

## PUBLICATIONS COVERED IN THIS THESIS

K.A. Jansen, D.M. Donato, H.E. Balcioglu, T. Schmidt, E.H.J. Danen, G.H. Koenderink, A Guide to Mechanobiology: Where Biology and Physics Meet, BBA 1853, 2015, 3043-3052 (*Chapter 1*)

I.K. Piechocka, K.A. Jansen, C.P. Broedersz, N.A. Kurniawan, F.C. MacKintosh, G. H. Koenderink, Multiscale strain-stiffening of semiflexible bundle networks, *Soft Matter*, in review (*Chapter 2*)

K.A. Jansen, R.G. Bacabac, I. K. Piechocka, G.H. Koenderink, Cells actively stiffen fibrin networks by generating contractile stress, *Biophysical Journal* 105(10), 2013, 2240-51 (*Chapter 3*)

K.A. Jansen, A. Zhmurov, G. Portale, D.H. Merino, R.I. Litvinov, B.E. Vos, V. Tutwiler, I.K. Piechocka, N.A. Kurniawan, W. Bras, J.W. Weisel, V. Barsegov, G.H. Koenderink, Unfolding of fibrin gels under strain, manuscript in preparation (*Chapter 4*)

K.A. Jansen, A. Zhmurov, G. Portale, D.H. Merino, R.I. Litvinov, V. Tutwiler, B.E. Vos, N.A. Kurniawan, W. Bras, J.W. Weisel, V. Barsegov, G.H. Koenderink, Fibrin Scattering Depends on Bundle Size, manuscript in preparation (*Chapter 4*)

K.A. Jansen, Andre Scholich, G.H. Koenderink, Microscopic view of fibrin blood clots, manuscript in preparation (*Chapter 5*)

A. Sharma, A.J. Licup, K.A. Jansen, R. Rens, M. Sheinman, G.H. Koenderink, F.C. MacKintosh, Strain-controlled criticality governs the nonlinear mechanics of fibre networks, *Nature Physics*, accepted (*Chapter 6*)

K.A. Jansen, A. J. Licup, A. Sharma, R. Rens, F.C. MacKintosh, G.H. Koenderink, Architecture and Normal Stress Govern Collagen Mechanics, manuscript in preparation (*Chapter 6*)

## OTHER PUBLICATIONS

J.L. Elliott, M. Der Perng, A. R. Prescott, K.A. Jansen, G.H. Koenderink, Roy A. Quinlan, The specificity of the interaction between CRYAB and desmin filaments and its impact on filament aggregation and cell viability, *Philosophical Transactions B* 368(1617), 2013, 20120375

N.A. Kurniawan, T.H.S. van Kempen, S. Sonneveld, T.T. Rosalina, B.E. Vos, K.A. Jansen, G.W.M. Peters, F.N. van de Vosse, G.H. Koenderink, Buffers Affect Fibrin Clot Structure by Slowing Down Lateral Aggregation of Protofibrils, manuscript in preparation



*For my brother*