

Cerebrovascular Diseases

Group leader

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Researchers

Camps Renom, Pol (FGS)

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Prats Sánchez, Luis Antonio (FGS)

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Research technicians

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Marín Bueno, Rebeca (IR)

Puig Grifol, Núria (IR)

Yélamos Morales, África (IR)



DESCRIPTION

The stroke team dedicates its research to ischemic and hemorrhagic stroke. Research is mainly oriented towards clinical projects, but also includes translational studies. The group is primarily composed of clinical neurologists dedicated especially to stroke, with postdoctoral or predoctoral training, as well as laboratory research personnel (biotechnology) and clinical trial support. The group undertakes intramural projects, either in collaboration with or independently of other groups within the same Institution, as well as extramural projects in collaboration with both national and international institutions.

MAIN LINES OF RESEARCH

- Cerebrovascular complications of carotid atheromatosis. Study of the vulnerability of the atheromatous plaque (Camps Renom, Pol).
- Prevention of cardiovascular events in patients with intracranial hemorrhage and atrial fibrillation (ENRICH-AF) and in patients with lobar intracerebral hemorrhage who take statins (Martí Fàbregas, Joan).
- Intracerebral hemorrhage due to anticoagulants (Prats Sánchez, Luis Antonio).
- Endovascular treatment to prevent hematoma growth in the acute phase (Prats Sánchez, Luis Antonio).
- Perilesional edema in patients with spontaneous intracerebral hemorrhage (Ramos Pachon, Anna).

- Management of patients with subarachnoidal hemorrhage (Ramos Pachon, Anna)
- Benefits and risks of intravenous thrombolysis and endovascular treatment (Camps Renom, Pol).
- Management of arterial blood pressure after endovascular treatment in patients with ischemic stroke and large vessel occlusion (Martí Fábregas, Joan).
- Relevance of the microbiota in cerebrovascular diseases (Prats Sánchez, Luis Antonio).
- Prognosis of catastrophic brain damage (Martínez Domeño, Alejandro).
- Participation in clinical trials (Camps Renom, Pol).

SCIENTIFIC CHALLENGES

- Our research focuses on the acute management of patients with ischemic stroke or spontaneous intracerebral hemorrhage and the secondary prevention of stroke.
- We are interested in conducting research with applicability of the results to the clinical problems raised. To this end, we apply for funding in national calls for competitive funds (mainly from the Instituto Carlos III) or from private entities (for example, the Fundació Marató TV3). We are part of a national stroke research network (RICORS) that includes clinical and basic researchers. We aim to internationalise our research and for this we are involved in the writing and design of guidelines of the European Stroke Organization, we participate or are the promoters of multiple national or international clinical trials (with academic initiative or funded by pharmaceutical companies), we are represented in multiple collaborative consortia (e.g. biomarkers of vulnerable carotid plaque, brain microbleeds). We publish our research in high-impact journals (Q1, D1) and present our results at international conferences. The stroke group is expanding, and we aim to incorporate new researchers from diverse fields of knowledge to enhance multidisciplinary.

- Our centre is accredited as a centre of maximum complexity in the management of stroke patients (European Stroke Organisation), and our work is carried out in the framework of a tertiary university hospital.

ACTIVE & AWARDED GRANTS

- Camps Renom, Pol. Impacto de la Inflamación en la Progresión de la Aterosclerosis Carotídea y el Riesgo de Ictus (estudio INCREASE). PI22/01659. Instituto de Salud Carlos III (ISCIII). Duration: 2023-2025. 141.570,00 €
- Camps Renom, Pol. RICORS-ICTUS. RD24/0009/0010. Instituto de Salud Carlos III (ISCIII). Duration: 2025-2027. 193.600,00 €
- Lambea Gil, Álvaro. Contratos Río Hortega 2022. CM22/00265. Instituto de Salud Carlos III (ISCIII). Duration: 2023-2024. 65.000,00 €
- Martí Fábregas, Joan. Ensayo clínico sobre optimización hemodinámica de la perfusión cerebral tras el tratamiento endovascular en pacientes con ictus isquémico (Estudio HOPE). ICI20/00137. Instituto de Salud Carlos III (ISCIII). Duration: 2021-2026. 362.939,50 €
- Martí Fábregas, Joan. PREVICTUS: Farmacogenética para prevenir los efectos adversos del tratamiento del ictus. pmp21/00165. Instituto de Salud Carlos III (ISCIII). Duration: 2022-2025. 1.067.000,00 €
- Martí Fábregas, Joan. RICORS-ICTUS. RD21/0006/0006. Instituto de Salud Carlos III (ISCIII). Duration: 2022-2025. 249.005,90 €
- Martí Fábregas, Joan. Edema cerebral en la hemorragia intracerebral: variables asociadas y estudio evolutivo de su implicación clínica y pronóstica. PI22/01156. Instituto de Salud Carlos III (ISCIII). Duration: 2023-2025. 196.020,00 €
- Prats Sánchez, Luis Antonio. Mejor terapia médica comparada a la mejor terapia médica junto a tratamiento endovascular para prevenir el crecimiento de hematoma en pacientes con hemorragia intracerebral espontánea: Estudio END-GROWTH. PI24/01009. Instituto de Salud Carlos III (ISCIII). Duration: 2025-2027. 240.000,00 €

- Puig Grifol, Nuria. Contractes Predoctorals PFIS 2020. FI20/00252. Instituto de Salud Carlos III (ISCIII). Duration: 2021-2024. 82.400,00 €

DOCTORAL THESES DEFENDED

- Campolongo Perillo, Antonia. Infusión intestinal continua de levodopa/carbidopa en la enfermedad de Parkinson: factores concomitantes digestivos que influyen en su eficacia y seguridad. 16/10/2024. Universitat Autònoma de Barcelona. Supervisors: Kulisevsky Bojarski, Jaime; Pascual Sedano, Berta M.; Román Abal, Eva María; Martí Fábregas, Joan. <https://hdl.handle.net/10803/692806>
- Puig Pijoan, Albert. Aplicabilitat clínica de nous biomarcadors de la malaltia d'Alzheimer i de biomarcadors vasculars en fluids en el deteriorament cognitiu. 12/11/2024. Universitat Autònoma de Barcelona. Supervisors: Ois Santiago, Angel Javier; Torre Fornell, Rafael de la; Martí Fábregas, Joan. <https://hdl.handle.net/10803/693172>.

SCIENTIFIC PRODUCTION

- Benítez S, Puig N, Camps P, Sánchez JL. Atherogenic circulating lipoproteins in ischemic stroke. *Frontiers in Cardiovascular Medicine*. 2024; 11:1470364. DOI:10.3389/fcvm.2024.1470364. PMID:39713216. IF:2,800 (Q2/4D). Document type: Review.
- Camps P, Guasch M, Martínez A, Prats L, Ramos A, Álvarez J, Silva Y, Fortea G, Morales L, Rodríguez A, Giralte E, Flores A, Ustrell X, López N, Corona DJ, Freijo MM, Luna A, Tejada H, Marta J, Moniche F, Pardo B, Castellanos M, Albert L, Sanz A, Aguilera A, Marín R, Ezcurra G, Lambea A, Martí J. A Randomized Trial on Hemodynamic Optimization of Cerebral Perfusion after Successful Endovascular Therapy in Patients with Acute Ischemic Stroke (HOPE). *CEREBROVASCULAR DISEASES*. 2024; DOI:10.1159/000540606. PMID:39208776. IF:2,200 (Q3/6D). Document type: Article.
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