

Job Offer

POST DOCTORANT in IMMUNOLOGY AND CUTANEOUS BIOLOGY FOR RHU SUccESS (WP4)

Job Profile

CSS

Offer description

Post-doctoral fellow in Immunology and Cutaneous Biology with experience in Extracellular Vesicles.

15 research projects have obtained financial support as part of the 4th call for "Hospital-University Research in Health" (RHU) projects of the future investment program, whose operator is the ANR. An Inserm team: team 2 (clinical and translational skin research) within INCIT UMR 1302 obtained a university hospital research program (RHU SUccESS; coordinator Pr B. Dréno) in the area of skin healing. The objective is to produce a regenerative dressing for deep 2nd degree burns from a fetal secretome. Team 2 is focused on the immunological properties of this secretome and the production and characterization of Extracellular Vesicles (EVs) produced by the secretome.

Researcher profiles

- First-Stage Researcher (*PhD candidate*)
- Recognised Researcher (*with less than 4 years research experience after PhD*)
- Established Researcher (*with more than 4 years research experience*)
- Leading Researcher

Research Fields

(2 max.)

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| <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Biological Sciences <input type="checkbox"/> Chemistry <input type="checkbox"/> Computer Science <input type="checkbox"/> Engineering <input type="checkbox"/> Environmental Science <input type="checkbox"/> Ethics in Health Sciences | <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Medical Sciences <input type="checkbox"/> Neurosciences <input type="checkbox"/> Pharmacological Sciences <input type="checkbox"/> Physics <input type="checkbox"/> Technology <input checked="" type="checkbox"/> Other (specify):
Extracellular Vesicles |
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Main Activities

Translational research, development and transfer to the clinic in the field of skin and skin regeneration; Production and Characterization of Extracellular Vesicles from a Fetal Secretome.

Research and development activity in skin biology as part of a research program (RHU) aimed at developing a biological dressing for second-degree burns, resulting from the encounter between physics (matrix) and cell biology, the component biological being a secretome consisting of proteins secreted into a culture medium by cell banks of fetal fibroblasts and keratinocytes.

The post-doctoral student will carry out the following missions:

Functional characterization of the secretome including:

- Isolation and characterization of extracellular vesicles from the secretome
- Study of the functionality of the secretome in connection with the Extracellular Vesicles, particularly in terms of its immunological and functional profile

Culture of cells to produce secretome and EVs from fetal keratinocytes and fibroblasts

Development and validation of analytical methods

Organization and realization of research work in biology for the transfer in production for a clinical application: interaction with industrialists

Scientific communications

Scientific and technological monitoring

Writing reports in English and French

Associated Activities

The post-doctoral student will also carry out the associated missions with the help of a technician:
Management of stocks of consumables and orders related to the project
Maintenance of equipment related to the project (pipette calibration, incubator cleaning, nitrogen tank filling, etc.)

Specific Requirements or Constraints

Knowledge of different cell types (PBMC, cancer cell lines, keratinocytes, fibroblasts)

Knowledge of Extracellular Vesicles: production and characterization

Knowledge in immunology

Knowledge of different *in vitro* skin models

Knowledge in cellular and tissue engineering

Skills: Cell culture, flow cytometry, immunohistochemistry, biochemistry, molecular biology

Skills/Qualifications

Healing, cell culture, Extracellular Vesicles, primary culture, cell lines, PBMC, keratinocytes, fibroblasts, reconstructed skin, explants, immunohistochemistry, flow cytometry, Elisa, PCR, good laboratory practices.

Required Experience

0 to 2 years 2 to 4 years 4 to 10 years >10 years

Fields: Experience in Extracellular Vesicles

Required Education Level or Diploma

Doctor of Science (PhD) in cell biology with knowledge of molecular biology

Required Languages

- English - French

Hosting Unit

Code

UMR 1302

Name

INCIT

Director

F. ALTARE

Composition

85 PEOPLE / 4 Teams

Address

IRS2 22 BD BENONI GOULLIN 44200 NANTES – CHU de Nantes 1 Pl. A. Ricordeau Nantes

Website

<https://incit.fr/>

Contract

Type	CDD
Duration	2 years
Salary	Between 2142 € (net salary) and 2 670 € (net salary) according experience
Envisaged Start Date	End of October or Onset of November 2022

Application

Applicants must send a CV and a cover letter to: brigitte.dreno@atlanmed.fr & catherine.ruiz@chu-nantes.fr

Contact for further information (name, telephone/mail): brigitte.dreno@atlanmed.fr & catherine.ruiz@chu-nantes.fr

Deadline for application: November 1st, 2022