

‘Herstel van mobiliteit in de revalidatie van personen met een dwarslaesie’

Een ZONmw-Revalidatie onderzoeksnetwerk

28e Minisymposium

23-10-2015

Beatrixoord, Haren



**university of
 groningen**



Marcel Post

Luc HV van der Woude

Sonja de Groot,

Marga Tepper, Ferry Woldring



UITNODIGING MINISYMPOSIUM 23 oktober 2015
UMCG, locatie Beatrixoord, Haren

28e minisymposium van het onderzoeksprogramma:

Herstel van mobiliteit in de revalidatie van personen met een dwarslaesie

12.00u-16.30u, UMCG, locatie Beatrixoord, Diltweg 5, Haren

Programma

12.00u – 12.30u Ontvangst

12.30u - 12.45u *Opening en voortgang programma*
- Luc van der Woude UMCG, RUG, Groningen

12.45u – 13.20u *Enhancing Community-Based Physical Activity Participation Among Adults with Spinal Cord Injury: The SCI Action Canada Story*
- Kathleen Martin Ginis, McMaster, Hamilton, Canada

13.20u – 14.00u *Revalidatie, Sport en Actieve leefstijl (Respect)*
- Femke Hoekstra en Rolinde Alingh, UMCG, RUG, Groningen

14.00u – 14.25u *Ervaren vermoeidheid, pijn en instabiliteit tijdens zitten bij personen met een dwarslaesie (ALLRISC data).*
- Linda Valent, Heliomare, Wijk aan Zee

14.25u – 14.45u Thee/Koffie

14.45u – 15.10u *Zingeving na een dwarslaesie*
- Elsbeth Littooi, Reade, Amsterdam

15.10u – 15.35u *Brain detection with NIRS in attempted foot movements in acute en chronic SCI*
- Noël Keijsers, St. Maartenskliniek, Nijmegen

15.35u – 16.00u *ZELF DOEN: opzet van een onderzoek naar zelfmanagement en eigen regie*
- Tijn van Diemen, St. Maartenskliniek, Nijmegen

16.00u – 16.30u Borrel

Organisatie: Luc van der Woude (BW, UMCG), Sonja de Groot (Reade / BW, UMCG), Marga Tepper, Ferry Woldring (Beatrixoord)

Informatie: Tel: 020-6071 699, Email: s.d.groot@reade.nl

Inschrijven: Voor 9 oktober 2015 via email naar Sonja de Groot (s.d.groot@reade.nl) (geen kosten)



Active Lifestyle Rehabilitation Interventions in aging Spinal Cord injury

Cross-sectional study:

Aftercare check-up

PhD project 1: Long-term secondary complications, fitness and active lifestyle



RCT: Self-Management

PhD project 2: Self-management of active lifestyle, fitness, and secondary complications

Intervention

Active Lifestyle

Secondary Complications

Age TSI

Physical Fitness

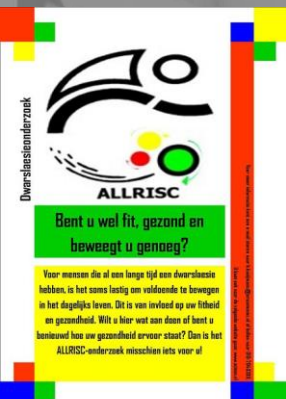
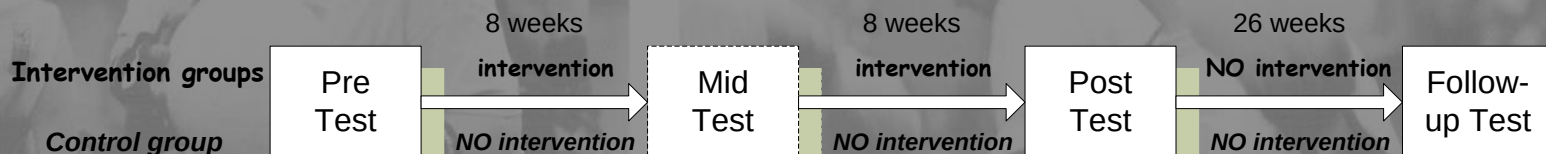
Intervention

RCT: Exercise (Form & Doses)

PhD project 3: Upper body overuse: effects of low-intensity hand rim wheelchair exercise
PhD project 4: Lower body disuse: effects of hybrid cycling

PhD project 5: Effects of overuse and mechanical loading

Formeel afgerond/-sloten!



‘Many Thanks to The A-team’

- Heliomare: Willemein Faber
- Beatrixoord: Marga Tepper
- Maartsenkliniek: Dirk v Kuppevelt
- Rijndam: Dorien Spijkerman
- Reade: Janneke Stolwijk
- De Hoogstraat: Floris van Asbeck
- Roessingh: Govert Snoek
- Adelante: Helma Bongers

- .Heliomare: Linda Valent
- .Beatrixoord: Ferry Woldring
- .Maartsenkliniek: Henny Rijken
- .Rijndam: Rogier Broeksteeg
- .Reade: Maurits Sloots
- .De Hoogstraat: ?
- .Roessingh: Marijke Schuitemaker
- .Adelante: Sandra Slangen

Marcel Post, Hans Bussmann, Thomas Janssen,
Sonja de Groot, Luc van der Woude

Jacinthe Adriaansen, Hedwig Kooimans, Jan vd
Scheer, Arjan Bakkum, Riemer Vegter

Hybrid cycling in spinal cord injury

Effects on fitness, physical activity and health



Arjan Ba

Low-intensity wheelchair
inactive p
long-term spinal c

Jan van der Scheer

Wheelchair Skill Acquisition



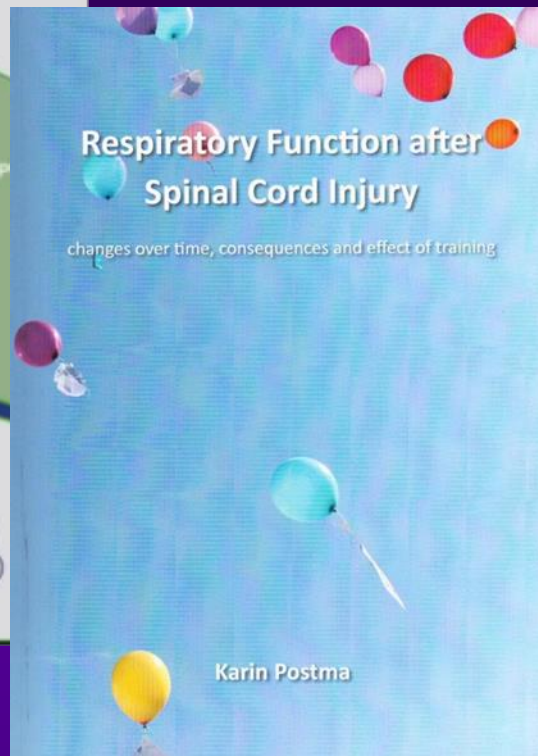
Motor learning effects of low-intensity handrim wheelchair p



Riemer JK Vegter

Respiratory Function after Spinal Cord Injury

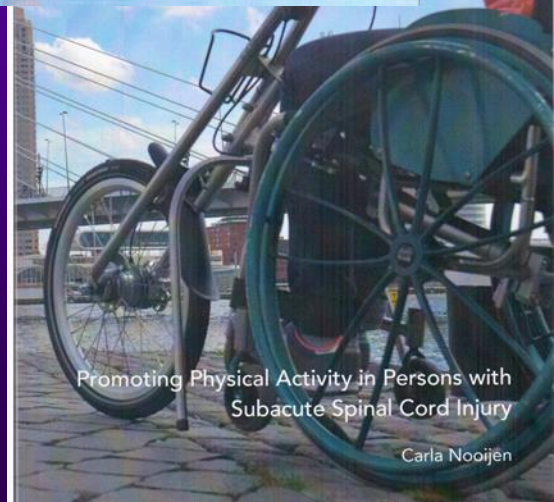
changes over time, consequences and effect of training



Karin Postma

Promoting Physical Activity in Persons with
Subacute Spinal Cord Injury

Carla Nooijen



www.scionn.nl



Promoting Physical Activity in Persons with Subacute Spinal Cord Injury
Carla

Low-intensity wheelchair training in inactive people with long-term spinal cord injury

Jan van der Scheer

Efficient of hand propulsion
Synchronous push strategy
John P. Lenton



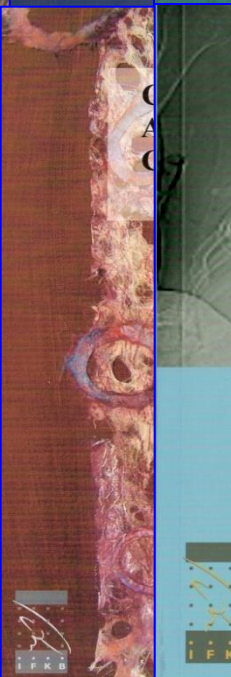
The Ergonomics of Wheelchair Use for Optimal Performance



Spinal Cord Injury - International Classification of Diseases



SPINAL CORD IN THE LUMBAR REGION

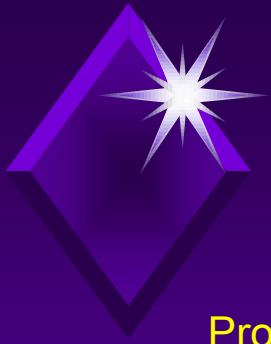


+?! SPASTIC ELEC IN THE LO



Manual of people





Tijdpad looptijd sinds 1998



1998-2015 : Research program 'Restoration of mobility in SCI'

Umbrella project: prospective-cohort study

5 academic & 8 rehab centres

Cardio-vascular Adaptation	Mechanical strain in arm & shoulder	Walking function	Co-ordination upper extremity	Patient involvem
Hand biking	Arm-Hand policy	Transmural nursing	Daily activities monitoring	Respiratory function
Cultural background	Physical capacity	Psycho-med asp	Arm-hand functionality	SCI Treatment
Hand cycling & overuse	Wheelchair skills	Osteo- porosis	Patient- monitoring	ALLRISC ALLRISC
Pain	Decubitus	Lokomat	ALLRISC	Perfect Basketball wheelchair
Powerassist	Implementatie	Wheel-I /Wheelers	ALLRISC	

Actuele ontwikkelingen

- ◆ ALLRISC:
 - ◆ ZonMw Implementatieproject
 - ◆ T7 Koepelproject: zorg & voorzieningen: under construction
 - ◆ Exoskelet Heliomare...

- ◆ Handbikebattle (Fondsen...?)
- ◆ Wheelers..... (Revalidatie Fondsen?)

Publicaties (zie www.scion.nl)

- van der Woude, L.H.V., de Groot, S., Postema, K., Buurman, J.B.J., Jansen, T.W.J., ALLRISC, Post, M.W.M. Active Lifestyle Rehabilitation Interventions in aging Spinal Cord Injury (ALLRISC): a multicenter research program. *Disability & Rehabilitation* 2013;35(13):1097-1103.
- Adriaansen JE, van Nieuwenhuijsen C, van der Woude LH, de Groot S, Post MW. Secondary health conditions in persons with a spinal cord injury for at least 10 years: design of a comprehensive long-term cross-sectional study. *Disability & Rehabilitation* 2013;35(13):1104-1110.
- Adriaansen JE, Post MW, de Groot S, van Nieuwenhuijsen C, van der Woude LH, de Groot S, Post MW. Secondary health conditions in persons with spinal cord injury: a longitudinal study from 1 year to 5 years post-discharge. *Journal of Rehabilitation Medicine* 2013; Accepted.
- Kucharski A, Post MW, van der Woude LH, de Groot S, Stan H, Buurman JB (2013). Randomized controlled trial of a self-management intervention in persons with spinal cord injury: design of the HARETS (Healthy Active Behavioural Intervention in SCI) study. *Disability & Rehabilitation* 2013;35(13):1111-1118.
- van der Scheer JW, de Groot S, Postema K, Vinger DH, van der Woude LH. Design of a randomized controlled trial on low intensity aerobic wheelchair exercise for inactive persons with chronic spinal cord injury. *Disability & Rehabilitation* 2013;35(13):1119-1126.
- van der Scheer JW, de Groot S, Vinger DH, Vinger DH, van der Woude LH (2014). Can a 15m-overground wheelchair sprint be used to assess wheelchair-specific anaerobic work capacity? *Medical Engineering & Physics* 2014; Accepted.
- Baikun AJF, de Groot S, van der Woude LH, Jansen TWJ. The effects of rapid cycle training in inactive people with long-term spinal cord injury: design of a multicentre randomized controlled trial. *Disability & Rehabilitation* 2013;35(13):1127-1132.
- Baikun AJF, Jansen TWJ, van der Woude LH, Jansen TWJ, de Groot S. A reliable method for measuring proximal tibio and distal femur bone mineral density using dual-energy X-ray absorptiometry. *Medical Engineering & Physics* 2013; Accepted.
- Baikun AJF, de Groot S, Oudevriel MG, de Jong J, Jansen TWJ. Metabolic rate and cardiorespiratory response during hybrid cycling versus handcycling at equal subjective exercise intensity levels in people with a spinal cord injury. *The Journal of Spinal Cord Medicine* 2013; Accepted.
- Baikun AJF, Paulsen TA, Bishop NC, Gossop-Torrey M, Sneljeh-Swaine JM, van Ruzewicz DJ, de Groot S, Jansen TWJ. Cardiovascular disease risk factors and 16 weeks of exercise in spinal cord injury. *Medicine & Science in Sports & Exercise* 2014; Submitted.

- ◆ Krachtig op weg(MP)?, Ervaringsdeskundigheid (MP)?

- ◆ UMCG: Ma-PhD, Marika Leving, motorisch leren hoepelrolstoelrijden

- ◆ FES ism Stoke Mandeville(TWJ)

- ◆ Promoties & publikaties veel

- ◆ Karin, Jan, Riemer, Carla
- ◆ Javinthe, Hedwig 2016, Christof, Matagne

- ◆ Oratie & installatie Prof dr M Post

- ◆ Notwill collaboration: shoulder functioning netwerk, Michel Bekker, Ursina Arnet, vacature postdoc



Boek: Crash, Niek vd Andel

5th International State-of-the-Art Congress

Groningen, The Netherlands, April 23-25, 2014

REHABILITATION: MOBILITY, EXERCISE & SPORTS



Rehabilitation: 'Mobility, Exercise & Sports' is the 5th edition of our International State-of-the-Art Congress. It builds on the strong and natural link between rehabilitation and human movement sciences. High standard thematic keynotes and free presentations are combined with posters and exhibition in a concise area and sociable atmosphere in the City of Talent!



PROCEEDINGS

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Disability and Rehabilitation

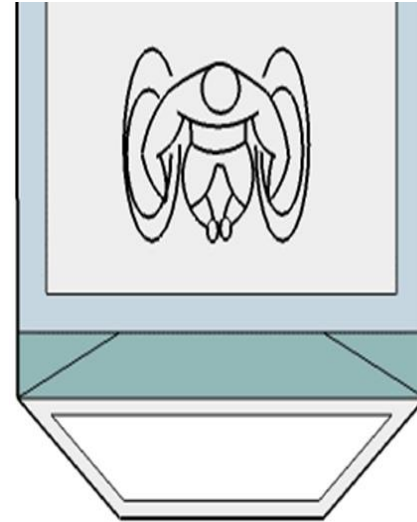
An international, multidisciplinary journal



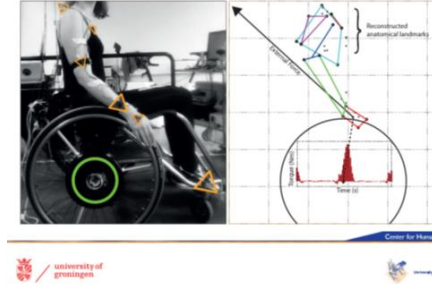
Official journal of the International Society
of Physical and Rehabilitation Medicine

informa
healthcare

www.rehabmove2014.com



Kinematics & Kinetics



Motor learning process in handrim wheelchair propulsion continued

Leving, M.T., Vegter, R.J.K, de Groot, S., van der Woude, L.H.V.

HandbikeBattle.nl



Uitvoer leverdatum logo's
team-sponsors
12 april 2014

Coloplast Trainingsdag - de
Posbank
18 april 2014

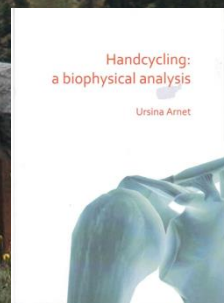
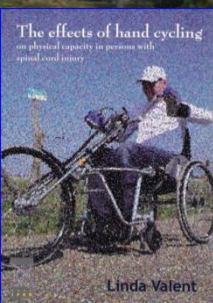
Sluiting inschrijving voor alle
deelnemers
15 juni 2014

Tweede inspanningstest -
Eigen beheer
26 juni 2014

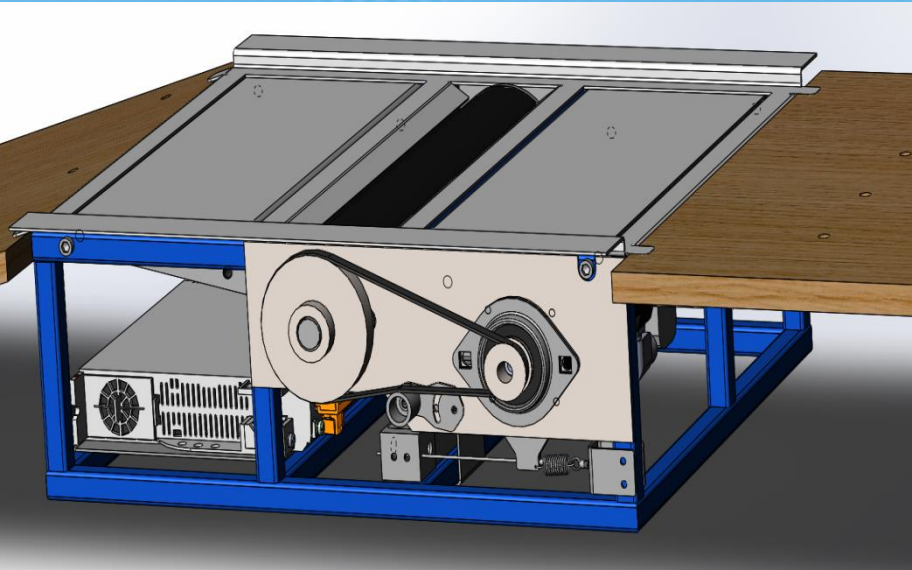


COLOPLAST.NL/OVERWINNEN

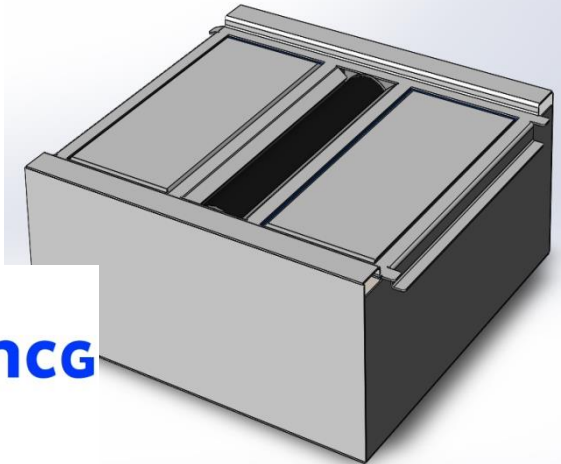
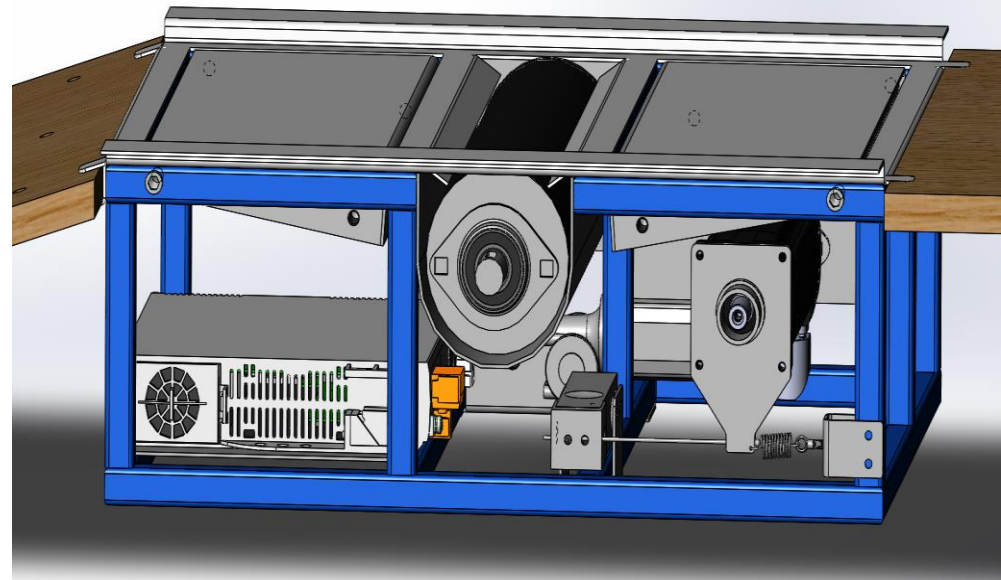
HandbikeBattle 2014 -
Kaunertaler Gletscherstraße



Prototype ergometer (& measurement wheel?)



- Minimale afstand tussen wielen: 130 mm.
- Maximale afstand tussen wielen: 938 mm.
- Hoogte bovenplaat: 186 mm.



umcg

Wde

THE STANDARD IN ERGOMETRY

23-10-2015, Beatrixoord, Haren



◆ 12.30-12.45u	Luc vd Woude	Opening
◆ 12.45-13.20u	Kathleen Martin Ginis	The SCI-Action Canada Story
◆ 13.20-14.00u	Femke Hoekstra	ReSpAct
◆ 14.00-14.25u	Linda Valent	Ervaren vermoeidheid, pijn & instabiliteit tijdens zitten
◆ 14.25-14.45u	Thee/koffie	
◆ 14.45-15.10u	Elsbeth Littooy	Zingeving na een dwarslaesie
◆ 15.10-15.35u	Noel Keijsers	Brain detection with NIRS
◆ 15.35-16.00u	Tijn van Diemen	ZELF DOEN
◆ 16.00-16.30u	Borrel	

◆ 29^e voorjaar 2016 Rijndam ??

◆ Zie: www.scionn.nl



Netwerk Herstel Mobiliteit bij Dwarslaesie



Bedankt

