Contribution ID: **5**   Type: **Practical**

Nanobody Isolation In Silico From Pre-Immune Libraries (hands-on)

Tuesday 23 September 2025 13:00 (1h 30m)

In the hands-on workshop, participants rotate through brief, guided exercises:

1. Processing VHH sequences and clustering clonotypes with MiXCR;
2. Building and comparing VHH models side-by-side using NanobodyBuilder2 vs. ColabFold/Boltz1;
3. Visualizing antigen–VHH interfaces;
4. Interpreting ZDock/Boltz-1 predictions via DockQ scores;
5. Exploring CDR motif distributions from MiXCR output. By session's end, attendees will understand each workflow component, its computational demands, and current limitations—enabling them to build their own in silico nanobody screening pipelines.

Presenter: KROPIVSEK, Klara (University of Nova Gorica)

Track Classification: In Silico Modelling and Design