Atlanta, due to the large size of its HIV epidemic, will serve as the ideal site to recruit HIV-infected and at-risk women who are representative of the Southern epidemic into the Women’s Interagency Health Study (WIHS). Inclusion of Atlanta will expand the WIHS research expertise and agenda to include areas for which the Emory faculty are leading experts nationally. The potential of an Emory Clinical Research Site is evident from the experience and excellent track record in the accrual of hundreds of women into HIV research including the DAIDS supported networks (ACTG, HPTN, HVTN) trials, and from the availability of state-of-the-art research capacity relevant to women’s health (colposcopy, DXA and fMRI, carotid intima ultrasound, cardiac CT, local specimen repository, etc.). The size of our HIV clinical activities, which include 7,921 patients (22% women), 950 whom are newly diagnosed and antiretroviral treatment naïve, offers a unique opportunity to diversify the WIHS cohort. Through long-standing collaboration between Emory investigators, county health departments, and community based organizations in the state, the Emory WIHS Clinical Research Site will attract eligible subjects from rural Georgia and from the hard-to-reach communities to better characterize the changing demographics of the epidemic in the South. Innovative approaches guided by principles aligned with community-based participatory research will be employed to recruit, link, and retain women in the WIHS cohort. The overarching focus of the Emory WIHS application is “HIV/AIDS secondary prevention for women through immunological, clinical, pharmacological, epidemiological and behavioral research”. Our vision is to make major contributions in effective behavioral and clinical interventions, and explore immunologic, epidemiological and pharmacological activities confronting women living with HIV. This vision is operationalized in our multisite research proposal “The Emory SWEET Trial”, an innovative implementable smartphone intervention designed to enhance antiretroviral adherence, promote harm reduction, reduce STDs incidence, and improve overall clinical and biomedical outcomes among HIV-infected and at-risk women. The site-specific projects engage the expertise of leading scientists at Emory to explore using the local WIHS cohort, the intracellular pharmacokinetics of commonly used antiretroviral drugs in HAART and PrEP, define the dyadic features that impact the lives of women living with HIV through couple voluntary counseling and HIV testing, and examine Bcell subsets, PD-1 expression, and serologic memory in peripheral blood and the female genital tract of HIV-infected women, to better characterize the impact of HIV infection on genital mucosal immunity.