally too, important advancements have been made to improve many areas of women's health. Crucial contributions from disciplines such as genetics, biochemistry, psychology, sociology, economics, law and ethics — many originating at UCL — have brought women's health into sharp focus on a global stage. Consumer and advocacy groups have raised awareness of women's health issues, enriching research, practice and policy.

Now is the time to capitalise on hard-won gains

The IfWH is ready to revolutionise women's healthcare for the 21st century. Building on our history, the next ten years will see us translate more research insights into effective global health and treatment programmes and policies, putting our Life-Course Approach at the centre of all we do.

But we cannot do it alone. Investment for new research programmes and interventions is crucial to empower us to expand in line with our ambition and respond to the need at pace and scale. With your support, we can ensure that critical new insights translate directly into effective, world-leading treatment of women and babies.

Why we need to do more

- Every day, 1,500 women around the world die from pregnancy, or childbirth-related complications.
- Up to 6,000 stillbirths occur per day worldwide, or one every
 16 seconds, leaving a lasting, profound impact on women, families, communities, and healthcare workers.
- **7,000** neonatal deaths occur every day globally.
- Currently, over 200 million women want to avoid a pregnancy but do not have access to contraceptive services.
- Approximately 45% of pregnancies are unplanned. These often have worse outcomes, both for the mother and the baby.
- An estimated 471,000 new cases of cervical cancer are diagnosed each year globally.

The Life-Course Approach underpins and runs through all of our work at the IfWH. We look rigorously at every stage of women's lives, and the full range of complex issues that women face at all stages: from infancy to childhood, puberty to pregnancy and motherhood, maturity to menopause and old age, and everything in between.



What we do: a robust, multi-faceted approach to advocating women's health

The IfWH currently operates across the key areas of teaching, research, training, and ethics. We provide new knowledge, nurture the current and future healthcare workforce, and undertake vital and wideranging research. The Institute's work includes:

- Strong teaching across undergraduate modules, MSc and MRes programmes, and an internationally-renowned PhD and MD(Res) programme.
- Cross-disciplinary, comprehensive and collaborative research programme with a global health strategy.
- Life Learning through online courses.
- Professional academic training for doctors through the Integrated Clinical Academic Training (iCAT).
- A dedicated Centre for Ethics to tackle ethical health issues that confront women and society, and to train clinicians on them.

We practice what we preach

The Institute is the proud holder of an Athena SWAN Gold award — received by only nine other academic departments in the UK. The Athena SWAN Charter is a flagship accreditation scheme which recognises action to address gender equality within academia and research.

We know that science cannot reach its full potential unless it can benefit from the talents of the whole population, and until women and men can benefit equally from the opportunities it affords. Gold Athena SWAN awards recognise significant and sustained progression and achievement in promoting gender equality while addressing challenges particular to the discipline.

Image: Elizabeth Garrett Anderson, pioneer of women's rights in medicine and society whose name the IfWH takes.

Our building blocks for success

An academic department within UCL's Faculty of Population Health Sciences, the IfWH bears the name of Elizabeth Garrett Anderson. Elizabeth was a pioneering doctor who dedicated her life to women's rights and to improving women's health, founding the first British hospital for women, in London in 1872.

The Institute has become a leading centre of excellence for research, clinical care, education and training in women's health.



More than the sum of our parts

Cutting-edge expertise in cross-disciplinary working, research and education at UCL is integrated with clinical excellence across the spectrum of women's health at our partner hospitals, UCLH, Royal Free Hospital and Whittington Hospital, which draws on the commitment of dedicated professionals in medicine, nursing and associated disciplines.

This unique ecosystem allows the IfWH to undertake professional education, public engagement and community projects while also supporting important healthcare initiatives meeting the scientific challenges of our changing world. Alongside work in the UK, the Institute has embarked on major ventures in women's health in Africa and India.

Whole-life care for women around the world

Our areas of expertise encompass all women's health concerns throughout their life course, including teenage sexual health, family planning, pre-conception, pregnancy, health of babies, women's cancers, gynaecology, menopause, geriatric care, psychology, sociology, education and training.

In all areas, clinical teams work seamlessly with research groups that are established as international leaders. More than 50 researchers in women's health are based at the Institute, including world-ranking senior academics with access to the latest research technology and facilities, and over 100 honorary staff are based at our collaborating Trusts and other higher education institutions in the UK.







Images, top to bottom: UCL's main campus; University College Hospital; the IfWH Annual Conference 2019, featuring some of the Institute's 74 staff and 129 honorary staff members.

UCL and UCLH: a unique history and ecosystem to foster progress

- UCL has a long history of inclusivity: it was 1st in England to welcome women to university education, and to welcome students of any religion and social background.
- A university with a reputation for excellence: Ranked 10th in the world for Public Health (ShanghaiRanking Global Ranking of Academics Subjects 2018); 8th in the world, 4th in Europe, and 1st in London by QS World University Rankings 2020; and 1st in UK for research strength (REF 2014).
- UCLH is a flagship NHS Trust with a state-of-the-art new building: Comprising 11 different hospitals, including University College Hospital, Macmillan Cancer Centre, Hospital for Tropical Diseases, and the National Hospital for Neurology and Neurosurgery.
- **Critical mass:** UCLH sees over 950,000 outpatients and admits over 156,000 patients each year. It has a turnover of £882 million and contracts with over 70 primary care trust commissioning bodies.
- An authoritative voice with reach:
 UCLH provides academically-led acute
 and specialist services, to people from
 the local area, from throughout the United
 Kingdom and overseas.

Multidisciplinary research that enables change

The IfWH undertakes world-leading research across four departments: Reproductive Health; Maternal and Fetal Medicine; Neonatology; and Women's Cancer.

Underpinning all of our research is the theme of global health: our strategy is to strengthen and further develop programmes of research and education that benefit healthcare professionals and the women, mothers and newborns they care for around the globe.

Our strength in comprehensive, holistic, whole-life span clinical research, and our expertise in study methodology, running multi-country large scale trials and epidemiological and public health methodologies, combine to provide us with a unique set of skills that enable us to contribute further to improving the lives of women, mothers and babies — whoever they are and wherever they live in the world.

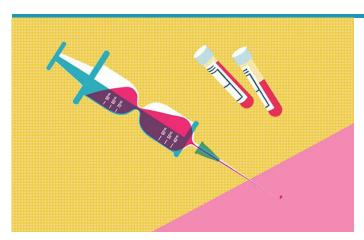
A track record of leading and driving change in the field

We are proud of our work over the past 15 years. Just some of our recent significant achievements include:



First UK fetal surgery for babies with spina bifida

A team from UCLH and Great Ormond Street Hospital operated on the abnormally developed spinal cords of six babies in the womb, in a UK medical first. The team — coordinated by the IfWH's Director, Professor Anna David — repaired the defect in the spine of two babies with open spina bifida while they were still in the womb, in separate operations during the summer of 2018. They have since successfully operated on eight more babies in the UK. The operations launched the Institute's UCL Centre for Prenatal Therapy, and won the British Medical Journal (BMJ) Awards Clinical Leadership team of the year 2019. In October 2019, UCLH was commissioned by NHS England, with UZ Leuven, to provide the clinical fetal surgery service for spina bifida.



Screening for ovarian cancer

Cancer screening is not yet available for ovarian cancer. Despite significant advances in treatment, only about 45% of women diagnosed with ovarian cancer survive for five years or more, largely because of late diagnosis. Led by the IfWH, the UK Collaborative Trial of Ovarian Cancer Screening is the largest randomised controlled trial ever undertaken, recruiting 200,000 women to be screened for ovarian cancer. The researchers found that a blood test picked up the cancer earlier and the screening method appears to be cost-effective. Extended follow-up is now underway to establish whether this results in lives being saved. If successful, then the blood-based screening programme may be able to reduce ovarian cancer deaths by a fifth



Improving newborn care globally

The Institute has led trailblazing research to develop the first major successful intervention for asphyxia in newborn babies, a leading cause of newborn deaths worldwide. Building on 40 years of research, the simple intervention of 'cooling' a baby with birth asphyxia by three degrees for three days was recommended. The team have been researching ways to improve outcomes further by studying therapies that can be added to cooling, such as melatonin or stem cells.

This is now saving one child from death, or severe disability, for every eight babies in developed settings, and is standard care in high resource settings. The Institute is testing next-step therapies in laboratory and clinical trials.



Shaping sexual health policy

The IfWH has an international reputation for research that has changed sexual and reproductive healthcare and policy. Research into the effectiveness of screening for genital chlamydia infection directly informed EU policy on chlamydia control, national guidance (NICE) on reduction of sexually transmitted infections, and the direction of the National Chlamydia Screening Programme in England. Advice from IfWH to the National Audit Office (NAO) led to the National Chlamydia Screening Programme confining chlamydia testing to higher risk groups attending health services, rather than low risk populations. The NAO report concluded that these and related efficiencies could save the NHS £40 million per year.

Responding to emerging needs: COVID-19 activity

As well as our commitment to our ongoing work to improve the lives of women and babies around the world, our academics have contributed to the global fight against COVID-19 in various ways, from contributing their expertise to developing tools to treat COVID-19 patients, to investigating the effect of the COVID-19 pandemic on women.



Creating a global support network for neonatal nurses

As the pandemic took hold, neonatal units around the world began to close their doors to parents and extended family, in an attempt to protect infants and minimise potential sickness in the number of healthcare professionals available to care for them. Neonatal nurses had to quickly adapt to provide the best care possible to the families whilst ensuring the safety of all babies on the unit, their colleagues and their own families.

Dr Katie Gallagher (IfWH Senior Research Fellow), in collaboration with the University of Hertfordshire, and Chelsea & Westminster NHS Foundation Trust / The True Colours Trust, launched a reflective writing project, collating experiences from neonatal nurses around the world. These experiences explored challenges and innovations and provided global community support during these unprecedented times. Stories are being published regularly in the Journal of Neonatal Nursing and on the Neonatal Nurses Association website, and are currently undergoing analysis to explore similarities between contributors.



Developing novel diagnostic tools for COVID-19 patients

Dr John Timms, group leader of the IfWH's Cancer Proteomics Group, along with a team of IfWH colleagues, has been involved in collaborative research with groups at the Crick Institute, Charite Hospital Berlin and the Medical University of Innsbruck, to build sophisticated biomarker models that predict outcomes in COVID-19 patients. The models developed are able to predict patient disease trajectory, as well as the recovery time of mild patients, the need for supplemental oxygen therapy or mechanical ventilation, as well as survival in severely ill patients.

Validation in an independent cohort from Innsbruck showed the survival model correctly predicted the outcomes for 23 out of 24 patients, allowing medical professionals to predict accurate prognoses weeks before the eventual outcome and plan treatment accordingly. The work is currently being written up for publication.



Investigating the impact of fertility clinic closures on patients

As the UK government announced its first lockdown in March 2020, all fertility clinics closed, causing disruption and delay to the treatments of thousands of men and women. A multi-disciplinary team, including Dr Zeynep Gurtin and Professor Joyce Harper from the IfWH, in collaboration with colleagues from the Reproductive Medicine Unit at UCLH, was convened to conduct first-response research into fertility patients' experiences, opinions and feelings.

Using an online questionnaire, the team received responses from more than 500 patients, and has already gained national coverage for the study. The team is currently preparing three journal articles and conference presentations to report their findings.



Exploring links between COVID-19 and pregnancy outcomes

The COVID-19 Conception and Pregnancy Study is an ongoing national study evaluating the impact of the pandemic on pregnancy outcomes, particularly on miscarriage and preterm labour. The study also examines the impact of the pandemic on access to contraception and pregnancy intentions. This is a collaborative project involving academics from the IfWH, led by alongside clinicians from the Reproductive Medicine Unit at UCLH.

The study currently has over 7,000 participants across the country. The study is ongoing, but preliminary analyses suggest valuable insights into the relationships between symptoms of COVID-19 and pregnancy outcomes. One such insight indicates that women were more likely to report difficulty accessing contraception after the start of the first national lockdown and that this is resulting in an increase in the proportion of unplanned pregnancies. The team is currently writing results up for publication.



The Life-Course Approach at the IfWH

The IfWH has a rich history of tackling substandard and siloed women's health — from birth to old age.

We have shown unwavering commitment to our vision — to improve knowledge, practice, and education in all aspects of women's and babies health — for the last 15 years. As a trusted authority and advocate, the Institute is now launching a new ten-year plan, formalising our Life-Course approach to women's health — from childhood to puberty, motherhood to menopause, and maturity to old age.

This mission will build on the breadth of the Institute's work to date and will encompass women's health concerns on an unmatched scale. We are focusing our work into six priority themes addressing the areas women seek support for throughout their life span, and underpinning these with a seventh theme, to enhance public understanding of women's health.

Approaching women's health from all angles

The seven priority themes are:

- **1. The Perinatal Brain:** To combat the 7,000 daily cases of neonatal deaths globally, the Centre for the Perinatal Brain will develop a baby assessment laboratory, a newborn neuro-intensive care unit, and a molecular biology lab.
- 2. The Preterm Baby: An estimated 60,000 babies are born prematurely every year in the UK. These babies are at high risk of complex health issues later in life. We will work to expand knowledge of the causes of preterm birth, and to develop effective preventive treatments to be used in clinics worldwide.
- **3. Sexual and Reproductive Health:** Our work in this area will encompass a range of healthcare concerns, from gynaecological conditions in young girls and improving choice of contraception, to creating a healthcare system that supports healthy pregnancies.
- **4. Maternal and Fetal Health:** Prenatal complications are a major cause of death for mothers and babies, yet prenatal therapy is a vastly under-resourced area. We will invest in three specialist centres to improve maternal and fetal health, and will promote optimised health and safety at birth.
- 5. Women's Cancer: The goal of the Centre for Women's Cancers is to improve risk prediction and early detection of women's cancers. We will use large biobanks to look at why these cancers develop, to find new ways to identify risk, to develop new ways of preventing these cancers, and to research early detection methods that can be developed to large-scale clinical trials.
- **6. Global Women's Health:** We will invest in three centres to ensure our work is global and representative, from translating our advances in newborn care to mothers in Asia and Africa, to investing in research on menopause and urogynaecology.
- 7. Learning and Understanding in Women's Health: The publicfacing element of our strategy, ensuring that our work and research is translated into improved public awareness of women's health issues.

Professor Anna David: Institute Director



Professor David is Director of the Institute, and a Professor of Obstetrics and Maternal Fetal Medicine. She leads the Centre for Prenatal Therapy, whose aim is to develop prenatal therapies for life

threatening disorders such as congenital diseases (e.g. haemophilia) and obstetric complications (e.g. fetal growth restriction, stillbirth and preterm birth). Professor David coordinated the awardwinning introduction of open fetal surgery for spina bifida to the UK at UCLH.

The Life-Course Approach

Existing and new centres as part of our Life-Course Approach include:

- Centre for Paediatric and Adolescent Gynaecology
- Centre for Sexual and Reproductive Health
- Centre for the Perinatal Brain
- Centre for Preterm Birth Prevention
- Centre for Prenatal Therapy
- UCL Stillbirth & Serious Incident Prevention and Research Centre (SPaRC)
- Centre for Placental Research
- Centre for Global Women's Health
- Centre for Menopause and Urogynaecology
- Centre for Environment and Women's Lifecourse Diseases
- Centre for Women's Cancers



Better lives for women and babies across the world

You can support radical change in the care of the specific health needs of women and their babies by investing in the IfWH.

Our plan of work is vast and complex, because the issues affecting women's health are vast and complex. The global clinical and academic landscape of women's health is continuously evolving. In the context of volatile challenges such as COVID-19, attacks on women's health rights globally, and systemic inequality and discrimination, the IfWH has a critical role to play.

We must be ready to not just respond to, but anticipate women's health needs in the UK and internationally, now and in the future. Our new mission will allow the IfWH to do this.

Our ten-year strategy and Life-Course Approach will bring together doctors, midwives, surgeons, psychologists, geneticists, laboratory scientists, innovators and more, with women and their babies at the heart of every programme. Comprehensive and robust, our plan will enable the IfWH — and our partners and supporters — to achieve meaningful, sustained impact at scale and pace.

Over the next ten years we will:

- Harness our existing network of world-leading academics, researchers and clinicians, and recruit more, to build capacity for our ten-year plan.
- Train the best and the brightest students and medical professionals from around the world on our sectorleading educational programmes to become the world-class health force of tomorrow.
- Launch a suite of targeted, multi-disciplinary new research centres to tackle the full range of issues facing women and babies of the world, now and in the future
- Invest in our infrastructure and physical home to ensure the spaces we use are befitting of the work we are doing and that we are able to grow in line with our ambition.

Underpinning all of our work will be targeted interventions to promote issues of women's health and place them firmly on national and international agendas.

Our work will bring fresh perspectives to women's health and generate ideas that can be translated from research to clinical improvements, faster and in real time. Before the Institute was established, such collaboration had never been attempted before and now, already, it is achieving results that are transforming and saving lives.

Achieving this integration of women's health issues brings exciting opportunities for progress, collaboration and investment. Together, we can break down the barriers that stand in the way of outstanding health care for women and girls.

"It is increasingly well recognised that there are differences in the factors determining health and the burden of ill-health for women and men. The dynamics of gender in health are of profound importance in this regard and have long been overlooked."

World Health Organisation

Join us: Supporting the Institute for Women's Health

Donors who invest in the Institute, in its people, its projects, and its spaces, will nurture one of the world's most ambitious, collaborative and unique communities for women's health. Join us as we save lives, reduce suffering and transform the care that is given to our mothers, wives, grandmothers, sisters, daughters, aunts, nieces, colleagues and friends.

Your investment will transform the landscape for women and babies worldwide, for their families, their communities, and their economies. We would be delighted to talk to you about how you can be part of the women's health revolution.

Supporting leadership in the field

Funding for academic posts to lay the foundations for new research centres — such as the Centre for Safe Birth and the Centre for Menopause and Urogynaecology — will allow us to attract and retain the most gifted and driven academics and researchers from across the globe.

Funded Chairs and Professorships are crucial and will enable us to build capacity in our key research areas.

Fostering the global pioneers of tomorrow: scholarships and fellowships

Our students, and potential students, represent the future: they are the innovators and critical thinkers that society needs to meet 21st century women's health challenges. Staying true to UCL's founding principle of education for all, we invest in the world's brightest people, regardless of their personal circumstances.

We want to work with like-minded philanthropists to help us give more outstanding people the opportunity to study at the lfWH: on our MSc in Women's Health; our intercalated BSc for medical students; our new MRes; and on our Life Learning professional development courses for current medical professionals.

Enabling crucial progress through research

Research breakthroughs drive progress and have a tangible impact on women's lives around the world. We need to accelerate discovery and implementation of treatment and practice for women and babies everywhere.

Support for our wide range of front-line research projects and centres means better women's healthcare outcomes, faster.

Investing in critical infrastructure

We want to continue to foster authentic collaboration and the chance encounters that spark innovation and solutions — to do this, we must invest in our physical spaces, state-of-the-art equipment, and labs.

Philanthropy support for a new/bigger home for the IfWH will accelerate research and teaching in an enabling and intuitive environment where current and future researchers can come together, exchange knowledge and ideas.

EGA Institute for Women's Health

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"I am struck by the high quality of the Institute's work, feeding into national recommendations, funded by major national and international grant giving bodies, and delivering novel methods to improve clinical outcomes in Women's Health."

Professor Donald Peebles Former Divisional Clinical Director for Women's Health, UCLH

