



**Press Release July 18th, 2014**

**BIOTEC Researcher is one of the „Highly Cited Researchers 2014“  
Thomson Reuters publishes ranking list of outstanding researchers**

*Dresden. The ranking list „Highly Cited Researchers 2014“ by Thomson Reuters named Dr. Michael Kuhn of the Biotechnology Center at the TU Dresden (BIOTEC) as one of the worldwide most cited researchers in the area biology and biochemistry. The American media company has evaluated the citation of scientific publications from 2002 until 2012 and listed 3,215 distinguished researchers in 21 different research areas in total.*

Together with colleagues from Switzerland, Denmark and Germany, the computational biologist Michael Kuhn has designed and programmed a data base for proteins. This data base contains more than five million proteins – including all 20,000 human proteins and others from different species. Proteins provide cells with structure and act as “molecular motors”: They recognize messenger substances, transport metabolites and initiate chemical reactions. For example, p53 is one of the proteins with the most connections and prevents the development of cancer in healthy cells. When it is damaged, cells can develop into cancer cells. P53 is found in Kuhn’s data base so that information about its interactions with other proteins and how they act together is accessible worldwide. Other researchers take advantage of this knowledge and refer to Kuhn’s studies in the description of their research. The company Thomson Reuters tracks these references worldwide and has generated a list with the most cited researchers this year.

“During my PhD thesis at the European Molecular Biology Laboratory (EMBL) in Heidelberg, I have started this research and published about my work in scientific journals. We also used the data base ourselves, in order to gain new knowledge about the mechanisms of drug action from their side effects”, says Michael Kuhn.

At the BIOTEC, the 32-year-old Kuhn, who is part of Professor Michael Schroeder’s group, works on a project with the title “Tracing the molecular evolution of the centrosome: adaptation of components and function” which is funded by the German Research Foundation (DFG). The centrosome is located near the cell nucleus, and helps to provide new cells with the right size and components after cell division. The centrosome of animals is more complex than in unicellular organisms. In

cooperation with Professor Anthony Hyman of the Max Planck Institute of Molecular Cell Biology and Genetics (MPI-CBG), Kuhn explores which evolutionary mechanisms caused the centrosome's change in structure and function on the molecular level.

The complete list of the „Highly Cited Researchers 2014“ can be found on the Thomson Reuters website: <http://highlycited.com/>

### **Photo**

Michael Kuhn from the BIOTEC is one of the „Highly Cited Researchers 2014“. ©BIOTEC

### **Contact for the Media**

Birte Urban-Eicheler, Press Officer Biotechnology Center at the TU Dresden (BIOTEC)

Phone: +49 351 458-82065

E-Mail: [birte.urban-eicheler@crt-dresden.de](mailto:birte.urban-eicheler@crt-dresden.de)

The **Biotechnology Center** was founded in 2000 as a central scientific unit of the TU Dresden with the goal of combining modern approaches in molecular- and cell biology with the traditionally strong engineering in Dresden. The BIOTEC plays a central role in the “Molecular Bioengineering and Regenerative Medicine” profile of the TU Dresden, fostering developments in the new field of Biotechnology/Biomedicine. The center focuses on cell biology, nanobiotechnology, and bioinformatics. [www.biotec.tu-dresden.de](http://www.biotec.tu-dresden.de)