



Press release January 30th, 2015

BIOTEC Junior researcher lays cornerstone for biotech start-up **Philipp Rosendahl receives Georg Helm Award**

The BIOTEC-student Philipp Rosendahl has received the Georg-Helm-Preis of the Verein zur Förderung von Studierenden der Technischen Universität Dresden e.V. for his diploma thesis "Mechanical Characterization of Suspended Cells in Microfluidic Channels". The prize is annually awarded to three students of the TU Dresden for great excellence and high impact results of their scientific thesis since 1995. Philipp Rosendahl has conducted his research in the group of Professor Jochen Guck at the Biotechnology Center of the TU Dresden (BIOTEC).

The 28-year old physics student co-developed an innovative method, called real-time deformability (RT-DC), for the analysis of the mechanical properties of biological cells with an unprecedented throughput of over 100 cells/second. Using RT-DC it is possible to obtain a "mechanical fingerprint" of whole blood, which can be used to sensitively assess the health state of patients within minutes. Currently, Philipp Rosendahl continues this project as a PhD student in the research group of Prof. Guck.

The great impact this novel method might have on fundamental and applied research, as well as clinical applications, is becoming evident by an ever-increasing number of scientific collaborations. Encouraged by the feedback of the scientific community and supported by the TU Dresden, the state of Saxony and the EU, Prof. Guck and his team are now setting up a spin-off company to commercialize RT-DC. The company, ZellMechanik Dresden, aims to make this innovative cell mechanical analysis device available to researchers and clinicians all over the world.

The award ceremony will take place on January 31st, 1pm at Vereinshaus Weißbachstrasse 1.

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