Nanobodies Workshop: Binder Recovery by In Silico and In Vitro Panning

Contribution ID: 17

Type: Practical

Workshop Practical: Nanobody Panning Against a Target Antigen

Wednesday 24 September 2025 16:00 (1 hour)

In the practical part of the workshop, participants will gain hands-on experience with phage display-based nanobody panning. Working in small groups, they will perform a selection round using a nanobody (VHH) library and a chosen model antigen immobilized on a solid surface. The goal is to enrich for nanobody clones that specifically bind the target.

The workflow includes incubation of the library with the antigen, washing to remove non-binders, elution of bound phages, and infection of E. coli for amplification. If time allows, participants will also explore panning on live cells to simulate more complex and physiologically relevant selection environments.

Takeaway: Participants will understand and carry out the core steps of a nanobody selection campaign, gaining insight into the practical considerations and challenges of identifying specific binders from a large preimmune or synthetic library.

Track Classification: Experimental Panning