

CDD technician in the “Toxins, Receptors and Ion Channels” team led by Dr. Denis Servent within the “Laboratory of Experimental and Molecular Pharmacology” (CEA/Institut Joliot/DMTS/SIMoS). Training sought: BTS, IUT, Professional License in Chemistry

Subject: synthesis, folding, purification and functionalization of peptide toxins interacting with certain adrenergic receptor subtypes

Adrenergic nerve fibers have been shown to control tumor initiation, while cholinergic nerve fibers regulate the dissemination of cancer cells. These two components of the autonomic nervous system thus play complementary roles promoting tumor development. The importance of certain subtypes of adrenergic receptors present in the tumor microenvironment therefore seems essential. As part of a project aimed at discovering new selective antagonists of these receptors, the screening of a unique library of venom peptides will be carried out and the identified hits will have to be synthesized in large quantities in order to characterize their functional profiles. To do this, we are looking for a technician who is proficient in automated solid-phase peptide synthesis. A mastery of HPLC would be welcome for the purification of peptides. The characterization of the different peptides will be done by electrospray mass spectrometry. On the initial peptide platform, it will be a question of grafting different chemical groups, allowing its multi-functionalization by click chemistry for example.

Place of work: CEA/Institut Joliot/DMTS/SIMoS. Saclay (91190).

Supervisor: Dr. Pascal Kessler, pascal.kessler@cea.fr

Duration: 1 year renewable

Start: October