加拿大 CellScale 品牌材料测试分析系统

Instrument	Year	Title	Author	Link
BioTester	2018	Biaxial mechanical behavior of bovine saphenous venous valve leaflets	J. Lu, H-Y S. Huang	View Article
UniVert	2018	Mechanical Strength Of Nafion®/ZrO2 Nano-Composite Membrane	R. Sigwadi, F. Nemavhola, S. Dhlamini, T. Mokrani	View Article
MechanoCulture B1	2018	Role of boundary conditions in determining cell alignment in response to stretch	K. Chen, A. Vigliotti, M. Bacca, R. M. McMeeking, V.S. Dashpande, J.W. Holmes	View Article
BioTester	2018	Prevalence of Calcification in Human Femoropopliteal Arteries and its Association with Demographics, Risk Factors, and Arterial Stiffness	A. Kamenskiy, W. Poulson, S. Sim, A. Reilly, J. Luo, J. MacTaggart	View Article
BioTester	2018	Comparison of corneal biomechanics after myopic small-incision lenticule extraction compared to LASIK: an ex vivo study	A.J. Kanellopoulos	View Article
UniVert	2018	Three-Dimensional Printing of Bisphenol A-Free Polycarbonates	W. Zhu, S-H. Pyo, S. You, C. Yu, J. Alido, J. Liu, Y. Leong, S. Chen	View Article
BioTester	2018	Dehiscence of patch augmentation of a left-sided atrioventricular valve related to strenuous isometric exercise: Case report and failure analysis	P.E. Hammer, C.W. Baird, P.J. del Nido, G.R. Marx	View Article
BioTester	2018	Puncturing of lyophilized tissue engineered vascular matrices enhances the efficiency of their recellularization	A.A. Ksiazek, L. Frese, P.E. Dijkman, B. Sanders, S. E. Motta, B. Weber, S.P. Hoerstrup	View Article
BioTester	2018	Biomechanical evaluation of a personalized	J. Vastmans, H.	View

Instrument	Year	Title	Author	Link
		external aortic root support applied in the Ross procedure	Fehervary, P. Verbrugghe, T. Verbelen, E. Vanderveken, J. Vander Sloten, T. Treasure, F. Rega, N. Famaey	Article
BioTester	2018	Polydopamine as sizing on carbon fiber surfaces for enhancement of epoxy laminated composites	W. Han, H-P. Zhang, J. Tavakoli, J. Campbell, Y. Tang	View Article
BioTester	2018	Comparison of in vivo vs. ex situ obtained material properties of sheep common carotid artery	M. Smoljkic, P. Verbrugghe, M. Larsson, E. Widman, H. Fehervary, J. D'hooge, J. Vander Sloten, N. Famaey	View Article
BioTester	2018	Soy Protein/Cellulose Nanofiber Scaffolds Mimicking Skin Extracellular Matrix for Enhanced Wound Healing	S. Ahn, C.O. Chantre, A.R. Gannon, J.U. Lind, P.H. Campbell, T. Grevesse, B.B. O'Conner, K.K. Parker	View Article
BioTester	2018	New findings confirm the viscoelastic behaviour of the inter-lamellar matrix of the disc annulus fibrosus in radial and circumferential directions of loading	J. Tavakoli, J.J. Costi	View Article
Ustretch	2018	Self-assembled Collagen-Fibrin Hydrogel Reinforces Tissue Engineered Adventitia Vessels Seeded with Human Fibroblasts	B. Patel, Z. Xu, C. Pinnock, L.S. Kabbani, M.T. Lam	View Article
BioTester	2018	3D printed, controlled release, tritherapeutic tablet matrix for advanced anti-HIV-1 drug delivery	M. Siyawamwaya, L.C. du Toit, P. Kumar, Y.E. Choonara, P.P.P.D Kondiah, V. Pillay	View Article
MicroSquisher	2018	Acrylate-based materials for heart valve scaffold engineering	R. Santoro, S. Venkateswaran, F.	View Article

Instrument	Year	Title	Author	Link
			Amandeo, R. Zhang, M. Brioschi, A. Callanan, M. Agrifoglio, C. Banfi, M. Bradley, M. Pesce	
BioTester	2018	Computational modeling guides tissue-engineered heart valve design for long-term in vivo performance in a translational sheep model	M.Y. Emmert, B.A. Schmitt, S. Loerakker, B. Sanders, H. Spriestersbach,, E.S. Fioretta, L. Bruder, K. Brakmann, S.E. Motta, V. Lintas, P.E. Dijkman, L. Frese, F. Berger, F.P.T. Baaijens, S.P. Hoerstrup	View Article
UniVert	2018	Fabrication of functionalized citrus pectin/silk fibroin scaffolds for skin tissue engineering.	S. Tukkan, D. Atila, A. Akdaq, A. Tezcaner	View Article
UniVert	2018	Rapid continuous 3D printing of customizable peripheral nerve guidance conduits	W. Zhu, K.R. Tringale, S.A. Woller, S. You, S. Johnson, H. Shen, J. Schimelman, M. Whitney, J. Steinauer, W. Xu, T.L. Yaksh, Q.T. Nguyen, S.Chen	View Article
MicroSquisher	2018	A Microvascularized Tumor-mimetic Platform for Assessing Anti-cancer Drug Efficacy	S. Pradhan, A.M. Smith, C.J. Garson, I. Hassani, W.J. Seeto, K. Pant, R.D. Arnold, B. Prabhakarpandian, E.A. Lipke	View Article
UniVert	2017	A highly deformable conducting traces for printed antennas and interconnects: silver/fluoropolymer composite amalgamated by triethanolamine	A. Kumar, H. Saghlatoon, T-G. La, M. M. Honari, H. Charaya, H.A. Damis, R. Mirzavand, P. Mousavi, H-J. Chung	View Article

Instrument	Year	Title	Author	Link
MicroSquisher	2017	A three-dimensional spheroidal cancer model based on PEG-fibrinogen hydrogel microspheres	S.Pradhan, J. M. Clary, D. Seliktar, E. A. Lipke	View Article
BioTester	2017	Biaxial experimental and analytical characterization of a dielectric elastomer	A. Helal, M. Doumit, R. Shaheen	View Article
BioTester	2017	Biaxial mechanical properties of bovine jugular venous valve leaflet tissues	H-Y. S. Huang, J. Lu	View Article
BioTester	2017	Comparison of Femoropopliteal Artery Stents Under Axial and Radial Compression, Axial Tension, Bending, and Torsion Deformations	K. Maleckis, P. Deegan, W. Poulson, C. Sievers, A. Desyatova, J. MacTaggart, A. Kamenskiy	View Article
BioTester	2017	Constitutive modeling of human femoropopliteal artery biaxial stiffening due to aging and diabetes	A. Desyatova, J. MacTaggart, A. Kamenskiy	View Article
BioTester	2017	Constitutive modeling of jugular vein-derived venous valve leaflet tissues	N. Kaul, H-Y. S. Huang	View Article
MicroSquisher	2017	Decellularized adipose tissue microcarriers as a dynamic culture platform for human adipose-derived stem/stromal cell expansion	C. Yu, A. Kornmuller, C. Brown, T. Hoare, L.E. Flynn	View Article
BioTester	2017	Design and characterization of a hyperelastic tubular soft composite	R. Shaheen, M. Doumit, A. Helal	View Article
MicroSquisher	2017	Encapsulation of Equine Endothelial Colony Forming Cells in Highly Uniform, Injectable Hydrogel Microspheres for Local Cell Delivery	W.J. Seeto, Y. Tian, R.L. Winter, F.J. Caldwell, A.A. Wooldridge, E.A. Lipke	View Article
BioTester	2017	In situ heart valve tissue engineering using a bioresorbable elastomeric implant – From material design to 12 months follow-up in sheep	J. Kluin, H. Talacua, A.I.P.M. Smits, M. Y. Emmert, M.C.P. Brugmans, E.S. Fioretta, P.E. Dijkman,	View Article

Instrument	Year	Title	Author	Link
			S.H.M. Sontjens, R.Duijvelshoff, S. Dekker, M.W.J.T. Janssen-van den Broek, V. Lintas, A. Vink, S.P. Hoerstrup, H.M. Janssen, P.Y.W. Dankers, F.P.T. Baaijens, C.V.C. Bouten	
BioTester	2017	JetValve: Rapid manufacturing of biohybrid scaffolds for biomimetic heart valve replacement	A.K. Capulli, M.Y. Emmert, F.S. Pasqualini, D. Kehl, E. Caliskan, J.U. Lind, S. P. Sheehy, S.J. Park, S. Ahn, B. Weber, J.A. Goss, S.P Hoerstrup, K.K. Parker	View Article
BioTester	2017	Limb flexion-induced twist and associated intramural stresses in the human femoropopliteal artery	A. Desyatova, W. Poulson, P. Deegan, C. Lomneth, A. Seas, K. Maleckis, J. MacTaggart, A. Kamenskiy	View Article
MechanoCulture T6	2017	Living nanofiber yarn-based woven biotextiles for tendon tissue engineering using cell tri-culture and mechanical stimulation	S. Wu, Y. Wang, P.N. Streubel, B. Duan	View Article
MechanoCulture FX	2017	Mechanical and signaling roles for keratin intermediate filaments in the assembly and morphogenesis of mesendoderm tissue at gastrulation	P.R. Sonavane, C. Wang, B. Dzamba, G.F. Weber, A. Periasamy, D.W. DeSimone	View Article
BioTester	2017	Mechanically Robust Electrospun Hydrogel Scaffolds Crosslinked via Supramolecular Interactions	B.B. Mollet, S. Spaans, P.G. Fard, N.A.M. Bax, C.V.C. Bouten, P.Y.W. Dankers	View Article

Instrument	Year	Title	Author	Link
MicroSquisher	2017	Microfluidic production of degradable thermoresponsive poly(N-isopropylacrylamide)-based microgels	D. Sivakumaran, E. Mueller, T. Hoare	View Article
BioTester	2017	Nondestructive mechanical characterization of developing biological tissues using inflation testing	P.J.A. Oomen, M.A.J. van Kelle, C.W.J. Oomens, C.V.C. Bouten, S. Loerakker	View Article
BioTester	2017	On the influence of wall calcification and intraluminal thrombus on prediction of abdominal aortic aneurysm rupture	H.E. Barrett, E.M. Cunnane, H. Hidayat, J.M. O'Brien, M.A. Moloney, E.G. Kavanagh, M.T. Walsh	View Article
BioTester	2017	Paraspinal Muscle Passive Stiffness Remodels in Direct Response to Spine Stiffness: A Study Using the ENT1-Deficient Mouse	K. Gsell, D. Zwambag, D.E. Fournier, C.A. Seguin, S.H.M. Brown	View Article
MicroSquisher	2017	PEG-fibrinogen hydrogels for three-dimensional breast cancer cell culture	S. Pradhan, I. Hassani, W.J. Seeto, E.A. Lipke	View Article
MicroSquisher	2017	Polysaccharide Hydrogels Support the Long-Term Viability of Encapsulated Human Mesenchymal Stem Cells and Their Ability to Secrete Immunomodulatory Factors	F. Hached, C. Vinatier, P-G. Pinta, P. Hulin, C. Le Visage, P. Weiss, J. Guicheux, A. Billon-Chabaud, G. Grimandi	View Article
MicroSquisher	2017	Pullulan microbeads/Si-HPMC hydrogel injectable system for the sustained delivery of GDF-5 and TGF-β1: new insight into intervertebral disc regenerative medicine	N. Henry, J. Clouet, A. Fragale, L.Griveau, C. Chedevile, J. Veziers, P. Weiss, J. Le Bideau, J. Guicheaux, C. Le Visage	View Article
MicroSquisher	2017	Real-time and non-invasive measurements of cell mechanical behaviour with optical coherence phase microscopy	D. Gillies, W. Gamal, A. Downes, Y. Reinwald, Y. Yang, A.J. El Haj, P.O. Bagnaninchi	View Article

Instrument	Year	Title	Author	Link
UniVert	2017	Self-reinforcing graphene coatings on 3D printed elastomers for flexible radio frequency antennas and strain sensors	X. Li, M.M. Honari, Y. Fu, A. Kumar, H. Saghlatoon	View Article
MechanoCulture FX	2017	Tenogenic phenotype maintenance and differentiation using macromolecular crowding and mechanical loading	D. Gaspar, A. Pandit, D. Zeugolis	View Article
BioTester	2017	Tensile behaviour of individual fibre bundles in the human lumbar anulus fibrosus	D.T. Pham, J.G. Shapter, J.J. Costi	View Article
MicroSquisher	2017	The physical basis of coordinated tissue spreading in zebrafish gastrulation	H. Morita, S. Grigolon, M. Bock, S.F.G. Krens, G. Salbreux, C-P. Heisenberg	View Article
MicroSquisher	2017	The role of adhesion junctions in the biomechanical behaviour and osteogenic differentiation of 3D mesenchymal stem cell spheroids	F.E. Griffin, J. Schiavi, T.C. McDevitt, J.P. McGarry, L.M. McNamara	View Article
BioTester	2017	Urinary Bladder Versus Gastrointestinal Tissue: a Comparative Study of Their Biomechanical Properties for Urinary Tract Reconstruction	N.F. Davis, J.J.E. Mulvihill, S. Mulay, E.M. Cunnane, D.M. Bolton, M.T. Walsh	View Article
BioTester	2016	A comparison between porcine, ovine, and bovine intervertebral disc anatomy and single lamella annulus fibrosis tensile properties	L.A. Monaco, S.J. DeWitte-Orr, D.E. Gregory	View Article
BioTester	2016	Acute pergolide exposure stiffens engineered valve interstitial cell tissues and reduces contractility in vitro	A.K. Capulli, L.A. MacQueen, B.B. O'Conner, S. Dauth, K.K. Parker	View Article
MechanoCulture T6	2016	Additive manufacturing of a photo-cross-linkable polymer via direct meld electrospinning writing for producing high strength structures	F. Chen, G. Hochleitner, T. Woodfield, J. Groll, P. Dalton, B.G. Amsden	View Article

Instrument	Year	Title	Author	Link
BioTester	2016	Age-Dependent Changes in Geometry, Tissue Composition and Mechanical Properties of Fetal to Adult Cryopreserved Human Heart Valves	D. van Geeman, A.L.F. Soares, P.J.M. Oomen, A. Dressen-Mol, M.W.J.T. Janssen-van den Broek, A.J. van den Bogaerdt, J.J.C. Bogers, M-J. T.H. Goumans, F.P.T. Baaijens, C.V.C. Bouten	View Article
MicroSquisher	2016	An Injectable Hydrogel Prepared Using a PEG/Vitamin E Copolymer Facilitating Aqueous-Driven Gelation	J. Zhang, B. Muirhead, M. Dodd, L. Liu, N. Mangiacotte, T. Hoare, S. Sheardown	View Article
BioTester	2016	Are adipose-derived stem cells cultivated in human platelet lysate suitable for heart valve tissue engineering	L. Frese, T. Sasse, B. Sanders, F.P.T. Baaijens, G.M. Beer, S.P. Hoerstrup	View Article
BioTester	2016	Biaxial quantification of deep layer transverse carpal ligament elastic properties by sex and region	B. Mathers, A. Agur, M. Oliver, K. Gordon	View Article
BioTester	2016	Biomechanical Characterization of Ascending Aortic Aneurysms	M. Smoljkic, H. Fehervary, P. Van den Bergh, A. Jorge-Penas, L. Kluyskens, S. Dymarkowski, P. Verbrugghe, B. Meuris, J. Vander Sloten, N. Famaey	View Article
BioTester	2016	Biomechanical properties and microstructure of heart chambers: a paired comparison study in an ovine model	S. Javani, M. Gordon, A.N. Azadani	View Article
BioTester	2016	Characterization of three-dimensional anisotropic heart valve tissue mechanical properties using inverse finite element	M. Abbasi, M.S. Barakat, K. Vanhidkhah, A.N.	View Article

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		analysis	Azadani	
BioTester	2016	Constitutive description of human femoropopliteal artery aging	A. Kamenskiy, A. Seas, P. Deegan, W. Poulson, E. Anttila, S. Sim, A. Desyatova, J. MacTaggart	View Article
MicroSquisher	2016	Delivery of Human Adipose Stem Cells Spheroids into Lockyballs	K.R. Silva, R.A. Rezende, F.D.A.S. Pereira, P. Gruber, M.P. Stuart, A. Ovsianikov, K. Brakke, V. Kasyanov, J.V.L. da Silva, J.M. Granjeiro, L.S. Baptista, V. Mironov	View Article
BioTester	2016	Deposition of a hydrophilic nanocomposite-based coating on a silicone hydrogel through a laser process to minimize UV exposure and bacterial contamination	G. Huang, W. H. Tse, J. Zhang	View Article
UniVert	2016	Development of an infusion bioreactor for the accelerated preparation of decellularized skeletal muscle scaffolds	B. M. Kasukonis, J.T. Kim, T.A. Washington, J.C. Wolchok	View Article
MicroSquisher	2016	Direct Production of Human Cardiac Tissues by Pluripotent Stem Cell Encapsulation in Gelatin Methacryloyl	P. Kerscher, J.A. Kaczmarek, S.E. Head, M. Brazel, W. Seeto, S. Bhattacharya, J. Kim, V. Suppiramaniam, E.A. Lipke	View Article
BioTester	2016	Improved Geometry of Decellularized Tissue Engineered Heart Valves to Prevent Leaflet Retraction	B. Sanders, S. Loerakker, E.S. Fioretta, D.J.P. Bax, A. Driessen-Mol, S.P. Hoerstrup, F.P.T. Baaijens	View Article

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BioTester	2016	Inflation and bi-axial tensile testing of healthy porcine carotid arteries	R.W. Boekhoven, M.F.J. Peters, M.C.M. Rutten, M.R. van Sambeek, F.N. van de Vosse, R.G.P Lopata	View Article
UniVert	2016	Material Properties from Air Puff Corneal Deformation by Numerical Simulations on Model Corneas	N. Bekesi, C. Dorronsoro, A. de la Hoz, S. Marcos	View Article
MicroSquisher	2016	Mineral particles modulate osteo-chondrogenic differentiation of embryonic stem cell aggregates	Y. Wang, X. Yu, C. Baker, W.L. Murphy, T.C. McDevitt	View Article
BioTester	2016	Modulation of collaen fiber orientation by strain-controlled enzymatic degradation	S. Ghazanfari, A. Dressen-Mol, C.V.C. Bouten, F.P.T. Baaijens	View Article
BioTester	2016	Nanocomposited coatings produced by laser-assisted process to prevent silicone hydrogels from protein fouling and bacterial contamination	G. Huang, Y. Chen, J. Zhang	View Article
BioTester	2016	Patient Specific Vascular Benchtop Models for Development and Validation of Medical Devices for Minimally Invasive Procedures	M. Kvasnytsia, N. Famaey, M. Bohm, E. Verhoelst	View Article
BioTester	2016	Peak stress in the annulus fibrosis under cyclic biaxial tensile loading	C.E. Gooyers, J.P. Callaghan	View Article
MicroSquisher	2016	PEG-fibrinogen Hydrogels for Three-dimensional Breast Cancer Cell Culture	S. Pradhan, I. Hassani, W.J. Seeto, E. A. Lipke	View Article
BioTester	2016	Phototactic guidance of a tissue-engineered soft-robotic ray	S-J. Park, M. Gazzola, K.S. Park, S. Park, V. Di Santo, E.L Blevins, J.U. Lind, P.H. Campbell, S. Dauth, K.K. Parker	View Article
BioTester	2016	Planar biaxial testing of heart valve cusp	M.R. Labrosse, R.	View

Instrument	Year	Title	Author	Link
		replacement biomaterials: Experiments, theory and material constants	Jafar, J.Ngu, M. Boodhwani	Article
BioTester	2016	Planar biaxial testing of soft biological tissue using rakes: A critical analysis of protocol and fitting process	H. Fehervary, M. Smoljkic, J.Vander Sloten, N. Famaey	View Article
BioTester	2016	Production of Synthetic, Para-Aramid and Biopolymer Nanofibers by Immersion Rotary Jet-Spinning	G.M. Gonzalez, L.A. MacQueen, J.U. Lind, S.A. Fitzgibbons, C. O. Chantre, I. Huggler, H.M. Golecki, J.A. Goss, K.K. Parker	View Article
BioTester	2016	Quantification of Coupled Stiffness and Fiber Orientation Remodeling in Hypertensive Rat Right-Ventricular Myocardium Using 3D Ultrasound Speckle Tracking with Biaxial Testing	D.W. Park, A. Sebastiani, C.H. Yap, M.A. Simon, K. Kim	View Article
MicroSquisher	2016	Reactive eletrospinning of degradable poly(oligoethylene glycol methacrylate)-based nanofibrous hydrogel networks	F. Xu, H. Sheardown, T. Hoare	View Article
BioTester	2016	The aging disc: using an ovine model to examine age-related differences in the biomechanical properties of the intralamellar matrix of single lamellae	D.M. Stewart, L.A. Monaco, D.E. Gregory	View Article
BioTester	2016	The choice of a constitutive formulation for modeling limb flexion-induced deformations and stresses in the human femoropopliteal arteries of different ages	A. Desyatova, J. MacTaggart, W. Poulson, P. Deegan, C. Lomneth, A. Sandip, A. Kamenskiy	View Article
BioTester	2016	The Effect of Local Hydration Environment on the Mechanical Properties and Unloaded Temporal Changes of Isolated Porcine Annular Samples	K.M. Gruevski, C.E. Gooyers, T. Karakolis, J.P. Callaghan	View Article

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UniVert	2016	The global mechanical properties and multi-scale failure mechanics of heterogeneous human stratum corneum	X. Liu, J. Cleary, G.K. German	View Article
BioTester	2015	Adipose derived tissue engineered heart valve	L. Frese, B. Sanders, G.M. Beer, B. Weber, A. Driessen-Mol, F.P.T. Baaijens, S.P. Hoerstrup	View Article
BioTester	2015	Biaxial stress relaxation of semilunar heart valve leaflets during simulated collagen catabolism: effects of collagenase concentration and equibiaxial strain state	S. Huang, H.-Y. S. Huang	View Article
BioTester	2015	Building a better infarct: Modulation of collagen cross-linking to increase infarct stiffness and reduce left ventricular dilation post-myocardial infarction	A.P. Voorhees, K.Y. DeLeon-Pennell, Y. Ma, G. V. Halade, A. Yabluchanskiy, R. Padmanabhan, E. Flynn, C.A. Cates, M.L. Lindsey, H.-C. Han	View Article
MicroSquisher	2015	Burr-like, laser-made 3D microscaffolds for tissue spheroid encagement	P. Danilevicius, R.A. Rezende, F.D.A.S. Pereira, A. Selimis, V. Kasyanov, P.Y. Noritomi, J.V.L. da Silva, M.Chatzinikolaidou, M. Farsari, V. Mironov	View Article
BioTester	2015	Corneal collagen cross-linking combined with simulation of femtosecond laser-assisted refractive lens extraction: an ex vivo biomechanical effect evaluation	A.J. Kanellopoulos, M.A. Kontos, S. Chen, G. Asimellis	View Article
BioTester	2015	Development of a biological scaffold engineered using the extracellular matrix secreted by skeletal muscle cells	S.A. Hurd, N.M. Bhatti, A.M. Walker, B.M. Kasukonis, J.C. Wolchok	View Article

Instrument	Year	Title	Author	Link
UniVert	2015	Development of a biological scaffold engineered using the extracellular matrix secreted by skeletal muscle cells	S. A. Hurd, N.M. Bhatti, A.M. Walker, B.M. Kasukonis, J.C. Wolchok	View Article
BioTester	2015	Development of non-cell adhesive vascular grafts using supramolecular building blocks	G. C. van Almen, H. Talacua, B.D. Ippel, B.B. Mollet, M. Ramaekers, M. Simonet, A.I.P.M. Smits, C.V.C. Bouten, J. Kluin, P.Y.W. Dankers	View Article
BioTester	2015	High-irradiance CXL combined with myopic LASIK: flap and residual stroma biomechanical properties studied ex-vivo	A.J. Kanellopoulos, G. Asimellis, B.Salvador-Culla, J. Chodosh, J.B. Ciolino	View Article
UniVert	2015	High-irradiance CXL combined with myopic LASIK: flap and residual stroma biomechanical properties studied ex-vivo	A. J. Kanelloploulos, G. Asimellis, B. Salvador-Culla, J. Chodosh, J.B. Ciolino	View Article
BioTester	2015	Improved geometry of decellularized tissue engineered heart valves to prevent leaflet retraction	B. Sanders, S. Loerakker, E.S. Fioretta, D.J.P. Bax, A. Driessen-Mol, S.P.Hoerstrup, F.P.T Baaijens	View Article
BioTester	2015	Leaflet stress and strain distributions following incomplete transcatheter aortic valve expansion	M. Abbasi, A.N. Azadani	View Article
BioTester	2015	Methods for using 3-D ultrasound speckle tracking in biaxial mechanical testing of biological tissue samples	C.H. Yap, D.W. Park, D. Dutta, M. Simon, K. Kim	View Article
BioTester	2015	Nanocomposite silicone hydrogels with a laser-assisted surface modification for	P. Yin, G.B. Huang, W.H. Tse, Y.G. Bao, J.	View Article

Instrument	Year	Title	Author	Link
		inhibiting the growth of baterial biofilm	Denstedt, J. Zhang	
BioTester	2015	Regional and depth variability of porcine meniscal mechanical properties through biaxial testing	A. Kahlon, M.B. Hurtig, K.D. Gordon	View Article
BioTester	2015	Superior tissue evolution in slow degrading scaffolds for valvular tissue engineering	M. Brugmans, S. Soekhradj-Soechit, D. van Geemen, M.A.J. Cox, C. Bouten, F.P.T. Baaijens, A. Driessen-Mol	View Article
BioTester	2015	The Biomechanics of Eyelid Tarsus Tissue	M.T. Sun, D. Pham, A.J. O'Conner, J. Wood, R. Casson, D. Selva, J.J. Costi	View Article
BioTester	2014	Cardiac Function of the Naked Mole-Rat: Echophysiological Responses to Working Underground	K.M. Grimes, A. Voorhees, Y.A. Chiao, H-C. Han, M.L. Lindsey, R. Buffenstein	View Article
BioTester	2014	Directional Biomechanical Properties of Porcine Skin Tissue	H-Y. Huang, S. Huang, C.P. Frazier, P.M. Prim, O. Harrysson	View Article
UniVert	2014	Intrastromal Application of Riboflavin for Corneal Crosslinking	T.G. Seiler, I. Fischinger, T. Senfft, G. Schmidinger, T. Seiler	View Article
MicroSquisher	2014	Mesenchymal morphogenesis of embryonic stem cells dynamically modulates the biophysical microtissue niche	M.A. Kinney, R.Saeed, T.C. McDevitt	View Article
BioTester	2014	Modeling the impact of scaffold architecture and mechanical loading on collagen turnover in engineered cardiovascular tissues	G. Argento, N. de Jonge, S.H.M. Sontjens, C.W.J. Oomens, C.V.C. Bouten, F.P.T. Baaijens	View Article

Instrument	Year	Title	Author	Link
BioTester	2014	Should a native depth-dependent distribution of human meniscus constitutive components be considered in FEA-models of the knee joint?	J.M. Parraga Quiroga, P. Emmans, W. Wilson, K. Ito, C.C. van Donkelaar	View Article
BioTester	2014	Strain-dependent modulation of macrophage polarization within scaffolds	V. Ballotta, A. Dressen-Mol, C.V.C. Bouten, F.P.T. Baaijens	View Article
BioTester	2014	Structural and mechanical adaptations of right ventrical free wall myocardium to pressure overload	M.R. Hill, M.A. Simon, D. Valdez-Jasso, H.C. Champion, M.S. Sacks	View Article
BioTester	2014	The biaxial biomechanical behavior of adominal aortic aneurysm tissue	S.A. O'Leary, D.A. Healey, E.G. Kavanagh, M.T. Walsh, T.M. McGloughling, B.J. Doyle	View Article
BioTester	2014	The biaxial mechanical behaviour of abdominal aortic aneurysm intraluminal thrombus: Classification of morphology and the determination of layer and region specific properties	S.A. O'Leary, E.G. Kavanagh, P.A. Grace, T.M. McGloughlin, B.J. Doyle	View Article
BioTester	2014	The impact of long term freezing on the mechanical properties of porcine aortic tissue	S. O'Leary, B. Doyle, T. McGloughlin	View Article
BioTester	2014	Vascular Elastography: A Validation Study	R.G.P. Lopata, M.F.J. Peters, J. Nijs, C.W. Oomens, M.C.M. Rutten, F.N. van de Vosse	View Article
BioTester	2013	A Nanocomposite Contact Lens for the Delivery of Hydrophilic Protein Drugs	J. Zhang, R. Bi, W. Hodge, P. Yin, W.H. Tse	View Article
MicroSquisher	2013	Alginate Encapsulation Parameters Influence the Differentiation of Microencapsulated Embryonic Stem Cell Aggregates	Wilson, J.L., Ali Naijia, M., Saeed, R., McDevitt, T.C.	View Article

Instrument	Year	Title	Author	Link
BioTester	2013	Comparison of methods used to measure the thickness of soft tissues and their influence on the evaluation of tensile stress	S.A. O'Leary, B.J. Doyle, T.M. McGloughlin	View Article
BioTester	2013	Corneal resistance to shear force after UVA-riboflavin cross-linking	A.P. Sondergaard, A. Ivarsen, J. Hjortdal	View Article
BioTester	2013	In vitro fabrication of autologous living tissue-engineered vascular grafts based on prenatally harvested ovine amniotic fluid-derived stem cells	B. Weber, D. Kehl, U. Bleul, S. Sammut, L. Frese, A. Ksiazek, L Behr, J. Achermann, G. Stranzinger, J. Robert, B. Sanders, M. Sidler, C.E. Brokopp, S.T. Proulx, T. Frauenfelder, R. Schoenauer, M.Y.Emmert, V. Falk, S.P.Herstrup	View Article
BioTester	2013	Mechanical Analysis of Ovine and Pediatric Pulmonary Artery for Heart Valve Stent Design	M.S. Cabrera, C.W.J. Oomens, C.V.C. Bouten, A.J.J.C. Bogers, S.P. Hoerstrup, F.P.T. Baaijens	View Article
BioTester	2013	Mechanics of the pulmonary valve in the aortic position	A.L.F. Soares, D. van Geeman, A.J. van den Bogaerdt, C.W.J. Oomens, C.V.C. Bouten, F.P.T. Baaijens	View Article
BioTester	2013	Reduction of Stromal Swelling Pressure after UVA-Riboflavin Cross-Linking	A.P. Sondergaard, A. Ivarsen, J. Hjortdal	View Article
BioTester	2012	A Murine Experimental Model for the Mechanical Behavior of Viable Right-Ventricular Myocardium	D. Valdez-Jasso, M.A. Simon, H.C. Champion, M.S. Sacks	View Article
BioTester	2012	An Examination of the Mechanical Properties of the Annulus Fibrosus: The Effect of	Diane Gregory, J. Callaghan	View Article

Instrument	Year	Title	Author	Link
		Vibration on the Intra-lamellar Matrix Strength		
BioTester	2012	Application of Simple Biomechanical and Biochemical Tests to Heart Valve Leaflets: Implications for Heart Valve Characterization and Tissue Engineering	H-Y. Huang, B.N. Balhouse, S. Huang	View Article
BioTester	2012	Biomechanical Properties of the Transverse Carpal Ligament Under Biaxial Strain	Michael Holmes, S. Howarth, J. Callaghan, P. Keir	View Article
BioTester	2012	Multi-Scale Mechanical Characterization of Scaffolds for Heart Valve Tissue Engineering	G. Argento, M. Simonet, C.W.J. Oomens, F.P.T. Baaijens	View Article
MicroSquisher	2012	Stiffening of Human Mesenchymal Stem Cell Spheroid Mircoenvironments Induced By Incorporation of Gelatin Microparticles	P. R. Baraniak, M.T. Cooke, R. Saeed, M.A. Kinney, K.M. Fridley, T.C. mcDevitt	View Article
BioTester	2011	A Comparison of Uniaxial and Biaxial Mechanical Properties of the Annulus Fibrosus: A Porcine Model	Diane Gregory, J. Callaghan	View Article
BioTester	2011	Does Vibration Influence the Initiation of Intervertebral Disc Herniation	Diane Gregory, J. Callaghan	View Article
BioTester	2011	Novel Lap Test Determines the Mechanics of Delamination Between Annular Lamellae of the Intervertebral Disc	D. Gregory, J. Veldhuis, C. Horst, W. Brodland, J. Callaghan	View Article
BioTester	2011	Surfactant Assisted Incorporation of Single-Walled Carbon Nanotubes Into a Chitosan-polyvinylpyrrolidone Polymer	T. Davis, J. Zhang, J.E. Herrera	View Article
BioTester	2010	An Examination of the Influence of Strain Rate on Subfailure Mechanical Properties of the Annulus Fibrosus	D. Gregory, J. Callaghan	View Article

Instrument	Year	Title	Author	Link
BioTester	2010	Biaxial Mechanical Testing of Human Sclera	A. Eilaghi, J. Flanagan, I. Tertinegg, C. Simmons, W. Brodland, R. Ethier	View Article
BioTester	2010	Effects of Sclera Stiffness on Biomechanics of the Optic Nerve Head in Glaucoma	A. Eilaghi	View Article
BioTester	2010	Effects of Sclera Stiffness Properties on Optic Nerve Head Biomechanics	A. Eilaghi, J. Flanagan, C. Simmons, R. Ethier	View Article
MicroSquisher	2009	Cellular Interfacial and Surface Tensions Determined From Aggregate Compression Tests Using a Finite Element Model. HFSP Journal	Brodland, G.W., Yang, J., Sweny, J.	View Article
BioTester	2009	Fabrication of Nanofiber Reinforced Protein Structures for Tissue Engineering	V. Beachley, X. Wen	View Article
BioTester	2009	Strain Uniformity in Biaxial Specimens is Highly Sensitive to Attachment Details	A. Eilaghi, J. Flanagan, G.W. Brodland, R. Ethier	View Article
BioTester	2009	The Influence of the Tensile Material Properties of Single Annulus Fibrosus Lamellae and the Interlamellar Matrix Strength on Disc Herniation and Progression	D. Gregory	View Article