

Prof. Dr. Marc Dalecki

Wissenschaftliche Projekte

<p>“Impact of cannabidiol supplementation on sleep, metabolic, and cognitive-motor function - A randomized double-blind pilot study”, Foy Health Inc. grant, \$ 4.930, PI Dr. Guillaume Spielmann. Role: Co-Investigator</p>
<p>“Assessing functional ability following mild brain insult using cognitive-motor integration”, Canadian Institutes of Health Research (CIHR) grant, April 2013 - March 2018, CAD \$ 472.549, PI Dr. Lauren E. Sergio. Role: Collaborator</p>
<p>Equipment funding proposal “Influence of behavioural context on human sensorimotor coordination” (PI Dr. Otmar Bock), € 96.000 proposed within the project “Embodied cognition”, PI Dr. Markus Raab and Dr. Rouwen Cañal-Bruland, € 176.600 proposed, funded by the German Research Foundation (DFG). Role: Co-Investigator</p>
<p>“The operation of control devices during parabolic flights: Influence of weightlessness, stress and motivation”. € 246.427, PI Dr. Otmar Bock, funded by the German Aerospace Centre (DLR), grant 50WB1224. Role: Collaborator, Person in charge</p>
<p>„Psychomotor performance in simulated weightlessness by water immersion“, € 142.000 proposed. Grant written under supervision of PI Dr. Uwe Hoffmann and Co-Investigator Dr. Otmar Bock. Implemented as partial project within “Determination of endurance capacity by gas exchange and heart rate kinetics during physical training“, € 426000, funded by the German Aerospace Center (DLR), grant 50WB0726. PhD student grant. Role: Collaborator, Person in charge</p>
<p>“Operation of control sticks in high-Gz: comparison of pilots and inexperienced subjects”. € 350.000, PI Dr. Otmar Bock, funded by the Federal Ministry of Defense, Germany, grant M/SAB1/6/A007, Rolle: Collaborator</p>
<p>“iMOV: Improving mobility in hospitalized patients to enhance balance, cognition and inflammation”. PI Dr. Phillip Page, CO-I: Dr. Klumpp, Dr. Guillaume Spielmann. Launchpad: Innovation Pilot Awards, Baton Rouge Health-Tech Catalyst & Health District, submitted March 2023, \$ 30.000 proposed. Role: Co-Investigator</p>
<p>“Coupling tDCS and physical exercise to improve brain plasticity and performance: An optimized countermeasure for future exploration-class missions”. PI Dr. Fabian Steinberg, CO-I: Dr. Guillaume Spielmann, Dr. Brian Marx. 2020-NASA-HERO-Appendix-B-Proposal Step-II, Submitted November 2020, \$ 149.166 proposed. Role: Co-Investigator</p>
<p>“Combined Aerobic and Resistance Exercise to improve T-cell metabolism and Cognitive-Motor function in Older Adults with Type 2 Diabetes - CARE Trial”, Co-PI Dr. Guillaume Spielmann, Co-I Dr Brian Irving. National Institute of Health (NIH) R21 grant, \$ 419.002 proposed. Role: Co-Principal Investigator</p>
<p>“Do sub-concussive impacts matter? The effects of head impacts on brain function in college football players over the course of a season”. Banting Postdoctoral Fellowship Grant application from Dr. Johanna Hurtubise, funded by the Canadian Institutes of Health Research (CIHR) and the National Science and Engineering Research Council (NSERC), Canada, \$ 114.000 proposed. Role: Supervisor</p>
<p>“Do sub-concussive impacts matter? The effects of head impacts on brain function in college football players over the course of a season”. CIHR Postdoctoral Fellowship Grant application from Dr. Johanna Hurtubise, funded by the Canadian Institutes of Health Research (CIHR), Canada, \$ 110.000 proposed. Role: Supervisor</p>

Wissenschaftlicher Lebenslauf

<p>“Assessing cognitive-motor integration and brain activity in children with a history of concussion: Relation between performance deficits and functional network changes”, CIHR, \$ 75.000 proposed. Role: Principal Investigator</p>	
<p>“Performing with a wounded brain: Assessing functional ability following concussion using cognitive-motor integration”, CIHR/NSERC, \$ 114.000 proposed. Role: Principal Investigator</p>	
<p>“Performing with a wounded brain: Assessing the short- and long-term functional ability of young adults following concussion using cognitive-motor integration”, CIHR, \$ 75.000 proposed. Role: Principal Investigator</p>	

Gesamtliste wissenschaftlicher Publikationen

1) Bücher/Buchkapitel

Beurskens R, Dalecki M. Physical activity: Effect of exercise on neurological function. In: Watson, RR (Edit.). Physical activity and the aging brain: Effect of exercise on neurological function. Academic Press Elsevier, 1. Edition 2017, Chapter 18, 185-198, ISBN 978-0-12-805094-1. DOI: <https://doi.org/10.1016/b978-0-12-805094-1.00018-6>.

Dalecki M, Dräger T, Hoffmann U. Chapter 2 Allgemeine Hinweise zur Übungsauswahl und Gestaltung. In: Hoffmann U (Edit). Sporttauchen lernen. Richtig üben und trainieren. Edition Naglschmid, Delius Klasing Verlag, 1. Edition 2013, ISBN 978-3-7688-3580-0.

Dalecki M, Hoffmann U. Chapter 3 Tauchausbildung mit ABC Ausrüstung. In: Hoffmann U (Edit). Sporttauchen lernen. Richtig üben und trainieren. Edition Naglschmid, Delius Klasing Verlag, 1. Edition 2013, ISBN 978-3-7688-3580-0.

Dalecki M, Hoffmann U. Chapter 4 Lernziel Tauchen mit DTG Ausrüstung. In: Hoffmann U (Edit). Sporttauchen lernen. Richtig üben und trainieren. Edition Naglschmid, Delius Klasing Verlag, 1. Edition 2013, ISBN 978-3-7688-3580-0

2) Aufsätze in Fachzeitschriften (mit Peer Review)

Wang, Z., Johannsen, N., Spielmann, G., Greenway, F., Irving, B., & Dalecki, M (2023). Boost your brain: A simple 100% normobaric oxygen treatment improves human motor learning processes. *Frontiers in Neuroscience*, 17, 1175649.

Phillips B, Adkins J, Jones B, Dalecki M (2022). Prolonged eye-hand decoupling deficits in young adults with a history of concussion from high school. *European Journal of Sport Science*, DOI: 10.1080/17461391.2022.2085186.

Veillon-Bradshaw M, Phillips B, Jones BD, Dalecki M (2022). Eye-hand decoupling deficits in young adults with concussion history from adolescence: issues with task novelty or task demand? *Neuroscience letters*, 781, 136668.

Dalecki M, Steinberg F, Beurskens R (2021). Rapid dual-task decrements after a brief period of manual tracking in simulated weightlessness by water submersion. *Human Factors*, 00187208211051804.

Wissenschaftlicher Lebenslauf

Caffey A, Dalecki M (2021). Evidence of Residual Cognitive Deficits in Young Adults with a Concussion History from Adolescence. *Brain Research*, 1768(10): 147570.

Yeomans M, Phillips B, Dalecki M, Hondzinski JM (2021). Eye Movements Influence on Coupled and Decoupled Eye-Hand Coordination Tasks. *Experimental Brain Research*, 239(8): 2477-2488.

Yeomans M, Yan, S, Hondzinski JM, Dalecki M (2021). Eye-hand decoupling decreases visually guided reaching independently of posture but reduces sway while standing: Evidence for supra-postural control. *Neuroscience Letters*, 752(5): 135833.

Jones B, Van Gemmert A, Dalecki M (2020). Does hand-dominance matter in non-standard visuomotor transformations? *Journal of Motor Behavior*, 53(5): 622-631.

Dalecki M, Usand J, Van Gemmert A, Sergio LE (2020). Eye-hand decoupling deficits in youth with concussion history: novelty adaptation or task demand problem? *International Journal of Sport Medicine*, 41(10): 688-695.

Möller F, Hoffmann U, Dalecki M, Dräger T, Doppelmayr M, & Steinberg F (2019). Physical Exercise Intensity During Submersion Selectively Affects Executive Functions. *Human Factors*, 63(2): 227-239.

Dalecki M, Gorbet D, Macpherson A, Sergio LE (2019). Sport experience improves complex motor skill recovery in children and adolescents following concussion. *European Journal of Sport Science*, 19(9): 1257-1266.

Dalecki M, Gorbet D, Sergio LE (2019). Development of rule-based eye-hand-decoupling in children and adolescents. *Child Neuropsychology*, 25(8): 1098-1115.

Van Wijngaarden A, Dalecki M, Hawkins K, Sergio LE (2018). Concussion history and Alzheimer's disease risk affect cognitive-motor integration in distinct ways. *Jacobs Journal of Neurology and Neuroscience*, 5(1): 038.

Dalecki M, Kalicinski M, Steinberg F, Bock O (2017). Age-related operator deficits in a realistic instrument-control task: Assessing possible motor, cognitive and mental causes. *International Journal of Industrial Ergonomics*, 59(5): 100-107.

Kalicinski M, Steinberg F, Dalecki M, Bock O (2016). Gaze behavior while operating a complex instrument-control task. *Aerospace Medicine and Human Performance*, 87(6): 1-6.

Dalecki M, Albines D, Macpherson A, Sergio LE. (2016). Prolonged cognitive-motor impairments in children and adolescents with a history of concussion. *Concussion*, 1(3): CNC14.

Brown J, Dalecki M, Hughes C, Macpherson AK, Sergio LE (2015). Cognitive-motor integration deficits in young adult athletes following concussion. *BMC Sports Science, Medicine and Rehabilitation* 7(1): 1-12.

Steinberg F, Kalicinski M, Dalecki M, Bock O (2015). Human performance in a realistic instrument-control task during short-term microgravity. *PLoS ONE* 10(6): e0128992.

Bock O, Dalecki M (2015). Mental rotation of letters, hands and complex scenes during whole-body tilt: Role of a body-centered versus a gravitational reference frame. *Human Movement Science* 40: 352-358.

Dalecki M, Bock O (2014). Isometric force exaggeration in simulated weightlessness by water immersion: role of visual feedback. *Aerospace Medicine and Human Performance* 85(6): 605-611.

Wissenschaftlicher Lebenslauf

Schneider S, Cheung J, Frick H, Krehan S, Micke S, Sauer M, Dalecki M, Dern S (2014). When neuroscience gets wet and hardcore: neurocognitive markers obtained during whole body water immersion. *Experimental Brain Research* 232: 3325-3331.

Thomas M, Dalecki M, Abeln V (2013). EEG coherence during mental rotation of letters, hands and scenes. *International Journal of Psychophysiology* 89(1): 128-135.

Dalecki M, Bock O, Hoffmann U (2013). Inverse relationship between task complexity and performance deficit in 5 m water immersion. *Experimental Brain Research* 227: 243-248.

Dalecki M, Bock O (2013). Changed joint position sense and muscular activity in simulated weightlessness by water immersion. *Aerospace Medicine and Human Performance* 84(2): 110-115.

Dalecki M, Dern S, Steinberg F (2013). Mental rotation of a letter, hand and complex scene in microgravity. *Neuroscience Letters* 533: 55-59.

Dalecki M, Bock O, Schulze B (2012). Cognitive impairment during 5 m water immersion. *Journal of Applied Physiology* 113: 1075-1081.

Dalecki M, Dräger T, Mierau A, Bock O (2012). Production of finely graded forces in humans: Effects of simulated weightlessness by water immersion. *Experimental Brain Research* 218: 41-47.

Dalecki M, Hoffmann U, Bock O (2012). Mental rotation of letters, body parts and complex scenes: Separate or common mechanisms? *Human Movement Science* 31: 1151-1160.

Steinberg F, Dräger T, Steegmanns A, Dalecki M, Röschmann M, Hoffmann U (2011). fit2dive - A field test for assessing the specific capability of underwater fin swimming with SCUBA. *International Journal of Performance Analysis in Sport* 11: 197-208.

Dalecki M, Bock O, Guardiera S (2010). Simulated flight path control of fighter pilots and novice subjects at +3 Gz in a human centrifuge. *Aerospace Medicine and Human Performance* 81(5): 484-488.

Guardiera S, Dalecki M, Bock O (2010). Stability of simulated flight path control at +3 Gz on a human centrifuge. *Aerospace Medicine and Human Performance* 81(4): 394-398.

Dalecki M, Bock O, Guardiera S (2009). Visual field motion effects on the production of manual forces and displacements. *Aerospace Medicine and Human Performance* 80: 790-795.

Steinberg F, Steegmanns A, Dräger T, Dalecki M, Röschmann M, Hoffmann U (2009). Erste Ergebnisse des tauchspezifischen Leistungstests "fit2dive". *Caisson* 24(2): 15-19.

3) Abstract publications

Yeomans M, Steinberg F, Spielmann G, Hondzinski J, Dalecki M (2021). Electrocortical Activity and Postural Control During Eye-Hand Coupling and Decoupling Tasks in Aerobically Fit Versus Sedentary Individuals. *Journal of Sport & Exercise Psychology*, 43:52-52.

Wissenschaftlicher Lebenslauf

Phillips, B, Jones B, Dalecki M (2020). Does time matter? Cognitive-motor integration deficits in college students with a history of concussion from high school. *Journal of Sport & Exercise Psychology*, 42:52-52.

Yeomans M, Yan S, Hondzinski J, Dalecki M (2020). Eye-hand coordination and postural control vary according to changes in cognitive-motor load. *Journal of Sport & Exercise Psychology*, 42:63-63.

Arata W, Phillips, B, Jones B, Adkins J, Dalecki M (2019). Prolonged Eye-Hand Coordination Deficits in Young Adult non-Athletes with a History of Concussion. *Journal of Sport & Exercise Psychology*, 41:25-25.

Yeomans M, Phillips B, Hondzinski J, Dalecki M (2019). Fixations Improved Temporal Movement Characteristics During Eye-Hand Coordination Tasks. *Journal of Sport & Exercise Psychology*, 41:53-53.

Dalecki, M., Usand, J., Sergio, L., & Van Gemmert, A. (2018). Are cognitive-motor integration deficits in children with concussion history linked to motor learning deficits? *Journal of Sport & Exercise Psychology*, 40:48-48.

Cutone M, Dalecki M, Goel J, Wilcox L, Allison R (2018). A Statistical Paradigm for Assessment of Subjective Image Quality Results. *SID Symposium Digest of Technical Papers*, 49(1):1312-1314.

Sergio, LE, Dalecki, M, Hurtubise, J, Brown, J, Gorbet, D, Hughes, C, & Macpherson, A (2017). Measuring cognitive-motor integration to detect prolonged performance declines post-concussion. *British Journal of Sports Medicine*, 51(11): A41.

3) Aufsätze in anderen Publikationsorganen (z. B. Fachzeitschriften ohne Peer Review, Sammelbände)

Dalecki M, Hoffmann U, Steinberg F (2014). Tauchtraining Teil 4: Apnoefähigkeit in kritischen Situationen. *Divemaster* 82: 39-42.

Dalecki M, Hoffmann U, Steinberg F (2014). Tauchtraining Teil 3: Stresstraining als beste Prävention. *Divemaster* 81: 17-20.

Dalecki M, Hoffmann U, Steinberg F (2014). Tauchtraining Teil 2: Orientierung im Raum. *Divemaster* 80: 25-26.

Dalecki M, Hoffmann U, Steinberg F (2014). Tauchtraining Teil 1: Geschicklichkeit. *Divemaster* 79: 17-18.

4) Konferenzbeiträge

Archarya P, Webb M, Yeomans MA, Dalecki M. A sex-related difference of cognitive functions among college soccer players with and without concussion history during soccer season: pre vs post. Accepted for presentation at the Society for Neuroscience (SfN) Meeting in Washington D.C. (US), November 2023.

Rodrigue J, Wang Z, Spielmann G, Irving BA, Greenway F, Dalecki M. Does a brief and simple 100% oxygen treatment improve sustained attention levels?. Accepted for presentation at the Society for Neuroscience (SfN) Meeting in Washington D.C. (US), November 2023.

Wang Z, Spielmann G, Johannsen N, Greenway F, Dalecki M. A simple 100% oxygen treatment improves motor sequence learning processes. Presented at the Society for Neuroscience (SfN) Meeting in San Diego (US), November 2022, #7010.

Wissenschaftlicher Lebenslauf

Burger K, Dautle T, Pryse E, Aubanel M, Dalecki M, Kuznetsov N. Does a single session of occlusion training improve visual-perceptual skills during an interceptive task in virtual reality? Presented at the Society for Neuroscience (SfN) Meeting in San Diego (US), November 2022, #4402.

Archarya P, Argianas G, Philpott E, Gray H, Geirnaeirt T, Dalecki M. Sex-related differences of cognitive functions in college's soccer players with and without concussion history: A pilot study. Presented at the Society for Neuroscience (SfN) Meeting in San Diego (US), November 2022, #7899.

Wang Z, Spielmann G, Johannsen N, Greenway F, Dalecki M. Boost your brain? 100% oxygen supply improves motor learning processes during a visuomotor adaptation task. Poster presentation at the Society for Neuroscience (SfN) Meeting (Virtual), November 2021, abstract #1048.

Burger K, Aubanel M, Kuznetsov N, Dalecki M. Catch me if you can: Task occlusion effects on football catching skills performed in a virtual reality environment. Poster presentation at the Society for Neuroscience (SfN) Meeting (Virtual), November 2021, abstract #3723.

Entezami S, Dalecki M, Smeha N, Brown J, Cavaliere A, Hurtubise J, Macpherson A, Sergio L. The effect of multiple concussions on rule-based and basic visuomotor performance in humans. Poster presentation at the Society for Neuroscience (SfN) Meeting (Virtual), November 2021, abstract #4371.

Yeomans M, Steinberg F, Spielmann G, Hondzinski J, Dalecki M. Electrocortical activity and postural control during eye-hand coupling and decoupling tasks in aerobically fit versus sedentary individuals. Talk presented at the North American Society for the Psychology of Sport and Physical Activity (NASPSPA) Virtual Conference, June 2021.

Dalecki M, Veillon-Bradshaw M. Does time matter? Quick performance changes during a short series of trials in a cognitive-motor integration task. Poster presented at the Annual Meeting of the Neural Control of Movement, April 2021.

O'Neil M, Phillips B, Jones B, Dalecki M. Prolonged eye-hand decoupling deficits in young adults with concussion history from adolescence: issues with task novelty or ongoing task demand? Poster presented at the Society for Neuroscience (SfN) Global Connectome Virtual Conference, January 2021.

Phillips B, Jones B, Dalecki M. Does time matter? Cognitive-motor integration deficits in college students with a history of concussion from high school. Poster presented at the North American Society for the Psychology of Sport and Physical Activity (NASPSPA) Virtual Conference, June 2020.

Yeomans M, Yan S, Hondzinski J, Dalecki M. Eye-hand coordination and postural control vary according to changes in cognitive-motor load. Poster presented at the North American Society for the Psychology of Sport and Physical Activity (NASPSPA) Virtual Conference, June 2020.

Jones B, Van Gemmert A, Dalecki M. Does direction matter during eye-hand decoupled visuomotor tasks with the dominant and non-dominant hand? Poster presented at the Annual Biomedical Research Conference for Minority Students (ABRCMS), November 2019, Anaheim, CA (U.S.).

Caffey A, Dalecki M. Prolonged cognitive deficits in young adults with a history of a concussion. Poster presented at Society for Neuroscience (SfN) Meeting, October 2019, Chicago (U.S.).

Wissenschaftlicher Lebenslauf

Yeomans M, Phillips B, Hondzinski J, Dalecki M. Fixations improved temporal movement characteristics during eye-hand coordination tasks. Poster presented at the North American Society for the Psychology of Sport and Physical Activity (NASPSPA) Conference, June 2019, Baltimore (U.S.).

Arata W, Phillips B, Jones B, Adkins J, Dalecki M. Prolonged eye-hand coordination deficits in young adult non-athletes with a history of concussion. Poster presented at the North American Society for the Psychology of Sport and Physical Activity (NASPSPA) Conference, June 2019, Baltimore (U.S.).

Jones B, Van Gemmert A, Dalecki M. Does rule-based visuomotor performance differ between the dominant and non-dominant hand? Poster presented at the Annual Biomedical Research Conference for Minority Students (ABRCMS), November 2018, Indianapolis (U.S.).

Dalecki M, Adkins C, Stokes C. Eye-hand coordination deficits in individuals with diabetes during a cognitive-motor integration task. Poster presented at the Society for Neuroscience (SfN) Meeting, November 2018, San Diego (U.S.).

Jones B, Van Gemmert A, Dalecki M. Rule-based visuomotor transformations differ between the dominant and non-dominant hand. Poster presented at the Society for Neuroscience (SfN) Meeting, November 2018, San Diego (U.S.).

Dalecki M, Usand J, Sergio, L, Van Gemmert A. Are cognitive-motor integration deficits in children with concussion history linked to motor learning deficits? Poster presented at the North American Society for the Psychology of Sport and Physical Activity (NASPSPA) Conference, June 2018, Denver (U.S.).

Cutone M, Dalecki M, Goel J, Wilcox L, Allison R. A statistical paradigm for assessment of subjective image quality results. Poster presented at the Society for Information Display Symposium, May 2018, Los Angeles (U.S.).

Dalecki M, Gorbet D, Sergio LE. Don't watch where you're going: Cognitive-motor integration development in children and adolescents. Poster presented at the Society for Neuroscience (SfN) Meeting, November 2017, Washington D.C. (U.S.).

Usand J, Van Gemmert A, Dalecki M. Does short-term adaptation alter cognitive motor deficit levels in children with a history of concussion? Poster presented at the Annual Biomedical Research Conference for Minority Students (ABRCMS), November 2017, Phoenix (U.S.).

Jones B, Van Gemmert A, Dalecki M. Does cognitive-motor integration performance differ between the hands? Poster presented at the Annual Biomedical Research Conference for Minority Students (ABRCMS), November 2017, Phoenix (U.S.).

Dalecki M, Gorbet D, Macpherson A, Sergio LE. Factors affecting cognitive-motor integration impairment and recovery post-concussion. Poster presented at the Society for Neuroscience (SfN) Meeting, November 2016, San Diego (U.S.).

Sergio LE, Dalecki M, Hurtubise J, Brown, J, Gorbet D, Hughes C, Macpherson A. Measuring cognitive-motor integration to detect prolonged performance declines post-concussion. Poster presented at the 5th International Consensus Conference on Concussion in Sport, October 2016, Berlin (Germany).

Dalecki M, Macpherson A, Sergio LE. Prolonged cognitive-motor integration deficits in children with a concussion history. Poster presented at the Traumatic Brain Injury Conference, January 2016, Toronto (Canada).

Wissenschaftlicher Lebenslauf

Dalecki M, Albines D, Macpherson A, Sergio LE. Children show cognitive-motor integration deficits nearly two years after concussion. Poster presented at Society for Neuroscience (SfN) Meeting, October 2015, Chicago (U.S.).

Van Wijngaarden A, Dalecki M, Hawkins K, Sergio LE. Comparison of cognitive motor integration deficits of children with concussion history and elderly with Alzheimer's disease risk. Poster presented at Society for Neuroscience (SfN) Meeting, October 2015, Chicago (U.S.).

Dalecki M, Sergio LE. Prolonged cognitive-motor impairments in children with a history of concussion. Poster presented at the Satellite symposium "Vision and Movement Order and Disorder – from Bench to Bedside", 9th Annual Canadian Neuroscience Meeting, 24th May 2015, Vancouver (Canada).

Dalecki M, Sergio LE. Prolonged cognitive-motor impairments in children with a history of concussion. Poster presented at the "9th Annual Canadian Neuroscience Meeting", May 2015, Vancouver (Canada).

Kalicinski M, Dalecki M, Steinberg F, Bock O. Age-related differences in a realistic process-control task. Poster presented at the "Third International Conference on Aging and Cognition", April 2015, Dortmund (Germany)

Dalecki M, Steinberg F, Kalicinski M, Bock O. The operation of control devices in old age: A new approach to assess motor and cognitive performance during realistic working scenarios. Poster presented at Society for Neuroscience (SfN) Meeting, November 2014, Washington D.C. (U.S.)

Steinberg F, Dalecki M, Kalicinski M, Bock O. Human operator characteristics in microgravity: Influence of stress, mood and motivation in a realistic working scenario. Poster presented at "Neuroscience" SfN Meeting, November 2014, Washington (U.S.)

Kalicinski M, Steinberg F, Dalecki M, Bock O. Human operator characteristics in a realistic working scenario in microgravity. Poster presented at the "6th International Congress of Medicine in Space and Extreme environments", September 2014, Berlin (Germany)

Dern S, Steinberg, F, Dalecki M. Influence of microgravity on egocentric and allocentric mental rotation. Poster presented at the "19th IAA Humans in Space Symposium", July 2013, Cologne (Germany)

Dalecki M, Bock O, Hoffmann U. Fine motor control and cognitive performance under water in comparable depths and body postures of astronaut training. Poster presented at the "19th IAA Humans in Space Symposium", July 2013, Cologne (Germany)

Dalecki M, Bock O, Hoffmann U. Mental rotation and executive control: Influence of simulated weightlessness by water immersion. Poster presented at Society for Neuroscience (SfN) Meeting, October 2012, New Orleans (U.S.)

Dalecki M, Hoffmann U, Bock O. Common and distinct mechanisms for mental rotation of external objects, body parts and complex scenes? Poster presented at "Neurovisionen", October 2011, Essen (Germany)

Dalecki M, Hoffmann U, Bock O: Human fine motor skills in simulated weightlessness. Poster presented at "SKILLS Summer School", July 2011, Gargonza (Italy)

Wissenschaftlicher Lebenslauf

Steinberg F, Dalecki M, Steegmanns A, Dräger T, Loosen D, Hoffmann U. Heart rate and ventilation responses to anticipate exhaustion in SCUBA diving. Poster presented at “ECSS Congress”, July 2011, Liverpool (UK)

Dalecki M, Hoffmann U, Bock O. Multiple mechanisms of mental rotation. Poster presented at “DVS Sportmotorik” conference, January 2011, Cologne (Germany)

Steinberg F, Dräger T, Steegmanns A, Dalecki M, Röschmann M, Mookerjee S, Hoffmann U. fit2dive - A field test for assessing fitness and performance in SCUBA diving. Poster presented at “ACSM’s 57th Annual Meeting”, June 2010, Baltimore (U.S.)

Nehring M, Guardiera S, Bock O, Dalecki M, Noppe A, Krause W. Pilots motor performance during simulated flight maneuvers in phases of sustained centrifugal acceleration. Poster presented at “ASMA2009”, May 2009, Los Angeles (U.S.)

Dräger T, Dalecki M, Hoffmann U. Development of a measuring system for performance diagnostic in SCUBA diving. Poster presented at “ECSS Congress”, June 2008, Estoril (Portugal)

Guardiera S, Bock O, Noppe A, Dalecki M, Hoepfener S, Pongratz H, Krause W. Isometric force production is degraded in hypergravity by vestibulo-spinal influences and cardiovascular stress. Talk presented at “Kongreß der Deutschen Physiologischen Gesellschaft”, March 2008, Cologne (Germany)

Guardiera S, Bock O, Noppe A, Dalecki M, Pongratz H, Krause W. The execution of forces and movements is differentially affected by hypergravity. Poster presented at Society for Neuroscience (SfN) Meeting, November 2007, San Diego (U.S.)

Dräger T, Dalecki M, Hoffmann U. Specific performance tests for diving. Poster presented at ICHM-EUBS meeting, May 2005, Barcelona (Spain)

Vorträge

Dalecki M. Bewegungskontrolle des Menschen – Auge-Hand Koordination nach Gehirnerschütterung in Kindern u. Jugendlichen. Presented June 2023 at the German University of Health and Sports, Campus Ismaning (Germany).

Dalecki M. New insights into complex cognitive-motor functions: Role of hand dominance and body posture on eye-hand decoupling performance. Presented July 2021 at the Open-Lab Talk Symposium, Department of Sport Science, University of Münster (Germany).

Dalecki M. Performing with a wounded brain? Eye-hand coordination in participants with diabetes. Presented May 2019 at the Peabody Society, College of Human Sciences & Education, Louisiana State University, Baton Rouge (U.S.).

Dalecki M. Cognitive-motor integration tasks: A sensitive assessment tool for detecting mild brain dysfunction in individuals with concussion history. Presented March 2019 at the Tri Beta Talk Series, Life Sciences, Louisiana State University, Baton Rouge (U.S.).

Dalecki M. Cognitive-motor integration tasks: A sensitive assessment tool for detecting mild brain dysfunction? Presented September 2018 at the Neuroscience Graduate Talk Series, Psychology Department, Louisiana State University, Baton Rouge (U.S.).

Wissenschaftlicher Lebenslauf

Dalecki M. Gefahr Gehirnerschütterung? Presented December 2017 at the Department of Further Education (VHS), Oelde (Germany).

Dalecki M. Eye-hand coordination tasks as sensitive assessment tool for detecting mild brain dysfunction. Presented June 2017 at the Colloquium Series of the Institute of Physiology and Anatomy, German Sport University, Cologne (Germany).

Dalecki M. Eye-hand coordination under altered external and internal conditions: Effects of extreme environments and concussion history on human fine motor skills. Presented Oct 2016 at the Centre for Vision Research Talk Series, York University, Toronto (Canada).

Dalecki M. Motor behavior under altered external and internal conditions: Effects of extreme environments and concussion history on human fine motor skills. Presented June 2016 at the School of Kinesiology, Louisiana State University, Baton Rouge (U.S.).

Dalecki M. Human motor control and cognition under altered conditions: Effects of simulated weightlessness and concussion history on eye-hand coordination. Presented April 2016 at the Neuroscience Seminar Series of the Centre for Neuroscience Studies, Queen's University, Kingston (Canada).

Dalecki M. Performing with a wounded brain: Assessing functional ability following concussion using cognitive-motor integration. Presented August 2015 at the Colloquium Series of the Institute of Physiology and Anatomy, German Sport University, Cologne (Germany).

Dalecki M. Human fine motor skills and cognitive performance in extreme environments. Presented October 2014 at the Neuroscience Seminar Series, York University, Toronto, ON (Canada).

Dalecki M, Dern S, Schulze B. Cognitive performance and fine motor control during water immersion. Presented December 2012 at the Workshop "Performance ability in SCUBA diving" from the Department of Further Education, DSHS Cologne, Cologne (Germany).

Dalecki M, Bock O, Hoffmann U. Motor and cognitive skills in simulated weightlessness during water immersion. Presented September 2012 at the "5th China-Germany Workshop on Microgravity and Space Life Sciences" in Rottach-Egern (Germany).

Dalecki M. Human fine motor skills in weightlessness, simulated weightlessness and in everyday situations. Presented September 2011 at the German Space Agency Workshop "Health Science in the Space Program" in Cologne (Germany).

Dalecki M. Human fine motor in weightlessness: Comparison of a laboratory and everyday task. Presented September 2010 at the German Space Agency and Centre of Integrated Space Physiology Opening Workshop, Cologne (Germany).

Dalecki M. Human fine motor skills and cognitive functions in simulated weightlessness. Presented September 2010 at the German Space Agency and Centre of Integrated Space Physiology Opening Workshop, Cologne (Germany).

Dalecki M. Excessive force production in hypergravity - possible origin and applied consequences. Presented December 2008 at the CVR talk series, York University, Toronto (Canada).

Wissenschaftlicher Lebenslauf

Dalecki M. Psychomotor performance in simulated weightlessness: Influence of water immersion and body position on central and specific cognitive and motor functions. Presented November 2008 at Brandeis University, Boston (U.S.).

Dalecki M. Excessive force production in hypergravity - possible origin and applied consequences. Presented November 2008 at Brandeis University, Boston (U.S.).

Dalecki M, Bock O, Hoffmann U. Spatial orientation and psychomotor performance in simulated weightlessness during complete water immersion. Presented April 2008 at European Astronaut Centre (EAC) Cologne (Germany).