

Global Consortium for Reproductive Longevity & Equality (GCRLE)

Mission & Vision Statement

The Challenge: Reframing the narrative around women's reproductive health

Women's health has long been sidelined as a niche subcategory of medicine, garnering barely 1% of research dollars and biopharma investment while impacting over half the global population. A tiny fraction of that 1% has been applied to study reproductive longevity, arguably the most important but simultaneously the most neglected topic affecting women's health and wellbeing.

Reproductive aging will impact every single female on the planet who lives to mid-life. Ovaries age at over twice the rate of other organs, and as more women globally delay childbearing this can lead to infertility, miscarriages, and birth defects. At the same time, ovaries also make hormones which are absolutely essential for overall health. Beyond reproduction, the end of fertility makes a woman's body age faster—menopause dramatically increases risk of cognitive decline, heart disease, stroke, insomnia, depression, osteoporosis, weight gain and arthritis.

The consequences of reproductive aging are profound, yet we don't understand the most basic things about it – what sets it in motion, why it varies so much between individuals, or why it happens so early. Systemic sex bias and dramatic underfunding in biomedical research have limited progress in addressing these key questions. Reproductive longevity is about *far more than fertility or menopause* and its accompanying health risks. It involves a woman's entire life experience and impacts career, family planning, and most importantly, health and well-being – this is about **equality**.

The Solution: Building the ecosystem to extend reproductive longevity

The [Global Consortium for Reproductive Longevity & Equality \(GCRLE\)](#) is a moonshot initiative to tackle female reproductive aging, launched at the [Buck Institute](#) in partnership with the [Bia-Echo Foundation](#) in 2020. We want to figure out what leads to reproductive decline in females and develop interventions to slow or reverse it. **The GCRLE's role is to facilitate & accelerate translating scientific discoveries from the lab into useful products and therapies that positively impact women's reproductive lives.** We are building an intellectual network of scientists in academia and biotech, clinicians, funders, and thought leaders from all over the world to promote a collaborative dialogue about women, aging and health.

Our goal is to extend female reproductive span, so we need to engage an army of creative scientists and visionaries to work collaboratively on this problem. In essence, we are building the field. We envision the Consortium as an innovation hub that supports a quickly growing knowledge base, to build a sustainable, impactful, research space. We need a paradigm shift to make it work - novel, innovative operating ideas that incentivize collaboration and conversation between stakeholders who would normally not interact. We want to mold the way industry and academic partners work together that go beyond traditional models so that opportunities and partnerships are realized earlier. This will accelerate discovery toward new products, diagnostics, and therapies for reproductive longevity.

The GCRLE, by focusing research on understanding how and why women go through reproductive decline in mid-life, has the potential to dramatically and significantly improve the health and well-being of women worldwide. We aim to balance the inequities women face managing family, career and health decisions.

To accomplish this, we are:

- **Funding scientists.** In 2020 we distributed more than **\$7m in research grants to 23 researchers** worldwide to pursue innovative research on reproductive aging and will fund another round of grants in early 2023. We provide these scholars with infrastructure, collaboration and network-building opportunities, paths to translation, as well as additional technical and scientific support for their research.
- **Creating a thriving community.** We are building the network and hosted the first-ever international conference dedicated to reproductive longevity and will continue to host multiple annual events. We have built advisory boards of experts to provide translational support, advocate for public funding, and study how to best propel the science forward.
- **Building resources for researchers.** We are pioneering a comprehensive knowledge hub with layers of information about topics in female reproductive aging spanning definitions to updates on the most cutting-edge research in real time vetted by scientists and clinicians. We built a reproductive biology core facility centered at the Buck Institute that provides learning opportunities and experimental help for researchers around the world interested in ovarian aging. We are also building a biobank for discarded tissue to better help researchers access hard-to-find human samples.
- **Building a global infrastructure.** Connecting people, clinicians, entrepreneurs, companies, and researchers to accelerate progress. To build the ecosystem in a novel way we are bringing people from different backgrounds together, connecting the science with entrepreneurs. Advances that will most rapidly lead to products and therapies for women are made through collaborations between academia and industry, utilizing the distinct expertise of both.
- **Advocating for change and greater investment.** We are spreading the word to change the narrative and encourage new funders in this space.

We are in a historic moment when the conversation about women's reproductive health is evolving – there is a palpable synergy as taboos around female bodies are shattered, periods, miscarriage, sex, menopause – women all over the world are pushing for open honest conversations to normalize their reproductive health issues and tackle infertility and menopause. It is imperative that we **expand funding for research** and find new ways to empower women with parity and options in their reproductive choices. Our goal is to build the field to understand the basic biological mechanisms that trigger female reproductive aging, from the earliest stages through to menopause, and ultimately leverage this understanding to intervene and balance the scales.

For more information, please visit <https://gcrle.org/>