

Plattform Life Sciences

Technology – Financing – Investment

Smart Medicine

How the digital transformation is impacting the future of medicine (5th ed.)



Health data

Driving the digital transformation?

Smart medicine

Potential for investors and the VC sector

Under debate

Investor-backed medical care centers

We embody “The Trace of Stones”

Building the innovation power plant with a Saxon can-do attitude

Hannes Balla doesn't do things by halves. The hero of the 1966 GDR cult movie “Spur der Steine” (The Trace of Stones) is a maverick: Against all odds, he builds a power plant with the help of his construction brigade. For many East Germans, the movie still stands for a creative approach to challenging realities. For innovators from Leipzig, the analogy goes even further.
By Urs Moesenfechtel / Translated by: Ursula Schoenberg

André Hofmann, Vice President of biosaxony e.V., the pan-Saxon association for biotechnology, medical technology and the healthcare industry, and Dr. Ronny Schulz, Project Manager for the Biotechnology and Healthcare Industry Cluster of the City of Leipzig, say: “We often feel the same, like a kind of ‘construction brigade’ for innovations.” We met them both - and other innovators from Leipzig - to learn more about what is happening in the field of smart medicine.

“In Leipzig and the Central German region,” Hofmann continues, “we too are building a new ‘power plant’ for the future.” Some of their key partners are SpinLab, which was awarded the title of Top Accelerator in Europe, and its cooperation partner, the Leipzig Graduate School of Management (HHL), as well as the biosaxony accelerator ‘MEDICAL FORGE’ and Leipzig University Medical Center’s (UML) innovation incubator ‘Innovation Center Computer Assisted



From old trade fair to new economy: A ~14,000 m² large complex with upscale lab, office and co-working spaces is being built for 62 million euros on the historic foundations of Trade Fair Hall 12 (a former machine tool hall on the BioCity Campus). It will serve as a new innovation center for smart health and life science companies.

Surgery (ICCAS)’. They are also supported by a broad coalition from industry, academia, healthcare, politics and society.

Actively countering the skilled worker shortage

One issue that is being actively tackled in the East is Germany’s ongoing shortage of skilled workers. “We all know that just talking about a problem has never solved it,” says Hofmann. That is why, led by biosaxony, twelve people from outside the industry are currently being retrained as Good Manufacturing Practice (GMP) operators for the cell and gene therapy sector. The concept is a first trial run, but can be scaled up to meet the needs of the pharmaceutical industry.

Specialists are urgently needed at the interface between medical informatics and clinical data management. Here, too, Central Germany is taking a cooperative approach: Regional universities and colleges are training medical data managers and clinical integration consultants, as well as offering qualification programs for digitization in medicine. The Leipzig branch of Lancaster University is promoting its newly estab-



What the can-do attitude has already achieved: By 2026, BIO CITY LEIPZIG and the 26,500 m² large ‘BioCube’ will be complemented by several new municipal and private life science buildings offering more than 60,000 m² of laboratory and office space.



The key members of the 'construction brigade' (left to right): André Hofmann: CEO biosaxony Management GmbH, Dr. Ronny Schulz: City of Leipzig's Clustermanager Biotechnology and Healthcare, Eric Weber: Founder and CEO of SpinLab – The HHL Accelerator. Prof. Dr. Thomas Neumuth: Technical Director Innovation Center Computer Assisted Surgery (ICCAS)

lished international bachelor's and master's degree programs in data science and cybersecurity.

Promoting innovation – through networking and know-how

This fundamental idea of active networking and cooperation also characterizes the way ICCAS works. In collaboration with international industrial partners, it offers application-oriented medical technology research and development. "Among others, we are approached by companies that have only limited development capacities or that are planning new R&D projects," ICCAS's Prof. Dr. Thomas Neumuth explains.

At ICCAS, experts are currently hard at work researching how smart medical solutions might be applied in the hospital of the future. This includes, for example, the analysis of 6G applications in collaboration with clinical partners. However, as Prof. Dr. Neumuth emphasizes, the center's regulatory, technical and legal expertise is also conducive to innovation: "Through medical device certification, companies can seamlessly use our project results for their own products."

A strong region with international appeal

But what about the perennial issue of funding? "Our approach is pragmatic," says Eric Weber from SpinLab. The accelerator recently launched the 'Smart Infrastructure Ventures' early-stage fund, with a volume of around 14 million euros. biosaxony is following suit and is not only expediting the establishment of a life sciences-oriented VC fund of 60 to 80 million euros for the region. Starting in mid-2023, MEDICAL FOUNDRY, a collaboration between biosaxony and Sächsische Beteiligungsgesellschaft, will also annually provide three start-ups with subordinated loans of 300,000 euros each to help them take their

first entrepreneurial steps. "We are increasingly attracting international investors or globally active companies like adesso SE which, for example, has just invested in the health startup eCovary," says Hofmann. "Globally active investors are looking for regional leaders."

The can-do attitude is also evident in how bureaucracy has been tailored to meet the needs of innovation funding. "Here in Leipzig, we are actively cutting approval and processing times," says Dr. Schulz. The Free State of Saxony is constantly investing in its administration and prioritizing staffing in its approval agencies. "We also have helpful 'guides' for our 'construction site' who form an agile team," say Dr. Schulz and Hofmann. For start-ups and SMEs there is a dedicated program through which companies from Leipzig can receive up to 70,000 euros in funding, e.g. for approvals and certifications.

Help in navigating the regulatory jungle

Regulations are an issue across Europe. Medical device manufacturers, for example, are currently confronted with the new EU Medical Device Regulation (MDR). So a regulatory service was created in Leipzig under the biosaxony umbrella. Its aim is to take some of the burden off of start-ups and SMEs by enabling the network to take over regulatory functions, including the provision of the person responsible for regulatory compliance. In addition, a central service unit pools the know-how it has gained from helping many companies – so companies seeking assistance can receive quick and competent support.

Building for a smart future

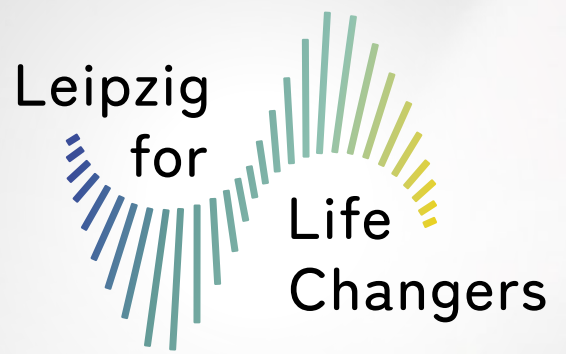
A key component of the power plant is the biosaxony accelerator MEDICAL FORGE. Every year, it guides eight selected (inter)

national companies through the Saxon innovation landscape. Support is provided on regulatory issues, on reimbursement in the German healthcare system, and for the implementation of innovations in healthcare. A cooperative network of healthcare providers, companies like B. Braun and HP, as well as numerous other partners and supporters offer participants active assistance on a variety of issues.

Many of the international MEDICAL FORGE participants want to remain in the region after-wards, bringing new challenges. Fortunately, the 'construction brigade' is already breaking ground here as well: Over the next three years, approximately 60,000 m² of laboratory and office space at the BioCity Campus will go on the market. Leipzig and the Free State of Saxony are investing 62 million euros to convert the former exhibition hall 12 into a technology start-up center with 14,000 m² on the Bio-City Campus. A science campus with approx. 275,000 m² of usable space is also being built close to the city center and in the direct vicinity of BIO CITY LEIPZIG, the university hospital and the veterinary medical center. And right next to the SpinLab, Hall 7 of the former cotton mill is being converted into a digital hub for 19 million euros – 6,000 m² which are intended for e-health start-ups in particular. Smart medicine is free to come – to Leipzig and to Saxony.

Smart medicine and the future of health – on and off stage

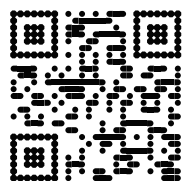
So innovators in Leipzig seem to be eagerly following the example of their movie heroes. But they are not just building the innovation power plant. One of the most famous scenes in 'The Trace of Stones' is the march of the Balla brigade. With a spring in their step, the craftsmen walk to the city's marketplace and celebrate their wins. That is something the people of Leipzig are good at, too: On the BioCity Campus, students and colleagues from the institutes and companies regularly meet for relaxing after-work get-togethers. On May 10th and 11th, 2023, the 'construction brigade' and the City of Leipzig will also welcome 500 national and international visitors to the 'future health xperience'. At this live hands-on event, guests will be able to experience smart medicine for themselves – as well as Leipzig's can-do mentality and Saxony's convivial spirit. ■



Bringing smart ideas to market - in Leipzig



The healthcare market is rapidly evolving: health apps, networked medical technology, operations by robot - exciting innovations are emerging in all areas. But where do these smart ideas reach market maturity and decisively drive the transformation process? In Leipzig, the top location for digital health in the heart of Europe. Welcome to the city of LifeChangers!



[Leipzig-for-lifechangers.com](https://leipzig-for-lifechangers.com)

FUTURE OF HEALTH XPERIENCE, Leipzig, May 10th - 11th 2023



Stadt Leipzig