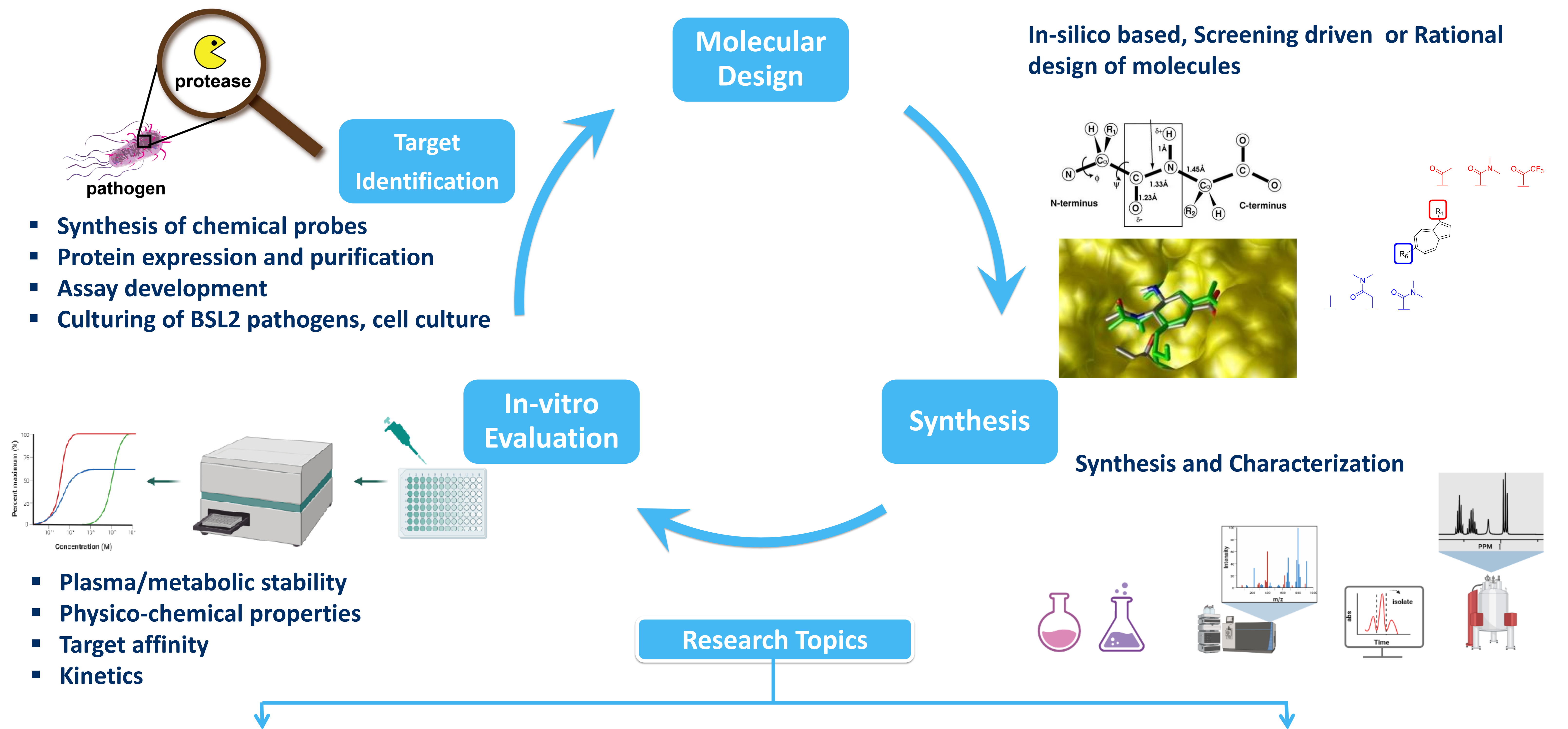


MASTER THESIS RESEARCH AT THE MEDICINAL CHEMISTRY LAB (UAMC)

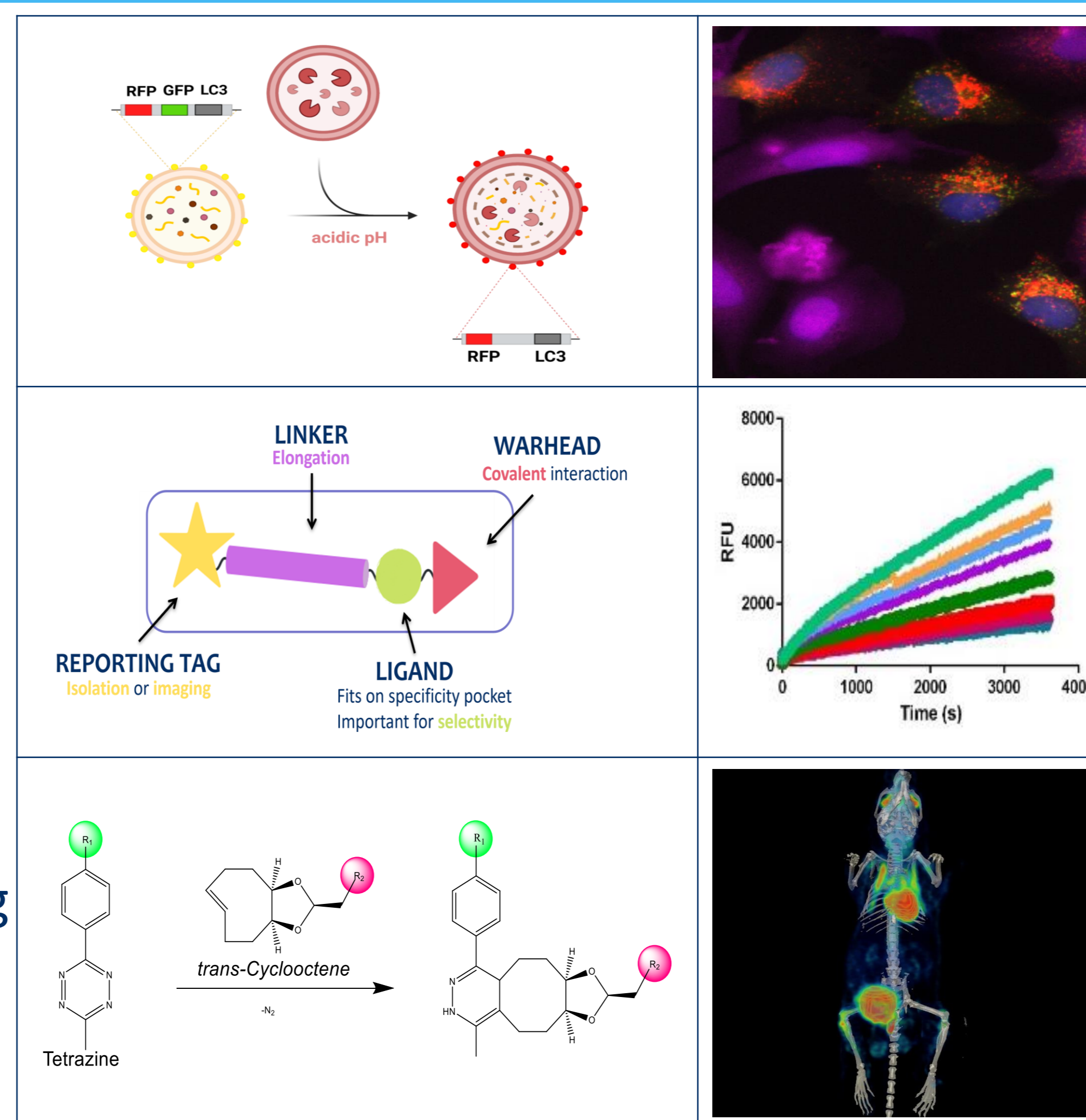
Research Purpose: Molecular design, synthesis and evaluation of bio-active molecules for

- studying biological processes
- evaluation as potential therapeutics
- biomarker in imaging applications

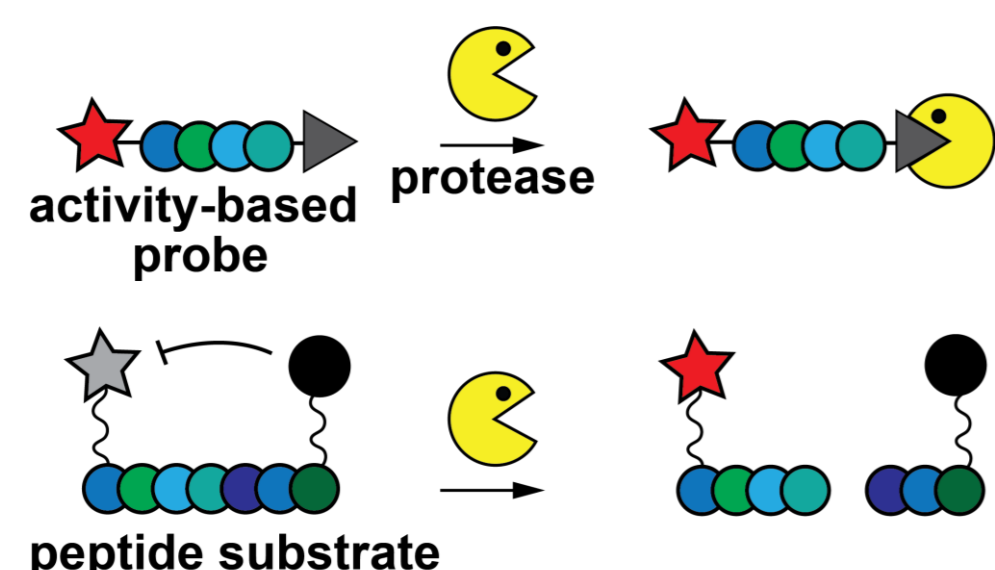


Experimental Medchem and Chemical Biology

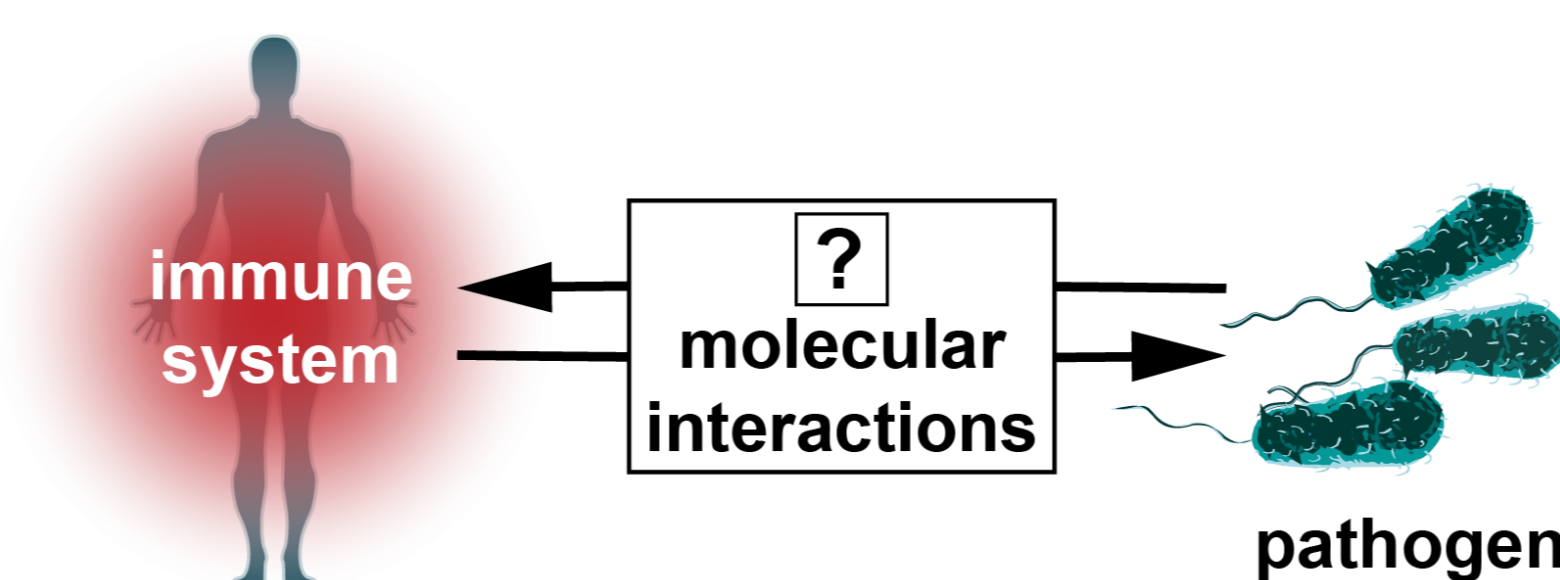
- **Cell death/survival**
 - Autophagy inducers
 - Ferroptosis and Necroptosis inhibitors
- **Protease targets**
 - Selective DPP9 inhibitors
 - Fibroblast Activation Protein inhibitors
- **Infectious diseases**
 - Mycobacterium Tuberculosis
- **Technology development**
 - Activity based probes for bioimaging
 - Transcyclooctene probes for PET imaging



Profiling of bacterial proteases during infection
Synthesis and biological application of chemical probes to monitor proteases

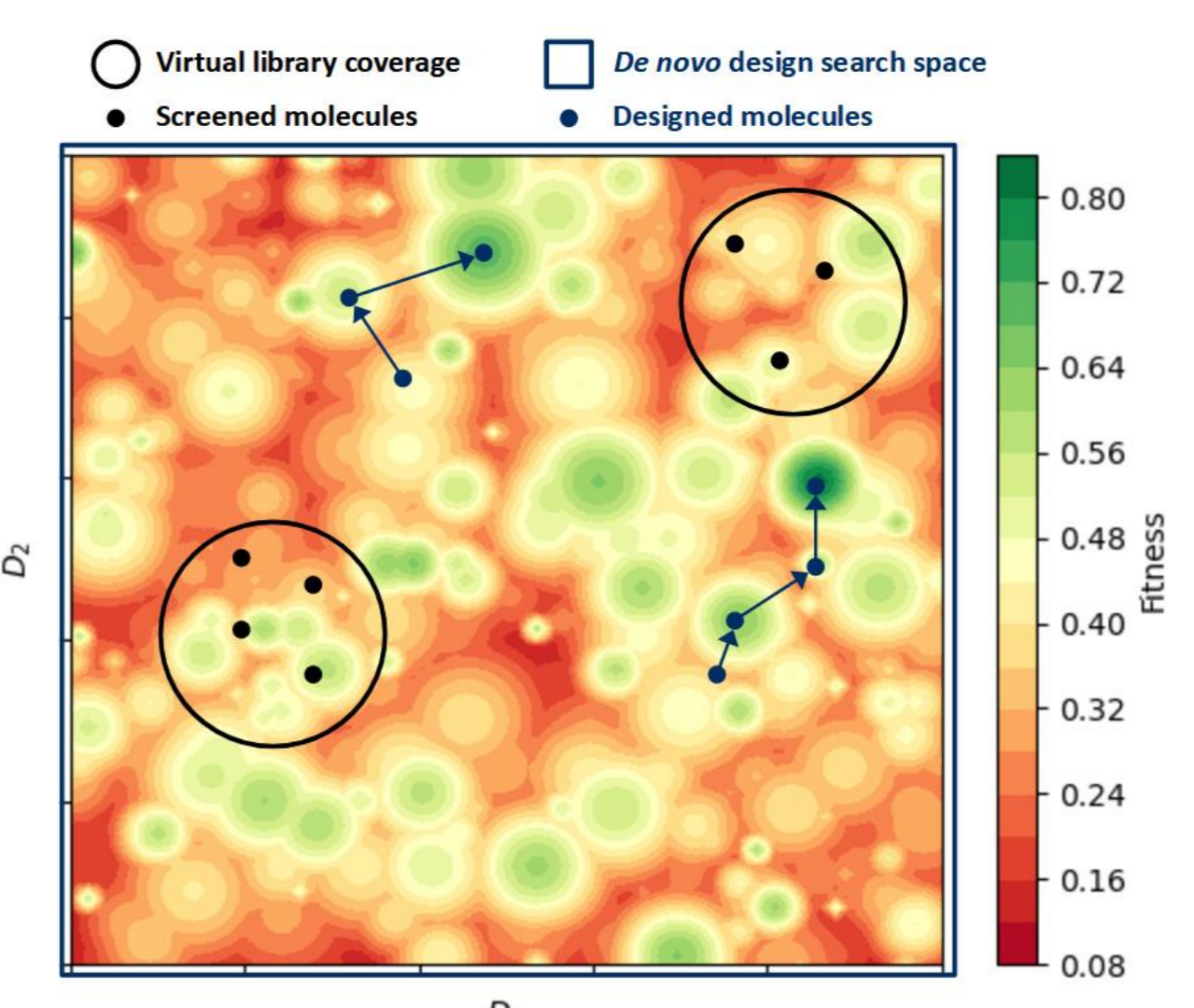


- **Strategies from chemical biology to study immune-pathogen interactions**

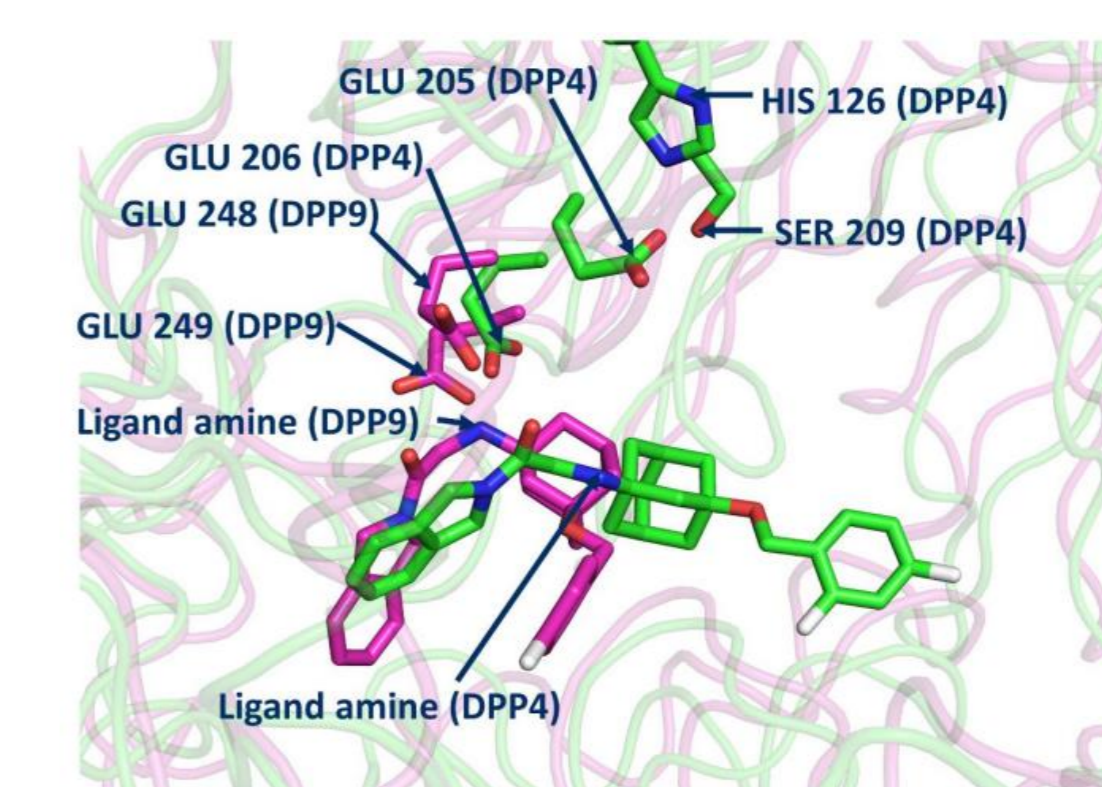


In-silico Medchem

- **Reaction Mechanism of Covalent Drugs**
Investigation of the reaction mechanism followed by optimization of the covalent drug
- **Computational *de novo* design of (synthetically feasible) molecules**



- **Computational drug discovery and molecular dynamics**



MORE INFORMATION?

- **MEDICINAL CHEMISTRY AND CHEMICAL BIOLOGY:**

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Prof. Dr. Pieter Van Der Veken (pieter.vanderveken@uantwerpen.be)

Prof. Dr. Michaela Prothiwa (michaela.prothiwa@uantwerpen.be)

- **IN SILICO DRUG DESIGN:** Prof. Dr. Hans De Winter (hans.dewinter@uantwerpen.be)

