Engineering single-domain antibodies: from selection to drug-like leads

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Discover and improve nanobodies – single-domain “mini-antibodies” with major potential for therapeutics and diagnostics. You will use in-vitro display selections (ribosome or yeast display) to isolate binders to medically relevant targets, then analyse and refine post-selection libraries to understand and predict how sequence affects binding and developability. Laboratory work (molecular biology, expression/purification) is paired with data analysis and computational method development to guide candidate selection and iterative optimisation. The goal is to deliver robust leads with real-world impact in health and biotechnology. There is genuine scope to shape targets and techniques to your interests. Applicants from biochemistry, molecular biology, chemical engineering or related fields are encouraged to apply.