

2 years post-doctoral position, available on August 2021

Clermont-Ferrand, France

- Genetics, Reproduction and Development (<https://www.gred-clermont.fr>). Institut GReD, Université Clermont Auvergne, CNRS 6293, INSERM 1103. Team 11: Nuclear receptors and Physiopathology, Drs Silvère BARON's and Jean-Marc LOBACCARO's team
- GREENTECH SA (<http://www.greentech.fr/en/>), Saint-Beauzire. Dr. Jean-Yves BERTHON and Pr. Edith FILAIRE.

Project "Identification of natural extracts targeting LXR nuclear receptors activity involved in skin wound healing"

Key words: skin physiology, phytochemistry, nuclear receptors, natural extracts with biological activities, *Drosophila* model.

The skin regeneration process is complex and involves numerous cells that will coordinate a program for repairing the dermis and epidermis. Throughout life, this mechanism is constantly solicited by external factors such as exposure to UV light, cold or skin contact with chemical pollutants. Ethnobotany and folk medicine have demonstrated that molecules of plant origin have the property of stimulating and potentiating this process of regeneration. Among the targets of these molecules, proteins called LXR (Liver X Receptors) have been identified as essential orchestrators of these tissue repair mechanisms. Through the partnership between NuReP research team (GReD Institute) and GREENTECH SA, the project XBioRepair aims to identify plant matrices able to modulate LXR activity, and thus promoting tissue regeneration.

This collaboration is based on two key elements: 1) the fundamental expertise that the NuReP team possesses in the biology of LXR proteins on which they have been working for more than 20 years; 2) the plant extract bank available to the company GREENTECH, which represents a directory of more than 3000 plant matrices. Through the engineering of new innovative *drosophila* models, NuReP team and GREENTECH company are proposing a project to identify plant extracts with high potential for tissue regeneration for the development of marketable products dedicated to the fight against skin aging.

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The position is funded by University of Clermont-Ferrand for 1 year renewable twice (max length 2 years).

The candidate should:

- have a PhD or a post-doctoral experience. We are looking for highly motivated researcher, with experience in the field of molecular biology, cell culture and transfection, western blot. Knowledges on phytochemistry will be appreciated.
- be rigorous, dynamic, organized and to have a good adaptability. The candidate will have to analyze the results, to draft technical protocols and study reports, to present the results and to participate in the management of the lab and orders.

Applicant should send a CV with list of publications, a description of their research activities and 2 to 3 recommendation letters addressed to:

Dr. S. Baron: silvere.baron@uca.fr; Dr. J.M. Lobaccaro: j-marc.lobaccaro@uca.fr; Dr. E. Filaire: edithfilaire@greentech.fr