The Medical Faculty of the University of Duisburg-Essen is inviting applications for a

Full Professorship in Radiology with Focus on Artificial Intelligence (W3 BBesO grade post, limited to 5 years)

The position is newly established and will work in concert with three additional professorship positions (two of them within the framework of the Cancer Research Center Cologne Essen (CCCE)), all related to the use of artificial intelligence (AI) in medicine.

Core tasks of the applicant are (i) the analysis of clinical processes with regard to improvement potential through AI systems (ii) the design and implementation of corresponding systems and (iii) the seamless integration of these systems into clinical processes. For this purpose, the applicant must have a deep understanding of practical clinical medicine and the technical competence to process clinical data on a large scale, to train AI systems using classical machine learning and deep learning, and to finally integrate these systems back into the hospital infrastructure. Special emphasis will be placed on the feasibility of such systems for routine clinical use, in particular with regard to user interaction.

The future jobholder must have a German board certification in Radiology or an equal qualification. In addition, good knowledge and practical experience with standards for data exchange in healthcare (in particular DICOM, HL7, FHIR, SNOMED-CT and LOINC) are required. Practical skills in the areas of machine learning and deep learning are also required. Proven practical skills in programming distributed systems, microservices and big data architectures as well as extensive experience in dealing with relational and non-relational database systems are desirable. Further prerequisites are previous experience in the development and implementation of industrial cooperations as well as intensive scientific activity that can be proven by scientific publications.

The future chair will also contribute to the main research focus of the Medical Faculty and will collaborate with and contribute to ongoing and evolving research consortia. As the University of Duisburg-Essen puts special emphasis on the quality of academic teaching, concepts on the participation in teaching activities with regard to the profile of the University Duisburg-Essen should be provided. Furthermore, the future chair will possess dedicated teaching skills and use innovative methods in teaching and qualified post graduates qualification.

Qualifications according to § 36 Hochschulgesetz NRW are required. Publications in peer-reviewed journals or patents, and successful experience with third-party funding applications are mandatory. The Medical Faculty in Essen promotes research particularly in the following areas: Cardiovascular Disease, Oncology, Transplantation Medicine and Translational Neuro- and Behavior Sciences, as well as the bridging disciplines of Immunology and Infectious Diseases.

The positions will be available at the earliest.

Application deadline: 27.05.2020

The University of Duisburg-Essen aims to increase diversity among its faculty members (see http://uni-due.de/diversity) and strives to increase the number of women in such positions. Therefore, we especially encourage women with relevant qualifications to apply. Women with the appropriate qualifications will receive preferential consideration. Applications from severely disabled candidates according to § 2 Abs. 3 SGB IX are welcome.

Applications with the usual supporting documents (curriculum vitae, list of scientific publications (see http://www.uni-due.de/imperia/md/content/medizin/formblatt_aufbau_schriftenverzeichnis.pdf), documents on scien- tific and professional career, certificate copies, information on third-party funding, participation in academic self-administration, past teaching experience and concepts for teaching, and 5 key publications should be submitted by email (medizin-dekanat@uk-essen.de) to Univ.-Prof. Dr. J. Buer, Dekan der Medizinischen Fakultät, Universitätsklinikum Essen, Hufelandstr. 55, 45147 Essen.

Furthermore, we need you to fill in our application form at https://www.uni-duesseldorf.de/med/de/organisation/bewerbungsbogen.php. Further information on the position and its embedding in the University of Duisburg-Essen as well as in the Faculty can be found at https://www.uni-due.de/med/de/organisation/berufungen.php.