

2024

Fleischhacker E, Sprecher CM, Milz S, Saller MM, Wirz R, Zboray R, Parrilli A, Gleich J, Siebenbürger G, Böcker W, Ockert B, Helfen T. Inflammatory tissue response in human soft tissue is caused by a higher particle load near carbon fiber-reinforced PEEK compared to titanium plates. *Acta Biomater* 2024;1742-7061(24)00195-8. doi: 10.1016/j.actbio.2024.04.023. Online ahead of print. [PMID 38636789](#)

Lima JEE, Rengarajan S, Wahl AS, George P, Sheth K, Lansberg M. Preclinical Data for Nogo Inhibition in Stroke Recovery: A Scoping Review (P2-5.026). *Neurology* 2024;102:17. <https://www.neurology.org/doi/10.1212/WNL.00000000000205821>

Ratz-Wirsching V, Habermeyer JK, Moceri S, Harrer J, Schmitz C, von Horsten S. Gene-dosage-and sex-dependent differences in the prodromal-like phase of the F344tgHD rat model for Huntington Disease. *Front Neurosci* 2024;7:1354977 doi: 10.3389/fnins.2024.1354977 [PMID 38384482](#)

Schmitz C, Alt C, Wuerfel T, Milz S, Dinzey J, Hill A, Sikes K, Burton K, Easley J, Stewart HL, Puttlitz CM, Gadomski BC, Labus K, Pearce DA, Maffulli N, Alt EU. New, biomechanically sound tendon tissue after injection of uncultured, autologous, adipose derived regenerative cells in partial Achilles tendon defects in rabbits. *bioRxiv* 2024.02.18.580890; doi: <https://doi.org/10.1101/2024.02.18.580890>

2023

Borchert L, Barapatre N, Kampfer C, Henschen S, Schmitz C, Edler von Koch F, Frank HG. Villous Trees in PE and FGR are altered in diverging, sexually dimorphic and syndrome specific patterns. *Placenta* 2023;140:e15. <https://doi.org/10.1016/j.placenta.2023.07.063>

Brugger BA, Neuper L, Guettler J, Forstner D, Wernitznig S, Kummer D, Lyssy F, Feichtinger J, Krappinger J, El-Heliebi A, Bonstingl L, Moser G, Rodriguez-Blanco G, Bachkönig OA, Gottschalk B, Gruber M, Nonn O, Herse F, Verlohren S, Frank HG, Barapatre N, Kampfer C, Fluhr H, Desoye H, Gauster M. Fluid shear stress induces a shift from glycolytic to amino acid pathway in human trophoblasts. *Cell & Biosciences* 2023;13:1613 <https://doi.org/10.1186/s13578-023-01114-3>

Correa D, Scheuber MI, Shan H, Weinmann OW, Baumgartner YA, Harten A, Wahl AS, Skaar KL, Schwab ME. Intranasal delivery of full-length anti-Nogo-A antibody: A potential alternative route for therapeutic antibodies to central nervous system targets. *Proc Natl Acad Sci USA* 2023;24;120(4):e2200057120. PMID 36649432

Darici D, Flägel K, Sternecker K, Missler M. Transfer of learning in histology: Insights from a longitudinal study. *ASE* 2023. <https://doi.org/10.1002/ase.2363>

Gaus R, Popal M, Heinsen H, Schmitt A, Falkai P, Hof PR, Schmitz C, Vollhardt A. Reduced cortical neuron number and neuron density in schizophrenia with focus on area 24: a post-mortem case-control study. *Eur Arch Psychiatry Clin Neurosci* 2023;273(6):1209-1223 [PMID 36350376](#)

Gewiess J, Sprecher C, Milz S, Gleich J, Helfen T. Osseous microarchitecture in frequent fracture zones of the distal clavicle. *JSES International* 2023;7:98-103. [PMID 36820417](#)

Ibañez V, Bohlen L, Manuella F, Mansuy I, Helmchen F, Wahl AS. EXPLORE: a novel deep learning-based analysis method for exploration behaviour in object recognition tests. *Sci Rep* 2023;14;13(1):4249. [PMID 36918658](#)

Jokinen LLJ, Wuerfel T, Schmitz C. Commentary: "Application of extracorporeal shock wave therapy in nervous system diseases: A review". *Front Neurol* <https://doi.org/10.3389/fneur.2023.1281684>

Kaub L, Schmitz C. Comparison of the penetration depth of 905 nm and 1064 nm laser light in surface layers of biological tissue ex vivo. *Biomedicines* 2023;11(5):1355 [PMID 37239026](#)

Kaub L, Schmitz C. Higher penetration depth of 1064 nm compared to 905 nm laser light into biological tissue is only relevant for surface layers and insignificant for 10 mm tissue depth onwards. *Preprints* 2023, 2023030176. <https://doi.org/10.20944/preprints202303.0176.v1>

Kaub L, Schmitz C. Spread of the optical power emission of several units of the same laser therapy devices used in sports medicine, which cannot be assessed by the users, shown by means of high-fidelity laser measurement technology. *Preprints* 2023. [PMID 36831122](#)

Kaub L, Stele A, Linck R, Fassbinder JWE. Magnetic Surveying for Archaeology Using Drones. Conference Paper. Conference: AGU Fall Meeting 2023, San Francisco, CA, USA

Lundeen M, Hurd JL, Hayes M, Hayes M, Facile TR, Furia JP, Maffulli N, Alt C, Alt EU, Schmitz C, Pearce DA. Management of partial-thickness rotator cuff tears with autologous adipose-derived regenerative cells is safe and more effective than injection of corticosteroid. *Sci Rep* 2023;13(1):19348 [PMID 37935850](#)

Praus P, Proctor T, Rohrmann T, Benedyk A, Tost H, Hennig O, Meyer-Lindenberg A, Wahl AS. Female sex and burden of depressive symptoms predict insufficient response to telemedical treatment in adult attention-deficit/hyperactivity disorder: results from a naturalistic patient cohort during the COVID-19 pandemic. *Front Psychiatry* 2023;14:1193898. [PMID 37867771](#)

Reinhardt N, Schmitz C, Milz S, de la Fuente M. Influence of the skull bone and brain tissue on the sound field in transcranial extracorporeal shock wave therapy: an ex vivo study. *Biomed Tech* 2023; doi: 10.1515/bmt-2022-0332. [PMID 37732512](#)

Schmitz C, Alt C, Alt EU. Management of knee pain in osteoarthritis with orthobiologics and corticosteroid injection: more questions than answers. *Preprints* 2023, 2023111081. <https://doi.org/10.20944/preprints202311.1081.v1>

Stehle A, Kaub L, Linck R, Schikarra M, Fassbinder JWE. Drone-based magnetometer prospection for archaeology. *J Archeol Science* 2023;158:105818. <https://doi.org/10.1016/j.jas.2023.105818>

Stoeckelhuber M, Grill FD, Wolff KD, Kesting MR, Wolff CT, Fichter AM, Loeffelbein DJ, Schmitz C, Ritschl L. Infantile human labial glands: distribution of aquaporins and claudins in the context of paracellular and transcellular pathways. *Tissue and Cell* 2023;82:102052. [PMID 36905859](#)

Vollhardt A, Frölich L, Stockbauer AC, Danek A, Schmitz C, Wahl AS. Towards a Better Diagnosis and Treatment of Dementia: Identifying Common and Distinct Neuropathological Mechanisms in Alzheimer's Disease and Vascular Dementia. *Preprints* 2023 doi: [10.20944/preprints202309.1473.v1](https://doi.org/10.20944/preprints202309.1473.v1)

2022

Dhein J, Haller C, Reichl FX, Milz S, Hickel R, Kollmuss M, Högg C. Intranuclear cell uptake and toxicity of titanium dioxide and zirconia particles as well as bacterial adhesion on dental titanium- and zirconia-implants. *Dent Mater* 2022;28(3):517-528. [PMID 34991888](#)

Finn D, Wack M, Kaub L, Gilder S, Coe R, Schillinger W, Branney M. A case for adopting the magnetic core alternating field demagnetizer. *IRM Quarterly* 2022;30(4):1,9-14

Fleischhacker E, Sprecher CM, Milz S, Saller MM, Gleich J, Siebenbürger G, Helfen T, Böcker W, Ockert B. Functional outcomes before and after implant removal in patients with posttraumatic shoulder stiffness and healed proximal humerus fractures: does implant material (PEEK vs. titanium) have an impact? - a pilot study. *BMC Musculoskelet Disord.* 2022;23(1):95. [PMID 35086539](#)

Furia JP, Lundeen MA, Hurd JL, Pearce DA, Alt C, Alt U, Schmitz C, Maffulli N. Why and how to use the body's own stem cells for regeneration in musculoskeletal disorders: a primer. *J Orthop Surg Res* 2022;17(1):36 [PMID 35062984](#)

Gaus R, Popal M, Heinsen H, Schmitt A, Falkai P, Hof PR, Schmitz C, Vollhardt A. Reduced cortical neuron number and neuron density in schizophrenia with focus on area 24: a post-mortem case-control study. *Eur Arch Psychiatry Clin Neurosci* 2022 Nov 9. doi: 10.1007/s00406-022-01513-6

Kaub L, Schmitz C. More than ninety percent of the light energy emitted by near-infrared laser therapy devices used to treat musculoskeletal disorders is absorbed within the first ten millimeters of biological tissue. *Biomedicines* 2022;10(12):3204. [PMID 36551959](#)

Liu F, Reichl FX, Milz S, Wölflé C, Kühnisch J, Schmitz C, Geist J, Hickel R, Högg C, Sternecker K. Disrupted biomineralization in zebra mussels after exposure to bisphenol-A: Potential implications for molar-incisor hypomineralization. *Dent Mater* 2022;38(4):689-699. [PMID 35279299](#)

Lundeen M, Hurd JL, Hayes M, Hayes M, Facile TR, Furia JP, Maffulli N, Alt C, Alt EU, Schmitz C, Pearce DA. Long-term safety and efficacy of treating symptomatic, partial-thickness rotator cuff tears with fresh, uncultured, unmodified, autologous, adipose-derived regenerative cells isolated at the point of care: 40 months follow-up of a prospective, randomized, controlled, first-in-human clinical trial. medRxiv 2022.12.14.22283447. <https://doi.org/10.1101/2022.12.14.22283447>

Müller AL, Brockmüller A, Schmitz C, Shakibaei M. Extrakorporale Stoßwellen und Phytopharmaka bei Tendinopathien: Molekulare Grundlagen für erfolgreiche Kombinationstherapien. [sportärztezeitung: online](#)

Rohrmann T, Praus P, Proctor T, Benedyk A, Tost H, Hennig O, Meyer-Lindenberg A, Wahl A. Patients with affective disorders profit most from telemedical treatment: Evidence from a naturalistic patient cohort during the COVID-19 pandemic. *Front. Psychiatry* 2022;13:971896. [PMID 36532188](#)

Schmitt A, Tatsch L, Vollhardt A, Schneider-Axmann T, Raabe FJ, Roell L, Heinsen H, Hof PR, Falkai P, Schmitz C. Decreased oligodendrocyte number in hippocampal subfield CA4 in schizophrenia: a replication study. *Cells* 2022;11(20):3242. [PMID 36291109](#)

Schmitz C. Was ist ein Fersensporn und was kann dagegen tun? Reader 's Digest 2022;10:27

Schmitz C. No distinction between studies with and without local anesthesia (comment on Surace SJ, Deitch J, Johnston RV, Buchbinder R. Shock wave therapy for rotator cuff disease with or without calcification. Cochrane Database Syst Rev 2020;3(3):CD008962). Published 2022

<https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD008962.pub2/read-comments>

Schmitz C. Overview on extracorporeal shock wave therapy. In: Sun T, Feng Z, Song W, Xing G, Schmitz C (eds): *Extracorporeal Shock Wave Therapy for Musculoskeletal Pain*. China, Summer/Fall 2022

Schmitz C. Clinical application of extracorporeal shock wave therapy (indications, contraindications, precautions). In: Sun T, Feng Z, Song W, Xing G, Schmitz C (eds): *Extracorporeal Shock Wave Therapy for Musculoskeletal Pain*. China, Summer/Fall 2022

Schmitz C. Intra-articular injections of mesenchymal stem cells without adjuvant therapies for knee osteoarthritis: a systematic review and meta-analysis: Letter to the Editor. Am J Sports Med 2022;50(12):NP48-NP49. [PMID 36177754](#)

Schmitz C, Alt C, Pearce DA, Furia JP, Maffulli N, Alt EU. Methodological flaws in meta-analyses of clinical studies on the management of knee osteoarthritis with stem cells: a systematic review. Cells 2022;11(6):965 [PMID 35326416](#)

Schmitz C, Morgan J. Profi-Sport: Bessere Prophylaxe durch radiale Extrakorporale Stoßwellentherapie. LMU News. März 2022

Schmitz C, Würfel T, Alt C, Alt EU. Behandlung von Sehnenrupturen mit Stammzellen: eine aktuelle Übersicht. Obere Extremität 2022;17:141–153

Shrivastava A, Sandhof CA, Reinle K, Jawed A, Ruger-Herreros C, Schwarz D, Creamer D, Nussbaum-Krammer C, Mogk A, Bukau B. The cytoprotective sequestration activity of small heat shock proteins is evolutionarily conserved. J Cell Biol 2022;221(10)e202202149. [PMID 36069810](#)

Suputtitada A, Chen CPC, Ngamrungsiri N, Schmitz C. Effects of repeated injection of 1% lidocaine vs. radial extra-corporeal shock wave therapy for treating myofascial trigger points: a randomized controlled trial. Medicina 2022;58(4):479 [PMID 35454318](#)

Tittelmeier J, Druffel-Augustin S, Alik A, Melki R, Nussbaum-Krammer C. Dissecting aggregation and seeding dynamics of α-Syn polymorphs using the phasor approach to FLIM. Comm Biol 2022;8;5(1):1345. [PMID 36477485](#)

Vankriekelsvenne E, Chrzanowski U, Manzhula K, Greiner T, Wree A, Hawlitschka A, Llovera G, Zhan J, Joost S, Schmitz C, Ponsaerts P, Amor S, Nutma E, Kipp M, Kaddatz H. Transmembrane protein 119 is neither a specific nor a reliable marker for microglia. Glia 2022;70:1170–1190.

[PMID 35246882](#)

Voisine C, Nussbaum-Krammer C. Using *C. elegans* to monitor proteostasis imbalances. J Vis Exp 2022;(186):e64643

Wahl AS, Bauer AQ, Allegra Mascaro AL. Editorial: Optical imaging and neurorehabilitation strategies after stroke. Front Hum Neurosci 2022;16:999725. [PMID 36118970](#)

Wu W, Geist, J, Beggel S, Schmitz C, Milz S, Sternecker K. Immunohistochemical detection of various proteoglycans in the extracellular matrix of zebra mussels. Fishes 2022;7(2):74 [PMID 34863222](#)

Wuerfel T, Schmitz C, Jokinen LLJ. Effects of exposure of musculoskeletal tissue to extracorporeal shock waves. biomedicines 2022;10(5):1084 [PMID 35625821](#)

Würfel T, Schmitz C, Jokinen L. Mode of action of extracorporeal shock wave therapy. In: Sun T, Feng Z, Song W, Xing G, Schmitz C (eds): Extracorporeal Shock Wave Therapy for Musculoskeletal Pain. China, Summer/Fall 2022

Yang Y, Kang J, Jiang T, Schmitz C, Weng C, Zhang L. Safety and efficacy of treating post-burn pathological scars with extracorporeal shock wave therapy: A meta-analysis of randomised controlled trials. Wound Repair Regen 2022;30(5):595-607. [PMID 35691021](#)

2021

Alt E, Rothoerl R, Hoppert M, Frank HG, Wuerfel T, Alt C, Schmitz C. First immunohistochemical evidence of human tendon repair following stem cell injection: A case report and review of literature. *World J Stem Cells* 2021;13(7):944-970. [PMID 34367486](#)

Alt E, Schmitz C, Bai X. Perspective: Why and how ubiquitously distributed, vascular-associated, pluripotent stem cells in the adult body (vaPS cells) are the next generation of medicine. *Cells* 2021;10(9):2303. [PMID 34571951](#)

Barapatre N, Kampfer C, Henschen S, Schmitz C, Edler von Koch F, Frank HG. Growth restricted placentas show severely reduced volume of villous components with perivascular myofibroblasts. *Placenta* 2021;109:19-27. [PMID 33945894](#)

Frank HG. Histologie für Dummies. Wiley-VCH (Verlag) 2021. ISBN 978-3-527-71756-9 (eBook ISBN 978-3-527-82788-6)

Frank HG, Sternecker K. Histologi@: Zytologie, Histologie und Mikroskopische Anatomie. Skript und kommentierter Lernzielkatalog zu histologischen Kursen für Studierende der Zahn- und Humanmedizin. [Überarbeitete Neuauflage]. München: Anatomische Anstalt der LMU München. 2021. <https://epub.ub.uni-muenchen.de/76443/>

Gleich J, Milz S, Ockert B. [Principles of tendon healing at the shoulder and consequences for their treatment : Importance of platelet-rich plasma and regenerative medicine]. *Unfallchirurg*. 2021;124:89-95. [PMID 33346862](#)

Guo X, Li L, Yan Z, Li Y, Peng Z, Yang Y, Zhang Y, Schmitz C, Feng Z. Efficacy and safety of treating chronic nonspecific low back pain with radial extracorporeal shock wave therapy (rESWT), rESWT combined with celecoxib and eperisone (C + E) or C + E alone: a prospective, randomized trial. *J Orthop Surg Res* 2021;16:705 (<https://doi.org/10.1186/s13018-021-02848>)

Habermeyer J, Boyken J, Dobner J, Canneva F, Ratz V, Moceri S, Admard J, Casadei N, Jost G, Bäuerle T, Frenzel T, Schmitz C, Schütz G, Pietsch H, von Hörsten S. Comprehensive phenotyping revealed transient startle response reduction and histopathological gadolinium localization to perineuronal nets after gadodiamide administration in rats. *Sci Rep* 10, 22385 (2020). doi.org/10.1038/s41598-020-79374-z

Horng A, Stroebel J, Geith T, Milz S, Pacureanu A, Yang Y, Cloetens P, Lovric G, Mittone A, Bravin A, Coan P. Multiscale X-ray phase contrast imaging of human cartilage for investigating osteoarthritis formation. *J Biomed Sci*. 2021;28:42. doi: 10.1186/s12929-021-00739-1. [PMID 34098949](#)

Kampfer C, Barapatre N, Schmitz C, Edler von Koch F, Frank HG. Villous typing by immunohistochemistry and design-based stereology reveals new aspects of villous architecture in normal and IUGR placentas. *Placenta* 2021;112:e45 doi.org/10.1016/j.placenta.2021.07.147

Kaub L, Keller G, Bouligand C, Glen JMG. Magnetic Surveys with Unmanned Aerial Systems: Software for Assessing and Comparing the Accuracy of Different Sensor Systems, Suspension Designs and Compensation Methods. *Geochemistry, Geophysics, Geosystems* 2021, 22 doi.org/10.1029/2021GC009745

Morgan JPM, Hamm M, Schmitz C, Brem MH. Return to play after treating acute muscle injuries in elite football players with radial extracorporeal shock wave therapy. *J Orthop Surg Res* 2021;16:708 (<https://doi.org/10.1186/s13018-021-02853>)

Schmitz C. In response to: Use of different radial extracorporeal shock wave devices may explain different outcome in treatment of chronic greater trochanteric pain syndrome using this modality. Clin J Sport Med 2021 Nov 10. doi: 10.1097/JSM.0000000000000994. Online head of print.

Schmitz, C. Improving extracorporeal shock wave therapy with 904 or 905 nm pulsed, high power laser pretreatment. Preprints 2021. [doi: 10.20944/preprints202101.0138.v1](https://doi.org/10.20944/preprints202101.0138.v1)

Schmitz C, Alt EU. Die Verwendung körpereigener Stammzellen in der regenerativen Medizin. Osteopathische Medizin 2021;22:2-5 [PDF](#) 273 KB

Schmidutz F, Milz S, Schiuma D, Richards RG, Windolf M, Sprecher CM. Cortical parameters predict bone strength at the tibial diaphysis, but are underestimated by HR-pQCT and µCT compared to histomorphometry. J Anat. 2021;238:669-678. doi: 10.1111/joa.13337. [PMID 33084063](#)

Stiller P, Schmitz C. Radial Extracorporeal Shock Wave Therapy to Support Breathing in Case of Coronavirus Disease 2019 (COVID-19): A Case Report. Preprints 2021. [doi: 10.20944/preprints202103.0192.v1](https://doi.org/10.20944/preprints202103.0192.v1)

Wegener B, Behnke M, Milz S, Jansson V, Redlich C, Hermanns W, Birkenmaier C, Pieper K, Weißgärber T, Quadbeck P. Local and systemic inflammation after implantation of a novel iron based porous degradable bone replacement material in sheep model. Sci Rep. 2021;11:12035. doi: 10.1038/s41598-021-91296-y. [PMID 34103567](#)

Wu W, Maffulli N, Furia JP, Meindlhumer L, Sternecker K, Milz S, Schmitz C. Exposure of zebra mussels to radial extracorporeal shock waves: implications for treatment of fracture nonunions. J Orthop Surg Res 2021;16:707 (<https://doi.org/10.1186/s13018-021-02852>)

Zhan J, Fegg FN, Kaddatz H, Rühling S, Frenz J, Denecke B, Amor S, Ponsaerts P, Hochstrasser T, Kipp M. Neurobiol Dis. 2021 Jul;155:105371. doi: 10.1016/j.nbd.2021.105371. Epub 2021 Apr 29. [PMID 33932559](#)

2020

Alt EU, Rothoerl R, Hoppert M, Frank HG, Alt C, Schmitz C. Human Tendon Repair Following Injection of Autologous, Unmodified Stem Cells: A Comprehensive Immunohistochemical Evaluation. Preprints 2020. [doi: 10.20944/preprints202009.0532.v1](https://doi.org/10.20944/preprints202009.0532.v1)

Alt EU, Winnier G, Haenel A, Rothoerl R, Solakoglu O, Alt C, Schmitz C. Towards a comprehensive understanding of ua-adrcs (uncultured, autologous, fresh, unmodified, adipose derived regenerative cells, isolated at point of care) in regenerative medicine. Cells 2020;9:1097. [doi: 10.3390/cells9051097](https://doi.org/10.3390/cells9051097)

Barapatre N, Aschauer B, Kampfer C, Schmitz C, Frank HG. Air contrast of the intervillous space enables non-disruptive Micro-CT analysis of paraffin-embedded archival placental tissue. Placenta 2020; 100:66-68. doi: doi.org/10.1016/j.placenta.2020.08.003

Brassett C, Cosker T, Davies DC, Dockery P, Gillingwater TH, Lee TC, Milz S, Parson SH, Quondamatteo F, Wilkinson T. COVID-19 and anatomy: Stimulus and initial response. J Anat. 2020; 10.1111/joa.13274. [PMID 32628795](#)

Diermeier T, Venjakob A, Byrne K, Burgkart R, Foehr P, Milz S, Imhoff AB, Vogt S. Effects of focal metallic implants on opposing cartilage - an in-vitro study with an abrasion test machine. BMC Musculoskeletal Disord. 2020; 21:261. doi: [10.1186/s12891-020-03292-4](https://doi.org/10.1186/s12891-020-03292-4)

He X, Reichl FX, Milz S, Michalke B, Wu X, Sprecher CM, Yang Y, Gahlert M, Röhling S, Kniha H, Hickel R, Högg C. Titanium and zirconium release from titanium- and zirconia implants in mini pig maxillae and their toxicity in vitro. Dent Mater. 2020; 36:402-412 [PMID 31992485](#)

Lutter C, Schöffl V, Hotfiel T, Schmitz C, Milz S, Strohm P. Radial extracorporeal shock wave therapy in flexor tendon pathology of the hand: A feasibility study. Technol Health Care. 2020;28:77-83. [PMID 31282446](#)

Mueller M, Sternecker K, Milz S, Geist J. Assessing turbine passage effects on internal fish injury and delayed mortality using X-ray imaging. 2020. PeerJ 8:e9977 <https://doi.org/10.7717/peerj.9977>

Reinbach C, Stadler MS, Pröbstl N, Chrzanowski U, Schmitz C, Kipp M, Hochstrasser T. Brain Res. 2020 Oct 15;1745:146950. doi: 10.1016/j.brainres.2020.146950. Epub 2020 Jun 7. [PMID 32524994](#)

Schönweger F, Sprecher CM, Milz S, Dommann-Scherrer C, Meier C, Dommann A, Neels A, Wahl P. New Insights into Osteointegration and Delamination from a Multidisciplinary Investigation of a Failed Hydroxyapatite-Coated Hip Joint Replacement. Materials (Basel). 2020;13:E4713. doi: 10.3390/ma13214713. [PMID 33105759](#)

Stoeckelhuber M, Kesting MR, Loeffelbein DJ, Schmitz C, Wolff KD. Diversity of mucins in labial glands of infants. Histol Histopathol. 2020;35:903-909. doi: [10.14670/HH-18-213](#)

Vidal X, Martí-Fàbregas J, Canet O, Roqué M, Morral A, Tur M, Schmitz C, Sitjà-Rabert M. Efficacy of radial extracorporeal shock wave therapy compared with botulinum toxin type A injection in treatment of lower extremity spasticity in subjects with cerebral palsy: A randomized, controlled, cross-over study. J Rehabil Med. 2020;52:jrm00076. doi: 10.2340/16501977-2703 [PMID 32556354](#)

Wegener B, Sichler A, Milz S, Sprecher C, Pieper K, Hermanns W, Jansson V, Nies B, Kieback B, Müller PE, Wegener V, Quadbeck P. Development of a novel biodegradable porous iron-based implant for bone replacement. Sci Rep. 2020;10:9141. [PMID 32499489](#)

Wegener B, Behnke M, Milz S, Janson V, Redlich C, Hermanns W, Pieper K, Quadbeck P. Local and Systemic Inflammation After Implantation of a Novel Iron Based Porous Degradable Bone Replacement Material in Sheep Model. Research Square 2020. <https://doi.org/10.21203/rs.3.rs-138400/v1>

2019

Barapatre N, Haeussner E, Grynspan D, Schmitz C, Edler von Koch F, Frank HG. The density of cell nuclei at the materno-fetal exchange barrier is sexually dimorphic in normal placentas, but not in IUGR. Sci Rep 2019 <https://doi.org/10.1038/s41598-019-38739-9>

Buehlmeyer A, Barapatre N, Schmitz C, Edler von Koch F, Haeussner E, Frank HG. The volume of villi with γ -sm-actin positive perivascular cells correlates with placental weight and thickness. Placenta 2019;85:24-31. <https://doi.org/10.1016/j.placenta.2019.08.082>

Chrzanowski U, Bhattacharai S, Scheld M, Clarner T, Fallier-Becker P, Beyer C, Rohr SO, Schmitz C, Hochstrasser T, Schweiger F, Amor S, Horn-Bochtler A, Denecke B, Nyamoya S, Kipp M. Oligodendrocyte degeneration and concomitant microglia activation directs peripheral immune cells into the forebrain. Neurochem Int. 2019;126:139-153. [PMID 30867127](#)

Chrzanowski U, Schmitz C, Horn-Bochtler A, Nack A, Kipp M. Evaluation strategy to determine reliable demyelination in the cuprizone model. Metab Brain Dis. 2019;34:681-685. [PMID 30607821](#)

Crupnik J, Silveti S, Wajnstein N, Rolon A, Vollhardt A, Stiller P, Schmitz C. Is radial extracorporeal shock wave therapy combined with a specific rehabilitation program (rESWT + RP) more effective than sham-rESWT + RP for acute hamstring muscle complex injury Type 3b in athletes? Study protocol for a prospective, randomized, double-blind, sham-controlled single centre trial. *J Orthop Surg Res*: in press (preprint available at [doi: 10.20944/preprints201905.0054.v1](https://doi.org/10.20944/preprints201905.0054.v1))

Fischbach F, Nedelcu J, Leopold P, Zhan J, Clarner T, Nellessen L, Beißel C, van Heuvel Y, Goswami A, Weis J, Denecke B, Schmitz C, Hochstrasser T, Nyamoya S, Victor M, Beyer C, Kipp M. Cuprizone-induced graded oligodendrocyte vulnerability is regulated by the transcription factor DNA damage-inducible transcript 3. *Glia*. 2019;67:263-276. [PMID 30511355](#)

Haenel A, Ghosn M, Karimi T, Vykoukal J, Shah D, Valderrabano M, Schulz DG, Raizner A, Schmitz C, Alt EU. Unmodified autologous stem cells at point of care for chronic myocardial infarction. *World J Stem Cells*. 2019;11:831-858. [doi: 10.4252/wjsc.v11.i10.831](#)

Henschen S, Barapatre N, Frank HG. In IUGR Placentas, estimates of Villous and Capillary Volumes of Peripheral Villi Correlate with the Placental Weight. *Placenta* 2019; 83:e18 doi: <https://doi.org/10.1016/j.placenta.2019.06.062>

Herbst E, Imhoff FB, Foehr P, Milz S, Plank C, Rudolph C, Hasenpusch G, Geiger JP, Aneja MK, Groth K, Vogt S, Imhoff AB, Schmitt A. Chemically Modified Messenger RNA: Modified RNA Application for Treatment of Achilles Tendon Defects. *Tissue Eng Part A*. 2019; 25:113-120. [PMID 29676227](#)

Herrmann FEM, Lamm P, Wellmann P, Milz S, Hagl C, Juchem G. Autologous endothelialized vein allografts in coronary artery bypass surgery - Long term results. *Biomaterials*. 2019;212:87-97. [PMID 31108275](#)

Liu J, Heinsen H, Grinberg LT, Alho E, Amaro E Jr., Pasqualucci CA, Rüb U, Seidel K, den Dunnen WFA, Arzberger T, Schmitz C, Kiessling M, Bader B, Danek A. Pathoarchitectonics of the cerebral cortex in chorea-acanthocytosis and Huntington's disease. *Neuropathol Appl Neurobiol* 2019;45:230-243. [PMID 29722054](#)

Hochstrasser T, Rühling S, Hecher K, Fabisch KH, Chrzanowski U, Brendel M, Eckenweber F, Sacher C, Schmitz C, Kipp M. Stereological Investigation of Regional Brain Volumes after Acute and Chronic Cuprizone-Induced Demyelination. *Cells*. 2019;8. [PMID 31484353](#)

Nyamoya S, Steinle J, Chrzanowski U, Kaye J, Schmitz C, Beyer C, Kipp M. Laquinimod Supports Remyelination in Non-Supportive Environments. *Cells* 2019;8. [PMID 31683658](#)

Nyamoya S, Leopold P, Becker B, Beyer C, Hustadt F, Schmitz C, Michel A, Kipp M. G-protein-coupled receptor Gpr17 expression in two multiple sclerosis remyelination models. *Mol Neurobiol* 2019;56:1109-1123. [PMID 29873041](#)

Putz R, Boszczyk B, Milz S. How the Ends of Bones Evolve and What They Do: The Anatomical and Biomechanical Perspective. *Semin Musculoskelet Radiol*. 2019;23:467-476. [PMID 31556082](#)

Rühling S, Kramer F, Schmutz S, Amor S, Jiangshan Z, Schmitz C, Kipp M, Hochstrasser T. Visualization of the breakdown of the axonal transport machinery: a comparative ultrastructural and immunohistochemical approach. *Mol Neurobiol* 2019;56:3984-3998. [PMID 30238390](#)

Solakoglu Ö, Götz W, Kiessling MC, Alt C, Schmitz C, Alt EU. Improved guided bone regeneration by combined application of unmodified, fresh autologous adipose derived regenerative cells and plasma rich in growth factors: A first-in-human case report and literature review. *World J Stem Cells* 2019; 11:124-146

Tappan S, Eastwood B, O'Connor N, Wang X, Ng L, Feng D, Hooks B, Gerfen C, Hof P, Schmitz C, Glaser J. Automatic navigation system for the mouse brain. *J Comp Neurol* 2019;527:2200-2211. [PMID 30635922](#)

Toussaint R, Schmitz C. Combination of radial extracorporeal shock wave therapy and neuroreflexory hyperbaric CO₂ cryotherapy: new horizons in sports medicine and the treatment of recreational and competitive athletes. *sports.medicine.newspaper* 2019;1:24-27

Venjakob AJ, Föhr P, Henke F, Tischer T, Sandmann GH, Blanke F, Imhoff AB, Milz S, Burgkart R, Vogt S. Influence of Sutures on Cartilage Integrity: Do Meniscus Sutures Harm Cartilage? An Experimental Animal Study. *Arthroscopy* 2019;35:1509-1516. [PMID 30745024](#)

Vidal X, Martí J, Canet O, Roqué MI Morral A, Tur M, Schmitz C, Sitjà M. Efficacy of radial extracorporeal shock wave therapy compared to botulinum toxin type a in the treatment of lower extremity spasticity in patients with cerebral palsy. *Ann Phys Rehab Med* 2019;61:e58

Yakimov V, Schweiger F, Zhan J, Behrangi N, Horn A, Schmitz C, Hochstrasser T, Kipp M. Continuous cuprizone intoxication allows active experimental autoimmune encephalomyelitis induction in C57BL/6 mice. *Histochem Cell Biol*. 2019;152:119-131. [PMID 31016368](#)

2018

Angstman NB, Frank HG, Schmitz C. Hypothermia ameliorates blast-related lifespan reduction of *C. elegans*. *Sci Rep* 2018;8:10549. [PMID 30002423](#)

Aust V, Kress E, Abraham S, Schröder N, Kipp M, Stope MB, Pufe T, Tauber SC, Brandenburg LO. Lack of chemokine (C-C motif) ligand 3 leads to decreased survival and reduced immune response after bacterial meningitis. *Cytokine* 2018 Sep 7;111:246-254. [PMID 30199766](#)

Becker B, Demirbas M, Johann S, Zendedel A, Beyer C, Clusmann H, Haas SJ, Wree A, Tan SKH, Kipp M. Effect of intrastriatal 6-OHDA lesions on extrastratial brain structures in the mouse. *Mol Neurobiol* 2018;55:4240-4252. [PMID 28616718](#)

Best N, Rompe JD, Zheis C, Schmitz C, Walther M, Engelhardt M, Tader C, Roth O, Placzek R: Enthesiopathien. In: Peters KM, König DP, Roth A (eds). *Fortbildung Osteologie 4*. Springer, Berlin, pp. 117-151.

Brettner F, Darling J, Baeuml EC, Mannell H, Frank HG, Amini M, Hulde N, Kammerer T, Becker BF, Rehm M, Conzen P, Chappell D. Chances and limitations of isolated mouse heart models for investigating the endothelial glycocalyx1. *Clin Hemorheol Microcirc* 2018;69:393-403. [PMID 29400664](#)

Crupnik J, Silveti S, Wajnstein N, Stiller P, Vollhardt A, Schmitz C. A prospective, randomized, double-blind, placebo controlled single centre trial to assess the efficacy and safety of radial extracorporeal shock wave therapy combined with a specific rehabilitation program for acute hamstring muscle complex injury Type 3b in athletes.

https://www.clinicaltrials.gov/ProvidedDocs/99/NCT03473899/Prot_000.pdf (published online on March 22, 2018)

d'Orange M, Aurégan G, Cheramy D, Gaudin-Guérif M, Guillermier M, Stimmer L, Joséphine C, Hérard AS, Gaillard MC, Petit F, Kiessling MC, Schmitz C, Colin M, Buée L, Panayi F, Diguet E, Brouillet E,

Hantraye P, Bemelmans AP, Cambon K. Potentiating tangles formation prevents from acute toxicity exerted by soluble Tau species in the rat. Brain 2018;141:535-549. [PMID 29253129](#)

Esser S, Göpfrich L, Bihler K, Kress E, Nyamoya S, Tauber SC, Clarner T, Stope MB, Pufe T, Kipp M, Brandenburg LO. Toll-like receptor 2 mediated glial cell activation in a mouse model of cuprizone-induced demyelination. Mol Neurobiol 2018;55:6237-6249. [PMID 29288338](#)

Fichtl A, Buettner A, Hof PR, Schmitz C, Kiessling MC. Delineation of subregions in the early postnatal human cerebellum for design-based stereologic studies. Front Neuroanat 2018;11:134. [PMID 29358908](#)

Fischbach F, Nedelcu J, Leopold P, Zhan J, Clarner T, Nellessen L, Beißel C, van Heuvel Y, Goswami A, Weis J, Denecke B, Schmitz C, Hochstrasser T, Nyamoya S, Victor M, Beyer C, Kipp M. Cuprizone-induced graded oligodendrocyte vulnerability is regulated by the transcription factor DNA-damage inducible transcript 3 (DDIT3). Glia 2018;67:263-276. [PMID 30511355](#)

Gilder S, Wack M, Kaub L, Roud S, Petersen N, Heinsen H, Hillenbrand P, Milz S, Schmitz C. Distribution of magnetic remanence carriers in the human brain. Sci Rep 2018;8:11363. [PMID 29288338](#)
https://www.uni-muenchen.de/forschung/news/2018/gilder_schmitz_magnetfeld.html

Herbst E, Imhoff FB, Foehr P, Milz S, Plank C, Rudolph C, Hasenpusch C, Geiger JP, Aneja MK, Groth K, Vogt S, Imhoff AB, Schmitt A. Chemically modified messenger RNA: Modified RNA application for treatment of achilles tendon defects. Tissue Eng Part A 2018;25:113-120. [PMID 29676227](#)

Hochstrasser T, Jiangshan Z, Rühling S, Schmitz C, Kipp M. Do pre-clinical multiple sclerosis models allow us to measure neurodegeneration and clinical progression? Expert Rev Neurotherm 2018;4:1-3. [PMID 29589965](#)

Hsieh CF, Yan Z, Schumann RG, Milz S, Pfeifer CG, Schieker M, Docheva D. In vitro comparison of 2D-cell culture and 3D-cell sheets of scleraxis-programmed bone marrow derived mesenchymal stem cells to primary tendon stem/progenitor cells for tendon repair. Int J Mol Sci 2018;19(8). pii: E2272. [PMID 30072668](#)

Janner SFM, Gahlert M, Bosshardt DD, Roehling S, Milz S, Higginbottom F, Buser D, Cochran DL. Bone response to functionally loaded, two-piece zirconia implants: A preclinical histometric study. Clin Oral Implants Res. 2018;29:277-289. [PMID 29288505](#)

Kniha K, Modabber A, Kniha H, Möhlhenrich SC, Hözlé F, Milz S. Dimensions of hard and soft tissue around adjacent, compared with single-tooth, zirconia implants. Br J Oral Maxillofac Surg 2018;33:217-222. [PMID 29179980](#)

Kniha K, Milz S, Kniha H, Ayoub N, Hözlé F, Modabber A. Peri-implant crestal bone changes around zirconia implants in periodontally healthy and compromised patients. Int J Oral Maxillofac Implants 2018;56:43-47. [PMID 29028851](#)

Liu J, Heinsen H, Grinberg LT, Alho E, Amaro E Jr., Pasqualucci CA, Rüb U, den Dunnen W, Arzberger T, Schmitz C, Kiessling M, Bader B, Danek A. Subcortical neurodegeneration in chorea: similarities and differences between Chorea-acanthocytosis and Huntington's disease. Parkinsonism Relat Disord 2018;49:54-59. [PMID 29402698](#).

Mattyasovszky SG, Langendorf EK, Ritz U, Schmitz C, Schmidtmann I, Nowak TE, Wagner D, Hofmann A, Rommens PM, Drees P. Exposure to radial extracorporeal shock waves modulates viability and

gene expression of human skeletal muscle cells: a controlled in vitro study. J Orthop Surg Res 2018;13:75. [PMID 29625618](#)

Schmitz C. [肌肉损伤的预防](#) China edition of Sportärztezeitung 2018;1:16-17

Sprecher CM, [Milz S](#), Suter T, Keating JH, McCarthy RJ, Gueorguiev B, Boudrieau RJ. Retrospective analysis of corrosion and ion release from retrieved cast stainless steel tibia plateau leveling osteotomy plates in dogs with and without peri-implant osteosarcoma. Am J Vet Res. 2018;79:970-979. [PMID 30153050](#)

[Sternecker K](#), Geist J, Beggel S, Dietz-Lauronn K, de la Fuente Matias, [Frank HG](#), Furia JP, [Milz S](#), Schmitz C. Exposure of zebra mussels to extracorporeal shock waves demonstrates formation of new mineralized tissue inside and outside the focus zone. Biol Open 2018;7. pii: bio033258 [PMID 29615415](#)

[Teske N](#), Liessel A, [Fischbach F](#), Clarner T, Beyer C, Wruck C, Fragoulis A, Tauber SC, Victor M, [Kipp M](#). Chemical hypoxia-induced integrated stress response activation in oligodendrocytes is mediated by the transcription factor nuclear factor (erythroid-derived 2)-like 2 (NRF2). J Neurochem 2018;144:285-301. [PMID 29210072](#)

Trepanier MO, Hildebrand KD, [Nyamoya S](#), Amor S, Bazinet RP, [Kipp M](#). Phosphatidylcholine 36:1 concentration decreases along with demyelination in the cuprizone animal model and in post-mortem multiple sclerosis brain tissue. J Neurochem 2018;145:504-515. [PMID 29574981](#)

Wahl P, Sprecher CM, Brüning C, Meier C, [Milz S](#), Gautier E, Fintan Moriarty T. Successful bony integration of a porous tantalum implant despite longlasting and ongoing infection: Histologic workup of an explanted shoulder prosthesis. J Biomed Mater Res B Appl Biomater. 2018;106:2924-2931. [PMID 30199602](#)

Zendedel A, Mönnink F, Hassanzadeh G, Zaminy A, Ansar MM, Habib P, Slowik A, [Kipp M](#), Beyer C. Estrogen Attenuates Local Inflammasome Expression and Activation after Spinal Cord Injury. Mol Neurobiol 2018;55:1364-1375. [PMID 28127698](#)

Zhang L, Fu XB, Chen S, Zhao ZB, [Schmitz C](#), Weng CS. Efficacy and safety of extracorporeal shock wave therapy for acute and chronic soft tissue wounds: a systematic review and meta-analysis. Int Wound J 2018;15:590-599. [PMID 28127698](#)

2017

Bode GH, Couè G, Freese C, Pickl KE, Sanchez-Purrà M, Albaiges B, Borrós S, van Winden EC, Tziveleka LA, Sideratou Z, Engbersen JF, Singh S, Albrecht K, Groll J, Möller M, Pötgens AJ, [Schmitz C](#), Fröhlich E, Grandfils C, Sinner FM, Kirkpatrick J, Steinbusch HWM, [Frank HG](#), Unger RE, Martinez-Martinez P. An in vitro and in vivo study of peptide-functionalized nanoparticles for brain targeting: The importance of selective bloodbrain barrier uptake. Nanomed Nanotech Biol Med 2017;13:1289-1399. [PMID 27482636](#)

Dex S, Alberton P, Willkomm L, Söllradl T, Bago S, [Milz S](#), Shakibaei M, Ignatius A, Bloch W, Clausen-Schaumann H, Shukunami C, Schieker M, Docheva D. Tenomodulin is Required for Tendon Endurance Running and Collagen I Fibril Adaptation to Mechanical Load. EBioMedicine. 2017;20:240-254. [PMID 28566251](#)

Furia JP, Rompe JD, Maffulli N, Cacchio A, [Schmitz C](#). Radial extracorporeal shock wave therapy is effective and safe in chronic distal biceps tendinopathy. Clin J Sport Med. 2017; 27:430-437. [PMID 27893487](#)

Geith T, Niethammer T, Milz S, Dietrich O, Reiser M, Baur-Melnyk A. Transient Bone Marrow Edema Syndrome versus Osteonecrosis: Perfusion Patterns at Dynamic Contrast-enhanced MR Imaging with High Temporal Resolution Can Allow Differentiation. *Radiology* 2017; 283:478-485. [PMID 27905865](#)

Gudi V, Gai L, Herder V, Salinas L, Tejedor, Kipp M, Amor S, Sühs KW, Hansmann F, Beineke A, Baumgärtner W, Stangel M, Skripuletz T. Synaptophysin is a reliable marker for axonal damage. *J Neuropathol Exp Neurol* 2017 Feb;76:109-125. [PMID 28177496](#)

Haeussner E, Schmitz C, Grynspan D, Edler von Koch F, Frank H-G. Syncytial nuclei accumulate at the villous surface in IUGR while proliferation is unchanged. *Placenta* 2017;60:47-53. [PMID 29208239](#)

Hochstrasser T, Exner GL, Nyamoya S, Schmitz C, Kipp M. Cuprizone-Containing Pellets Are Less Potent to Induce Consistent Demyelination in the Corpus Callosum of C57BL/6 Mice. *J Mol Neurosci.* 2017; 61:617-624. Epub 2017 Feb 25. [PMID 28238065](#)

Holtman IR, Bsibsi M, Gerritsen WH, Boddeke HWGM, Eggen BJL, van der Valk P, Kipp M, Amor S, van Noort JM. Identification of highly connected hub genes in the protective response program of human macrophages and microglia activated by alpha B-crystallin. *Glia* 2017; 65:460-473. [PMID 28063173](#)

Ibrahim MI, Donatelli RA, Hellman M, Hussein AZ, Furia JP, Schmitz C. Long-term results of radial extracorporeal shock wave treatment for chronic plantar fasciopathy: a prospective, randomized, placebo-controlled trial with two years follow-up. *J Orthop Res* 2017; 35:1532-1538. [PMID 27567022](#)

Imamura M, Alamin S, Hsing WT, Alfieri FM, Schmitz C, Battistella LR. Efficacy of radial extracorporeal shock wave therapy (rESWT) for disabling pain due to severe primary knee osteoarthritis: a prospective, randomized, placebo controlled, double blind study with subjective and objective endpoints. *J Rehab Med* 2017; 49:54-62. [PMID 27904912](#)

Kertzman P, Czászár NBM, Furia JP, Schmitz C. Radial extracorporeal shock wave therapy is efficient and safe in the treatment of fracture nonunions of superficial bones: a retrospective case series. *J Orthop Surg Res* 2017; 12:164. [PMID 29110711](#)

Kipp M, Kiessling MC, Hochstrasser T, Roggenkamp C, Schmitz C. Design-based stereology for evaluation of histological parameters. *J Mol Neurosci* 2017;61:325-342 [PMID 27826759](#)

Kipp M, Nyamoya S, Hochstrasser T, Amor S. Multiple sclerosis animal models: A clinical and histopathological perspective. *Brain pathology* 2017;61:325-342. [PMID 27792289](#)

Kniha K, Kniha H, Möhlhenrich SC, Milz S, Hözlé F, Modabber A. Papilla and alveolar crest levels in immediate versus delayed single-tooth zirconia implants. *Int J Oral Maxillofac Surg* 2017;46:1039-1044. [PMID 28259599](#)

Nyamoya S, Kipp M, Hochstrasser T. Cuprizone as a model of myelin and axonal damage. *Drug Discov Today Dis Models* 2017;25-26:63-68

Puentes F, van der Star BJ, Boomkamp SD, Kipp M, Boon L, Bosca I, Raffel J, Gnanapavan S, van der Valk P, Stephenson J, Barnett SC, Baker D, Amor S. Neurofilament light as an immune target for pathogenic antibodies. *Immunology*. 2017; 152:580-588. [PMID 28718500](#)

Roth CJ, Haeussner E, Ruebelmann T, Edler von Koch F, Schmitz C, Frank HG, Wall WA - Dynamic modeling of uteroplacental blood flow in IUGR indicates vortices and elevated pressure in the intervillous space – a pilot study. *Sci Rep* 2017; 7:40771. [PMID 28102332](#)

Rüther BJ, Scheld M, Dreymueller D, Clarner T, Kress E, Brandenburg LO, Swartenbroekx T, Hoornaert C, Ponsaerts P, Fallier-Becker P, Beyer C, Rohr SO, Schmitz C, Chrzanowski U, Hochstrasser T, Nyamoya S, Kipp M. Combination of cuprizone and experimental autoimmune encephalomyelitis to study inflammatory brain lesion formation and progression. *Glia*. 2017; 65:1900-1913. [PMID 28836302](#)

Schmitz C. Not all extracorporeal shock wave therapies are equal: a comment on Ulusoy et al. *J Foot Ankle Surg* 2017;56:762-767

2016

Angstman NB, Frank HG, Schmitz C. Advanced behavioral analyses show that the presence of food causes subtle changes in *C. elegans* movement. *Front Behav Neurosci* 2016;10:60. [PMID 27065825](#)

Császár NBM, Schmitz C. Effektivität und Sicherheit der Extrakorporalen Stoßwellentherapie bei Sehnenpathologien: eine systematische Übersicht über in der PEDro Datenbank gelistete Studien. In: Plaaß C, Weisskopf L (eds). *Sehnenerkrankungen*. Walter de Gruyter, Berlin, 2016

D'Este M, Martin Sprecher C, Milz S, Nehrbass D, Dresing I, Zeiter S, Alini M, Eglin D. Evaluation of an injectable thermoresponsive hyaluronan hydrogel in a rabbit osteochondral defect model. *J Biomed Mater Res A* 2016;104:1469-1478. [PMID 26833870](#)

Draheim T, Liessem A, Scheld M, Wilms F, Weissflog M, Denecke B, Wruck C, Kensler T, Zendehdel A, Beyer C, Kipp M, Fragoulis A, Clarner T. Activation of the astrocytic Nrf2/ARE system ameliorates the formation of demyelinating lesions in a multiple sclerosis animal model. *Glia* 2016;64:2219-2230.

Falkai P, Malchow B, Wetzestein K, Nowastowski V, Bernstein HG, Steiner J, Schneider-Axmann T, Kraus T, Hasan A, Bogerts B, Schmitz C, Schmitt A. Decreased oligodendrocyte and neuron number in anterior hippocampal areas and the entire hippocampus in schizophrenia: A stereological post-mortem study. *Schizophr Bull* 2016;42 Suppl 1:S4-S12.

Frank HG. Placental Development. In: *Fetal and Neonatal Physiology*, 2-Volume Set, 5th Edition. Section II Placenta and Intrauterine Environment (pps 101-113). Polin, Abman, Rowitch, Benitz (eds). Elsevier 2016. ISBN 9780323352147

Große-Veldmann R, Becker B, Amor S, van der Valk P, Beyer C, Kipp M. Lesion Expansion in experimental demyelination animal models and multi sclerosis lesions. *Mol Neurobiol* 2016;53:4905-17 [PMID 26363796](#)

Haeussner E, Schmitz C, Frank HG, Edler von Koch F. Novel 3D light microscopic analysis of IUGR placentas points to a morphological correlate of compensated ischemic placental disease in humans. *Sci Rep* 2016;6:24004. [PMID 27045698](#)

He X, Reichl FX, Wang Y, Michalke B, Milz S, Yang Y, Stolper P, Lindemaier G, Graw M, Hickel R, Högg C. Analysis of titanium and other metals in human jawbones with dental implants - A case series study. *Dent Mater* 2016;32:1042-51. [PMID 27298240](#)

Hochstrasser T, Frank HG, Schmitz C. Dose-dependent and cell type-specific cell death and proliferation following in vitro exposure to radial extracorporeal shock waves. *Sci Rep* 2016;6:30637.

Höflich K, Beyer C, Clarner T, Schmitz C, Kipp M, Hochstrasser T. Acute axonal damage in three different murine models of multiple sclerosis: a comparative approach. *Brain Res* 2016;1650:125-133.

Janssen K, Rickert M, Clarner T, Beyer C, Kipp M. Absence of CCL2 and CCL3 ameliorates central nervous system grey matter but not white matter demyelination in the presence of an intact blood-brain barrier. Mol Neurobiol 2016;53:1551-1564. [PMID 25663168](#)

Kipp M. Remyelination strategies in multi sclerosis: a critical reflection. Expert Rev Neurother 2016;16:1-3. [PMID 26618372](#)

Kipp M, Hochstrasser T, Schmitz C, Beyer C. Female sex steroids and glia cells: impact on multi sclerosis lesion formation and fine tuning of the local neurodegenerative cellular network. Neurosci Biobehav Rev 2016;67:125-136.

Kniha K, Gahlert M, Hicklin S, Brägger U, Kniha H, Milz S. Evaluation of hard and soft tissue dimensions around zirconium oxide implant supported crowns: A One-Year Retrospective Study. J Periodontol 2016;14:1-15. [PMID 26654346](#)

Kraus TM, Imhoff FB, Reinert J, Wexel G, Wolf A, Hirsch D, Hofmann A, Stöckle U, Buchmann S, Tischer T, Imhoff AB, Milz S, Anton M, Vogt S. Stem cells and bFGF in tendon healing: Effects of lentiviral gene transfer and long-term follow-up in a rat Achilles tendon defect model. BMC Musculoskelet Disord. 2016 Apr 5;17:148. doi: 10.1186/s12891-016-0999-6

Moore SR, Heu C, Yu NY, Whan RM, Knothe UR, Milz S, Knothe Tate ML. Translating Periosteum's Regenerative Power: Insights From Quantitative Analysis of Tissue Genesis With a Periosteum Substitute Implant. Stem Cells Transl Med 2016;5:1739-1749. [PMID 27465072](#)

Putz R, Milz S. Macroscopic and functional anatomy of the apophyseal plate. Orthopäde. 2016; 45:199-205. doi: 10.1007/s00132-016-3227-z. German. Erratum in: Orthopäde. 2016; 45:445.

Riedemann T, Schmitz C, Sutor B. Immunocytochemical heterogeneity of somatostatin-expressing GABAergic interneurons in layers II and III of the mouse cingulate cortex: a combined immunofluorescence / design-based stereological study. J Comp Neurol 2016;524:2281-2299. [PMID 26669716](#)

Rompe JD, Theis S, Schmitz C. Evidenz-basierte Überprüfung der Therapieempfehlungen bei Epicondylopathia radialis humeri (Tennisellenbogen). In: Peters K, Roth A (eds). Fortbildung Osteologie, Band IV. Springer, Berlin, 2016

Rosenkranz E, Maywald M, Hilgers R, Brieger A, Clarner T, Kipp M, Plümäkers B, Meyer S, Schwerdtle T, Rink L. Induction of regulatory T cells in Th1-/Th17-driven experimental autoimmune encephalomyelitis by zinc administration. J Nutr Biochem 2016;29:116-123. [PMID: 26895672](#)

Scheld M, Rüther BJ, Große-Veldmann R, Ohl K, Tenbrock K, Dreymüller D, Fallier-Becker P, Zendedel A, Beyer C, Clarner T, Kipp M. Neurodegeneration Triggers Peripheral Immune Cell Recruitment into the Forebrain. J Neurosci 2016;36:1410-5. [PMID 26895672](#)

Schindele SF, Sprecher CM, Milz S, Hensler S. Osteointegration of a modular metal-polyethylene surface gliding finger implant: a case report. Arch Orthop Trauma Surg 2016;136:1331-52016. [PMID 27450194](#)

Schmitz C, Först A, Kreutz A, Tröster S: Geheimnisvolle Triggerpunkte. Sportärztezeitung 2016;2:14-20

Stoeckelhuber M, Loeffelbein DJ, Olzowy B, Schmitz C, Koerdt S, Kesting MR. Labial salivary glands in infants: histochemical analysis of cytoskeletal and antimicrobial proteins. J Histochem Cytochem 2016;64:502-510.

Ummenthum K, Peferoen LAN, Finardi A, Baker D, Pryce G, Mantovani A, Bsibsi M, Bottazzi B, Peferoen-Baert R, van der Valk P, Garlanda C, Kipp M, Furlan R, van Noort JM, Amor S. Pentraxin-3 is upregulated in the central nervous system during MS and EAE, but does not modulate the autoimmune neuroinflammation. *Eur J Immunol* 2016;46:701-11. [PMID 26576501](#)

Wagenknecht N, Becker B, Scheld M, Beyer C, Clarner T, Hochstrasser T, Kipp M. Thalamus Degeneration and Inflammation in Two Distinct Multiple Sclerosis Animal Models. *J Mol Neurosci*. 2016;60:102-14. [PMID 27491786](#)

Wang T, Du L, Shan L, Dong H, Feng J, Kiessling MC, Angstman NB, Schmitz C, Jia F. A prospective case control study of radial extracorporeal shock wave therapy for spastic plantar flexor muscles in young children with cerebral palsy. *Medicine* 2016;95:e3649. [PMID 27175689](#)

Zendedel A, Johann S, Mehrabi S, Joghataei M, Hassanzadeh G, Kipp M, Beyer C. Activation and regulation of NLRP3 inflammasome by intrathecal application of SDF-1a in a spinal cord injury model *Mol Neurobiol* 2016;53:3063-75 [PMID 25972240](#)

Zengin A, Kropp B, Chevalier Y, Junnila R, Sustarsic E, Herbach N, Fanelli F, Mezzullo M, Milz S, Bidlingmaier M, Bielohuby M. Low-carbohydrate, high-fat diets have sex-specific effects on bone health in rats. *Eur J Nutr* 2016;55:2307-20 [PMID 26386685](#)

2015

Angstman NB, Kiessling MC, Frank HG, Schmitz C. High interindividual variability in dose-dependent reduction in speed of movement after exposing *C. elegans* to shock waves. *Front Behav Neurosci* 2015;9:12. [PMID 4319468](#)

Bode GH, Pickl KE, Sanchez-Purrà M, Albaiges B, Borrós S, Pötgens AJ, Schmitz C, Sinner FM, Losen M, Steinbusch HW, Frank HG, Martinez-Martinez P; European NanoBioPharmaceutics Research Initiative. Detection of Peptide-based nanoparticles in blood plasma by ELISA. *PLoS One* 2015;10:e0126136.

Brisevac D, Adzic M, Laketa D, Parabucki A, Milosevic M, Lavrnja I, Bjelobaba I, Sévigny J, Kipp M, Nedeljkovic N. Extracellular ATP selectively upregulates ecto-nucleoside triphosphate phosphophydrolyase-2 and ecto-5-nucleotidase by rat cortical astrocytes in vitro. *J Mol Neurosci* 2015;57:452-462. [PMID 26080748](#)

Butterworth PA, Walsh TP, Pennisi YD, Chesne AD, Schmitz C, Nancarrow SA. The effectiveness of extracorporeal shock wave therapy for the treatment of lower limb ulceration: a systematic review. *J Foot Ankle Res* 2015;8:3. [PMID 4342213](#)

Clarner T, Janssen K, Nellessen L, Stangel M, Skripuletz T, Krauspe B, Hess FM, Denecke B, Beutner C, Linnartz-Gerlach B, Neumann H, Vallières L, Amor S, Ohl K, Tenbrock K, Beyer C, Kipp M. CXCL10 triggers early microglial activation in the cuprizone model. *J Immunol* 2015;194:3400-3413. [PMID 25725102](#)

Császár NBM, Angstman NB, Milz S, Sprecher CM, Kobel P, Farhat M, Furia JP, Schmitz C. Radial shock wave devices generate cavitation. *PLoS One* 2015;10:e0140541. [PMID 26509573](#)

Frank HG (2015): Histologi@: Einführung in die Zytologie und Histologie. Begleitskript zum Kursus Zytologie, Histologie und Mikroskopische Anatomie. München: Anatomische Anstalt der LMU München, ISBN [978-3-95925-008-5](#) (online)

Goldberg J, Clarner T, Beyer C, Kipp M. Anatomical distribution of cuprizone-induced lesions in C57BL6 mice. *J Mol Neurosci* 2015;57:166-175. [PMID 26067430](#)

Haeussner E, Aschauer B, Burton GJ, Huppertz B, Edler von Koch F, Müller-Starck J, Salafia C, Schmitz C, Frank HG. Does 2D-Histologic identification of villous types of human placentas at birth enable sensitive and reliable interpretation of 3D structure? *Placenta* 2015;36:1425-1432. [PMID 26494606](#)

He X, Hartlieb E, Rothmund L, Waschke J, Wu X, Van Landuyt KL, Milz S, Michalke B, Hickel R, Reichl FX, Högg C. Intracellular uptake and toxicity of three different titanium particles. *Dent Mater* 2015; 31:734-744. [PMID 25910990](#)

Kiessling MC, Milz S, Frank HG, Korbel R, Schmitz C. Radial extracorporeal shock wave treatment harms developing chicken embryos. *Sci Rep* 2015;5:8281. [PMID 25655309](#)

Krauspe B, Dreher W, Beyer C, Baumgartner W, Denecke B, Berger K, Langhans CD, Clarner T, Kipp M. Short-term cuprizone feeding varies N-acetylaspartate quantification as a marker of neuro-degeneration. *J Mol Neurosci* 2015;55(3):733-48. [PMID 25189319](#)

Kruczek D, Clarner T, Beyer C, Kipp M, Mey J. Activation of nuclear receptors RAR, RXR and LXR does not reduce cuprizone-induced demyelination in mice. *Nucl Rec Res* 2015. [doi:10.11131/2015/101163](https://doi.org/10.11131/2015/101163)

Kusserow A, Ficklscherer A, Kreuz PC, Finze S, Mittelmeier W, Jansson V, Milz S, Wegener B. Importance of a distal centralizer in experimental malpositioning of cemented stems. A biomechanical study on human femora. *Arch Med Sci* 2015;11:1324-9. [PMID 26788098](#)

Lardenoije R, van den Hove DL, Vaessen TS, Iatrou A, Meuwissen KP, van Hagen BT, Kenis G, Steinbusch HW, Schmitz C, Rutten BP. Epigenetic modifications in mouse cerebellar Purkinje cells: effects of aging, caloric restriction, and overexpression of superoxide dismutase 1 on 5-methylcytosine and 5-hydroxymethylcytosine. *Neurobiol Aging* 2015;36:3079-3089. [PMID 26476235](#)

Mattyasovszky S, Troester S, Schmitz C. Fallbeispiele Akut-RSWT – Anwendung bei Fussballprofis des FSV Mainz 05. *medicalsports network* 2015;3:42-43.

Milz S, Putz R, Haasters F, Ockert B. Anatomy of the acromioclavicular and coracoclavicular region : Functional and clinical aspects.[Article in German] *Unfallchirurg* 2015;118:390-396.

Ohl K, Tenbrock K, Kipp M. Oxidative stress in multiple sclerosis: central and peripheral mode of action. *Exp Neurol* 2015;277:58-67. [PMID 26626971](#)

Rompe JD, Furia J, Caccio A, Schmitz C, Maffulli N. Radial shock wave treatment alone is less efficient than radial shock wave treatment combined with tissue-specific plantar fascia-stretching in patients with chronic heel pain. *Int J Surg* 2015;24:135-42. [PMID 25940060](#)

Schmidutz F, Sprecher CM, Milz S, Gohlke F, Hertel R, Braunstein V. Resurfacing of the humeral head: An analysis of the bone stock and osseous integration under the implant. *J Orthop Res* 2015; 33:1382-90. [PMID 25808101](#)

Schmitz C. Akut-RSWT. Akute radiale Stosswellentherapie – neue Konzepte und Behandlungsmöglichkeiten bei Fussballprofis. *medicalsports network* 2015;2:26-29.

Schmitz C. Einsatz von Stosswellentherapie bei Spitzensportlern – wann ist das sinnvoll? *JATROS Orthopädie* 2015;2:36-38.

Schmitz C, Császár NBM, Milz S, Schieker M, Maffulli N, Rompe JD, Furia JP. Efficacy and safety of extracorporeal shock wave therapy for orthopedic conditions: a systematic review on studies listed in the PEDro database. *Brit Med Bull* 2015;116:115-38. [PMID 26585999](#)

Slowik A, Schmidt T, Beyer C, Amor S, Clarner T, Kipp M. The sphingosine 1-phosphate receptor agonist FTY720 is neuroprotective after cuprizone-induced CNS demyelination. *Br J Pharmacol* 2015;172:80-92. [PMID 25220526](#)

Sprecher CM, Schmidutz F, Helfen T, Richards RG, Blauth M, Milz S. Histomorphometric assessment of cancellous and cortical bone material distribution in the proximal humerus of normal and osteoporotic individuals: Significantly reduced bone stock in the metaphyseal and subcapital regions of osteoporotic individuals. *Medicine* 2015;94.

Viehöfer AF, Shinohara Y, Sprecher CM, Boszczyk BM, Buettner A, Benjamin M, Milz S. The molecular composition of the extracellular matrix of the human iliolumbar ligament. *Spine J* 2015;15:1325-31. [PMID 24139866](#)

2014

Ficklscherer A, Loitsch T, Serr M, Güleyüz MF, Niethammer TR, Müller HH, Milz S, Pietschmann MF, Müller PE. Does footprint preparation influence tendon-to-bone healing after rotator cuff repair in an animal model? *Arthroscopy* 2014;30:188-94. [PMID 24485111](#)

Ficklscherer A, Scharf M, Hartl TK, Schröder C, Milz S, Roßbach BP, Güleyüz MF, Pietschmann MF, Müller PE. Tissue characteristics in tendon-to-bone healing change after rotator cuff repair using botulinumneurotoxin A for temporary paralysis of the supraspinatus muscle in rats. *Connect Tiss Res* 2014;55:140-6. [PMID 24409812](#)

Geith T, Sergiu A, Milz S, Bamberg F, Keilmann F. Visualisation of methacrylate-embedded human bone sections by infrared nanoscopy. *J Biophotonics* 2014;7:418-24. [PMID 23420621](#)

Günther CM, Müller PE, Mutschler W, Sprecher CM, Milz S, Braunstein V. Straight proximal humeral nails are surrounded by more bone stock in comparison to bent nails in an experimental cadaveric study. *Patient Saf Surg* 2014; 8:18. [PMID 24817909](#)

Haeussner E, Buehlmeyer A, Schmitz C, Edler von Koch F, Frank HG. Novel 3D microscopic analysis of human placental villous trees reveals unexpected significance of branching angles. *Sci Rep* 2014;4:6192. [PMID 25155961](#)

Kiessling MC, Büttner A, Butti C, Müller-Starck J, Milz S, Hof PR, Frank HG, Schmitz C. Cerebellar granule cells are generated postnatally in humans. *Brain Struct Funct* 2014;219:1271-86. [PMID 23716277](#)

König MA, Milz S, Bayley E, Boszczyk BM. The direct anterior approach to the thoracolumbar junction: an anatomical feasibility study. *Eur Spine J* 2014;23:2265-71. [PMID 24633718](#)

Korr H, Angstman NB, Born TB, Bosse K, Brauns B, Demmler M, Füller K, Kántor O, Kever BM, Rahimyan N, Salimi S, Silny J, Schmitz C. No evidence of persisting unrepaired nuclear DNA single strand breaks in distinct types of cells in the brain, kidney, and liver of adult mice after continuous eight-week 50 Hz magnetic field exposure with flux density of 0.1 mT or 1.0 mT. *PLoS One* 2014;10:9. [PMID 25302592](#)

Kraus TM, Imhoff FB, Wexel G, Wolf A, Hirsch D, Lenz L, Stöckle U, Buchmann S, Tischer T, Imhoff AB, Milz S, Anton M, Vogt S. Stem cells and basic fibroblast growth factor failed to improve tendon

healing: an in vivo study using lentiviral gene transfer in a rat model. J Bone Joint Surg Am 2014;96:761-9. [PMID 24806013](#)

Kubosch D, Vacariu A, Milz S, Izadpanah K, Südkamp NP, Strohm PC. Anatomical assessment of iliac crest graft size for anterior spondylodesis. Acta Orthop Belg 2014;80:515-21. [PMID 26280724](#)

Lenze U, Pohlig F, Seitz S, Ern C, Milz S, Docheva D, Schieker M. Influence of osteogenic stimulation and VEGF treatment on in vivo bone formation in hMSC-seeded cancellous bone scaffolds. BMC Musculoskelet Disord 2014;15:350. [PMID 25323565](#)

Malchow B, Strocka S, Frank F, Bernstein HG, Steiner J, Schneider-Axmann T, Hasan A, Reich-Erkelenz D, Schmitz C, Bogerts B, Falkai P, Schmitt A. Stereological investigation of the posterior hippocampus in affective disorders. J Neural Transm 2014; J Neural Transm 2015;122:1019-1033. [PMID 25307869](#)
Moore SR, Milz S, Knothe Tate ML. The linea aspera: a virtual case study testing emergence of form and function. Anat Rec 2014;297:273-80. [PMID 24347367](#)

Moore SR, Milz S, Knothe Tate ML. Periosteal thickness and cellularity in mid-diaphyseal cross-sections from human femora and tibiae of aged donors. J Anat 2014;224:142-9. [PMID 24175932](#)

Müller-Starck J, Büttner A, Kiessling MC, Angstman N, Csaszár NBM, Haeussner E, Hochstrasser T, Sternecker K, Hof PR, Milz S, Frank HG, Schmitz C. No changes in cerebellar microvessel length density in SIDS: implications for pathogenetic mechanisms. J Neuropathol Exp Neurol 2014;73:312-323. [PMID 24607967](#)

Schlaudraff KU, Kiessling MC, Császár NBM, Schmitz C. Predictability of the individual clinical outcome of extracorporeal shock wave therapy for cellulite. Clin Cosmet Investig Dermatol 2014;7: 171-183.

Schmitz C. Radiale Stosswelle: Leistungssteigerung bei Profisportlern? Ja – aber bitte richtig informiert. medical sports network 2014;3:44.

Schmitz C, Eastwood BS, Tappan SJ, Glaser JR, Peterson DA, Hof PR. Current automated 3D cell detection methods are not a suitable replacement for manual stereologic cell counting. Front Neuroanat 2014;8:27. [PMID 24847213](#)

Sternecker K, Denic M, Geist J. Timing matters: species-specific interactions between spawning time, substrate quality, and recruitment success in three salmonid species. Ecol Evol 2014;4:2749-2758.

Uppal N, Gianatiempo I, Wicinski B, Schmeidler J, Heinsen H, Schmitz C, Buxbaum JD, Hof PR. Neuropathology of the posteroinferior occipitotemporal gyrus in children with autism. Mol Autism 2014;24;5:17. [PMID 24564936](#)

Uppal N, Wicinski B, Buxbaum JD, Heinsen H, Schmitz C, Hof PR. Neuropathology in the anterior midcingulate cortex of children with autism. J Neuropathol Exp Neurol 2014;73:891-902. [PMID 25101703](#)

2013

Brasnejvic I, Lardenoije R, Schmitz C, van der Kolk N, Dickstein DL, Takahashi H, Hof PR, Steinbusch H, Rutten B. Region-specific neuron and synapse loss in the hippocampus of APPSL/PS1 knock-in mice. Transl Neurosci 2013;4:8-9. [PMID 24829793](#)

Csaszár NBM. Vom Australischen Institut für Meeresforschung an die Anatomische Anstalt München – Ein Primer für interdisziplinäre Forschung. NeadeA 2013;8-12.

Császár NBM, Schmitz C. Extracorporeal shock wave therapy in musculoskeletal disorders. J Orthop Surg Res 2013;8:22. [PMID 23895659](#)

Ficklscherer A, Hartl TK, Scharf M, Sievers B, Schröder C, Milz S, Niethammer T, Pietschmann MF, Müller PE. Effects of selective paralysis of the supraspinatus muscle using botulinum neurotoxin a in rotator cuff healing in rats. J Orthop Res 2013;31:716-23. [PMID 23239559](#)

Frank HG, Aschauer, B. Einführung in die Histologische Technik. NeadeA 2013;1-5.

Haeussner E, Schmitz C, Edler von Koch F, Frank HG. Birth Weight correlates with Size but not Shape of the Normal Human Placenta. Placenta 2013;34:574-82. [PMID 23672847](#)

Hofmann-Kiefer KF, Chappell D, Knabl J, Frank HG, Martinoff N, Conzen P, Becker BF, Rehm M. Placental Syncytiotrophoblast Maintains a Specific Type of Glycocalyx at the Fetomaternal Border: The Glycocalyx at the Fetomaternal Interface in Healthy Women and Patients With HELLP Syndrome. Repr Sci 2013; 20:1237-45. [PMID 23585336](#)

Hoppe S, Alini M, Benneker LM, Milz S, Boileau P, Zumstein MA. Tenocytes of chronic rotator cuff tendon tears can be stimulated by platelet-released growth factors. J Shoulder Elbow Surg 2013;22:340-9. [PMID 22521394](#)

Kiessling MC, Büttner A, Butti C, Müller-Starck J, Milz S, Hof PR, Frank HG, Schmitz C. Intact numbers of cerebellar purkinje and granule cells in sudden infant death syndrome: a stereologic analysis and critical review of neuropathologic evidence. J Neuropathol Exp Neurol 2013;72:861-70. [PMID 23965745](#)

Kirchhoff C, Kirchhoff S, Sprecher CM, Ahrens P, Imhoff AB, Hinterwimmer S, Milz S, Braunstein V. X-treme CT analysis of cancellous bone at the rotator cuff insertion in human individuals with osteoporosis: superficial versus deep quality. Arch Orthop Trauma Surg 2013;133:381-7. [PMID 23224427](#)

Kubosch D, Windolf M, Milz S, Südkamp NP, Strohm PC. Biomechanical comparison of three types of bone graft for anterior spondylodesis. Technol Health Care 2013;21:315-22. [PMID 23949172](#)

Müller-Starck J. Histologi@ - ein bedeutender Meilenstein in der Lehre der mikroskopischen Anatomie. NeadeA 2013;18-19.

Sandmann GH, Adamczyk C, Grande Garcia E, Doebele S, Buettner A, Milz S, Imhoff AB, Vogt S, Burgkart R, Tischer T. Biomechanical comparison of menisci from different species and artificial constructs. BMC Musculoskelet Discord 2013;14:324. [PMID 24237933](#)

Schmitz C, Császár NBM, Rompe JD, Chaves H, Furia JP. Treatment of chronic plantar fasciopathy with extracorporeal shock waves (review). J Orthop Surg Res 2013;8:31.

Sprecher CM, Gahlert M, Röhling S, Kniha H, Gueorguiev B, Milz S. Comparison of imaging methods used for dental implant osseous integration assessment. J Mater Sci Mater Med 2013;24:2195-2200. [PMID 23838879](#)

Sternecker K, Wild R, Geist J. Effects of substratum restoration on salmonid habitat quality in a subalpine stream. Environmental Biology of Fishes 2013. ISSN 0378-1909. Environ Biol Fish [DOI 10.1007/s10641-013-0111-0](#)

Volkmer E, Leicht U, Moritz M, Schwarz C, Wiese H, Milz S, Matthias P, Schloegl W, Friess W, Goettlinger M, Augat P, Schieker M. Poloxamer-based hydrogels hardening at body core temperature

as carriers for cell based therapies: in vitro and in vivo analysis. J Mater Sci Mater Med 2013;24:2223-34. [PMID 23712537](#)

2012

Arora R, Milz S, Sprecher C, Sitte I, Blauth M, Lutz M. Behaviour of ChronOST™ Inject in metaphyseal bone defects of distal radius fractures: Tissue reaction after 6-15 months. Injury (Int. J. Care Injured) 2012;43:1683-8.

Chatuparisute P, Shinohara Y, Kirchhoff C, Fischer F, Milz S. Immunohistochemical composition of the human lunotriquetral interosseous ligament. Appl Immunohistochem Mol Morphol 2012;20:318-24. [PMID 22505013](#)

Chouliaras L, van den Hove DL, Kenis G, Keitel S, Hof PR, van Os J, Steinbusch HW, Schmitz C, Rutten BP. Prevention of age-related changes in hippocampal levels of 5-methylcytidine by caloric restriction. Neurobiol Aging 2012;33:1672-1681. [PMID 21764481](#)

Chouliaras L, van den Hove DL, Kenis G, Keitel S, Hof PR, van Os J, Steinbusch HW, Schmitz C, Rutten BP. Age-related increase in levels of 5-hydroxymethylcytosine in mouse hippocampus is prevented by caloric restriction. Current Alz Res 2012;9:536-544. [PMID 22272625](#)

Gantert M, Kreczmanski P, Kuypers E, Jellema R, Strackx E, Bastian N, Gavilanes AW, Zimmermann LJ, Garnier Y, Schmitz C, Kramer BW. Effects of in utero endotoxemia on the ovine fetal brain: A model for schizophrenia? Front Biosci (Elite Ed). 2012;4:2845-53. [PMID 22652683](#)

Höistad M, Heinsen H, Schmitz C, Hof PR. Stereologic assessment of the dorsal anterior cingulate cortex in schizophrenia: absence of changes in neuronal and glial densities. Neuropathol. Applied Neurobiol 2012;39:348-61. [PMID 22860626](#)

Jacot-Descombes S, Uppal N, Wicinski B, Santos M, Schmeidler J, Giannakopoulos P, Heinsein H, Schmitz C, Hof PR. Decreased pyramidal neuron size in Brodmann areas 44 and 45 in patients with autism. Acta Neuropathol 2012;124:67-79. [PMID 22467063](#)

Kirchhoff C, Braunstein V, Milz S, Sprecher CM, Kirchhoff S, Graw M, Imhoff AB, Hinterwimmer S. Age and gender as determinants of the bone quality of the greater tuberosity: A HR-pQCT cadaver study. BMC Musculoskelet Disord 2012;13:221. [PMID 23148627](#)

Knothe Tate ML, Tami AE, Netrebko P, Milz S, Docheva D. Multiscale computational and experimental approaches to elucidate bone and ligament mechanobiology using the ulna-radius-interosseous membrane construct as a model system. Technol Health Care 2012;20:363-78.

Midilli R, Gode S, Karci B, Orhan M, Saylam CY. The clinical value of the novel cauterization procedure for the inferior turbinate artery during turbinate surgery. Eur Arch Otorhinolaryngol 2012;269:1629-33. [PMID 22134669](#)

Milz S. Spine function: a concert of many different players. J Anat 2012;221:479.

Ockert B, Braunstein V, Sprecher C, Shinohara Y, Kirchhoff C, Milz S. Attachment sites of the coracoclavicular ligaments are characterized by fibrocartilage differentiation. A study on human cadaveric tissue. Scand J Med Sci Spor 2012;22:12-7.

2011

Bartels H, Fazekas U, Youson JH, Potter IC. Changes in the cellular composition of the gill epithelium during the cycle of a nonparasitic lamprey. Functional and evolutionary implications. *Can J Zool* 2011;89:538-545.

Braunstein V, Duda S, Sprecher CM, Brighenti V, Arora R, Tami A, Lutz M, Milz S. [Comparison of regional distribution of cancellous bone in osteoporotic and non-osteoporotic distal radii]. *Unfallchirurg* 2011;114:424-30. German. [PMID 21448676](#)

Chouliaras L, van den Hove DL, Kenis G, Dela Cruz J, Lemmens MA, van Os J, Steinbusch HW, Schmitz C, Rutten BP. Caloric restriction attenuates age-related changes of DNA methyltransferase 3a in mouse hippocampus. *Brain Behav Immun* 2011;25:616-23. [PMID 21172419](#)

Chouliaras L, van den Hove DL, Kenis G, Keitel S, Hof PR, van Os J, Steinbusch HW, Schmitz C, Rutten BP. Prevention of age-related changes in hippocampal levels of 5-methylcytidine by caloric restriction. *Neurobiol Aging* 2011;33:1672-81. [PMID 21764481](#)

Frank HG. Placental Development. In: *Fetal and Neonatal Physiology*. Polin RA, Fox WW, Abman SH eds. p. 108 ff. Elsevier Saunders. Philadelphia. ISBN 978-1-4160-3479-7. 2011

Kessler C, Greindl A, Breuer B, Haberl U, Rybka A, Emgenbroich M, Frank HG, Pötgenset A. Erythropoietin mimetic compound AGEM400(HES) binds to the same receptor as erythropoietin but displays a different spectrum of activities. *Cytokine* 2011;57:226-37. [PMID 22142701](#)

Kubosch D, Milz S, Lohrmann C, Schwieger K, Konstantinidis L, Sprecher CM, Südkamp NP, Strohm PC. Risk of graft fracture after dorso-ventral thoraco-lumbar spondylodesis: is there a correlation with graft size? *Eur Spine J* 2011;20:1644-9. [PMID 21748494](#)

Küper C, Bartels H, Beck FX, Neuhofer W. Cyclooxygenase-2-dependent phosphorylation of the pro-apoptotic protein Bad inhibits tonicity-induced apoptosis in renal medullary cells. *Kidney Int* 2011;80:938-45. [PMID 21716255](#)

Lemmens MA, Siersma AS, Rutten BP, Dennissen F, Steinbusch HW, Lucassen PJ, Schmitz C. Age-related changes of neuron numbers in the frontal cortex of a transgenic mouse model of Alzheimer's disease. *Brain Struct Funct* 2011;216:227-37. [PMID 21409417](#)

Richter A, Lübbing M, Frank HG, Nolte I, Bullerdiek JC, von Ahsen I. High-mobility group protein HMGA2-derived fragments stimulate the proliferation of chondrocytes and adipose tissue-derived stem cells. *Eur Cell Mater* 2011;21:355-63. [PMID 21484705](#)

Salzmann GM, Buchberger MS, Stoddart MJ, Grad S, Milz S, Niemyer P, Sudkamp NP, Imhoff AB, Alini M. Varying regional topology within knee articular chondrocytes under simulated in vivo conditions. *Tissue Eng Part A* 2011;17:451-61. [PMID 20807006](#)

Santos M, Uppal N, Butti C, Wicinski B, Schmeidler J, Giannakopoulos P, Heinsen H, Schmitz C, Hof PR. von Economo neurons in autism: a stereologic study of the frontoinsular cortex in children. *Brain Res* 2011;1380:206-17. [PMID 20801106](#)

Steinbrück A, Milz S, Woiczinski M, Schröder C, Utzschneider S, Jansson V, Fottner A. Anatomie und Biomechanik des Patellofemoralgelenks: Physiologische Gegebenheiten und Veränderungen nach Implantation einer Kniestotalendoprothese. *Orthopäde* 2011;40:848-854. [PMID 21938492](#)

2010

Frank HG, Schmitz C. Der Mensch und „seine“ Placenta: Was bedeuten die beiden wirklich füreinander? *NeadeA* 2010; 4-8.

Hasler C, Sprecher CM, Milz S. Comparison of the immature sheep spine and the growing human spine: a spondylometric database for growth modulating research. Spine 2010;1;35:E1262-72. [PMID 20938392](#)

Kubosch D, Milz S, Sprecher CM, Südkamp NP, Müller CA, Strohm PC. Effect of graft size on graft fracture rate after anterior lumbar spinal fusion in a sheep model. Injury 2010;41:768-71. [PMID 19740465](#)

Kuipers H, Schnorfeil FM, Fehling HJ, Bartels H, Brocker T. Dicer-dependent microRNAs control maturation, function, and maintenance of Langerhans cells in vivo. J Immunol 2010;185:400-9. [PMID 20530258](#)

Ibrahim MI, Donatelli RA, Schmitz C, Hellman MA, Buxbaum F. Chronic plantar fasciitis treated with two sessions of radial extracorporeal shock wave therapy. Foot Ankle Int 2010;31:391-7. [PMID 20460065](#)

Kiessling M. 7482 Nissl-Chloroform Upper East Side: Ein Labor-Erlebnisbericht. NeadeA 2010; 26-29.

Lauria G, Bakkers M, Schmitz C, Lombardi R, Penza P, Devigili G, Smith AG, Hsieh ST, Mellgren SI, Umapathi T, Ziegler D, Faber CG, Merkies IS. Intraepidermal nerve fiber density at the distal leg: a worldwide normative reference study. J Peripher Nerv Syst 2010;15:202-7. [PMID 21040142](#)

Lemmens MA, Steinbusch HW, Rutten BP, Schmitz C. Advanced microscopy techniques for quantitative analysis in neuromorphology and neuropathology research: current status and requirements for the future. J Chem Neuroanat 2010;40:199-209. [PMID 20600825](#)

Michelsen KA, Korr H, Steinbusch HW, Schmitz C. Presenilin 1-related alterations in DNA integrity in a transgenic mouse model of Alzheimer's disease. Brain Res 2010;1316:139-44. [PMID 20034479](#)

Niemeyer P, Fechner K, Milz S, Richter W, Suedkamp NP, Mehlhorn AT, Pearce S, Kasten P. Comparison of mesenchymal stem cells from bone marrow and adipose tissue for bone regeneration in a critical size defect of the sheep tibia and the influence of platelet-rich plasma. Biomaterials 2010;31:3572-9. [PMID 20153047](#)

Niemeyer P, Schönberger TS, Hahn J, Kasten P, Fellenberg J, Suedkamp N, Mehlhorn AT, Milz S, Pearce S. Xenogenic transplantation of human mesenchymal stem cells in a critical size defect of the sheep tibia for bone regeneration. Tissue Eng Part A 2010;16:33-43. [PMID 19604039](#)

Orhan M, Govsa F, Saylam C. A quite rare condition: absence of sphenoidal sinuses. Surg Radiol Anat 2010;32:551-3. [PMID 20082077](#)

Orhan M, Govsa F, Saylam C. A surgical view of the superior nasal turbinate: anatomical study. Eur Arch Otorhinolaryngol 2010;267:909-16. [PMID 20012078](#)

Orhan M, Midilli R, Gode S, Saylam CY, Karci B. Blood supply of the inferior turbinate and its clinical applications. Clin Anat 2010;23:770-6. [PMID 20607822](#)

Pautke C, Vogt S, Kreutzer K, Haczek C, Wexel G, Kolk A, Imhoff AB, Zitzelsberger H, Milz S, Tischer T. Characterization of eight different tetracyclines: advances in fluorescence bone labeling. J Anat 2010;217:76-82. [PMID 20456523](#)

Rompe JD, Cacchio A, Weil L, Furia JP, Haist J, Reiners V, Schmitz C, Maffulli N. Plantar fascia-specific stretching versus radial shock-wave therapy as initial treatment of plantar fasciopathy. J Bone Joint Surg Am 2010;92:2514-22. [PMID 21048171](#)

Rutten BP, Brasnjevic I, Steinbusch HW, Schmitz C. Caloric restriction and aging but not overexpression of SOD1 affect hippocampal volumes in mice. Mech Ageing Dev 2010;131:574-9. [PMID 20728464](#)

Rutges J, Creemers LB, Dhert W, Milz S, Sakai D, Mochida J, Alini M, Grad S. Variations in gene and protein expression in human nucleus pulposus in comparison with annulus fibrosus and cartilage cells: potential associations with aging and degeneration. Osteoarthritis Cartilage 2010;18:416-23. [PMID 19833252](#)

Schmitz C. "Design based" Stereologie – eine ganz kurze Einführung. NeadeA 2010; 9-13.

Strohm PC, Kubosch DC, Sprecher CM, Schmal H, Südkamp NP, Milz S. [Graft integration in the lumbar spine of bovine cancellous bone compared to autologous iliac crest in a sheep model]. Z Orthop Unfall 2010;148:666-73. [PMID 20648420](#)

Takahashi H, Brasnjevic I, Rutten BP, Van Der Kolk N, Perl DP, Bouras C, Steinbusch HW, Schmitz C, Hof PR, Dickstein DL. Hippocampal interneuron loss in an APP/PS1 double mutant mouse and in Alzheimer's disease. Brain Struct Funct 2010;214:145-60. [PMID 3038332](#)

Tischer T, Aryee S, Wexel G, Steinhauser E, Adamczyk C, Eichhorn S, Milz S, Martinek V, Gängbacher B, Imhoff AB, Vogt S. Tissue engineering of the anterior cruciate ligament-sodium dodecyl sulfate-acellularized and revitalized tendons are inferior to native tendons. Tissue Eng Part A 2010;16:1031-40. [PMID 19845462](#)

Wegener B, Schrimpf FM, Bergschmidt P, Pietschmann MF, Utzschneider S, Milz S, Jansson V, Müller PE. Cartilage regeneration by bone marrow cells-seeded scaffolds. J Biomed Mater Res A 2010;95:735-40. [PMID 20725984](#)