

## Advanced Medical Imaging, Artificial Intelligence, and Imaging-Guided Therapy

### Group leader

Munuera Del Cerro, Josep Lluís (FGS)

### Researchers

Alfonso Cerdan, Sheila (FGS)

Aubanell Creus, Anton (FGS)

Codo Tarraubella, Xenia (FGS)

Gimenez Nadal, Anna (FGS)

Gomez Chiari, Marta Cecilia (FGS)

Granell Moreno, Esther (FGS)

Hernandez Giraldo, Cristian David (FGS)

Hernandez Jover, Diana (FGS)

Lozano Martinez, Gloria Andrea (FGS)

Mendez Escalante, Jorge Eliecer (FGS)

Menso , Maria Magdalena (FGS)

Oliva Ibarz, Javier (FGS)

Otero Ruiz, Jorge Enrique (FGS)

Pernas Canadell, Juan Carlos (FGS)

Rios Vives, Miguel Angel (FGS)

Sánchez Fernández, Juan Jose (FGS)

Tecame , Mario (FGS)

Valverde Lavirgen, Sandra (FGS)

Villalba Auñon, Jorge (FGS)



### MAIN LINES OF RESEARCH

- Artificial Intelligence.
- Quantitative Medical Imaging Advances and Radiomics.
- Innovative Imaging Technologies.
- Image-Guided Therapy 3D Imaging and Surgical Planning.
- Design and Testing of Medical Devices.

### SCIENTIFIC CHALLENGES

- Increasing knowledge in the implementation of digital technologies in healthcare through the design and testing of tools supporting clinical and radiological decision-making, based on Artificial Intelligence and Robotics.
- Promoting the development and use of advanced biomarkers in medical imaging, including new acquisition methods, techniques, or procedures, especially quantitative and omics biomarkers.
- Encouraging the use of advanced imaging technologies and 3D printing for the enhancement of educational resources and clinical-surgical planning.
- Enhancing participation in national and international research networks focused on diagnostic imaging, as well as fostering collaboration in multidisciplinary research teams.

### DOCTORAL THESES DEFENDED

- Guisado-Alonso, Daniel. Estratègies per optimitzar el tractament endovascular en l'íctus agut: anàlisi dels criteris de selecció i de la relació



### 5.1.5 Translational Medicine Area

entre la circulació col·lateral i la pressió arterial.  
28/04/2023. Universitat Autònoma de Barcelo-  
na. Supervisors: Martí Fàbregas, Joan; Delgado  
Mederos, Raquel; Granell Moreno, Esther. [http://  
hdl.handle.net/10803/690489](http://hdl.handle.net/10803/690489).