UNIVERSITY | TECHMED OF TWENTE. | CENTRE

THE TECHMED EVENT

Tech.Land Transforming borders into connections

Elke Wirtz, Dr. Holger Winter

TECH.LAND MAP and Figures



238B+ EUR

Gross Domestic Product



HISTORY















Twin Cities:

Close partnership between the cities of Münster and Signing of **MoU** Enschede

Joint battery trip to Silicon Valley / Launch
Cross-border
Strategy

Joint visit DE/NL to Brussels Launch
TECH.LAND
Brand & Program

Joint medtech/health trip to Minnesota

2021

2022

2023

2023

2024

2024

















MISSION



"To tackle the societal challenges and increase the global competitiveness of our region, businesses and knowledge institutions, we rally together as Dutch and German triple-helix ecosystems, to realize the full technology and innovation potential in the heart of Europe (East Netherlands, North Westphalia and more)."

Partners

















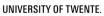






Network













































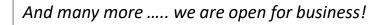












CLUSTERS



artner

n O

Managem

Projects

- Z

- Serobat (FH Münster, FFB, MEET)

TECH.LAND PROGRAM

- Initiating Partner: IHK, Twente Board, Oost NL
- Supporting Partner: Wirtschaftsförderung Münster / Stadt Münster, Handwerkskammer Münster, EUREGIO, Münsterland e.V., Gemeente Enschede, WTC Twente, Kreiswirtschaftsförderung Borken
- Network Partner: University Münster (REACH, Institut für Niederlandestudien), FH Münster, Westfälische Hochschule, University Twente, Saxion Hogescholen, WIN, Kreiswirtschaftsförderungen ...

Energy

Battery

- DE: Technologieförderung MS/FFB
- NL: Twente Board, Oost NL
- Universities
- Companies

Hydrogen

- NL: Oost NL / Twente Board
- DE: Wirtschaftsförderer WIN / Coesfeld
- Universities
- Companies

Advanced Manufacturing & Robotics

- DE: IHK Nord Westfalen/WFG Borken
- NL: Oost NL
- GfW Warendorf
- Universities
- Companies

Circular Economy

• DE: HWK

- NL: Oost NL
- WIN Emscher Lippe
- Kreiswirtschaftsförderung Steinfurt
- Universities
- Companies

Health & MedTech

- DE: Wirtschaftsförderung MS/UKM
- NL: Twente Board
- Universities
- Companies

Further Topics & Projects

- ChipTECH
- Financial Services
- ...

Interreg

Mobile Aircraft Charger (FFB, IHK, TA, FMO)

Other Projects

- Battery Days NL
- NL: Battery Cluster NL
- EFRE: Susyfos,
- Ggf. Batteryrecycling Ibbenbühren ZZWB
- ZLSM2 (Weiterentwicklung ZinkLuft)

Interreg

- Energy Booster (LP HWK)
- BOOST (LP: FH MS, Oost.nl)
- AGIT (Landmaschinenbau)

Other Projects

- H2 Solution Lab
- DE: H2 Raum! (H2 Hydrogen Academy)
- Common Plattform: Hydrogen[X]
- HyCore (Großelektrolyzeur) (Bund)
- Elefact (Serienfert. Elektro.) (NRW)

Netzwerke

- Hymat-Netzwerk Steinfurt

Interreg

- Manufacturing Next Materials
- Industry 4.0 Ost NL Lead Partner TO
- Innoloop (Partner: Oost NL, TAFH, FH) TO
- Prep. Excellence Cluster Robotics
- Prep. Cyber Security / AI Application

Other Projects

- NL: EDIH

Interreg

- Two4C (LP HWK) TO
- X-Lives (Netzwerk Oberfläche, Tech MS., FH, IWARU) TO
- CREATE (FH, KIEMT)

Other Projects

- DE: Circular Performer
- DE: Kreislaufwirtschafts-region Münsterland
- Sustainable Innovation
- Prep.: Antrag Zirkuläres Bauen
- Clue (FH) (IWARU)

Netzworks

Netzwerk Oberfläche

Interreg

- BRIDGE (LP Uni Twente mit UKM)
- Antrag: Nano Detect (FH, JÜKE, Uni Osna)
- Interreg Project Health4You

Other Projects

- MoU between UKM and MST (university hospital collaboration)
- eNurse
- Business dialogue

Interreg

- Future Beeing (MS, Enschede)
- Smart Solution Labs (WFG)
- Talent Symposium

Digital / Data Production

Startups (REACH/Novel-T/Digital Hub)

Clusters – Focus Health & Medtech



Europes first transnational triple helix ecosystem on "Batteries", "Hydrogen" and "Circular Economy", "Advanced Manufacturing & Robotics" and "Health & MedTech"













Cross border potentials in MedTech/Health



- The health care systems, the treatment in hospitals and the education of students are quite different, the challenges are similar (lake of workforce, aging population, costs)
 - possibility to learn from each other and to question own system
- Both regions somehow complement each other:
 - Enschede Region represents strong MedTech Cluster with innovative SMEs
 - Münster is known as a strong care provider
- Strong innovative suppliers on both side of the border
- Joint efforts to address the EU MDR regulation
- Support each other with respect to market access
- Higher perception compared to a separate appearance of each region

Health care / MedTech sector Münsterland





- 60.000 people work in health care (Münsterland)
- Employment increased by > 25 % (2013 2022)
- About 50 companies active in MedTech
- 1.000 employees in R&D activities
- Main focus on health care

University Hospital Münster (UKM)

- 11.800 Employees
- Excellent Care & Science
- 3D-Center of Orthopedics
- 240 Mio € in investments
 - MedForCe, Body & Brain Institute
- New Service Center

MedTech Health related economic Ecosystem / German Companies



Product Developer

Medtech

MBL Neurofeedback **Refined Laser System** Aktivmed GmbH 1A Medizintechnik **Bursch Medizintechnik KLmedical** Dr. Suwelack

Demcon duro 3D CiBX

Ecomedis

GerialDental

GN Resound

Hemotec Medical

HIMED

Mediso

Med-Net

Quantum Analysis

Raguse

STERO Enurex

Zahntechnik Näfel

Product Developer

Diagnostic

BioCheck **GimmiSyS FIA Biomed** Monasterium Polytaksys Truion

Digital Health

KAITOS beemo Helpwave **BEWATEC** Mesics Tunstall GmbH deltacityNET OpenEDC Health



































Knowledge Center

Center for Soft Nanoscience Center for Nanotechnology MPI for Molecular Biomedicine Multi Scale Imaging Center MedForCe **Body & Brain Institute**

Services

Arrows biomedical **Qubeto GmbH** Tascon GmbH Trialflow GmbH





MedTech/Health Cluster structure



Core Group

Elke Wirtz, WFM Münster

Kathleen Spring, GEWI Münster

Jutta Wirth, Oost NL

Holger Winter, CeNTech

Alexander Schippers, Oost NL

Freerk Faber, WTC Twente

Hans Browers, Tech.Land

Big Group

































Activities: Visit of Minnesota MedTech Region



Visit of University of Minnesota, Mayo Clinic, contact to Medical Alley

Take home messages:

- One of the leading state in the US: high quality of live, collaboration is key to success
- Medical Alley association represents about 800 companies (budget 4.5 Mio. \$)
- Tech HUB "Smart MedTech": artificial intelligence, machine learning and data science
- European market is getting less on interest because of the MDR regulation
- US health care system is expensive, similar challenges as in Europe
- staff shortage, collapsing health system, Life expectancy is reduced
- Mayo Clinics are one the best rated clinics in the world
 - Digitalization, Training and education, use of latest technologies (3D print)
 - Strong interaction between City and the Mayo Clinics

Europe is very competitive with respect to innovation and technology

Collaboration with Minnesota is going to be expanded (Medica 2024)







Upcoming events



Tech.Land Business Breakfast Medica

Thursday, 14 Nov 2024 9.00 – 11.00 am

Exclusive breakfast offers a unique opportunity to connect Tech.Land organizations with visiting delegations from MN/USA and Singapore.

Dutch German Buisness Dialogue Health & MedTech

Tuesday, 03. Dec 2024 15.45 – 18.30 pm

Keynote: Prof. Dr. med. Alexander Friedrich, Director University Hospital Münster (UKM)

<u>Pannel discussion</u> with companies from the crossborder region Tech.Land

How to address current challenges in prevention and home care with technological innovation?

Current projects: Interreg Project Bridge



Partner: Bureau Acute Zorg, UKM, University Münster, University Twente, NovioQ

Challenges:

- A pandemic like COVID does not stop at borders
- Hospitals close to the border face the challenge of providing high-quality care with limited resources

Goals:

- Create digital Platform for common use of resources
 - coordinating and sharing resources between healthcare facilities.
 - reduce gaps in the provision of resources/services while minimizing waste through duplication
 - reduce enormous administrative burden of already existing cross border exchanges like rescue helicopters and ambulances as well as emergency care and

For patients, this would mean shorter distances and faster access to specialized care.

Planed projects: Interreg Project



- Joint project Münsterland/Enschede region
- Budget 7.0 Million €, Funding 5.0 Million €
- Support start-up companies and SMEs during their scale-up phase (matchmaking, training seminars)
- Joint R&D Subprojects for Advanced Medical Technologies
- Support Program for Market Access and Regulatory Support
- Address Topics "Living Labs" and prevention





www.techland.org







Thanks for your interest!

See you at MEDICA 2024:

Business breakfast - Thursday, Nov. 14, 9-11am

CCD Süd - Room #6

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