

Enzyme-Linked Immunosorbent Assay (ELISA) Service Center

The Project: Expand ELISA Services

The PATH Malaria Vaccine Initiative (MVI), which is working to enhance the ability of assays and other laboratory tools to evaluate the potential of new vaccine candidates, is supporting the expansion of the ELISA (enzyme-linked immunosorbent assay) Service Center, a key facility located at the Walter Reed Army Institute of Research (WRAIR).

MVI is working with partners to support the upgrade of the ELISA Service Center to an ELISA Global Reference Center—a major development that is meant to provide the global malaria vaccine community with standardized and highly reproducible analyses of vaccine-induced antibody levels, comparative assessments of vaccine candidates, and assay development.

The Potential: Enhanced Services Could Benefit the Global Community

Experience shows that properly evaluating the potential of new vaccine candidates requires reliable and sensitive laboratory tools. Investments to develop, qualify, and use novel assays and models would provide robust data to inform decision-making around vaccine development and reduce investment risk.

MVI and the US Agency for International Development (USAID) established the ELISA Service Center in 2005. The assays offered by the center were initially developed to evaluate WRAIR's vaccine candidates. The Malaria Serology Laboratory at WRAIR uses several ELISA assays, including those against the 3D7 allele of *Plasmodium falciparum* apical merozoite antigen 1 (AMA1) and merozoite surface protein 1 (p42) (MSP-1p42), liver-stage antigen 1 (LSA1), and circumsporozoite protein (CSP).

The proposed upgrade of the ELISA Service Center to an ELISA Global Reference Center would directly benefit the global community by enabling the center to take an active role in technology transfer, training, and assay development in addition to evaluating antibody responses to a greater number of malaria antigens. Other organizations supporting the upgrade include the European Malaria Vaccine Initiative and USAID.

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The PATH Malaria Vaccine Initiative (MVI) is a global program established at PATH through an initial grant of \$50 million from the Bill & Melinda Gates Foundation. MVI's mission is to accelerate the development of malaria vaccines and ensure their availability and accessibility in the developing world. MVI's vision is a world free from malaria. For more information, please visit www.malariavaccine.org. **PATH** is an international, nonprofit organization that creates sustainable, culturally relevant solutions that enable communities worldwide to break longstanding cycles of poor health. By collaborating with diverse public- and private-sector partners, PATH helps provide appropriate health technologies and vital strategies that change the way people think and act. PATH's work improves global health and well-being. For more information, please visit www.path.org.