

Research assistant preparing for a fully funded PhD fellowship

We seek a research assistant for a one-year position, primarily focused on preparing for and, if possible, progressing into a fully funded 3-year PhD fellowship as part of a Novo Nordisk Fonden project named *Transforming University Science Education in the New Media Era: Practices, Technologies, and Disciplinary Thinking*.

About the position as research assistant at CED

Centre for Educational Development (CED) intends to contribute to the research-based development of university science education. We acknowledge that it can be difficult to start as a PhD fellow and succeed in this field without a longer start-up phase. In consequence, we offer a one-year position as research assistant to allow time to work your way into the topic and fine-tune a PhD-project description, before potential enrolment at the PhD School of Natural Sciences at Aarhus University.

The expected PhD-project will be embedded in a work package that focuses on the design, implementation, and evaluation of AI-enhanced immersive virtual/augmented/extended (VR/AR/XR) environments to support learning of scientific concepts and practices at the university-level. This work package investigates how such cutting-edge educational technology spaces can foster embodied and epistemic engagement with scientific practices – helping students not only understand complex concepts and procedures in the short term, but also develop deeper, longer-term epistemic capacities through hands-on, situated experiences. Central to the project is the integration of these technologies into real classroom and laboratory settings, ensuring contextual relevance and pedagogical effectiveness.

The PhD candidate will play a leading role in shaping and conducting this research, from co-designing XR environments with instructors and students to analysing multimodal learning data (e.g., individual as well as collaborative verbal interactions, student gestures, task and activity sequences) and evaluating long-term learning outcomes.

The work package is part of a larger interdisciplinary project – *Transforming University Science Education in the New Media Era: Practices, Technologies, and Disciplinary Thinking* – which also includes work packages led by researchers from University of Copenhagen and University of Southern Denmark on creative problem solving, instruction, and disciplinary writing in the age of AI.

Main supervisor is Associate Professor Prajakt Pande.

About the tasks

Your primary tasks during the 1-year position as a research assistant are:

Research (50%)

- contribute to your main supervisor's current research
- design, collect data, and contribute to analyses of a smaller pilot study pre-PhD
- participate as a co-author on a research paper with colleagues from CED
- prepare a potential enrolment at the PhD School of Natural Sciences at Aarhus University with your main supervisor, including writing a project proposal and connected qualifying activities.

Development, teaching, and operation (40%)

- contribute to our extensive portfolio of tasks linked to the ongoing digital transformation of the degree programs and learning activities, especially but not exclusively related to AI, <https://digitalcurriculum.au.dk> in collaboration with colleagues from CED
- join the editorial team behind AU Educate (<https://educate.au.dk>), especially regarding quality assurance and further development of the content related to GAI

Administration and meetings etc. (10%)

In addition, to a lesser extent, you can participate in other tasks in the centre by specific agreement if your time schedule permits.

Application Deadline:
17 August 2025

Institute/Faculty:
Centre for Educational
Development (CED)

**Academic contact
person:**
Anne Mette Mørcke
Centerleder
morcke@au.dk
+4551447574

Vacant positions:
1

Number of months:
12

Hours per week:
37

**Expected date of
accession:**
01/12/2025

About your qualifications and competences

You have

- completed an academic degree at the candidate or master level, for example, Chemistry, Biology, Geology, Cognitive Science, Educational Psychology, Human-Computer Interaction, Education Sciences, or other relevant programmes that include educational and/or natural science perspectives
- a strong interest in science education, disciplinary practices, and technology-enhanced learning.

It is an advantage if you have

- a solid foundation in understanding learning processes from a cognitive, embodied, and/or epistemic perspective
- familiarity with design-based, qualitative, or mixed-methods educational research
- a solid foundation in digital research and/or learning technologies, experience working with or researching AI tools in educational or scientific contexts
- published an academic text in the form of a paper, report, or book chapter
- experience in teaching (preferably in science, science communication, or higher education)
- experience with immersive technologies (e.g., XR/VR/AR) and/or multimodal data analysis (e.g., eye-tracking, gesture tracking, interaction analysis).

You can

- write academically in English
- contribute to complex development projects that include technologies and digitalisation at university level.
- communicate research ideas clearly to interdisciplinary and non-specialist audiences
- collaborate across disciplinary boundaries with students, instructors, developers, and fellow researchers.

About the Centre for Educational Development (CED) at Aarhus University

The mission of CED is to inspire engaging teaching and excellent educations at Aarhus University. We offer teachers, academic staff, coordinators, directors, and executives at Aarhus University competent and professional partnership, collaboration, and help concerning their ongoing teaching tasks and competencies.

Furthermore, we ambitiously strive for the highest international level through applied research in university teaching and learning. We contribute to development projects and experiments in the fields of digitalization and learning technologies in higher education, university teaching, and program development.

CED employs about 60 colleagues organized into three departments specialized in digital development, teaching development, and program development, respectively, plus a small administration. We have a good collegial atmosphere characterized by a high degree of collaboration and continuous professional development. We value inquiry, co-creation, empowerment, and expertise.

The research group at CED works within and across the three departments. The group comprises six associate professors, four assistant professors, two postdocs, and five PhD-students. The group focus on high quality applied research. The current topics of interest in the group include student learning, transitions and career, teacher development and educational leadership, health sciences education research, digitalization and learning technology in higher education. We come from a wide range of research methods and theoretical frameworks.

For a more detailed description of CED, please, [visit our website](#).

Conditions and place of employment

The position is full-time (37 hours per week) and limited to 1 year after employment. By mutual agreement, the one-year position can result in a 3-year fully funded PhD

scholarship from CED, subject to enrolment.
Expected start date is 1 November 2025 or as soon as possible.

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).

Further information on qualification requirements and job description can be found in the [Ministerial Order on Job Structure for Academic Staff at Universities](#).

The successful applicant will refer to the department manager of the Department of Program Development at CED.

Place of employment is Trøjborgvej 82-84, 8000 Aarhus C, Denmark.

The hiring process

In connection with your motivated written application, you must attach the following:

- CV
- Documentation for your candidate or master's degree
- Example of a published academic text with you as (co-)author, or your candidate/master thesis in Danish or English
- Description of your experiences with teaching, innovation, or development projects

Applications must be made in English.

We use shortlisting in the hiring process. In this shortlisting process, the centre lead, the department lead and the scientific assessor exclude applicants that are far from being eligible for the described position. Only shortlisted applicants receive a full assessment.

After the shortlisting process, the scientific assessor gives a written summary concerning each of the shortlisted applicants. Based on these summaries of qualifications, an employment committee of future colleagues and the department lead invites the best applicants for an interview.

Interviews are expected to take place in week 38 (medio September).

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.

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/