

Stefan Schmid, PT, PhD

Curriculum Vitae

Personal Information:

ResearcherID: [E-8534-2010](#)
ORCID ID: [0000-0001-5138-9800](#)
Date of birth: November 08, 1979
Place of birth: Bern, Switzerland
Nationality: Swiss
Languages: German / Swiss-German, English, French
Personal interests: Skydiving

Contact Information:

Harvard Medical School, Department of Orthopedic Surgery
Beth Israel Deaconess Medical Center, Center for Advanced Orthopaedic Studies
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Education:

06/2012 – 06/2016 **ETH Zurich (CH)**
PhD in Biomechanics
01/2008 – 09/2009 **New York University (USA)**
MA in Pathokinesiology
08/2001 – 07/2005 **Feusi Physiotherapieschule Bern / Ausbildungszentrum Insel (CH)**
Diploma in Physiotherapy
08/1995 – 07/1999 **Lehrwerkstätten der Stadt Bern (CH)**
Certificate in Electronics Technology / Professional Maturity Certificate

Continuing Education / Certifications (selection):

09/16 – 06/17 **Bern University of Applied Sciences (CH)**
CAS in Higher Education Didactics and E-Learning
03/14 – 11/14 **University of Bern (CH)**
Clinical Investigators I and II: Basic and advanced GCP
09/10 **Istituto Ortopedico Rizzoli, Bologna (IT)**
ESMAC Gait Analysis Course
05/06 – 01/08 **Internationales Institut für Analytische Physiotherapie / Akademie zur Medizinischen Fort- und Weiterbildung, Bad Säckingen (DE)**
Post-Graduate Certification in Applied Biomechanics

Employment History:

08/18 –	Harvard Medical School & Beth Israel Deaconess Medical Center (USA) Research Fellow
01/17 – 07/18	Bern University of Applied Sciences (CH) Lecturer
03/10 – 12/16	Bern University of Applied Sciences (CH) Research Associate
06/09 – 02/10	Manhattan Physical Medicine & Rehabilitation, New York, NY (USA) Physical Therapist
08/05 – 12/07	Hirslanden Klinik Beau-Site, Bern (CH) Physical Therapist
03/03 – 07/05	Physiotherapie Steinbach, Medizinische Trainingstherapie, Belp (CH) Instructor / Supervisor (part-time)
06/00 – 06/01	Ascom AG, Bern (CH) Electronics Technologist

Institutional Appointments:

01/17 – 07/18	Leader, Specialization “Profession Development”, MSc in Physiotherapy program, Bern University of Applied Sciences (CH)
09/15 – 07/18	Leader, Specialization “General Physiotherapy”, MSc in Physiotherapy program, Bern University of Applied Sciences (CH)
08/05 – 12/07	Clinical Internship Supervisor, Hirslanden Klinik Beau-Site, Bern (CH)
06/00 – 06/01	Team Leader ATM Light Ring Component Test, Ascom AG, Bern (CH)

Awards and Scholarships:

2017	Early Postdoc.Mobility Fellowship, Swiss National Science Foundation (CH)
2009	Graduate scholarship, Swiss-American Society (CH)
2008	Graduate scholarship, Manuela-Geiger-Foundation (CH)

Memberships in Professional Societies:

2011 –	European Society of Biomechanics (#1266)
2011 –	European Society of Movement Analysis in Adults and Children (#00015)
2010 –	Swiss Physiotherapy Association (#116143)

Professional Service:

Reviewer for Scientific Peer-Reviewed Journals:

More information here: [Publons](#)

2018	Gait & Posture PLOS ONE European Journal of Pediatrics
2017	Gait & Posture Clinical Biomechanics Journal of Applied Biomechanics physioscience
2016	Gait & Posture PLOS ONE
2014	Journal of Biomechanics International Journal of Sports Medicine
2013	Medical Engineering & Physics Research in Developmental Disabilities Age (Official J. of the American Aging Association)

Grant Reviewer:

2017, 2018	Commission scientifique du domaine Santé, HES-SO, Switzerland
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Research Activities:

2019 –	Novel musculoskeletal models to assess spine segmental loads in adolescents with idiopathic scoliosis <i>Role: Co-Investigator</i> <i>Sponsor: NCSRR (CHF 25'000.-)</i>
2018 –	Using subject-specific musculoskeletal spine models to predict segmental loading and individual muscle forces during functional activities in adolescents with idiopathic scoliosis <i>Role: Principal Investigator</i> <i>Sponsor: SNSF (Grant-no.: P2EZP3_178427, CHF 79'880.-) Link</i>
2018 –	Low back pain: Unveiling the contribution of motor control adaption using biomechanical modeling and neuroimaging <i>Role: Project Partner (PI: Michael L. Meier, PhD)</i> <i>Sponsor: Currently unfunded (grant application submitted to SNSF)</i>
2018 –	Spine Biomechanics during Functional Activities in Patients with Chronic Low Back Pain: A Pilot Feasibility Study (DRKS00012538) <i>Role: Principal Investigator</i> <i>Sponsor: physioswiss (CHF 5'900.-)</i>
2013 – 2016	The Measurement of Spine Dynamics during Gait for the Quantification of Intervention Outcomes in Patients with different Pathologies (NCT01803256 , NCT01803243) <i>Role: Principal Investigator / Doctoral student (Supervisor: William R. Taylor, PhD; Co-Supervisors: Silvio Lorenzetti, PhD, Reinald Brunner, MD)</i> <i>Sponsors: BFH (Laufbahnmodell) / physioswiss (CHF 6'000.-)</i>

- 2010 – 2016 Influence of stochastic resonance therapy (SRT) on postural control, gait and strength performance capacity in patients suffering from stroke or traumatic brain injury
Role: Scientific Staff (PI: Lorenz Radlinger, PhD)
Sponsor: SNSF (Grant-no.: 13DPD6_127280, CHF 70'263.-) [Link](#)
- 2011 – 2014 Anwendung eines Smartphone-basierten Messinstrumentes zur Quantifizierung von Gangabweichungen
Role: Co-Principal Investigator (with Heiner Baur, PhD)
Sponsor: Unfunded
- 2010 – 2014 Benign Generalized Joint Hypermobility – active and passive muscle tone
Role: Scientific Staff (PI: Lorenz Radlinger, PhD)
Sponsor: SNSF (Grant-no.: 13DPD6_127285, CHF 101'964.-) [Link](#)
- 2010 – 2013 Development and validation of an Android®-based measurement tool for the quantification of the sit-to-stand movement
Role: Principal Investigator
Sponsor: Unfunded
- 2010 – 2012 Swiss Physiotherapy Research Priorities – How are they defined and what is expected?
Role: Co-Investigator (PI: Jan Kool, PT, PhD)
Sponsors: Various
- 2010 – 2011 Strength and patient care in elderly
Role: Co-Investigator (PI: Lorenz Radlinger, PhD)
Sponsor: BFH (Grant-no.: 10158VPT_WGS, CHF 85'625.-)
- 2009 Effect of Cryotherapy on the Electromyographic Output of Lower Extremity Muscles during a Plyometric Exercise in Normal Healthy Adults
Role: Master student (Supervisor: Marilyn Moffat, PT, DPT, PhD, DSc (hon))
Sponsor: Unfunded
- 2005 Variabilität der Bodenreaktionskräfte gesunder Personen beim Treppensteigen
Role: Diploma student (Supervisor: Lorenz Radlinger, PhD)
Sponsor: Unfunded

Teaching Experience:

Lectures, courses and seminars:

Undergraduate Level:

- 2013 – Lecturer, “Biomechanik” (in: Grundlagen Untersuchung, M0011), BSc in Physiotherapy Program, Bern University of Applied Sciences (CH), 50 students, 26h of teaching/year
- 2018 – Lecturer, “Einführung in biomechanische Methoden: Kinematik und Dynamik” (in: Bewegungswissenschaft, 41343-01), BSc in Sport, Bewegung und Gesundheit, University of Basel (CH), 40-50 students, 4h of teaching/year
- 2017 – 2018 Lecturer, “Bewegungsanalyse und Smartphone” (in: Leistungsaspekte der Trainingswissenschaft und technische Aspekte der Bewegungswissenschaft, 47087-01), BSc in Sport, Bewegung und Gesundheit, University of Basel (CH), 40-50 students, 2h of teaching/year
- 2018 Lecturer, “Biomechanik: Vertiefung Untere Extremität” (in: Muskuloskelettales System 1, M0022), BSc in Physiotherapy Program, Bern University of Applied Sciences (CH), 50 students, 6h of teaching/year

- 2018 Lecturer, "Biomechanik: Vertiefung Wirbelsäule" (in: Muskuloskelettales System 3, M0041), BSc in Physiotherapy Program, Bern University of Applied Sciences (CH), 50 students, 6h of teaching/year
- 2017 Lecturer, "Biomechanik: Vertiefung Obere Extremität" (in: Muskuloskelettales System 2, M0032), BSc in Physiotherapy Program, Bern University of Applied Sciences (CH), 50 students, 6h of teaching/year

Graduate Level:

- 2011 – 2018 Module Coordinator (until 2014 Co-Coordinator), "Transfer Module 1&2" (MGP0612&MGP0615), MSc in Physiotherapy Program, Bern University of Applied Sciences (CH)
- 2015 – 2018 Lecturer and Module Coordinator (in 2015 only Module Coordinator), "Anatomie und Biomechanik des Bewegungssystems" (MGP1101), MSc in Physiotherapy Program, Bern University of Applied Sciences (CH), 15 students, 8-9h of teaching/year
- 2015 – 2018 Module Coordinator, "Transfer Modul 3" (MPT0615), MSc in Physiotherapy Program, Bern University of Applied Sciences (CH)
- 2017 – 2018 Module Coordinator, "Business, Kommunikation und Marketing" (MGP1105), MSc in Physiotherapy Program, Bern University of Applied Sciences (CH)
- 2017 Lecturer, "Bewegungsanalyse und Smartphone" (in: Neue Technologien in der Physiotherapie, MGP1109), MSc in Physiotherapy Program, Bern University of Applied Sciences (CH), 15 students, 2h of teaching/year
- 2017 Lecturer and Module Coordinator, "APA-Biomechanik und Koordination" (17778-01), MSc in Sport Sciences Program, University of Basel (CH), 30-40 students, 8h of teaching
- 2017 Lecturer, "Der Ethikantrag" (in: Forschung und Ethik, MGP0450), MSc in Physiotherapy Program, Bern University of Applied Sciences (CH), 40 students, 4h of teaching/year
- 2016 Lecturer, "Gangabweichungen" (in: Physiotherapeutische Diagnose Neurologie, MGP1172), MSc in Physiotherapy Program, Bern University of Applied Sciences (CH), 15 students, 2h of teaching/year
- 2010 – 2011 Teaching Assistant, "Epidemiologie" (MGP0430), MSc in Physiotherapy Program, Bern University of Applied Sciences (CH), 25 students, 10h of teaching/year

Continuing Education:

- 2017 Guest Lecturer, "Bewegungsbiomechanik", MAS in Cranio Facial Kinetic Science, University of Basel (CH), 20 students, 4h of teaching
- 2016 Guest Lecturer, "Biomechanik der Wirbelsäule/Kompensationsmechanismen", MAS in Cranio Facial Kinetic Science, University of Basel (CH), 20 students, 2h of teaching
- 2015 Guest Lecturer, "Einführung in die Bewegungsanalyse der Wirbelsäule", MAS in Functional Kinetic Science, University of Basel (CH), 20 students, 1h of teaching

Extracurricular:

- 2013 – 2015 Lecturer, "Einführung in EndNote", Bern University of Applied Sciences (CH), 20-40 students, 3h of teaching/year
- 2014 Lecturer, "Grundlagen der Biomechanik und der Bewegungsanalyse" (Summer School – MSc in Physiotherapy Preparation Course), Bern University of Applied Sciences (CH), 10 students, 8h of teaching

2012 – 2013 Lecturer, “Einführung ins Bewegungslabor”, MSc in Physiotherapy Program, Bern University of Applied Sciences (CH), 5-10 students, 4-6h of teaching/year

Advisory and Supervisory Responsibility:

Undergraduate Theses:

3. Dino Causevic, BSc in Mechanical Engineering, 2014, ETH Zurich, “Testung und Weiterentwicklung einer Auswertungsroutine zur Quantifizierung der Wirbelsäulen-Kinematik „ (Advisor, thesis completed)
2. Dominique Koch and Cédric Aebischer, BSc in Physiotherapy, 2011, Bern University of Applied Sciences, “Akuter Einfluss von Stochastischer Resonanz Therapie auf die mechanische Leistung und Sprunghöhe“ (Supervisor, thesis completed)
1. Ursina Buchmüller and Yvonne Brühlhart, BSc in Physiotherapy, 2011, Bern University of Applied Sciences, “Der Heel-Rise Test: Standardisierung, Validität und Test-Retest-Reliabilität“ (Supervisor, thesis completed)

Graduate Theses:

11. Edwige Simonet, MSc in Physiotherapy, 2019, Bern University of Applied Sciences, “Spinal Motion Characteristics during Functional Activities in Patients with Non-Specific Chronic Low Back Pain: A Pilot Feasibility Study” (Supervisor, thesis ongoing)
10. Magdalena Suter, MSc in Physiotherapy, 2019, Zurich University of Applied Sciences, “Accuracy and Reliability of Spinal Curvature Angles measured with the Epionic SPINE System during Functional Activities” (Supervisor, thesis ongoing)
9. Jana Frangi, MSc in Physiotherapy, 2019, Zurich University of Applied Sciences, “Accuracy and Reliability of Lower Extremity Kinematics measured with the Myon Aktos-t System during Functional Activities” (Supervisor, thesis ongoing)
8. Christian Bangerter, MSc in Physiotherapy, 2018, Bern University of Applied Sciences, “The effect of leg length discrepancy on spinal kinematics during gait: A cross-sectional study” (Supervisor, thesis completed)
7. Fabiola Angelico, MSc in Physiotherapy, 2015, Zurich University of Applied Sciences, “Upper limb movements during gait in children with Leg Length Discrepancy – a kinematic analysis” (Supervisor, thesis completed)
6. Angela Ehrhardt, MSc in Physiotherapy, 2015, Bern University of Applied Sciences, “Vergleich der Reflexaktivität von normalbeweglichen und hypermobilen Frauen beim Treppensteigen” (Co-Supervisor, thesis completed)
5. Michael Niederer, MSc in Physiotherapy, 2014, Zurich University of Applied Sciences, “Effects of an induced extension restriction in the knee on secondary gait deviations in healthy young adults” (Co-Supervisor, thesis completed)
4. Martina Furrer, MSc in Physiotherapy, 2014, Bern University of Applied Sciences, “Validation of a smartphone-based measurement tool for the quantification of level walking” (Supervisor, thesis completed)
3. Björn Bruhin, MSc in Movement Sciences, 2013, ETH Zurich, “The Measurement of Spine Dynamics during Gait in Healthy Adolescents” (Advisor, thesis completed)
2. Adrien Cerrito, MSc in Physiotherapy, 2013, Bern University of Applied Sciences, “Development and validation of an Android®-based measurement tool for the quantification of the sit-to-stand movement” (Supervisor, thesis completed)

1. Matthias Stettler, MAS in Sports Physiotherapy, 2011, University of Salzburg, "Onset Latency des M. quadriceps femoris nach sagittaler Gleichgewichtsstörung bei Frauen mit und ohne Hypermobilität" (Advisor, thesis completed)

Research Assistants / Interns:

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| 10/17 – 12/17 | Jana Frangi, MSc in Physiotherapy student, Zurich University of Applied Sciences, 10 week scientific internship (supervisor) |
| 10/17 – 12/17 | Magdalena Suter, MSc in Physiotherapy student, Zurich University of Applied Sciences, 10 week scientific internship (supervisor) |
| 10/17 – 12/17 | Edwige Simonet, MSc in Physiotherapy student, Bern University of Applied Sciences, 10 week scientific internship (supervisor) |
| 10/16 – 12/16 | Christian Bangerter, MSc in Physiotherapy student, Bern University of Applied Sciences, 10 week scientific internship (supervisor) |
| 07/15 – 09/15 | Samar Almubarak, BS in Mechanical Engineering student, Northeastern University (USA), 9 week research assistantship at ETH Zurich (co-supervisor) |
| 10/14 – 11/14 | Yael Brudsche, MSc in Physiotherapy student, Bern University of Applied Sciences, 5 week scientific internship (supervisor) |
| 10/13 – 12/13 | Yvonne Brühlhart, MSc in Physiotherapy student, Bern University of Applied Sciences, 10 week scientific internship (supervisor) |
| 11/12 – 02/13 | Martina Furrer, MSc in Physiotherapy student, Bern University of Applied Sciences, 10 week scientific internship (supervisor) |
| 11/11 – 02/12 | Adrien Cerrito, MSc in Physiotherapy student, Bern University of Applied Sciences, 10 week scientific internship (supervisor) |
| 11/11 – 02/12 | Helene Moser, MSc in Physiotherapy student, Bern University of Applied Sciences, 10 week scientific internship (supervisor) |

Congress Presentations, Invited Talks and Media Appearances:

Congress Presentations (Presenter):

16. **Schmid S**, Bruhin B, Ignasiak D, Romkes J, Taylor WR, Brunner R, Ferguson SJ, Lorenzetti S. Age-related Differences in Spinal Motion during Gait. *Poster Presentation. World Confederation for Physical Therapy Congress 2017, Cape Town, South Africa.*
15. **Schmid S**, Angelico F, Freslier M, Brunner R, Romkes J. Is Upper Limb Motion influenced by a Structural Leg Length Discrepancy in Adolescents during Gait? *Poster Presentation. World Confederation for Physical Therapy Congress 2017, Cape Town, South Africa.*
14. **Schmid S**, Romkes J, Taylor WR, Lorenzetti S & Brunner R. Spinal Deviations in Hemiplegic Cerebral Palsy Gait: Secondary Effect of Disturbed Leg Function? *Oral Presentation. European Society of Biomechanics Congress 2016, Lyon, France.*
13. **Schmid S**, Romkes J, Taylor WR, Lorenzetti S, Brunner R. Are Spinal Gait Deviations related to Ankle Function in Spastic Hemiplegic Cerebral Palsy? *Poster Presentation. Swiss National Physiotherapy Congress 2016, Basel, Switzerland.*
12. **Schmid S**, Studer D, Hasler C-C, Romkes J, Taylor WR, Brunner R, Lorenzetti S. Non-invasive Assessment of Spinal Kinematics during Gait in Patients with Adolescent Idiopathic Scoliosis. *Oral Presentation. World Confederation for Physical Therapy Congress 2015, Singapore, Singapore.*

11. **Schmid S**, Lorenzetti S, Hasler C-C, Romkes J, Taylor WR, Brunner R. Radiographic Evaluation of an Enhanced Trunk Marker Set in Patients with Adolescent Idiopathic Scoliosis. *Oral Presentation. 1st Clinical Movement Analysis World Conference 2014, Rome, Italy.*
10. **Schmid S**, Furrer M, Bichsel L, Niederer M, Baur H. Quantifying Level Walking using Smartphones: A Validation Study. *Poster Presentation. 1st Clinical Movement Analysis World Conference 2014, Rome, Italy.*
9. **Schmid S**, Bruhin B, Romkes J, Hasler C-C, Brunner R, Lorenzetti S. Evaluation of an Enhanced Markerset for the Measurement of Trunk Kinematics in Adolescents. *Oral Presentation. 13th International Symposium on 3D Analysis of Human Movement 2014, Lausanne, Switzerland.*
8. **Schmid S**, Luder G, Mueller Mebes C, Stettler M, Stutz U, Ziswiler H-R, Radlinger L. Neuromechanische Gangadaptationen bei Frauen mit Gelenkshypermobilität. *Poster Presentation. Swiss National Physiotherapy Congress 2014, Bern, Switzerland.*
7. **Schmid S**, Cerrito A, Bichsel L, Radlinger L. Using Smartphones to measure Chair Rising in the Elderly: a Validation Study. *Oral Presentation. 22nd Annual Meeting of the European Society for Movement Analysis in Adults and Children 2013, Glasgow, Scotland.*
6. **Schmid S**, Luder G, Mueller Mebes C, Stettler M, Stutz U, Ziswiler H-R, Radlinger L. Gait Neuromechanics in Women with and without Joint Hypermobility. *Oral Presentation. 22nd Annual Meeting of the European Society for Movement Analysis in Adults and Children 2013, Glasgow, Scotland.*
5. **Schmid S**, Armand S, Pataky Z, Golay A, Martin J, Allet L. Effect of obesity on chair rise performance and its underlying muscular functions. *Oral Presentation. European Society of Biomechanics Congress 2012, Lisbon, Portugal.*
4. **Schmid S**, Moffat M, Gutierrez G. Neuromuskuläre, biomechanische und leistungsbezogene Effekte der Kniegelenkskühlung während eines einbeinigen Sprungs (Drop-Jump). *Poster Presentation. Swiss National Physiotherapy Congress 2012, Geneva, Switzerland. [Poster in German]*
3. Stettler M, **Schmid S**, Luder G, Mebes C, Stutz U, Radlinger L. Onset Latency of the Quadriceps Muscle following Sagittal Perturbation in Women with and without Hypermobility. *Poster Presentation. SNSF Interactiv Symposium on Research in Applied Health & Life Sciences 2011, Bern, Switzerland.*
2. **Schmid S**, Moffat M, Gutierrez G. Effect of Knee Joint Cooling on the Electromyographic Activity of Lower Extremity Muscles during a Plyometric Exercise. *Poster Presentation. World Confederation of Physical Therapy Congress 2011, Amsterdam, Netherlands.*
1. **Schmid S**, Hilfiker R, Leitner M, Rogan S, Radlinger L. Reliability and Validity of Performance Measurements using Trunk Accelerometry during a Standardized Heel-Rise Test in Young and Elderly Subjects. *Poster Discussion Session (oral and poster presentation). World Confederation of Physical Therapy Congress 2011, Amsterdam, Netherlands.*

Invited Talks:

3. **Schmid S**. Gangstörungen: Direkte Folge der Pathologie oder (nur) Kompensation? Jubiläumsanlass „Physiowelten“, Bern University of Applied Sciences (CH), April 26, 2016.
2. **Schmid S**. Quantifizierung der Wirbelsäulen-Bewegungen beim Gehen. Colloque Santé, Bern University of Applied Sciences (CH), November 25, 2014.
1. **Schmid S**. The Measurement of Spine Dynamics during Gait. Biomechanics Seminar, Clinical Morphology & Biomedical Engineering, University of Basel (CH), June 17, 2013.

Media Appearances:

1. SRF, Swiss Public Television, February 20, 2012: Puls " Hypermobilität - Wenn Beweglichkeit zur Qual wird". [Link](#)

Bibliography:

Citation Metrics (21.12.2018):

ResearcherID: Sum of times cited: 143, h-index: 8
Google Scholar: Sum of times cited: 296, h-index: 10

Refereed Journal Publications (peer reviewed):

Also available here: [PubMed](#), [ResearcherID](#), [ORCID](#) and [Google Scholar Citations](#)

31. Bangerter C, Romkes J, Lorenzetti S, Krieg A, Hasler CC, Brunner R, **Schmid S***. What are the biomechanical consequences of a structural leg length discrepancy on the adolescent spine during walking? *Gait & Posture*. 2019;68:506-513. [Link](#)
30. **Schmid S***, Stauffer M, Jäger J, List R, Lorenzetti S. Sling-based infant carrying affects lumbar and thoracic spine neuromechanics during standing and walking. *Gait & Posture*. 2019;67:172-180. [Link](#)
29. Gafner S*, Hoevel V, Punt I, **Schmid S**, Armand S, Allet L. Hip-abductor fatigue influences sagittal plane ankle kinematics and shank muscle activity during a single-leg forward jump. *Journal of Electromyography and Kinesiology*. 2018;43:75-81. [Link](#)
28. Sotelo M, Eichelberger P, Furrer M, Baur H, **Schmid S***. Walking with an induced unilateral knee extension restriction affects lower but not upper body biomechanics in healthy adults. *Gait & Posture*. 2018;65: 182-189. [Link](#)
27. Herren K, **Schmid S**, Rogan S*, Radlinger L. Effects of stochastic resonance whole body vibration in individuals with unilateral brain lesion: a single-blind randomized controlled trial. *Rehabilitation Research and Practices*. 2018. Article ID 9319258. [Link](#)
26. Mueller Mebes C*, Luder G, **Schmid S**, Stettler M, Stutz U, Radlinger L. Symptoms in daily life and activity level of women with and without hypermobility. *Rheumatology: Current Research*. 2018;8:241. [Link](#)
25. **Schmid S***, Bruhin B, Ignasiak D, Romkes J, Taylor WR, Ferguson SJ, Brunner R, Lorenzetti S. Spinal Kinematics during Gait in Healthy Individuals across Different Age Groups. *Human Movement Science*. 2017;54:73-81. [Link](#)
24. Baaklini E, Angst M, Schellenberg F, **Schmid S**, Tal A, Taylor WR, Lorenzetti S*. High-heeled walking decreases lumbar lordosis. *Gait & Posture*. 2017;55:12-14. [Link](#)
23. Angelico F, Freslier M, Romkes J, Brunner R, **Schmid S***. Upper Extremity Motion during Gait in Adolescents with Structural Leg Length Discrepancy – an Exploratory Study. *Gait & Posture*. 2017;53:115-120. [Link](#)
22. **Schmid S***, Romkes J, Taylor WR, Lorenzetti S, Brunner R. Orthotic Correction of Lower Limb Function during Gait does not immediately influence Spinal Kinematics in Spastic Hemiplegic Cerebral Palsy. *Gait & Posture*. 2016;49:457-62. [Link](#)
21. Mueller Mebes C*, Luder G, **Schmid S**, Stettler M, Stutz U, Ziswiler HR, Radlinger L. Aspects of Isometric Contractions and Static Balance in Women with Symptomatic and Asymptomatic Joint Hypermobility. *International Journal of Physical Medicine & Rehabilitation*. 2016;4:347. [Link](#)

20. Stettler M*, Luder G, **Schmid S**, Mueller Mebes C, Stutz U, Ziswiler H-R, Radlinger L. Passive Anterior Tibial Translation in Women with and without Joint Hypermobility - an Exploratory Study. *International Journal of Rheumatic Diseases*. 2016. In Press. [Link](#)
19. **Schmid S***, Studer D, Hasler C-C, Romkes J, Taylor WR, Lorenzetti S, Brunner R. Quantifying Spinal Gait Kinematics using an Enhanced Optical Motion Capture Approach in Adolescent Idiopathic Scoliosis. *Gait & Posture*. 2016;44:231-7. [Link](#)
18. **Schmid S***, Studer D, Hasler C-C, Romkes J, Taylor WR, Brunner R, Lorenzetti S. Using Skin Markers for Spinal Curvature Quantification in Main Thoracic Adolescent Idiopathic Scoliosis: An Explorative Radiographic Study. *PLoS ONE*. 2015;10(8):e0135689. [Link](#)
17. Furrer M, Bichsel L, Niederer M, Baur H, **Schmid S***. Validation of a smartphone-based measurement tool for the quantification of level walking. *Gait & Posture*. 2015;42(3):289-94. [Link](#)
16. Nast I*, Tal A, **Schmid S**, Schoeb-Mezzanotte V, Rau B, Barbero M, Kool J. Physiotherapy Research Priorities in Switzerland: Views of the Various Stakeholders. *Physiotherapy Research International*. 2015; 21:137-146. [Link](#)
15. Luder G*, **Schmid S**, Stettler M, Mueller Mebes C, Stutz U, Ziswiler H-R, Radlinger L. Stair climbing - An insight and comparison between women with and without joint hypermobility: a descriptive study. *Journal of Electromyography and Kinesiology*. 2015;25(1):161-167. [Link](#)
14. Cerrito A, Bichsel L, Radlinger L, **Schmid S***. Reliability and validity of a smartphone-based application for the quantification of the sit-to-stand movement in healthy seniors. *Gait & Posture*. 2015;41(2):409-13. [Link](#)
13. Schoeb V*, Rau B, Nast I, **Schmid S**, Barbero M, Tal A, Kool J. How do patients, politicians, physiotherapists and other health professionals view physiotherapy research? A qualitative study. *Physiotherapy Research International*. 2014;19(2):79-92. [Link](#)
12. **Schmid S***, Luder G, Mueller Mebes C, Stettler M, Stutz U, Ziswiler H-R, Radlinger L. Neuromechanical Gait Adaptations in Women with Joint Hypermobility – an Exploratory Study. *Clinical Biomechanics*. 2013;28:1020-1025. [Link](#)
11. **Schmid S**, Armand S, Pataky Z, Golay A, Allet L*. The Effect of Body Mass Index on Chair Rise Performance. *Journal of Applied Biomechanics*. 2013;29:705-711. [Link](#)
10. Tal-Akabi A*, **Schmid S**, Taeymans J. Determinants of inpatient rehabilitation length of stay and discharge modality following hip or knee replacement surgery in Switzerland - a retrospective observational study. *Swiss Medical Weekly*. 2013;143:w13832. [Link](#)
9. **Schmid S***, Schweizer K, Romkes J, Lorenzetti S, Brunner R. Secondary Gait Deviations in Patients with and without Neurological Involvement: A Systematic Review. *Gait & Posture*. 2013;37(4): 480-493. [Link](#)
8. **Schmid S***, Moffat M, Gutierrez G. Effects of Cooling on Ground Reaction Forces, Knee Kinematics and Jump Height in Drop Jumps. *Athletic Training & Sports Health Care*. 2013;5(1):29-37. [Link](#)
7. Rogan S*, Hilfiker R, **Schmid S**, Radlinger L. Stochastic resonance whole-body vibration for chair rising performance on untrained elderly: a pilot study. *Archives of Gerontology and Geriatrics*. 2012;55(2):468-473. [Link](#)
6. Rogan S*, Radlinger L, **Schmid S**, Herren K, Hilfiker R, de Bruin E.D. Skilling up for training: a feasibility study investigating acute effects of stochastic resonance whole-body vibration on postural control of older adults. *Ageing Research*. 2012;3(1):e5. [Link](#)
5. Taeymans J*, **Schmid S**, Hilfiker R. Understanding Systematic Reviews and Meta-Analyses in a Physiotherapeutic Context. *Physioscience*. 2011;7:168-174. [Article in German] [Link](#)
4. Leitner M*, **Schmid S**, Hilfiker R, Radlinger L. Reliability of Vertical Ground Reaction Forces during Stair Climbing in the Elderly Population. *Gait & Posture*. 2011;34(3):421-425. [Link](#)

3. **Schmid S***, Hilfiker R, Radlinger L. Reliability and Validity of Trunk Accelerometry derived Performance Measurements in a Standardized Heel-Rise Test in Elderly Subjects. *Journal of Rehabilitation Research and Development*. 2011;48(9):1137-1144. [Link](#)
2. **Schmid S***, Moffat M, Gutierrez G. Effect of Knee Joint Cooling on the Electromyographic Activity of Lower Extremity Muscles during a Plyometric Exercise. *Journal of Electromyography and Kinesiology*. 2010;20(6):1075-81. [Link](#)
1. Luder G*, Baumann T, Jost C, **Schmid S**, Radlinger L. Variability of Ground Reaction Forces in Healthy Subjects during Stair Climbing. *Physioscience*. 2007;3:181-187. [Article in German] [Link](#)

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