University Medicine Essen is on its way to becoming a SMART Hospital, where digital technologies will enable employees to further improve patient care, research and education. We are convinced that truly personalized medicine can only be realized, if we combine digitization in medicine with artificial intelligence. We have therefore decided to establish an institute for Artificial Intelligence (AI) in Medicine. In its founding stage, this institute will be staffed with four professorships dealing with different aspects of AI in medicine. We envision these professorships to synergistically lead the successful development of our innovative concept. It is our aim to identify highly motivated individuals with a broad and complementary range of expertise with whom we undertake this journey.

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

**Full Professorship in Translational Image-Guided Oncology**
*(W3 BBesO grade post, initially limited to 5 years)*

The position is newly established within the framework of the Cancer Research Center Cologne Essen (CCCE), in which the University Hospital Essen and the University Hospital Cologne join forces to advance translational cancer research and computational cancer biology. Generous funding is provided by the state of Nordrhein-Westfalen for 5 years; following successful development of the CCCE perpetuation of the professorship is envisioned.

The holder of this position will contribute to research and teaching in the field of image-guided Oncology at the Medical Faculty and University Hospital Essen. She or he will interact within the framework of the West German Cancer Center (WTZ), a leading comprehensive cancer center designated as Oncology Center of Excellence by the German Cancer Aid. As partner site of the federally funded German Cancer Consortium (DKTX), formed by seven excellent university medical centers and the German Cancer Research Center Heidelberg (DKFZ), the West German Cancer Center offers a highly competitive and stimulating scientific environment including access to core facilities, biobanks and datasets from large patient cohorts. Collaborative research with basic science is fostered through the Center for Medical Biotechnology integrating the Faculties of Biology, Chemistry and Medicine of the University of Duisburg-Essen.

The future chair should be an internationally acknowledged scientist with broad, outstanding track record in the technical aspects of image-guided oncology. The future chair is expected to establish research lines that translate innovative image guidance concepts for a range of interventions, including, but not limited, to precision surgery, focal and molecularly targeted systemic therapies, into clinical exploration and application in cancer patients. Particular focus areas are the realization of improved procedural planning, real-time intra-procedural diagnostics, imaging-based therapy delivery or theranostics. The future chair will also contribute to the main research focuses of the Medical Faculty and will collaborate with and contribute to ongoing and evolving research consortia. Furthermore, the future chair will possess dedicated teaching skills and use innovative methods in teaching.

Qualifications according to § 36 Hochschulgesetz NRW are required. Publications in peer-reviewed journals and successful experience with competitive third-party funding applications are mandatory. Involvement in teaching activities of the university with emphasis on postgraduate education is mandatory. Concepts on the participation in teaching activities with regard to the profile of the Medical Faculty of the University of Duisburg-Essen should be provided.

**Full Professorship in Medical Data Science in Oncology**
*(W3 BBesO grade post, initially limited to 5 years)*

The position is newly established within the framework of the Cancer Research Center Cologne Essen (CCCE), in which the University Hospital Essen and the University Hospital Cologne join forces to advance translational cancer research and computational cancer biology. Generous funding is provided by the state of Nordrhein-Westfalen for 5 years; following successful development of the CCCE perpetuation of the professorship is envisioned.

The holder of this position will contribute to research and teaching in Medical Data Science at the Medical Faculty and University Hospital Essen. She or he will interact within the framework of the West German Cancer Center (WTZ), a leading comprehensive cancer center designated as Oncology Center of Excellence by the German Cancer Aid. As partner site of the federally funded German Cancer Consortium (DKTX), formed by seven excellent university medical centers and the German Cancer Research Center Heidelberg (DKFZ), the West German Cancer Center offers a highly competitive and stimulating scientific environment including access to core facilities, biobanks and datasets from large patient cohorts.

The future chair should be an internationally acknowledged scientist with broad, outstanding expertise in informatics, particularly in the fields of bioinformatics, biostatistics or medical informatics. The future chair is expected to lead the development and application of novel technologies to retrieve, integrate and mine multimodal datasets originating from clinical care and translational research. New algorithms and bioinformatics pipelines shall be developed that will ultimately feed into direct improvements of patient care in oncology. The future chair will also contribute to the main research focuses of the Medical Faculty and will collaborate with and contribute to ongoing and evolving research consortia. Furthermore, the future chair will possess dedicated teaching skills and use innovative methods in teaching.

Qualifications according to § 36 Hochschulgesetz NRW are required. Internationally visible publications in the field and successful experience with competitive third-party funding applications are mandatory. Involvement in teaching activities of the university with emphasis on postgraduate education is mandatory. Concepts on the participation in teaching activities with regard to the profile of the Medical Faculty of the University of Duisburg-Essen should be provided.

The positions will be available at the earliest.

Application deadline: 13.06.2019

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_schrittverzeichnis.pdf]), documents on scientific 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-due.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/bewerbungen.php.