2-years post-doctoral position in France, Tours (from 01/01/2016)

Team 3 “Aerosoltherapy and biologics for respiratory diseases”
Research Centre for Respiratory Diseases (CEPR), INSERM U1100
Faculty of Medicine, Tours - France
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KEY WORDS: monoclonal antibodies, immunology, immunogenicity, pharmacology and drug delivery, pulmonary route, experimental models

JOB ENVIRONMENT

Team 3 of CEPR/INSERM U1100 is an academic research structure affiliated with the University François-Rabelais of Tours and INSERM (French institute of biomedical research) located in Tours, France. It is a multidisciplinary team focusing on the delivery of biopharmaceuticals through the airways for treating respiratory diseases. Please visit our website, http://cepr.inserm.univ-tours.fr/ for more informations.

The project is included in LabEx MAbImprove research grant (http://mabimprove.univ-tours.fr/) gathering teams from Tours and Montpellier and dedicated to “antibody-based therapeutics”. The project relates on the strategies to improve antibody administration, evaluating novel delivery routes, and overcoming issues of their stability, tolerance and immunogenicity.

PROJECT SUMMARY

Accumulating evidences indicate that the airways are a promising alternative to the systemic route for the delivery of antibody-based therapeutics in the treatment of respiratory diseases. Indeed, we and others have shown that: 1/ it was feasible to aerosolize antibody-based therapeutics preserving their molecular integrity and pharmacological properties using certain types of aerosol devices and optimizing formulations; 2/ aerosolized antibody-based therapeutics achieved a therapeutic response in animal models; and 3/ aerosolized antibody-based therapeutics might accumulate durable into the lungs, while passed slowly into the systemic circulation. Before transferring this novel delivery method into the clinic, it is important to understand the fate of the antibody-based therapeutics delivered through the airways, locally into the lung mucosa. Indeed, immune responses to antibody-based therapeutics, in particular development of anti-drug antibody (ADA), may interfere with their efficacy and be associated with safety concern.

The project aims at characterizing the immune responses associated to airways delivery of antibody-based therapeutic, depending on different parameters and deciphering the molecular mechanisms underlying those responses.

JOB DESCRIPTION

We are seeking a highly motivated and talented individual to join our research group as a Postdoctoral Fellow. The selected candidate will work with a multi-disciplinary team of researchers and in a collaborative environment (CEPR + LabEx MAbImprove). The candidate will apply his/her understanding of immunology and/or pharmacology to broaden our understanding of antibody-based therapeutics immunogenicity and safety after delivery through the airways using various experimental models (in vivo studies). This person will be responsible for hands-on studies with in vivo models of respiratory diseases, and it is expected he/she will already have significant training and skill with in vivo models. The successful candidate will have a strong background in immunology and/or pharmacology, and an interest in drug delivery and monoclonal antibodies. This person will enjoy working collaboratively, and should have the ability to independently design and execute experiments.

Requirements

- A Ph.D. preferably in immunology or pharmacology– previous post-doctoral experience(s) is strongly desired.
- Strong background in (lung or mucosa) immunology is preferred
- Experience with rodent and/or other animal models is preferred
- Ideal candidate would have background knowledge of the airways and lung delivery/immunology
- Track record of innovative research and scientific publications
- Excellent organizational, interpersonal and oral communication skills
- An ability to be productive and successful in an intense work environment
- Other duties as assigned

Excellent salary and benefits package offered.
Please send your cover letter and resume to both:
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And Renaud.respaud@univ-tours.fr