

# Norwegian University of Science and Technology

Jobbnorge ID: 214289 Deadline: 12/28/2021 Website: http://www.ntnu.no

Scope: Fulltime

Duration: Temporary

We are looking for a motivated, service-minded individual to join our team as a

# **Senior Engineer**

## This is NTNU

NTNU is a broad-based university with a technical-scientific profile and a focus in professional education. The university is located in three cities with headquarters in Trondheim.

At NTNU, 9,000 employees and 42,000 students work to create knowledge for a better world.

Video: https://youtu.be/Xt-yHCN5QS0

# About the position

The MR Core facility at NTNU, Trondheim is offering a full-time (100%) 2.5-year position with possibility for extension for a senior engineer in preclinical imaging.

The MR Core Facility offers state of the art preclinical in vivo imaging facilities. Instrumentation includes a Bruker 7 T Biospec equipped with cryocoil, X-nuclei coils, and PET insert for simultaneous MRI & PET acquisitions; whole body optical imaging system (IVIS), and a small animal ultrasound imaging system with photoacoustics (VEVO Lazer-X). In addition to the preclinical in vivo imaging opportunities, we have a clinical 3 T Siemens Skyra, two high resolution Bruker 600 MHz Spectrometers, which are predominantly used for HR-MAS and biofluid analysis, as well as a MALDI system (Bruker Rapiflex) for metabolic imaging and GCMS equipment for metabolic analysis. Interest and expertise in these metabolic imaging technologies would be an advantage, but not a requirement for the candidate.

NTNU is a leading centre for technology and research within Norway, and the MR Core aims to provide excellent services for our customers. The preclinical imaging facility is part of the Norwegian Molecular Imaging Infrastructure (NORMOLIM) which is a national research infrastructure and a node in Euro-BioImaging ERIC, providing preclinical imaging services for national and international researchers. As a member of MR Core you will have the opportunity to work alongside researchers from a multitude of fields, including <a href="mailto:cancer">cancer</a>, <a href="mailto:neuroscience">neuroscience</a>, <a href="mailto:ultrasound">ultrasound</a>, <a href="mailto:exercise and health">exercise and health</a> as well as corporate customers from <a href="mailto:SINTEF">SINTEF</a> and from outside of the health sciences. A key task in this role will be to adapt imaging strategies to best suit the needs of the customer, develop and advertise new techniques and sequences to attract new customers, and to provide support throughout experiments and data analysis. You will also have the opportunity to attend and present research results at international conferences.

The main responsibilities of the position are training and assisting users on our Bruker 7 T Biospec small animal MR system, helping users with study design, planning and analysis of imaging experiments, maintaining the lab and instruments, and carrying out QA-routines on the systems. We seek a motivated applicant who will bring expertise to our team, drive research, and actively seek to increase preclinical lab activity.

We would prefer the successful applicant to be available to start as soon as possible.

#### **Duties of the position**

- Stimulating research activity on the preclinical MRI-PET instrument.
- Planning and optimising imaging strategies according to user needs.
- Training and supporting users on preclinical imaging equipment.
- Helping users with choice of data analysis methods.
- Maintaining lab instruments.
- Working as part of our team to ensure smooth running of the lab (e.g. maintenance of equipment, health and safety routines in the lab).

#### Required selection criteria

- M.Sc. in physics, biophysics, biomedical engineering, biology, chemistry, neuroscience or other relevant field.
- Documented experience with preclinical imaging.
- FELASA licence for preclinical research in vivo (or equivalent).
- Good written and oral English language skills.

#### Preferred selection criteria

- · Experience with MR imaging and spectroscopy.
- Experience with PET imaging and handling PET tracers.
- PhD or extensive research experience in preclinical imaging.
- · Experience with preclinical PET imaging.
- · Experience with Bruker ParaVision software.
- Experience in designing research protocols and implementation of sequences for MRI and/or PET research.
- Experience with image post-processing and analysis, including quantitative MRI analysis (e.g. ADC maps, DCE MRI, T1 and T2 mapping, MR spectroscopy etc.) and quantitative PET analysis.
- Experience with working in an interdisciplinary team.
- · Good written and oral Norwegian language skills.

#### Personal characteristics

- Motivated
- Team player
- Solution oriented
- Service minded
- Creative with strong problem-solving skills
- · Ability to share knowledge and competence
- Resourceful

In the evaluation of which candidate is best qualified, emphasis will be placed on education, experience and personal suitability, as well as motivation, in terms of the qualification requirements specified in the advertisement

## We offer

- exciting and stimulating tasks in a strong international academic environment
- an open and inclusive work environment with dedicated colleagues
- favourable terms in the Norwegian Public Service Pension Fund
- · employee benefits

# Salary and conditions

The gross salary for the position of senior engineer code 1181 is normally remunerated at gross from NOK 524 900 - NOK 650 300 before tax per year, depending on qualifications and seniority. From the salary, 2 % is deducted as a contribution to the Norwegian Public Service Pension Fund.

The engagement is to be made in accordance with the regulations in force concerning State Employees and Civil Servants, and the acts relating to Control of the Export of Strategic Goods, Services and Technology. Candidates who by assessment of the application and attachment are seen to conflict with the criteria's in the latter law will be prohibited from recruitment to NTNU. After the appointment you must assume that there may be changes in the area of work.

# About the application

Please note that the application will only be evaluated on the basis of the information available at the expiry of the application deadline. Therefore, make sure that your application clearly shows how your skills and experience meet the criteria described above.

The application must contain:

- · CV. certificates and diplomas
- name and adress of three references
- motivation letter

#### **General information**

A good work environment is characterized by diversity. We encourage qualified candidates to apply, regardless of their gender, functional capacity or cultural background.

The city of Trondheim is a modern European city with a rich cultural scene. Trondheim is the innovation capital of Norway with a population of 200,000. The Norwegian welfare state, including healthcare, schools, kindergartens and overall equality, is probably the best of its kind in the world. Professional subsidized day-care for children is easily available. Furthermore, Trondheim offers great opportunities for education (including international schools) and possibilities to enjoy nature, culture and family life and has low crime rates and clean air quality.

As an employee at NTNU, you must at all times adhere to the changes that the development in the subject entails and the organizational changes that are adopted.

Under the Freedom of Information Act (offentleglova), your name, age, position and municipality may be made public even if you have requested not to have your name entered on the list of applicants.

If you have any questions about the position, please contact Senior Engineer Deborah Hill, telephone +47 45188628, email deborah.hill@ntnu.no. If you have any questions about the recruitment process, please contact HR Advisor Sissel Sollien, e-mail: sissel.sollien@ntnu.no

Please submit your application and supporting documentation via jobbnorge.no. If you are invited for interview, you must bring certified copies of certificates and diplomas.

Application deadline: 28.12.2021

# NTNU - knowledge for a better world

#### NTNU - knowledge for a better world

The Norwegian University of Science and Technology (NTNU) creates knowledge for a better world and solutions that can change everyday life.

The Department of Circulation and Imaging (ISB) has 260 employees, and its research units are at the Cardiothoracic Centre at St. Olav's Hospital, integrated with collaborating clinical divisions. The Department of Circulation and Medical Imaging (ISB) includes anaesthesiology, radiology, radiography, ultrasound, magnetic resonance imaging, exercise physiology, cardiovascular physiology, pulmonary physiology, pulmonary medicine, cardiology, vascular surgery, thoracic surgery and biomedical engineering.

The department is also responsible for the Centre for Innovative Ultrasound Solutions (CIUS), the Medical Simulation Centre and the MR Centre. More information about the department is available at http://www.ntnu.edu/isb

# **Additional information**

#### Place of service:

Øya, Trondheim 7030 Trondheim (Trondheim Municipality)