

THE POPULATION COUNCIL CENTER FOR BIOMEDICAL RESEARCH

A NONPROFIT PRODUCT-DEVELOPMENT ENTITY

CENTER FOR BIOMEDICAL RESEARCH (CBR)



CENTER FOR
BIOMEDICAL
RESEARCH

For more than 60 years, research conducted at the CBR laboratories has addressed critical questions in sexual and reproductive health and supported the development of innovative products that help protect the health and well-being of millions of people worldwide.

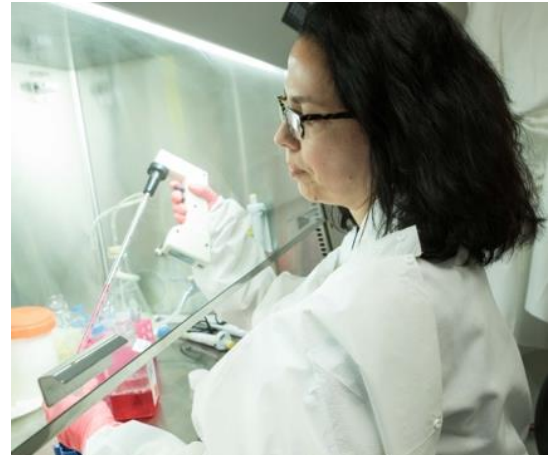
The Center's researchers pioneered the field of long-acting reversible contraception (LARCs), developing intrauterine devices (IUDs) such as ParaGard® (the copper-T IUD) and Mirena®; implants such as Norplant® and Jadelle®, and most recently, a contraceptive vaginal system known as Annovera®; which have led to a series of technological descendants. Today, more than 170 million women worldwide are using contraceptive technologies developed at CBR or based on CBR's technologies.

OUR WORK

The Center's scientists are investigating new approaches to prevent HIV and other sexually transmitted infections (STIs) and developing next-generation contraceptives and novel multipurpose prevention technologies, or MPTs, which are products designed to prevent HIV, other STIs and, in some cases, unintended pregnancy. Researchers are developing on demand and sustained release formulations that deliver active pharmaceutical ingredients from fast-dissolving inserts, gels, intravaginal rings (IVRs) and other innovative delivery systems that are designed to be safe, low-cost and easy to use.

OUR CAPABILITIES

The Council's experience in reproductive health, HIV and other STIs, basic science research, behavioral science, and public health guides the Center's efforts to develop the products that women and men need and will use. The biomedical innovations developed at the Center's labs have the potential to expand the options to improve sexual and reproductive health significantly. CBR expertise includes product formulation, in which promising drugs or combinations of drugs are loaded into novel drug delivery systems, and preclinical and clinical testing of products to establish safety and efficacy. The Council has deep experience in regulatory and health systems management, and in product introduction and social marketing, which helps ensure that the products developed in our labs will be available to the people who need them most. The Council has seven FDA-approved products, numerous patents and hundreds of publications in top peer-reviewed scientific journals. CBR scientists are developing a rich pipeline of products, ensuring that men and women worldwide will have safe and effective products that meet their sexual and reproductive health needs throughout the different stages of their lives.



Located on the campus of New York City's Rockefeller University, CBR is a vibrant hub of scientific investigation and product development.

OUR PARTNERSHIP MODEL

CBR partners with universities, government institutions, other non-profit research organizations, service delivery organizations, contract research organizations and pharmaceutical companies to develop, manufacture and conduct clinical trial testing.

Our model includes research, co-development, manufacturing, clinical trial and material transfer agreements. CBR does not market any of our products relying on partnerships with pharmaceutical companies to market and distribute our products which include provisions for public sector pricing. Our focus is on developing long term partnerships where mutual commitments to products can be realized.



SELECTED PRODUCTS IN DEVELOPMENT

Population Council researchers are pioneering bold approaches to reduce sexually transmitted infections and unintended pregnancy by developing a new generation of MPTs.

MPTs—fast-dissolving inserts, gels, and intravaginal rings—are designed to prevent HIV, other STIs, and/or unintended pregnancy simultaneously, allowing women and men to lead healthy sexual and reproductive lives.

Vaginal ring for the prevention of pregnancy and HIV



- Etonogestrel (ETG), ethinyl estradiol (EE), and QGriffithsin (QGRFT) vaginal ring (EEQ IVR) is in preclinical phase
- GRFT is a naturally occurring algae-derived protein that inhibits HIV and other pathogens, including HSV, and is the most potent anti-HIV agent described in the literature
- GRFT could eliminate risk of HIV drug cross-resistance, as no other antiretroviral with similar mode of action is used in treatment
- Collaboration with Oak Crest Institute of Science

Fast dissolving insert for the prevention of pregnancy and HIV



- QGriffithsin, citric acid, lactic acid, sodium bitartrate
- On demand contraception, hormone free
- Does not impact bleeding profile
- Provides protection for women with infrequent sex
- Collaboration with PATH

Dual prevention pill for the prevention of pregnancy and HIV



- Provides protection for women against pregnancy and HIV by co-formulating emtricitabine and tenofovir disoproxil fumarate (PrEP) with levonorgestrel and ethinyl estradiol for contraception
- Designed to increase uptake of and adherence to PrEP especially among high risk adolescent girls

CBR is developing new contraceptive methods to address the needs of the 142 million women with an unmet need for contraception and millions more who are dissatisfied with their current method.

These contraceptives address the need for on demand contraception for infrequent sex, male contraception, and potential better safety profiles, especially for heavier and obese women.

Microneedle patch for on demand contraception



- Nestorone microneedle for on-demand contraception
- 4–6-day window of protection when used prior to coitus
- Target is minimal breakthrough bleeding if used less than once a month

Nestorone/estradiol contraceptive 3-month ring



- Estradiol could be a safer estrogen with potentially fewer side effects, especially for heavier women