A PhD scholarship jointly funded by Anses and INRAE is proposed to support a University thesis entitled "*Estimation of lifetime dietary exposure to mixtures: Consequences for risk assessment*". The project will start in autumn 2021 and the successful candidate will be located equally at Anses Maisons-Alfort (first part of the thesis) and at LABERCA (UMR 1329 Oniris/INRAE, Nantes) in the second part of the thesis.

Proposal title

Estimation of lifetime dietary exposure to mixtures: Consequences for risk assessment

Abstract

We propose a thesis topic that is particularly innovative and challenging in an international environment, with the aim of contributing to the assessment of dietary risks related to chemical contaminants in food. In a previous thesis, we developed a methodology to estimate the lifetime exposure of consumers to chemical contaminants (applications taken on Cd, BPA, PCBs) via their diet taking into account their respective profile (e.g. socio-demographic variables, age, year of birth) and changes in behaviour over time (dietary habits or level of contamination of food). The proposed thesis work will continue this work by taking into account the mixtures of chemical hazards to which the population is exposed throughout its life through its diet. The exposure trajectories generated will be interpreted from a risk assessment perspective. Using pharmacokinetic models (PBPK-PD), other exposure routes than ingestion will be considered and aggregated (inhalation, dermal contact) internal exposure data will complement external approaches for a more detailed risk assessment in prediction.

Further information

For further information please contact the project coordinators, Dr. Gilles Rivière (gilles.riviere@anses.fr) or Pr Bruno Le Bizec (bruno.lebizec@oniris-nantes.fr).

*: The final approval of the financial support is under progress.

Qualifications

- Strong toxicology background (Pharmacist, Veterinarian, M.Sc. in Toxicology or equivalent)
- Advanced knowledge in modelling (R, SAS or equivalent)
- Experience or knowledge about one or more of the following areas will be an advantage:
  - Risk assessment
  - Dietary exposure
- Good collaboration and communication skills (written and spoken English)
- Structured and analytical working approach

Coordination / Supervision

Gilles Rivière, PhD, HDR
Bruno Le Bizec, PhD, HDR

Salary and appointment terms

The salary and appointment terms are consistent with the current rules for PhD degree students. The period of employment is 3 years and contracted directly with Oniris (Ecole Nationale Vétérinaire, Agroalimentaire et de l'Alimentation Nantes Atlantique).

Application

Please submit your application no later than **30th August 2021**. Applications must be submitted as **one pdf file** containing all materials to be given consideration. The file must include:

- A letter motivating the application (cover letter)
- *Curriculum vitae*
- Details of Master's results (and MSc diploma if available)

Ideally, interviews and selection will take place beginning of September 2021. Candidates may apply prior to obtaining their master's degree, but cannot begin before having received it.

You can read more about LABERCA on www.laberca.org

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