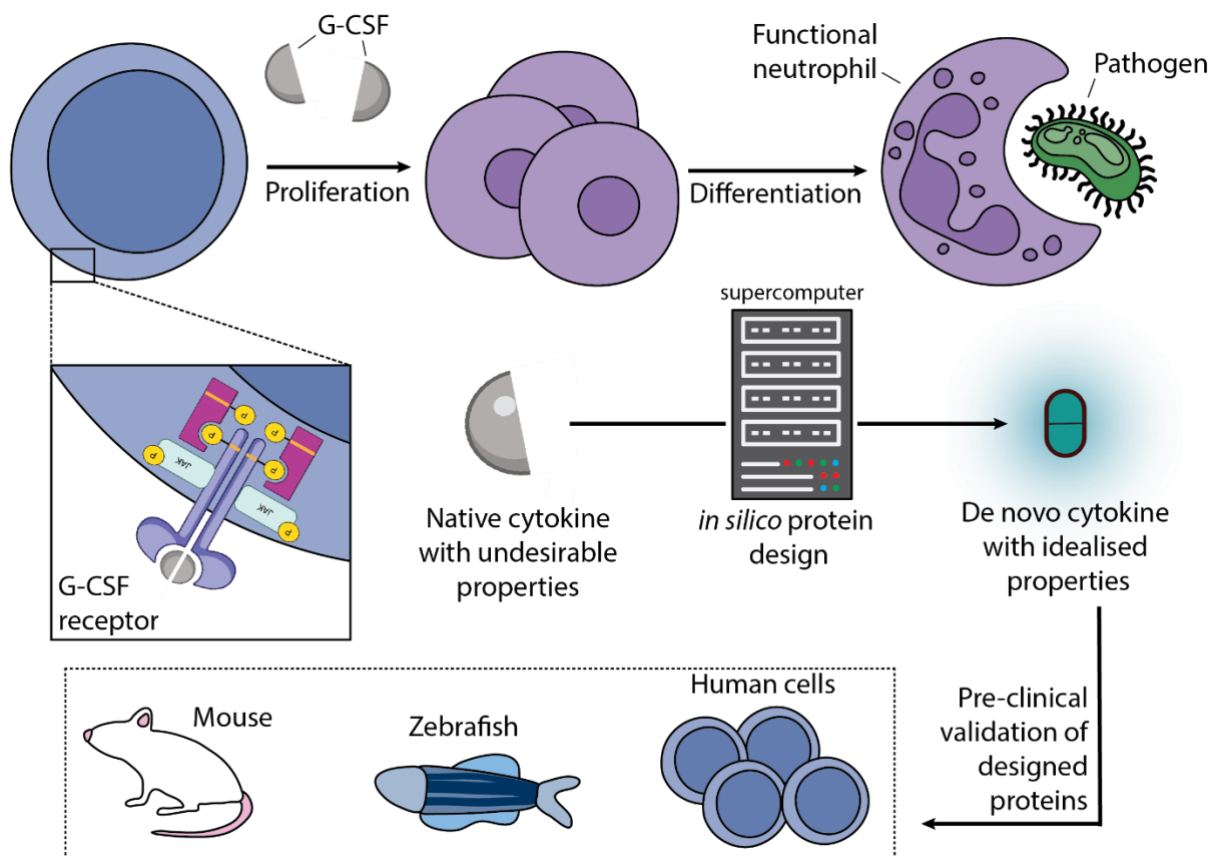




The design and development of novel immunotherapeutic proteins



Native G-CSF is a cytokine responsible for proliferating and differentiating blood stem cells into white blood cells capable of fighting pathogens. G-CSF acts by dimerizing and activating its target receptor in the unspecialized blood cells. Using computational protein design, the research team could generate hyper-stable cytokines with enhanced properties, *de novo*. These designs are capable of exerting strong granulopoietic activity in different model systems, including human cells and different animal models.