

THE | SHAPING A
TECHMED | HEALTHY
EVENT | FUTURE

14.45-16.00 | PIONEERS IN HEALTHCARE TALKS

PIONEERS IN HEALTHCARE TALKS

DR. IR. JOJANNEKE SCHUILING-JUKES – UT – TECHMED CENTRE

PIONEERS IN HEALTHCARE INNOVATION FUND

UNIVERSITY OF TWENTE.



PIONEERS IN HEALTHCARE INNOVATION FUND

Technical solutions to overcome limitations in the current health care, or new medical applications of existing technology, that is what Pioneers in Healthcare is all about.

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SAXION
UNIVERSITY OF
APPLIED SCIENCES

MST

zgt

**Deventer
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REGGEBORGH

The strength of regional collaboration: 1+1=3



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PIHC: Voucher program

- Projects with at least 1 researcher from UT or Saxion and 1 clinician from MST, ZGT or DZ.
- Each year: 11 vouchers of €60.000,-
 - Technological pioneering in healthcare voucher
 - Applying technology in healthcare voucher
- Seed funding: will our idea work?



Impact on healthcare: faster introduction of technological innovation

- Technological pioneering
 - (further) development of new technology for a clinical challenge
- Applying technology
 - existing technology to be used for a new application

Cantilever technology Acoustic and colorimetric sensor Pressure controlled therapy Shape-memory alloys
Photoacoustic Imaging Photoacoustic Computed Tomography Smartphone-based technology Hand-held device
24/7 intervention app Localized Surface Plasmon Resonance Point-of-care blood analysis Patient phenotyping
Continuous monitoring Electro-mechanical resynchronization therapy Patient-tailored technology Transcranial doppler
Telemedicine Automated sleep staging tool Robotics E-health Therapeutic drug monitoring Gamification
EEG Pain diagnostic technology Biopsy needle steering Multi-angle Light Scattering Low field MRI
Sensor technology Magnetic Resonance Imaging Portable technology Wireless sensors
CT perfusion scans **Home monitoring** Online questionnaire Motion Magnification Algorithms
Multi-parameter chip Histological mapping Lab-on-a-chip Multimodal brain monitoring
Process mining Individual behavioral patterns Tailored rehabilitation program Self-management Infrared imaging technology MicroRNA profile
Big data Adaptive rebreathing technology Portable automated personalized coaching system Deep learning techniques
Alarm System Low-coherence Spectroscopy Intelligent home-based online exercise program Innovative nasal sensor
eHealth Overnight pulseoximetry Automated evaluation of motor development Non-invasive technology
Value based health care Intracerebral pressure measurements Point-of-care monitoring Antibody therapy
Ambulant system

Amputation Inflammatory Joint Disease Rheumatoid arthritis Sepsis
Premature care **Orthopaedics** Brain injury
Inflammatory diseases COPD Diabetes Chronic ulcers
Sleep movement disorders Hip fracture **Neonatal care** Infertility Diabetic foot
Gastroenterology **Sleep apnea** Open-heart surgery Foot ulcers
Airway infections **Breast cancer** Esophageal cancer Addiction
Total knee replacement Mesenteric ischemia Lung cancer Parkinson's disease Bacterial infection
Chronic pain Asthma Heart failure Pain Breast Cancer Lung diseases
Bariatric surgery Critical limb ischemia Insomnia

The strength of regional collaboration

- Ca. 90% of project partners still collaborate
 - Consortia extended with new partners, often SMEs
- Additional and follow-up funding
 - New research lines at universities, in collaboration with hospitals and SMEs
- Valorisation
 - Prototypes, spin-off companies, patent applications
- Implementation
 - Ca 80% are working on clinical testing or implementation of new technology. Patients are involved at all steps in this process




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