10 March 2020



Open Postdoc position

LABORATORY OF PROTEIN CHEMISTRY INSTITUTE FOR SUPRAMOLECULAR SCIENCE AND ENGINEERING UNIVERSITY OF STRASBOURG, FRANCE

ABOUT US

Institute for Supramolecular Science and Engineering (ISIS) is a leading interdisciplinary research institute at the University Strasbourg of (https://isis.unistra.fr). Our team specializing in protein chemistry focuses on application of protein design, total chemical synthesis of proteins and biophysics to solving challenging biological problems (https://torbeevlab.com)

WE ARE LOOKING FOR

A skilled postdoctoral candidate with strong interest in peptide / protein chemistry. The project will be to perform structure-function studies of intrinsically disordered proteins using combinatorial protein synthesis. The proteins of interest are involved in gene transcription and we aim at developing new inhibitors of protein-protein interactions important for new cancer therapeutics. The main requested techniques are solid-phase peptide synthesis and peptide ligation chemistries. The knowledge and experience with protein NMR or X-ray crystallography are highly valued

REOUIREMENTS

- Experience in solid-phase peptide synthesis and peptide ligation chemistries
- Skills in organic synthesis
- Ability to perform and interpret the results of biophysical experiments (e.g. CD, fluorescent spectroscopy, analytical ultracentrifugation)
- Knowledge of structural biology methods (protein NMR and X-ray crystallography)
- The ability to plan and execute experimental work without close supervision
- The ability to work as the team

HOW TO APPLY

Qualified applicants should submit an application by email, including a letter outlining research interests, the CV, and the contact information of three referees to Dr. Vladimir Torbeev (torbeev@unistra.fr)

RELEVANT PUBLICATIONS

- 1. Enhancing binding affinity of an intrinsically disordered protein by a-methylation of key amino acid residues. V. Bauer, B. Schmidtgall, G. Gógl, J. Dolenc, J. Osz, Y. Nominé, C. Kostmann, A. Cousido-Siah, A. Mitschler, N. Rochel, G. Travé, B. Kieffer, V. Torbeev, ChemRxiv https://doi.org/10.26434/chemrxiv.10113128.v1
- 2. Chemical synthesis of transactivation domain (TAD) of tumor suppressor protein p53 by native chemical ligation of three peptide segments. A. Baral, A. Asokan, V. Bauer, B. Kieffer, V. Torbeev, *Tetrahedron* **2019**, 75, 703
- 3. Dissecting mechanism of coupled folding and binding of an intrinsically disordered protein by chemical synthesis of conformationally constrained analogues. B. Schmidtgall,
- O. Chaloin, V. Bauer, M. Sumyk, C. Birck, V. Torbeev, Chem. Commun. 2017, 53, 7369