

Job posted by Centre d'Economie Rurale (CER Groupe) - Belgium (July 2010):

post-doc position in a department of food analysis

The purpose of the present 12 months post-doc position is to develop and validate an immuno ELISA for the rapid detection of recombinant growth hormone in milk.

Description

Context :

The use of recombinant bovine somatotropin (rbST) to increase milk production has been a common practice in the United States (US) and many other countries as the commercial product became available in 1994. Such use however has never been approved in the European Union (EU) and was banned in 1999 due to concerns on animal health and welfare, food safety and human implication associated with the administration of rbST in dairy cows. Though the administration and marketing of rbST is banned on the EU, imports of milk and dairy products from rbST treated animals into the EU are unaffected. Therefore, methods are required that will allow the unequivocal identification of rbST-treated animal products. The present project will, by the use of new technologies and a wide range of expertise, deliver a means of screening and confirming the presence of this unwanted growth promoter in milk. The current proposal brings together four partners across Europe and aims to develop a unique procedure to rapidly detect and unambiguously prove the administration of rbST through a holistic approach using knowledge of chemistry, biochemistry, immunology, biosensor technology and analytical instrumentation. A parallel assay development strategy for the detection of rbST in milk using three different immunochemistry platforms has been planned. The dipstick format is simple, user-friendly and portable for rapid on site screening. The ELISA is simple, robust and low-cost that is widely used conventional method, whilst biosensor assay is sensitive, specific, simple (label-free) and versatile technology platform that can provide real time monitoring and various information of the investigation. Development of all the immunoassays will be supported and backed up by the sophisticated chemical confirmatory method utilising the most advanced mass spectrometry equipments. The overall objectives is, by the use of new technologies and a wide range of expertise, to deliver a unique means of screening and confirming the presence of this unwanted growth promoter in milk.

This project is conducted in the frame of a **FP7 Marie Curie action IAPP** (Industry Academy Partnerships & Pathways) and aims at transfer knowledge in the consortium.

Objectives:

In this context, the purpose of the present 12 months post-doc position will be undertake research in line with the requirements of a European Commission funded research project. The appointee will contribute to the development and validation of an ELISA for the detection of recombinant bovine growth hormone. He/she will also undertake related scientific and administrative duties in relation to the research project.

Requirements

- Researcher not residing / having main activity in Belgium > 12 months in last 3 years before recruitment
- Required education level: PhD or equivalent
- Required research experiences: (a) main research field = biological sciences
(b) years of research experience = 4
- Required language: english

Other job details

- Type of contract: Temporary
- Status: Full-time
- Country: BELGIUM
- City: Marloie
- FP7 / PEOPLE / MarieCurie Actions: <http://ec.europa.eu/research/mariecurieactions/>
- Company/Institute: Centre d'Economie Rurale (CER Groupe) - Health department
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<http://www.cergroupe.be>

Application details

- Envisaged job starting date: 01/10/2010
- How to apply: via Email ac.huet@cergroupe.be