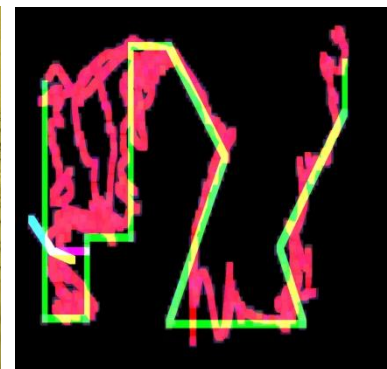
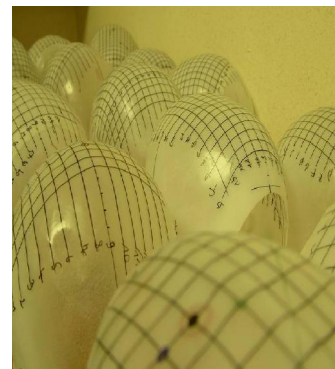
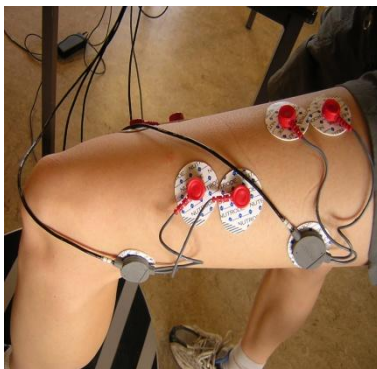




PHL-REVAL

Rehabilitation & Healthcare Research Center



PHL-REVAL

Rehabilitation & Healthcare Research Center

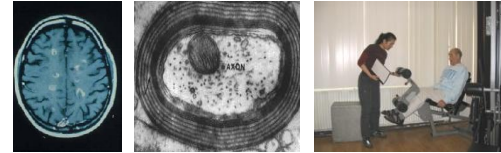


Revalidatierobotica

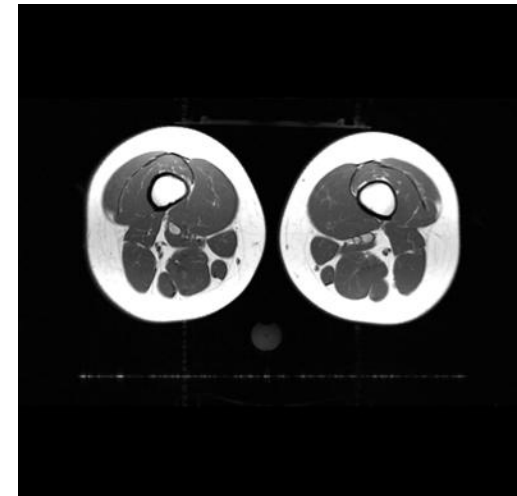
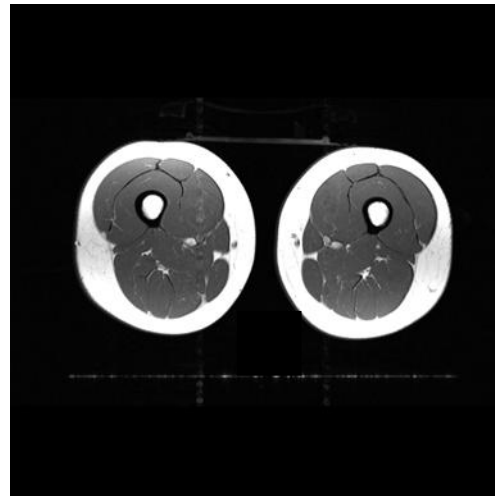
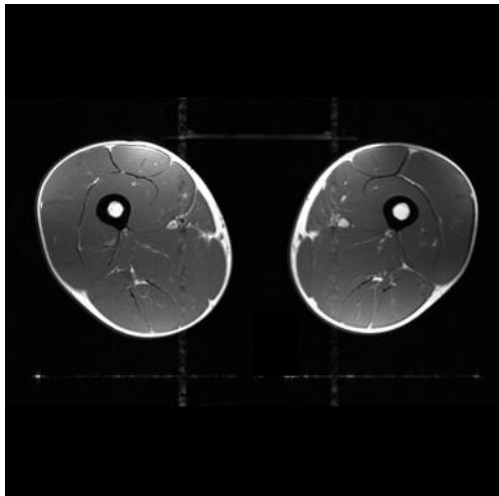
Bert op 't Eijnde



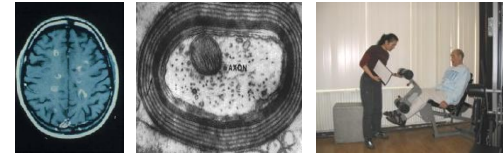
Revalidatierobotica, context



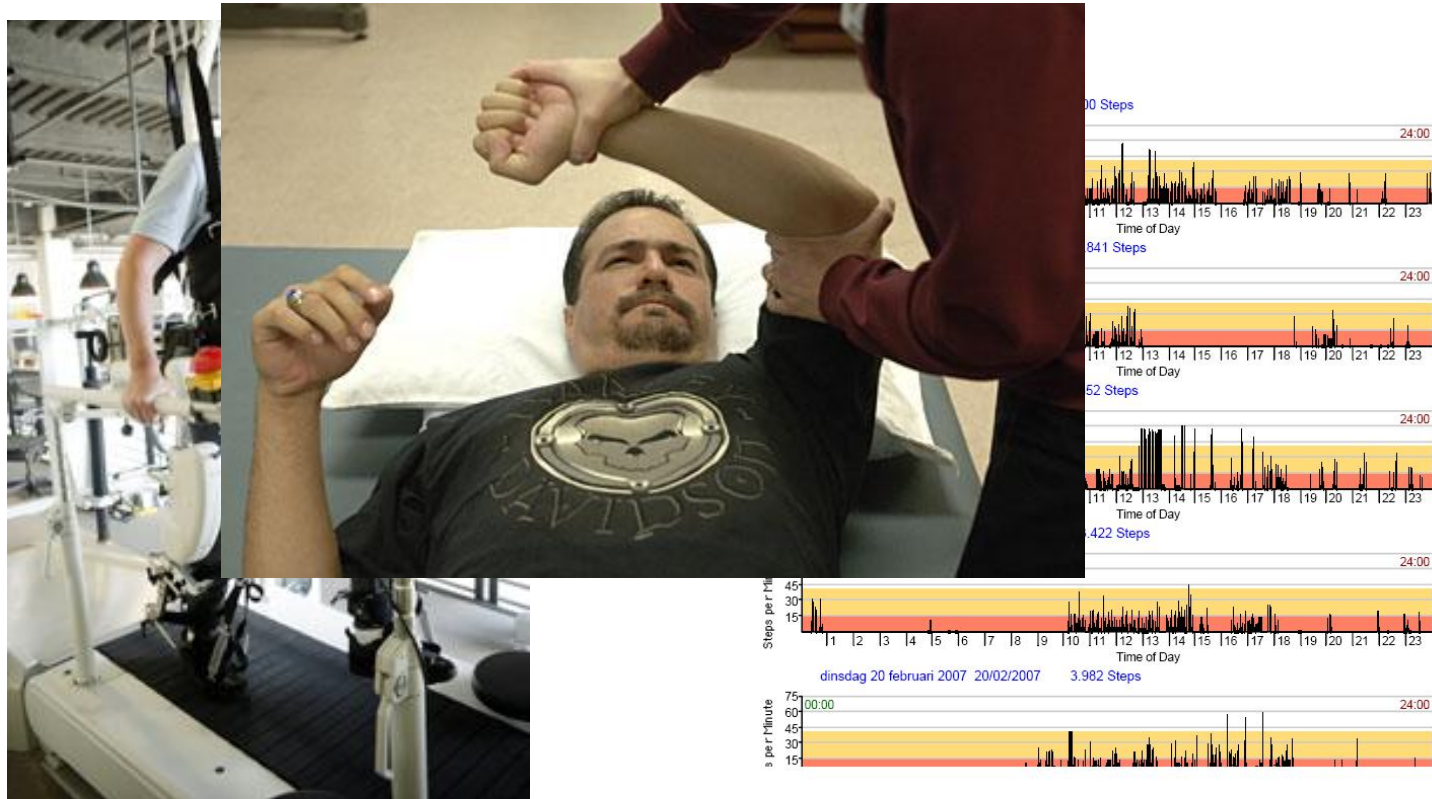
Revalidatie van chronisch neurologische aandoeningen (MS, Parkinson, ALS, Huntington, polio, ...)



Revalidatierobotica, context



Revalidatie van chronisch neurologische aandoeningen (MS, Parkinson, ALS, Huntington, polio, ...)

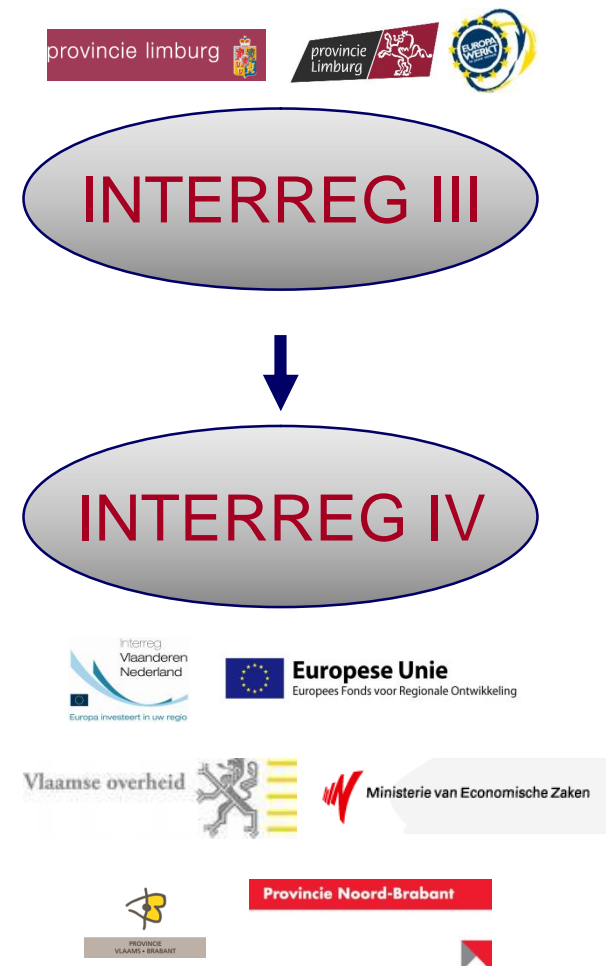


Geert Alders, Domien Gijbels & Peter Feys et al.

Projectconsortium

- **PHL**, REVAL - Studiecentrum voor revalidatieonderzoek.
- **Universiteit Hasselt**, EDM - Expertisecentrum voor Digitale Media.
- **Universiteit Maastricht**, Departement Bewegingswetenschappen.
- **Revalidatie & MS Centrum Overpelt (RMSC)**.

- **Technische Universiteit Eindhoven**, Faculteit Technologie Management.
- **Katholieke Universiteit Leuven**, Clinial Motion Laboratory.
- **Revalidatiecentrum Blixembosch**.
- **ADELANTE** Hoensbroek.



Partners

- Revalidatiecentrum De Mick Brasschaat.
- Nationaal MS Centrum Melsbroek.

- **Maastricht Instruments/IDEE.**



- Spronken Orthopedie.
- Enraf-Nonius.
- Gymna.
- Focal Revalidatietechnieken.
- MOOG.

- LifeTechLimburg.
- LifeTecZone.
- Brabantse Ontwikkelingsmaatschappij.
- SYNTENS.

-



Kennistransfer



Valorisatie

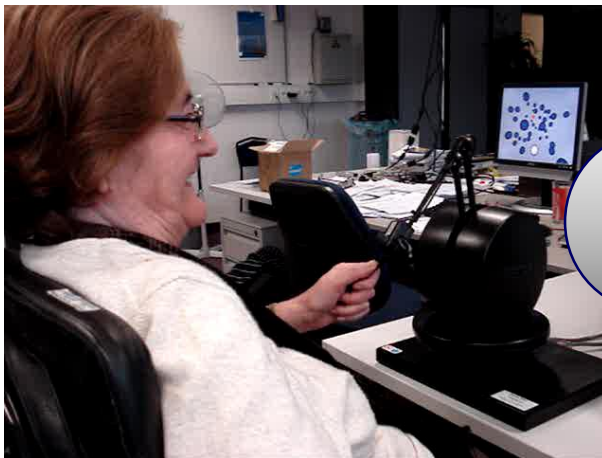
Projectdoelstellingen, INTERREG III

Kunnen robotica gebruikt worden bij de revalidatie van de bovenste ledematen van personen met een beperkte armfunctie?

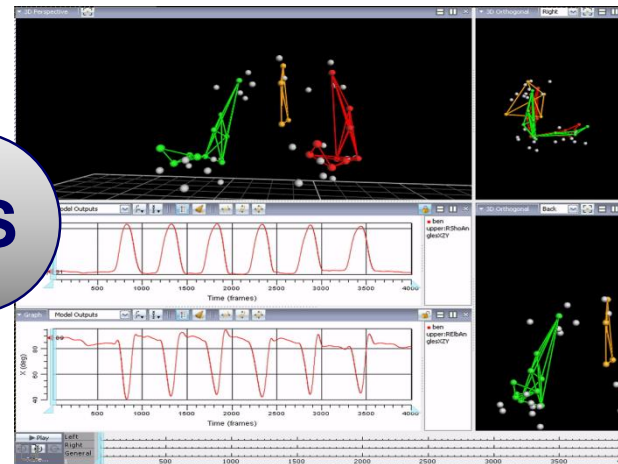
Revalidatierobotica

&

Bewegingsregistratie

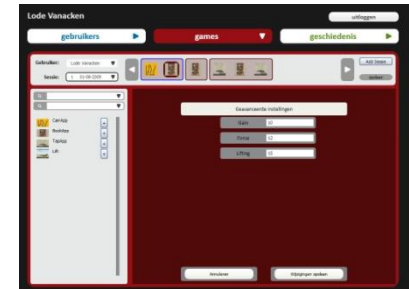
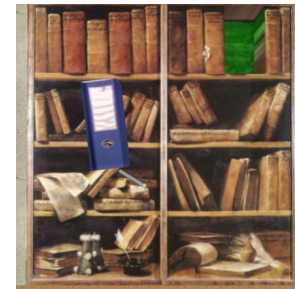
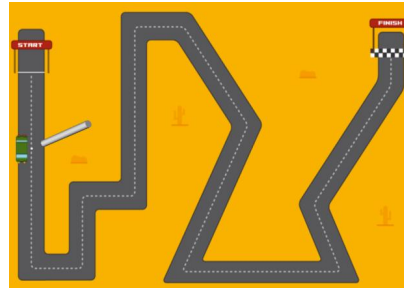
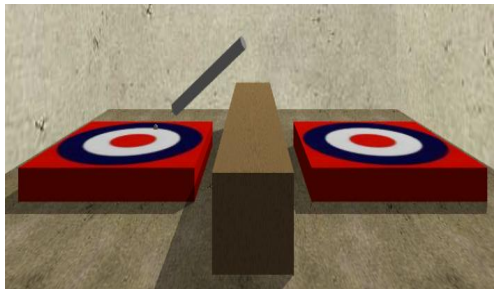


MS



Projectdoelstellingen, INTERREG III

1. Gebruik van robots & virtuele omgevingen bij armrevalidatie



Gebruik van robotica & virtuele leeromgevingen is mogelijk

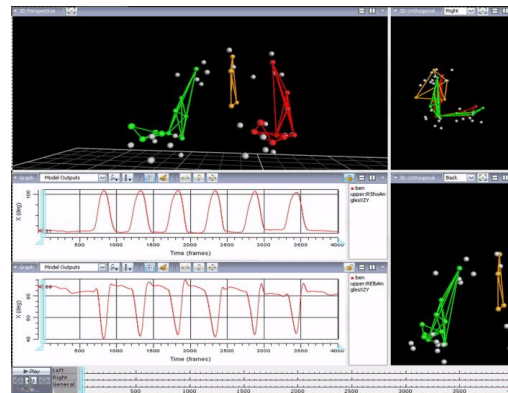
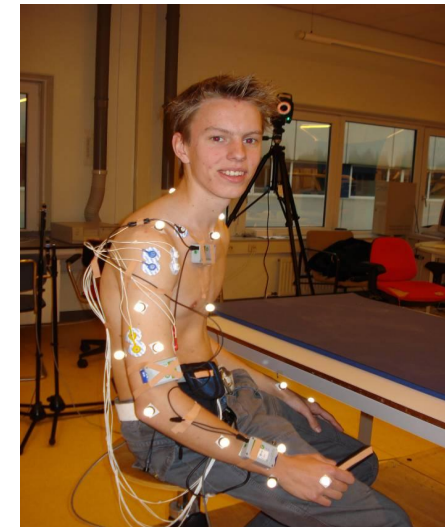
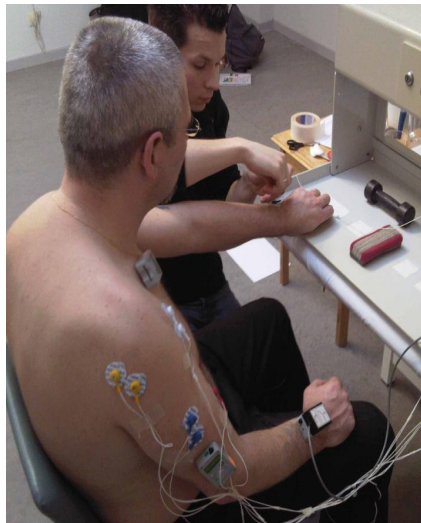
MS

Projectdoelstellingen, INTERREG III



2. Meten van de kwaliteit van armbewegingen →

Sensor Sleeve I (TRANSCEND)



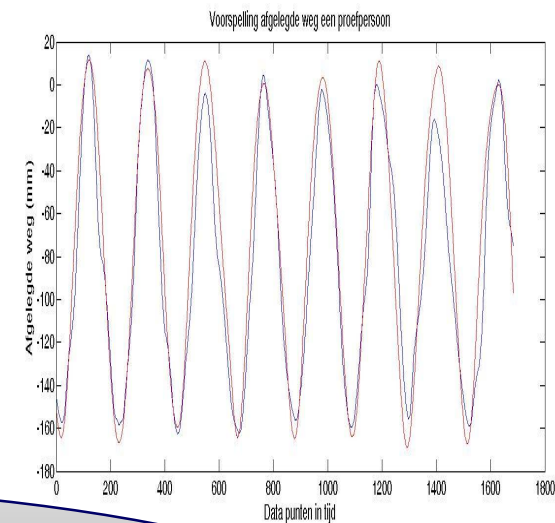
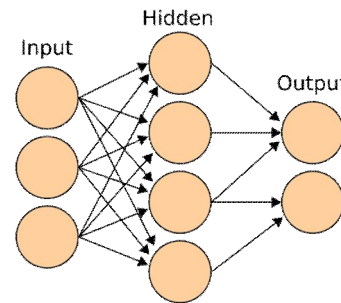
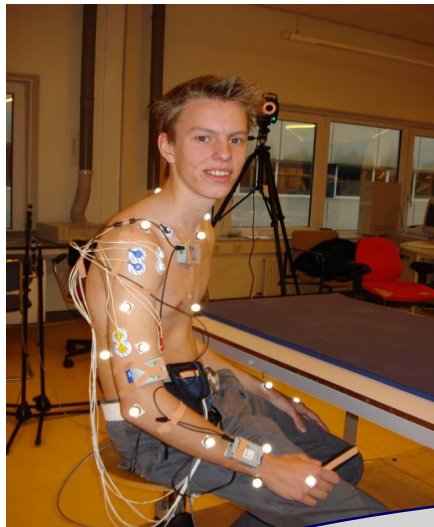
Kenneth Meijer & Emile Arnoldussen

Projectdoelstellingen, INTERREG III



2. Meten van de kwaliteit van armbewegingen →

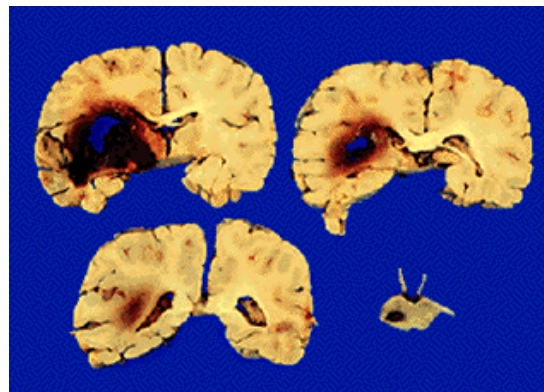
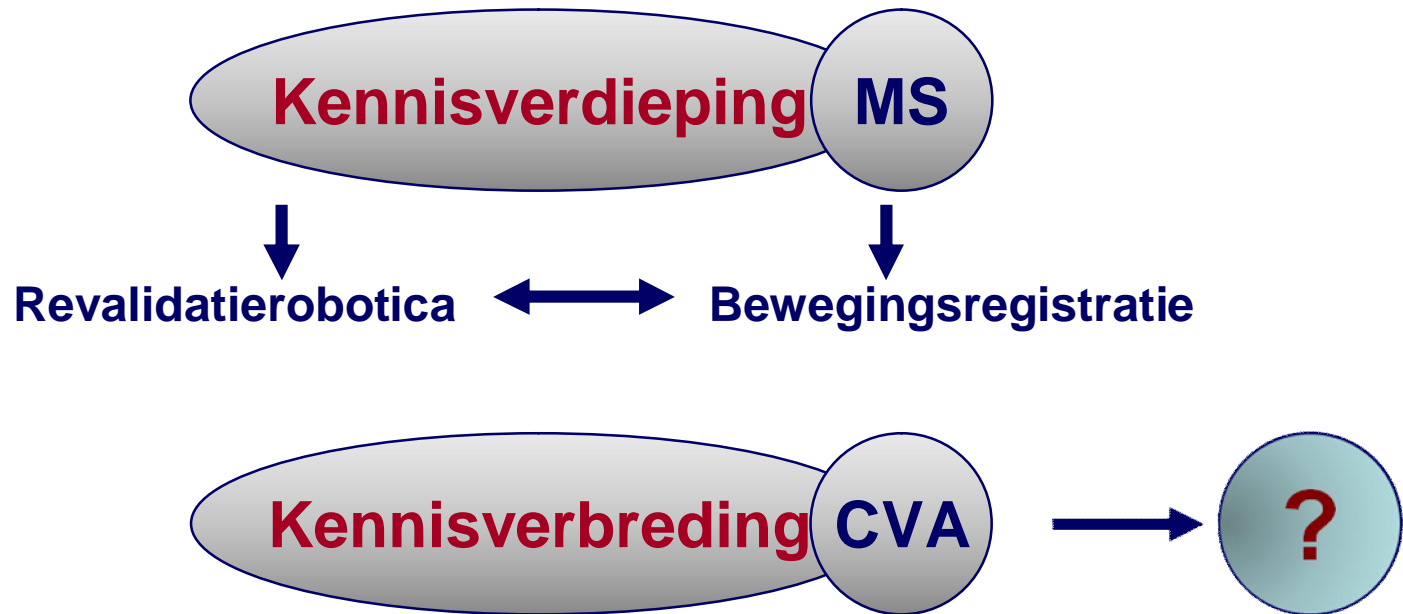
Sensor Sleeve I (TRANSCEND)



De kwaliteit van eenvoudige armbewegingen kan gemeten worden

MS

Projectdoelstellingen, INTERREG IV



Current status, INTERREG IV

1. Robotica → trying to increase proprioceptive feedback



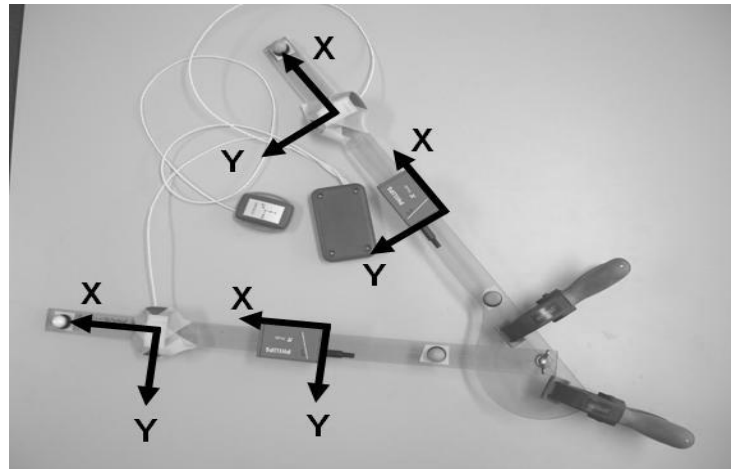
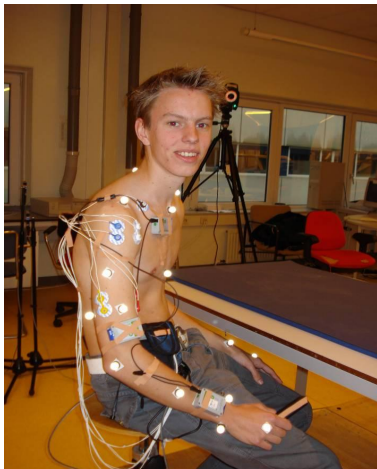
RCT

Current status, INTERREG IV



2. Bewegingsregistratie →

Sensor Sleeve II



Reconstructing of 3D kinematics with inertial measurement units

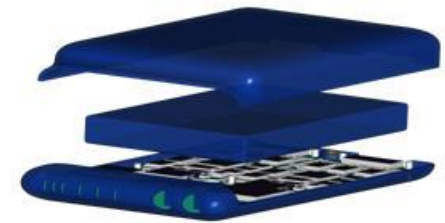
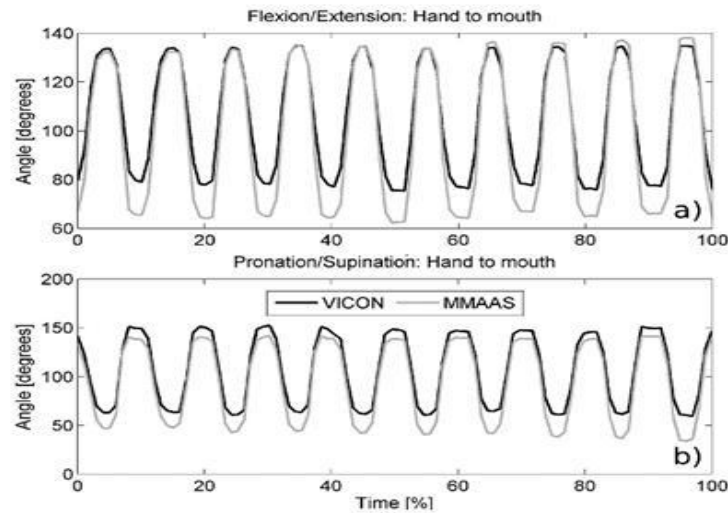


Current status, INTERREG IV



2. Bewegingsregistratie →

Sensor Sleeve II



Sensor calibration & VICON validation

KATHOLIEKE UNIVERSITEIT

RCT

Sensor Sleeve Light

Projectteam



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www.phl.be