



3.3. Infectious Diseases and Immunity Area



## 3.3.2 Molecular Microbiology Group

Publications: 58 | Q1:25

### COMPOSITION

#### Jesús Mingorance Cruz.

Investigador Titular. FIBHULP. Profesor Asociado de la Facultad de Medicina. Universidad Autónoma de Madrid

- **Iván Bloise Sánchez.** Facultativo Especialista en Microbiología y Parasitología Clínica. Hospital Universitario La Paz
- **Emilio Cendejas Bueno.** Facultativo Especialista de Área en Microbiología. Hospital Universitario La Paz
- **Elias Dahdouh.** Investigador Postdoctoral Miguel Servet. FIBHULP
- **Iker Falces Romero.** Facultativo Especialista de Área en Microbiología. Hospital Universitario La Paz
- **Silvia García Bujalance.** Facultativo Especialista de Área en Microbiología. Hospital Universitario La Paz
- **Maria Jesús García García.** Profesora Emérita. Departamento de Medicina Preventiva y Salud Pública y Microbiología. Facultad de Medicina. Universidad Autónoma de Madrid
- **Julio García Rodríguez.** Jefe de Servicio de Microbiología. Hospital Universitario La Paz
- **Paulino Gómez Puertas.** Científico Titular CSIC. CBM "Severo Ochoa". Profesor Honorario. Universidad Autónoma de Madrid
- **Rocío González Soltero.** Catedrática de Genética Molecular. Universidad Europea
- **David Grandioso Vas.** Facultativo Especialista de Área en Microbiología. Hospital Universitario La Paz
- **Almudena Gutiérrez Arroyo.** Facultativo Especialista de Área en Microbiología. Hospital Universitario La Paz
- **Fernando Lázaro Perona.** Facultativo Especialista de Área en Microbiología. Hospital Universitario La Paz
- **María Belén Loeches Yagüe.** Médico Adjunto. Unidad de Enfermedades Infecciosas. Hospital Universitario La Paz
- **Carmen Menéndez Gómez.** Profesor contratado Doctor, Departamento de Medicina Preventiva y Salud Pública y Microbiología. Facultad de Medicina. Universidad Autónoma de Madrid
- **Dolores Montero Vega.** Facultativo Especialista de Área en Microbiología. Hospital Universitario La Paz
- **Verónica Pérez Blanco.** Facultativo Especialista de Área en Medicina Preventiva. Hospital Universitario La Paz
- **Rafael Carlos Prados Rosales.** Investigadora Postdoctoral. Universidad Autónoma de Madrid
- **María Inmaculada Quiles Melero.** Facultativo Especialista de Área en Microbiología. Hospital Universitario La Paz
- **Alicia Rico Nieto.** Facultativo Especialista de Área en Microbiología. Hospital Universitario La Paz
- **Graciela Rodríguez Sevilla.** Facultativo Especialista de Área en Microbiología. Hospital Universitario La Paz
- **Guillermo Ruiz Carrascoso.** Facultativo Especialista de Área en Microbiología. Hospital Universitario La Paz
- **Carlos Toro Rueda.** Facultativo Especialista de Área en Microbiología. Hospital Universitario La Paz



### STRATEGIC OBJECTIVES

- The Molecular Microbiology research group is integrated into the Department of Microbiology at Hospital La Paz, and a significant number of its members are physicians in the department devoted to microbiological diagnostic work. This integration determines the group's strategic approach and therefore, the different lines of research revolve around several aspects of clinical microbiology and infectious diseases.
- An important line of activity (Clinical Microbiology) is the result of the routine activities provided by the department, but goes further and deeper into the methodological, epidemiological and pathological challenges encountered in the daily routine.
- One research line derived from the former is the development of methods for the molecular characterisation of pathogenic microorganisms, including microbiological diagnosis and epidemiological analysis, and more recently, microbial genomics.
- Another line focuses on the study of the evolution of pathogenic microorganisms. As a model of opportunistic pathogens, we study *Escherichia coli*, a microorganism that is well characterised at the genetic level and that is clinically relevant as the primary cause of urinary tract infections and one of the most frequently involved in bacteraemia.
- Another important focus, given the scarcity of new antibiotics, is the search for new molecules. In this line, we use molecular dynamics to search for new metallo-beta-lactamase inhibitors.
- Several group members belong to the Faculty of Medicine and they have a long research record in the Molecular Biology and Pathogenesis of *Mycobacterium tuberculosis* and other mycobacteria.



### 3. Information groups by area

#### 3.3. Infectious Diseases and Immunity Area

#### RESEARCH LINES

- Molecular epidemiology and evolution of pathogens
- Molecular methods for diagnostics of infectious diseases
- Genomics of hospital microbial pathogens
- Design of new inhibitors of metallo-beta-lactamases by molecular dynamics
- Molecular Biology and Pathogenesis of *Mycobacterium tuberculosis*

#### RESEARCH ACTIVITY

##### Master Theses

- **Martín Portugués S.** Desarrollo de un protocolo de tipificación rápida por MLST, para aislados clínicos de *Escherichia coli* y *Staphylococcus aureus*, utilizando la secuenciación masiva por MinION [dissertation]. Madrid: UAM; 2023(14/09/2023). Director: Dahdouh E.
- **Tello Durán B.** Interacción entre miRNAs, microbiota intestinal y marcadores de inflamación: Caracterización y desarrollo de un pipeline para su aplicación en muestras humanas [dissertation]. Madrid: UE; 2023(01/11/2023). Director: González Soltero R.

##### Final Degree Theses

- **Merino González S.** Selección por antibióticos de mutantes de porinas en enterobacterias [dissertation]. Madrid: UAM; 2023(30/06/2023). Director: Mingorance Cruz J.
- **Muñoz García M.** El papel de la dieta en el Síndrome del Intestino Irritable [dissertation]. Madrid: UAM; 2023(28/05/2023). Director: Menéndez Gómez C.
- **Redondo Lois L.** Implicaciones del SIBO en la absorción de nutrientes [dissertation]. Madrid: UAM; 2023(28/05/2023). Director: Menéndez Gómez C.

##### Publications

- **Acero LA, Quiles-Melero I, Jaras-Hernández MJ, Toro C.** Is *Mycobacterium shimoidei* an underrecognized cause of tuberculosis-like disease? Rev Esp Quim. 2023; 36(6): 643-4. Letter. IF: 1.9; Q4
- **Acero LA, Soto SR, Nieto AR.** Answer to photo quiz: a sticky foe. J Clin Microbiol. 2023; 61(2): e00390-22. Editorial Material. IF: 6.1; Q1
- **Millan MR, Pérez-Cecilia E, Ruiz-Serrano MJ, Saloso S, Simon M, Tato M, Toro C, Valverde-Canovas JF, Esteban J.** Clinical evaluation of nontuberculous mycobacteria (NTM) elite agar, a new medium for the isolation of NTM: a multicenter study. J Clin Microbiol. 2023; 61(4): e0003623. Article. IF: 6.1; Q1
- **Busca A, Salmantón-García J, Marchesi F, Farina F, Seval GC, Van Doesum J, De Jonge N, Bahr NC, Maertens J, Meletiadis J, Fracchiolla NS, Weinbergerová B, Verga L, Ráclí Z, Jiménez M, Glenthøj A, Blennow O, Tanase AD, Schönlein M, Prezioso L, Khanna N, Duarte RF, Zák P, Nucci M, Machado M, Kulasekara Raj A, Espigado I, De Kort E, Susana JMR, Marchetti M, Magliano G, Falces-Romero I, İlhan O, Ammatuna E, Zompi S, Tsirigotis P, Antoniadou A, Zambrotta GPM, Nordlander A, Karlsson LK, Hanakova M, Dragonetti G, Cabrita A, Venemyr CB, Gráfe S, Van Praet J, Tragianidis A, Petzer V, López-García A, Itri F, Groh A, Gavrilaki E, Dargenio M, Rahimli L, Cornely OA, Pagan L.** Outcome of COVID-19 in allogeneic stem cell transplant recipients: Results from the EPICOVIDEHA registry. Front Immunol. 2023; 14: 1125030. Article. IF: 5.7; Q1
- **Cercenado E, Rodríguez-Baño J, Alfonso JL, Calbo E, Escosa L, Fernández-Polo A, García-Rodríguez J, Garnacho J, Gil-Navarro MV, Grau S, Gudiol C, Horcajada JP, Larrosa N, Martínez C, Molina J, Nuviols X, Oliver A, Pañó-Pardo JR, Pérez-Rodríguez MT, Ramírez P, Rey-Biel P, Vidal P, Retamar-Gentil P.** Antimicrobial stewardship in hospitals: Expert recommendation guidance document for activities in specific populations, syndromes and other aspects (PROA-2) from SEIMC, SEFH, SEMSPG, SEMICYUC and SEIP. Enferm Infec Micr Cl. 2023; 41(4): 238-42. Editorial Material. IF: 2.6; Q3
- **Cobo-Vázquez E, Aguilera-Alonso D, Carrasco-Colom J, Calvo C, Saavedra-Lozano J.** Increasing incidence and severity of invasive Group A streptococcal disease in Spanish children in 2019-2022. Lancet Reg Health Eur. 2023; 27: 100597. Letter. IF: 13.6; D1
- **Colomo S, Ros-Pardo D, Oltra SS, Gómez-Puertas P, Sarrio D, Moreno-Bueno G.** Structural and functional insights into GSDMB isoforms complex roles in pathogenesis. Cell Cycle. 2023; 22(20): 2346-59. Review. IF: 3.4; Q3
- **Dahdouh E, Cendejas-Bueno E, Ruiz-Carrascoso G, Schüffelmann C, Lázaro-Perona F, Castro-Martínez M, Moreno-Ramos F, Escosa-García L, Alguacil-Guillén M, Mingorance J.** Intestinal loads of extended-spectrum beta-lactamase and Carbapenemase genes in critically ill pediatric patients. Front Cell Infect Mi. 2023; 13: 1180714. Article. IF: 4.6; Q2
- **de la Calle M, Rodríguez-Molino P, Gómez MPR, Baquero-Artigao F.** Cytomegalovirus seroprevalence in pregnant women in Madrid: First step for a systematic screening. Enferm Infec Micr Cl. 2023; 41(1): 55-6. Editorial Material. IF: 2.6; Q3
- **de Salazar A, Martínez MJ, Navero-Castillejos J, Negredo A, Galán JC, Molinero ER, Lagarejos E, Muñoz-Almagro C, Rodríguez AH, Lepe JA, Pagarolras AA, Castro SP, Cintas MIZ, González MDG, Niubó-Bosch J, Gutiérrez Arroyo A, Vázquez A, García F, Fariñas MPSS.** The imperative for quality control programs in Monkeypox virus DNA testing by PCR: CIBERINFEC quality control. J Med Virol. 2023; 95(11): e29240. Article. IF: 6.8; D1
- **Díaz-García J, Gómez A, Machado M, Alcalá L, Reigadas E, Sánchez-Carrillo C, Pérez-Ayala A, de la Pedrosa EGG, González-Romo F, Cuétara MS, García-Esteban C, Quiles-Melero I, Zurita ND, Muñoz-Algarra M, Durán-Valle MT, Sánchez-García A, Muñoz P, Escribano P, Guinea J.** Non-Candida isolates from blood cultures and intra-abdominal samples: data derived from a multicentre prospective study conducted in Madrid. Rev Esp Quim. 2023; 36(5): 541-4. Letter. IF: 1.9; Q4
- **Díaz-García J, Machado M, Alcalá L, Reigadas E, Pérez-Ayala A, de la Pedrosa EGG, González-Romo F, Cuétara MS, García-Esteban C, Quiles-Melero I, Zurita ND, Muñoz-Algarra M, Durán-Valle MT, Sánchez-García A, Muñoz P, Escribano P, Guinea J.** Trends in antifungal resistance in *Candida* from a multicenter study conducted in Madrid (CANDIMAD study): fluconazole-resistant *C. parapsilosis* spreading has gained traction in 2022. Antimicrob Agents Ch. 2023; 67(11): e0098623. Article. IF: 4.1; Q2
- **Díaz-García J, Machado M, Alcalá L, Reigadas E, Sánchez-Carrillo C, Pérez-Ayala A, de la Pedrosa EGG, González-Romo F, Merino P, Cuétara MS, García-Esteban C, Quiles-Melero I, Zurita ND, Muñoz-Algarra M, Durán-Valle MT, Martínez-Quintero GA, Sánchez-García A, Muñoz P, Escribano P, Guinea J.** Antifungal resistance in *Candida* spp within the intra-abdominal cavity: study of resistance acquisition in patients with serial isolates. Clin Microbiol Infec. 2023; 29(12): 1604.e1-6. Article. IF: 10.9; D1
- **Doesum JAV, Salmantón-García J, Marchesi F, Di Blasi R, Falces-Romero I, Cabrita A, Farina F, Besson C, Weinbergerová B, Van Praet J, Schönlein M, López-García A, Lamure S, Guidetti A, De**



### 3. Information groups by area

#### 3.3. Infectious Diseases and Immunity Area

- Ramón-Sánchez C, Batinic J, Gavrilaki E, Tragannidis A, Tisi MC, Plantefève G, Petzer V, Ormaza-bal-Vélez I, de Almeida JM, Marchetti M, Maertens J, Machado M, Kulasekaraj A, Hernández-Rivas JA, Silva MGD, Fernández N, Espigado I, Drgona L, Dragonetti G, Metafuni E, Calbacho M, Blennow O, Wolf D, van Anrooij B, Rodrigues RN, Nordlander A, Martín-González JA, Liévin R, Jiménez M, Gräfe SK, García-Sanz R, Córdoba R, Rahimli L, van Meerten T, Cornely OA, Pagano L. Impact of SARS-CoV-2 vaccination and monoclonal antibodies on outcome post-CD19-directed CAR T-cell therapy: an EPICVIDE-HA survey. *Blood Adv.* 2023; 7(11): 2645-5. Article. IF: 7.4; Q1
- Egger M, Salmantón-García J, Barac A, Gangneux JP, Guegan H, Arsic-Arsenijevic V, Matos T, Tomazin R, Klimko N, Bassetti M, Hammarström H, Meijer EFJ, Meis JF, Pratessi J, Krause R, Sipahi OR, Schramann U, White PI, Desoubeaux G, García-Rodríguez J, García-Vidal C, Martín-Pérez S, Ruiz M, Tumbarello M, Talento AF, Rogers B, Lagrou K, van Praet J, Arikian-Akdoglu S, Arendrup MC, Koehler P, Cornely OA, Hoenigl M. Predictors for prolonged hospital stay solely to complete intravenous antifungal treatment in patients with candidemia: results from the ECMM candida III multinational European observational cohort study. *Mycopathologia.* 2023; 188(6): 983-94. Article. IF: 3.6; Q2
  - Falces-Romero I, Bloise I, García-Rodríguez J, Cendejas-Bueno E. Staphylococcus aureus bacteremia in patients with SARS-CoV-2 infection. *Med Clin-Barcelona.* 2023; 160(11): 495-8. Article. IF: 2.6; Q1
  - Falces-Romero I, Bloise I, Schuffelmann-Gutiérrez C, Laplaza-González M, Escosa-García L, Verdú-Sánchez C, Calderón-Llopis B, Amores-Hernández I, Gómez-Zamora A, Río-García M, Menéndez-Suso JJ, Rodríguez-Álvarez D, Pérez-Costa E, Rodríguez-Rubio M, Álvarez-Rojas E, de la Oliva P, Martínez-Romillo PD, Mingorance J, García-Rodríguez J, Cendejas-Bueno E. Is the ERICAP candida score useful for the diagnosis of candidemia in a pediatric critical care unit? *Pediatr Infect Dis J.* 2023; 42(8): E318-9. Letter. IF: 2.9; Q3
  - Falces-Romero I, Quiles-Melero I, García-Rodríguez J. Isolation of filamentous basidiomycetes from respiratory samples in a tertiary care Spanish hospital. *Rev Iberoam Micol.* 2023; 40(4): 51-3. Article. IF: 1.5; Q4
  - Galar A, Juárez M, Sousa-Casanovas I, Catalán P, Valerio M, Antunez-Muiños P, Barbeito-Castiñeiras G, Blanco-Alonso S, Folgueira MD, García-Acuña JM, Lalueza A, Lázaro-Perona F, de Sá EL, Martín L, Muñoz E, Portero F, Ramos-Martínez A, Romero-Gómez MP, Rosillo S, Fernández-Avilés F, Martínez-Sellés M, Bouza E, Muñoz P. Systematic influenza screening in cardiac intensive care units during the influenza season: A prospective study in Spain. *Int J Infect Dis.* 2023; 136: 37-42. Article. IF: 4.8; Q1
  - García Álvarez-Fernández R, Aragoneses-Cazorla G, Lerma L, Prados-Rosales RC, Luque-García J L. Isolation of bacterial extracellular vesicles and identification of their protein cargo. *Methods Mol Biol.* 2023; 2652: 285-92. Article. Not indexed
  - García-Espinoza L, del Rosal T, Quintana L, Maseda R, Grasa C, Falces-Romero I, Menéndez-Suso JJ, Pérez-Conde I, Méndez-Echevarría A, Santos EJA, Alonso LA, de Lucas R, Calvo C, Baquero-Artigao F. Bloodstream infection in children with epidermolysis bullosa. *Pediatr Infect Dis J.* 2023; 42(6): 510-4. Article. IF: 2.9; Q3
  - García-García ML, Pérez-Arenas E, Pérez-Hernández P, Falces-Romero I, Ruiz S, Pozo F, Casas I, Calvo C. Human metapneumovirus infections during COVID-19 pandemic, Spain. *Emerg Infect Dis.* 2023; 29(4): 850-2. Letter. IF: 7.2; Q1
  - García-Sánchez C, Bloise I, García-Rodríguez J, Cendejas-Bueno E. Are cerebrospinal fluid biochemical parameters valid to predict positive results in microbiological molecular diagnostic platforms? A 4-year experience with the FilmArray® Panel Meningitis/Encephalitis for detection of community-acquired bacterial meningitis. *Diagn Microf Infect Dis.* 2023; 107(3): 1247804. Article. IF: 2.1; Q3
  - Gracia-Ahufinger I, López-González L, Vasallo EJ, Galar A, Siller M, Pitart C, Bloise I, Torrecillas M, Gijón-Cordero D, Viñayo B, Castillo-García J, Campo R, Mulet X, Madueño-Alonso A, Chamizo-López EJ, Arrastia-Erviti M, Galán-Sánchez F, Fernández-Querjo M, Rodríguez-Díaz JC, Gutiérrez-Zufiaurre MN, Rodríguez-Maresma MA, Ortega-Lafont MD, Yagüe-Guirao G, Chaves-Blanco L, Colomina-Rodríguez J, Vidal-Acuña MR, Portillo ME, de Luna FFA, Centelles-Serrano MJ, Azcona-Gutiérrez JM, Campero ADIG, Rey-Cao S, Muñoz P, Calvo-Montes J, Zboromyrska Y, Grandioso D, Cámaras J, Cantón R, Larrosa-Escartín N, Díaz-Regaón J, Martínez-Martínez L. The CARBA-MAP study: national mapping of carbapenemases in Spain (2014-2018). *Front Microbiol.* 2023; 14: 1247804. Article. IF: 4.0; Q2
  - Grasa C, Monteaudo-Vilavedra E, Pérez-Arenas E, Falces-Romero I, del Castillo YM, Schüffelmann-Gutiérrez C, del Rosal T, Méndez-Echevarría A, Baquero-Artigao F, Santoveña AZ, Fernández PS, Sainz T, Calvo C. Adenovirus infection in hematopoietic and solid organ paediatric transplant recipients: treatment, outcomes, and use of cidofovir. *Microorganisms.* 2023; 11(7): 1750. Article. IF: 4.1; Q2
  - Herrero-Martínez JM, Trigo E, Navarro M, García-Alcázar D, Carrillo I, Fernández-López T, Calderón-Moreno M, Millán-Pérez R, Cuadros J, Velasco M, García-Bujalance S, Lizasoain M, Martín-Rabadán P, Pérez-Ayala A, Flores-Chávez M. Prevalence of chagas disease in latin american pregnant women in madrid, spain: a multicentre cross-sectional study from 2011 to 2016. *Trop Med Int Health.* 2023; 28(12): 912-22. Article. IF: 2.6; Q2
  - Hoenigl M, Salmantón-García J, Egger M, Gangneux JP, Bicanic T, Arikian-Akdoglu S, Alastruey-Izquierdo A, Klimko N, Barac A, Özencı V, Meijer EFJ, Khanna N, Bassetti M, Rautemaa-Richardson R, Lagrou K, Adam KM, Akalin EH, Akova M, Arsenijević VA, Aujayeb A, Blennow O, Bretagne S, Danion F, Denis B, de Jonge NA, Desoubeaux G, Drgona L, Erben N, Gorri A, Rodriguez JG, García-Vidal C, Giacobbe DR, Goodman AL, Hamal P, Hammarström H, Toscano C, Lanterrier F, Lass-Flörl C, Lockhart DEA, Longval T, Loughlin L, Matos T, Mikulska M, Narayanan M, Martín-Pérez S, Pratessi J, Rogers B, Rahimli L, Ruiz M, Roilides E, Samarkos M, Schramann U, Sili U, Sipahi OR, Sivakova A, Steinmann J, Trauth J, Turhan O, Van Praet J, Vena A, White PL, Willinger B, Tortorano AM, Arendrup MC, Koehler P, Cornely OA. Guideline adherence and survival of patients with candidaemia in Europe: results from the ECMM Candida III multinational European observational cohort study. *Lancet Infect Dis.* 2023; 23(6): 751-61. Article. IF: 36.4; D1
  - Ligero-López J, García-Rodríguez J, Ruiz-Carrascoso G. Diagnosis of gastrointestinal infections: comparison between traditional microbiology and a commercial syndromic molecular-based panel. *Fems Microbiol Lett.* 2023; 370(): -fnad122. Article. IF: 2.2; Q3
  - Ligero-López J, Rubio-Mora E, Ruiz-Bastián MD, Quiles-Melero MI, Cacho-Calvo J, Cendejas-Bueno E. Antimicrobial susceptibility testing of anaerobic bacteria causing bacteraemia: A 13-year (2010-2022) retrospective study in a tertiary hospital. *Anaerobe.* 2023; 84(): -102803. Article. IF: 2.5; Q3
  - Ligero-López J, Sánchez-Castellano MA, Falces-Romero I, Montero-Vega MD, García-Rodríguez J. Progressive multifocal leukoencephalopathy: a retrospective study of the last 12 years in a tertiary-care hospital. *J Neurovirol.* 2023; 29(5): 598-604. Article. IF: 2.3; Q3
  - López CN, de Abreu JMG, Pérez-Blanco V, Buckley RD, Gómez MPR, Díaz-Menéndez M. Effectiveness of the BNT162b2 mRNA Covid-19 vaccine in Spanish healthcare workers. *Enferm Infec Microbiol Clin.* 2023; 41(1): 33-5. Article. IF: 2.6; Q3
  - Maldonado-Barrueco A, Grandioso-Vas D, García-Rodríguez J, Quiles-Melero I. Clostridium perfringens abscess in an intravenous drug user: slammimg. *Rev Esp Quim.* 2023; 36(3): 314-6. Letter. IF: 1.9; Q4
  - Maldonado-Barrueco A, Grasa CD, Grandioso-Vas D, del Rosal T, Sánchez-Holgado M, Sánchez-García L, López-Ortego P, Falces-Romero I, García-Rodríguez J, Quiles-Melero I. Treponema pallidum causing congenital syphilis with severe multisystem involvement. *J Travel Med.* 2023; 30(1): taac152. Editorial Material. IF: 9.1; D1
  - Maldonado-Barrueco A, Rodríguez-Ayala M, Grandioso-Vas D, García-Clemente P, Guedez-López GV, García-Rodríguez J, Quiles-Melero I. Epidemiology and prevalence of mutations associated with resistance to macrolides and fluoroquinolones in *Mycoplasma genitalium* in a tertiary hospital from Madrid, Spain. *Rev Esp Quim.* 2023; 36(3): 310-3. Article. IF: 1.9; Q4
  - Maldonado-Barrueco A, Sanz-González C, Falces-Romero I, García-Clemente P, Cacho-Calvo J, Quiles-Melero I. Prevalence of mutations associated with macrolide and fluoroquinolone resistance in *Neisseria gonorrhoeae* with Allplex™ NG&DR Assay (Seegene®) in a tertiary hospital from Madrid, Spain. *Rev Esp Quim.* 2023; 36(6): 625-8. Article. IF: 1.9; Q4
  - Maldonado-Barrueco A, Sanz-González C, Gutiérrez-Arroyo A, Grandioso-Vas D, Roces-Álvarez P, Sendagorta-Cudós E, Falces-Romero I, Mingorance J, García-Rodríguez J, Quiles-Melero I. Sexually transmitted infections and clinical features in monkeypox (mpox) patients in Madrid, Spain. *Travel Med Infect Di.* 2023; 52: 102544. Article. IF: 6.3; D1
  - Malvar O, Gil-Santos E, Ruz JJ, Sentre-Arribas E, Sanz-Jiménez A, Kosaka PM, García-López S, Paulo AS, Sbarra S, Waquier L, Favero I, van der Heiden M, Altmann RK, Papanastasiou D, Kounadis D, Panagiotopoulos I, Mingorance J, Rodríguez-Tejedor M, Delgado R, Calleja M, Tamayo J. Multifrequency nanomechanical mass spectrometer prototype for measuring viral particles using optomechanical disk



### 3. Information groups by area

#### 3.3. Infectious Diseases and Immunity Area

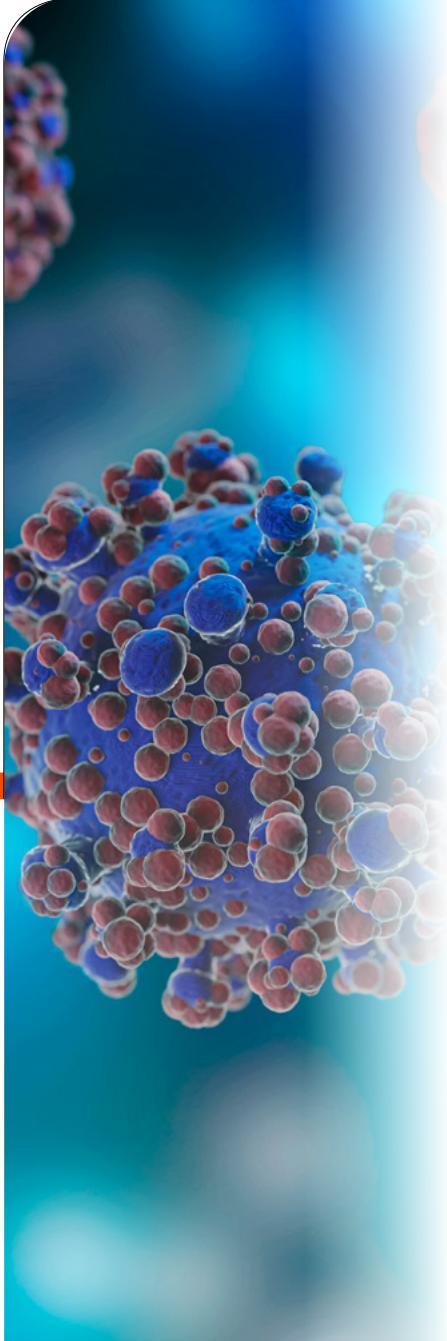


- resonators. Proc IEEE Int Conf Micro Electro Mech Syst. 2023; 153-6. Article. Not indexed
- Marchesi F, Salmanton-García J, Buquicchio C, Itri F, Besson C, Dávila-Valls J, Martín-Pérez S, Fianchi L, Rahimli L, Tarantini G, Grifoni FI, Sciume M, Labrador J, Cordoba R, López-García A, Fracchiolla NS, Farina F, Ammatuna E, Cingolani A, García-Bordallo D, Gräfe SK, Bilgin YM, Dargenio M, González-López TJ, Guidetti A, Lahmer T, Lavilla-Rubira E, Méndez GA, Prezioso L, Schönlein M, Van Doesum J, Wolf D, Hersby DS, Magyari F, Van Praet J, Petzer V, Tascini C, Falces-Romero I, Glenthøj A, Cornely OA, Pagano L. Passive pre-exposure immunization by tixagevimab/cilgavimab in patients with hematological malignancy and COVID-19: matched-paired analysis in the EPICOVIDEHA registry. *J Hematol Oncol.* 2023; 16(1): 32. Letter. IF: 29.5; D1
  - Marchesi F, Salmanton-García J, Emarah Z, Piukovics K, Nucci M, López-García A, Ráclí Z, Farina F, Popova M, Zompi S, Audisio E, Ledoux MP, Verga L, Weinbergerová B, Szotkowski T, Da Silva MG, Fracchiolla N, De Jonge N, Collins G, Marchetti M, Magliano G, García-Vidal C, Biernat MM, Van Doesum J, Machado M, Demirkiran F, Al-Khabori M, Zák P, Visek B, Stoma I, Méndez GA, Maertens J, Khanna N, Espigado I, Dragonetti G, Fianchi L, Del Principe MI, Cabrita A, Ormazabal-Vélez I, Jaksic O, Buquicchio C, Bonuomo V, Batinic J, Omrani AS, Lamure S, Finizio O, Fernández N, Falces-Romero I, Blennow O, Bergantini R, Ali N, Win S, Van Praet J, Tisi MC, Shirinova A, Schönlein M, Prattes J, Piedimonte M, Petzer V, Navrátil M, Kulasekararaj A, Jindra P, Sramek J, Glenthøj A, Fazzi R, De Ramón-Sánchez C, Cattaneo C, Calbacho M, Bahr NC, El-Ashwah S, Cordoba R, Hanakova M, Zambrutto GPM, Zambrutto G, Sciumé M, Booth S, Rodrigues RN, Sacchi MV, García-Poutón N, Martín-González JA, Khostelidi S, Gräfe S, Rahimli L, Ammatuna E, Busca A, Corradini P, Hoenigl M, Klimko N, Koehler P, Pagliuca A, Passamonti F, Cornely OA, Pagano L. COVID-19 in adult acute myeloid leukemia patients: a long-term follow-up study from the European Hematology Association survey (EPICOVIDEHA). *Haematologica.* 2023; 108(1): 22-33. Article. IF: 8.2; Q1
  - Mellado-Sola I, Rodríguez-Molino P, Armas EA, López JN, Falces-Romero I, Rey CC, Lozano CG, Mellado MJ, López-Hortelano MG, Sainz T. Impact of coronavirus pandemic on tuberculosis and other imported diseases screening among migrant minors in Spain. *Trop Med Infect Dis.* 2023; 8(1): 28. Article. IF: 2.8; Q2
  - Navarro-Carrera P, Aranda-Díaz A, García-Ballesteros D, Cacho-Calvo J, García-Rodríguez J, Cendejas-Bueno E. Evaluation of MSP96, MBT biotargetTM 96 and anchorChipTM 600/96 MALDI-TOF MS target plates for direct identification of positive blood cultures. *J Microbiol Meth.* 2023; 211: 106789. Article. IF: 1.7; Q4
  - Oltra SS, Colomo S, Sin L, Pérez-López M, Lázaro S, Molina-Crespo A, Choi KH, Ros-Pardo D, Martínez L, Morales S, González-Paramos C, Orantes A, Soriano M, Hernández A, Lluch A, Rojo F, Albanel J, Gómez-Puertas P, Ko JK, Sarrió D, Moreno-Bueno G. Distinct GSDMB protein isoforms and protease cleavage processes differentially control pyroptotic cell death and mitochondrial damage in cancer cells. *Cell Death Differ.* 2023; 30(5): 1366-81. Article. IF: 13.7; D1
  - Romero-Gómez MP, Gómez-Arroyo B, González-Donapetry P, Cendejas-Bueno E, García-Rodríguez J. Rapid antigen test for adenovirus in children: Age and onset of symptoms are important. *Enferm Infect Micr Cl.* 2023; 41(10): 617-20. Article. IF: 2.6; Q3
  - Rossi G, Salmanton-García J, Cattaneo C, Marchesi F, Dávila-Valls J, Martín-Pérez S, Itri F, López-García A, Glenthøj A, da Silva MG, Besson C, Marchetti M, Weinbergerová B, Jaksic O, Jiménez M, Bilgin YM, Van Doesum J, Farina F, Zák P, Verga L, Collins GP, Bonuomo V, Van Praet J, Nucci M, Meers S, Espigado I, Fracchiolla NS, Valkovic T, Poulsen CB, Colovic N, Dragonetti G, Ledoux MP, Tascini C, Buquicchio C, Blennow O, Passamonti F, Machado M, Labrador J, Duarte RF, Schönlein M, Poulsen CB, Falces-Romero I, Kulasekararaj A, García-Vidal C, Fernández N, Abu-Zeinah G, Ormazabal-Vélez I, Adzic-Vukicevic T, Piukovics K, Stoma I, Cuccaro A, Magliano G, Szotkowski T, González-López TJ, El-Ashwah S, Bergantini R, Sili U, Maertens J, Demirkiran F, De Ramón C, Petzer V, Del Principe MI, Navrátil M, Dargenio M, Seval GC, Samarkos M, Ráclí Z, Pincés LI, Lahmer T, Busca A, Méndez GA, Vena A, Biernat MM, Merelli M, Calbacho M, Barac A, Bavastro M, Limongelli A, İlhan O, Wolf D, Çolak GM, García-Sanz R, Emrah Z, Miskovic B, Gräfe SK, Mladenovic M, Aiello TF, Núñez-Martín-Buitrago L, Nordlander A, Arellano E, Zambrutto GPM, Ammatuna E, Cabrita A, Sacchi MV, Rodrigues RN, Hersby DS, Hanakova M, Rahimli L, Cordoba R, Cornely OA, Pagano L. Age, successive waves, immunization, and mortality in elderly COVID-19 hematological patients: EPICOVIDEHA findings. *Int J Infect Dis.* 2023; 137: 98-110. Article. IF: 4.8; Q1
  - Ruedas-López A, Tato M, Broncano-Lavado A, Esteban J, Ruiz-Serrano MJ, Sánchez-Cueto M, Toro C, Domingo D, Cacho J, Barrado L, López-Roa P. Subspecies distribution and antimicrobial susceptibility testing of mycobacterium abscessus clinical isolates in Madrid, Spain: a retrospective multicenter study. *Microbiol Spectr.* 2023; 11(3): e0504122. Article. IF: 3.7; Q2
  - Salmanton-García J, Marchesi F, da Silva MG, Farina F, Dávila-Valls J, Bilgin YM, Glenthøj A, Falces-Romero I, Van Doesum J, Larmer T, Buquicchio C, El-Ashwah S, Petzer V, Van Praet J, Schönlein M, Dargenio M, Méndez GA, Meers S, Itri F, Giordano A, Pincés LI, Espigado I, Stojanowski Z, López-García A, Prezioso L, Jaksic O, Vena A, Fracchiolla NS, González-López TJ, Colovic N, Delia M, Weinbergerová B, Marchetti M, de Almeida JM, Finizio O, Besson C, Biernat MM, Valkovic T, Lahmer T, Cucarao A, Ormazabal-Vélez I, Batinic J, Fernández N, De Jonge N, Tascini C, Anastasopoulou AN, Duléry R, Del Principe MI, Plantefève G, Papa MV, Nucci M, Jiménez M, Auñayeb A, Hernández-Rivas JA, Merelli I, Cattaneo C, Blennow O, Nordlander A, Cabrita A, Varricchio G, Sacchi MV, Cordoba R, Arellano E, Gräfe SK, Wolf D, Emarah Z, Ammatuna E, Hersby DS, Martín-Pérez S, Rodrigues RN, Rahimli L, Pagano L, Cartney OA. Nirmatrelvir/ritonavir in COVID-19 patients with hematological malignancies: a report from the EPICOVIDEHA registry. *Eclinicalmedicine.* 2023; 58: 101939. Article. IF: 9.6; Q1
  - Salmanton-García J, Marchesi F, Koehler P, Weinbergerová B, Colović N, Falces-Romero I, Buquicchio C, Farina F, van Praet J, Biernat MM, Itri F, Prezioso L, Tascini C, Vena A, Romano A, Delia M, Dávila-Valls J, Martín-Pérez S, Lavilla-Rubira E, Adžić-Vukicević T, García-Bordallo D, López-García A, Criscuolo M, Petzer V, Fracchiolla NS, Espigado I, Sili U, Meers S, Erben N, Cattaneo C, Tragiannidis A, Gavrilaki E, Schönlein M, Mitrovic M, Pantic N, Merelli M, Labrador J, Hernández-Rivas JA, Glenthøj A, Fouquet G, Del Principe MI, Dargenio M, Calbacho M, Besson C, Kohn M, Gräfe S, Hersby DS, Arellano E, Çolak GM, Wolf D, Marchetti M, Nordlander A, Blennow O, Cordoba R, Mišković B, Mladenović M, Bavastro M, Limongelli A, Rahimli L, Pagano L, Cornely OA. Molnupiravir compared to nirmatrelvir/ritonavir for COVID-19 in high-risk patients with haematological malignancy in Europe. A



### 3. Information groups by area

#### 3.3. Infectious Diseases and Immunity Area



- matched-paired analysis from the EPICOVIDEHA registry. *Int J Antimicrob Agents.* 2023 Oct;62(4):106952. Article. IF: 4.9; Q1
- **Sánchez PG, Iglesias I, Falces-Romero I, Serrano-Villar M, Calvo C, Alcolea S, Sainz T, Méndez-Echevarría A.** Balancing the risks and benefits of pet ownership in pediatric transplant recipients. *transplantation.* 2023; 107(4): 855-66. Review. IF: 5.3; Q1
- **Sánchez-Castellano MA, Marcelo C, Marco J, Figueira-Iglesias JC, García-Rodríguez J.** A tale of two hospitals: comparing capa infections in two icus during the spanish fourth pandemic wave. *Mycopathologia.* 2023; 188(4): 335-44. Article. IF: 3.6; Q2
- **Sánchez-Estrada R, Méndez-Guerrero O, García-Morales I, González-Y-Merchand JA, Cerna-Cortes JF, Menéndez MC, García MJ, León-Solís LE, Rivera-Gutiérrez S.** Organization and characterization of the promoter elements of the rrna operons in the slow-growing pathogen mycobacterium kumamotoense. *Genes (Basel).* 2023; 14(5): 1023. Article. IF: 2.8; Q2
- **Sastre LC, Gallotti A, Loches-Yagüe B, Moreno-Ramos F, Rico-Nieto A.** Dalbavancin as consolidation therapy in elderly patients. *Eur J Geriatr Gerontol.* 2023; 5(2): 139-43. Article. IF: 0.3; Q4
- **Sobral-Costas TG, Escudero-Tornero R, Servera-Negré G, Bernardino JI, Arroyo AG, Díaz-Menéndez M, Bustó-Leis JM, Álvarez PR, Pinto PH, Cudós ES.** Human monkeypox outbreak: Epidemiological data and therapeutic potential of topical cidofovir in a prospective cohort study. *J Am Acad Dermatol.* 2023; 88(5): 1074-82. Article. IF: 12.8; D1
- **Vinuela L, de Salazar A, Fuentes A, Serrano-Conde E, Falces-Romero I, Pinto A, Portilla I, Masia M, Peraire J, Gómez-Sirvent JL, Sanchez M, Iborra A, Baza B, Aguilera A, Olalla J, Espinosa N, Iribarren JA, Martínez-Velasco M, Imaz A, Montero M, Rivero M, Suarez-García I, Macia MD, Galan JC, Pérez-Elias MJ, García-Fraile LJ, Moreno C, García F.** Transmitted drug resistance to antiretroviral drugs in Spain during the period 2019-2021. *J Med Virol.* 2023; 95(12): e29287. Article. IF: 6.8; D1
- **Yagüe BL, Rico-Nieto A, Salicchio ER, Manjavacas AMI.** Myocarditis by toxoplasma gondii in an immunocompetent young man. *Enferm Infec Micr Cl.* 2023; 41(6): 375-6. Editorial Material. IF: 2.6; Q3

#### Research projects

- **Dahdouh E.** Alianza para la exploración de inhibidores de carbapenemas (AC20/00012). ISCIIL. 2021-2023. *Management centre: FIBHULP*
  - **Dahdouh E.** Ayuda Adicional- Contrato Juan de la Cierva (IJC2019-038832-I). Ministerio de Ciencia Innovacion. 2021-2023. *Management centre: FIBHULP*
  - **García Bujalance S.** Evaluación del rendimiento del ensayo aptima HIV-1 quant para la detección y cuantificación del HIV-1 en muestras de plasma. Hologic Deutschland GMBH. 2016-Ongoing. *Management centre: FIBHULP*
  - **García García MJ.** Latencia y adaptacion: papel de mycobacterium tuberculosis silente en la enfermedad (PI19/00666 ). ISCIIL. 2020-2023. *Management centre: FUAM*
  - **García Rodríguez J.** Role of mycobacterial dynamin-like proteins in the biogenesis of membrane vesicles, and host-pathogen interactions (1R01AI161821-01 ). National Institutes of Health. 2021-2024. *Management centre: FUAM*
- Clinical trials**
- **Loches Yagüe, María Belén.** tratamiento antimicrobiano ambulatorio oral vs. parenteral para la endocarditis infecciosa. Type/Phase: IV; Sponsored by: Fundació De Recerca Clínic Barcelona-Institut D'Investigacions Biomèdiques August Pi i Sunyer (Fundació Clinic Per A La Recerca Biomèdica);  
*Signed date: 11/01/2023*
- Patents and trademarks**
- **Vicente Muñoz M, Mingorance Cruz J, Rueña González MS, inventors; CSIC, assignee.** Method for determining state of growth and viability of bacterial FtsZ population, whether natural or cultivated, is based on determining existence of FtsZ rings in actively growing individual cells. P200200370; 2002 February 15.
  - **Mingorance Cruz J, Castán García P, Franco de Sarabia Rosado PM, inventors; Biotools Biotechnological & Medical Laboratories S.A., assignee.** Composition, method and kit for detecting bacteria by means of sequencing. PCT/ES2009/000507, EP2492352, US2013157265, CA2775273, MX2012004627; 2009 October 22.
  - **Mingorance Cruz J, Castán García P, Franco de Sarabia Rosado PM, inventors; 2B Blackbio S.L, assignee.** Composition, method and kit for detecting fungi and yeasts by means of sequencing. PCT/ES2010/000248; 2010 June 02.