# G.R.H. (Ruben) Regterschot, PhD

Postdoctoral Researcher in Rehabilitation & BioMechanics Department of Rehabilitation Medicine Erasmus Medical Center The Netherlands

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### **Appointments:**

- Postdoctoral Researcher, Department of Rehabilitation Medicine, Erasmus MC, Rotterdam, the Netherlands, 2017-present.
- Researcher, Department of Orthopaedics, University Medical Center Groningen, University of Groningen, Groningen, the Netherlands, 2016-2017.
- Research scientist, Personal Health Department, Philips Research Europe, Eindhoven, the Netherlands, 2015-2016.
- PhD candidate, Center for Human Movement Sciences, University Medical Center Groningen, University of Groningen, Groningen, the Netherlands, 2010-2015.

## **Education & training**

2015 Certificate from University of Groningen for completion of PhD training.

MSc. in Human Movement Sciences, University of Groningen, the Netherlands.

#### Scientific publications

#### PhD dissertation

Regterschot GRH. The power of standing up: Development and clinical evaluation of a sensor-based method for the estimation of power during sit-to-stand in older adults. Groningen: University of Groningen, 2015.

Research articles in peer-reviewed scientific journals

- 1. **Regterschot GRH**, Zhang W, Baldus H, Stevens M, Zijlstra W. Accuracy and concurrent validity of a sensor-based analysis of sit-to-stand movements in older adults. Gait Posture. 2016;45:198-203.
- 2. Douma KW, **Regterschot GRH**, Krijnen WP, Slager GE, van der Schans CP, Zijlstra W. Reliability of the Q Force; a mobile instrument for measuring isometric quadriceps muscle strength. BMC Sports Sci Med Rehabil. 2016;8:4.
- 3. **Regterschot GRH**, Morat T, Folkersma M, Zijlstra W. The application of strength and power related field tests in older adults: criteria, current status and a future perspective. Eur Rev Aging Phys Act. 2015;12:2.
- 4. Zhang W, **Regterschot GRH**, Geraedts H, Baldus H, Zijlstra W. Chair Rise Peak Power in Daily Life Measured with a Pendant Sensor Associates with Mobility,

- Limitation in Activities and Frailty in Old People. IEEE J Biomed Health Inform. 2015.
- 5. **Regterschot GRH**, Zhang W, Baldus H, Stevens M, Zijlstra W. Sensor-based monitoring of sit-to-stand performance is indicative of objective and self-reported aspects of functional status in older adults. Gait Posture. 2015;41(4):935-40.
- 6. Zhang W, **Regterschot GRH**, Wahle F, Geraedts H, Baldus H, Zijlstra W. Chair rise transfer detection and analysis using a pendant sensor: an algorithm for fall risk assessment in older people. Conf Proc IEEE Eng Med Biol Soc. 2014;2014:1830-4.
- 7. Fuermaier AB, Tucha L, Koerts J, van den Bos M, **Regterschot GRH**, Zeinstra EB, van Heuvelen MJ, van der Zee EA, Lange KW, Tucha O. Whole-body vibration improves cognitive functions of an adult with ADHD. Atten Defic Hyperact Disord. 2014;6(3):211-20.
- 8. **Regterschot GRH**, Van Heuvelen MJ, Zeinstra EB, Fuermaier AB, Tucha L, Koerts J, Tucha O, Van Der Zee EA. Whole body vibration improves cognition in healthy young adults. PLoS One. 2014;9(6):e100506.
- 9. Zhang W, **Regterschot GRH**, Schaabova H, Baldus H, Zijlstra W. Test-retest reliability of a pendant-worn sensor device in measuring chair rise performance in older persons. Sensors (Basel). 2014;14(5):8705-17.
- 10. **Regterschot GRH**, Zhang W, Baldus H, Stevens M, Zijlstra W. Test-retest reliability of sensor-based sit-to-stand measures in young and older adults. Gait Posture. 2014;40(1):220-4.
- 11. **Regterschot GRH**, Folkersma M, Zhang W, Baldus H, Stevens M, Zijlstra W. Sensitivity of sensor-based sit-to-stand peak power to the effects of training leg strength, leg power and balance in older adults. Gait Posture. 2014;39(1):303-7.