

Head of the Department of Radiation Biology, Institute for Cancer Research, Oslo University Hospital combined with an adjunct full Professor position (20%), University of Oslo

# **Oslo University Hospital**

Oslo University Hospital (OUH) is a highly specialized hospital in charge of extensive regional and local hospital assignments, and is accredited as a Comprehensive Cancer Center (CCC). As Scandinavia's largest hospital, we carry out more than 1.2 million patient treatments each year. The hospital has a responsibility for a number of national and multi-regional assignments, and has several national centers of competence. OUH is responsible for approximately 50 percent of all medical and health care research conducted at Norwegian hospitals, and is a significant role player within the education of a large variety of health care personnel. The hospital hosts one of the largest radiotherapy centers world-wide, with about 6000 new patients receiving state-of-the-art radiotherapy each year. The center is located at the Radium Hospital in close vicinity to the Institute for Cancer Research. A Proton Therapy center is under construction at the same location. The Proton Therapy center will open in 2024-2025 and includes a cyclotron, 2 treatment rooms for cancer patients and a facility for preclinical research. We plan to include about 75% of all patients treated at the proton centre in clinical studies. The preclinical proton facility will consist of a treatment room with gantry, a room for stalling and work with small animals, a preclinical MR-scanner and laboratory for cell work and will offer a unique setting for proton therapy research.

## **Institute for Cancer Research**

The Institute for Cancer Research (ICR) organized as a part of the Division of Cancer Medicine at OUH, conducts cutting edge cancer research ranging from basic cancer biology to translational and clinical research. It is the leading cancer research institute in Norway and has a strong international standing. ICR is organized in 6 research departments including Department of Radiation Biology (DRB), currently with altogether 25 research groups, approx. 390 employees and an annual output of approx. 230 peer reviewed publications. Particularly strong research areas are molecular genetics, cell biology, cancer progression and metastasis biology, biomarker discovery and development, radiation biology, tumour immunology/immunotherapy and systems biology. The groups conduct particularly strong translational research within breast cancer, colorectal cancer, lung cancer, lymphomas, sarcomas, melanoma, gynaecologic cancers and prostate cancer. ICR also hosts a department for core facilities including NGS/genomics platforms, bioinformatics, flow- and mass cytometry, pre-clinical imaging scanner (incl. animal MRI) and X-ray machine, and electron-, confocal- and high-resolution microscopy. In collaboration with The University of Oslo, ICR is in the leadership of a Center of Excellence (CanCell), a K.G. Jebsen Center for B cell malignancies, a Centre for Advanced Cell Therapy (ACT) and a new Norwegian Centre for Clinical Cancer Research (MATRIX), as well as other large nation-wide collaborative projects and EU funded projects.

## **Department of Radiation Biology**

The mission of Department of Radiation Biology (DRB) is to improve the outcome of cancer treatment by radiation-based strategies. DRB is an interdisciplinary team of approximately 60 employees consisting of physicists, molecular biologists, biochemists, pharmacists, medical doctors

and engineers, organized in 4 research groups and 7 project groups. The research at the department is focused on the biological responses to ionizing and non-ionizing radiation. The vision is to develop a biological understanding of the radiation responses on the molecular, cellular and physiological level, and to utilize this knowledge to design new strategies for the treatment of cancer. Our research strategy involves basic, translational and clinical radiobiological research as well as pursuing innovations for improved radioterapeutic outcome.

The current research groups at DRB mainly focus their research on 1) molecular biomarkers that can identify patients at risk for failure after radiotherapy and guide the clinical decision-making, 2) DNA damage checkpoints and repair in response to ionizing radiation in order to improve cancer therapy, 3) utilization of light to activate photosensitizing medicines to translocate therapeutic macromolecules into the cytosol of target cells, a technology named photochemical internalization (PCI) and 4) developing novel strategies for targeted delivery of alpha-particle based radiation therapy. The department is active in the regional research network in radiation oncology NIRO (niroresearch.no)

## Job description

A permanent tenured position as Head of the Department of Radiation Biology is available from 1<sup>st</sup> January 2023 at the Institute for Cancer Research, OUH. The position is combined with a part-time position as adjunct full Professor (20%) at University of Oslo. It is required that the position holder attends to both positions.

We are seeking an outstanding scientist and research leader who will establish and run his/her own research group in preclinical and translational proton therapy research. As Head of the Department the holder of the position reports directly to the Director of Institute for Cancer Research (ICR) and is part of the ICR leadership team. The successful candidate will be expected to lead the further development of the Department both scientifically and socially, and to actively contribute to the further development of ICR's international excellence. Candidates need to have experience at group leader level or above, in an advanced cancer research organization or a similar higher academic research organization. The role as Head of Department is expected to be combined with the leadership of an own research group. The successful candidate is expected to establish a research group in preclinical proton therapy that will employ the facilities in the new Proton Therapy Center. This Proton therapy research group is expected to perform experimental and preclinical research to gain improved understanding of the interactions of protons with biological matter and translate the research into better utilization of protons for treatment of cancer. The research group leader is further expected to collaborate with the clinical proton therapy unit for implementing research findings into clinical practice.

We are looking for a candidate with collaborative and strategic abilities, who will actively contribute to an excellent collaborative working environment at the Institute. The candidate will be selected based on administrative experience and skills as well as the applicant's academic standing and research profile in proton therapy. The Department Head will lead the Department's management team of 4 research groups.

#### Regarding the part-time academic position at University of Oslo:

For a complete job description with qualification requirements and basis of evaluation on the academic position please see: LINK

The candidate's qualifications for a professorship will be assessed by an external evaluation by a committee appointed by University of Oslo. The position will, in addition to research, involve teaching and supervision of students at the Section for Biophysics and Medical Physics, Department of Physics, Faculty of Mathematics and Natural Sciences.

### **Qualifications:**

- Experience and skills at the research group leader level or above
- Documented qualities in leadership and team building
- PhD degree in natural sciences or medicine
- Research experience and production at a high international level
- Substantial experience in experimental and preclinical proton therapy
- Documented academic qualifications at the professorial level
- A track record for attracting external competitive funding.
- She/he must have the ability to work independently, but leverage academic collaborations within the Institute as well as externally.
- Experience in supervision at the MSc and PhD level

### Personal qualities

- Team player
- Flexible
- Self-motivated
- Communicative
- Leadership and organization skills

#### We offer

- The successful candidate will be offered a permanent position internally funded by OUH. The Department Head position will according to Norwegian legislation be subjected to a 6-month probationary period. The position is included in the Norwegian Health Assurance and Retirement Pension Schemes, and the salary will be within the official range at OUH for leadership positions depending on qualifications.
- An enthusiastic work environment with broad expertise and high professional level
- Close proximity to the clinical milieu at the hospital, including the radiotherapy center with the upcoming proton therapy unit
- Access to high quality instrumentation and services from the Core Facility Department and other in-house instrumentation, such as a preclinical research facility, MRI and X-ray sources for *in vitro* and *in vivo* studies, hypoxia-chamber, IVIS, Seahorse (see also <u>https://www.ousresearch.no/corefacilities/</u>).
- A preclinical proton research facility will be available from 2025.

• For additional information please contact Head of Insitute for Cancer Research, Professor Kjetil Taskén (kjetil.tasken@medisin.uio.no, Mobile +47-90860759)

### **Application procedure**

The application should include (as one combined pdf file):

- A covering letter summarizing the career and past research and innovation portfolio;
- CV with a full list of publications with the 10 most significant papers indicated and citations and H-index provided;
- A research plan (max 5 pages) for the first 5 years;
- The CV should include a list of supervised PhD candidates (name of candidate, period of supervision, institution, date of defense of the thesis, main- and co supervisors for each candidate), ability to raise funding of own research, administrative experience, leadership, collaborations, communication and dissemination. The applicant is expected to present a plan on how his/her research will integrate and synergize with the ongoing research at the department and with the environment at the ICR and at OUH Comprehensive Cancer Centre at large as described: <a href="https://www.ous-research.no/radiationbiology/">https://www.ous-research.no/radiationbiology/</a>; <a href="https://www.ous-research.no/radiationbiology/">https://www.ous-research.n
- Description of qualifications regarding administration, leadership and teaching
- The application must be submitted through OUH Webcruiter: XXXX
- Application deadline: XXX, 2022.