

Santiago, Chile, 6-7 December 2017



Gender Summit 12

<http://gendersummitchile.cl>

Table 11:
***“Engineering,
biotechnology and
diversity”***

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Community Transformation through Integrative
STEM Education Research Practice Partnerships
<http://www.utas.edu.au/stem>
stem.education@utas.edu.au

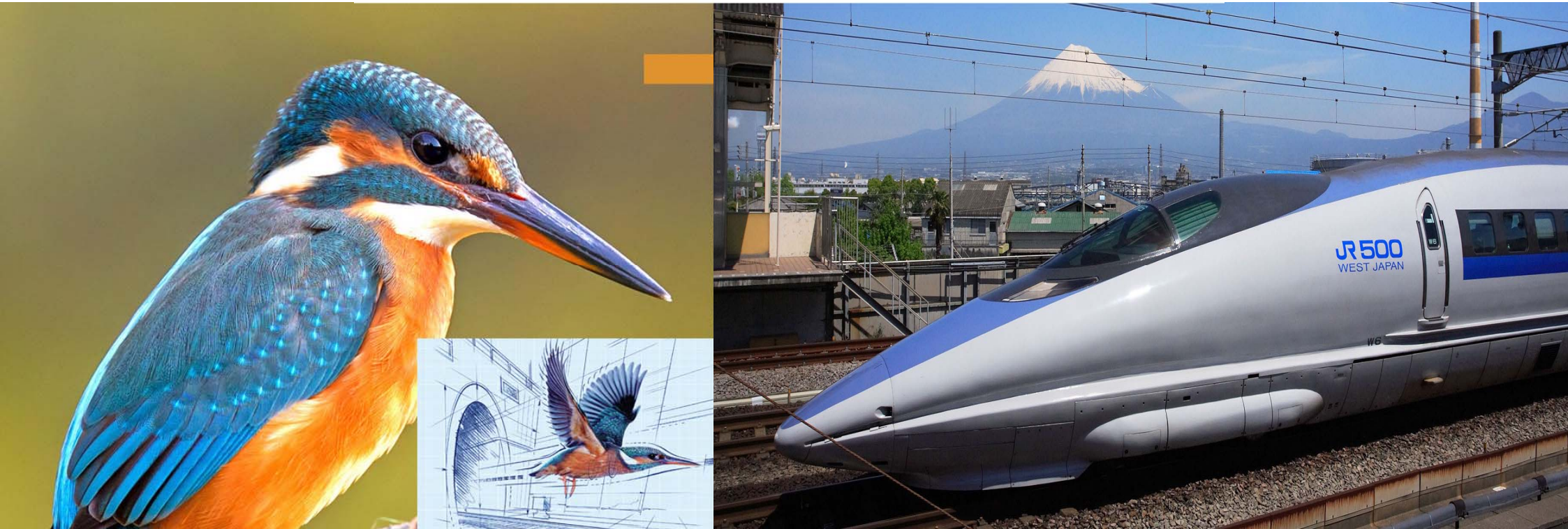


Why Biomedical Engineering?

- 1. Help improve the lives of others***
- 2. Fulfil personal, social, and societal interests in diverse settings***
- 3. Solve practical problems***
- 4. Empower women's intellectual curiosity and technical ability***
- 5. Work in a collaborative, diverse, inclusive, and multidisciplinary field***

***Biologically
Inspired
Engineering***

Bio-mimetics/Bio-mimicry



Inventions inspired by Nature

Biomedical Engineering



Human prosthetics

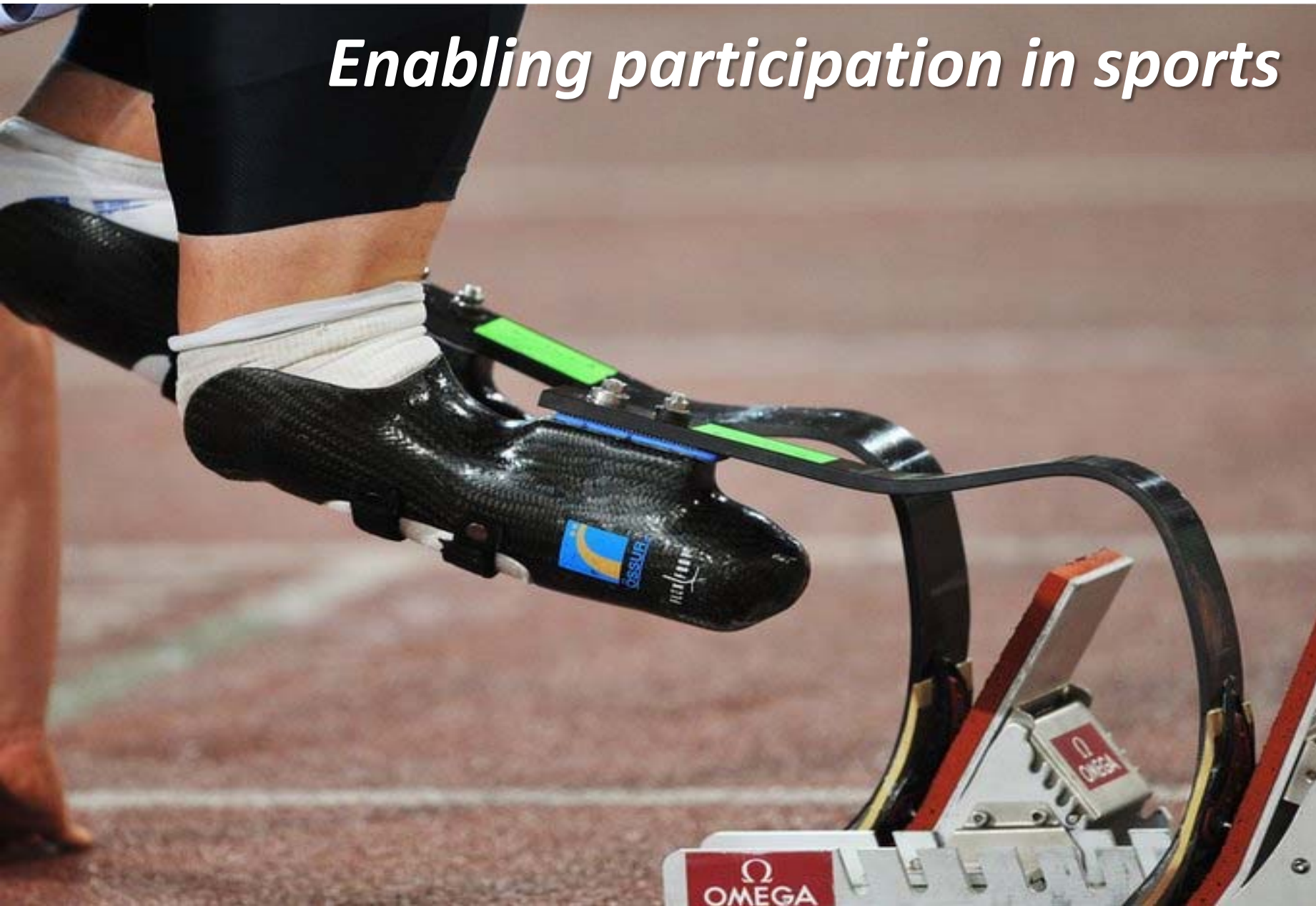


Animal prosthetics



Improving dexterity in dealing with daily tasks

Enabling participation in sports



Health Informatics Engineering



IT-based innovations in healthcare

Smart clothing



Scapula Strain Sensors (2)
Spine Goniometer (1)

EMG Electrodes (2)

Inertial Measurement
Units (14)

Knee Goniometers (2)

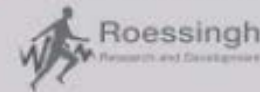
Shoe Insole
Force Sensors (2)

INTERACTION *for Stroke*
Full Body Sensing System for Daily Life
Performance Monitoring

UNIVERSITY OF TWENTE.



UNIVERSITÀ DI PISA



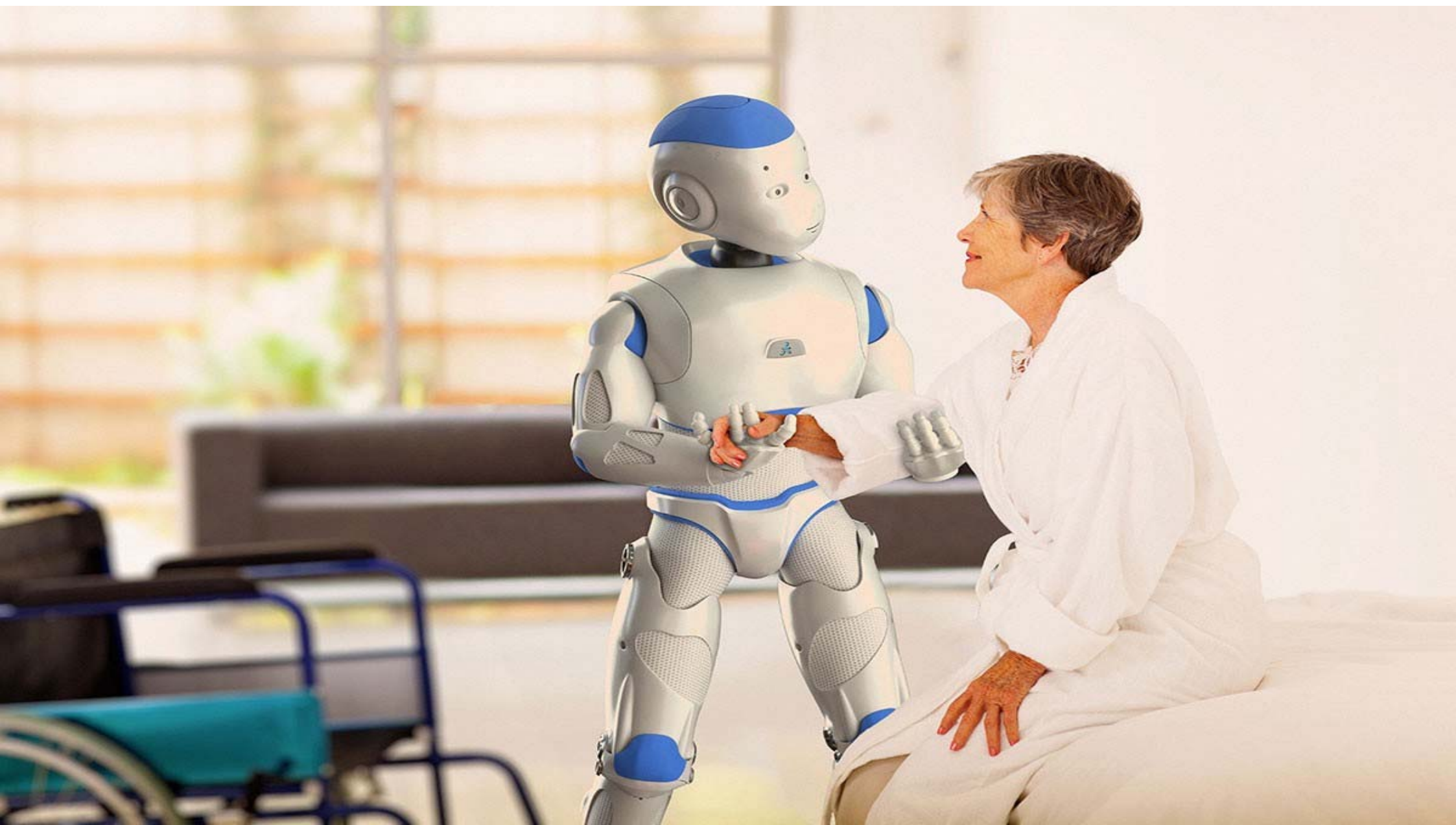
Universität
Zürich

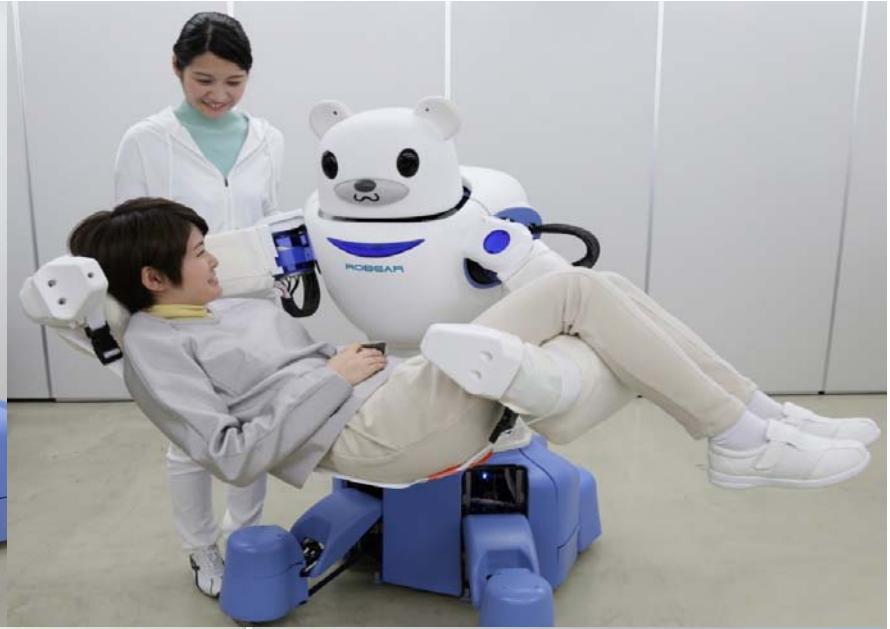
Smartex

Smart textiles



Personal Care Robotics







Robotic Surgery

