

Chronic Respiratory Diseases

Group leader

Plaza Moral, Vicente (FGS)

Researchers

Aguilera Molina, Marta (FGS)
 Alonso León, Ana María (FGS)
 Antón Albisu, Pedro Antonio (FGS)
 Blanco Bejar, Marta (FGS)
 Castillo Villegas, Diego (FGS)
 Crespo Lessmann, Astrid (FGS)
 De La Rosa Carrillo, David (FGS)
 Fortuna Gutiérrez, Ana (FGS)
 Francesqui Candela, Joel Rodrigo (FGS)
 Giménez Palleiro, Ana María (FGS)
 Gutiérrez Pereyra, Fernando (FGS)
 Gutiérrez Rouco, Marta (FGS)
 Iglesias Aranda, Alicia (FGS)
 Martín Gutiérrez, Maria Isabel (FGS)
 Mayos Pérez, Mercedes (FGS)
 Najas Sales, Víctor (FGS)
 Pajares Ruiz, Virginia (FGS)
 Palones Femenia, Esther (FGS)
 Paz Del Río, Luis Daniel (FGS)
 Peiró Fábregas, Meritxell (FGS)
 Peñacoba Toribio, Patricia (FGS)
 Podzamczar Valls, Inés (FGS)
 Puy Rion, Maria Carme (FGS)
 Rafecas Codern, Albert (FGS)
 Ramos Barbon, David (FGS)
 Rodríguez García, Concepción (FGS)
 Ruiz Díaz, Maria Luisa (FGS)
 Santaolalla Tragant, Àngels (FGS)
 Segura Medina, Macarena (FGS)
 Serra Mitjà, Pere (FGS)
 Solanes García, Ingrid (FGS)
 Soto Retes, Lorena Concepción (FGS)
 Suárez Correa, Beatriz (FGS)
 Torrego Fernández, Alfonso (FGS)
 Trujillo Reyes, Juan Carlos (FGS)

Research technicians

Gaya Mestre, Inmaculada (FGS)
 Mateus Medina, Eder Fredy (IR)
 Panadero Paz, Carolina (IR)
 Vélez Segovia, Eduardo Antonio (IR)



DESCRIPTION

The Research Group on Chronic Respiratory Diseases (GREC) of the Department of Pulmonology at the Hospital Universitari de la Santa Creu i Sant Pau (HSCSP) has been a pioneer and is currently one of the leaders in pulmonary research. It combines clinical and translational research on chronic obstructive pulmonary disease (COPD)-Respiratory Insufficiency, Asthma, and obstructive sleep apnea-hypopnea syndrome (OSAHS). It hosts a basic science laboratory specialised in respiratory disease animal models, and cell & molecular biology.

MAIN LINES OF RESEARCH

Asthma: Asthma exacerbations; Severe asthma; Good clinical practice guidelines for asthma; Bronchial inflammation; Experimental asthma and pathogenic mechanisms; Multicentre biobank specialising in bronchial biopsies for research into asthma; Bronchial thermoplasty; Clinical trials.

COPD and Respiratory Failure: Non-invasive mechanical ventilation; Respiratory rehabilitation; Pathophysiology; Exacerbation.

Obstructive Sleep Apnoea (OSA): Physiology and clinical, diagnostic and treatment consequences of sleep disorders; Obesity-hypoventilation syndrome; Analysis of airway inflammation in patients with OSA.

SCIENTIFIC CHALLENGES

Consolidate a leading clinical trial unit in respiratory diseases. Capture pre-clinical development contracts from the pharmaceutical and biotech industry, using the capabilities of our basic research lab and experimental animal models. Recruit research trainees seeking a doctoral degree. Support the development of multidisciplinary research networks, such as the Barcelona Respiratory Network and the Programme for Integrated Research on Asthma of the Spanish Society of Pneumology and Thoracic Surgery (SEPAR), and collaborate with or become involved in existing networks, such as CIBER-Respiratory Disorders. Achieve and transfer pharmaceutical discovery in the core research line of the basic science lab.

ACTIVE & AWARDED GRANTS

- Peñacobo Toribio, Patricia. Utilidad de la telemonitorización en el proceso de adaptación a la ventilación mecánica domiciliaria. SEPAR 2023. Sociedad Española de Pneumología y Cirugía Torácica. Duration: 2022-2024. 16.740,00 €

DOCTORAL THESES DEFENDED

- Bianchi, María Marta. Características diferenciales de la neumonía organizada asociada o no a enfermedades autoinmunes sistémicas. 08/11/2024. Universitat Autònoma de Barcelona. Supervisors: Castellvi Barranco, Ivan; Castillo Villegas, Diego; Casademont Pou, Jordi. <https://hdl.handle.net/10803/693036>.
- Puy Rion, Maria Carme. Adaptació a la ventilació mecànica domiciliària (VMD): procediment i factors associats a la resposta al tractament. 18/10/2024. Universitat Autònoma de Barcelona. Supervisors: Antón Albisu, Pedro Antonio; Plaza Moral, Vicente. <https://hdl.handle.net/10803/692922>.

SCIENTIFIC PRODUCTION

- Álvarez FJ, Casas F, Soto G, Blanco M, Delgado J, Galo AP, Quirce S, Plaza V,

REMAS GRP. Spanish Consensus on Remission in Asthma (REMAS). ARCHIVOS DE BRONCONEUMOLOGIA. 2024; 60(8). DOI:10.1016/j.arbres.2024.04.002. PMID:38697903. IF:8,700 (Q1/1D). Document type: Article.

- Arismendi E, Puente L, Domingo C, Dávila I, Quirce S, González FJ, Crespo A, Sánchez M, Rivas C, Cea L. Diagnosed and undiagnosed cough-related stress urinary incontinence in women with refractory or unexplained chronic cough: Its impact on general health status and quality of life. Chronic Respiratory Disease. 2024; 21:14799731241273751. DOI:10.1177/14799731241273751. PMID:39222070. IF:3,500 (Q2/3D). Document type: Article.
- Arismendi E, Ribo P, García A, Torrego A, Bobolea I, Casas R, Palomino R, Picado C, Muñoz R, Valero A. Asthma Control According to GINA 2023: Does Changing the Criteria Improve Asthma Control?. Journal of Clinical Medicine. 2024; 13(22):6646. DOI:10.3390/jcm13226646. PMID:39597790. IF:3,000 (Q1/2D). Document type: Article.
- Betancor D, Otal M, Olaguibel JM, Rodrigo JM, Puebla M, Arismendi E, Barranco P, Barroso B, Bobolea, Cárdena B, Cruz MJ, Curto E, Del Pozo, Domínguez J, González FJ, Luna JA, Martínez C, Mullol J, Muñoz X, Picado C, Plaza, Quirce S, Rial MJ, Roibás, Soto L, Valero A, Valverde M, Sastre J. Global Lung Initiative as Diagnostic Criteria in Asthma-COPD Overlap Syndrome: Prevalence and Disease Characterization in a Real-Life Asthma Cohort. JOURNAL OF INVESTIGATIONAL ALLERGOLOGY AND CLINICAL IMMUNOLOGY. 2024; 34(3). DOI:10.18176/jiaci.0966. PMID:38888581. IF:6,100 (Q1/2D). Document type: Article.
- Cano E, Gómez AV, Segovia EV, Barrenechea MA, Torres JS, Francesqui J, Carroz KP, Solis A, Fernández OA, González A, Bordas J, César EC, Vilarnau EB, Villegas DC, Pardessus AR, Fernández CG, Moyano MG, Gajate AU, Hortas AB, Molina M. Prognostic factors of progressive fibrotic hypersensitivity pneumonitis: a large, retrospective, multicentre, observational cohort study. Erj Open Research. 2024;

- 10(1). DOI:10.1183/23120541.00405-2023. PMID:38410707. IF:4,300 (Q1/3D). Document type: Article.
- de JP, Casanova C, Marín JM, Cabrera C, Marín M, Ezponda A, Cosio BG, Martínez C, Solanes I, Fuster A, Calle M, Gotera C, Feu N, Marín A, Alcaide AB, Sangro M, Bastarrika G, Celli BR. Impact of Applying the Global Lung Initiative Criteria for Airway Obstruction in GOLD Defined COPD Cohorts: The BODE and CHAIN Experience. ARCHIVOS DE BRONCONEUMOLOGIA. 2024; 60(1). DOI:10.1016/j.arbres.2023.10.002. PMID:37925245. IF:8,700 (Q1/1D). Document type: Article.
 - de la Rosa D, de Granda JI, Cáceres LD, Pereyra FG, Moreno BR, Martínez MA, Suárez G. The impact of smoking on bronchiectasis and its comorbidities. Expert Review of Respiratory Medicine. 2024; 18(5). DOI:10.1080/17476348.2024.2369716. PMID:38888096. IF:2,900 (Q2/4D). Document type: Review.
 - del Pozo V, Bobolea I, Rial MJ, Espigol G, Laqué RS, Hernández JM, Mora E, Crespo A, Alonso J, Sosa MSD, Maza J, Atienza B, Bañas D, Moure AL, Rúa I. Expert consensus on the use of systemic glucocorticoids for managing eosinophil-related diseases. Frontiers in Immunology. 2024; 14:1310211. DOI:10.3389/fimmu.2023.1310211. PMID:38250075. IF:5,700 (Q1/3D). Document type: Review.
 - Millán P, Castellví I, Martínez L, Mariscal A, Barril S, D'Alessandro M, Franquet T, Castillo D. Diagnostic Value of Krebs von den Lungen (KL-6) for Interstitial Lung Disease: A European Prospective Cohort. ARCHIVOS DE BRONCONEUMOLOGIA. 2024; 60(6). DOI:10.1016/j.arbres.2024.03.028. PMID:38644152. IF:8,700 (Q1/1D). Document type: Article.
 - Mondoni M, Cefalo J, Carlucci P, Puci M, Saderi L, Degrassi M, Fernández AT, Pajares V, Bodtger U, Sorino C, Zagaria MP, Solidoro P, Centanni S, Sotgiu G. The current practice in the diagnostic work-up of patients with hemoptysis of unknown etiology an international survey. MINERVA MEDICA. 2024; DOI:10.23736/S0026-4806.24.09192-4. PMID:38695633. IF:4,700 Document type: Article.
 - Osuna R, Mulet M, Barril S, Cantó E, Millán P, Pardessus A, de la Rosa D, Castillo D, Vidal S. Levels of Lysozyme and SLPI in Bronchoalveolar Lavage: Exploring Their Role in Interstitial Lung Disease. INTERNATIONAL JOURNAL OF MOLECULAR SCIENCES. 2024; 25(8):4297. DOI:10.3390/ijms25084297. PMID:38673881. IF:4,900 (Q1/3D). Document type: Article.
 - Palones E, García JL, Cisneros C, Almonacid C, Pérez L, Plaza V, Crespo A. Methodology Employed to Develop the Airway Mucus Secretion Test (T-SEC): A Questionnaire to Evaluate Airway Mucus Hypersecretion in Patients With Asthma. ARCHIVOS DE BRONCONEUMOLOGIA. 2024; 60(3). DOI:10.1016/j.arbres.2024.01.002. PMID:38290898. IF:8,700 (Q1/1D). Document type: Article.
 - Palones E, Plaza V, González L, Segarra A, Querol L, Bertoletti F, Rodríguez MJ, Gallano P, Crespo A. Chronic Cough and Cerebellar Ataxia With Neuropathy and Bilateral Vestibular Areflexia Syndrome (CANVAS): Screening for Mutations in Replication Factor C Subunit 1 (RFC1). ARCHIVOS DE BRONCONEUMOLOGIA. 2024; 60(8). DOI:10.1016/j.arbres.2024.04.028. PMID:38755058. IF:8,700 (Q1/1D). Document type: Article.
 - Romero BR, Torrubiano IV, Juan JM, Frades SH, Pallares JP, Ruiz VP, Pérez AW, Ramos HC, Viedma EC. Ultrasound in the Study of Thoracic Diseases: Innovative Aspects. ARCHIVOS DE BRONCONEUMOLOGIA. 2024; 60(1). DOI:10.1016/j.arbres.2023.10.009. PMID:37996336. IF:8,700 (Q1/1D). Document type: Review.
 - Soriano M, Sionis A, Rodríguez E, Bonet A, Soto L, Tauron M, Belmar D, Arakama S, Mayol J, Rodríguez L. Amiodarone triggered Kounis syndrome complicated by refractory cardiac arrest rescued with VA-ECMO. Clinical Case Reports. 2024; 12(5):e8712. DOI:10.1002/ccr3.8712. PMID:38765612. Document type: Article.
 - Soto L, Milagro J, Crespo A, Curto E, Medina E, Bailon R, Gil E, Laguna P, Plaza V. Parasympathetic nervous system: A key role

- in control and mood disorders in patients with asthma. ANNALS OF ALLERGY ASTHMA & IMMUNOLOGY. 2024; 133(4). DOI:10.1016/j.anai.2024.07.022. PMID:39074657. IF:5,800 (Q1/3D). Document type: Article.
- Tomassetti S, Ciani L, Luzzi V, Gori L, Trigiani M, Giuntoli L, Lavorini F, Poletti V, Ravaglia C, Torrego A, Maldonado F, Lentz R, Annunziato F, Maggi L, Rossolini GM, Pollini S, O, Ciurleo G, Casini A, Rasero L, Bartoloni A, Spinicci M, Munavvar M, Gasparini S, Comin C, Cerinic MM, Peired A, Henket M, Ernst B, Louis R, Corhay JL, Nardi C, Guiot J. Utility of bronchoalveolar lavage for COVID-19: a perspective from the Dragon consortium. Frontiers in Medicine. 2024; 11:1259570. DOI:10.3389/fmed.2024.1259570. PMID:38371516. IF:3,100 (Q1/2D). Document type: Review.
 - Torres G, Sánchez M, Gracia E, Benítez ID, Martínez D, Dalmases M, Pinilla L, Minguez O, Vaca R, Pascual L, Aguilá M, Cortijo A, Gort C, Martínez MA, Mediano O, Peralta SR, Fortuna AM, Márquez PP, Drager LF, Cabrini M, de Barros S, Masa JF, Peñafiel JC, Felez M, Vázquez S, Abad J, García F, Casitas R, Lee CH, Barbé F. Long-term effect of obstructive sleep apnoea management on blood pressure in patients with resistant hypertension: the SARAH study. EUROPEAN RESPIRATORY JOURNAL. 2024; 64(2):2400269. DOI:10.1183/13993003.00269-2024. PMID:39060017. IF:16,600 (Q1/1D). Document type: Article.
 - Valencia AN, Retes LS, Bartolomé B, Gutiérrez GP, Bigorra T. Allergy to *Theobroma Cacao*. Clinical Case Reports. 2024; 12(6):e8803. DOI:10.1002/ccr3.8803. PMID:38883222. Document type: Article.
 - Valverde M, Sánchez P, Betancor D, Barroso B, Rodrigo JM, Mahillo I, Arismendi E, Bobolea I, Cárda B, Cruz MJ, Del Pozo V, Domínguez J, González FJ, Olaguibel JM, Luna JA, Martínez C, Mullol J, Muñoz X, Peleteiro L, Picado C, Plaza V, Quirce S, Rial MJ, Soto L, Valero A, Sastre J. Comparison of Long-term Response and Remission to Omalizumab and Anti-IL-5/IL-5R Using Different Criteria in a Real-life Cohort of Severe Asthma Patients. ARCHIVOS DE BRONCONEUMOLOGIA. 2024; 60(1). DOI:10.1016/j.arbres.2023.11.011. PMID:38042707. IF:8,700 (Q1/1D). Document type: Article