

SAXONY!

 Saxony  
Trade & Invest



LIFE SCIENCES

# Zebrafish, Team Spirit and Superb Ideas

How Anna wants to help shape the future  
of medicine in Saxony.

Vineyards draped across sun-drenched slopes move past the train window. Green meadows with families who're enjoying picnics. A fragile glass dome right out of the Arabian Nights. To be sure, it had been a long trip from Stanford to Dresden. But as her ICE train glides through the picturesque Elbe River Valley, Anne is certain: "I made the right decision," she thinks. "I can see myself being at home here." The right place for researching and living where she can finally pursue and explore her ideas for a new regenerative therapy which had already been on her mind since she had been a research assistant in the USA.



## BETWEEN THE PHARMACEUTICAL INDUSTRY AND „SMART MEDICAL“

The hotbed for Saxony's life sciences branch is the pharmaceutical industry. What began with August Lingner and the mouthwash "ODOL" in the late 19th century became known as the Sächsisches Serumwerk Dresden vaccine factory later. Today, the company is a corporate site of GlaxoSmithKline Biologicals and produces influenza vaccines for the global market. Saxony's medical technology is also steeped in tradition and accounts for about 70 % of the life sciences sector in the region.

Today, Saxony is considered to be a national center of excellence for cell and gene therapies as well as regenerative medicine. And Saxony's cancer research has gained international renown and reputation, too – when it comes to both early diagnosis and innovative treatments. Thanks to the traditionally strong cross-technology expertise in Saxony which is also available in the sectors micro and nano electronics, sensor technology, 5G mobile communication as well as 3D printing technology, the region's life sciences branch develops growing competences for applications in the smart medical sector. Whether it be in the fields of telemedicine, point-of-care diagnostics, computer-assisted surgery, or health care robots – interdisciplinary knowledge is an important success factor for the entire branch.



Even more bright ideas are being developed by Saxony's researchers and entrepreneurs. Learn more about them as you read on: [www.business-saxony.com/lifesciences](http://www.business-saxony.com/lifesciences), or scan the QR code

## VIBRANT DEVELOPMENT IN SAXONY

Saxony has invested one billion euros and twenty years into developing the region into a very special and, above all, an exceptionally dynamic life sciences location. More than 300 commercial enterprises and 30 research institutions with about 200 work groups and 15,500 employees from 40 countries are working on innovative solutions for human health here today.

Those who come to Saxony as entrepreneurs, researchers, or specialists will find highly specialized biotech companies as well as truly unique research clusters and clinical centers here in which scientists and physicians cooperate closely with one another. Interdisciplinarity and cooperation are paramount: "Being better than others is only possible through cooperation," that's how the Finnish lipidomics pioneer and Dresden resident Prof. Dr. Kai Simons expresses the guiding principle of the region.



### VITAL NETWORK

The branch association "biosaxony" brings stakeholders from business, science, and government together and actively promotes this cooperation.

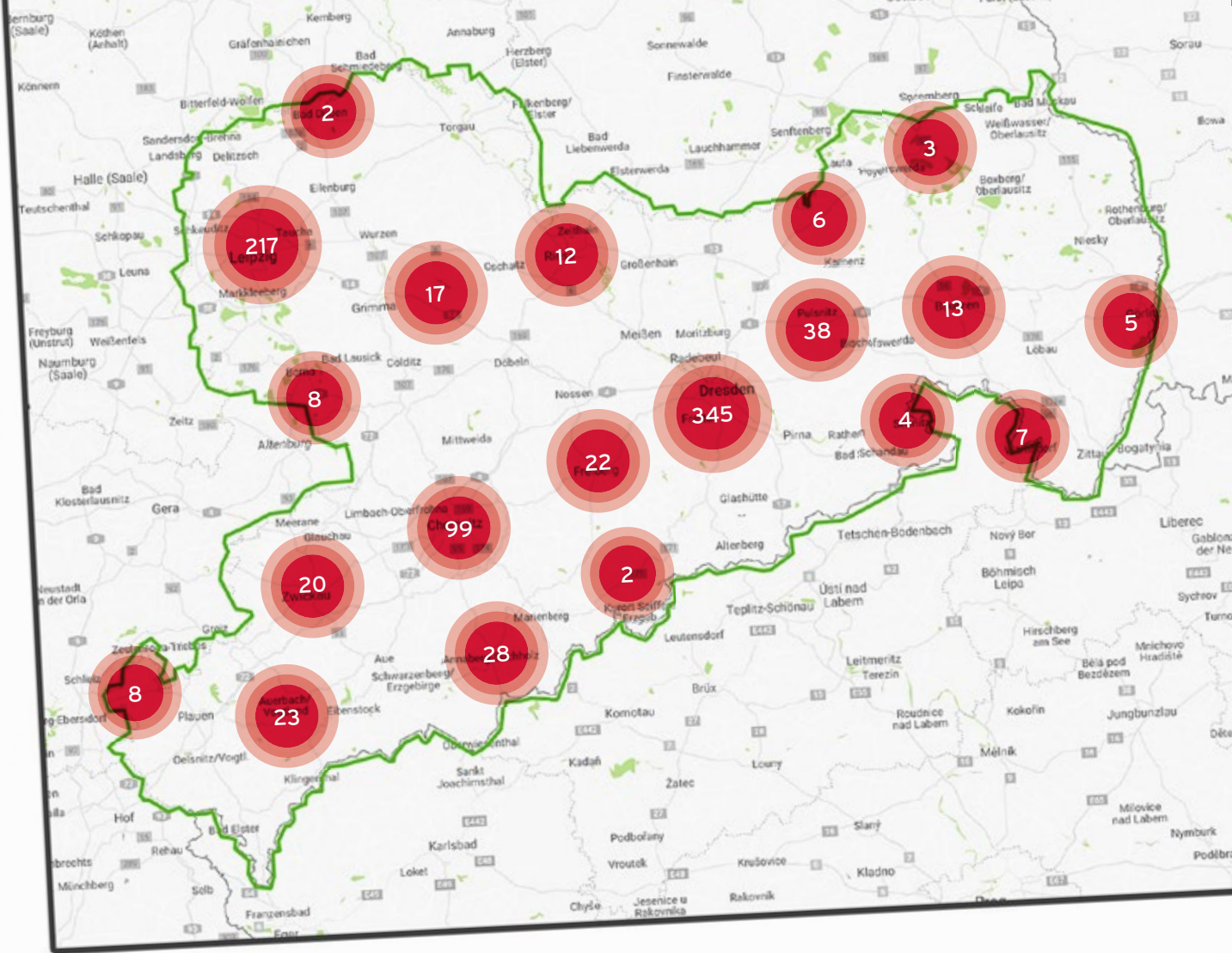


At the train station, Anna rushes past the taxicabs with her trolley suitcase and boards the tram: The nice people from the "DRESDEN-concept Welcome Center," who had already helped her with the official registration and all the accompanying paperwork and who had helped her find that beautiful and inexpensive apartment right on the river, have described the route precisely for her. Anna loves exploring a new city with public transportation in order to get the right feel for the place and its people. That's what she'll be doing for the next two weeks before she starts working as a team leader at the Center for Regenerative Therapies Dresden (CRTD): She wants to finally meet the people behind the profiles on Facebook and LinkedIn in person and get to know them after she had already established online contact with them previously.





"Hmmm..." lost in her thoughts, Anna drums her fingers on her tablet. The view from her apartment across the Elbe River is fantastic - but at the moment, she doesn't really know where she's to start her journey of discovery. Well, she's, of course, done research on the internet when the question came from Saxony as to whether she'd like to establish and head her own research group at the CRTD. "Finally" - that had actually been her first thought. "I'm now 32; it's time to move on from that assistant job."



## LIFE SCIENCES CENTERS:

ICCAS BIO CITY!  
**LEIPZIG** sonovum  
 Fraunhofer IZI

NCT/UKC!!! BIOZ  
**DRESDEN**  
 CAICB/ MPI-CBG?

**CHEMNITZ**

And she was surprised how many potential contact points she had actually found here for her own scientific projects: So many universities, corporations, and non-university institutes are focused on the life sciences in Saxony. "I think, I'll ask Kai Simons," muses Anna. "The professor comes like me from Finland and will probably give me a number of good tips."



**SEARCH ONLINE**  
 for life sciences companies in Saxony.



Prof. Dr. Kai Lennart Simons \*



Anna

Tell me Kai, why did you come to Saxony?

5:20 PM ✓

In the 1990s, I had been a cell biologist in Heidelberg when I got the offer to help establish an institute for molecular life sciences in Dresden. I saw the possibility that not just an institute might be founded in Saxony, but actually an entire research community. I saw this as an exciting challenge.

5:23 PM

What should I look for, and why did you stay around for 20 years?

5:34 PM ✓

After having undergone rapid development, our research has reached a world-class standard. Universities, university hospitals, Max Planck and Fraunhofer institutes, etc. - they all form a multi-disciplinary community here and offer superb research environments. This kind of quality attracts excellent researchers - like it did you and me.

6:18 PM

You founded in Saxony a start-up that is based on your research. I'm thinking of maybe doing the same thing...

7:58 PM ✓

Anyone who founds a company here gets more attention and has better opportunities to differentiate themselves from the others than, for example, in Boston, where there's a lot more competition. The bio centers in Dresden and Leipzig offer ideal conditions even for start-ups.

8:14 PM

What specifically do you like about Dresden?

8:20 PM ✓

I truly love living in Dresden. There's lots of room in the city, and the surrounding countryside is spectacular. And even students or young researchers with a family and children find a pleasant and stimulating environment here.

9:03 PM

\* Prof. Dr. Kai Lennart Simons is a Finnish medical researcher and biochemist who was born in 1938. He is considered to be a pioneer in lipidomics. He helped establish the Max Planck Institute of Molecular Cell Biology and Genetics (MPI-CBG) in Dresden in 2001. As a 74-year-old, he founded the biotech company Lipotype in 2012 in Dresden.



Photo: Lipotype GmbH

## DELVING INTO THE MYSTERY OF FAT MOLECULES

Detailed information on diabetes, Parkinson's, and other still inactive diseases are waiting to be discovered in the key component of cell membranes – fat molecules and/or lipids. The Finnish lipidomics pioneer Prof. Kai Simons has dedicated his life to the research of technologies which are capable of analyzing this information. In 2012, he founded the Lipotype GmbH together with colleagues in the BioInnovationCenter BioZ Dresden – the first and only GMP-certified shotgun lipidomics provider on the entire globe. In doing so, the researcher wants to trigger a small revolution “made in Saxony” for individualized medicine. The customers include academic researchers as well as the pharmaceutical, cosmetics, and food industries.



## GOOD TEST - GOOD THERAPY

An individually customized therapy for each and every patient – this vision of medical experts is about to become reality thanks to the Biotype GmbH in Dresden. Founded in 1999 as the first biotech start-up in Saxony, Biotype develops, produces, and distributes state-of-the-art diagnostics applied in personalized medicine. With new test methods and test kits, the company seeks to support doctors and physicians from the sectors oncology, hematocology, dermatology, and forensics in mastering the current challenges in medicine.

### IDEAS FOR THE MEDICINE OF TOMORROW

are provided by numerous R&D facilities in Saxony.



## A HEADBAND LISTENS CLOSELY

A special headband from Leipzig makes it possible to look into the head and to quickly detect the smallest changes in the brain. To do so, the engineers of the Sonovum GmbH have modified ultrasound technology in such a way that brain tissue can be examined “mobily” in real time and without surgical intervention. The measurement system consists of the headband with ultrasound probes as well as a device which evaluates the requisite data with the help of mathematical models. Thanks to the new acoustocerebrography (ACG), precious minutes can be saved for the treatment of patients having a stroke.

## LAB-IN-A-POCKET

Much too often when antibiotics are prescribed, it's hit or miss without knowing whether it is a bacterial infection or not. This can be avoided with the innovative minilab developed by the start-up Anvajo GmbH from Dresden. The device is hardly any bigger than a smartphone. It contains a tiny little spectrometer and a digital microscope. With the device, a physician or lab technician can analyze blood samples within a minute. Because the “fluidlab R-300” is particularly easy to operate and inexpensive, it is frequently used also in environmental technology, food analytics, and research. The Dresden-based company develops the requisite hardware and software in-house.



The fact that Anna is first visiting Leipzig for two days is actually due to a tip: A biotechnologist, who had earned his doctoral degree at Leipzig University and who now works at the CRTD, lives one floor below her. “Take your time and look around Leipzig first,” he had told her. “There’s a unique ecosystem composed of universities and non-university research institutes, start-ups, and mature companies to be found around the BIO CITY LEIPZIG technology center.” In the BioCube, for example, the start-up Sonovum is developing ultrasonic head bands which can actually listen to the brain. Just one exciting visit which is on her itinerary for Leipzig.



## WHERE BRIGHT IDEAS CAN GROW

The interdisciplinary life sciences ecosystems in Dresden and Leipzig unite research, education, and business under one roof.



## MANAGEABLE DIAGNOSTICS TECHNOLOGY FOR DEVELOPING COUNTRIES

Around the globe, 36.9 million people live with HIV, many of them in developing countries where clinics and test labs are often located quite some distance away. With “CyFlow,” the Sysmex Partec GmbH from Görlitz – the pioneer and market leader for flow cytometry – has introduced a mobile, fully equipped diagnostic instrument to the market. The compact and robust flow cytometer analyzes cells that float past it and delivers results within three minutes. The inexpensive, user-friendly solutions of the Görlitz experts also support the fight against tuberculosis and malaria.



Photo: Sysmex Partec GmbH

## CUTTING EDGE DIAGNOSTICS AT HOME IN SAXONY

When it comes to the development and production of medical devices for modern diagnostics, Saxony has some “hidden champions” lined up. For example, the Dr. Müller Gerätebau GmbH. The Freital-based company is one of the leading international manufacturers of systems for diabetes diagnostics and therapy. The systems determine quickly, easily, and precisely the most important parameters from only one drop of blood. A globally leading provider of breath gas analysis systems is the Fischer Analysen Instrumente GmbH (FAN) from Leipzig. The company’s products identify, for example, the trigger for gastric ulcers via the breath and, thus, offer a gentle alternative for diagnostics when compared to gastroscopy. Functional disorders of the liver and pancreas as well as lactose intolerances can be identified via the breath as well.



Photo: Dr. Müller Gerätebau GmbH

## ABOUT BIOMARKERS AND BIOBANKING

The Leipzig-based Zellkraftwerk GmbH has developed a unique technology platform which not only permits classic blood cell analyses, but also the measurement of tissue samples, red blood cells, and rare cells. More than 105 biomarkers can be measured on one cell. The cell samples are stored on special chips – the so-called biobanking – which is why the samples can be kept for a period of up to two years and reused as often as desired. This way, various approaches can be tested on the same sample. The Zellkraftwerk technology is used, above all, for the development of drugs in order to test their impact on the basis of markers.

## LOCATION FOR COSMOPOLITANS

The vibrant and future-oriented life sciences environment in Saxony attracts companies from all around the globe. The EUROIMMUN AG – a globally leading provider of medical laboratory diagnostics – has been active in Saxony already for more than 20 years now. Reagents for the determination of antibodies that help detect allergies, autoimmune and infectious diseases are primarily manufactured at the two production sites in East Saxony. In 2018, the US American GENEWIZ corporation decided in favor of a commitment in Leipzig. The trade fair city is now the European headquarters of the leading global genomics service provider which runs a high-tech laboratory with state-of-the-art sequencing platforms and lab automation technologies here.



Photo: EUROIMMUN AG



Anna takes a look at the “operating room of the future” at Leipzig University. “Today, we’re demonstrating how digital technologies will support the work of surgeons tomorrow,” she was told by the engineers and medical professionals who work together in interdisciplinary teams at the Innovation Center Computer Assisted Surgery (ICCAS). And the guys from Leipzig hadn’t promised too much: The operating room glows with a blue light. Instead of being surrounded by tiny monochrome displays, the surgeons and nurses have large monitors all around them. They’re displaying in real time the path of the scalpel in the patient’s body, 3D models as well as the vital data and the actual progress of the operation. “I really like this,” Anna thinks. “As someone who conducts fundamental research, it’s nice to see how everything is actually applied in the real world.”

## THE SMART OPERATING ROOM

In the operating room of the future, the technology will be smart: It will assist surgeons in planning surgeries and during surgical interventions, and it will relieve them of ancillary activities. For this purpose, the Innovation Center Computer Assisted Surgery (ICCAS) at Leipzig University is developing computer-aided technologies and intelligent assistance systems. On the basis of collected data, digital patient models are created here with which it will be possible to make the diagnoses more accurate, plan surgeries, and find individual therapies for patients. During surgical interventions, state-of-the-art imaging methods show the surgeons where they have to position their instruments or whether any complications are about to happen. With its comprehensive approach, the ICCAS is considered to be a pioneer around the entire globe.



Photo: ICCAS / Leonie Lang

## „BIG DATA“ IN MEDICINE

So that physicians in intensive care units are able to recognize life-threatening complications in a timely manner, the consortium “Smart Medical Information Technology for Health Care,” abbreviated SMITH, is developing computer-aided decision support systems under the leadership of Leipzig University. These systems help doctors take the requisite countermeasures with suitable antibiotics and other life-saving remedies at an early stage. Towards this end, the systems evaluate the individual data of patients and the progression of their ailment as well as the latest medical research and combine these data with one another – in strict compliance with data protection and privacy laws, of course. In so doing, the SMITH partners link data integration centers at all participating university hospitals with one another.



Photo: Stefan Straube / University of Leipzig Medical Center



### ANOTHER CENTER FOR DIGITAL HEALTH

works in an interdisciplinary manner at Dresden University of Technology.



## TROUBLESHOOTER SOFTWARE

As a vibrant ICT location, Saxony is home to numerous software specialists who are working on solutions for the control and monitoring of processes in health care. Since 2001, the Dresden-based qualitytype GmbH has been developing specialized software products for such processes and the requisite data management in laboratories. The MedialInterface GmbH is the market leader in the field of speech-based medical documentation; from Dresden, the company supports its customers around the entire globe with simplified solutions for managing the flood of information in health care. Headquartered in Dresden, the Cognitec Systems GmbH is the only company on the entire globe which has been working exclusively on face recognition technologies and innovative applications based thereon since 2002. The systems are used, for example, for border controls, security check-ins – and in the future also in robotic health care assistants which will enable them to interact better with the humans they are programmed to assist.



### SAXONY'S SOFTWARE COMPETENCE

for the technologies of tomorrow is multifaceted.





Photos (2): B. Braun Avitum Saxonía GmbH

## FILTERS FOR DIALYSES

Patients suffering from chronic renal insufficiency are dependent on having their blood cleansed via dialyses at regular intervals. The core element in this treatment is the dialysis machine. The B. Braun Avitum Saxonía GmbH manufactures such blood filters at no less than three locations in Saxony. About 1,000 employees develop new dialyzers, spin the fibers for them, mold the housings, and assemble and pack the filters. The high research density found in the Dresden region was the crucial factor for the Hessian parent company B. Braun to pool its "Extracorporeal Blood Treatment" division in Saxony. This was a groundbreaking decision: With its factory in Wilsdruff, the company operates the most modern production site for dialyzers in Europe today.

## FROM RESEARCH TO CLINICAL APPLICATIONS

The Fraunhofer Institute for Cell Therapy and Immunology IZI in Leipzig acts at the interfaces of medicine, life sciences, and engineering sciences. The scientists transfer biomedical research into clinical applications. For example, they are participating in the development of new immuno-oncological therapies in which modified immune cells and antibodies combat cancerous tumors. Currently, they are readying an innovative technology which helps deactivate viruses and other pathogenic agents for mass production. Additional fields of research include neurodegenerative diseases and immune disorders as well as such illnesses as strokes, arthritis, and infections.

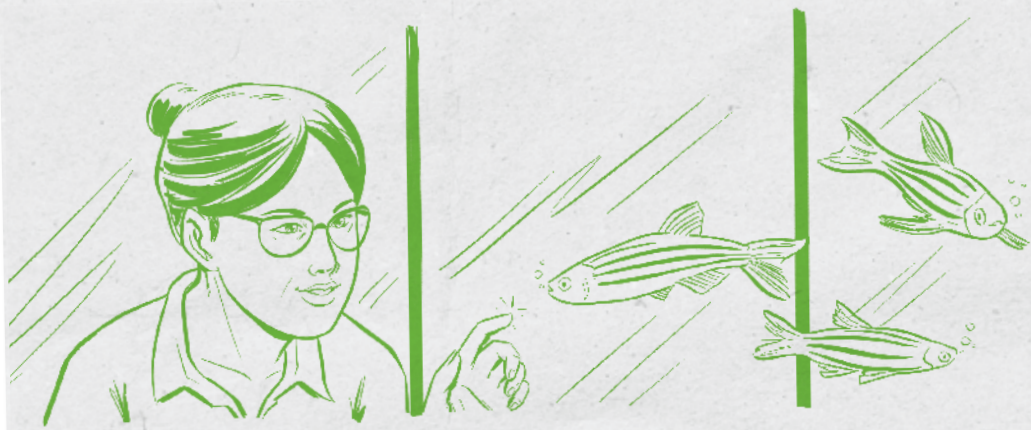


Anna is really excited: In a minute, she'll be visiting one of the most renowned research institutes of the life sciences sector in Saxony. And she doesn't even have to go very far - the Fraunhofer Institute for Cell Therapy and Immunology IZI is located right next to BIO CITY LEIPZIG. A South Korean researcher is showing her the ultra-modern labs and cleanrooms at the IZI. This is where Anna feels right at home; she's fascinated by the cell therapy production lines, the high-performance microscopes, and other analytical instruments which only very large research institutes can afford. "This potential for development at the Fraunhofer IZI is a unique opportunity for young biotech enterprises;" thinks Anna. "I'll have to remember that. The IZI could also be a great partner for my group."



Photos (2): Fraunhofer IZI





“And who are you, little one?” Anna taps the glass pane. Today, she went downstairs: into the cellar of the Max Planck Institute of Molecular Cell Biology and Genetics in Dresden as Kai Simons had suggested to her. The view is spectacular: Thousands of zebrafish are swimming in schools through the luminous aquariums. She likes in particular a very adventurous fish. “Nemo shall be your name,” Anna whispers. Does he know the secret of self-healing? Because that’s what this is all about here: The Max Planck researchers want to harness the surprisingly regenerative powers of zebrafish and the like for humans in order to thwart old age and illness. Anna will be quite busy with them when she starts working next door on regenerative therapies soon. “You always meet twice in life,” Anna whispers as she winks at Nemo.

## UNVEILING THE SECRETS OF LIFE

How do cells organize themselves into tissues? How are organs formed from these tissues? Why are some animals able to regenerate lost limbs and even organs? About 550 researchers from 41 countries are addressing these questions at the Max Planck Institute of Molecular Cell Biology and Genetics (MPI-CBG) in Dresden. They are, thus, paving the way towards therapies for such previously incurable diseases as cystic fibrosis. Based on the findings gained at the MPI-CBG, the spin-off Dewpoint Therapeutics started in early 2019 with corporate sites in Boston (USA) and Dresden. Its objective is to find treatment options for the severest ailments.



Photo: MPI-CBG / Jürgen Lösel (© MPI-BY-NC)

## MAKING THE INCURABLE CURABLE

Right in the heart of the BioCampus in Dresden’s Johannstadt district one can find the three institutes of the Center for Molecular and Cellular Bioengineering (CMCB). The focal points of its research range from conducting fundamental to applied research in molecular bioengineering at the BIOTEC and B CUBE all the way to analyzing the basic understanding of stem cell biology and tissue regeneration at the CRTD. Cells that renew themselves. Cancer that doesn’t even arise at all: The Center for Regenerative Therapies Dresden (CRTD) focuses on the self-healing powers of the body. The objective is to develop innovative regenerative therapies for such previously incurable diseases as Alzheimer’s, Parkinson’s, or leukemia and to rapidly implementing them in practice.



Photo: CRTD

## THE TREASURE TROVE OF LIFE

Where money was once counted and gold was stored, the DNA of seven million people are archived today – in deposit boxes at a temperature of minus 20 degrees Celsius. The former building of the German Central Bank in Dresden is the place of the world’s largest typing lab for stem cell donors: The DKMS Life Science Lab Dresden examines the DNA of all samples one after another so that the matching donors can quickly be found for patients undergoing stem cell transplants. So far, the laboratory has typed 1.2 million of the stored samples. Towards this end, the Dresden-based Life Science Lab was the first laboratory of its kind on the entire globe to introduce the “Next Generation Sequencing” in 2013 which accelerates the typing process enormously.

Photos (2): Tobias Sauer / DKMS Life Science Lab



## COMMITMENT TO FIGHT CANCER

At the National Center for Tumor Diseases (NCT) Dresden, patients and researchers are heading in the same direction. Everything revolves around ultramodern cancer drugs and immunotherapies. The NCT builds upon the structures of the University Cancer Center (UCC), and the University Hospital Dresden is just around the corner. This way, cancer patients can be treated in line with the latest scientific findings and achievements directly on site. Since 2020, the center has been home to a research platform which is unique on the entire globe. The platform includes an operating room of the future, state-of-the-art imaging devices, and a radiation unit. Additionally, the NCT/UCC benefits from the National Center for Radiation Research in Oncology "OncoRay," which is also located at the University Hospital. Here, about 80 physicians, physicists, biologists, and computer scientists from 38 countries are working on individualized proton therapies for every patient.

Photos: (2): Dresden University Hospital (Gabriele Bellmann)



## Scissor Cut with Genes



Photo: Dresden University (TU/D)

The internationally leading molecular biologist Frank Buchholz is a Professor for Medical Systems Biology at the University Hospital Dresden and the head of translational research at the University Cancer Center. His work group has developed a method with which defective segments in the genome can be identified, repaired, or even removed. This permits the early detection and treatment of such diseases as HIV or cancer. Professor Buchholz is the co-founder of several start-ups which include, for example, the Dresden-based Eupheria Biotech GmbH and the PROVIREX Genome Editing Therapies GmbH in Hamburg. The focus is on the continued development and promotion of a technology which not only cuts the genome very precisely, but is also able to reconnect the two cuts with the same precision.

## STRENGTHENING THE DEFENSE, PREVENTING RELAPSES

Today, many types of cancer can be treated quite well. The problem are relapses. The Riboxx GmbH from Radebeul develops and produces innovative reagents for an immunotherapy that prevents these relapses. The reagents are based on an innovative platform technology for the production of ribonucleic acid (RNA). The pharmaceuticals activate the body's own immune cells. Subsequently, the latter identify and remove the cancer cells that remained in the body.

It's less than five minutes on foot for Anna to go from the Max Planck Institute to the University Hospital. "The distance between theory and practice is always just around the corner in Dresden," Ian, a young oncologist whom she had met via the open access platform at the university library, explains to her. "Everyone is linked to everyone, whether it be via DRESDEN-concept or the mutual research projects. The National Center for Tumor Diseases Dresden and the University Cancer Center, for example, are so closely linked that they're actually presenting themselves as a single entity nowadays," explains her guide and shows her a building that had been constructed just recently. Anna sees doctors in it with data glasses, surgeons and engineers who are teaching an artificial intelligence. "Interdisciplinary work has top priority here. You're always welcome with your expertise in regenerative therapies," says Ian at their parting before he disappears in a throng of people heading for the cafeteria.

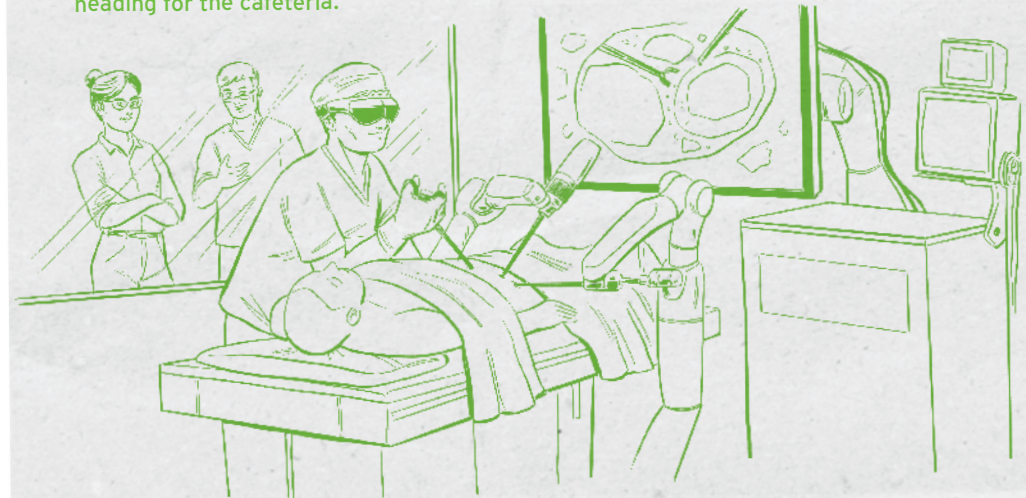




Photo: BromMarin GmbH

## HEALING POWERS FROM SEA SPONGES AND CELL CULTURES

Rethinking problems – and solving them –, this is what numerous spin-offs of Saxony’s renowned research facilities stand for. Researchers from the Freiberg University of Mining and

Technology and the University Hospital Dresden have proven the healing effect of brominated substances contained in sea sponges on tumors and metastases. In 2015, this resulted in the founding of the BromMarin GmbH, which has been developing pharmaceutical products from sponges ever since. The research conducted at Dresden University of Technology’s B CUBE evolved into the start-up denovoMATRIX GmbH in 2018 which has developed a technology for the mass cultivation of stem cells. Stem cell therapies and 3D printing of organs are the future. So far, though, it has been difficult to grow large quantities of these cell cultures in high quality. denovoMATRIX has solved this problem – with a chemical coating for lab vessels and carriers which emulates the environment in which the cells grow inside the body.

## IMPLANTS FROM THE 3D PRINTER

The INNOTERE GmbH specializes in implants for bone regeneration. The experts from Radebeul develop and produce an injectable bone cement paste based on calcium phosphate. Physicians greatly appreciate this implant material because it is easy to use. Lengthy preoperative preparations are not necessary. The company applies this innovative technology also for the 3D printing of filigree skeletons (“scaffolds”). This permits the precise definition of the size, form, and porosity and to adjust the implants to individual defects. No other company on the entire globe offers this singular combination of bone-like material properties and innovative technology for 3D printed implants.



Photo: INNOTERE GmbH

## IT'S THE MATERIAL THAT MATTERS

Saxony’s research institutes excel with their exceptional materials expertise. And they also contribute this expertise to bio and medical technology. Dresden University of Technology’s Institute of Textile Machinery and High-Performance Material Technology (ITM) develops, for example, textile implants which are used as stents or as artificial muscles and heart valves. Joint replacements and dental implants are produced from metal foams or with powder-metallurgical 3D printing at the Fraunhofer Institute for Manufacturing Technology and Advanced Materials IFAM’s Branch Lab Dresden. The Fraunhofer Institute for Ceramic Technologies and Systems IKTS Dresden uses ceramic materials for the development of functional components which can be applied in implantology. And the Fraunhofer Institute for Organic Electronics, Electron Beam and Plasma Technology FEP in Dresden contributes biodegradable electronics for active implants.



Photo: ITM / Dresden University (TUD)



Photo: Fraunhofer IKTS

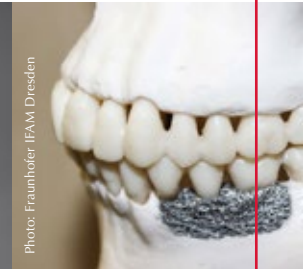


Photo: Fraunhofer IFAM Dresden

## VERSATILE ENZYMES AND MORE

The Leipzig-based c-LEcta GmbH focuses on white biotechnology and specializes in the industrial exploitation and utilization of biological processes. c-LEcta develops enzymes as well as microbial production strains for the manufacture of proteins with very high yields that are used in the fine chemicals and food industries as well as for the production of biofuels.

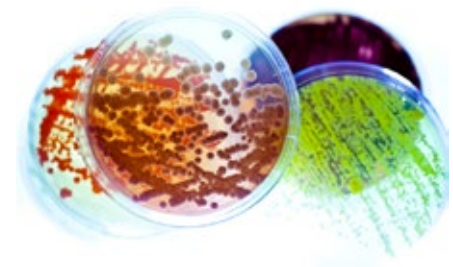


Photo: c-LEcta GmbH



### A PRIME LOCATION FOR BUSINESS FOUNDERS

Saxony actively supports start-ups: With many start-up and idea contests and a wide range of technology support programs.





Finally: Her new job at the CRTD begins. The colleagues have welcomed Anna with a little party: "Whenever you need help ... just drop by." And they have immediately told Anna about the joint technology platform at the CMCB with which the life scientists from different institutes in Dresden all have access to really expensive DNA sequencers and similar instruments. Andrew and Jinjin are unpacking the light microscope at the moment. Anna had brought the two young microbiologists with her from California as the founding members of her first research group. "I think, we'll really make some serious progress here with our brainchild," she says to both of them and both nod: If there's any place where you feel really welcome and where you're immediately integrated into excellent networks, then that place is right here...



# SAXONY!

## The Pros Behind It

...are the staff members of the Saxony Economic Development Corporation (Wirtschaftsförderung Sachsen GmbH). We're promoting the business location Saxony with conviction. But we prefer to let our actions speak for themselves. We assist new business setups and company expansions, help develop new markets, and initiate networks between business and research.

You see, we give our very best for Saxony – and also for your project. Come and take a look behind the scenes: We'd love to hear from you! Call us at +49-351-2138 0.

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# LIFE SCIENCES LOCATION SAXONY

LIFE SCIENCES COMPANIES  
**300**

**30**

R&D INSTITUTIONS



**15,500**  
Employees

OF THAT  
**230**

MEDICAL TECHNOLOGY COMPANIES



**10,500**  
Employees

Annual Turnover  
**€ 1,900 Million**



SUPPLIERS AND SERVICE PROVIDERS  
**450**

**40,500**  
Employees



Even more bright ideas are being developed by Saxony's researchers and entrepreneurs. Learn more about them as you read on: [www.business-saxony.com/lifesciences](http://www.business-saxony.com/lifesciences), or scan the QR code