

**Title: Host-microbe interactions in genital GVHD after stem cell transplantation**

**Project description:** This literature review project focuses on the biological mechanisms underlying genital graft-versus-host disease (GVHD) in women after allogeneic stem cell transplantation. The student will review current scientific literature on how the genital microenvironment—including viral infections (such as HPV), the vaginal microbiome, and immune responses—may contribute to inflammation and tissue damage in this condition. The project will involve analyzing recent research articles and synthesizing current knowledge on host-microbe interactions, mucosal immunity, and post-transplant complications. The goal is to identify key biological mechanisms and potential molecular biomarkers that could improve early detection and monitoring of genital GVHD. The project will be supervised remotely by researchers at Karolinska Institutet and Karolinska University Hospital and will provide experience in scientific literature analysis and academic writing in the fields of immunology, microbiology, and transplantation medicine.

**Application:** Interested students should send their CV, a short motivation email, and their current transcript of grades to [mariano.molina.beitia@ki.se](mailto:mariano.molina.beitia@ki.se). **Application deadline:** April 15, 2026 (applications will be reviewed on a rolling basis).