



GRUPO GIRONA
(RD21/0006/0011)



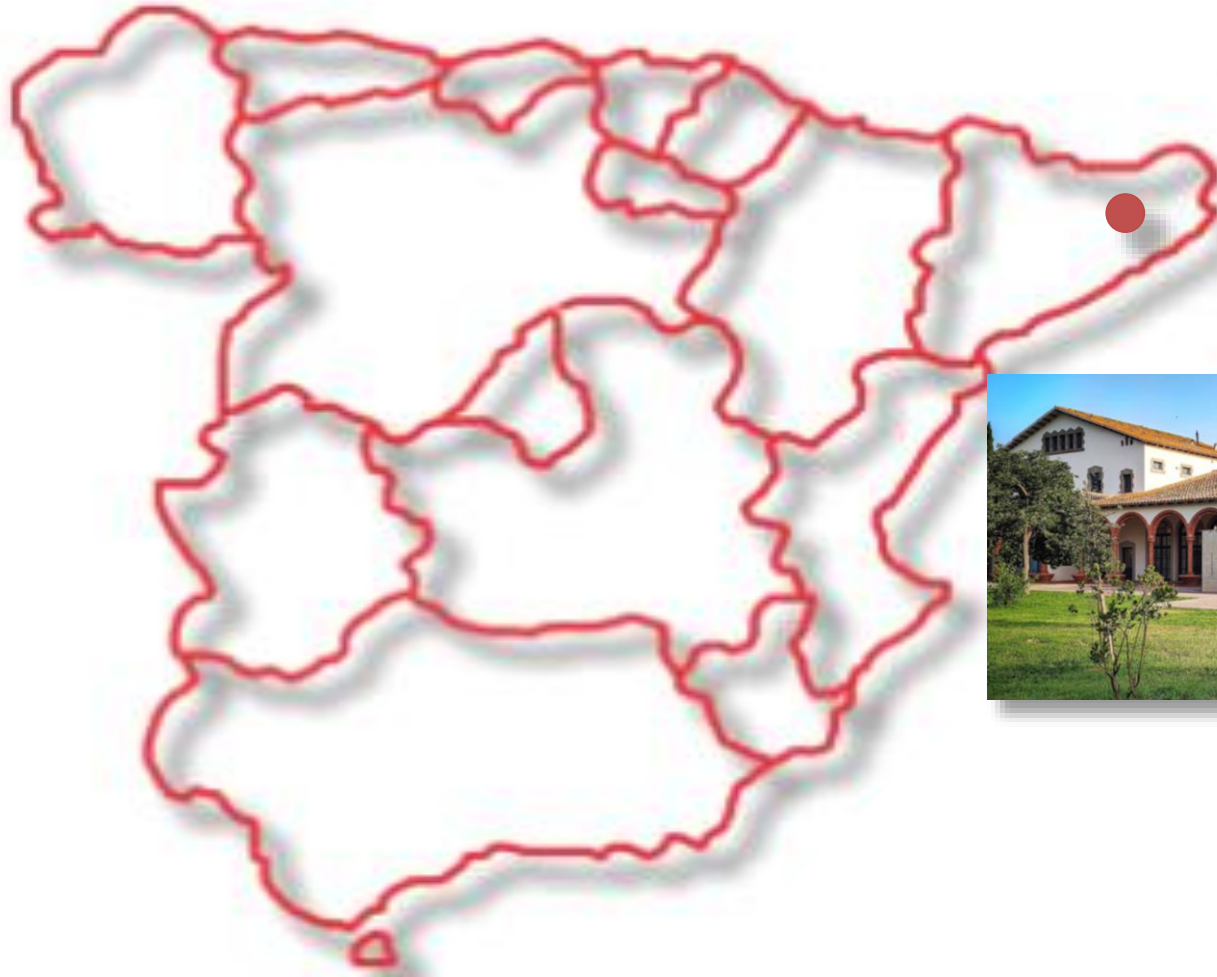
RICORS ICTUS



GIRONA

H. Universitario Dr. Josep Trueta

IdIBGi



GRUPO DE ESTUDIO DE ENFERMEDAD CEREBROVASCULARES



H. Dr. Josep Trueta - IDIBGI

Grupo Clínico – Unidad de Ictus

- Joaquín Serena
- Yolanda Silva
- Alan Murillo*
- Juan Cienfuegos*
- Víctor Vera*

NEUROintervencionistas-Clínicos

- Mikel Terceño
- Saima Bashir

Grupo preclínicas

- Carme Gubern **RICORS**
- Dolors Puigoriol
- Laia Carballo **PFIS**
- Gemma Huguet
- Elisabeth Kádár **UdG**
- Rosa Suñer

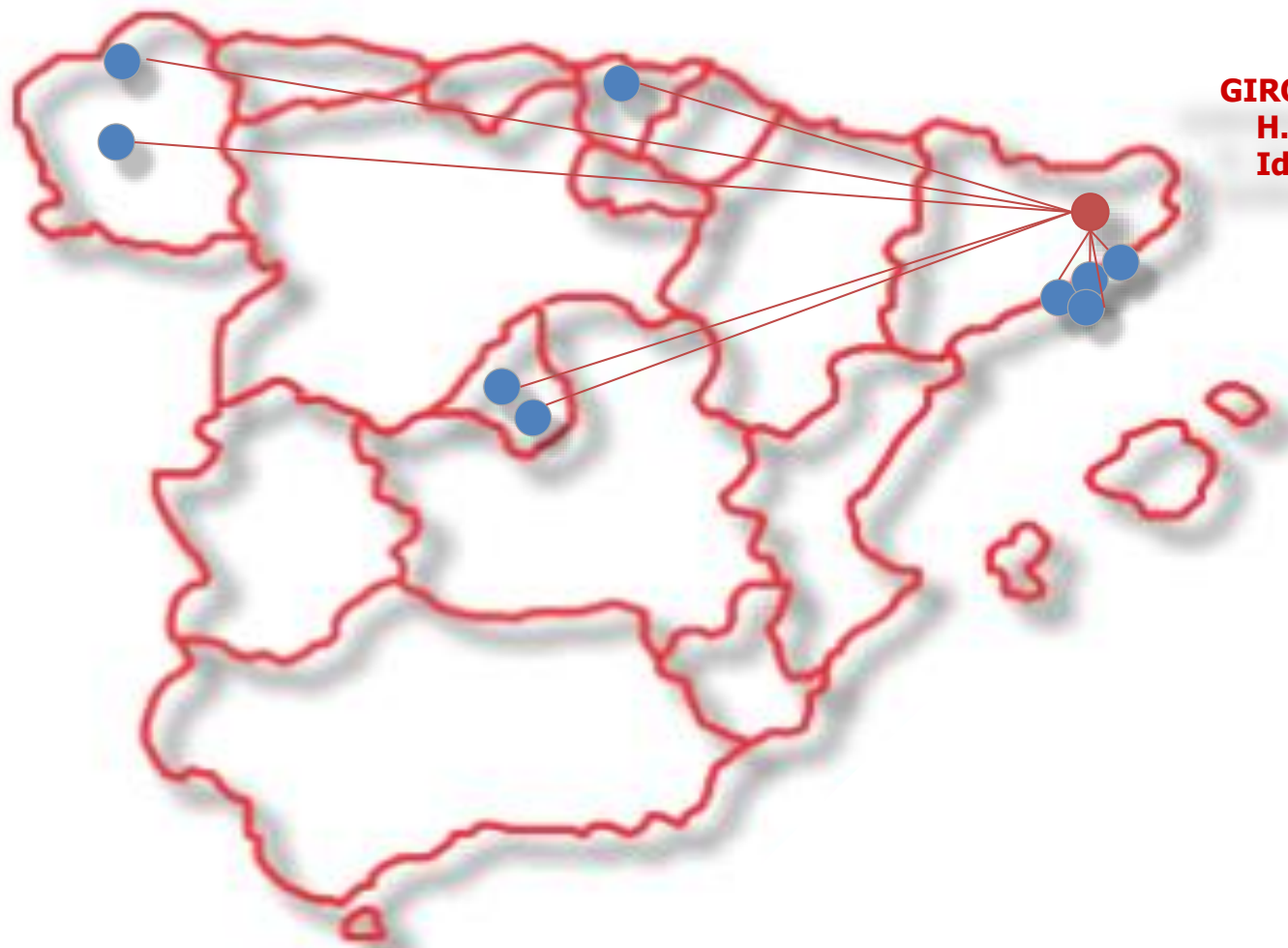
Enfermería / Ensayos

- Gabriel*
- Laura Pardo
- Montse Reina





RICORS



GIRONA
H. Universitario Dr. Josep Trueta
IdIBGi



RESEARCH LINE 1. BIOMARKERS FOR IDENTIFICATION OF STROKE AND ITS RECOVERY

WP 2.- Use of biomarkers in stroke subtypes

WP 3.- Biomarkers for outcome (stroke complications and recovery)

WP 4.- Biomarkers in experimental models of stroke and selected pathways for diagnosis and therapy

RESEARCH LINE 2. ACUTE-PHASE TREATMENT

WP: To improve reperfusion rates and patient selection

WP: Multicenter clinical trial of blood pressure control after thrombectomy

WP: Role of the type of anesthesia in clinical outcome in posterior territory strokes



RESEARCH LINE 3. BRAINPROTECTION

WP1.- Study of molecular mechanisms related with the brain injury and ischemic penumbra.

RESEARCH LINE 4. BRAIN REPAIR AND FUNCTIONAL RECOVERY

WP3. Stimulation of sensory-motor recovery

RESEARCH LINE 5. SECONDARY PREVENTION

WP1. Identification of mechanisms related to the development of active (high risk) atherosclerotic plaques



ISQUEMIA

- Study of predictive blood and radiological **biomarkers of evolution/progression** in cerebral ischaemia, as well as the molecular mechanisms involved.
- Etiopathogenic stroke markers using blood and tissue biomarkers obtained from patients treated with mechanical **thrombectomy**.
- Determination of clinical aspects in the identification of the underlying etiopathogenesis in **cryptogenic** stroke and infrequent cause stroke.

ATEROMATOSIS

FIS PI19/01776 , 2020-2022
FIS PI16/01540 , 2017-2019

- Identification of blood and tissue biomarkers of vulnerable carotid plaque and associated molecular mechanisms.

FIS PI19/01776 , 2020-2022

HEMORRAGIA

- Study of predictive blood and radiological biomarkers of evolution/progression in cerebral haemorrhage.

FIS PI21/0143 , 2022-2024

NEUROREPARACIÓN

- Evaluation of the effect of immersive reality systems on improving motor rehabilitation in stroke patients.

eHealth, 2021

ISQUEMIA AGUDA

○ Estudio de miRNAs



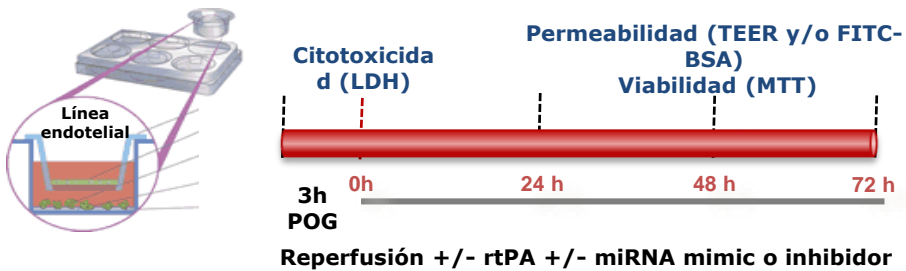
○ Pacientes ictus agudo

Inicio ictus: Pre-rtPA +2, +24, +72h



○ Modelo in vitro BHE

Monocultivo línea endotelial murina bEnd.3
Monocultivo línea endotelial humana hCMEC / D3



H. Trueta de Girona

H. A Coruña

- Identificación miRNAs circulantes predictores TH

- Estudios funcionales miRNAs predictores TH y validación de dianas

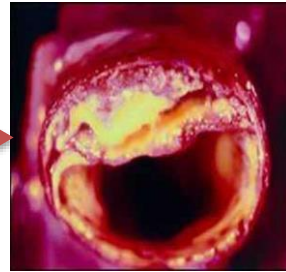
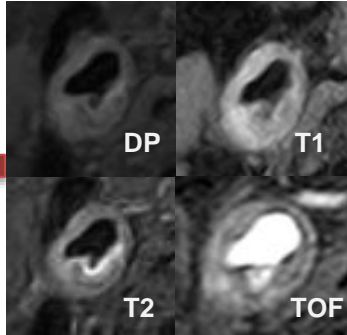
Presurgical

Endarterectomy

Follow-up

**High-resolution
MRI**

**Endarterectomy
specimens (plaques)**



Non-invasive decision-making algorithm

**miRNA in circulating
peripheral blood**

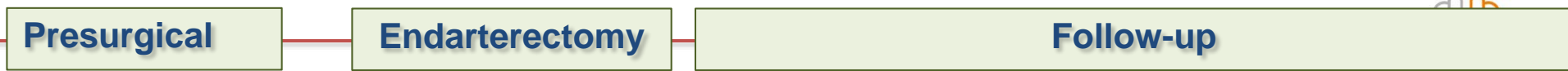


- Patients
- Healthy controls

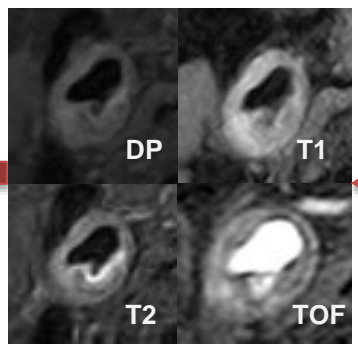
FIS 2017-2018 (PI16/01540)

FIS 2020-2022 (PI19/01776)

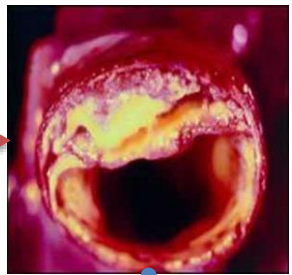
Non-invasive decision-making algorithm



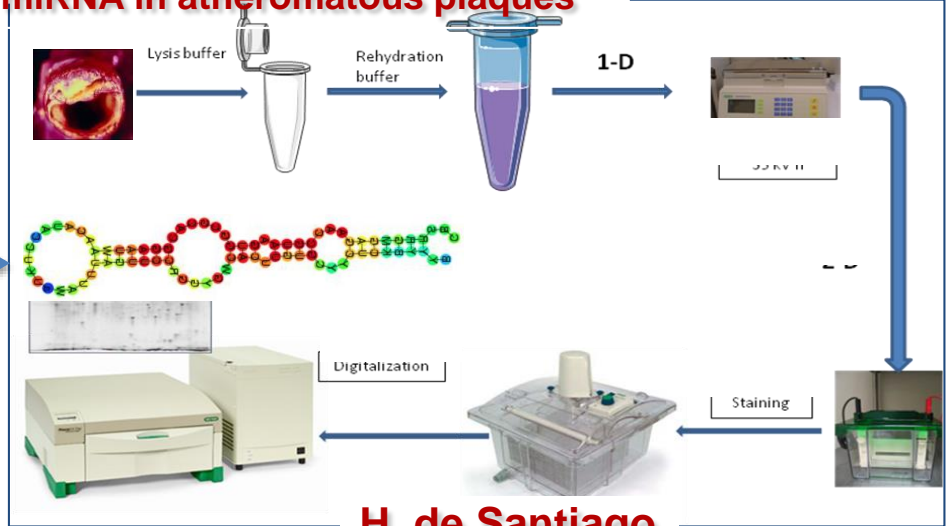
High-resolution MRI



Endarterectomy specimens (plaques)



Proteómica in atheromatous plaques
miRNA in atheromatous plaques



H. de Santiago

miRNA in circulating peripheral blood



- Patients
- Healthy controls

FIS 2017-2018 (PI16/01540)

FIS 2020-2022 (PI19/01776)

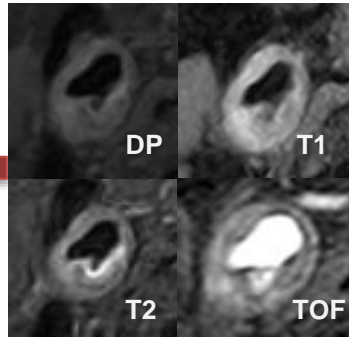
Non-invasive decision-making algorithm

Presurgical

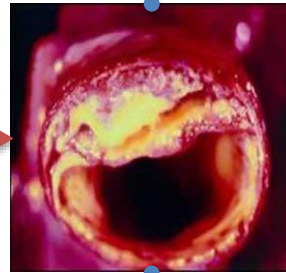
Endarterectomy

Follow-up

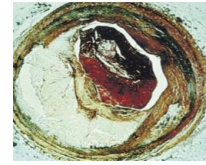
High-resolution MRI



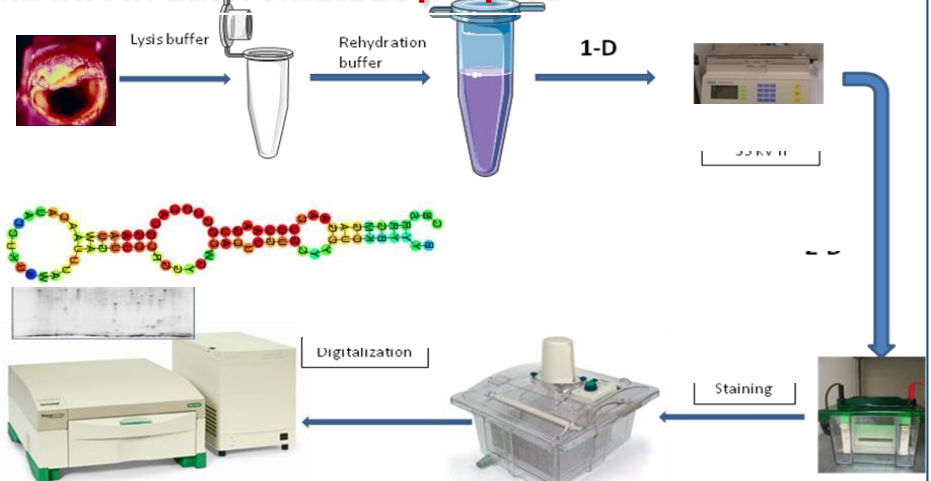
Endarterectomy specimens (plaques)



Histology of the pieces of endarterectomy



Proteómica in atheromatous plaques
miRNA in atheromatous plaques



H. de Santiago

miRNA in circulating peripheral blood

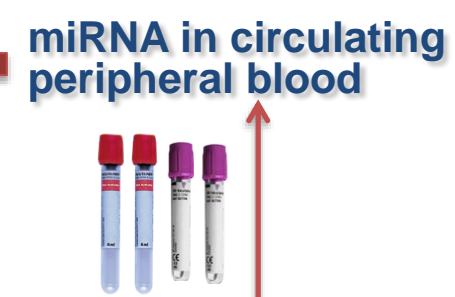
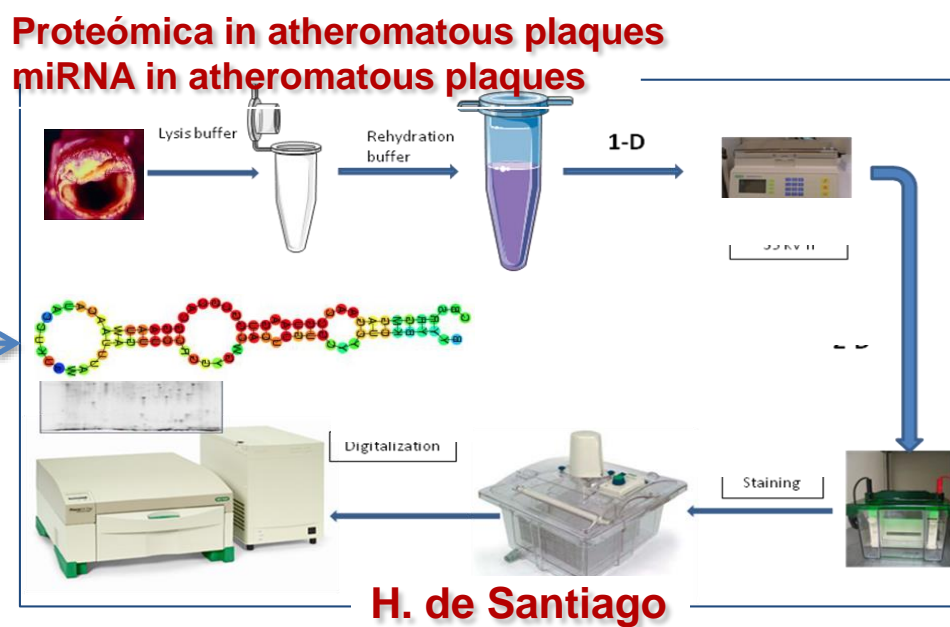
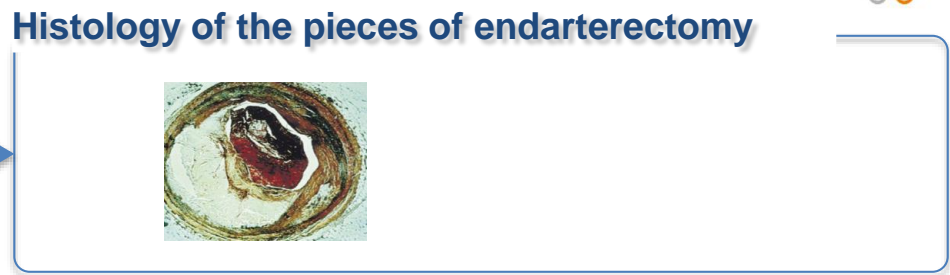
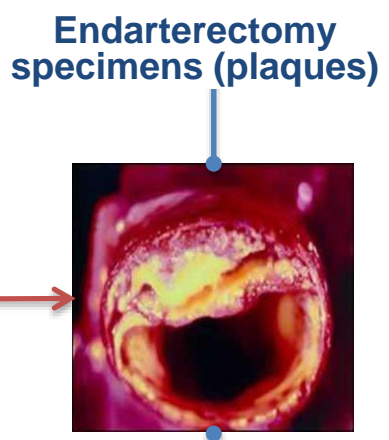
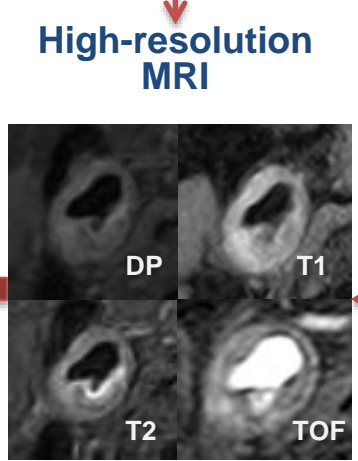
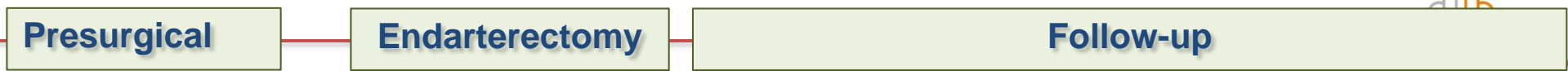


- Patients
- Healthy controls

FIS 2017-2018 (PI16/01540)

FIS 2020-2022 (PI19/01776)

Non-invasive decision-making algorithm



- Patients
- Healthy controls

FIS 2017-2018 (PI16/01540)

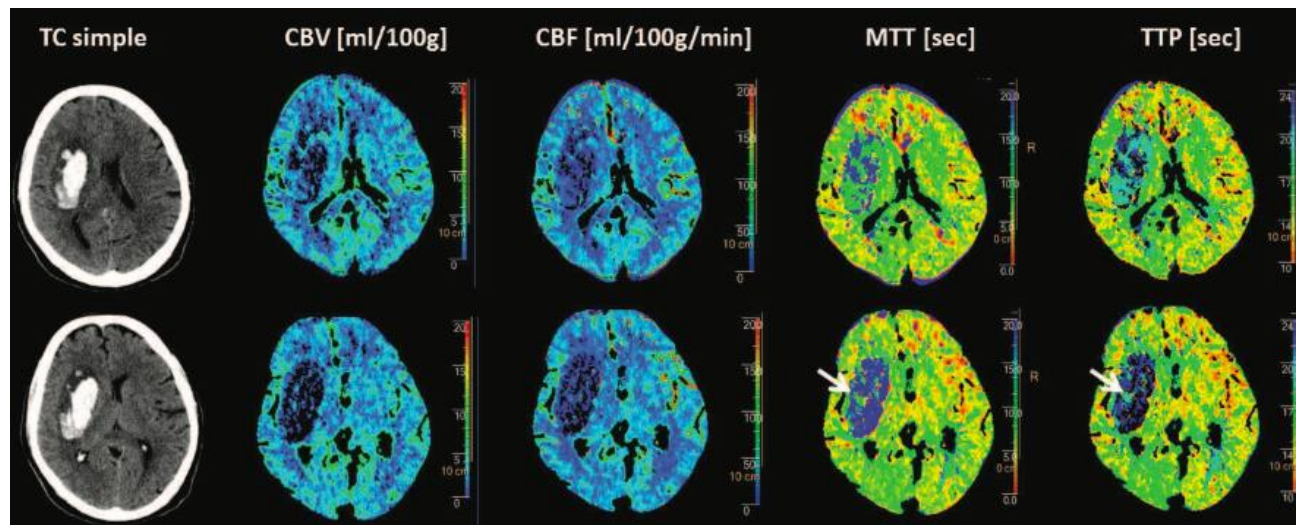
FIS 2020-2022 (PI19/01776)



Crecimiento del hematoma y pronóstico funcional

- TC-Perfusión <12 h. >> angio-TC / TC postcontraste
 - EC
 - Área perihematoma: volumen de flujo y presión de perfusión cerebral.
 - Alteración de BHE mediante mapas de perfusiónn (perihematoma, hematoma, sano contralateral)

Basal, +24, +48, +72h, 3 meses



RAPID

Marató TV3 2018-2021

FIS 2022-2024 (PI21/0143)

ISQUEMIA AGUDA - TROMBECTOMÍA

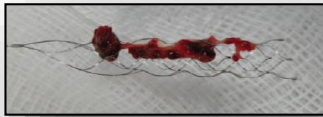


○ Pacientes ictus agudo



Trombo

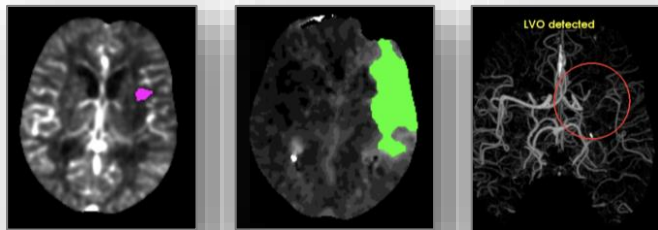
Inicio ictus: Pre-TM, fin TM, +24, + 3 meses



Univ. Complutense

MORPHEUS

RAPID



Clinical implications of NETs in patients with ischemic stroke



○ Pacientes ictus agudo



Inicio, + 3 meses, +12 meses



Realidad virtual en rehabilitación intensiva.

IMAGENOMA



Integral Body Imaging Research

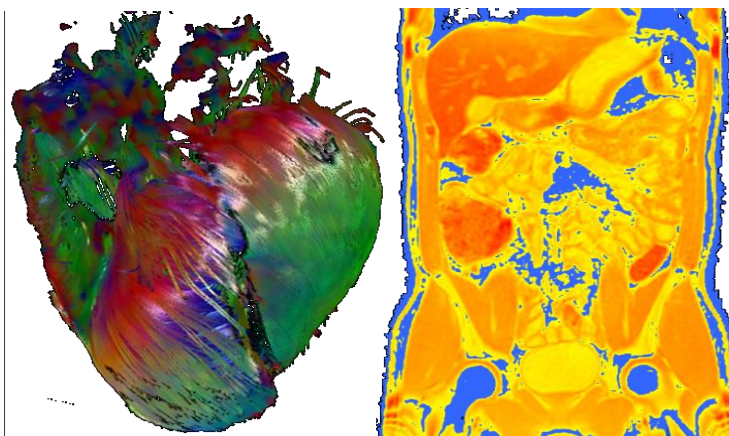
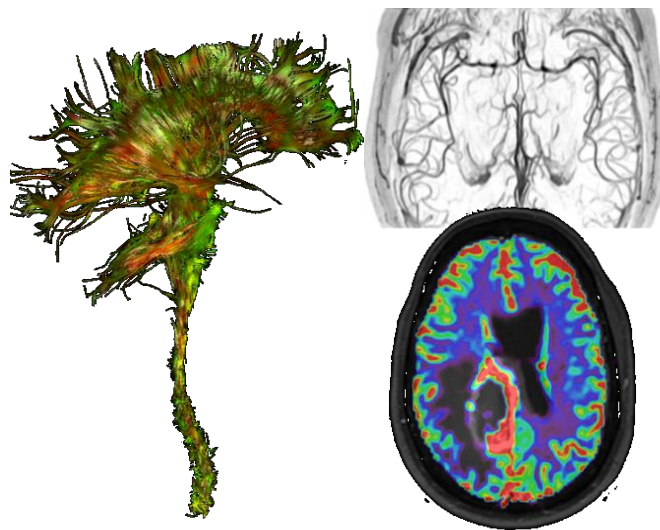
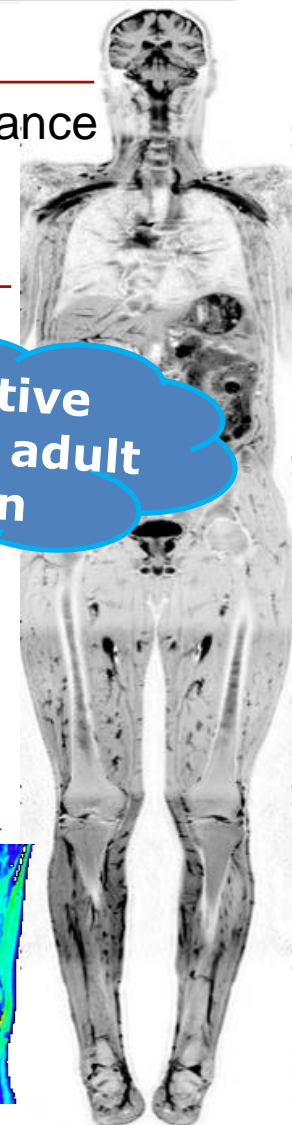
To develop advanced imaging biomarkers

- Observational population study: 2000 adult
- >50
- Province of Girona
- Whole-body magnetic resonance imaging
- Metabolomics

- Whole-body magnetic resonance imaging
- Metabolomics



Representative sample of the adult population





PROYECTOS ACADÉMICOS

MORPHEUS

HOPE

ODEA TIA

PRESTIGE-AF

METHINKS-DEEPSTROKE

AQUAS

ANAIS

Stent Roadsaver™

ARICH (Registro Europeo HIC)

ROSSETTI

Registro HIC-CAT

TNKCAT

ATRIUM

ENSAYOS CLÍNICOS

ACTISAVE STUDY

CONVINCE

CHARM

APRIL

AXIOMATIC - BMS

ANGIONAUTICS (Estudio AQUAS)

DISTAL

TECNO

CHOICE-2

IN EXTREMIS

SICARIO

RACETOLL

FIRST PASS

TEMPO-2

