

Position for Master 2 internship: February-July 2027

Dynamic assemblies of peptides toward the inhibition of protein-protein interactions

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Target-directed Dynamic Combinatorial Chemistry (*tdDCC*) is a powerful strategy for identifying protein ligands, and has great potential to significantly decrease the time and cost associated with the early phases of drug discovery.¹ This strategy has been mainly employed for the discovery of small enzyme ligands, and we are currently exploring it for the discovery of larger peptidic ligands for the inhibition of protein-protein interactions (PPI),²⁻⁴ through orthogonal dynamic covalent chemistries (project funded by the ANR JCJC OrthoPep). Depending on the candidate's profile, the internship may explore several aspects of the project; its exact scope will be defined together with the candidate during the interview.

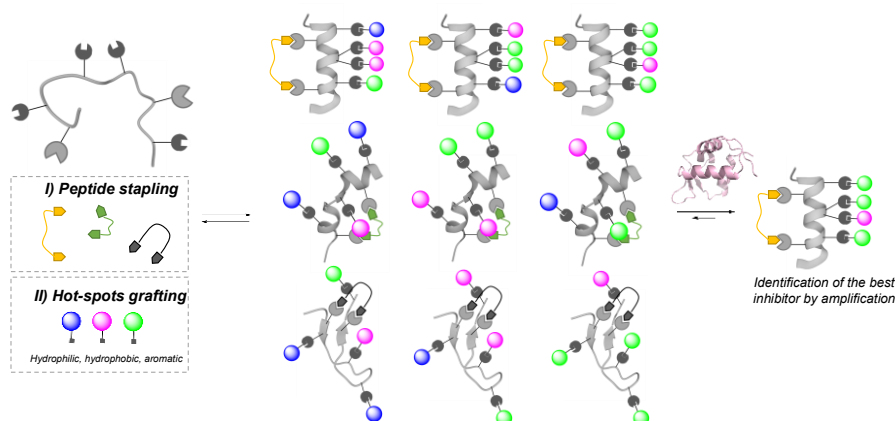


Figure. Combining orthogonal dynamic covalent chemistries in *tdDCC*

In any case, we are looking for candidates interested in the chemistry-biology interface to join the team of Chemobiology of Peptides and Proteins (CPP) (<https://cpcv.chimie.ens.fr/teams/CPP>), with good skills in organic synthesis, purification, and analysis (NMR, HPLC, MS).

To apply, an email should be addressed to lou.roccard@sorbonne-universite.fr. The applicant will attach a CV (including references to contact), a cover letter, and M1 grades.

References

- (1) Aguanell, A.; Hennebelle, M.; Ortega, M. Á.; Pérez-Fernández, R. Dynamic Combinatorial Chemistry Directed by Proteins and Nucleic Acids: A Powerful Tool for Drug Discovery. *Chem. Soc. Rev.* **2025**. <https://doi.org/10.1039/D5CS00223K>
- (2) Zagiel, B.; Peker, T.; Marquant, R.; Cazals, G.; Webb, G.; Miclet, E.; Bich, C.; Sachon, E.; Moumné, R. Dynamic Amino Acid Side-Chains Grafting on Folded Peptide Backbone**. *Chem. – Eur. J.* **2022**, 28 (36), e202200454. <https://doi.org/10.1002/chem.202200454>
- (3) Peker, T.; Zagiel, B.; Rocard, L.; Bich, C.; Sachon, E.; Moumné, R. Analytical Tools for Dynamic Combinatorial Libraries of Cyclic Peptides. *ChemBioChem* **2023**, 24 (24), e202300688. <https://doi.org/10.1002/cbic.202300688>
- (4) Rodrigues, A.; Garcia Coll, J.; Ravault, D.; Zagiel, B.; Carlier, L.; Rocard, L.; Moumné, R. Target-Directed Stapled Peptides through Dynamic Combinatorial Chemistry. *ChemRxiv* **2026**. <https://doi.org/https://doi.org/10.26434/chemrxiv.15000968/v1>