FICHE DE POSTE

Fonctions : Post - doctorant en Nutrition et biostatistiques

Catégorie : A
Corps : Chercheur post-doctorant
BAP : A

Sorbonne University

Continuing the humanistic tradition of the Sorbonne, it is committed to addressing the scientific challenges of the 21st century and transmitting the knowledge generated by its laboratories and research teams to its students and to society as a whole.

With a student body of 54,000, including 4,700 doctoral candidates and 10,200 international students, it employs 6,300 faculty members, including teaching staff, researchers, and 4,900 library, administrative, technical, social, and health personnel. Its budget is €670 million.

Sorbonne Université, primarily located in the heart of Paris, has a leading-edge potential and extends its presence to more than twenty sites in the Île-de-France region and beyond.

Sorbonne Université has an original organization with three faculties: 'Letters,' 'Health,' and 'Sciences and Engineering,' each of which has significant autonomy in implementing the university's strategy within their scope based on a contract of objectives and resources. University governance is primarily dedicated to promoting the university's strategy, steering, developing partnerships, and diversifying resources.

Presentation

Ce poste est à pourvoir au sein de la faculté de santé • https://sante.sorbonne-universite.fr

Localisation (Direction/service) :
Nutrition and Obesity Unit: Systemic Approaches, NutriOmique UMRS U1269 Sorbonne University, INSERM

NutriOmique is a research unit of Sorbonne University, INSERM, specialized in the study of obesity and its complications, using "omics" approaches such as genomics, metagenomics, and metabolomics. NutriOmique explores the molecular mechanisms underlying metabolic diseases and seeks to identify personalized prevention and treatment strategies, including nutritional approaches. In these translational dimensions, the unit works closely with the Nutrition Service at Pitié-Salpêtrière Hospital, Paris. To learn more about their work, you can visit their website at www.nutriomique.org.

As part of its projects on the developing relationship between diet-microbiota and metabolic and inflammatory health, the unit conducts both data analyses and nutritional intervention studies in collaboration with the Nutrition Service of Pitié-Salpêtrière Hospital and the local clinical investigation center. Significant needs for nutritional data analysis and biostatistics in general are thus identified. The research is based on original hypotheses.

Missions and activities

Mission: Nutriomique unit is recruiting a postdoctoral researcher in Nutrition and Biostatistics. Under the supervision of the unit director, you will contribute to the analysis of the relationships between nutritional data from national and international cohorts, "omics" data (metabolomics), and immuno-inflammatory data (especially derived from high-throughput immune data phenotyping) within the framework of the National PineAppI project supported by BPI and a project supported by the National Research Agency. These projects aim to understand the factors related to nutrition in a broad sense that could impact immune and inflammatory responses, particularly through mechanisms related to the intestinal microbiota (metagenomics and metabolomics). The goal is to identify plausible marker panels and their potential causality within a multidisciplinary project involving clinician-researchers, biologists (immunologists), and European industrial partners. This postdoctoral position requires a combination of scientific skills (especially in Nutrition) and technical skills in programming and data management, as well as the ability to collaborate with domain experts and effectively communicate scientific results. One of the key objectives of these projects is to develop approaches in Precision Nutrition to modulate immuno-inflammatory phenotypes.

Overall goals:
- Scientific work involving the processing of data from various sources, particularly nutritional, to identify nutritional, metagenomic, and metabolomic factors involved in the variability of immuno-inflammatory responses. The postdoctoral researcher will propose appropriate analytical methods to address specific questions.
This will involve programming for Data Management and Analysis: Developing programs in suitable languages (such as R or Python) to synthesize, develop, and integrate datasets from diverse sources, including multiple nutritional databases. Specifically, the postdoctoral researcher must master the steps to process raw nutritional data using reference databases (national and international). This entails cleaning, standardizing, and formatting data to prepare them for biostatistical analysis.

As a young researcher, the task will involve contributing to analytical and scientific deliverables defined in the projects and presenting project and research results to stakeholders, including industrial and academic partners. This requires effectively communicating scientific conclusions, insights, and implications from the analysis.

Specific Missions:
- Contribute to improving nutritional and associated reference databases by integrating new data, ensuring data quality, and evaluating their suitability for analysis.
- Conduct literature reviews related to studies addressing our questions and prepare bibliographic syntheses.
- Develop and validate analysis plans (using DAG).
- Encode and statistically process data (calculation of nutritional scores, linear and logistic regressions, mixed models, principal component analysis, clustering methods).
- Report analysis results; synthesize and discuss findings.
- Write scientific publications.
- Participate in the scientific dissemination of results.

QUOTITY OF WORK: 100%
WORKING TIME: 37H04
TYPE of CONTRACT: fixed-term contract at least 2 years.
SALARY: Post-doctoral grid of Sorbonne University (2250 to 3000€ per month depending on experience).

Skills and competencies

Required Cross-functional Knowledge:
The candidate must hold a Ph.D. in Biostatistics or Epidemiology/Nutrition, preferably with a specialization in nutritional epidemiology. If the expertise lies in biostatistics, significant experience with nutritional data is essential.

Professional Skills:
- Advanced proficiency in statistical analysis software (preferably R).
- Languages: French and English (excellent written and verbal comprehension and expression).

Know-how / Soft Skills:
- Ability to work in a team and possess excellent interpersonal skills.
- Time management skills and ability to prioritize tasks.
- Initiative and proposal capabilities with autonomy in work.
- Strong writing skills.
- Respect for confidentiality and ethical principles related to human studies.
- Sense of public service.

Exposition aux risques professionnels, conditions particulières d'exercice et formations réglementaires
no

*Conformément à l'annexe de l'arrêté du 18 mars 2013 (NOR : MENH1305559A)