Go for quality: New Center for Biohybrid Medical Systems at RWTH Aachen University embarks on digital data management

Together with labfolder, the NRW Priority Professorship Biohybride and Medical Textiles in the new Center for Biohybrid Medical Systems at the RWTH Aachen University embarks on digital data management. Goals are the protection and traceability of the primary data, but the vision is to structure Big Data and also data that may have previously been ignored.

Aachen and Berlin, Jan 24, 2018: RWTH Aachen University opens the "Center for Biohybrid Medical Systems (CBMS)" within the biomedical engineering cluster. The new center, which will employ about 150 people, will not only provide a new building infrastructure, but also a digital infrastructure from day one.

The department lead by Prof. Dr. Stefan Jockenhövel develops so-called biohybrid implants, i.e. implants that are partly made from artificial materials and partly from the body's own cells - such as for example the biohybrid heart valve. To achieve this, a combination of a biological component - cells in a biological matrix - and a technical support component are used. The technical component is a so-called textile reinforcement, which ensures that the implant works reliably and remains stable for a long time. The biomaterials are processed into textile structures using traditional textile techniques such as knitting, melt and electrospinning. The textiles are then colonized by the cells using fibrin, the body's "glue", e.g. for blood coagulation. In the bioreactor, the heart valves produced this way are then trained for the natural blood flow and pressure occurring in the body. After this conditioning phase, the biohybrid and long-term stable heart valves are ready for implanting into the patient of the future.

The focus of the new research center is on preclinical studies, however the aim is to further test the results in clinical studies, at the university hospital in the immediate vicinity.

"When you do research that is so close to clinical application, and everything is aimed at testing the results in human patients, you have to ensure the quality and traceability of the preclinical research data for all participants," comments Prof. Christian Apel, head of the department Biohybrid and Medical Textiles. Both the" Good Scientific Practice "and the regulatory authorities demand a complete record and safe storage of our research results.

Of course, as a university institution, we also have many students and postgraduates who contribute a big deal to research. However, they leave the institute after completing their project, which is not only a great pity but also very frustrating to see data generated with great effort become inretrievable, hidden in paper notebooks or in unstructured or even inaccessible digital documents."

However, the vision of the digitization strategy goes even further: "Once you have convinced employees to store all your data in a structured and accessible way, and this
data treasure trove grows constantly, then previously unimagined possibilities open up for us in the future," says Prof. Apel: "Every scientist dreams of getting as much out of his data as possible. We produce so much data that a human can not possibly perceive all the potential relations within the datasets."

Because of these goals and this vision, the RWTH researcher have opted for an electronic lab book. Within the evaluation process, the decision fell on labfolder: "Although digitization is all over other industries already - in the lab environment you still need to convince your team to fully embark on central, digital data storage. And the ease of use is the most important factor to convince your team, The ease of use of labfolder, plus the possibilities for granular data structures is what convinced us of labfolder."

Florian Hauer, co-founder and COO of labfolder, is enthusiastic about the decision - not only because another prestigious customer was won with the new center at the RWTH: "Of course, it's great fun to work with pioneers who share our vision: Sooner or later, the lab book will become an intelligent lab assistant."

For the teams at RWTH Aachen, the relocation to the new center as well as the onboarding onto the digital infrastructure has already been completed. The center will open officially on May 4, 2018.

Press kit

Link to photos, videos and screenshots: 18-01-24 Press Kit

About labfolder GmbH

labfolder provides a well-designed productivity platform for research teams, supporting scientists in their quest to make groundbreaking scientific discoveries. labfolder's software as a service (SaaS) makes it easier to record, retrieve, share, discuss, & validate research data as a team.

labfolder is used by more than 16,000 international scientists in all disciplines. It is used in academia as well as by industrial and pharmaceutical scientists in R&D, analysis, and production labs. labfolder offers a free version for up to three team members, whilst prices for the advanced version are available at www.labfolder.com/pricing

labfolder was founded in 2013 by molecular biologist Simon Bungers (CEO) and biophysicist Florian Hauer (COO), who were later joined by Yannick Skop (CCO) and Mario Russo (CTO).

The increasing demand of digital solutions for managing growing amounts of scientific data in a regulated environment has resulted in the continuous growth of labfolder, which is supported by investors such as Peppermint Ventures, the IBB Beteiligungsgesellschaft, Vogel Ventures and a consortium of other expert business angels.

Press contact
Dr. Simon Bungers
+49 (0) 30 86459390
+49 (0) 177 6014270
sb@labfolder.com

Anne Hennecke
MC Services AG
+49 (0) 211 529252 22
anne.hennecke@mc-services.eu

Social Media
Web: www.labfolder.com
Blog: www.labfolder.com/blog
Twitter: @labfolder
LI: linkedin.com/company/labfolder
FB: facebook.com/labfolder

Communication
labfolder GmbH
Pettenkofer Str. 4a
10247 Berlin
Germany
About RWTH Aachen

With its 260 institutes in nine faculties, RWTH Aachen is among the leading European scientific and research institutions. 44,517 students in 152 courses of study are registered for the winter semester of 2015/16, including 8,556 international students from 128 countries. Teaching at RWTH Aachen is first and foremost application-oriented. Its graduates are therefore sought-after as junior executives and leaders in business and industry.

Press contact
Thorsten Karbach
+49 (0) 241 80-94323
pressestelle@zhv.rwth-aachen.de

Social Media
Web: www.rwth-aachen.de
Twitter: @RWTH
LI: linkedin.com/school/9790/
FB: facebook.com/RWTHAachenUniversity

Address
RWTH Aachen University
Templergraben 55
52062 Aachen