A Prestigious Appointment at Harvard

Change at Fraunhofer MEVIS: Ron Kikinis assumes professorship in the USA, Horst Hahn now sole Institute director

Prof. Ron Kikinis, the former director of the Fraunhofer Institute for Digital Medicine MEVIS in Bremen, has accepted a renowned appointment at Harvard Medical School in the United States. Since March 1, 2020, Prof. Horst Hahn has been the sole director of the Institute – for the prior six years, both had acted in dual leadership roles. Kikinis has assumed the B. Leonard Holman Endowed Professor of Radiology at Harvard Medical School. This endowed chair is one of the highest academic distinctions at the prestigious Medical School and is only awarded to researchers who are worldwide leaders in their field.

“Ron Kikinis, one of the pioneers of computer-aided medicine, has truly left his mark in Bremen,” said Horst Hahn, commemorating the accomplishments of his former partner. On May 1, 2014, both assumed the directorship of Fraunhofer MEVIS; Kikinis retained his previous position and commuted every two months between Bremen and Boston. In addition, Kikinis, a medical doctor who also holds an academic doctorate, held a professorship in Medical Image Computing at the University of Bremen. “This has significantly strengthened the partnership between Fraunhofer MEVIS and the University of Bremen,” explained Hahn. “The subject of medical computing is now a component of the computer science curriculum at the University of Bremen.” Students now learn how innovative algorithms can help obtain patient-relevant information from ultrasound, MRI, and CT image data to attain more accurate diagnoses. More and more therapies are supported by software assistants, for example, to determine the optimal dose for tumor irradiation.

During his activities in Germany, Kikinis also helped spark research in the relatively young field of radiomics, which can be described as the computer-assisted combination of images and clinical data. Experts combine, for instance, image data from MR scanners with clinical information such as blood values and digitalized tissue sections. These combined data sets are then scanned by adaptive algorithms in search of meaningful patterns. In the future, the results could, for example, help to find the most promising drug for a cancer patient’s chemotherapy. During his time at Fraunhofer MEVIS, Ron Kikinis was one of the initiators of the Radiomics Priority Program of the German Research Foundation (DFG).
Even though the 64-year-old is now returning to Harvard, he will continue to be a cooperation partner at his former place of work. In the United States, he coordinates the “Imaging Data Commons” (IDC) consortium, in which Fraunhofer MEVIS is also involved. Its aim is to organize image databases for cancer research to be much more easily accessible for multicenter studies. Doing so should enable adaptive algorithms to search for meaningful patterns in several databases at the same time while ensuring data privacy. “I found my time in Germany to be very valuable, and the highlight of this experience was the people at Fraunhofer MEVIS,” said Ron Kikinis. “It was a very satisfying job and I am very proud of what I have achieved.”