



CONNECTING COMPANIES
SUPPORTING BUSINESS
ENABLING GROWTH



Your Telehealth Software Solution
from digital health experts

TEL ·
· BIO
MED ·



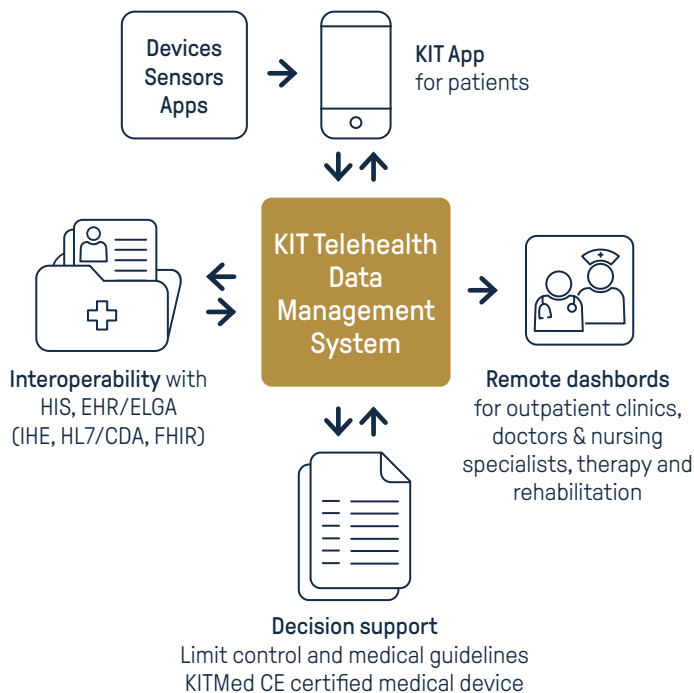
**Flexible & modular technology
for integrated care programs**



Medical indications & care plans
Heart failure, hypertension, CHD, diabetes,
pain, oncology, ulcers, physical inactivity, etc.

KIT Telehealth Platform

Software solution for integrated care and disease management programs



References

HerzMobil – Therapy pathway for heart failure

- > 40% reduction of days in hospital
- Sustainable improvement in the Quality of life
- Proven to be cost effective

www.herzmobil.at



StrokeNet – Outpatient rehabilitation after stroke

- Coordination of outpatient care networks (physiotherapy, occupational therapy and logopedics)
- Outcome analyses & Benchmarking
- Prescription & Billing Workflow

www.strokecare.at



telbiomed Medizintechnik und IT Service GmbH

Reininghausstraße 13, 8020 Graz, Austria

References and contact: www.telbiomed.at, office@telbiomed.at



Strategic R&D partner

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DEAR READERS,



Whenever I present the Human Technology Cluster, I often hear, "You are broadly positioned! And all this exists in little Styria?" This reaction makes me very proud, because it is true: our cluster community is indeed a vibrant network of the most diverse industries, companies, people and ideas. Therefore, I am now all the more pleased that we can provide an overview of this diversity of topics with this brochure.

Across all differences, we are united by the idea that innovation comes from cooperation, and that a network-based economy is a tremendously fertile ground for relocations, start-ups, partnerships and joint projects. In terms of communication and cooperation, Styria, which is

small in terms of area, is really big. In hardly any other business location can you find everything in such a confined space: excellent research and development facilities, a tightly meshed infrastructure and strongly networked know-how.

Key players in the university sector are Med Uni Graz in conjunction with the Biobank and the LKH University Hospital Graz, the Technical University, Karl Franzens University and the Joanneum University of Applied Sciences. A plethora of business and incubation centers – including, for example, the Center for Knowledge and Technology Transfer – bundle and support life science companies.

International research centers such as Joanneum Research, the Austrian center for industrial biotechnology (acib) or the Research Center Pharmaceutical Engineering (RCPE) on one hand and industrial companies such as K-Businesscom, Neuroth, Payer, Roche Diagnostics, VTU, ZETA on the other hand are impressive examples of the innovative power of Styria as a life science location.

We hope you enjoy browsing through this brochure – see you in Styria, the life science hotspot in the south of Austria.

Lejla Pock, CEO



Engineering the facilities of the future

Today's breakthrough therapies demand a new generation of manufacturing capabilities. Vast in scale, powered by advanced digitalization and equipped with flexible, modular technologies, Europe's largest life science companies are leading the way together with VTU. From feasibility to design. From construction to documentation and validation. We're there, every day, managing growing complexity with unprecedented speed. Learn how VTU is helping to make tomorrow's pharma and biopharma facilities more versatile, more scalable and more sustainable than ever before at vtu.com





CONNECTING COMPANIES
SUPPORTING BUSINESS
ENABLING GROWTH





BUILDING BRIDGES

About

The Human.technology Styria GmbH (HTS) is a cluster organization founded in 2004 with a focus on human technologies.

We see ourselves as bridge builders between research, development and business with the aim of creating synergies, making innovations accessible to the Styrian economy, developing new partnerships and increasing the national and international visibility of the region. The Styrian Human Technology Cluster (Human.technology Styria / HTS) is a bridge builder between research, development and business within the life science sector.

We network, create synergies, develop new partnerships and enable innovative solutions to successfully enter the market. In this way, we boost the national and international visibility of the region.

Styria's potential lies not only in the exceptional quality of its products and services, but also in its broad portfolio, which spans all stages of the value chain.

The cluster currently has over 140 internationally successful member companies from the fields of business, research and healthcare services – including major companies such as AT&S, VTU, Payer, Roche diagnostics and ZETA, educational and research institutions such as MedUni Graz, TU Graz and Joanneum Research, and healthcare service providers such as KAGes and Sanlas Holding. The cluster's sphere of influence employs around 45,000 people and generates annual sales of more than 5.13 billion euros (as of January 2022).

Human.technology Styria focuses on three key areas:

1. Medical Technology,
2. Pharma/Biotechnology and
3. Health/Sustainability.

The cross-sectional topics of start-ups, digitalization and qualification complement this strategic orientation.





MEETING STYRIA

About

FACTS & FIGURES

CAPITAL: GRAZ

1,247,413 PEOPLE

16,401KM² SURFACE AREA

2,995m highest point

44.3 average age

84.3 years life expectancy women

79.2 years life expectancy men

Quelle: <https://www.landesentwicklung.steiermark.at>

93% OF PEOPLE IN GRAZ ARE SATISFIED WITH THEIR HEALTH CARE SYSTEM

Quelle: Eurobarometer 2016

5.15% R&D QUOTA STYRIA

<https://wibis-steiermark.at>

17,805 R&D EMPLOYEES

<https://wibis-steiermark.at/thema-des-monats/august-2021-forschung-und-entwicklung-2019/>

2.0 BILLION EURO R&D INVESTMENTS STYRIA

<https://wibis-steiermark.at/thema-des-monats/august-2021-forschung-und-entwicklung-2019/>

49 BILLION EURO REGIONAL GDP

<https://www.ic-steiermark.at/>

26 BILLION EXPORT VOLUME

<https://www.ic-steiermark.at/>

GRAZ RANKS FIFTH OUT OF 66 CITIES FOR SAFETY OF JOBS

Expat City Ranking 2020

58% OF STYRIA IS FORESTED. IT IS THE "GREEN HEART OF AUSTRIA"

9 UNIVERSITIES

13 research facilities

25 centres of excellence

15.8% proportion of academics

3,327 TECHNICAL DEGREES PER YEAR

55,000 students at universities and universities of applied science

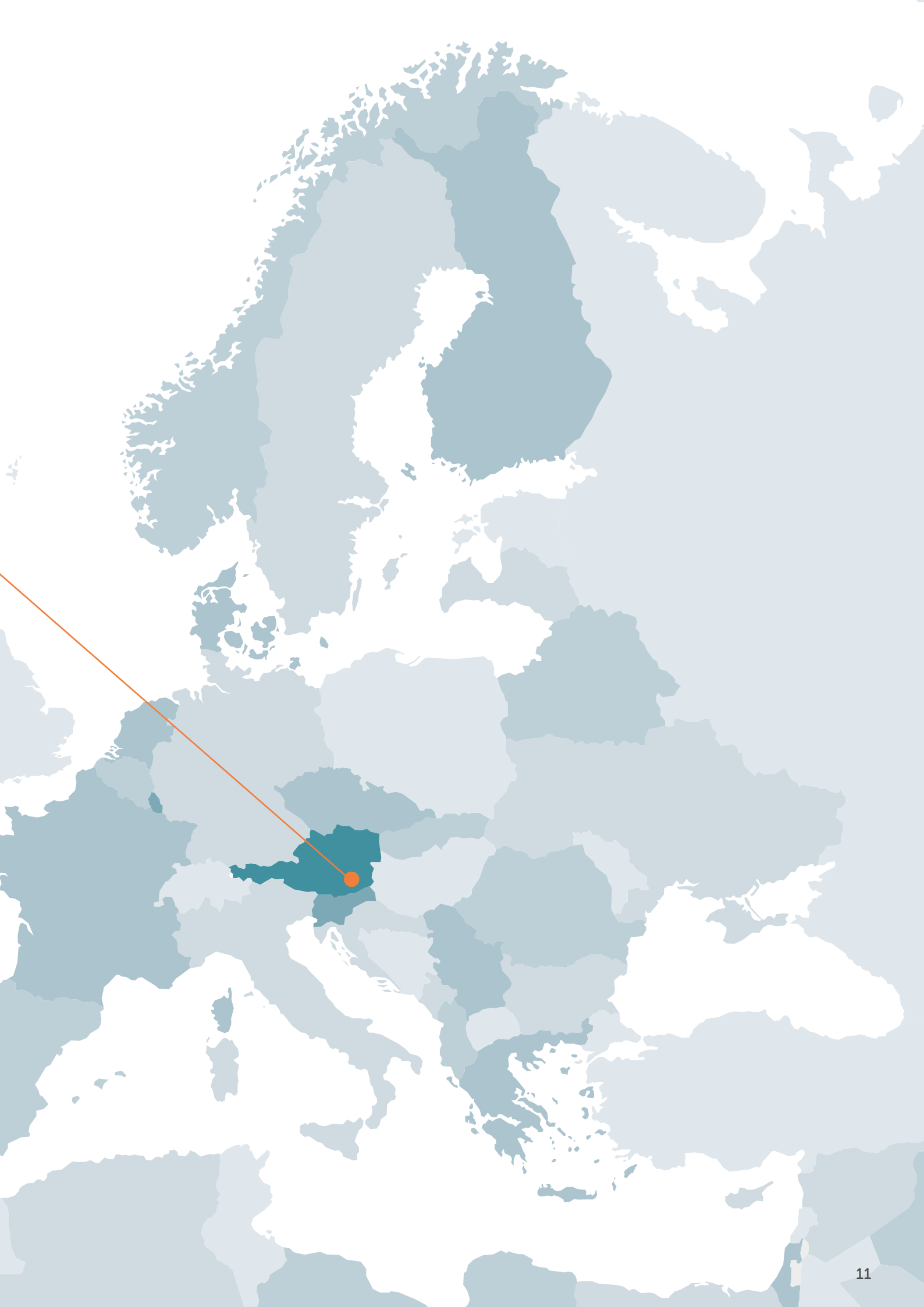
523,241 gainfully employed

46,963 COMPANIES

183 large-scale enterprises

31 innovation centres

<https://wibis-steiermark.at/>



FIRST-CLASS RESEARCH, INNOVATION-ORIENTED INDUSTRY

Styria's strong points lie in particular in the close link between first-class research and an innovation-oriented industry. The very well-developed research tradition is firmly rooted in all competence centers, universities and UASs. Regional strength is formed and built up here – and is a permanent magnet for the international industry.

The tightly meshed communication and infrastructure is also excellent: Key players are spatially close to each other, for example the Center for Knowledge and Technology Transfer, Med Uni Graz, the LKH- Univ. Klinikum Graz.

SYNERGIES FOR INNOVATION

"Med Uni Graz is – already from its own basic understanding – closely interwoven in the life cycle of pharma and biotech developments: as the starting point of innovation, as a research partner, up to the validation and application partner. The preparation of Styrian soil for innovations in the field of life sciences and medicine as well as the lively exchange, especially with economic players, represent the greatest added value for us."

Mag. Caroline Schober,
Vizerektorin für Forschung & Internationales



A NETWORK OF SUPPORT

About

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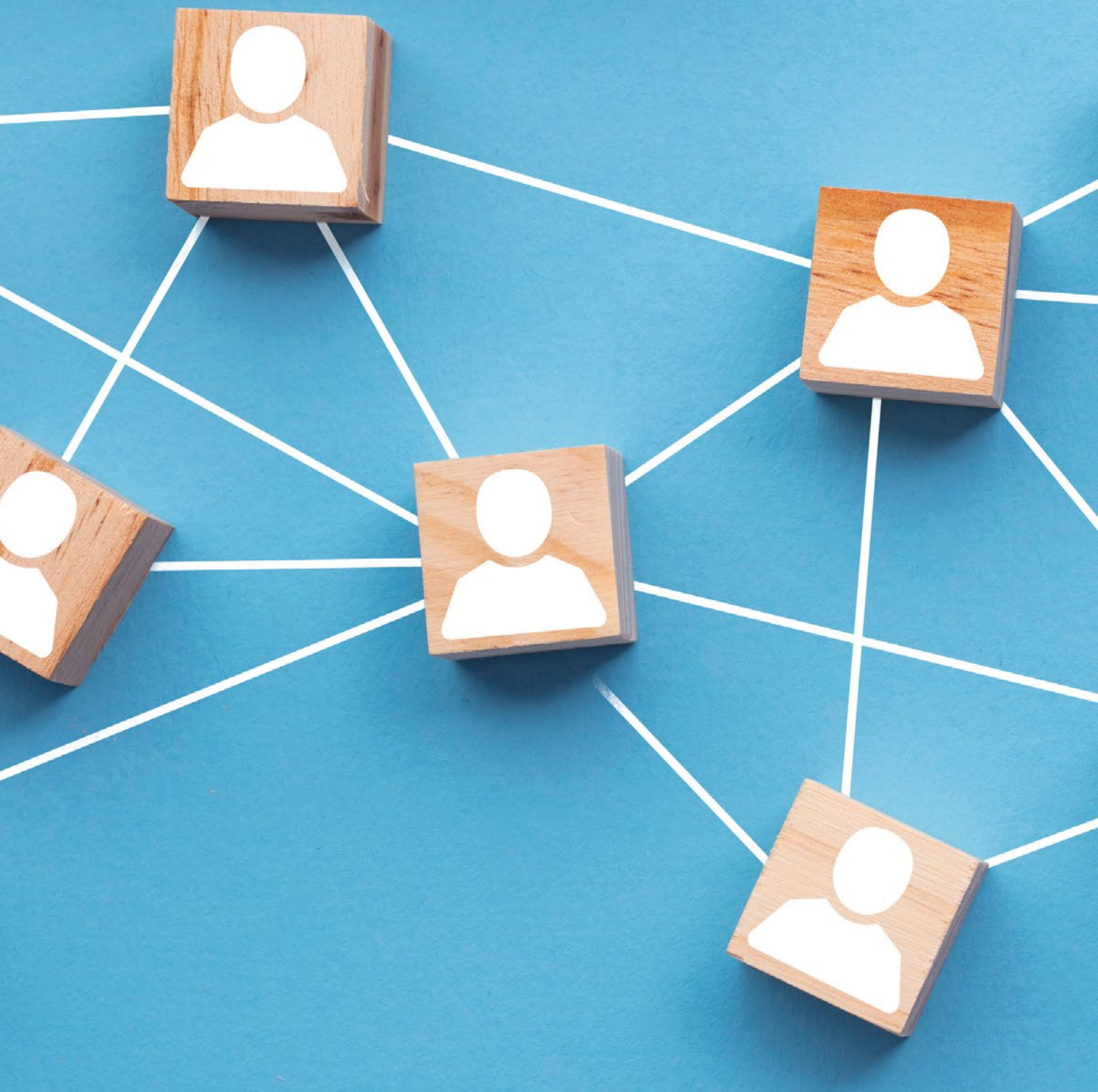
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STRONGER TOGETHER

"Styria has sustainably developed into a hotspot in the field of life sciences – not only on the basis of our strong human technology cluster, numerous research and COMET centers and the MedUni. The network of science and business at the location pushes innovation, which is demonstrated by the many start-ups, spin-offs and company settlements in the health sector with their future-oriented technologies and business models. SFG is fully committed to driving this development forward as an active partner."

Mag. Christoph Ludwig,
Geschäftsführer, SFG



CONNECTING FOR SUCCESS

Human.technolgy Styria is very well connected: We have access to a whole range of European and international networks in the health and life science sector. We cooperate, exchange ideas, support and promote each other on an equal footing – and thus jointly benefit from a strong, international network that serves the further develop-

ment of technologies related to human health. Here is a selection of cooperating networks:

- Eurocluster DESIRE
- EEN
- Life Science Austria
- Styrian e-Health Advisory Board



STYRIAN SUPERPOWERS FOR BIOPHARMA



The companies and organizations in Styria that are involved in the biopharmaceutical supply chain, from raw materials and equipment suppliers to manufacturers and distributors of biopharmaceutical products named us the "European Supply Champion" for biopharma. The human technology cluster highlights the region's strengths in areas such as research and development, production, and quality control, as well as its proximity to key markets in Europe and beyond.

PRODUCTION

- Engineering and Automation
- Process planning, development, optimization and simulation
- System engineering and construction ("digital twin")
- Industry/Pharma 5.0 ("Human meets Automation")

CELL AND GENETIC ENGINEERING

- Precision medicine
- Biosafety



REVOLUTIONIZING HEALTHCARE

"Together with Human.technology Styria, ZETA is accelerating the digitization of the entire value chain in the pharmaceutical and biotech industry. ZETA's latest innovation is called Integrated Digital Testing. This enables end-to-end digital logging of factory and site acceptance tests. The advantage for our customers: the simple and fast digital documentation saves time, costs and minimizes sources of error."

Andreas Marchler,
Managing Director, ZETA GmbH

FROM TEST TUBE TO PATIENT. THE PATH OF THE MEDICAL INGREDIENT

FROM TEST TUBE TO PATIENT. THE PATH OF THE MEDICAL INGREDIENT

The pharmaceutical and biotech value chain involves research and discovery, followed by clinical development, manufacturing and supply chain, launch and commercialization, and monitoring and health records. Innovative manufacturing and supply chain management are crucial to ensure timely and cost-effective delivery of drugs to patients, as well as maintaining product quality and safety throughout the whole supply chain.



EFFICIENCY AND INNOVATION: SUPPLY CHAIN MANAGEMENT FOR THE 21ST CENTURY

"Health and care are and will remain central issues for the future. Together with the Human.technology Styria Cluster as an important hub, it is possible to drive forward research and development in medicine. The future of medicine has long since begun; together, synergies can be leveraged in the best possible way and new groundbreaking innovations can be created."

DI Dr. Heinz Mayer,
Geschäftsführer, Joanneum Research

“Ready to achieve
the climate goals?”

WITH ZETA TO ZERO EMISSION

- ▶ Customer-specific decarbonization strategies
- ▶ Cut energy consumption as well as emissions
- ▶ Reduction of interfaces – from concept to project execution
- ▶ Perfect alignment of process systems and building
- ▶ Expertise in clean room and HVAC engineering



WATCH THE VIDEO ON
WWW.ZETA.COM

EUROPEAN SUPPLY CHAMPIONS

THE FUTURE OF PRODUCTION, CONTINUOUS MANUFACTURING – DIGITAL TWIN – PREDICTIVE MAINTENANCE

Pharma & BioTech

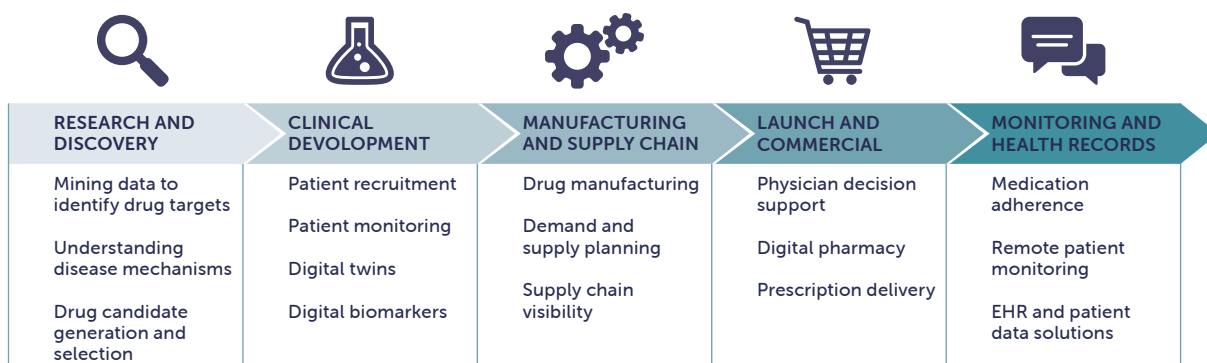
The Styrian supply industry boasts a range of strengths in various areas including process development, plant design and engineering, simulation and optimization, scale down and scale up, industrial biotechnology, API development and analysis, flow chemistry and continuous production, packaging and logistics, and biomarker research for therapeutics.

One of the major strengths of the Styrian supply industry is its expertise in process development. With extensive knowledge and experience in this area, the industry is able to efficiently and effectively develop and improve manufacturing processes for various products, ensuring maximum efficiency and quality. In addition, the industry's expertise in plant design and engineering allows for the creation of state-of-the-art facilities that are designed

to optimize productivity and reduce costs. This is supported by the industry's proficiency in simulation, testing and optimization, which enables the identification of potential issues and the development of effective solutions.

Furthermore, the industry's strengths in scale down and scale up enable the seamless transition from laboratory to commercial scale production, while industrial biotechnology and API development and analysis expertise allow for the creation of high-quality products that meet the specific needs of customers.

Finally, the industry's biomarker research for therapeutics is a significant strength, as it enables the identification of effective treatments and the development of new therapies that can improve the health and well-being of people worldwide.





STOELZLE PHARMA
HEALTH & SAFETY

SAFE PACKAGING FOR HEALTHY PRODUCTS

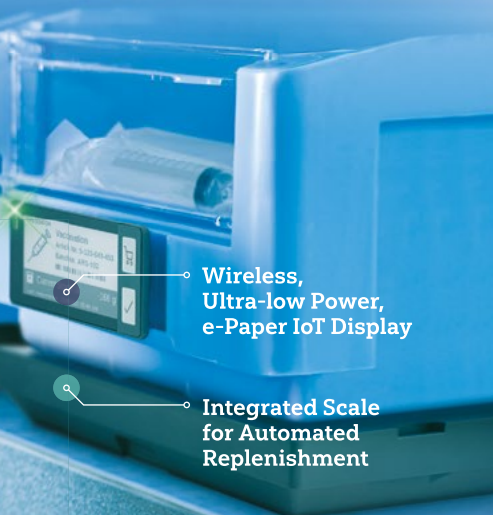
www.stoelzle.com/pharma

Stoelzle Glass Group, Fabrikstrasse 11, 8580 Köflach, Austria



Digital Inventory Management.

sep100® – The Smart IIoT Technology



Wireless,
Ultra-low Power,
e-Paper IoT Display

Integrated Scale
for Automated
Replenishment



Automated
re-ordering



Real-time
control



Time for patients -
no paper work

Developed by
pdi-digital.com

FROM MICRO TO MACRO

MICROFLUIDICS & MICROBIOME & INDUSTRIAL BIOTECHNOLOGY

Styria has long been known for its strength in industrial biotechnology, with a particular focus on Microfluidics and Microbiome science. With a firm commitment to innovation and a focus on the future, Styrian companies are at the forefront of the latest technological advancements in these fields.

The use of Microfluidics has become increasingly prevalent in biotechnology, offering a wide range of benefits to researchers and scientists. By leveraging the unique properties of microscale devices, such as high throughput and precise control over small volumes, Styrian companies are creating novel solutions for a variety of applications,

including drug discovery, point-of-care diagnostics, and lab-on-a-chip systems.

Similarly, Microbiome science is an area of growing importance, with significant implications for human health, agriculture, and the environment. Styrian companies are leading the way in this field, developing innovative technologies to better understand and manipulate microbial communities for beneficial outcomes.

One of the hallmarks of Styrian companies is their forward-thinking approach to industrial biotechnology. By investing in cutting-edge research and development, they are constantly pushing the boundaries of what is possible, creating new and exciting opportunities for growth and progress.

In addition, the strong focus on collaboration and knowledge exchange among Styrian companies is fostering a dynamic ecosystem of innovation, with experts from different fields working together to develop novel solutions to complex challenges.



POWER IN PARTNERSHIP

"Human.technology Styria provides an indispensable network that combines scientific know-how with business-knowledge and strongly drives innovation. The cluster is therefore an important bridge builder in bringing innovation to the people. This strengthens the healthcare system and Austria as a business location."

Dr. Uta-Maria Ohndorf,
General Manager,
Roche Diagnostics Österreich

A close-up, high-resolution portrait of a middle-aged man with a warm, friendly smile. He has dark, slightly graying hair and a light stubble. The lighting is soft and natural, highlighting the texture of his skin. He is wearing a dark, textured sweater.

Doing now what
patients need next

We bring the right treatments to the right patients at the right time. With our combined strengths in pharmaceuticals and diagnostics, we are better equipped to advance personalized healthcare.

www.roche.at

A HIDDEN CHAMPION FOR HEALTHY CELLS

spermidineLIFE® for your cell renewal¹

The human body consists of about 75 trillion cells. These are the smallest but most important living unit in our body. Our vital cells age every second of our lives. In some cases, billions of cells can die in a day. As long as we are young, this is not a cause for concern, because our body can renew the cells without any problem. With age, however, this becomes increasingly difficult.

However, we can influence this natural process. With the innovative

approach of controlled cell renewal, we can renew our cells 365 days a year, rid them of accumulated cellular waste and thus keep them healthy. **spermidineLIFE®** with zinc and thiamine supports your cell renewal and ensures healthy cells and a healthy life.¹

Spermidine – a polyamine with a great potential

Spermidine is a natural polyamine that is found in almost all of our cells. With age, however, the content of spermidine in our body cells decreases, so it makes sense to sup-

plement it. For our spermidine we rely on a 100% natural raw material: wheat germ.

In years of research, **spermidine LIFE®** worked together with the University of Graz on processes that enable the natural extraction of purely plant-based spermidine. But the clinically tested² **CelVio Complex®** is more than just spermidine. It contains all the important ingredients of wheat, which are a guarantee for the 100% naturalness of the extract. Because only the best is good enough for our cells.

Your Life. Your Decision.

Cell renewal from nature

Support your **cell renewal¹** with the innovative nutritional supplement from the green heart of Austria.

spermidineLIFE® Boost+ with **100% natural spermidine** from the **CelVio® Complex – clinically tested²** and produced in Austria. Choose the world market **leader!**

www.spermidineLIFE.com



¹ Zinc contributes to normal DNA and protein synthesis, protection of the cell from oxidative stress and has a function in cell division.
² Aging (Albany NY). 2018;10(1):19-33 doi: 10.18632/aging/101354.

SUPER SUPPLEMENTS: FOODS FOR FUTURE

NUTRACEUTICALS & FUNCTIONAL FOOD

The Global Market Report 2021 puts the market potential of dietary supplements at USD 441.7 trillion. Nutraceuticals are already in great demand in Austria – and the trend is rising. According to a survey conducted by Statistik Austria in 2021, 58% regularly or occasionally use nutritional supplements.

Human.technology Styria is also naturally interested in this forward-looking topic and, in the "Nutraceuticals & Functional Food" project, is linking the biotechnological research and production expertise available in Styria with the regional value chains. In this approach, new

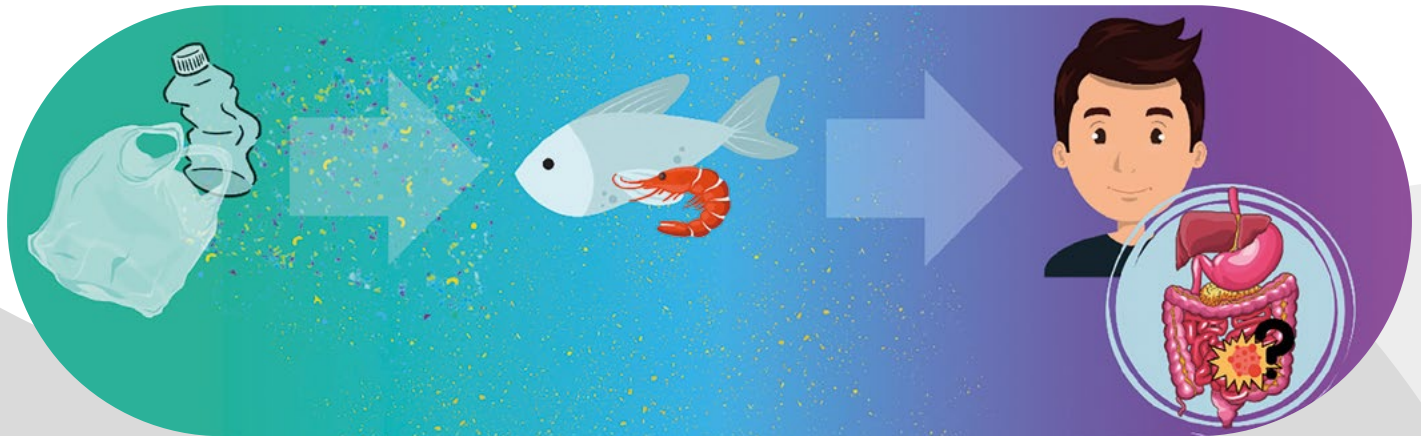
business concepts are to be developed and expanded in the long term.

The community founded for this purpose, consisting of experts from research and industry, identifies and addresses current trends such as "Cultivated Meat" and connects the Styrian nutraceutical champions with the cluster community. The joint trend scouting leads to new opportunities to identify and leverage bioeconomic potential in the field of nutraceuticals, because Styrian companies have the potential to become innovation hotspots in the field of "Nutraceuticals & Functional Food".



MICROPLASTICS – A HAZARD FOR HUMAN HEALTH?

Micro- and nanoplastic particles (MNP) have been found in recent years in all parts of the world and in various organisms. Until now, the health effects of this exposure to MNP are almost completely unexplored, especially regarding tumor development, growth and dissemination.



Microplastics enter the food chain: The degradation of plastics in nature produces MNP of different sizes and compositions. Together with those plastics that are released from food packaging (e.g., PET bottles), MNP enter the human organism. microONE is investigating the question of whether and if so, what health effects occur as a result of MNP in the intestinal tract.

Micro- and nanoplastic particles (MNP) are found throughout our environment and are now ubiquitous. The food we consume, the air we breathe, and even the cosmetics we use contain a significant number of plastic particles. These particles are found not only in areas of high population density, but also in remote places such as the deep sea and hard-to-reach glaciers.

Humans ingest MNP in **significant amounts on a daily basis**. It is estimated that each person in Central Europe ingests an average of **up to 5 g of plastic particles per week**, which is about the weight of a credit card! The gastrointestinal tract is one of the first organs in animals and humans to be exposed to high amounts of MNP on a daily basis. Microplastics have now also been detected in human stool and models show that the negative impact on the gut microbiome should not be underestimated.

However, the **behavior of these particles in the human body is poorly understood**. What is the persistence of plastic particles absorbed into the human body and how cells cope with constant exposure to plastic? What are the effects of MNP on chronic inflammatory diseases?

These and other burning research questions are being investigated by an international research team led by CBmed GmbH as part of the FFG-funded COMET module microONE in Graz and Vienna since 2022. The COMET module microONE was designed to fill this substantial knowledge gap within a multinational, multidisciplinary, cross-sectorial approach. It aims to provide scientific evidence on whether – and if so, how – different particles influence tumor development and spread by using colorectal cancer (CRC), one of the most frequent tumor entities and prone to contact with MNP in the gut.

CBmed was founded in October 2014 as a non-university research organization. CBmed has established a global network of first-rate scientists and clinicians, as well as industry partners. CBmed has the consortium lead in the publicly funded **COMET module "microONE"**, including 20 national and international scientific and industrial project partners, which is dealing with the question: Microplastic Particles – a Hazard for Human Health?

www.cbmed.at

microONE is listed as one of the reference projects within the "Action Plan Microplastics 2022-2025" of the Federal Ministry for Climate Protection, Environment, Energy, Mobility, Innovation and Technology in Austria.



microONE
 Microplastics – a Hazard for Human Health?

microONE is funded within COMET – Competence Centers for Excellent Technologies – by BMK, BMAW as well as the co-financing federal provinces Styria and Vienna. The COMET programme is managed by FFG (www.ffg.at/comet).

Duration: 01.01.2022 – 31.12.2025

Project volume: 3.75 Mio. €

Management: Priv.-Doz. Dr. Wolfgang Wadsak, (managing director, CBmed) and Prof. Dr. Lukas Kenner (scientific director, CBmed)

microONE's main Austrian partner universities:



Want to find out more? Get in contact with our team:
office@cbmed.at



Visit us on our website

**Let's
 change
 the world,
 together.**





BIG HANDS FOR BIG INDUSTRIES

The Human.technology Styria Medtech cluster brings together companies, research institutions, and other stakeholders in the medical technology industry, providing a platform for collaboration and knowledge-sharing. By fostering a strong ecosystem for medical technology innovation in Styria, the organization aims to support the development of new products and services that can improve health outcomes and drive economic growth in the region.



MATERIALS & SURFACES

- Metal- & synthetics-production
- Additive production technologies/
3D Printing
- Surface technologies

MEDICAL SENSING

- Clinical sensorics
- Wearables & consumer electronics
- Biosensorics
- Processmonitoring



UNLEASHING THE POTENTIAL OF MEDICAL TECHNOLOGY

"The cooperation with the HTS Cluster has been a positive and successful collaboration for PAYER for many years. After the severely limited opportunities in recent years, we are very pleased that we can again increasingly push joint networking activities. Thus we lay the foundation of a strong visibility of Styrian competences and opportunities in the field of human technology and on the part of PAYER as a manufacturer in the field of Advanced Consumables, Fluidic & Precision Assemblies."

DI Harald Riedlhuber,
General Manager, PAYER Inter-
national Technologies GmbH

MATERIALS AND SURFACES

In medical technology, the human technology cluster supports companies with a focus on medical (micro) electronics, production technologies, materials science, automation, biomedical sensor technologies, software solutions or biomarker research and application for diagnosis and therapy.

The knowledge of materials, which ranges from plastics, metallurgy, biomaterials to the latest surface finishing technologies, is outstanding. International market leaders such as ams AG, Infineon and AT&S contribute their knowledge to the life science industry and develop new products and technologies together with the region's SMEs.



THE NEXT-GENERATION OF MEDICAL SOLUTIONS

"In our daily work with and for the life sciences sector, VTU focuses on new technologies for the strategic planning and optimization of modern process plants throughout their entire life cycle. We focus on sustainability and digitalization in order to shape and develop the issues of the future. We look forward to continuing our successful collaboration with our partners in the Human Technology Cluster in various projects."

Dr. Friedrich Fröschl,
CEO, VTU Group GmbH



SENSING THE HUMAN BODY

Data is the gold of the 21st century – and innovative sensor technologies provide this data. There are no limits to the inventiveness of Styrian sensor technology experts: from scanning eye movements to diagnose dizziness, to intelligent textiles that can measure vital signs, to breathing air analysis to determine ovulation ... The potential is huge, and so are the market opportunities.

HEALTHCARE & MEDICAL

PAYER
MEDICAL



With our many years of experience, we have established ourselves as one of the most important suppliers of highly complex and process-safe medical fluidics and consumables.

PREMIUM-PARTNER



Areas we specialize in:

- Advanced Consumables
- Fluidics
- Precision Assembling
& Packaging

Premium partner for the development and industrialization of medical products.

We take a solution-oriented approach to every project, and our goal is to increase our customers' success by achieving the highest quality standards through process reliability to meet the highest quality requirements, and by using innovative technologies to offer comprehensive system solutions. Depending on customer requirements, we select the appropriate solution at our worldwide locations: from prototype construction, through pre-series production with further scale-up options, to series production.

We are the trusted and reliable partner of world-renowned medical device manufacturers and always strive for strategic and longterm partnerships. As we offer all process steps of the value chain (from the idea to series production) from a single source we can flexibly adapt to the needs of our customers and enable efficient product realization processes.

Areas in which we support our customers::

- Sophisticated Concepts & Designs
- Industrial Engineering
- Tool design & construction (multi-component tools)
- Selection of suitable materials
- Plastic injection molding (multi-component molds)
- Surface treatments
- Manual assembly
- Semi- & fully automated assembling
- Scale-up concepts including automation
- Intelligent production processes (controlled and/or under clean room conditions)
- Supply chain management, quality management, project management, Product life cycle management



PAYER International
Technologies GmbH

Reiteregg 6
8151 St. Bartholomä
AUSTRIA

+43 3123 2881 0
office@payergroup.com
payergroup.com

DRIVING INNOVATION: DIGITALIZATION

Digitalization in healthcare refers to the use of digital technologies to improve the delivery of healthcare services. This includes the use of electronic health records, telemedicine, mobile health apps, and other digital tools to improve the efficiency and quality of care. Digitalization has the potential to improve patient outcomes, reduce costs, and increase access to healthcare services.

Through its initiatives and programs, HTS seeks to foster a strong ecosystem for digital health innovation in Styria, and to position the region as a hub for digital healthcare solutions in Europe. The Human.technology Styria also collaborates with other regional, national, and international initiatives and organizations to promote the development and adoption of digital health technologies.

- Digital health
- The hospital of tomorrow
- AI in health



TRANSFORMING HEALTHCARE THROUGH DIGITAL INNOVATION

"With our digital solutions in the healthcare sector, we relieve healthcare staff of administrative tasks, increase the quality of treatment and leave more time for the patient. With our own K-Businesscom Cyber Defense Center, we also meet the highest security requirements. Since 2022, we have not only been a member but also a shareholder of the Human.technology Styria Cluster. This shows our clear commitment to wards making an even greater contribution to the cluster in all areas of IT and data security. Together with the cluster, we want to drive forward digitization in healthcare with innovative solutions".

Reinhold Wurzinger, Leiter
Region Süd, K-Businesscom AG

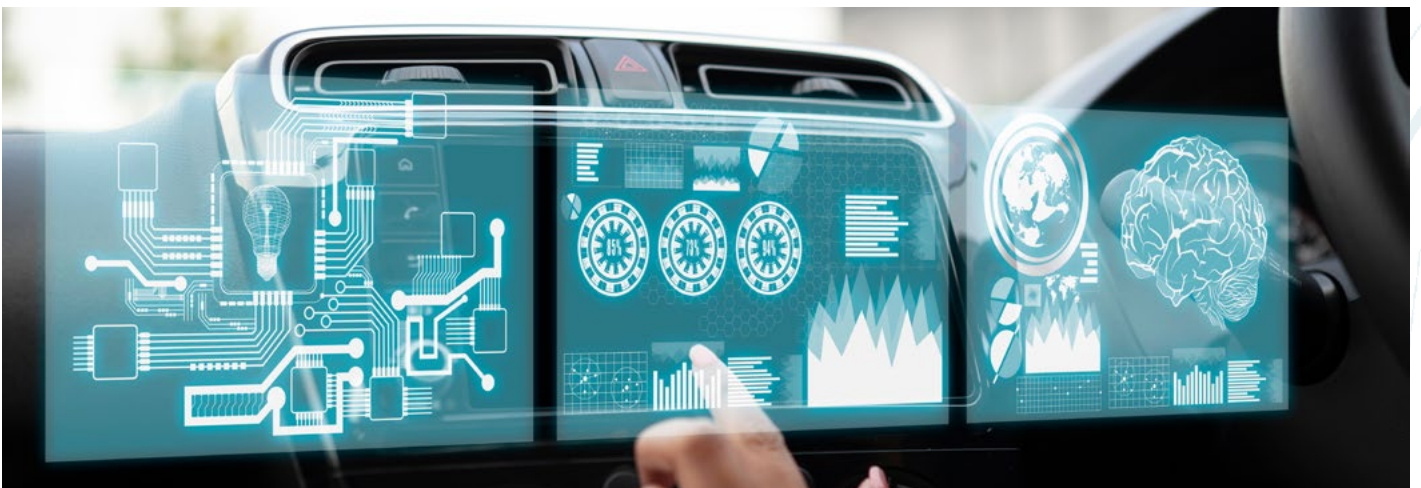


THINK DIGITAL, BREATHE DIGITAL, LIVE DIGITAL

As Human.technology Styria, technology is part of our name. Our partners in the region are highly technology driven, they think digital, they breathe digital, they live digital. In healthcare, sometimes we are in the driver seat and sometimes technology drives us. Artificial intelligence is often related as the disruptive

technology of the 21st century and when I think about digitalisation, technology, and AI in healthcare I'm inspired by Dr. Siegfried Meryn, who once in his keynotes in Graz said: "In the future it's not about what medical treatment will be possible with your mobile phone, it will be about what will NOT be possible."

Digitalisation



The background is a dark blue field filled with glowing light blue and white circuit-like lines, nodes, and gears. A large, stylized 'AI' is centered on the left. To the right, there's a play button icon in a circle, a square containing the binary code '011000', and a circular icon with a vertical bar and a dot. The overall aesthetic is high-tech and futuristic.

AI

[011000]

AI IN HEALTH

Digitalisation



AI IN HEALTH

"In the next few years, we will get used to the fact that many tasks that we previously attributed to human intelligence will be transferred to machines. AI composes music, paints pictures, writes texts, controls factories, drives cars, makes diagnoses and invents new medicines. The next big research question is how we can design AI which we can trust in all these vital functions."

Wolfgang Kienreich,
Know-Center Graz

THE HOSPITAL OF TOMORROW

Digitization offers a multitude of possibilities to treat and care for people better, to save costs in the health system and to generate regional added value. In an international comparison, however, there is a great need to catch up in Austria, especially in telemedicine and in the area of age-appropriate assistance systems. As part of the Styrian

e-Health Advisory Board and as the organizer of the Styrian platform for healthcare, we promote innovations in the healthcare market. In this context, new cooperation partnerships, such as public and private health insurance companies, will play an increasingly important role in the implementation of new innovative solutions.



HEALTHY LIVING, SMART CARE

In the field of "Health & Sustainability" we are pursuing the goal of innovative products, concepts and services to improve the resilience of the healthcare system in the long term.



ACTIVE & ASSISTED LIVING

TOUCH AND TRY OUT

In theory, it's quite simple: new technologies can be so helpful and supportive in the everyday lives of older people that they can live independently in their own homes for a very long time without constant help from relatives or caregivers – even when physical or mental impairments would otherwise make this difficult.

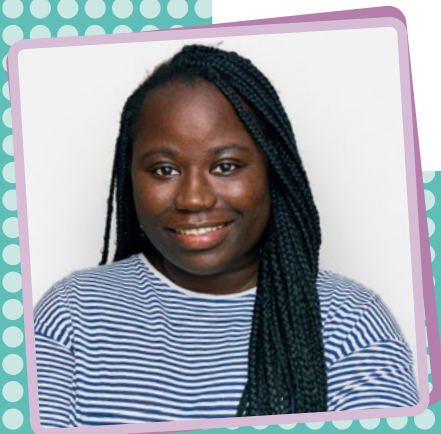
In practice, the situation often looks different: The pitfall lies in the gap between the products and those who are supposed to use them: Does a 30-year-old software developer understand the needs of an elderly person? Does a best ager know what assistive technology is available, where it can be purchased, and how it works?

With the opening of the "Leichter-Leben-Raum" in Graz, this gap between technology and users has been closed.

The Geriatric Centers Graz, the Human.technology Styria Cluster and other partners developed a showroom where a variety of digital and physical aids can be tried out on site at leisure. Conversely, manufacturers of age-assistive technologies receive valuable information about their product's potential for improvement directly from their target group. A Living Lab, in which new products are tried out and further developed together with the target group, completes the offer.



WIR SUCHEN DICH!



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der Lebenshilfe unsere Gesellschaft!

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Teilhabe für alle, Nachhaltigkeit
und Regionalität.



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und ein wertschätzendes
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jobs.lebenshilfen-sd.at



YOUNG SOLUTIONS FOR THE ELDERLY

Health & Sustainability

The Human.technology Styria Cluster was able to win over a number of already very successful start-ups to subject their innovations to a reality check in the "Leichter Leben Raum" and the "Living Lab" by senior citizens:

Elly

Through a combination of light module and app, ELLY supports family members in caring for people in need of care. And gives them and their loved ones more security and comfort.

<https://opus-novo.com/>

ilviHOME

ilviHOME ensures end-to-end medical care in the home environment. With individualized applications, data can be transmitted directly and discussed with medical professionals from home.

<https://www.ilvi.io/ilvihome>

digitAAL life APP

In collaboration with JOANNEUM RESEARCH Forschungsgesellschaft, the Medical University of Graz and application partners from the care sector, a multidisciplinary team from the fields of dementia, care and IT developed the tablet app DIGITAAL life, which activates cognitive performance in a playful, multimodal way.

<https://digitaal.life>



Digital health care
from the inpatient sector
to the home environment



ilviHOME

ilviCLINIC

Arrange a free demo
appointment now

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- » relieve nursing staff
- » reduce data entry times
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- » improve the quality of life and care of the patient



ilvi GmbH
Business Park 6
A-8200 Gleisdorf
Tel. +43 5 0747 300
office@ilvi.io
www.ilvi.io

FROM WASTE TO RESOURCE - AND BACK AGAIN

Health & Sustainability

In its strategic thrust "Health & Sustainability", Human. technology Styria focuses on the current topic of medical waste in order to promote sustainability in the life science sector. This is because the recycling rate of medical waste is still low worldwide, including in Austria: more than 90 percent of medical waste is incinerated, and valuable raw materials are not recycled.

The objective of the "Medical Waste" project is to develop recyclable solutions for the healthcare sector and implement them in pilot projects. Healthcare facilities, HTS cluster partners, experts from the circular economy and innovative start-ups/ solution providers will participate in the project.



WE LOVE NETWORKING!

We are the hub of a cluster of around 140 Styrian companies that work for human health. We act as a hub for contacts, know-how and information for this community. Our goal is to create economic added value for the cluster community, to further develop the strengths of the region in a targeted manner and thus to improve the international visibility of the location.

About





MAG. LEJLA POCK
CEO



MAG. YVONNE MÜLLER
Assistant to the Management
& Marketing



DI PASCAL MÜLNER
Business Development
Digitization & Strategic Lead
Pharma / BioTech



MAG. MICHAEL PICHLER
Business Development
Health & Sustainability /
Qualification



DR. LORENZ NEUHÄUSER-HAPPE
Business Development
MedTech



PH. D. PABLO ZARDOÑA-
LAGUARDIA
Business Development
Pharma / BioTech



MAG. EVA BUCHT
PR & Marketing



SIGRID PUNTIGAM
Project Assistant



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Benedikt Law Firm · Robert Benedikt, attorney-at-law
Office Vienna: Bäckerstraße 6 A-1010 Vienna
Office Graz: Hofgasse 3, A-8010 Graz
t: +43 1 513 0100 33 · m: +43 676 5395009
e: r.benedikt@rbenedikt.com

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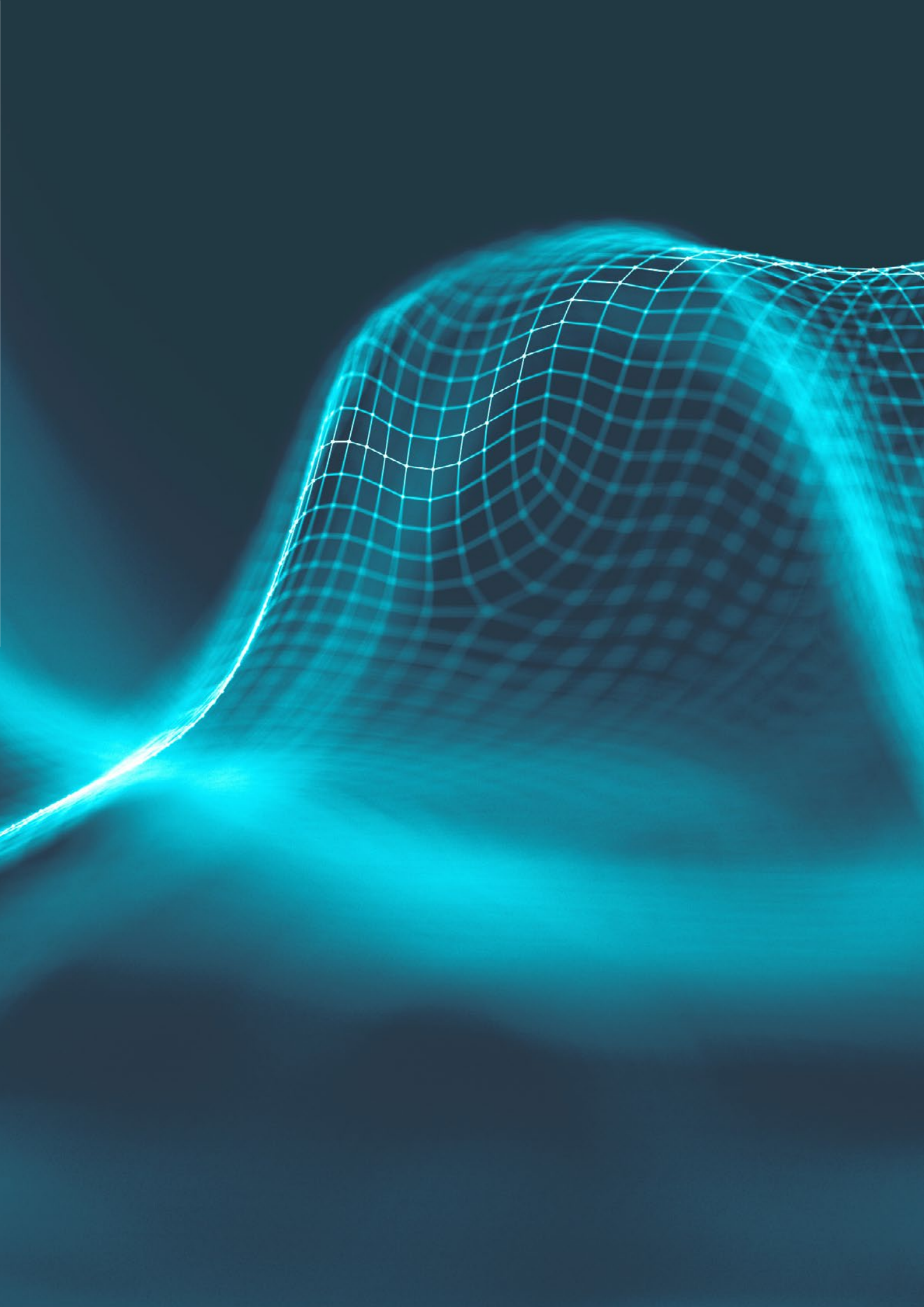
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CONNECTION IS THE KEY
Human.technology Styria GmbH
Neue Stiftingtalstraße 2
Eingang B, 1. Stock
8010 Graz, Austria
+43 316 58 70 16
office@human.technology.at
humantechnology.at

