PhD-position - at Department of Clinical medicine

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PhD-position
Jointly offered by the Faculty of Medicine, Department of Clinical Medicine (K1) and Department of Information Science and Media Studies (InfoMedia), a PhD-position (100%) is available for a period of four (4) years or max 4 months after completed the PhD-degree, if this is achieved within a shorter time than four years. The positions include 25 % required duties such as teaching, exam work or supervision, depending on the demands at the two departments involved. Teaching activities may be part of the Medical Technology program and may also include modules of information science and human-computer interaction. Other activities may include supporting international scientific conferences. The position is part of the project “ANeED Joint Effort”, funded by the Faculty of Medicine at the University of Bergen and the Norwegian Research Council.

About the project:
- Dementia with Lewy Bodies (DLB) is our focus of research in the ANeED Joint Effort. DLB is a less known but highly prevalent and severe neurodegenerative disease, characterized by non-amnestic cognitive decline, visual hallucinations, fluctuations in cognitive abilities and arousal, daytime sleepiness, sleep behavior disorder, and motor parkinsonian symptoms. DLB is underdiagnosed, frequently misdiagnosed, and severely under-researched.
- This PhD-project is focused on data collection using wearable devices (smart watch, EEG/EOG glasses and an EEG headband) to identify digital biomarkers for diagnosis, undertake prognosis and evaluation of drug effects in patients and of caregiver distress, develop a unique digital application for patients and their caregivers, conduct pharmacological analyses, and study the effects of elements of the Patient and Public Involvement (PPI) program.
- The ANeED Study, testing Ambroxol in DLB, will contribute to the clinical drug research of dementia and explore the innovation potential for other diseases like Alzheimer’s and Parkinson’s.
- The PhD-position announced here is a part of a work package focused on the application of wearable devices and development of mobile user interfaces for monitoring, intervening, and supporting DLB patients and keeping their caregivers informed.

About the work tasks:
- Design, develop, and test physiological data collection pipelines including wearable sensors, and sensors of smartphones, smart watches, and EEG glasses.
- Apply AI and ML methods.
- Develop digital biomarkers for disease and drug effects.
- Develop predictive algorithms for prevention of falls and other accidents.
- Design and develop interactive applications to support patients and caregivers.

Qualifications and personal qualities:
Requirements:
- at the date of commencement of the PhD education (but not mandatory when submitting the application) the applicant must hold a master’s degree or equivalent in one of the following disciplines: medical technology, biomedical engineering, computer engineering, computer science, data science, bioinformatics, medicine or similar.
- hands-on experience with interface design, development, and testing mobile applications
- hands-on knowledge in building and experimenting with sensor-based systems will be considered
- competences in machine learning or statistical learning
- the candidate should be able to work independently and in a structured manner, and have the ability to cooperate with others
- the applicant must have a good command of oral and written English

Optional skills and experience:
- hands-on experience in data analysis and modelling
- experience with deep learning (e.g. DNN, CNN, RNN, LSTM) in tensorflow or pytorch
- experience from relevant research projects
- knowledge of basic psychology and pedagogy and experience teaching or tutoring university courses
Applicants whose education is from a country other than Norway should also attach a certified translation of the diploma (if available) and the latest version of transcript of grades to English or a Scandinavian language, if the original is not in any of these languages. It is required that the applicant enclose a review (or confirmation of document submission for review) from NOKUT of whether the education (bachelor and master degree) in question is of a scope and level that corresponds to the level of a Norwegian master’s degree. Please see www.nokut.no/en for more information about NOKUT’s general recognition. The review from NOKUT may take some time and the application should be sent to NOKUT as soon as possible after deciding to apply for the position. If no answer is received within the application deadline, you may enclose documentation from NOKUT that they have received your application.


**About the PhD position:**

Organized research training (PhD program):
If selected, you must take part in the University of Bergen approved PhD programme leading to the degree within a time limit of three years. You must have admission to the organized PhD training in computer science (carried out at InfoMedia) or medicine (carried out at K1) in order to qualify for the position. Application for admission to the PhD programme, including a project plan outline for the training plan must be submitted no later than three months after the date of commencement.

The PhD-position:
PhD-positions are fixed term positions. You cannot be employed in a PhD-position for more than one fixed term period at the same institution or have had similar employment at an institution in the region.

**We can offer:**
- Exciting development opportunities as part of your role in a strong professional environment
- Salary NOK 509 500 (code 1017, pay grade 55) in the state salary scale.
- Enrolment in the [Norwegian Public Service Pension Fund](http://www.uib.no/en/med/115526/english-language-requirements-phd-admission)
- Good [welfare benefits](http://www.uib.no/en/med/115526/english-language-requirements-phd-admission)

**Your application must include:**
- A brief account of the applicant’s research interests and motivation for applying for the position
- Certified copies of diplomas (if already graduated) and the latest version of transcripts of grades. Applicants whose education is from another country than Norway should also attach a certified translation of the diploma and transcript of grades to English or a Scandinavian language, if the original is not in any of these languages, and a review (or confirmation of document submission for review) from NOKUT (both bachelor and master degree) of whether the education in question is of a scope and level that corresponds to the level of a Norwegian master’s degree. This may take some time and we recommend you to apply as soon as you know you will apply for this position. If no answer is received within the application deadline, please enclose documentation from NOKUT that they have received your application
- Documentation of language skills (English) [http://www.uib.no/en/med/115526/english-language-requirements-phd-admission](http://www.uib.no/en/med/115526/english-language-requirements-phd-admission)
- Complete list of publications and scientific work you want to be evaluated
- Any publication in your name
- Two references (name and contact information)

**General information:**
For further information please contact Arvid Rongve e-mail: arvid.rongve@helse-fonna.no or Morten Fjeld e-mail: morten.fjeld@uib.no

The state labour force shall reflect the diversity of Norwegian society to the greatest extent possible. People with immigrant backgrounds and people with disabilities are encouraged to apply for the position.

The University of Bergen applies the principle of public access to information when recruiting staff for academic positions.

Information about applicants may be made public even if the applicant has asked not to be named on the list of persons who have applied. The applicant must be notified if the request to be omitted is not met.

For further information about the recruitment process, click [here](#).

**Life as a PhD candidate at UiB**

Marion Claireaux tells about life and work as a PhD candidate at UiB.

Video: [https://www.youtube.com/watch?v=nrtp6VxMeJ4&index=2&list=PLf8ZIY1fAO0qihROTj6StDbSScp0lSO6G](https://www.youtube.com/watch?v=nrtp6VxMeJ4&index=2&list=PLf8ZIY1fAO0qihROTj6StDbSScp0lSO6G)

**About UiB**

The University of Bergen is a renowned educational and research institution, organised into seven faculties and approximately 54 institutes and academic centres. Campus is located in the centre of Bergen with university areas at Nygårdshøyden, Haukeland, Marineholmen, Møllendalsveien and Årstad.

There are five departments and seven centres at Faculty of Medicine.

[Read More about the faculty](#) and [departments](#).