

## MASTER 2R CHEMISTRY

### PROPOSITION DE STAGE DE RECHERCHE (*Research Training Proposals*)

**Titre du sujet de stage (title):** Synthesis new anticancer compounds displaying a pharmacologically optimized profile.

**Equipe d'accueil (team):** Molécules Bioactives (MB)

**Date :** January/February 2018

**Description du projet (project):** This research program aims at design and synthesizing a new family of anticancer compounds possessing an improved pharmacologic profile. In collaboration with biologists from Nice Sophia Antipolis University, we discovered new lead compounds exhibiting potent anti-leukemic and anti-melanoma activities. Hence, one of the objectives of this program is develop further the structural optimization of this series of compounds and to broaden the application scope to other cancer types. The second aim will be focused on the optimisation of the pharmacokinetic parameters of the series and most importantly to the elucidation of their mode of action. The latter point is of paramount importance as the comprehension of the mechanism of action at the molecular level will be central for further structural improvement.

**Techniques utilisées (used techniques):** Regular organic synthesis techniques, purification methods (extraction, precipitation, crystallisation, chromatography, HPLC) et analytical methods (NMR, MS, IR, UV)

**Compétences (technical skills):** Organic synthesis skills, compound characterization, spectra analyses. Interests and knowledge concerning the interface between Chemistry & Biology are recommended.

**Mots clés (key words):** Nucleosides, Heterocycles, Leukaemia, Melanoma.

**Responsable(s) de Stage (Manager):** Dr. Anthony Martin

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Possibilité de prolonger par une thèse (*possibility of Ph. D financial support*): se renseigner auprès de l'équipe (*enquire information from concerning team*)

Financement du stage (*salary/month*) : 508 euros par mois (6 mois) *508 euros/month during 6 months*

Programme support (*supporting program*):