DETAILED SCIENTIFIC PROGRAM & PRACTICAL INFORMATION

Wednesday, October 21st 2026

Palacio de Congresos (Avenida Juan XXIII 17)

17:00 – 17:40 **Registration**

17:40 – 18:00 Official opening

- **Carlos Serrano**, Major of Jaca
- **Rosaura Pérez**, Director of Secretariat for Research Resources, University of Zaragoza
- **Esther Julián**, Coordinator of Myco_NET

18:00 – 18:30 Sponsor Conference (CERTEST)

- **Dra. Esther Pérez Herrán (CERTEST)**: **Abordaje integral de CERTEST frente a la tuberculosis: diagnóstico, vacunas y tratamiento** (CERTEST´s comprehensive approach to tuberculosis: diagnosis, vaccines and treatment)

18:30 – 19: 30 Open Plenary Lecture

- **Prof. Carlos Martín (UNIZAR):** ***"MTBVAC: un viaje de la genética a una vacuna global contra la tuberculosis". (MTBVAC: A Journey from Mycobacterial Genetics to a Global Tuberculosis Vaccine)***

Thursday, October 22nd 2026

Residencia Universitaria (Calle Universidad, 3)

Session 2: Thursday 09:00-10:30.
Residencia Universitaria de Jaca
Chairpersons: Cristina Vilaplana & Alicia Aranaz.

9:00 – 09:30 Keynote presentation

Mireia Coscollá – Host-specific infection dynamics of *Mycobacterium tuberculosis* complex lineages in human and bovine granuloma models

09:30 – 10:00 Short talks

A. Arbués - Targeted nanocarrier-based drug delivery improves intracellular and granuloma-associated antitubercular activity
P. Gil-Berbel - Establishing an *in vitro* translation system to understand molecular translation and ribosome plasticity in mycobacteria
M. Silva - Conditional essentiality of *Mycobacterium tuberculosis* NDH-2 across environments

10:00 – 10:30 Keynote presentation

Álvaro Chiner - Novel phylogenetic association analyses reveal the complex architecture of drug resistance in *Mycobacterium tuberculosis*

10:30 – 11:30 Coffee break & Poster Session I

Session 3: Thursday 11:30-13:30. Residencia Universitaria de Jaca. Chairpersons: José Domínguez & Nacho Aguiló

11:30 – 12:00 Short talks

G. Pascual - Extracellular vesicles as morphotype-dependent effectors in *Mycobacterium abscessus*
A. Ruiz-Enamorado - The Non-Canonical Mismatch Repair Protein, NucS, Safeguards Mycobacterial Genomes Against Oxidative Damage

T. Silva - HOST-MAB: Understanding host-*Mycobacterium abscessus* interactions using macrophages with diverse genetic ancestry

12:00 – 12:30 Keynote presentation

María Vidal - *Drosophila melanogaster* as a cost-effective bridge model for antimycobacterial drug evaluation

12:30 – 13:00 Short talks

A. Jiménez-Alesanco - Optimization and preclinical development of oral BCG and MTBVAC vaccination for mucosal protection against tuberculosis
M. Casal - Prophylactic efficacy of MTBVAC in lung metastasis mouse models
P. Cuenca - Mucosal and parenteral BCG-based vaccination strategies differentially modulate Th1 immune responses intensity and confer protection against *Mycobacterium caprae* in goats

13:00 – 13:30 Steering Committee Meetings: Myco_NET and CIBERES

13:30 – 15:00 Lunch Break

Session 4: Thursday 15:00-16:30. Residencia Universitaria de Jaca. Chairpersons: María Jesús García & Sonia Gullón.

15:00 – 15:30 Keynote presentation

Rafael Prados - The *Mtb* RNAome in and out of extracellular vesicles: implications for diagnosis and pathophysiology

15:30 – 16:00 Short talks

A. Lucía - Impact assessment of inoculum size and recent modifications on the EUCAST reference method for MIC determination of anti-tuberculosis drugs
A. Roig - Role of the inhA_S94A Mutation on drug resistance and the spread of an Isoniazid-Resistant Tuberculosis strain
A. Lacoma - Activity of fusidic acid against *Mycobacterium tuberculosis* H37Ra in a human macrophage infection model

16:00 – 16:30 Keynote presentation

Emma Sáez - Patient-centered and health systems research integrated within the BLMs4BU clinical trial to shorten Buruli ulcer treatment in West Africa.

16:30 – 17:30 Coffee break & Poster Session II

Session 5: Thursday 17:30-19:30. Residencia Universitaria de Jaca. Chairpersons: José Domínguez & Nacho Aguiló

17:30 – 18:00 Short talks

S. Lin - Epidemiological, Clinical and Microbiological Characteristics of Tuberculosis in Aragon (Spain): A Population-Based Case-Control Study based on Real -Data (2017–2022).
J. Gonzalo-Asensio - Antimicrobial conjugates with vitamin B12 as a Trojan Horse strategy against *Mycobacterium tuberculosis*
L. Varón-Pozuelo - Early Translational Shutdown and Metabolic Reprogramming in *Mycobacterium tuberculosis* under Capreomycin Stress

18:00 – 18:30 Short talks

N. Ferrer-Luzón - Carbon Availability Orchestrates Small RNA Expression in *Mycobacterium tuberculosis* Lysates and Extracellular Vesicles
J. Arruego - Functional analysis of natural variants in the PhoPR virulence system of *Mycobacterium tuberculosis*
L. Vázquez - Preliminary Clinical Evaluation of a Ribosomal Operon Promoter as a Biomarker of *Mycobacterium tuberculosis* Viability and Bacillary Burden

18:30 – 19:30 Plenary Lecture

- **Prof. Margarida Saraiva (Uni Porto):** "Understanding tuberculosis through the lens of *Mycobacterium tuberculosis*"

21:00 - … Networking Official Dinner

Restaurant "El Parque" Pº Constitución, 1.

Friday, October 23rd 2026

Residencia Universitaria (Calle Universidad, 3)

Session 6: Friday 09:00-11:00. Residencia Universitaria de Jaca. Chairpersons: Cristina Vilaplana & Alicia Aranaz

09:00 – 9:30 Keynote presentation

Alisa Aliaga - Shaping *Mycobacterium ulcerans* and Buruli Ulcer Distribution: Natural Drivers and Human-Induced Pressures

09:30 – 10:00 Keynote presentation

Bernat Pérez del Val - Connecting animal and human mycobacterial research: activities and perspectives from IRTA-CReSA

10:00 – 10:30 Short talks

M. Cortacans - Comparative macrophage responses to *Mycobacterium manresensis* and *Mycobacterium abscessus*
N. Traba - Mincle and TLRs coordinate macrophage-driven antitumour responses to mycobacterial lipid
M. Pinilla - Pericytes enhance macrophage bactericidal activity during *Mycobacterium tuberculosis* infection

10:30 – 11:00 Keynote presentation

Daria Smalchuk - Beyond phage diversity: Assessing mycobacteriophage-antibiotic combinations against *Mycobacterium tuberculosis*

11:00 – 12:00 Coffee break & Poster Session III

Session 7: Friday 12:00-13:30. Residencia Universitaria de Jaca. Chairpersons: María Jesús García & Sonia Gullón

12:00 – 12:30 Short talks

F. Cordero - Genetic determinants of transmission success in *Mycobacterium tuberculosis*
M. Álvarez - MIPERA: automating Mtb Intra-Patient Evolution Reporting and Analysis
M. Caballer-Gual - Experimental evolution reveals lineage-specific trajectories of bedaquiline adaptation in the *Mycobacterium tuberculosis* complex

12:30 – 13:00 Keynote presentation

Claire Brooks - Radiomic trajectory phenotyping of tuberculosis lesions reveals treatment response patterns in the marmoset model

13:00 – 13:30 Short talks

P. Soldevilla - Tuberculosis and stress: when two unstoppable forces meet
F. Roca - The host-resistance factor Sam68 protects Mtb-infected macrophages from premature cell death
G. Goig - Therapeutic opportunities of high-dose rifampicin regimens against borderline rifampicin-resistant tuberculosis

13:30 – 15:30 Lunch Break (registration required)

15:30 – 16:00 Closing remarks

POSTERS LIST

POSTER SESSION I

P_01 Sofía Samper: *Description of Two Novel Rapidly Growing Non-Tuberculous Mycobacterial Species Isolated from Human Clinical Samples*

P_02 Isabel Otal: *Evolution of a Mycobacterium tuberculosis strain during an outbreak transmission driven by IS6110-mediated recombination*

P_03 Alexandre Pinto: *Targeting Mycobacterium tuberculosis One-Carbon Metabolism to Disrupt Fatty Acid Resistance*.

P_04 Ilean Zitlali Aguilar-Elguea: *Differential expression of exosomal miRNAs from macrophages with NOD2 receptor blockade challenged with M. bovis BCG*

P_05 José Antonio Aínsa: *A complementary photothermal treatment enhances the effect of BMNP-associated bacteriocin AS-48 and reduces the viability of Mycobacterium tuberculosis*

P_06 Miriam Blay-Benach: *Mucosal BCG and prime-boost vaccination strategies enhance functional reprogramming of alveolar macrophages in goats*.

P_07 Cristina Alierta: *The IFN-γ/JAK1 axis modulates tumor aggressiveness and immune escape mechanisms in intravesical MTBVAC-based immunotherapy for bladder cancer*

P_08 Paula Ruiz-Rodríguez: *A closed pangenome reveals structural routes to host adaptation in the Mycobacterium tuberculosis complex*

P_09 Carme Cucarella: *Challenges in Precise Genome Engineering in Mycobacterium smegmatis: Insights from RecT-Mediated Editing of the rrnA Operon*

P_10 Laura Villamayor-Belinchon: *Structural basis of canonical translation initiation in Mycobacteria*

P_11 Teresa Cortés: *In vitro selection and characterisation of capreomycin resistant mutants in Mycobacterium smegmatis*

P_12 Diego Aznar: *Unravelling the transcriptome of the human tuberculosis lesion and its clinical implications*

POSTER SESSION II

P_13 Irene Latorre: *Assessment of lateral-flow and ELISA assays based on IP-10 detection for the diagnosis of Mycobacterium tuberculosis infection*

P_14 Carlos Peña: *Full-spectrum flow cytometry reveals distinct phenotypic immunological profiles in peripheral blood and bronchoalveolar lavage from patients with pulmonary tuberculosis*

P_15 Núria Sabando-García: *Immunomodulatory Effects of Mycobacterium brumae as an Adjuvant in Prophylactic Bladder Cancer Treatment*

P_16 Iris Moret-Gómez: *Non-tuberculous Mycobacteria-based Immunomodulation as a Prophylactic Strategy Against Pulmonary Infections*

P_17 Arnau Seguí-Moll: *Comparative genomics reveals the evolutionary diversification of asparaginases across the genus Mycobacterium*

P_18 Arnau Seguí Moll: *Exploring Mycobacteria as a Source of Therapeutic L-Asparaginases with Antileukemic Potential*

P_19 Marta López-Llaría: *Genomic epidemiology of mycobacteria involving paediatric population*

P_20 Andrea Marcos-Abellán: *Integrating INDELs to Refine Mycobacterium tuberculosis Transmission Networks*

P_21 Sergio Sánchez Lorente: *Paratuberculosis: the dual challenge*

P_22 Vivian C. Salgueiro-Toledo: *Cell envelope stress and Dynamin-like proteins IniA and IniC coordinate extracellular vesicle biogenesis in Mycobacterium tuberculosis*

P_23 Carmen Menéndez: *Lipid availability facilitates persistence of Mycobacterium tuberculosis under Iron deprivation*

P_24 Mariana Moreira: *Uncovering drivers of post-tuberculosis sequelae informed by host-pathogen interactions*

POSTER SESSION III

P_25 Juan Calvet-Seral: *Exploring the rRNA synthesis ratio biomarker in Mycobacterium ulcerans for drug activity evaluation*

P_26 Lidia de Tapia-Hernández: *Multiplexed rRNA biomarkers for medium-to-high-throughput evaluation of Mycobacterium tuberculosis drug response*

P_27 María Fernanda Raigosa Muñoz: *New Cholic Acid Derivatives as Novel Anti-Mycobacterium tuberculosis Agents*

P_28 Pedro Ruiz-Gutiérrez: *Sam68 as a key regulator of pathological cell migration and host defense against tuberculosis*

P_29 Victor Castro-Ruiz: *The host-resistance factor Sam68 protects Mtb-infected macrophages from premature cell death*

P_30 Iris Moret-Gómez: *Within-host evolution generates virulence diversity in Mycobacterium abscessus*

P_31 Elsa Moreno-García: *Context-dependent roles of progranulin in host defense: myeloid dysfunction with pathogen-specific effects beyond mycobacterial infection*

P_32 Patricio López Expósito: *Whole-Blood RNA-seq Captures Structured rRNA Patterns Linked to Tuberculosis State and Progression*

P_33 Joaquín Sanz: *Exploring the Effects of MTBVAC Vaccination on Innate Immune Responses to Sepsis Through Single-Cell Transcriptomics*

P_34 Miriam Blay-Benach: *In vitro Mycobacterium fortuitum priming enhances pro-inflammatory and bactericidal responses of caprine alveolar macrophages upon homologous re-stimulation*.



Location of conference sites and restaurant

Palacio de Congresos y Exposiciones.
Avenida Juan XXIII, 17.

Restaurante El Parque.
Pº de la Constitución, 1.

Residencia Universitaria.
Calle Universidad, 3