Announcement of post-doc scholarship at the Department of Clinical Sciences Lund, division of Orthopedics

Personalizing medicine for patients with knee and hip osteoarthritis using Big Data

A short but detailed description of the project and what the scholarship holder will get to study further. Please specify which techniques and knowledge the scholarship holder will get to study.

In the proposed project the scholar will address the challenges presented by osteoarthritis (OA). OA is one of the most common chronic diseases and is thus a major burden on the health care system. More specifically, the project aims to develop and validate a new phenotyping paradigm for an improved treatment allocation of patients affected by this disease. The following four key research questions will be addressed in the proposed study:

1. What is the effectiveness of education + rehabilitation and education only in subjects with hip and knee OA?
2. Do gender and affected joint mediate the relationship between non-surgical interventions and treatment outcome?
3. Which are the effect modifiers in a non-surgical intervention including education and rehabilitation in subjects with knee and hip OA?
4. Which is the a priori patient specific chance of success of a non-surgical intervention for subjects with knee and hip OA?

The above mentioned research questions will be analyzed using statistical methodology as well as machine learning and deep learning, two subareas within Artificial Intelligence.

Qualifications:

- To be eligible for a post-doc scholarship at Lund University the recipient must hold a PhD degree within a relevant field. The PhD degree must not be from Lund University. The PhD degree must not be older than three year. The applicant must not have been employed at Lund University in the past two years.
- Please specify experiences, knowledge or interests necessary for taking part as a postdoc in this project. Remember that a scholarship is not an employment and the qualifications necessary might differ from what you could ask for from an employee.
The scholar must have a PhD in OA research. Candidates with a proven track record in identifying clinical OA phenotypes will be prioritized.

**Reference number:** V 2018/635

**Scholarship period:** The scholarship covers a period of 6 months with possibility of prolongation up to a maximum of 24 months in total.

**Preliminary start date:** 2018-09-01

**Supervisor/contact person:** Leif Dahlberg, +46-702885633, leif.dahlberg@med.lu.se

Written application, including reference number, is to be sent via e-mail to the supervisor and must include the following:

- CV
- Personal letter stating the reasons why the study suits the applicant (maximum one page)
- References
- Phd Diploma or transcript of records to show the PhD exam

**Application deadline:** 2018-04-19

**Information regarding scholarships at Lund University**

- The scholarship follows the regulations laid down by the University Vice-Chancellor (LS 2010/68, A13).

- The scholarship is intended for the holder’s own education/professional development and does not constitute remuneration for work or other service that has been carried out or will be carried out on behalf of the University.

- The scholarship sum is paid out quarterly.

- A scholarship awarded will be reviewed every six months.

- Scholarships are tax-exempt.

- Scholarships do not give rise to sickness benefits, compensation from the Social Insurance Office or retirement pension.

- The Scholarship holder is to be informed about the risk of possible retrospective taxation in Sweden in cases where the scholarships are administered and paid out by LU and the scholarship holder gains employment at LU shortly after the period of the scholarship.