



Monday • NOVEMBER 23

08:30–09:00	Registration
09:00–09:30	Opening Ceremony
09:35–09:50	Opening Remarks Dr. Tovar y Romo <i>Director del Instituto de Fisiología Celular</i>
10:00–11:00	Distinguished Keynote Lecture Dr. Donald E. Ingber <i>Harvard • Wyss Institute</i>
11:00–11:20	Coffee Break
11:20–12:20	Plenary lecture Building Muscular Pump Dr. Kit Parker <i>Tarr Family Professor of Bioengineering and Applied Physics Harvard School of Engineering and Applied Sciences Boston Children's Hospital</i>
12:20–13:00	Plenary lecture Dr. Jorge Luis Menchaca <i>Universidad Autónoma de Nuevo León</i>
13:00–14:00	Plenary lecture Early metastasis detection and personalized therapy design through disseminated tumor cell capture and organoid array screening. Dr. Ramón Ocádiz <i>University of Michigan</i>
14:00–15:00	Lunch
15:00–16:00	COMMET 2026 Group Photo
16:00–16:30	LANSBIODYT Collaborative Research Talks 10 Years of LaNSBioDyT: A Journey Through Biomimetic Science and Innovation. Dr. Tatiana Fiordelisio Coll <i>LANSBIODYT Responsible</i>
16:30–17:00	Plenary lecture Probing Biological Interfaces with Kelvin Force Microscopy: From Interaction Detection to Charge Mapping and Dynamics. Dr. Leonardo Ibor Ruiz Ortega <i>Universidad Estatal de Sonora</i>

Tuesday • NOVEMBER 24

08:30–09:00	Registration
09:00–09:15	Opening Remarks Dr. Remy Ávila Foucat <i>Director del Centro de Física Aplicada y Tecnología Avanzada UNAM (CFATA)</i>
09:15–10:15	Keynote Speaker New technologies for measuring the molecular forces in living cells. Dr. Khalid Salaita <i>Emory University</i>
10:15–11:15	Keynote Speaker Cancer Reprogramming: The Hidden Crosstalk Between Adipocytes and Tumor Cells in 3D Cultures. Dr. César López Camarillo <i>UACM Ciencias Genómicas</i>
11:15–11:30	Coffee Break
11:30–12:30	Plenary lecture Development of high-fidelity 3D printing bioinks to build advanced tissue models. Dr. José Morán Mirabal <i>Director - Centre for Advanced Light Microscopy McMaster University</i>
12:30–13:00	LANSBIODYT Collaborative Research Talks Cell-based microfluidic assay for anti-inflammatory effects of plant-derived nanovesicles. Dr. Gabriel Caballero <i>CINVESTAV Monterrey</i>
13:00–13:30	Plenary lecture Anti-Biofilm Strategies: The New Battle Against Multidrug-Resistant Bacteria. Dr. María Luisa del Prado Audelo <i>Tec de Monterrey / INBioTech</i>
13:30–14:00	Plenary lecture Microphysiological devices as a platform to study Toxoplasma gondii early human intestinal infection. Dr. Carlos Jorge Ramírez Flores <i>CINVESTAV</i>
14:00–15:00	Lunch
15:00–16:00	Poster Session
16:00–16:30	Plenary lecture Open-Source Additive Manufacturing System for Tissue Engineering. Dr. América Padilla <i>Centro de Investigación y de Estudios Avanzados (CINVESTAV)</i>
16:30–17:00	Plenary lecture Effect of Europium Doping on the Structural and Photoluminescent Properties of Hydroxyapatite. Dr. Nestor Efrén Méndez <i>Universidad del Valle de México, Campos Querétaro</i>



Wednesday • NOVEMBER 25

08:30-09:00	Registration
09:00-09:15	Opening Remarks Dr. Laura Cecilia Bonifaz Alfaro <i>Coordinadora de Investigación en Salud del IMSS</i>
09:15-10:15	Keynote Speaker Dr. Grissel Trujillo Santiago <i>Tecnológico de Monterrey / FORMA Foods</i>
10:15-11:15	Plenary lecture Simple Strategies for Complex Tissues: Advancing Biofabrication Through Microarchitectural Control Dr. Mario Moisés Álvarez <i>Tecnológico de Monterrey/FEMSA</i>
11:15-11:30	Coffee Break
11:30-12:30	Plenary lecture Remote modulation of cellular functions by magneto-mechanical and magneto-thermal switches. Dr. Susel del Sol Fernández <i>Instituto de Ciencias Físicas, UNAM</i>
12:30-13:00	Plenary lecture Beyond Conventional Fluorescence: TauSense and New Dimensions in Confocal Microscopy with STELLARIS. Dr. Piero Bagnaresi <i>Leica Microsystems</i>
13:00-13:30	Plenary lecture Ocular Organoids: Innovative Models for Vision Disease Research. Dr. Juan Carlos Zenteno Ruiz <i>Conde de Valenciana</i>
13:30-14:00	LANSBIODYT Collaborative Research Talks Lo que ninguna disciplina resuelve sola: más de dos años diseñando con LANSBIODYT. DI. Yesica Escalera <i>Centro de Investigaciones de Diseño Industrial UNAM</i>
14:00-15:00	Lunch
15:00-16:00	Poster Session
16:00-17:00	Flash Talks (participants selected)

Thursday • NOVEMBER 26

08:30-09:00	Registration
09:00-09:15	Opening Remarks Dr. Gabriel Ascanio Gasca <i>Director del Instituto de Ciencias Aplicadas y Tecnología UNAM</i>
09:15-10:15	Keynote Speaker Cuboids: A Microscale cancer model that retains key features of the tumor microenvironment. Dr. Albert Folch <i>University of Washington</i>
10:15-11:15	Plenary lecture Mechano-mimetic matrices: a progress or a misleading tool for probing cell biology? Dr. Alice Nicholas <i>Université Grenoble Alpes</i>
11:15-11:30	Coffee Break
11:30-12:30	Plenary lecture Mechanics and dynamics of the lymph node: a biophysical perspective. Dr. Paolo Pierobon <i>Institut Cochin</i>
12:30-13:00	Plenary lecture Dr. María Cristina Piña Barba <i>Instituto de Investigaciones en Materiales, UNAM</i>
13:00-13:30	Plenary lecture A Three-Dimensional Model to Unravel the Molecular Mechanisms of Neural Tube Closure and Myelomeningocele Dr. Ana Zatarain <i>Facultad de Medicina, UNAM</i>
13:30-14:00	LANSBIODYT Collaborative Research Talks Dr. Edda Sciutto Conde <i>Instituto de Investigaciones Biomédicas, UNAM</i>
14:00-15:00	Lunch
15:00-15:30	LANSBIODYT Collaborative Research Talks Targeting TGF- β in T Lymphocytes: Lessons from In Vivo Models for Cancer Therapy. Dr. Paula Licona <i>Instituto de Fisiología Celular, UNAM</i>
15:30-17:30	Flash Talks (participants selected)



Friday • NOVEMBER 27

08:30-09:00

Registration

09:00-09:15

Opening Remarks

Dr. Laura Alicia Palomares Aguilera
Instituto de Biotecnología UNAM

09:15-10:15

Keynote Speaker

Biofabrication of Human Tissues for Diverse Applications.
Dr. Shrike Zhang
Harvard Medical School

10:15-11:15

Plenary lecture

Cell growth and biosynthesis under pressure.
Dr. Morgan Delarue
LAAS-CNRS

11:15-11:30

Coffee Break

11:30-12:30

Plenary lecture

Physical mechanisms of engineered T cell activation and release of toxic payloads.
Dr. Shalini Low-Nam
Purdue University

12:30-13:00

Plenary lecture

Multiscale materials for poorly soluble drugs: from supramolecular systems to microfluidic liposomes.
Dra. Yareli Rojas Aguirre
Instituto de Investigaciones en Materiales, UNAM

13:00-14:00

Discussion Forum

Regulatory Challenges in Emerging Biomimetic Technologies

14:00-15:00

Lunch

15:00-15:30

LANSBIODYT Collaborative Research Talks

Development of a biomimetic device to evaluate the transmigration of NK lymphocytes.

MSc. Diana Guadalupe Velázquez
LANSBIODYT

Assessment of cytosolic calcium dynamics in natural killer cells provoked by extracellular mechanical cues.

MSc. Karla Amairani Ventura
LANSBIODYT

15:30-16:30

LANSBIODYT Collaborative Research Talks

Some aspects of T cell mechanotransduction: from molecular to cellular scale.

Dr. Pierre-Henri Puech
CNRS Inserm

16:30-17:00

Closing Ceremony

Poster and Flash Talks Awards



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