

# Leading Edge Cluster Medical Valley EMN

## Speaker

Prof. Dr.-Ing. Erich R. Reinhardt

## Deputy Speaker and Contact Faculty of Medicine

Prof. Dr. med. Dr. h.c. Jürgen Schüttler

## Address

Medical Valley EMN e.V.  
Henkestraße 91  
91052 Erlangen  
Phone: +49 9131 91617-0  
Fax: +49 9131 9704921  
team@medical-valley-emn.de  
www.en.medical-valley-emn.de

## Aims and structure

The Medical Valley European Metropolitan Region Nuremberg (EMN) is a leading international cluster in medical technology. Here, there are not only highly specialized leading international research institutions, but also many emerging companies. They work closely with world-renowned health research facilities in the cluster in order to find solutions to the challenges of healthcare of today and tomorrow.

The cluster is so outstanding that it was nominated as national Cluster of Excellence by the BMBF in 2010. Since 2007 Medical Valley EMN e. V. operates as a uniting cluster management organization. It currently has more than 200 members from industrial, science, healthcare, network, and political sectors. The key tasks of cluster management are the development, coordination, and marketing of the cluster. We measure our success by asking these fundamental questions:

Are we able to stimulate new ideas, projects, and foundations?

Do we obtain R&D (research and development) funding for innovative projects?

Do our services catalyze the innovation of ideas?

Do our activities promote the cross-sectoral and transdisciplinary exchange of knowledge?

Do we strengthen exchange in the cluster and improve cultural cooperation?

Do we promote creative minds?

Do we support the internationalization of our partners?

Our services help the commercialization of the ideas of our members. Our offerings include funding-procurement and consulting, foundation support, identification and exchange of clinical partners, regulatory approval and reimbursement, strategic needs assessment and health economics evaluation, open innovation

as well as international market access. To provide comprehensive support, we incorporate established specialists and experts within the cluster through the "One-Stop-Shop" principle. Our current specifically-selected activities include the operation of innovation centers in Erlangen and Forchheim, the coordination of the Bavarian Cluster Medical Technology (in cooperation with Forum MedTech Pharma), the conducting of the Medical Valley Awards (prize for research teams in pre-foundation phases), and the coordination of the platform "Digital medicalHealth" within the Center for Digitalization Bavaria. Since 2010 Medical Valley has acquired more than 150 million euros R&D grants for its partners.

## Research

Following you will find three examples of currently running projects with the Faculty of Medicine:

### **digiDEM (sponsored by the Bavarian State Ministry of Health and Care)**

The objective of digiDEM is derived from the Bavarian Dementia Strategy formulated in 2013. The aim of the Bavarian Dementia Strategy is to use innovative approaches and solutions, among other things, to bring about a change in awareness of how to deal with the disease and to create framework conditions that enable people with dementia (PwD) to live in the midst of our society and preserve their dignity in all phases. Based on the Bavarian Dementia Strategy of the Bavarian State Government and the recommendations of the Enquête Commission of the Bavarian Parliament, digiDEM has the following goals:

- Establishment of a digital dementia register for the citizens of Bavaria with extensive data collection in all seven government districts of Bavaria
- Establishment of a digital dementia guide PwD and their nursing relatives
- Provision of digital services for PwD and cognitive disabilities
- Establishment of a digital support platform for voluntary engagement in the supervision of PwD
- Establishment of a digital participation platform for citizens in Bavaria

### **d.hip (Digital Health Innovation Platform)**

d.hip (compare own report) is a strategic partnership of FAU, UK Erlangen, Siemens Health-

neers, and Medical Valley EMN e.V. to start outstanding research projects in future fields such as precision medicine, hospital management, or new services for home care. The overall subject matter is the joint vision "Digital Health Twin". In addition to projects, a d.hip lab was created, which offers over 500m<sup>2</sup> of space for project teams, workshops, and conference rooms. The d.hip program is rounded up by a scientific program that will lead to junior professorships in key technology areas and attract international doctoral students to Erlangen for projects.



*Kick-off meeting of d.hip on April 2018 with high-ranking representatives of all d.hip-partners*

### **Medical Valley Award**

Two teams with the members from the Faculty of Medicine were awarded in the last round. Each team received 500,000 euros for the next two years. Their topics were:

- Miniaturized, intra-urethral, energy-autonomous closure system for incontinence patients to improve their quality of life (6 million patients in Germany, about 350 million euro for incontinence material annually; Institute of Pathology)
- A sensor-based step (gait) analysis and algorithms for tumble risk detection purposes (Department of Neurology)

