

## Publikationsliste

1/7

### Artikel, Rezension und Buchkapitel, Gesetzeskommentar, Lexikonartikel: peer reviewed

Krüger, M; Wehland, M; Bauer, J.; Egli, Marcel; Kopp, S.; Corydon, T J; Infanger, M.; Moreels, M; Baatout, S & Grimm, Daniela (2019). Growing Blood Vessels in Space: Preparation Studies of the SPHEROIDS Project using Related Ground-Based Studies.. *Acta Astronautica*, (159), 267-272.

Lye Yee Yap, Jasmine; Beyer, Christian; Bharanty, N; Casarosa, M; Foo, Zi Ling; Egli, Marcel; Franco-Obregon, A.; Fröhlich, J; Hui Hua Fong, Charlene; Kala Palanchamy, M; Lee, C. N.; Tai, Yee Kit; Taneja, R; Toh, Shi Jie & Yin, N (2019). Ambient and supplemental magnetic fields promote myogenesis via a TRPC1-mitochondrial axis: Evidence of a magnetic mitohormetic mechanism. *FASEB Journal*, 33(10), 33-38.

Granata, Timothy; Habermacher, Patrick; Härr, Vinzenz & Egli, Marcel (2019). The influence of bio optical properties of *Emiliania huxleyi* and *Tetraselmis sp.* on biomass and lipid production when exposed to different light spectra and intensities of an adjustable LED array and standard light sources.. *Nature Applied Science*, (524), 1.

Leeners, B.; Krüger, THC; Geraedts, K; Tronci, E; Mancini, T; Egli, Marcel; Röblitzky, S.; Saleh, L; Spanaus, K; Schippert, C; Zhang, Y & Ille, Fabian (2019). Associations Between Natural Physiological and Supraphysiological Estradiol Levels and Stress Perception. *Front. Psychol.*, (1296), 10.

Zotter, Peter; Richard, S.; Egli, Marcel; Rothen-Rutisauer, B & Nussbaumer, Thomas (2019). A simple method to determine cytotoxicity of water-soluble organic compounds and solid particles from biomass combustion in lung cells in vitro.. *Environ Sci Technol*, (53), 3959-3968.

Baatout, S; Krüger, M; Evert, M; Bauer, J.; Pietsch, J.; Corydon, T J; Infanger, M.; Grimm, D.; Egli, Marcel; Kobbero, SD; Melnik, D; Moreels, M; Nebuloni, S; Sahana, J; Wehland, M; Carvalho, D.; Gass, S. & Koop, S. (2019). Growth of Endothelial Cells in Space and in Simulated Microgravity – a Comparison on the Secretory Level.. *Cellular Physiology and Biochemistry*, (52), 1039-1060.

Granata, Timothy; Habermacher, Patrick; Härr, Vinzenz & Egli, Marcel (2019). The influence of bio-optical properties of *Emiliania huxleyi* and *Tetraselmis sp.* on biomass and lipid production when exposed to different light spectra and intensities of an adjustable LED array and standard light sources. *Nature Applied Science*, 2019, 1-19. doi: 10.1007/s42452-019-0529-x

Wüest, Simon; Gantenbein, Benjamin; Ille, Fabian & Egli, Marcel (29.3.2018). Electrophysiological experiments in microgravity: lessons learned and future challenges. *npj Microgravity*, 2018, 1-7. doi: 10.1038/s41526-018-0042-3

Wüest, Simon; Caliò, Martina; Wernas, Timon; Tanner, Samuel; Giger, Christina; Wyss, Fabienne; Ille, Fabian; Gantenbein, Benjamin & Egli, Marcel (2018). Influence of Mechanical Unloading on Articular Chondrocyte Dedifferentiation. *Ing.J.Mol.Sci.*, 19(5), 1-18.

Grimm, D.; Egli, Marcel; Krüger, M; Riwaldt, S; Corydon, T J; Kopp, S.; Wehland, M; Wise, P.; Infanger, M.; Mann, V. & Sundaresan, A (2018). Tissue Engineering under Microgravity Conditions – Use of Stem Cells and Specialized Cells.. *Stem Cells and Development*, (27), 787-804.

Liu, G.; Bollier, D; Gübeli, Ch; Arnold, P.; Borghi, L; Peter, N. & Egli, Marcel (2018). Simulated microgravity and the antagonistic influence of strigolactone on plant nutrient uptake in low nutrient conditions.. *Nature Microgravity*, (4), 20-20.

Franco-Obregón, Alfredo; Cambria, E.; Greutert, H.; Wernas, Timon; Hitzl, W; Egli, Marcel; Sekiguchi, M; Boos, N.; Ferguson, S J; Hausmann, O.; Kobayashi, H. & Wuertz-Kozak, K. (2018). TRPC6 in simulated microgravity of intervertebral disc cells.. *Eur Spine J.*, (27), 2621-2630.

Egli, Marcel; Casartelli, Ernesto; Stern, Philip & Wüest, S L (2017). Fluid Dynamics Appearing during Simulated Microgravity Using Random Positioning Machines.. *PLoS ONE*, 12, 170.

Egli, Marcel; Beyer, Ch; Casarosa, M; Ferguson, S J; Franco-Obregón, Alfredo; Fröhlich, J; Krawczyk, K & Wuertz, K (2017). Single, brief exposures to pulsed electromagnetic fields stimulate In Vitro myogenesis by mimicking a mechanical stimulus..

Wüest, Simon; Plüss, Tobias; Hardegger, Christoph; Felder, Mario; Kunz, Aaron; Fleischli, Benno; Komotar, Carlos; Rüdinger, Lukas; Albisser, Andreas; Gisler, Thomas; Frauchiger, Daniela & Egli, Marcel (2017). Electrophysiological Recordings on a Sounding Rocket: Report of a First Attempt Using *Xenopus laevis* Oocytes. *Gravitational and Space Research*, 5(2), 43-56.

## Publikationsliste

Marcel Egli

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**Artikel, Rezension und Buchkapitel, Gesetzeskommentar,  
Lexikonartikel: peer reviewed**

Wüest, Simon; Stern, Philip; Casartelli, Ernesto & Egli, Marcel (2017). Fluid Dynamics Appearing during Simulated Microgravity Using Random Positioning Machines. *PLOS ONE*, 1-19. doi: <https://doi.org/10.1371/journal.pone.0170826>

Egli, Marcel; Geraedts, K; Hengartner, M P; Ille, Fabian; Kruger, THC; Leeners, B.; Mancini, T; Röblitzky, S.; Saleh, L; Schippert, C; Spanaus, K; Tronci, E & Zhang, Y (2017). Lack of Associations between Female Hormone Levels and Visuospatial Working Memory, Divided Attention and Cognitive Bias across Two Consecutive Menstrual Cycles.. *Front. Behav. Neurosci.*, 11:120.

Egli, Marcel; Ehrig, Frank; Garaedts, K; Hengartner, M P; Ille, Fabian; Kruger, THC; Leeners, B; Mancini, T; Röblitzky, S.; Saleh, L; Schippert, C; Spanaus, K; Tronci, E & Zhang, Y (2017). Negative affect is unrelated to fluctuations in hormone levels across the menstrual cycle: Evidence from a multisite observational study across two successive cycles.. *Journal of Psychosomatic Research.*, 99, 21-27.

Zotter, Peter; Richard, S.; Egli, Marcel & Nussbaumer, Thomas (2017). Citotossicità delle emissioni dei generatori a biomasse legnose. *Agriforenergy*, 3-4, 1-11.

Egli, Marcel; Baake, C; Bauer, J.; Corydon, T J; Echegoyen, D; Gass, Thomas; Grimm, D.; Infanger, M.; Nebuloni, S; Pietsch, J. & Riwaltd, S (2017). Three-dimensional growth of human endothelial cells in an automated cell culture experiment container during the SpaceX CRS-8 ISS space mission - The SPHEROIDS Project.. *Biomaterials*, 124, 126-156.

Wüest, Simon; Rösch, Christian; Ille, Fabian & Egli, Marcel (2017). Calcium dependent current recordings in *Xenopus laevis* oocytes in microgravity. *Acta Astronautica*, 141, 228-236. doi: <https://doi.org/10.1016/j.actaastro.2017.10.003>

Grimm, D.; Egli, Marcel; Krüger, M; Riwaltd, S; Corydon, T J; Kopp, Sascha; Wehland, M; Wise, P; Infanger, M. & Sundaresan, A (2017). Tissue Engineering under Microgravity Conditions – Use of Stem Cells and Specialized Cells. (in press).. *Stem Cells and Development*, 444.

Krüger, THC; Egli, Marcel & Leeners, B. (2017). Prolactin and sexuality. *Gynäkologische Endokrinologie*, 3, 15.

Brungs, S; Christianen, P.C.M.; Egli, Marcel; Hemmersbach, R; Ngo Anh, J; van Loon, J & Wüest, Simon (14.01.2016). Facilities for Simulation of Microgravity in the ESA Ground-Based Facility Programme. *Microgravity Sci Technol*, 2016(1), 210-223.

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**Artikel, Rezension und Buchkapitel, Gesetzeskommentar,  
Lexikonartikel: peer reviewed**

Nussbaumer, Thomas; Egli, Marcel; Richard, Stéphane & Zotter, Peter (2016). Zytotoxizität von Abgas aus Holzfeuerungen. In Thomas Nussbaumer (Hrsg.), *Zotter, Peter; Richard, Stéphane; Egli, Marcel; Nussbaumer, Thomas: Zytotoxizität von Abgas aus Holzfeuerungen, 14. Holzenergie-Symposium. ETH Zürich 16.9.16, Verenum, ISBN 3-908705-31-2, 65–81* (S. 65-81). Zürich: Verenum press.

Egli, Marcel; Aleshcheva, G; Hemmersbach, R; Wehland, M & Grimm, D. (2016). Tissue Engineering of Cartilage on Ground-Based Facilities. *Microgravity Science and Technology*, 237-245.

Aleshcheva, G; Bauer, Johann; Hemmersbach, R; Egli, Marcel; Wehland, M & Grimm, D. (29.12.2015). Tissue Engineering of Cartilage on Ground-Based Facilities. *Microgravity Sci Technol*, 2015(11), 265-276.

Granata, Timothy; Krehel, Marek; Wittkopf, Stephen & Egli, Marcel (2015). A hybrid facade that combines an algal bioreactor with photovoltaics. In Jean-Louis Scartezzini (Hrsg.), *Proceedings of International Conference CISBAT 2015: Future Buildings and Districts Sustainability from Nano to Urban Scale: Vol. 2* (S. 567-572). Lausanne: EPFL.

Aleshcheva, G; Wehland, M; Sahana, J; Bauer, J.; Hemmersbach, R; Frett, T; Infanger, M.; Grosse, J; Grimm, D. & Egli, Marcel (2015). Moderate alterations of the cytoskeleton in human chondrocytes after short-term microgravity produced by parabolic flight maneuvers could be prevented by up-regulation of BMP-2 and SOX-9. *FASEB Journal*, 23.

Wüest, Simon; Richard, Stéphane; Kopp, Sascha; Grimm, Daniela & Egli, Marcel (2015). Simulated Microgravity: Critical Review on the Use of Random Positioning Machines for Mammalian Cell Culture. *BioMed Research International*, 2015(Article ID 971474), 2-8.

Wüest, SL; Richard, S.; Walther, I.; Furrer, R.; Anderegg, R.; Sekler, Jörg & Egli, Marcel (2014). Novel Microgravity Simulator Applicable for Three-Dimensional Cell Culturing. *Microgravity Sci Technol*, (26), 77-88.

Benavides Damm, Tatiana; Isabelle, Walther; Wüest, Simon; Sekler, Jörg & Egli, Marcel (2014). Cell Cultivation Under Different Gravitational Loads Using a Novel Random Positioning Incubator. *Biotechnology and Bioengineering*, 111(6), 1180-1190. doi: 10.1002/bit.25179

Benavides Damm, Tatiana & Egli, Marcel (2014). Calcium's Role in Mechanotransduction during Muscle Development. *Cellular physiology and biochemistry : international journal of experimental cellular physiology, biochemistry, and pharmacology*, 2014(2), 249-272. doi: 10.1159/000356667

## Publikationsliste

Marcel Egli

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**Artikel, Rezension und Buchkapitel, Gesetzeskommentar,  
Lexikonartikel: peer reviewed**


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Benavides Damm, Tatiana; Walther, I.; Wüest, Simon; Sekler, Jörg & Egli, Marcel (2014). Cell cultivation under different gravitational loads using a novel random positioning incubator. *Biotechnol Bioeng*, 111, 1180-1190.

Damm, Tatiana Benavides; Richard, Stéphane; Tanner, Samuel; Wyss, Fabienne; Egli, Marcel & Franco-Obregón, Alfredo (2013). Calcium-dependent deceleration of the cell cycle in muscle cells by simulated microgravity [Besprechung des Buchs *FASEB Journal*]. *FASEB Journal*, 2013, 2045-2054.

Benavides Damm, Tatiana; Franco-Obregón, Alfredo & Egli, Marcel (2013). Gravitational Force Modulates G2/M Phase Exit in Mechanically Unloaded Myoblasts. *Cell Cycle*, (12), 3001-3012.

Walther, I.; Cogoli, M. & Egli, Marcel (2013). Microgravity Cell Culture Systems and Bioreactors: Current Status and Future Developments. *Current Biotechnology*, 2013(12), 244-249.

Benavides Damm, Tatiana; Richard, S.; Tanner, S.; Wyss, F.; Egli, Marcel & Franco-Obregón, Alfredo (2013). Calcium-Dependent Deceleration of the Cell Cycle by Simulated Microgravity. *FASEB Journal*, (27), 2045-2054.

Leeners, B.; Kruger, THC; Brody, S; Schmidlin, S; Naegeli, E & Egli, Marcel (2013). Prolactin increases after orgasm correlate with quality of sexual experience in women. *J Sex Med*, (10), 1313-9.

Crocetti, S; Beyer, Ch; Shade, G; Egli, Marcel & Franco-Obregón, Alfredo (2013). Low intensity and frequency pulsed electromagnetic fields provide a method to selectively kill breast cancer cells. *PLoS One*, (8), e72944.

Aleshcheva, G; Infanger, M.; Hemmersbach, R; Bauer, J.; Hauslage, J; Sahana, J; Egli, Marcel & Grimm, D. (2013). Changes in Morphology, Gene Expression and Protein Content in Chondrocytes cultured on a Random Positioning Machine. *PLoS One*, (8), e79057.

Richard, S.; Henggeler, D.; Ille, Fabian; Vadrucci, S; Moeckli, M.; Forster, I.; Ian, C.; Franco-Obregón, Alfredo & Egli, Marcel (2012). A Semi-automated Electrophysiology System for Recording from *Xenopus* Oocytes Under Microgravity Conditions. *Microgravity Science and Technology*, (24), 237-244.

Kruger, THC; Leeners, B.; Naegeli, E; Schmidlin, S; Schedlowski, M; Hartmann, U & Egli, Marcel (2012). Prolactin secretory rhythm in females: Immediate and long-term alterations after sexual contact. *Hum Reprod*, 1139-1143.

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**Artikel, Rezension und Buchkapitel, Gesetzeskommentar,  
Lexikonartikel: peer reviewed**


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Grosse, J; Wehland, M; Pietsch, J.; Ma, X.; Ulbrich, C.; Schulze, H.; Saar, K; Hübner, N; Hauslage, J; Hemmersbach, R; Braun, M; van Loon, J; Vagt, N; Infanger, M.; Egli, Marcel; Richter, P; Baltz, Th; Einspanier, R; Sharbati, S; Eilles, Ch & Grimm, D. (2012). Short-term weightlessness produced by parabolic flight manoeuvres altered gene expression patterns in human endothelial cells. *FASEB Journal*, 639-655.

Faith Toy, M.; Kühn, J.; Franco-Obregón, Alfredo; Depeursinge, C & Egli, Marcel (2012). Enhanced robustness digital holographic microscopy for demanding environments. *Biomed Opt Express*, 313-326.

Richard, S.; Ille, F.; Forster, I.; Franco-Obregón, Alfredo & Egli, Marcel (2012). A semi-automated electrophysiology system for recording from *Xenopus* oocytes under microgravity conditions. *Microgravity Sci Technol*, 237-244.

Faith Toy, M.; Depeursinge, C; Parent, J; Richard, S. & Egli, Marcel (2012). Accelerated autofocusing of off-axis holograms using critical sampling. *Biomed Opt Express*, 313-326.

Pietsch, J.; Sickmann, A.; Weber, G.; Bauer, J.; Wildgruber, R.; Egli, Marcel; Infanger, M. & Grimm, D. (2012). Metabolic enzyme diversity in different human thyroid cell lines and their sensitivity to gravitational forces. *Proteomics*, 2012(12), 2539-25.

Pietsch, J.; Bauer, J.; Infanger, M.; Grimm, M & Egli, Marcel (2011). The effects of weightlessness on the human organism and mammalian cells. *Curr Mol Med*, (11), 350-364.

Ulbrich, C.; Pietsch, J.; Grosse, J; Wehland, M; Schulze, H.; Saar, K; Hübner, N; Hauslage, J; Hemmersbach, R; Braun, M; van Loon, J; Vagt, N; Richter, P; Einspanier, R; Sharbati, S; Baltz, Th; Infanger, Kurt; Grimm, D. & Egli, Marcel (2011). Differential gene regulation under altered gravity conditions in follicular thyroid cancer cells: Relationship between extracellular matrix and the cytoskeleton. *Cell Physiol Biochem*, (28), 185-198.

Pietsch, J.; Sickmann, A.; Weber, G.; Bauer, J.; Wildgruber, R.; Infanger, M.; Grimm, D. & Egli, Marcel (2011). A proteomic approach to analyzing spheroid formation of two human thyroid cell lines cultured on a random positioning machine. *Proteomics*, (11), 2095-2104.

Pietsch, J.; Sickmann, A.; Bauer, J.; Weber, G.; Nissum, M; Westphal, K; Egli, Marcel; Grosse, J; Schönberger, J; Eilles, Ch; Infanger, M. & Grimm, D. (2011). Proteome analysis of thyroid cancer cells after long-term exposure to a random positioning machine. *Microgravity Sci Technol*, 381-390.

## Publikationsliste

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**Artikel, Rezension und Buchkapitel, Gesetzeskommentar,  
Lexikonartikel: peer reviewed**

Monici, M.; Cialdai, F.; Romano, G.; Pezzatini, S.; Morbidelli, L. & Egli, Marcel (2011). An in Vitro Study on Tissue Repair: Impact of Unloading on Cells Involved in the Remodelling Phase. *Microgravity Sci. Technol.* (23), 391-401.

Sirzen-Zelenskaya, A.; Gonzalez-Iglesias, AE; Boutet de Monvel, J.; Bertram, R.; Freeman, ME; Gerber, U. & Egli, Marcel (2011). Prolactin-induced inhibition of electrical activity of rat paraventricular oxytocinergic neurons. *J Neuroendocrinol.* (23), 883-893.

Schaffhauser, DF; Andriani, O; Ghezzi, Ch.; Franco-Obregón, Alfredo; Dittrich, PS & Egli, Marcel (2011). Microfluidic platform for electrophysiological studies on *Xenopus laevis* oocytes under varying gravity levels. *Lab on a Chip*, (11), 3471-3478.

Pache, C; Westphal, K; Parent, J; Franco-Obregón, Alfredo; Depeursinge, C & Egli, Marcel (2010). Digital holographic microscopy real-time monitoring of cytoarchitectural alterations during simulated microgravity. *J Biomed Opt.* 26021-1-26021-9.

Pietsch, J.; Kussian, R.; Sickmann, A.; Bauer, J.; Weber, G.; Nissum, M.; Westphal, K.; Grosse, J.; Schönberger, J.; Wildgruber, R.; Infanger, M.; Grimm, D. & Egli, Marcel (2010). Application of free-flow isoelectric focusing to identify protein candidates changing under microgravity conditions. *Proteomics*, (10), 904-913.

Ulbrich, C.; Westphal, K; Pietsch, J.; Winkler, HDF; Leder, A; Bauer, J.; Kossmehl, P; Grosse, J; Schönberger, J; Grimm, D.; Infanger, M. & Egli, Marcel (2010). Characterization of human chondrocytes exposed to simulated microgravity. *Cellular physiology and biochemistry : international journal of experimental cellular physiology, biochemistry, and pharmacology*, (25), 551-560.

Toy, MF; Pache, C; Parent, J; Kühn, J.; Egli, Marcel & Depeursinge, C (2010). Dual-mode digital holographic and fluorescence microscopy for the study of morphological changes in cells under simulated microgravity. *Three-Dimensional and Multidimensional Microscopy: Image Acquisition and Processing*, (16), 7570-7573.

Maucalire, L & Egli, Marcel (2010). Effect of simulated microgravity on growth and production of exopolymeric substances of *Micrococcus luteus* space and earth isolates. *FEMS Immunol Med Microbiol.* (59), 350-356.

Studer, M; Bradacs, G; Hilliger, A; Hürlimann, E; Engeli, S; Thiel, CS; Zeitner, P; Denier, B; Binggeli, M; Syburra, Th; Engelmann, F; Ullrich, O & Egli, Marcel (2010). Parabolic maneuvers of the Swiss Air Force fighter jet F-5E as a research platform for cell culture experiments in microgravity. *Acta Astronautica*, (68), 1729-1741.

**Artikel, Rezension und Buchkapitel, Gesetzeskommentar,  
Lexikonartikel: peer reviewed**

Leeners, B.; Kruger, THC & Egli, Marcel (2010). Prolactin secretion patterns: basic mechanisms and clinical implications for reproduction. *Reproduction*, (140), 643-654.

Egli, Marcel (2009). Humans in Earth orbit - what effect does it have? In L. Codignola, K.-U. Schrogl (Hrsg.), *Humans in outer space – Interdisciplinary odysseys* (S. 252-255). Wien /New York: Springer.

Freeman, M.E.; McKee, DT; Egli, Marcel & Bertram, R. (2008). Biological and mathematical modelling approaches to defining the role of oxytocin and dopamine in the control of mating-induced PRL secretion. In R.S. Bridges (Hrsg.), *Neurobiology of the parental brain* (S. 133-136). Elsevier: Academic Press.

Pache, C; Westphal, K; Parent, J; Franco-Obregón, Alfredo; Depeursinge, C & Egli, Marcel (2008). Digital holographic microscopy for the study of morphological changes in cells under simulated microgravity condition. *J Grav Physiol.* (15), 237-238. doi: <https://doi.org/10.1117/1.3377960>

Monici, M.; Romano, G; Cialdai, F; Fusi, F; Marziliano, N; Benvenuti, S; Cellai, I; Egli, Marcel & Cogoli, A (2008). Gravitational/mechanical factors affect gene expression profile. *J Grav Physiol.* (15), 191-192.

Cogoli, A & Egli, Marcel (2008). Cell biology in space: Basic Research and potential applications. *Infocus*, (12), 51-63.

Egli, Marcel & Cogoli, A (2008). Cell biology in space: Basic Research and potential applications. *Infocus*, 51-63.

Ulbrich, C.; Westphal, K; Baatout, S; Wehland, M; Bauer, J.; Infanger, M.; Kreutz, R; Vadrucci, S; Cogoli, A; Grimm, D.; Derradji, H & Egli, Marcel (2008). Effects of basic fibroblast growth factor on endothelial cells under conditions of simulated microgravity. *J Cell Biochem.* (104), 1324-1341. doi: <https://doi.org/10.1002/jcb.21710>

Sellix, M. T.; Egli, Marcel; Poletini, MO; McKee, DT; Bosworth, MD; Fitch, CA & Freeman, M.E. (2006). Anatomical and functional characterization of clock gene expression in neuroendocrine dopaminergic neurons. *Am J Physiol.* (290), 1309-1323.

Bertram, R.; Toporikova, N.; Freeman, ME & Egli, Marcel (2006). A mathematical model for the mating-induced prolactin rhythm of female rats. *Am J Physiol.* (290), 573-582. doi: <https://doi.org/10.1152/ajpendo.00428.2005>

## Publikationsliste

Marcel Egli

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**Artikel, Rezension und Buchkapitel, Gesetzeskommentar,  
Lexikonartikel: peer reviewed**

**Artikel, Rezension und Buchkapitel, Gesetzeskommentar,  
Lexikonartikel: peer reviewed**

Egli, Marcel; Toporikova, N.; Sellix, M.T.; Blanco, W.; Bosworth, MD; Bertram, R. & Freeman, M.E. (2006). Prolactin secretory rhythm of mated rats induced by a bolus injection of oxytocin. *Am J Physiol*, (290), 566-572.

Toporikova, N.; Sellix, M.T.; Blanco, W.; Bosworth, MD; Bertram, R.; Fitch, CA; Freeman, M. E. & Egli, Marcel (2006). Prolactin secretory rhythm of mated rats induced by a single injection of oxytocin. *Am J Physiology*, 2005(290), 566-572. doi: <https://dx.doi.org/10.1152%2Fajpendo.00427.2005>

Egli, Marcel; Sellix, M.T.; Poletini, MO & Bosworth, MD (2006). Anatomical and functional characterization of clock gene expression in neuroendocrine dopaminergic neurons. *Am J Physiol*, (209), 1309-1323.

Egli, Marcel; Bertram, R; Cogoli-Greuter, M & Vadrucchi, S (2005). Are clock genes involved in altered circadian rhythms during space flight? *J Grav Physiol*, (12), 233-236.

Bertram, R.; Sellix, M.T.; Freeman, M.E. & Egli, Marcel (2004). Rhythmic secretion of prolactin in rats: Action of oxytocin coordinated by vasoactive intestinal polypeptide of suprachiasmatic nucleus origin. *Endocrinology*, (145), 3386-3394. doi: <https://doi.org/10.1210/en.2003-1710>

Sellix, M.T.; Henderson, R. P.; Freeman, M.E. & Egli, Marcel (2004). Ovarian steroid hormones modulate circadian rhythms of neuroendocrine dopaminergic neuronal activity. *Brain Res*, (1005), 168-185. doi: <https://doi.org/10.1016/j.brainres.2004.01.049>

Sunn, N.; Egli, Marcel; Burazin, T. C.; Burns, P.; Colvill, L.; Davern, P.; Denton, D. A.; Oldfield, B. J.; Weisinger, R. S.; Rauch, M.; Schmid, H.A. & McKinley, M. J. (2002). Circulating relaxin acts on subformal organ neurons to stimulate water drinking in the rat. *PNAS*, (99), 1701-1706.

Berger, Th.; Imboden, H. & Egli, Marcel (2002). Angiotensin II influences the hyperpolarisation-activated current I<sub>h</sub> in neurones of the rat paraventricular nucleus. *Neurosci Lett*, (330), 53-56. doi: [https://doi.org/10.1016/s0304-3940\(02\)00736-x](https://doi.org/10.1016/s0304-3940(02)00736-x)

Egli, Marcel; Laurent, J. P.; Mosimann, R.; Felix, D. & Imboden, H. (2000). Morphological and immunocytochemical characterisation of electrophysiologically investigated neurons in the PVN of the rat. *J Neurosci Methods*, (95), 145-150.

**Publikationsliste**

Marcel Egli

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**Buchkapitel, Gesetzeskommentar, Lexikonartikel: not peer reviewed**

Granata, Timothy & Egli, Marcel (2016). Bionutrients. In ESA (Hrsg.), *Bionutrients* (S. 6-30). Netherlands: ESA.

Tronci, E; Mancini, T; Salvo, I; Sinisi, S; Mari, F.; Melatti, I; Massini, A; David, A. Basin; Dierkesy, A; Ehrigy, R; Röblitzky, S.; Leeners, B.; Krüger, THC; Egli, Marcel & Ille, F. (2014). Patient-Specific Models from Inter-Patient Biological. *Proceedings of FMCAD* (S. 2-8). xxx: xxx.

Egli, Marcel (2011). Sounding rocket and balloon activities and related Research in Switzerland 2009 - 2011. *Proceedings of the 20th ESA Symposium on European rocket and balloon programmes and related research* (S. 221-232). NL: ESA.

**Bericht / Working Paper**

Egli, Marcel; Richard, Stéphane & Wüest, Simon (2014). *A Novel Microgravity Simulator Applicable for Three-Dimensional Cell Culturing (Microgravity Science and Technology)*.

## Publikationsliste

Marcel Egli

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### Präsentation (Tagungsbeitrag/Referat/Vortrag)

Wüest, Simon; Horn, Marvin; Baumann, Ralf & Egli, Marcel (09.06.2015). *Novel Model to Study Intervertebral Disc Degeneration under Simulated Microgravity Condition*. 21th Swiss Conference on Biomaterials and Regenerative Medicine, Lausanne.

Egli, Marcel (02.03.2012). *Bio-medical Research in Space*. Bio-medical Research, Göttingen.

Egli, Marcel (11.11.2011). *Space Biology Group - Research and Space Support Center*. United Nations Assembly, Vienna, Austria.

Chooi, Y.; Benavides Damm, Tatiana; Traxler, J.; Unternährer, S; Kisielow, M; Beyer, C.; Egli, Marcel & Franco-Obregón, Alfredo (30.09.2010). *Pulsed Electromagnetic Fields Induce Immediate Changes in Cytoskeletal Arrangement by Activating Cellular Mechanotransduction Pathways*. 4th Mechanobiology Workshop and Biophysical Society Joint Meeting, Singapore.

Toy, MF; Kühn, J.; Parent, J; Pache, C; Depeursinge, C & Egli, Marcel (05.05.2010). *Real time 3-D cytomorphological imaging using digital holographic microscopy and fluorescence microscopy for space biology*. DH, s.

Schaffhauser, DF; Forster, I.; Egli, Marcel & Dittrich, PS (02.02.2010). *A microfluidic device for electrophysiological measurements on Xenopus oocytes under zero gravity*. Lab-on-a-chip European congress, Dublin, Ireland.

Schaffhauser, DF; Franco-Obregón, Alfredo; Forster, I.; Dittrich, PS & Egli, Marcel (16.09.2009). *Microfluidic chip for patch clamping in microgravity*. Analytical Chemistry Symposium "Analyze That", Zurich.

Egli, Marcel (23.01.2009). *Electrophysiological study of cellular effects of weightlessness induced muscle atrophy*. ESA Parabolic Flight Symposium, Noordwijk, Netherlands.

Westphal, K; Vadrucci, S; Franco-Obregón, Alfredo & Egli, Marcel (10.09.2008). *Influence of altered gravity on clock gene expression in rat-1 fibroblasts*. ESA Life Science Symposium, Angers, France.

Pache, C; Westphal, K; Parent, J; Franco-Obregón, Alfredo; Depeursinge, C & Egli, Marcel (14.05.2008). *Digital holographic microscopy for the study of morphological changes in cells under simulated microgravity condition*. ESA Life Science Symposium, Angers, France.

Sirzen-Zelenskaya, A.; Bertram, R.; Freeman, M.E.; Gerber, U. & Egli, Marcel (17.10.2007). *Influence of prolactin on oxytocin-containing neurons in the paraventricular nucleus*. Meeting of the Endocrine Society, Toronto, Canada.

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### Präsentation (Tagungsbeitrag/Referat/Vortrag)

Freeman, M.E.; McKee, DT; Egli, Marcel & Bertram, R. (05.07.2007). *Biological and mathematical modeling approaches to defining the role of oxytocin and dopamine in the control of mating-induced prolactin secretion*. Parental Brain Conference, Boston, MA.

Vadrucci, S; Cogoli-Greuter, M & Egli, Marcel (05.06.2006). *Influence of Altered Gravity on Clock Gene Expression in Rat-1 Fibroblasts*. Meeting of the Society for Research on Biological Rhythms, Sandestin, FL.

Egli, Marcel; Bertram, R.; Sellix, M.T.; Toporikova, N. & Freeman, ME (15.04.2004). *Oxytocin as a Prolactin-releasing factor: Joint biological and mathematical studies*. Meeting of the Society for Neuroscience, San Diego, CA.

Egli, Marcel; Freeman, ME & Sellix, M.T. (23.04.2003). *Vasoactive intestinal peptide of suprachiasmatic nucleus origin controls prolactin and oxytocin secretion in pseudopregnant rats*. Meeting of the Endocrine Society, Philadelphia, PA.

Egli, Marcel; Bertram, R. & Freeman, ME (13.03.2003). *Computational model of the hypothalamo-hypophyseal neuronal network regulating the release of Prolactin in rats*. Meeting of the Society for Neuroscience, New Orleans, LA.

Egli, Marcel; Berger, Th. & Imboden, H. (14.02.2001). *Angiotensin II influences the hyperpolarisation-activated current  $I_h$  in neurones of the rat paraventricular nucleus*. International Congress of Physiological Sciences, Christchurch, NZ.