

Dear TUM friends and associates,

Successful scientists share not only a passion for discovery, but also a willingness to compete at the highest level. The researchers we introduce in this edition have overcome stiff competition to convince the European Research Council (ERC) of the merits of their project proposals. The prestigious grants in question are awarded according to a single criterion – scientific excellence. These ERC grants also function as a seal of quality for the associated scientific institutions, since recipients can choose to carry out their research at any location in Europe. So we are extremely proud that TUM is one of the most attractive universities for ERC grant holders.

In Germany as a whole, TUM is the university with the second-highest number of ERC grants. Since the European Research Council was founded in 2007, 42 of our scientists have received funding across 45 projects. 2014 was a particularly strong year in this regard, with TUM gaining the most ERC Consolidator Grants of any German research organization and ranking fourth in Europe.

The international success of our scientists against this fierce competition – the success rate of ERC applications lies at around 11 percent – is also confirmation of our stringent recruitment policy. Many scientists supported by the ERC have also gained numerous other awards in their fields. And almost all ERC recipients at TUM have been granted this funding during their time with us and chosen to remain here. We view this as a great distinction, since these grants are transferable, allowing researchers to move freely between European locations. Scientists here receive support and personal advice from our TUM ForTe office to help with their applications for funding at both a national and EU level. Equally, gaining an ERC grant means scientists are eligible for our TUM Faculty Tenure Track program – a career planning and development path for young scientists that is currently unparalleled in Germany. This program gives leading researchers an additional incentive to bring their ERC grant to TUM or to stay on with us.

The European Research Council promotes basic research – based on the conviction that the resulting insights pave the way for new, application-oriented avenues of research. ERC projects often entail bold and challenging questions with open outcomes, which could nevertheless result in breakthrough findings at some stage. So it is all the more important that ERC grants fund researchers for up to five years, giving them the independence to focus exclusively on their chosen



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*Wolfgang A. Herrmann*

path. The wide reach of excellence in basic research at TUM is highlighted by the distribution of ERC projects across a total of eight departments – from Medicine and Physics through Informatics and Electrical, Electronic and Computer Engineering to Chemistry, Mathematics and Mechanical Engineering, as well as Nutrition and Food Sciences, Ecology and Ecosystem Management, and Agricultural Economics. Readers of *Faszination Forschung* will already be familiar with many of these projects from previous issues. The seven outstanding researchers to whom this edition is dedicated and of whom we are proud reflect anew this broad spectrum of excellent research.

**Thomas Korn** is setting out to investigate the theory that, in the autoimmune disease multiple sclerosis, autoreactive immune cells are first activated elsewhere in the body and only then migrate to the brain, where they attack the nerve fibers. If he succeeds in proving this, it would explain how ▶