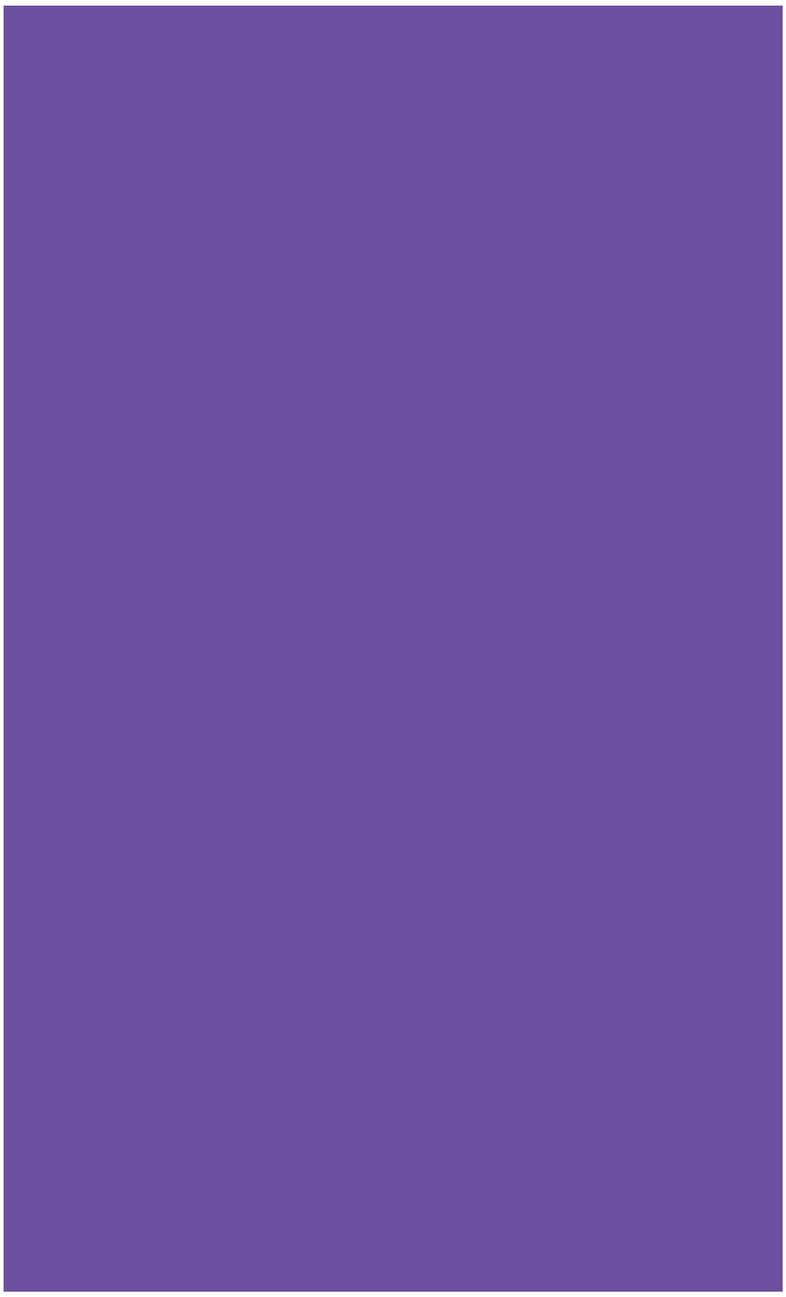
Ester Bond Scaffolding: A New Protein Platform Technology

A novel ‘superglue’ utilising ester bonds to join multiple different units together to access many innovative applications.

Problems with Current Systems

C rrent protein sca-olding s stems are based on larger sca-old domains ith str ct res that are assembeled from monomers. This limits the n mber of di-erent t pes of, cargo that can be attached to the sca-old at once, s all to one. What if o ant to assemble more than one t pe of cargo to make a pol meric comple ?

Technology

Ester bond sca-olding is a protein platform technolog that can join together m ltiple di-erent proteins sing mod lar b ilding blocks as molec lar g e. It is orthoganal, hich ill facilitate the engineering of tethered-en_ me cl sters, presentation of antigen combinations, or linking of an other f nctional cargo. The technolog pro ides n mero s inno ations to the, eld, incl ding:

- Vaccine optimisation
- Diagnostics
- En ironmental biosensors
- Laborator tools
- Bio-batteries
- En_ me resilience
- H drogel formation
- Antibiotic prod ction
- M lti alent signal acti ation
- Cell capt re
- Assembl of nanoparticles for semicond ctors