



Post-doc or Engineer position in Autophagy/Cellular Biology

We are looking for a motivated **Post-doctoral candidate or engineer** in cellular biology to join the team “Biology of the NeuroMuscular System” in the IMRB (INSERM U955, Créteil, France) and to participate to a project which concerns the adverse effects induced by the exposure to environmental particulate toxins and the interplay with genetic autophagy deficiency. We previously uncovered SNPs in autophagy genes in patients with Macrophagic Myofasciitis (preliminary data: European patent 2019 18207583.8-1118, Satt Paris, publication in preparation), and we now need to assess the functionality of autophagy in macrophages removed from patients.

More specifically, you will focus on monitoring autophagy flux in macrophages isolated from patient PBMCs using the appropriate cell biology experiments. For that purpose, you will use a wide range of approaches electronic microscopy, live-cell imaging, flow cytometry, mammalian cell culture, immunolabelling, in coordination with a PhD student.

Thus, you will use these methodologies, carry out experiments, analyze and communicate the data through oral communications and publications.

The candidate will have the opportunity to enhance his/her scientific career in a friendly and stimulating environment, to interact with national and international scientists across disciplines, including physical chemistry, molecular and cellular biology to toxicology.

Qualifications: You have a Master 2 or a PhD in cellular biology with a solid background in the **study of autophagy process**. You will need strong communication and organization skills.

Applications details:

The position is funded by ANR (French National Agency for Research), and is a full-time position fixed for 12 months (salary according to INSERM rules). The position will start in early 2020.

Applications including a complete CV, a cover letter as well as contact details of 2 referees should be send to Guillemette Crépeaux (guillemette.crepeaux@vet-alfort.fr).

Recent publications on the related research program:

1. Belaid A, Roméo B, Filippakis H, Meyer M, Grosjean I, Yazbeck N, Domdom MA, Crépeaux G, Gherardi RK, Lagadic-Gossmann D, Chargui A, Gilson E, Benarroch-Popivker D, Brest P, Hofman P, Mograbi B. 2018. Autophagy-driven cancer drug development. “Autophagy and cardiometabolic diseases - from molecular, mechanisms to translational medicine”. Jun Ren for Elsevier.

2. JD. Masson, G. Crépeaux, FJ. Authier, C. Exley, RK.Gherardi
Critical analysis of reference studies on the toxicokinetics of aluminum-based adjuvants
Journal of Inorganic Biochemistry Volume 181, April 2018, Pages 87-95;
doi.org/10.1016/j.jinorgbio.2017.12.015

2. G. Crépeaux, H. Eidi, MO. David, Y. Baba-Amer, E. Tzavara, B. Giros, FJ. Authier, C. Exley, CA. Shaw, J. Cadusseau, RK. Gherardi
Non-linear dose-response of aluminium hydroxide adjuvant particles: Selective low dose neurotoxicity
Toxicology 375 48–57 (2017) ; doi/10.1016/j.tox.2016.11.018

3. G. Crépeaux, H. Eidi, MO. David, E. Tzavara, B. Giros, C. Exley, PA. Curmi, CA. Shaw, RK. Gherardi, J. Cadusseau
Highly delayed systemic translocation of aluminum-based adjuvant in CD1 mice following intramuscular injections
Journal of Inorganic Biochemistry, 2015 Nov;152:199-205. doi:
10.1016/j.jinorgbio.2015.07.004

4. H. Eidi, MO. David, G. Crépeaux, L. Henry, V. Joshi, MH. Berger, M. Sennour, J. Cadusseau, RK. Gherardi, PA. Curmi
Fluorescent nanodiamonds as a relevant tag for the assessment of alum adjuvant particle biodisposition BMC Medicine (2015) 13:144.