Jobbnorge-ID: 112559
Søknadsfrist: Closed
Nettside:
Omfang:
Varighet:

PhD fellowship in Micro- and Nanofabrication for Neurobiology

Medical technology, nanomedicine, bionanotechnology, and biotechnology are strategic areas within NTNU. By coupling nanotechnology/microsystems directly with biomedicine and biotechnology, novel approaches for discovery, diagnosis and therapy are expected to emerge.

The PhD position is for 3.5 years including a total of 30 credits from NTNU's PhD courses. For regulations concerning the PhD-degree at NTNU, please see: http://www.ntnu.edu/dmf/research/phd

The PhD position is part of start-up projects in designing, making and testing of microfluidic devices and electrophysiological reading of designer neuronal cell networks, neurons-on-a-chip. More specifically the PhD student will design and fabricate in PDMS microchannels and/or biofunctionalized gold-on-glass patterns to study cellular assemblies, neuron-bundle function and axonal outgrowth to enable creation of functional neuronal cell circuits and study neuronal plasticity. At later stages it is expected that these designer neuronal cell networks will be monitored on microelectrode arrays (MEAs).

The successful applicant is expected to work independently in the cleanroom and with biological testing of devices in close collaboration and communication with biomedical research environments. Furthermore, the candidate is expected to have a 6-12 month research stay at a collaborating laboratory abroad. The applicant must start in the position at the latest September 2015. A strong background in microfabrication for life science is recommended. Candidates with a strong background in microsystems for neurobiology will be preferred.

For this position the applicants must have:

- a master's degree or equivalent education, submitted no later than May 2015. The academic record must have a weighted average grade of B or higher, in accordance with NTNU's grading system.
- training with relevance to this project
- experience in microfabrication, microsystems, or nanotechnology for life sciences, ideally with experience with microfluidics, mammalian cell biology (neurobiology), cell culture, electrophysiology and microscopy

Emphasis will also be placed on

- the candidates' motivation for the position
- documented ability to work independently and as a team player
- the ability to communicate and give oral and written presentations in English
- A successful applicant is highly competent, flexible and an ambitious person

Candidates from universities outside Norway are kindly requested to send a Diploma Supplement or a similar document, which describes in detail the study and grade system and the rights for further studies associated with the obtained degree:
http://ec.europa.eu/education/policies/rec_qual/recognition/diploma_en.html

A good work environment is characterized by diversity. We encourage qualified candidates to apply, regardless of their gender, functional capacity or cultural background. If necessary, we will adapt the workplace for people with disabilities. Increasing the number of women in academic positions is an important priority for the Norwegian University of Science and Technology.

More information regarding moving to Trondheim, Norway and working at NTNU.

Depending on qualifications and academic background, PhD candidates at the Faculty of Medicine will be remunerated at wage levels 50-58 on the Norwegian State salary scale, with gross salary from NOK 429 400 - NOK 491 100a year, of which 2 % is deducted for the Norwegian Public Service Pension Fund. A yearly amount for operating costs will be added. The appointment will be made in accordance with current regulations and supplementary rules with guidelines for employment as PhD candidate appointments at universities and university colleges.

How to apply:

The allocated means are intended for new fellowships. Candidates who hold, or have already held a PhD position at NTNU cannot be rehired at NTNU in the same type of position.

The candidate must be fluent in both spoken and written English. Candidates from non-English speaking countries outside the Nordic countries must provide official documentation of their English competence. Approved tests are TOEFL, IELTS and Cambridge Certificate in Advanced English (CAE) or Cambridge Certificate of Proficiency in English (CPE). The following results are required:
TOEFL: 600 / writing 4.5 (paper-based test), 92 / writing 22 (internet- based test) IELTS: 6.5, with no section lower than 5.5 (only Academic IELTS test accepted) CAE/CPE: grade B or A.

The candidate's **motivation, skills and personal qualifications for the position and project** should be described in the application letter. The application should contain the following attachments:

- Applicants' CV (including list of publications, relevant former positions and copy of relevant transcripts and diplomas)
- Short statement from a former supervisor/tutor/teacher
- Contact information for two references (including email addresses and telephone number)
- Other relevant information

Applicants are asked to apply via www.jobbnorge.no.

Deadline for applications: April 30th 2015

For further information about the position, please contact Professor, Øyvind Halaas, Department of Cancer Research and Molecular Medicine. Phone (+47) 977 90 870, oyvind.halaas@ntnu.no

For information concerning the application process, please contact: HR-consultant Mariann Hansen (+47) 482 80 634, mariann.hansen@ntnu.no.

Please note that under the Norwegian Civil Service Act, information about applicants may be made public even though the applicant has requested not to be included on the list of applicants.

Tilleggsinformasjon

Arbeidssted: