Postdoc in AI for Imaging in Radiation Oncology

Application Deadline:
09 January 2026

Institute/Faculty:
Department of Clinical Medicine

Faculty:
Faculty of Heatlh

Academic contact person:
Stine Sofia Korreman
Professor
stine.korreman@clin.au.dk

Vacant positions:
1

Number of months:
36

Hours per week:
37

Expected date of accession:
01/04/2026

The Department of Clinical Medicine, Danish Center for Particle Therapy, at Faculty of Health at Aarhus University invites applications for a position as Postdoc in the field of AI for Imaging in Radiation Oncology within the AIM@CANCER research center as per 1 April 2026 or as soon as possible thereafter. The position will be combined with a function in the Danish Data Science Research Infrastructure In Radiotherapy (DESIRE). The position is a full-time position for a fixed term of 3 years. It is expected that the time is divided approximately equally between the two functions in the AIM@CANCER center and the DESIRE project, respectively.

Department of Clinical Medicine

At the Department of Clinical Medicine, you will be part of what is probably the largest health science research department in Denmark. Our clinical research covers all the medical specialities and takes place in close collaboration with the university hospital and the regional hospitals in the Central Denmark Region. We have approx. 30,000 square metres of modern research facilities for experimental surgery and medicine, animal facilities and also advanced scanners at our disposal. The department has overall responsibility for the Master's degree programs in medicine and in molecular medicine. At the department we are approx. 670 academic employees, 500 PhD students and 160 technical/administrative employees who are cooperating across disciplines. You will be working at Aarhus University Hospital or another hospital in the Central Denmark Region. You can read more about the department here and about the faculty here.

About the position

The postdoc will be part of the AIM@CANCER research centre funded by the Novo Nordisk Foundation with the overall objective of developing high quality vision foundation models for high quality radiotherapy. In the project, we will use large-scale medical images primarily from Denmark, to build domain specific large vision models for radiotherapy tasks, including image segmentation, dose prediction and treatment outcome prediction. The AIM@CANCER center is hosted by Aarhus University and includes researchers from University of Copenhagen, Copenhagen University Hospital (Rigshospitalet), Odense University Hospital and Memorial Sloan-Kettering Cancer Center, NY. Read more about the project here: https://health.medarbejdere.au.dk/en/display/artikel/supercomputer-and-ai-to-strengthen-danish-cancer-treatment-new-project-secures-dkk-53-million.

The focus area of this postdoc will be to build vision foundation models based on CT-, MR-, and PET images for cancer patients referred for radiotherapy based on retrospective Danish data. The research will include testing different levels of model scaling in terms of data amount and diversity, and training will take place both on a local GPU cluster and on the Gefion supercomputer (https://dcai.dk/gefion). Downstream finetuning of models for various radiotherapy related tasks (e.g. image segmentation, dose prediction) will also be a part of the study.

As part of the position, a substantial function will be dedicated to tasks relating to national data collection/curation and building the infrastructure for national deployment of AI models within DESIRE – the Danish Data Science Research Infrastructure In Radiotherapy (https://www.straaleterapi.dk/en/desire/), also funded by the Novo Nordisk Foundation. The infrastructure constitutes an essential and necessary support for the research in the AIM@CANCER center, and a high degree of synergy between the two functions is therefore expected.

As part of the AIM@CANCER center, you will collaborate with other postdocs and PhD students, not only at Aarhus University but also at the other institutions involved in the project. As part of the DESIRE project, you will collaborate with a national team of 5-10 data scientists/developers and with all radiotherapy clinics in Denmark.

You will be supervised by Professor of Medical Physics Stine Korreman, director of the AIM@CANCER research center, and be embedded in the interdisciplinary research group "AI and big data in Radiation Oncology" (read more about the group here: https://www.en.auh.dk/departments/the-danish-centre-for-particle-therapy/research/research-groups/artificial-intelligence-and-big-data-in-radiation-oncology/). The group is part of the joint oncology research environment at Aarhus University Hospital and housed at the Danish Center for Particle Therapy. The research environment is well-established and of highest international standard, with research activities in radiation oncology bridging translational and clinical research.

Your job responsibilities

As Postdoc in AI for Imaging in Radiation Oncology, your position is primarily research-

based and may also involve teaching assignments. You will contribute to the development of the department through research of high international quality. For the DESIRE related function, you will contribute to development of a national data science research infrastructure which constitutes the data backbone of the research.

Your main tasks will consist of:

- Independent research of high international quality, including publication.
- Collaboration with and co-supervision of PhD students and master/bachelor students in the project.
- Collaboration with local research group on artificial intelligence in radiation oncology.
- Collaboration with researchers in the AIM@CANCER research center.
- Contribution to activities (participation and planning) in the AIM@CANCER research center and in the DESIRE project.
- Participation in local journal club and seminar series.
- Collaboration with the national team of data scientists/developers in DESIRE.

You will report to Professor of Medical Physics Stine Korreman.

Your competences

You have academic qualifications at PhD level, for example within the following areas; computer science, biomedical engineering, data science, statistics, mathematics, physics or an adjacent subject, with focus on medical image analysis and/or deep learning.

Furthermore, the following competences will be expected:

- Programming skills (Python, and/or C# or similar programming language).
- Knowledge of some of the following fields: medical image data, database structure, image processing, creation of user-friendly WEB pages.
- Analytical skills and ability to work independently on a project basis.
- Prior experience in radiation oncology will be considered an advantage.

As a person, you have good interpersonal skills, are inclusive and team-oriented and able to contribute to a good work environment. We expect you to be fluent in oral and written English.

In order to be assessed as qualified for a Postdoc position, you must meet these academic criteria.

Questions about the position

If you have any questions about the position, please contact Professor of Medical Physics Stine Korreman tel.: +45 28119886, email: stine.korreman@clin.au.dk.

Your place of work will be the Danish Center for Particle Therapy, Department of Clinical Medicine, Palle Juul Jensens Boulevard 25, entrance B3, DK-8200 Aarhus N, Denmark.

We expect to conduct interviews in the end of February.

Terms of employment

- Appointment as a postdoc requires academic qualifications at PhD level.
- Further information on the appointment procedure can be found in the Ministerial Order on the Appointment of Academic Staff at Universities.
- The appointment is in accordance with the Danish Confederation of Professional Associations (Akademikerne).
- Remuneration is in accordance with the above, and the Salary agreement catalogue for staff at Health.
- The yearly base salary for a fulltime postdoc is between DKK 484.214,84 and DKK 538.720,20 depending on the years of working experience after achieved

MSc degree. The base salary includes a position related supplement and pension (17.1 %). Additional supplement(s) for special qualifications can be negotiated. Authorisation supplemement(s) will be granted, if relevant for the position. Your local eligible trade union representative at Aarhus University negotiates your salary on your behalf.

- Researchers recruited from abroad are offered a special researcher tax scheme with a lower tax rate.
- Further information on qualification requirements and job description can be found in the Ministerial Order on Job Structure for Academic Staff

Application

Your application must include the following:

- Motivated application
- Curriculum Vitae
- Diploma
- Template for applicant - postdoc
- A list of publications
- A teaching portfolio. We refer to Guideline on the use of teaching portfolios
- A maximum of five of the publications of greatest relevance to the job may be submitted (optional)
- Research plan can be uploaded (optional)
- Coauthor statement(s) can be uploaded (optional)
- References/recommendations can be uploaded separately in the e-recruitment system (optional)

We refer to the faculty's Guidelines for applicants.

Aarhus University's ambition is to be an attractive and inspiring workplace for all and to foster a culture in which each individual has opportunities to thrive, achieve and develop. We view equality and diversity as assets, and we welcome all applicants.

International applicant?

Aarhus University offers a broad variety of services for international researchers and accompanying families, including assistance with relocation and career counselling to expat partners. Please find more information about the International Staff Office and the range of services here. Aarhus University also has a Junior Researcher Association and offers career development support. You can read more about these resources here.

The application must be submitted via Aarhus University's recruitment system, which can be accessed under the job advertisement on Aarhus University's website.

Aarhus University

Aarhus University is an academically diverse and research-intensive university with a strong commitment to high-quality research and education and the development of society nationally and globally. The university offers an inspiring research and teaching environment to its 38,000 students (FTEs) and 8,300 employees, and has an annual revenues of EUR 935 million. Learn more at www.international.au.dk/