

Laboratory of Medical Biochemistry

Unravelling the structure-function relationship of proteins in human pathophysiology



Prof. dr. ir. Yann Sterckx
Proteins in host-parasite interactions



Prof. dr. Ingrid De Meester
Serine proteases

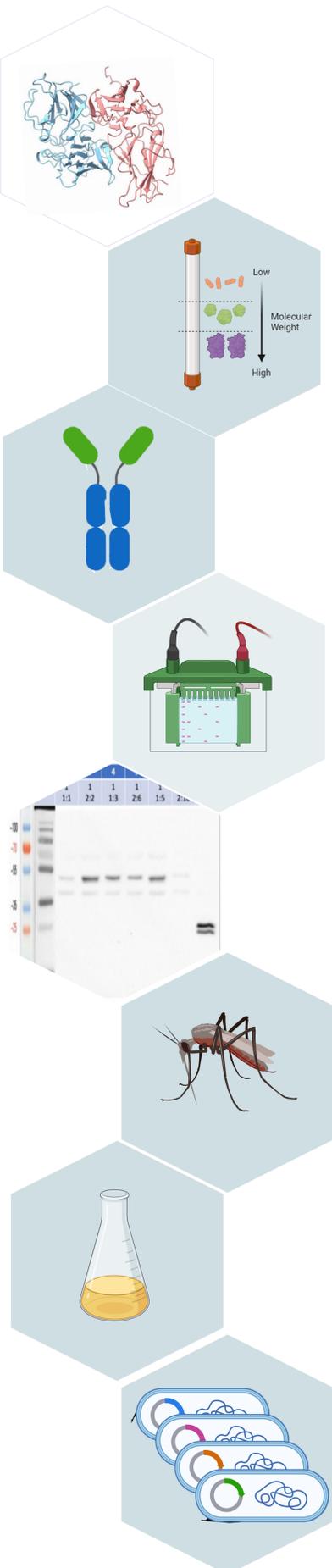


Molecular & Structural Biology

- Recombinant protein production (bacterial, insect, mammalian)
- Protein structure elucidation
- Biophysical protein-ligand interaction (BIPP)
- Kinetic & thermodynamic binding characterization

Functional and clinical exploration

- Elucidation of enzyme function and expression
- Enzyme inhibitor (I) characterization
- Assay development and validation



Leishmania donovani DLP1

Is *Ldo*DLP1 a good drug target to treat leishmaniasis?

Granzyme B

How to visualize GzmB in the tumour microenvironment?

Malaria sporozoite surface antigens

What is the role of SPZ 6Cys proteins and CSP in hepatocyte invasion?

FAP

What is the role of FAP in the tumour microenvironment?
How do FAPis bind to FAP?

Plasmodium vivax TrAgs

How do PvTrAgs contribute to reticulocyte invasion?

DPP8/9
understanding expression & activation in human cells.
How does DPP9 interact?

Camelid single-domain antibodies

(aka Nanobodies®)

How can camelid sdAbs help us to answer questions?

