

# MATRIX

## A USAID Project to Advance the Research and Development of Innovative HIV Prevention Products for Women

### About MATRIX

- [MATRIX](#) is a five-year program funded by the U.S. Agency for International Development (USAID) in 2021 that aims to expedite the research and development of HIV prevention products for women – including products to protect against both HIV and pregnancy – that in addition to being safe and effective, will be **acceptable, affordable, scalable** and **deliverable** in the settings where they are needed most.
- MATRIX activities are focused on the **early** research and development of products, which involves both pre-clinical research – the laboratory and animal studies needed to support a product’s evaluation in humans – and the first clinical trials of products. Through its North-South Partnerships, MATRIX aims also to strengthen the research and development capacity of African investigators to facilitate full and sustainable ownership of this work.
- MATRIX is being implemented by Magee-Womens Research Institute (MWRI) in collaboration with partner organizations based in Kenya, South Africa, the United States and Zimbabwe. Leading the project is Sharon Hillier, Ph.D., of MWRI and the University of Pittsburgh, USA, with Thesla Palanee-Phillips, Ph.D., from Wits RHI and University of Witwatersrand, South Africa, serving as deputy director. Collectively, MATRIX partners have expertise across multiple fields, including drug formulation, drug delivery and product development; clinical trials design and implementation; human-centered design and socio-behavioral research; market strategy and business case development; capacity strengthening; and stakeholder engagement.



### How is MATRIX unique?

- The research and development of new products begins with rigorous testing in the laboratory and then studies in animals seeking to demonstrate their potential safety and efficacy. These studies must be conducted, and other regulatory requirements met, before a product can proceed to human clinical trials. The products being developed under MATRIX must also meet a second set of standards that considers what women want and are likely to use and whether the product will provide added value and be practical and feasible to introduce in countries most affected by HIV. Indeed, a key feature of MATRIX is its focus on being responsive to end-user and stakeholder feedback during the earliest stages of product development to inform decisions about product design and MATRIX’s overall research agenda.
- While early-phase clinical trials of new HIV prevention products have predominately been conducted in the United States or Europe, MATRIX is conducting these kinds of studies in sub-Saharan Africa (in parallel with the United States) in order to gain important insight into the safety and acceptability of new products in the populations that are most important.

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