

## Curriculum Vitae

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### Ernst Markus

Dipl. Physiotherapeut FH, Msc, OMT svomp

### Ausbildungen und Diplome

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2002-2006 Master of Science in Physiotherapie, Niederlande  
1990-1992 Physiotherapie, Deutschland

### Berufliche Tätigkeiten

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Ab 2016 Medbase Archhöfe, Winterthur  
Ab 2009 Wissenschaftlicher Mitarbeiter, Forschung und Entwicklung ZHAW Winterthur  
1992-2009 Physiotherapeut in verschiedenen Praxen und Institutionen

### Interessegebiete

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Rücken-, Nacken und Kopfschmerzen, Schmerzrehabilitation, Manuelle Therapie, Rehabilitation nach Verletzungen und Operationen

### Sprachen

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- Deutsch
- Englisch
- Italienisch
- Niederländisch

### Publikationen

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#### Awards:

Januar 2016

Forschungspreis der Reha Rheinfelden

<http://www.reha-rheinfelden.ch/medizinisches-angebot/wissenschaft/forschungspreis/>

Juni 2008

Best Poster: National physiotherapy congress Switzerland

#### Publicationen:

1. Markus J **Ernst**, Rebecca J. Crawford, Sarah Schelldorfer, Anne-Kathrin Rausch-Osthoff, Marco Barbero, Jan Kool, Christoph M. Bauer: Extension and flexion in the

- upper cervical spine in neck pain patients. *Manual Therapy* 06/2015; 20:547-552.  
DOI:10.1016/j.math.2014.12.005
2. Sarah Schelldorfer, Markus Josef **Ernst**, Fabian Marcel Rast, Christoph Michael Bauer, André Meichtry, Jan Kool: Low back pain and postural control, effects of task difficulty on centre of pressure and spinal kinematics. *Gait & Posture* 09/2014; 41(1):112-118. DOI:10.1016/j.gaitpost.2014.09.004
  3. Markus J **Ernst**, Fabian M Rast, Christoph M Bauer, Valentine L Marcar, Jan Kool: Determination of thoracic and lumbar spinal processes by their percentage position between C7 and the PSIS level. *BMC Research Notes* 02/2013; 6(1):58.  
DOI:10.1186/1756-0500-6-58
  4. Christoph Michael Bauer, Martin Heimgartner, Fabian Marcel Rast, Markus Josef **Ernst**, Sarah Oetiker, Jan Kool: Reliability of lumbar movement dysfunction tests for chronic low back pain patients. *Manual Therapy* 03/2016; accepted.  
DOI:10.1016/j.math.2016.02.013
  5. R. Signer, V. Gafner, M. J. **Ernst**: Adhäsive Kapsulitis der Schulter: Manuelle Therapie oder Narkosemobilisation /Frozen shoulder: Manual therapy or manipulation under anesthesia [Article in German]. *Manuelle Medizin* 02/2016; 54(2):95-100.  
DOI:10.1007/s00337-016-0108-9
  6. Christoph Bauer, Fabian Rast, Markus **Ernst**, Sarah Oetiker, Andre Meichtry, Jan Kool, Saara Rissanen, Jaana Suni, Markku Kankaanpää: Pain intensity attenuates movement control of the lumbar spine in low back pain. *Journal of electromyography and kinesiology: official journal of the International Society of Electrophysiological Kinesiology* 10/2015; DOI:10.1016/j.jelekin.2015.10.004
  7. C.M. Bauer, F.M. Rast, M.J. **Ernst**, J. Kool, S. Oetiker, S.M. Rissanen, J.H. Suni, M. Kankaanpää: Concurrent validity and reliability of a novel wireless inertial measurement system to assess trunk movement. *Journal of Electromyography and Kinesiology* 06/2015; DOI:10.1016/j.jelekin.2015.06.001
  8. C.Bianchi, A. Meichtry, L.Tänzer, U.Ritter, M.J. **Ernst**: Is Manual Examination of Active Myofascial Trigger Points in Patients with Tension-Type Headache Reliable? Interrater Reliability Trial [Article in German]. *manuelletherapie* 02/2015; 19(01):31-37.  
DOI:10.1055/s-0035-1545386
  9. Anne-Kathrin Rausch Osthoff, Markus J **Ernst**, Fabian M Rast, Danica Mauz, Eveline S. Graf, Jan Kool, Christoph M Bauer: Measuring Lumbar Reposition Accuracy in Patients

With Unspecific Low Back Pain. Spine 01/2015; 40(2):E97-E111.  
DOI:10.1097/BRS.0000000000000677

10. A.S. Hügli, M.J **Ernst**, J.Kool, F.M.Rast, A.K. Rausch-Osthoff, A.Mannig, S.Oetiker, C.M. Bauer: Adherence to home exercises in non-specific low back pain. A randomised controlled pilot trial. Journal of Bodywork and Movement Therapies 01/2015; 19(1):177-85. DOI:10.1016/j.jbmt.2014.11.017
11. Markus Dietsche, Markus J. **Ernst**: Effectiveness of Selective Strengthening Exercise for the Wrist in Subacute and Chronic Tennis Elbow Systematic Review with Meta-Analysis [Article in German]. manuelletherapie 02/2014; 18(01):38-47.  
DOI:10.1055/s-0034-1368805
12. P. Wiedemeier, M.J. **Ernst**: Manual trigger point therapy and headache: A systematic review of the literature [Article in German]. Manuelle Medizin 10/2013; 51:374-380.  
DOI:10.1007/s00337-013-1058-0
13. Wolfgang Schallert, Markus J. **Ernst**: Reliability and Validity of the Upper limb neurodynamic test in symptomatic neck patients. Systematic review [Article in German]. manuelletherapie 02/2013; 17(01):27-38.
14. M. **Ernst**, S. Fink, A. Iseli, D. Watzek: Intertester reliability of the craniocervical flexion test [German]. manuelletherapie 01/2009; 13(4):147-151. DOI:10.1055/s-0028-1109721
15. M.J **Ernst**: Die lumbale Spinalkanalstenose-eine Herausforderung auch für Physiotherapeuten: Ein Review der Literatur. manuelletherapie 01/2003; 7:67-81.

*Conference Proceedings:*

1. C.M. Bauer, A.-K. Rausch-Osthoff, M.J. **Ernst**, F.M. Rast, D. Mauz, E.S. Grav, H. Luomajoki, J. Kool: Measuring lumbar reposition accuracy in patients with unspecific low back pain—systematic review and meta-analysis. Physiotherapy; 05/2015
1. C.M. Bauer, F.M. Rast, M.J. **Ernst**, J. Kool, H. Luomajoki, J. Suni, M. Kankaanpää: Validity and reliability of inertial measurement units when measuring lumbar range of motion, movement control, repetitive movement and reposition error. Physiotherapy; 05/2015
2. Markus J **Ernst**, Rebecca J Crawford, Sarah Schelldorfer, Anne-Kathrin Rausch-Osthoff, Marco Barbero, Jan Kool, Christoph M. Bauer: Measuring upper cervical

spine ROM in the sagittal plane, what's the benefit? SVOMP Symposium, Winterthur, Switzerland; 03/2015

3. Sarah Schelldorfer, Markus J **Ernst**, Fabian M Rast, Christoph M Bauer, André Meichtry, Jan Kool: Low Back Pain and Postural control, effects of task difficulty on COP and spinal kinematics. Swiss physiotherapy congress, Berne; 06/2014
4. C. Bauer, M. **Ernst**, F. Rast, S. Schelldorfer, A. Meichtry, J. Kool, J. Suni, M. Kankaanpaa: FRI0570-HPR Lumbar Repositioning is Influenced by Nonspecific Low Back Pain, Test Setup and Body Mass Index. Annals of the Rheumatic Diseases; 06/2014
5. Markus J **Ernst**, Christoph Bauer, Sarah Schelldorfer, Jan Kool: Effects of feet position and visual closure on postural control excursions in asymptomatic subjects.. Physiocongress, Genève; 05/2012
6. Bauer Christoph, Baumgartner Lukas, Schelldorfer Sarah, **Ernst** Markus J, Lawrence M: Technical Validation of a New Movement Therapy System for Treatment of Low Back Pain.. ESMAC Congress, Vienna; 09/2011
7. Markus J **Ernst**, D.Fässler, C.Hauser, M.H.H.Rocourt, A. Steinemann, M. Wüthrich: Post-operative rehabilitation after rotatorcuff-repair: a systematic review of the literature [in German]. Physiocongress, St. Gallen; 08/2008
8. Markus J **Ernst**, Jürg Bernhard, Jan Kool: Is the Loaded reach test valid in assessing functional limitation in neck pain patients? Master-Thesis Presentations, Zurich; 10/2006