

Instrument	Year	Author	Title
MC T6	2016	F. Chen, G. Hochleitner, T. Woodfield, J. Groll, P. Dalton, B.G. Amsden	Additive Manufacturing Of A Photo-Cross-Linkable Polymer Via Direct Meld Electrospinning Writing For Producing High Strength Structures
MC T6	2017	S. Wu, Y. Wang, P.N. Streubel, B. Duan	Living Nanofiber Yarn-Based Woven Biotextiles For Tendon Tissue Engineering Using Cell Tri-Culture And Mechanical Stimulation
MC FX	2017	P.R. Sonavane, C. Wang, B. Dzamba, G.F. Weber, A. Periasamy, D.W. DeSimone	Mechanical And Signaling Roles For Keratin Intermediate Filaments In The Assembly And Morphogenesis Of Mesendoderm Tissue At Gastrulation
MC FX	2017	D. Gaspar, A. Pandit, D. Zeugolis	Tenogenic Phenotype Maintenance And Differentiation Using Macromolecular Crowding And Mechanical Loading
MC T6	2018	Mir Ali	Mechanotransduction And Control Of Valvular Cell Phenotype As Tools To Inform Valvular Pathophysiology
MC B1	2018	K. Chen, A. Vigliotti, M. Bacca, R. M. McMeeking, V.S. Dashpande, J.W. Holmes	Role Of Boundary Conditions In Determining Cell Alignment In Response To Stretch
MC FX	2018	S. N. Bradley	Stretching Vascular Smooth Muscle Cells on Micropatterned Surfaces
MC TR	2019	C. Ludovica	Advanced In-vitro Models with Integrated Sensing for Real-time Monitoring of Electrical and Mechanical Properties of Cellular Constructs
MC FX	2019	N. Shealy, J. Rex, A. Bradshaw, C. Gross	Dynamic Stretching of Fibrillar Collagen Enhances Cross-linking by Transglutaminas
MC T6	2019	D. Kumar, S. A. Cain, L. A. Bosworth	Effect Of Topography And Physical Stimulus On Hmsc Phenotype Using A 3d In Vitro Model
MC TR	2019	A. Sensini, L. Christofolini, A. Zucchelli, M. L. Focarete, C. Gualandi, A. De Mori, A. P. Kao, M. Roldo, G. Blunn, G. Tozzi	Hierarchical Electrospun Tendon-ligament Bioinspired Scaffolds Induce Changes in Fibroblasts Morphology under Static and Dynamic Conditions
MC T6	2019	J. Bracamonte, S. Saunders, S. Cole, G. Annohene, G. Tepper, J. Soares	In vitro degradation of electrospun polycaprolactone tissue engineering scaffolds under cyclical dynamic loading
MC T6	2019	D. Gaspar, Christina N. M. Ryan, Dimitrios I. Zeugolis	Multifactorial Bottom-Up Bioengineering Approaches For The Development Of Living Tissues Substitutes
MC B1	2019	O. Friedrich, A-L. Merten, D. Schneidereit, Y. Guo, S. Schurmann, N. Martinac	Stretch In Focus: 2d Inplane Cell Stretch Systems For Studies Of Cardiac Mechano-Signaling
MC FX	2019	R. Tran, M. Siemens, C. Nguyen, A. Ochs, M. Zaragoza, A. Grosberg	The Effect of Cyclic Strain on Human Fibroblasts with Lamin A/C Mutations and Its Relation to Heart Disease
MC T6	2019	M. S. Ali, X. Wang, C. M. R. Lacerda	The Effect Of Physiological Stretch And The Valvular Endothelium On Mitral Valve Proteomes
MC TR	2020	C. Ludovica, G. Mattei, A. Ahluwalia	A New Load-controlled Testing Method for Viscoelastic Characterisation Through Stress-rate Measurements
MC TR	2020	Cambria, E., Brunner, S., Heusser, S., Fisch, P., Hitzl, W., Ferguson, S.J. and Wuertz-Kozak, K.	Cell-laden agarose-collagen composite hydrogels for mechanotransduction studies.
MC T6	2020	Lin, J., Li, X., Yin, J. and Qian, J.	Effect of Cyclic Stretch on Neuron Reorientation and Axon Outgrowth.
MC TR	2020	Sit, B., Feng, Z., Xanthis, I., Marhuenda, E., Zingaro, S., Shanahan, C., Jones, G., Yu, C.H. and Iskratsch, T.	Matrix stiffness and blood pressure together regulate vascular smooth muscle cell phenotype switching and cofilin dependent podosome formation.

MC FX	2020	Rogers, J.D., Holmes, J.W., Saucerman, J.J. and Richardson, W.J.	Mechano-Chemo Signaling Interactions Modulate Matrix Production by Cardiac Fibroblasts.
MC T6	2020	Thirumaran, A., Stapleton, A., Tofail, S.A., Palma, M., Pandit, A. and Biggs, M.J.	Self-powered piezo-bioelectronic device mediates tendon repair through modulation of mechanosensitive ion channels.
MC FX	2020	Tran, R.D., Siemens, M., Nguyen, C.H., Ochs, A.R., Zaragoza, M.V. and Grosberg, A.	The Effect of Cyclic Strain on Human Fibroblasts With Lamin A/C Mutations and Its Relation to Heart Disease.
MC B1	2020	Kim, M.K.M., Burns, M.J., Serjeant, M.E. and Séguin, C.A.,	The mechano-response of murine annulus fibrosus cells to cyclic tensile strain is frequency dependent.
MC T6	2021	Fernandez, Anup Poudel, Jose-Ramon Sarasua, Una FitzGerald, Manus J.P. Biggs,	A flexible strain-responsive sensor fabricated from a biocompatible electronic ink via an additive-manufacturing process
MC T6	2021	Akogwu Abbah,Aitor Larrañaga,Arun Thirumaran,Aimee Stapleton,Syed A. M. Tofail,Matteo Palma,Michelle Kilcoyne,Abhay	A Self-Powered Piezo-Bioelectric Device Regulates Tendon Repair-Associated Signaling Pathways through Modulation of Mechanosensitive Ion Channels
MC FX	2021	Kaneda, Khosrowdad Salehi, Chloe Castaneda, Arkadiusz Gertych, Juliane D Glaeser, View ORCID ProfileDmitriy Sheyn	Directing iPSC Differentiation into iTenocytes using Combined Scleraxis Overexpression and Cyclic Loading
MC T6	2021	Kailei Xu1,2,3†, Xixia Liu 2,3,4†, Xiaokeng Li 2,3, Jun Yin2,3, Peng Wei5, Jin Qian6* and Jie Sun1,7	Electromechanical Stimulation on PC12 Cell Proliferation and Axon
MC T6	2021	Hyeree Park, Showan N. Nazhat, Derek H. Rosenzweig	Mechanical activation drives tenogenic differentiation of human mesenchymal stem cells in aligned dense collagen hydrogels
MC FX	2021	Jesse D. Rogers, Jeffrey W. Holmes, Jeffrey J. Saucerman, William J. Richardson,	Mechano-chemo signaling interactions modulate matrix production by cardiac fibroblasts,
MC TR	2021	Szojka, A., Li, D. X., Sopcak, M., Ma, Z., Kunze, M., Mulet-Sierra, A., Adeeb, S. M., Westover, L., Jomha, N. M., & Adesida, A. B.	Mechano-Hypoxia Conditioning of Engineered Human Meniscus.
MC T6	2021	Labro, Quentin Dermigny, Marie Naudot, Sophie Le Ricousse, Cecile Legallais, Fahmi Bedoui	Monitoring mechanical stimulation for optimal tendon tissue engineering: A mechanical and biological multiscale study
MC T6	2021	Quentin Dermigny, Marie Naudot, Sophie Le Ricousse, C. Legallais, Fahmi	tissue engineering: a mechanical and biological multiscale study
MC B1	2021	Rashika Joshi, Matthew R. Batie, Qiang Fan, and Brian Michael Varisco*	Mouse Lung Organoid Responses to Reduced, Increased, and Cyclic Stretch
MC B1	2021	Xun Xu, Yan Nie, Weiwei Wang, Nan Ma & Andreas Lendlein	Periodic thermomechanical modulation of toll-like receptor expression and distribution in mesenchymal stromal cells
MC FX	2021	Thompson, C.L.; McFie, M.; Chapple, J.P.; Beales, P.; Knight, M.M.	Polycystin-2 Is Required for Chondrocyte Mechanotransduction and Traffics to the Primary Cilium in Response to Mechanical Stimulation.
MC FX	2021	Tran, R.D.H.; Morris, T.A.; Gonzalez, D.; Hetta, A.H.S.H.A.; Grosberg, A.	Quantitative Evaluation of Cardiac Cell Interactions and Responses to Cyclic Strain.
MC TR	2021	Tam, Agnieszka A. Karol, Wolfgang Hitzl, Victor Y. Leung, Ralph Müller, Stephen J. Ferguson, Karin Wuertz-Kozak	TRPV4 mediates cell damage induced by hyperphysiological compression and regulates COX2/PGE2 in intervertebral discs