

Al Mahi, Amira		
SETD2 controls cytoskeletal dynamics to regulate cell adhesion and migration		46
Anderer, Lisa		
Unraveling navigation at branchpoints: live imaging of endogenously labeled cargo and motor proteins in <i>c. elegans</i> neurons		47
Anisimov, Mikhail		
Efficient detection of tubulin ligands with coumarin-30 and microscale thermophoresis		48
Artmann, Carolin		
Temperature adjustment of frog tubulin: in silico study of microtubule dynamics		49
Barata-García, Sergio	Presenter: Oliva-Blanco, María Ángela A.	
Hijacking the cytoskeleton: coronavirus nucleoprotein drives tubulin curvature and ring formation		50
Barsukov, Igor		
Effect of phosphorylation on EB1 structure and interaction		51
Basu, Sreya		
A role for tubulins in cellular quality control		52
Benjamin, Melanie Sandra		
Actin-dependent microtubule dynamics regulation facilitates neuron maturation		53
Benoit, Matthieu		
Structural characterization of C- and D-type lateral interactions in microtubules		54
Biswas, Subham	Presenter: Schaedel, Laura	
Tau accelerates tubulin exchange in the microtubule lattice		55
Bittleston, Alice	Presenters: Planelles-Herrero, Vicente Jose	
Structural insights into kinesin-3 allosteric coupling		56

Boiardi, Martina	
Cytoskeletal dynamics modulate cell cycle oscillations in frog egg extracts	57
Bose, Subhaya	
In silico modeling of cooperative Ndc80 binding and force transmission on microtubules	58
Brito, Claudia	
Mechanistic dissection of γTuRC activation by Centrosomin Motif 1 (CM1)	59
Butler-Hallissey, Ciarán	Presenter: York, Harrison
Direct labelling of microtubule turnover reveals in-lattice repair and stabilisation patterns in developing neurons	60
Cabrita, Jéssica	Presenter: Pimenta-Marques, Ana
Wdr62 functions with patronin and katanin to organize acentrosomal microtubule networks throughout Drosophila oogenesis and support fertility	61
Cada, Štěpán	
Casein kinase 1δ/ϵ regulates interphase microtubule dynamics and +TIP protein phosphorylation in migratory leukemic cells	62
Caillol, Damien	
Role of microtubule glutamylation in skeletal muscle formation and function	63
Cairns, William	
Understanding roles and mechanisms of microtubule cross-linkage during neuronal maintenance	64
Canten, Yaren	
CRMP regulates microtubule organization and morphology of glia cells in <i>C. elegans</i>	65
Catapano, Valeria	
EB2 enforces curved microtubule growth, revealing a new +TIP mechanism shaping cell morphology	66

Cancelled		67
Chauhan, Prashali	Microtubule network remodeling pathways with spatio-temporal control of active crosslinking	68
Cheeran, Sheba	Coordinated control of both microtubule ends regulates mitotic spindle length	69
Chen, Jo-Mei	The HURP-NF-κB axis upregulated stable microtubules are essential for crescent golgi ribbon formation and cell migration	70
Chen, Po-Pang	Cell cycle-specific regulation of centrosome clustering dynamics in cancer cells by the multifunctional kinesin HSET	71
Conway, William	Presenter: Redemann, Stefanie Eg5 activity and density-driven bundling organize the human metaphase mitotic spindle independently of spindle bipolarity	72
Corbett, Dom	Programmable topological defects in microtubule–kinesin active nematics as biomimetic organizing centers	73
Cueff, Louis	Presenter: Bouvrais, Helene Microtubule stiffening by the doublecortin-domain protein ZYG-8 contributes to mitotic spindle orientation during zygote division in <i>Caenorhabditis elegans</i>	74
Dang, Thanh mai Julie	Tubulin polyglutamylation in neuronal development and degeneration: insights from zebrafish CCP mutants	75
Deretic, Jovana	CCDC66 phase separation promotes microtubule nucleation independently of gamma-tubulin	76

Desvigne-Hansch, Eva		
Spatial and temporal control of tubulin polyglutamylation in neurons		77
Dibsy, Ryane	Presenter: Echard, Arnaud	
Control of microtubule severing in the terminal step of cytokinesis by branched actin networks and Aurora B-dependent ESCRT-III turnover		78
Dodokova, Alica		
ATP-Mg²⁺ selectively regulates MAP binding to microtubules		79
Dufourt, Tanguy		
Investigating the mechanisms that control the position and orientation of the cell division plane in brown algae		80
Elfarkouchi, Abir	Presenter: Conduit, Paul	
A structural model for the autoinhibition of the gamma-TuRC-activating CM1 domain		81
Fazil, Thasni		
Microtubule remodeling under siege by TUBB4B mutations		82
Fernández, Oscar	Presenter: Lucena-Agell, Daniel	
Structural analysis of microtubule lattice changes induced by microtubule-stabilizing agents		83
Flores, Maria		
Visualizing the molecular impacts of polyglutamylation on the neuronal cytoskeleton		84
Fortelková, Nikol		
The role of BBSome in regulating intraflagellar transport within primary cilia		85
Frolov, Nikita		
Dynamic instability promotes optimal fractality of branched microtubule arrays		86
Gassmann, Reto		
Structural basis of kinesin light chain recognition by the ER-localized dynein adaptor CDR2		87

Gowett, Madison		
The tubulin tyrosination cycle regulates meiotic spindle function and chromosome segregation in mammalian oocytes		88
Grabska, Agata		
Impact of microparticles on the architecture of microtubule cytoskeleton of mouse embryonic fibroblasts nih 3t3		89
Gravett, Molly		
Decoding microtubule-stabilising drug mechanisms		90
Grover, Rahul		
Membrane fluidity modulates vesicular transport through tau envelopes via motor clustering and rebinding		91
Grycova, Lenka		
ATP decline delocalizes tau from microtubules		92
Gunasekaran, Gowthaman		
Regulation of microtubule dynamics by cytoplasmic SETDB1 through HDAC6 activity		93
Hacker, Daniela	Presenter: Lamborelle, Caspar	
SHANK3–CAMSAP2 interaction links synapses to dendritic microtubule organisation in PV neurons		94
Haineault, Justin		
Microtubule polyglutamylation by TTL11 is sensitive to the conformational state of the microtubule lattice		95
Hernandez, Luis		
Expanding the chemical toolkit for studying microtubule acetylation		96
Högner, Marika		
Impact of the tubulin code on the regulation and function of microtubule-actin crosslinking proteins		97
Hoogebeen, Robin		
Multilayered control over microtubule ultrastructure by EB and CAMSAP2 in cells		98

Hoshino, Asumi	Presenter: Bazzaro, Martina	
Damage-sensing microtubule severing blocks lattice repair and drives cytoskeletal collapse and neuronal degeneration		99
Housseini, Karim	Presenter: Mali, Girish	
Molecular basis for the activation of outer dynein arms in cilia		100
Hoyas Sánchez, Eva		
Microtubule dynamics as a key modulator in the response to heat stress in plants		101
Hu, Cécile		
Investigating γ-turb activation by Cnn and Msps in vivo		102
Janan, Maral		
Tubulin deacetylation is required for spindle organization and chromosome movement during cell division		103
Jannasch, Anita		
Asymmetric tail preload favors a superpower motility mode in kinesin-8 Kip3		104
Jawale, Yash		
Tubulin interaction with lipid interfaces reveals surfactant-like properties		105
Johari, Mridul		
Missense variants in TUBA4A cause myo-tubulinopathies		106
Joshi, Pooja		
A reservoir-integrated dual-capillary microfluidic device for localized chemical perturbation at the subcellular scale		107
Judernatz, Jo		
Cryo-electron tomography of reconstituted anaphase-like minimal midzone bundles		108
Kaade, Rayane		
Slender lobes: a spindle matrix protein crucial for the spindle integrity in drosophila oocytes		109

Kalutskii, Maksim	Presenter: Igaev, Maxim	
Understanding kinetochore-mediated force transduction by microtubules in chromosome segregation		110
Kalutskii, Maksim		
Tension dependent grip of DAM1-Microtubule complex		111
Kawale, Drishtant		
Determining the impact of tubulin code on microtubule cytoskeleton architecture and function in neurons		112
Kohoutova, Sarka		
Microtubule-associated proteins guide dishevelled cytoskeletal localization		113
Kucherenko, Zinaida		
Structural and functional investigation of TRiC chaperonin in neurons		114
Kumar, Rohit		
Highly expressed in cancer 1 (Hec1) regulates kinetochore fibrous corona organization in human cells		115
Kushner, Artem		
Tubulin.xyz: an interactive structural atlas of tubulin and microtubules		116
Lasser, Dario		
An e2-e3 ubiquitination cascade controls microtubule organization and abundance at synaptic terminals of Drosophila motoneurons		117
Cancelled		118
Legal, Thibault	Presenter: Bui, Khanh Huy	
Structural and functional characterization of the microtubule seam binding protein SPEF1		119

Lemeslier, Charlotte		
Neuron navigator +tip proteins regulate endothelial protrusive activity during sprouting angiogenesis		120
Lin, Ya-Hsuan		
In vitro reconstitution of cooperative interactions within oligomers of microtubule-bound Ndc80 complex		121
Lin, Yu-Chun		
Spatiotemporal control of microtubules reveals roles in cellular function and aging		122
Liu, Hanjin		
Microtubule mass amplification by human spastin via tubulin ring formation		123
Lopes, Danilo		
Determining the mechanistic roles of tubulin glutamylation in the regulation of neuronal functions		124
Luo, Jingyi	Presenters: Luo, Jingyi; Ti, Shih-Chieh	
Allosteric modulation of paclitaxel efficacy by human tubulin variants		125
Lurz, Yannic	Presenter: Pырpassopoulos, Serapion	
Mechanical tension extends the microtubule lattice and modulates kinesin-1 binding in an isoform-dependent manner		126
Lyalina, Tatiana	Presenter: Bechstedt, Susanne	
An intrinsically disordered polymerase: how CKAP2 controls microtubule growth and mitotic spindle fidelity		127
Mahapatra, Varsha		
Taxane-induced conformational changes in the microtubule lattice activate GEF-H1-dependent RhoA signalling		128
Maiocchi, Alice	Presenter: Prota, Andrea E.	
Effective tubulin degradation by rationally designed proteolysis targeting chimeras		129

Marxer, Florina		
Exploring the emergent properties of microtubule bundles built from passive crosslinking proteins		130
Massoni-Laporte, Aurelie		
Microtubules and centrosome remodeling in quiescence		131
Messuti, Eleonora	Presenter: Mazzarella, Luca	
Characterization of NF1 function on microtubule repair through quantitative analysis of intra-lattice damage under mitotic and pharmacological stress		132
Mitra, Aniruddha	Presenter: Peterman, Erwin	
Single-molecule dynamics of ciliary proteins in <i>C. elegans</i> sensory neurons		133
Mofidi, Mahsa		
Tubulin contact networks and asymmetric C-terminal tail dynamics in the microtubule lattice: insights from all-atom MD		134
Mohammed, Danahe	Presenter: Martin, Maud	
Microtubule detyrosination promotes endothelial sprouting by impairing retrograde trafficking and enhancing matrix remodeling		135
Mondal, Saradmoni		
Single-molecule measurements reveal an intermediate state and clarify the role of nucleotide in microtubule dynamics		136
Mullick, Sanjana		
Microtubule glycylation fine tunes motor function, ciliary stability and trafficking		137
Mushtaq, Zeeshan	Presenter: Pielage, Jan	
Loss of nudE-mediated dynein activation at synaptic terminals causes progressive axon length-dependent neurodegeneration		138
Muto, Etsuko		
GTP hydrolysis drives microtubule growth in dynamic instability		139
Naaz, Farha		
Resolving directional and lateral dynamics of intracellular cargo transport using minflux		140

Nicolaou, Kyriacos		
Modeling the emergence of microtubule organization in developing neurons		141
Nicot, Simon	Presenter: Gillard, Ghislain	
TMCPs: the swiss-army knives of tubulin-modifying enzymes		142
Novotná Florianicová, Kamila		
Identifying enzymes editing the tubulin code in tardigrades: insights into microtubule regulation under extreme stress		143
Ohkura, Hiro		
Assembling the meiotic spindle at the right place in the large volume of oocytes		144
Orbach, Ron		
SPACA9 suppresses microtubule dynamic instability from the microtubule lumen		145
Owen, Randall		
The Hec1/Ndc80 tail domain contributes to kinetochore-microtubule attachment stability through direct contacts with the microtubule lattice		146
Pagani, Niels Angelo		
Towards identifying the protein interactors of dynein during t-cell activation		147
Pais, Eva		
Exploring the role of microtubule inner proteins in chromosome segregation		148
Paquette, Alexandra	Presenter: Brouhard, Gary	
Doublecortin and doublecortin-like kinase fulfil different functions in neurons		149
París-Ogayar, Rebeca	Presenter: Díaz, José-Fernando	
Microtubule axial lattice state gates tau recognition and condensation		150

París-Ogayar, Rebeca	
Development of a structurally non-perturbative fluorescent MSA for microtubule visualization and functional studies	151
Pastore, Stephen	
Quantitative proteomic and functional characterization of a class I β-tubulin pathogenic variant in a retinal pigment epithelial cell model	152
Pellicer Camardiel, Aitor	
Dissecting the interaction of the cilia-associated protein NME7 with the γ-tubulin ring complex	153
Pirrung Martinez, Laura	
The ubiquitin ligase herc2 regulates microtubule abundance at presynaptic terminals of drosophila motoneurons	154
Prokop, Andreas	
A microtubule-based model bringing together and explaining long-standing conundrums of neurodegeneration	155
Rajendraprasad, Girish	
Molecular mechanism underlying tubulin detyrosination-mediated resistance to microtubule-depolymerizing agents	156
Ramaswamy, Varun	
Modulation of microtubule lateral contacts by a fluorescent taxol broadens the architectural selectivity of doublecortin	157
Raviv, Uri	
Structures, energetics and dynamics of active tubulin self-organization	158
Ren, Muiyang	
Ciliophagy promotes microtubule remodelling and motile cilia recycling under stress	159
Rice, Luke M.	
A TOG domain regulates microtubule dynamics using tubulin-GEF activity at the polymer end	160

EMBO | EMBL Symposium: Microtubules: from atoms to complex systems

Roland-Gosselin, Fanny	Presenter: Bernard, Fred	
The spectraplakins short stop (shot) organizes an acentrosomal microtubule network in early oogenesis, essential for nuclear positioning		161
Roll-Mecak, Antonina	Presenters: Roll-Mecak, Antonina; Zhernov, Iliia	
Tubulin glutamylation and tau synergize for selective control of kinesin motility		162
Ruhnow, Felix		
Live-imaging of RanGTP-dependent spindle formation in <i>Xenopus laevis</i> egg extract using cell-sized compartments		163
Saunders, Harriet		
Structure-guided design of a first-in-class clickable enzyme substrate analog for imaging and proteomic discovery of glutamylation		164
Schaer, Joël	Presenter: Anisimov, Mikhail	
Localization of EB3 protein at growing microtubule ends by phase separation and a hydrodynamic instability		165
Scheffler, Kathleen		
The actin motor Myosin-10 plays dual roles in shaping the meiotic spindle through distinct pathways – via MTOCs and branching		166
Scheiderer, Lukas		
MINFLUX examines the impact of missense mutations in kinesin-1 which cause HSP		167
Schweizer, Donna		
Tubulin auto-regulation protein SCAPER binds to microtubules and blocks growth in in vitro reconstitution assays		168
Sebastien, Muriel		
Microtubule patterning by tubulin isotypes in skeletal muscle cells		169
Sekimoto, Ken		
Allosteric propagation of curvature along filament		170

Siahaan, Valerie		
Revealing the crosstalk between the tubulin code and the MAP code		171
Sid'El Moctar, Sidi Mohamed	Presenter: Bouvrais, Helene	
MTFlow: a flow matching based model for microtubule segmentation in noisy or low-contrast microscopy images		172
Singh, Kashish		
In situ cryoET reveals a role of tubulin in an E3 ligase assembly		173
Skendo, Kristjana	Presenter: Meraldi, Patrick	
Ran-GTP targets jointly regulate bridging microtubules		174
Sokolowski-Adams, Yvonne		
Shared origins, different fates: axonemes and spindles from a bipartite MTOC		175
Steiman, Sydney	Presenter: Ivakine, Evgueni	
SLICE: a universal platform to dissect tubulin isotype function and model disease-relevant variants		176
Steiman, Sydney		
Developing targeted therapeutics for primary cilium-dependent TUBB-related tubulinopathy		177
Taieb, Anaelle		
Role of the putative γ-TuRC protein Mozart-like protein		178
Temirci, Elif Sena		
Cytoskeleton networks shape the diatom cell wall		179
Thomas, Alexandre		
Deciphering the mechanisms of EMT-induced primary cilium assembly		180
van Schelt, Jasper		
Kinesin-1 selectivity for stable microtubules is mediated by MAP7D1's recognition of expanded lattices		181

Vaughan, Jessica	
Oil free microfluidic confinement enables microtubule self-organization in microarrays of cell-like compartments	182
Veer, Sukh	
Biomechanics of axons: mechanical insights into the microtubule and actin-spectrin framework	183
Villaseca, Soraya	
A neuronal like microtubule-driven nucleokinesis program enables neural crest migration through confined tissues in vivo	184
Vineethakumari, Chithran	
Dendritic varicosities revealed as important microtubule organisers in neurons	185
Vinopal, Stanislav	
Disruption of microtubules and actin differentially affects mortality and anhydrobiosis recovery in the eutardigrade paramacrobiont <i>gadabouti</i> (Macrobiontidae)	186
Voß, Yannik	
A divergent malaria parasite builds its cytoskeleton from two distinct microtubule subclasses	187
Wieczorek, Mirko	
Pretubulysin - a microtubule depolymerizing drug that doesn't let go: mechanistic insights into its slow reversibility	188
Wiest, Andreas	
Expanding the glutamylation landscape: a live-cell chemical proteomics platform for unbiased TLL substrate discovery	189
Winterborn, Yvonne	
Mechanism and regulation of Bim1 (EB1) interaction with the outer kinetochore Ndc80 complex	190
Yagoubat Merah, Akila	
Asymmetric microtubule nucleation from Golgi stacks promotes opposite microtubule polarity in axons and dendrites	191

Zezlina, Maja		
Regulation of the augmin complex on a molecular level		192
Zhang, Daniel	Presenters: Muñoz-Hernandez, Hugo; Filipcik, Pavel	
A cryo-em processing pipeline for microtubules using cryosparc		193
Zhauniarovich, Andrei		
Expanding the toolkit for the semi-synthesis of α/β-tubulin with defined post-translational modifications		194
Zhou, Zhong Yan		
The potential of targeting microtubule function and stabilization against endothelial dysfunction and ageing		195