Curriculum vitae – Prof. Dr. rer. nat. Oliver Lieleg

Personal data

Date of birth: 22.08.1980 in Sulzbach-Rosenberg
Nationality: German

Professional experience

since 10/2011	Professor (W2) for Biomechanics, Munich School of Bioengineering, Department of Mechanical Engineering, Technische Universität München
09/2010 – 06/2011	Instructor/Researcher, Department of Biological Engineering, Massachusetts Institute of Technology, Cambridge, USA
01/2010 – 08/2010	Postdoc, Department of Biological Engineering, Massachusetts Institute of Technology, Cambridge, USA
03/2009 – 12/2009	Postdoc, FAS Center for Systems Biology, Harvard University, Cambridge, USA
11/2008 – 03/2009	Postdoc, Lehrstuhl für Zellbiophysik E27, Physik Department, Technische Universität München

Education

11/2005 – 11/2008	PhD studies in experimental biophysics, Technische Universität München Dissertation topic: "*Model systems of the actin cortex*" Thesis advisor: Prof. Dr. A.R. Bausch Degree earned: Dr. rer. nat. ("*summa cum laude*")
10/2000 – 10/2005	Diploma studies in physics, Technische Universität München, Specialization in molecular and cellular biophysics Thesis topic: "*Untersuchung des Phasenverhaltens und der mikromechanischen Eigenschaften von Biopolymer-Netzwerken*" Degree earned: Dipl. Phys. Univ. ("*mit Auszeichnung/with distinction*")

Selected peer-reviewed publications (total number of publications: 55; current h-index: 19)

[1] A. Dragos, M. Martin, C.F. Falcón Garcia, L. Kricks, P. Pausch, T. Heimerl, B. Bálint, G. Maróti, G. Bang, D. López, **O. Lieleg** and Á. Kovács, *Collapse of genetic division of labour and evolution of autonomy in pellicle biofilms*, Nature Microbiology, DOI: 10.1038/s41564-018-0263-y (2018)

[2] B. Winkeljann, K. Boettcher, B. Balzer and **O. Lieleg**, *Mucin coatings prevent tissue damage at the cornea-contact lens-interface*, Advanced Materials Interfaces, 4(19), 1700186 (2017)

[3] B. Käsdorf, F. Weber, G. Petrou, V. Srivastava, T. Crouzier, and **O. Lieleg**, *Mucin-inspired lubrication on hydrophobic surfaces*, Biomacromolecules,18(8), 2454-2462 (2017)

[4] S. Grumbein, D. Minev, M. Tallawi, K. Boettcher, F. Prade, F. Pfeiffer, C.U. Große and **O. Lieleg**, *Hydrophobic Properties of Biofilm-Enriched Hybrid Mortar*, Advanced Materials, 28(39, 8138-8142 (2016)

[5] D. Walker, B.T. Käsdorf, H.-H. Jeong, and **O. Lieleg**, and P. Fischer, *Enzymatically active biomimetic micropropellers for the penetration of mucin gels*, Science Advances, 1(11), e1500501 (2015)

[6] T. Crouzier, K. Boettcher, A.R. Geonnotti, N.L. Kavanaugh, J.B. Hirsch, K. Ribbeck, and **O. Lieleg**, *Modulating mucin hydration and lubrication by deglycosilation and polyethylene glycol binding*, Advanced Materials Interfaces, 2(18), 1500308 (2015)

[7] F. Arends, S. Sellner, Ph. Seifert, U. Gerland, M. Rehberg, and **O. Lieleg**, *A microfluidics approach to study the accumulation of molecules at basal lamina interfaces*, Lab on a Chip, 15, 3326 - 3334 (2015)

[8] F. Arends, R. Baumgärtel, and **O. Lieleg**, *Ion-Specific Effects Modulate the diffusive mobility of colloids in an extracellular matrix gel*, Langmuir, 29 (51): 15965-15973 (2013)

[9] **O. Lieleg**, C. Lieleg, J. Bloom, C. Buck, and K. Ribbeck, *Mucin biopolymers as broad-spectrum antiviral agents*, Biomacromolecules, 13(6), 1724-1732 (2012)

[10] **O. Lieleg,** J. Kayser, G. Brambilla, L. Cipelletti and A.R. Bausch, *Complex Slow Dynamics in Bundled Cytoskeletal Networks*, Nature Materials, 10, 236-242 (2011)