

Summer School for Young Researchers in Radiology & AI

The German and Austrian Radiological Society (DRG and ÖRG) are jointly launching a Young Investigator Summer School in Radiology & AI.

Under the motto "*Artificial Intelligence in Radiology*" the Summer School aims to prepare scientists at an early stage of their careers to carry out research projects independently and to introduce them to supervising their first third party-funded projects (DFG, FWF, or similar projects). Another key aim is to address the lack of excellently trained young researchers in interdisciplinary fields.

TOPIC OF THE SUMMER SCHOOL

Artificial intelligence (AI) is playing an increasingly important role in medicine. The pursuit of individualized, targeted, and the gentlest possible therapy requires optimized image-data acquisition on the one hand and integrative evaluation of complex data sets on the other. In modern medical imaging AI algorithms are used in very different ways. They are used for lesion detection and characterization, radiomics analysis, integrative evaluation of image data and biobanks, dose optimization, and structured reporting. The long-term successful implementation of AI in medicine requires close cooperation between medicine and informatics as an indispensable basic prerequisite. Summer Schools aim to create a transdisciplinary training platform for talented scientists from the fields of medicine, particularly radiology, nuclear medicine, and pathology, as well as computer science, and to further develop ideas for their own research regarding third-party funded projects.

PARTICIPATION IN THE ACADEMY FOR EARLY CAREER RESEARCHERS

The Summer School is aimed at early-career researchers with a natural sciences and medicine background who have recently completed their doctorate (no more than six years ago; periods of parenting and childcare are considered) or will complete it by 2024 at the latest. If you currently have not yet completed your doctorate, you are eligible to apply if you have successfully defended your doctorate by the academy week. Further, applicants should actively be involved in a working group or structures with relevant expertise. Applicants should not have completed their habilitation.

Interest in a scientific career is a prerequisite. The goal is to support a first detailed project outline for individual funding by DFG, FWF or other funding bodies.

Those interested in participating in the Summer School must submit the following documents, which are decisive for the selection of participants:

- Letter of motivation (max. one page)
- Project outline (max. four pages)
- Current curriculum vitae (max. two pages)
- List of publications and conference papers
- Copy of the doctoral certificate/statement on the prospects of success of your doctoral project by the doctoral supervisor
- Letter of support of the department head (max one page)

The project outline does not need to include a work plan or budget planning. What is important is a summary of the background and any previous work, a clear description of the research question

(including the planned methods), and a brief argumentation on the relevance or originality of the project idea. The topic must fit the focus of the Summer School (Artificial Intelligence in radiology).

Please send us your application by June 20th, 2024, using the follow submission tool:
<https://www.oerg.at/ausbildungsaerzte/submission-tool-summer-school/>

An interdisciplinary committee will review the applications and invite up to 36 participants to the event. Pairwise applications (Imaging/Computer Science) are preferred, individual applications may not be considered.

Applicants will be notified by July 31st, 2024, at the latest whether they can take part in the Young Investigator Academy.

The Summer School will take place at Schloss Birlinghoven, 53757 Sankt Augustin, Germany, from September 16 to 20, 2024. Participants will acquire and deepen their knowledge of the possibilities of Artificial Intelligence in radiology through lectures, discussions, and excursions. At the same time, they will receive targeted support in preparing their own funding proposal. A hackathon is already scheduled as an integral part of the event.

The participation fee amounts to 750 euros, in addition to covering travel and accommodation expenses. Participants from the Austrian Radiology Society will have their travel expenses covered by the society. The Summer School will be supported by the German and the Austrian Radiology Society.

CRITERIA FOR SELECTION

- Classification of the outlined project in the topic (suitability)
- Relevance of the research question addressed in the thematic context
- Theoretical basis of the research question
- Innovative content of the project
- Perspective and potential links of the topic in relation to the academic career
- Suitability and originality of the methodological approach
- Feasibility of the project
- Scientific qualification of the candidate
- Suitability of the scientific environment
- Publication record of the applicant, taking the career phase into account

CONTACT FOR QUESTIONS ABOUT THE SUMMER SCHOOL

Organizational questions will be answered by:

Claudia Donth, donth@drg.de

Beate Kasperak, office@oerg.at

Florian Schneider, schneider@drg.de

Scientific questions will be answered by the coordinator of the Summer School:

Univ.-Prof. Dr. Ulrike Attenberger, ulrike.attenberger@ukbonn.de