



The Institute of Statistics, Biostatistics and Actuarial Sciences (ISBA) of the Université catholique de Louvain (UCL), Louvain-la-Neuve, Belgium, has vacancies for

4 PhD positions

Job description

The job description depends on the project that will finance the position :

- *Position 1* : Financed by an ARC project, supervision of the PhD student by Michel Denuit, Christian Hafner, Johan Segers or Rainer von Sachs.

Preference will be given to candidates with interest and experience in one of the following topics :

- Time series analysis
- Risk theory
- Extreme value analysis
- Dependence modelling via copulas

The candidate will work in a mixed research group consisting of 4 academic members together with their PhD students and postdocs. Areas of applications include not only finance and insurance but also environmental sciences and signal processing.

- *Position 2* : Financed by an ERC grant, supervision of the PhD student by Ingrid Van Keilegom.

Preference will be given to candidates with interest in survival analysis, and in particular in topics related to cure models, copulas, dependent censoring, measurement errors and endogeneity. The candidate will work in a large research group in this area, including academic members and a number of PhD students and postdocs.

- *Position 3* : Financed by a PDR project, supervision of the PhD student by Anouar El Ghouch and/or Ingrid Van Keilegom.

Preference will be given to candidates with interest in survival analysis, and in particular in multi-state models. The candidate will work in a large research group in this area, including academic members and a number of PhD students and postdocs.

- *Position 4* : Financed by an IAP project, supervision of the PhD student by one of the full-time faculty members of ISBA.

Preference will be given to candidates with interest in areas that are close to the research done at ISBA. This includes (among others) the following topics :

- (i) mathematical statistics (semi- and non-parametric statistics, multivariate analysis, regression, mixture models, survival analysis, extreme value statistics, inverse problems, time series analysis, econometrics,...)
- (ii) biostatistics (survival analysis, clinical trials, quality control, chemometrics, medical and industrial data,...)
- (iii) actuarial sciences and quantitative finance (life and non-life insurance, pension theory, stochastic modelling of financial assets and derivatives, risk measures, solvency rules, mathematical finance, Levy processes, ...)

Job requirements

Master degree in (bio)statistics, actuarial sciences or a related discipline. The diploma must have been obtained with at least distinction or an equivalent grade. Good knowledge of written and spoken English is required. For positions 1 and 4, good knowledge of French is also required (or willingness to learn French during the first year). No proper knowledge of French is required for positions 2 and 3.

Terms of employment

For positions 2 and 3 : a tax-free monthly grant of up to 4 years. The candidate will be involved on a small scale into some teaching activities of the institute.

For positions 1 and 4 : a tax-free monthly grant for 1 year with limited teaching activities, followed by a contract as teaching assistant (50% research, 50% teaching).

Research environment

The Institute of Statistics, Biostatistics and Actuarial Sciences (ISBA, <http://www.uclouvain.be/isba>) is a renowned research centre of high international reputation which offers a very stimulating working environment. At the ISBA there are around 30 pre- and postdoctoral researchers working under the supervision of 10 full-time professors, in a variety of fields of methodological and applied statistics, including biostatistics and actuarial sciences. They are integrated into the Graduate School in Statistics and Actuarial Sciences which offers them an up-to-date training in their field via regular seminar series, short courses and workshops, all in English and often given by international short and long-term visitors. ISBA is also part of a large international research network. It has numerous academic contacts, including those to neighboring fields (medicine, agronomy, social science, economy, finance and engineering) as well as collaborations with industry.

Information

For further information, please contact Prof. J. Segers (johan.segers@uclouvain.be) for position 1 and Prof. I. Van Keilegom (ingrid.vankeilegom@uclouvain.be) for position 2, 3 and 4. For administrative questions or for more information regarding the application procedure please contact Mrs. N. Guillaume (nancy.guillaume@uclouvain.be).

Application

Please send the following documents to Mrs. N. Guillaume (nancy.guillaume@uclouvain.be):

- a letter of motivation, **clearly** mentioning the position(s) for which you are applying
- your curriculum vitae
- a list of passed courses and grades
- copy of diplomas
- at least one reference letter to be sent by email directly by the referee

The closing date for application is **31 May 2016** (applications received after 31 May will be considered as they arrive, until the position is filled). Only duly completed applications can be taken into account.

Starting date

1 September 2016, or at another date to be agreed by all parties.