

NANOMEDICINE - Posters with flash presentation

Poster Name	Title
1 Livia Neves Borgheti Cardoso	Extracellular Vesicles as Drug Delivery System for the Treatment of Malaria
2 Tania Patiño Padial	Effect of enzyme quantity and distribution on the self-propulsion of urease-powered micromotors
3 Lucas Pedraz	A bioreactor to evaluate the effect of oxygen gradients in bacterial infections: deepening in oxygen-controlled gene expression
4 Sílvia Pujals Riatós	Studying structure and dynamics of self-assembled peptide nanostructures using fluorescence and super resolution microscopy
5 Romén Rodríguez Trujillo	Microfluidic Platform for Circulating Tumor Cells Isolation
6 Dobryna Zalvidea	3D forces measurement during <i>in vivo</i> remodelling capillary network in the chorioallantoic membrane of the chicken embryo

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7 Francesc Xavier Arqué Roca	Acetylcholinesterase-Powered Microswimmers and their Biomedical Applications
8 Aida Baelo	Hydroxylamines as a new family of antibacterial agents
9 Aida Baelo	Advanced therapies for the treatment of biofilm wound infections
10 Arnau Biosca Romanillos	Immunoliposome-based Drug Delivery to <i>Plasmodium falciparum</i> Gametocytes
11 Nuria Blanco Cabra	Aerobic vitamin B ₁₂ biosynthesis is essential for <i>Pseudomonas aeruginosa</i> class II ribonucleotide reductase activity during planktonic and biofilm growth

12	Laura Carol Perdiguier	Magnetic Hyperthermia: Potential Therapeutic Tool for Malaria
13	Martí Checa	Electric forces in electrolyte solutions under non-static conditions measured with the Atomic Force Microscope
14	Joan Espelt Ballarà	The stringent response is essential for maintaining virulence in the enteroaggregative <i>E. coli</i> strain O42
15	Natalia Feiner-Gracia	Super-resolution microscopy unveils dynamic nanoparticle protein corona formation
16	Edgar Fuentes Fuentes	Stability in Biological Media of Molecularly-Precise Micelles Dictates Internalization in Living Cells
17	Andrea García Lizarribar	Microfluidic system for liposome formation
18	Tânia Gonçalves	Engineering of Si-Au Janus Motors for Biomedical Applications
19	Victor González-Tarragó	Binding of ZO-1 to $\alpha 5\beta 1$ integrins regulates the mechanical properties of $\alpha 5\beta 1$ -fibronectin links
20	Berta Gumí Audenis	Structure and nanomechanics of quatsomes membranes
21	Ricardo Hidalgo	Electrochemical studies of <i>Shewanella oneidensis</i> MR-1
22	Ana Hortelão	Enhancement of Drug Release through Enzyme-Powered nanomotors based on Tunable Mesoporous Silica Nanoparticles
23	Mario Hüttener	Crosstalk between IncHI1 plasmids and their hosts: tetracycline-dependent induction of the heat shock regulon
24	Ignasi Jorba	Nanomechanics of the Drosophila Embryonic Central Nervous System
25	Jaideep Katuri	Cross-streamline migration of chemically active Janus particles in flow
26	Elena Lantero Escolar	Developing Aptamers against <i>Plasmodium falciparum</i> : Different Approaches to Overcome the Challenge
27	Helena Lozano	Electrical and morphological characterization of bacterial polar flagella

28	Albert Martí i Simó	Implementation of a Patient-Specific Workflow for Assessing Endothelialization of Elastin-like Recombinamers for Cardiovascular Applications: from Computational Fluid Dynamics to Microfluidics.
29	Rafael Mestre Castillo	Electrical control of 3D bio-printed muscle cells towards biomedical applications
30	Ruben Millan	Electrostatic Force Microscopy in liquid media
31	Monica Mir	Early Diagnosis of Alzheimer in a Multiplexed approach based on New blood biomarkers
32	Nerea Murillo-Cremaes	Construction of highly Ciprofloxacin-loaded mesoporous silica nanoparticles for drug delivery applications in bacteria-protected biofilms
33	Lucas Santiago Palacios Ruiz	Active colloids at a liquid-liquid interface
34	Jemish Parmar	Cobalt Iron Oxide based micromotors for degradation of antibiotic
35	Lucas Pedraz	<i>Pseudomonas aeruginosa</i> AlgR regulates ribonucleotide reduction and links it to oxidative stress signals
36	Santiago Raymond	Development of patient-specific biomimetic bone grafts
37	Sergi Rey Viñolas	Development of the fabrication process of a scaffold for rotator cuff augmentation and its biological characterization
38	Roger Riera	A study of polyplexes as gene delivery vectors using super-resolution microscopy
39	Agostino Romeo	Flexible and Conformable Biosensors for Personalized Medicine
40	Gerard Rubí Sans	Macromolecular Crowders for Cell-Derived Matrix deposition enhancement
41	Eduard Torrents	<i>Pseudomonas aeruginosa</i> PAO1 is impaired in anaerobic growth and infectivity compared to clinical isolates due to a single point mutation in the class III ribonucleotide reductase promoter region
42	Diana Vilela Garcia	Microbots decorated with silver nanoparticles kill bacteria in aqueous media

ICT FOR HEALTH - Posters with flash presentation

Poster Name	Title
43 Noelia Campillo	Frequency and Magnitude of Intermittent Hypoxia Modulate Endothelial Wound Healing in a Cell Culture Model of Sleep Apnea
44 Jordi Fonollosa	Chemical gas sensor array for non-invasive home activity monitoring
45 Manuel Lozano García	Continuous Adventitious Respiratory Sound Analysis for the Assessment of Bronchodilator Response in Asthma Patients

ICT FOR HEALTH - Posters

Poster Name	Title
46 Luis Carlos Estrada Petrocelli	Neural inspiratory time detection from surface diaphragm electromyography
47 Rene Fabregas	Mapping of electric permittivity with high pixel resolution: steps toward SPM-Nanotomography
48 Bryan Falcones	A Novel Cell Culture Device to Study the Cross-talk Between Cells Simultaneously Exposed to Different Oxygenation Mimicking Hypoxic Gradients in Tumors
49 Luis Fernández Romero	Signal preprocessing stages for evaluating ham quality through GC-IMS
50 R. Nuemi Hernández Solares	Feasibility study of a low-cost miniature device for the analysis of ammonia in breath
51 Ignasi Jorba	Multiscale Nonlinear Mechanics of Lung Extracellular Matrix
52 Ignasi Jorba	An Acellular Myocardial Scaffold Optimal for Cardiac Recovery: Proteomic, Structural and Mechanical Characterization
53 Albert Miguel López	Tracking Software for Active Micro and Nanomotors

54	Leonardo Sarlabous	Non-invasive technique for estimating the inspiratory mechanical muscle activation during breathing in healthy subjects and COPD patients
55	Jia Yan	Number of discriminable odor features for the optimization of MOX gas sensor operating temperatures
84	Sílvia Mas	A method for the analysis of flatus: Perspectives for non-invasive assessment of gastrointestinal diseases

CELL ENGINEERING - Posters with flash presentation

Poster Name	Title	
56	Alberto Elosegui Artola	Force triggers YAP nuclear entry by mechanically regulating transport across nucleopores
57	Andrea Malandrino	Analysis of Extracellular Deformations During Vasculogenesis
58	Andreu Matamoros Angles	Understanding functions of the Cellular Prion Protein in synapse formation and neurotransmission: From lab-on-a-chip devices to neuronal network analysis
59	Jesús Ordoño Fernández	Lactate based scaffolds as modulators of cardiac tissue remodeling
60	Patricia Prado Peralta	Biofabrication of 3D self-assembling nephron structures from human pluripotent stem cells
61	Maria Valls Margarit	Generation of human cardiac patches with tissue-like functionality
62	Elia Vidal Girona	Direct ink printed titanium scaffolds functionalized with an antibacterial calcium phosphate coating obtained by one-step pulsed electrodeposition

CELL ENGINEERING - Posters

Poster	Name	Title
63	Gizem Altay	Epithelial monolayers obtained from intestinal epithelial stem cells
64	Ignasi Casanellas Mercado	Uneven nanopatterns promote the formation of a connectivity network among human stem cells undergoing chondrogenesis
65	Laura Clua Ferre	A tissue-specific decellularized extracellular matrix platform for the generation of human pluripotent stem cell derived tissue constructs by 3D bioprinting
66	Jordi Comelles Pujadas	Hydrogels with independently controlled topography and stiffness reveal contact guidance as stiffness independent
67	María García-Díaz	Towards biomimetic 3D multicellular models of the intestinal mucosa
68	Elena Garreta Bahima	Generation of kidney organoids by differentiation of human pluripotent stem cells to intermediate mesoderm progenitors using culture substrates of controlled stiffness
69	Dencho Gugutkov	Hybrid nanofibers' orientation and dimensionality govern the behavior and osteogenic differentiation of ADMSCs
70	Kevin Ibeas Martinez	Development the pETS-IBECGLOW vectors: a useful tool to study bacterial gene expression during biofilm formation and infection
71	Enara Larrañaga Carricajo	Effects of ephrin micro and nanopatterns on Eph receptor oligomerization and cell positioning
72	Ernest Latorre Ibars	Tensional homeostasis in three-dimensional epithelia of controlled size and shape
73	Laia Lidón Gil	Transcriptional control of PrP ^c by Tau in Alzheimer's disease
74	Andrés Marco Giménez	An upgraded iCRISPR2 Platform for Human Functional Genetics in a Dish
75	Joan Martí Muñoz	Inducing bone formation through vascularization. A novel process to modulate Ca ²⁺ release in physiological conditions

76	Agata Mata Rodríguez	Aberrant integration of adult-generated granule cells and mossy fiber formation in absence of Sema3E/PlexinD1 signalling in the adult hippocampus
77	Francina Mesquida Veny	Modulation of axonal growth through optogenetic control of neuronal activity
78	Salima Nedjari	Three Dimensional Honeycomb Patterned Fibrinogen Based Nanofibers Induce Substantial Osteogenic Response Of Mesenchymal Stem Cells
79	Roger Oria	Molecular force loading explains cell sensing of extracellular ligand density and distribution
80	Tania Patiño Padial	3D Bioprinting for the engineering of bio-hybrid actuators based on skeletal muscle
81	Alejandro Prieto Durán	Role of Hha-like proteins in conjugation of the virulence plasmid pAA2 in the enteroaggregative <i>E. coli</i> strain 042
82	Laura Urrea	The Cellular Prion Protein as Neuronal Receptor for α -Synuclein Spreading in Parkinson's Disease
83	Irene Cano	Evaluation of angiogenic potential of cell-derived ECM scaffolds on chick embryo chorioallantoic membrane (CAM) animal model