Alpar, Lale Toll-like receptors and the Drosophila neck fold: a morphogenetic process controlled by the interplay of mechanical forces and geometry	<b>ic</b> 42
Amadio, Roberto Wasp expression in macrophages prevents cgas-sting activation controlling the integrity of the nuclear envelope	າ <b>by</b> 43
Bader, Laura  Nuclear mechanics in the developing zebrafish heart	44
Belska, Paula  Substrate curvature and its control on tissue chirality	45
Bianchi, Laura F. How to correct errors in the early embryo: challenges and mechanisms of 'cellular multi-tasking'	46
Biswas, Arikta Presenter: Chan, Chii Jou Mechanical control of mammalian ovarian folliculogenesis by the cells and tissue pressure	eca 47
Boutillon, Arthur Stress-driven tissue fluidization physically segments vertebrate Somites	48
Bovyn, Matthew Seven Million Lumina into One: Development of the Bile Canalic	uli 49
Brandstätter, Tom  Data-driven theory reveals universal cell-cell interactions across distinct motile cells	5 50
Chilupuri, Ranjith Strengthening barrier function by apkc-iota overexpression lead coordinated hydraulic fractures in epithelia	<b>s to</b> 51
Creff, Justine Presenter: Krndija, Denis Breaking the Intestinal Barrier: Mechanics of Junctional Rupture Between Different Cell Types	e 52

Dar, Srishti	Presenter: Tesoro Moreno, Rubén	
The missing link of surface mechanics symmetry breaking	s: protein caging triggers	53
Darrigrand, Jean-François  Coordinated basement membrane pul drive pancreas branching morphogen		54
Davis, John Robert  Patterns of contractility within a tissue dynamics	e modulate force-balance	55
Decker, Linda  Decoding the biomechanome of color	ectal cancer	56
Dey, Bipasha  Divergent evolutionary strategies previous gastrulation	vent tissue collision during fly	57
Dintheer, Alina ECM remodelling and tension develophealing is mechanically regulated	oment during tendon wound	58
El Arawi, Dalia Characterizing spatial-temporal chang gastruloids self-organization	ges in tissue rheology during	59
Espina, Jaime Role of microtubule dynamics in direc	cted motion.	60
Fabrèges, Dimitri Function and regulation of developme embryogenesis	ental variabilities in mammalian	61
Frey, Felix  Decoding membrane designs – curvat membranes remodel	ture sorting reveals how	62
Gehrels, Emily Egg shape directs tissue flow in the D	rosophila embryo	63

Gemperle, Jakub Magnetogenetic spatiotemporal control of Rab25 endosomes triggers mechanosensory and invasive cell phenotypes in 3D matrix	64
Gordillo Pi, Clara  Deciphering the biomechanical mechanisms driving the expansion of the olfactory orifice in zebrafish.	65
Grudtsyna, Valeriia Collective cross-talk of mechanics and biochemistry	66
Gumulec, Jaromir Unveiling the interplay of vimentin dynamics and cytoskeletal mechanics in prostate cancer progression	67
Gunnan Ramkumar, Shivani Acquiring and reacquiring shape in the Zebrafish Pectoral Fin	68
Gupta, Praver Towards the mechanical basis of transformed cell elimination during epithelial defense against cancer	69
Harrison, Ryan  Cell organisation and 3D shape formation in a posterior neuruloid system	70
Hübner, Kerstin A novel TROP2 complex affects the cytoskeleton architecture and mechanobiology in colorectal cancer	71
Huerta-López, Carla Presenter: Clemente, Alejandro Cell response to extracellular matrix viscous energy dissipation outweighs high-rigidity sensing	72
Hundsdorfer, Lara  A live-cell imaging-compatible stretch device to study the influence of biomechanics on the interaction between bacterial pathogens and epithelia	73

EMBO   EMBL Symposium: The mechanics of life: from development to disease	
Jipp, Marcel Active fluctuations of cells reduce friction to enable fast and coherent collective migration	74
John, Alphy Probing the role of mechanosensory pathways in regulating intestinal stem cell niche homeostasis	75
Jones, Carl Presenter: Midlang, Andreas Characterizing biomechanics in a developing chordate nervous system	76
Junqueira Alves, Chrystian J	

Junqueira Alves, Chrystian J.  Manipulate mechano-electrical signalineural stem cells	ng to regulate the behavior of	77
Kamaras, Christos Nuclear envelope rupture during confir formin-mediated nuclear actin assemb	0 00	78
Khalilgharibi, Nargess Role of network remodeling in baseme	Presenter: Sorichetti, Valerio ent membrane mechanics	79
Khan, Ahmad Kamal Numerical simulation and analysis of c adhesive forces	cellular shapes from differential	80
Klatt, Niklas Polarity of cortex mechanics and fluidi	ity	81

Probing the role of mechanosensory pathwa stem cell niche homeostasis	ys in regulating intestinal	75
Jones, Carl Prese Characterizing biomechanics in a developing system	nter: Midlang, Andreas g chordate nervous	76
Junqueira Alves, Chrystian J.  Manipulate mechano-electrical signaling to neural stem cells	egulate the behavior of	77
Kamaras, Christos Nuclear envelope rupture during confined co formin-mediated nuclear actin assembly for		78
Khalilgharibi, Nargess Prese Role of network remodeling in basement me	nter: Sorichetti, Valerio mbrane mechanics	79
Khan, Ahmad Kamal Numerical simulation and analysis of cellula adhesive forces	r shapes from differential	80
Klatt, Niklas Polarity of cortex mechanics and fluidity		81
Kräter, Martin  Deformability cytometry: high-speed physic cells or how to feel for function	al phenotyping of single	82
Krishnakumar, Vishnu Stretching without breaking: How gut epithe mechanical challenges to maintain its integr		83
Kubiza, Hannah Guiding the differentiation of an airway muc micromechanical environment	osa in vitro model via its	84

	1	Posters A-Z
Lång, Emma Topology-guided polar ordering of co	Presenter: Lång, Emma llective cell migration	85
Liang, lvy The influence of cell shape anisotropy fibroblast-to-myofibroblast transition	y and spreading area on	86
Loo, Yi Ting Modelling the pattern formation and s during neuruloid development	elf-organisation of cell fates	87
Luthold, Carole Fibronectin-mediated ERK activation differentiation	counteracts melanocyte	88
Martinez Martin, Ines Exploring the molecular basis of card titin physical properties through biocl individual amino acids		f 89
Martinez-Morales, Juan R.  Yap mediated mechanoreciprocity is eassembly	essential for embryo axis	90
Marwaha, Rituraj Force guided lysosomes facilitate lea epithelial wound healing	der cell emergence during	91
Méry, Adrien Light-probing of rheological propertie microtissues	es of 3D engineered	92
Michaut, Arthur Epiboly-induced tension shapes the e avian embryos	extra-embryonic territory in	93
Middelkoop, Teije A cytokinetic ring-driven cell rotation development	achieves Hertwig's rule in ea	rly 94

EMBO   EMBL Symposium: The mechanics of life: from development to disease	
Mirkes, Kristina  Growth control in planarian flatworms: The role of extracellular matrix	95
Modes, Carl  Complex space-sharing networks in development: to ensnarl or not to ensnarl?	96
Moutin, Elisa Extracellular matrix orchestration of tissue remodeling promoting colitis-associated neoplasia	97
Mueller, Torsten Presenter: Mueller, Torsten; Macgregor-Fairlie, Michael Multiparametric Investigation of Bacterial Surface Structure with Correlative Atomic Force Microscopy	98
Mukenhirn, Markus Tight junctions regulate lumen morphology via hydrostatic pressure and junctional tension	99
Muñoz, Jose Inference of growth distribution in embryogenesis	100
Nagle, Irène Magnetic approaches for tissue mechanics and engineering of the skeletal muscle	101
Narayanan, Rachna Characterising the interplay of signalling and cell mechanics in zebrafish presomitic mesoderm morphogenesis	102
Outla, Zuzana Presenter: Gregor, Martin Targeting mechanical homeostasis in cancer progression and metastasis	103
Peussa, Heidi Light-induced nanoscale deformation in azobenzene thin film triggers rapid intracellular Ca2+ increase via mechanosensitive cation channels	104

Pilia, Giulia Large scale, multiparametric physical cancer spheroids by nanoindentation	in situ characterization of	105
Popard, Henri Role of nuclear envelope tension in th confinement	e response of cell growth to	106
Pragnere, Sarah A bottom-up tissue engineering appro micro-structure	ach to control tissue	107
Prechova, Magdalena Plectin-mediated cytoskeletal crosstal mechanical stress-induced damage	k protects epithelia against	108
R. Azenha, Sara New insights on mechanotransduction	n in collective cell migration	109
Ribeiro, Miguel Nuclear protein turnover in collective	cell migration	110
Roessner, Rita	Presenter: Aponte-Santamaria, Cam	ilo
Mechanical control of cell adhesion in multivalency	infection: force-induced	111
Romani, Patrizia A unifying role of mitochondria in nuc	Presenter: Dupont, Sirio lear mechanotransduction	112
Ruef, Nora	Presenter: Martínez Magdaleno, Jos	e
Exocrine gland-resident memory CD8 for tissue surveillance	+ T cells use mechanosensing	113
Sanchez Rendon, Julio Cesar Apical shear stress impacts cell dynar transcriptomic profile of three differen		114

Schindler, Magdalena Stochastic and deterministic regulation of cell cycle (de)synchronization ensures robust initiation of embryo morphogenesis		115
Sgualdino, Francesca A human pluripotent stem cell vincul of mechanical forces in neural tube o		116
Singh, Amit Kumar Electro-hydraulics of electrically pola	rized spherical organoids	117
Soffer, Arad Spectrin governs cell shape and barr development.	Presenter: Luxenburg, Chen ier formation during epidermal	118
Srejic, Nevena Compressive mechanical stress mod through Erk5 dependent activation of		119
Staddon, Michael Curved edges in the vertex model shi transition point	ift the solid-to-fluid phase	120
Stojanovski, Klement Mechanical feedback via yap-1 ensur the C. elegans pharynx during develo		121
Suleimenova, Nuriza <b>A new link between tissue mechanics</b>	and oxidative stress	122
Sumbal, Jakub Contractile peri-TEB fibroblasts instruct mammary branching morphogenesis		123
Sumbal, Jakub  Fibroblast contractility is required for branching	Presenter: Sumbalova Koledova, Zuzana r fibroblast-induced epithelial	124

Sun, Yingyu Impact of CRB2 on the mechanical behaviour of podocytes	125
Tarannum, Nawseen Presenter: Woolner, Sarah Mechanical regulation of cell division orientation: shape or force?	126
Tavano, Stefania You shall not pass! How ectoderm patterning modulates lateral mesendoderm migration in the early zebrafish gastrula.	127
Theuer, Vanessa Influence of E-cadherin on epithelial cell mechanics and adhesion	128
Ucla, Pierre Photopolymerization of 3D fiber networks to study the dynamics of cell-matrix interactions	129
Vangheel, Jef An active foam model of epithelial fluidity	130
Vanslambrouck, Michiel Presenter: Jelier, Rob Image-based force inference by biomechanical simulation	131
Vela-Alcántara, Ana Presenter: Tamariz, Elisa Substrate stiffness differentially modulates cell morphology, migration, and Neuropilin-1 expression in tumoral and non-tumoral cell lines.	132
Vennettilli, Michael  A three-dimensional vertex model capable of probing morphology and patterning in intestinal organoids	133
Vorechovský, Miroslav A 3D vertex model reveals mechanistic coupling of patterning and proliferation in organoids	134
Walewska, Agnieszka The velocity of cytoplasmic movement in trophectodermal cells as a marker of the keratin cytoskeleton quality in mouse embryos	135

Posters A-Z

Wolff, Mareike Magnetic resonance elastography	in zebrafish neuroblastoma models	136
Yau, Wan Yee Thick elastic sheets and complex t	issue shape: theory and modeling	137
Zaher, Mira Stored elastic bending energy as a folding	Presenter: Schultheiss, Tom mediator of embryonic body	138

EMBO | EMBL Symposium: The mechanics of life: from development to disease