

# Postdoc in Advanced Image Processing in Dentistry

The Department of Dentistry and Oral Health at Faculty of Health at Aarhus University invites applications for a position as Postdoc in the field of advanced image processing as per 1 July 2026 or as soon as possible thereafter. The position is a fixed-term full-time position for 1 year.

As postdoc at the Department of Dentistry and Oral Health, you will be employed at an internationally recognised department, where we conduct research on oral health and disease in the teeth, mouth and jaws. We offer an inspiring international research environment with specialised research laboratories, modern clinical facilities and advanced digital equipment throughout the department. Our degree programmes cover the orofacial team for societal healthcare services, divided into three professions: dentist, dental hygienist, and clinical dental technician. We create synergy between our degree programmes and educate students in prevention and treatment of disease and health promotion among the population. The Department has around 300 staff and 700 students. The focus of both our research and educational work is orofacial health as an integral part of general health, and our collaboration is built on respect, trust, recognition and professionalism. You can read more about the Department [here](#) and the Faculty of Health [here](#).

## About the research project

Our group is part of a larger initiative to implement state-of-the-art data science principles into dental practice. While our primary focus is on the use of deep learning in (dental) imaging, our work expands into any type of data (e.g. tabular data) as well as various other algorithmic methods for data processing and analysis.

Current projects within this scope include, but are not limited to:

- Detection and classification of lesions
- Segmentation of anatomical and pathological regions of interest
- Image enhancement e.g. improving resolution, noise, artefacts etc.
- Synthetic radiography

## Your job responsibilities

As Postdoc in advanced image processing your position is primarily research-based but may also involve teaching assignments. You will contribute to the development of the department through research of high international quality. In your daily work, you will work closely with colleagues on your project, where you will receive supervision and guidance.

Your main tasks will consist of:

- Conduct Independent research of high international quality.
- Publish findings in reputable scientific journals and present at international conferences.
- Stay abreast of latest developments in the field and incorporate them into your research.
- Oversee and manage the day-to-day operations of the lab.
- Address and resolve any team conflicts or interpersonal issues.
- Conduct performance evaluations and provide constructive feedback.
- Help in the mentorship and supervision of undergraduate or graduate students in their research projects.
- Participate in departmental seminars, workshops, and other academic activities.

You will report to Associate Professor Ruben Pauwels.

## Your competences

You have academic qualifications at PhD level. Candidates can have a background in a (bio)medical discipline (incl. medicine or dentistry), medical physics, computer/data science, electrical engineering, etc. Prior experience in (1) image processing, particularly for radiographic and computed tomographic data as well as mesh-type data, and (2) machine learning, particularly deep learning, will be considered as a significant advantage.

**Application Deadline:**  
30 April 2026

**Institute/Faculty:**  
Department of  
Dentistry and Oral  
Health

**Faculty:**  
Faculty of Health

**Academic contact person:**  
Ruben Pauwels  
Lektor  
+4587150003  
ruben.pauwels@dent.a  
u.dk

**Vacant positions:**  
1

**Number of months:**  
12

**Hours per week:**  
37

**Expected date of accession:**  
01/06/2026

As a person you are highly motivated, inclusive, independent yet willing to collaborate with other team members and eager to develop a novel research program. We expect you to be fluent in oral and written English and possess good communication and interpersonal skills.

In order to be assessed as qualified for a Postdoc position, you must meet [these academic criteria](#).

Shortlisting will be used.

#### **Questions about the position**

If you have any questions about the position, please contact Associate Professor Ruben Pauwels tel.: (+45) 8715 0003 or [ruben.pauwels@dent.au.dk](mailto:ruben.pauwels@dent.au.dk).

Your place of work will be the Department of Dentistry and Oral Health, Vennelyst Boulevard 9, DK-8000 Aarhus C, Denmark.

We expect to conduct interviews in early May 2026.

#### **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 supplement(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 37,000 students (FTEs) and 8.700 employees and has an annual revenue of EUR 1.106 billion. Learn more at [www.international.au.dk/](http://www.international.au.dk/)*