**Thrombosis and Haemostasis**

- Investigation of the genetic basis of venous and arterial thrombosis. GAIT-1 and GAIT-2 projects.
- Investigation of new antithrombotic drugs: thrombin inhibitors, molecules against activated factor X, low molecular weight heparin with oral activity, among others.
- Biomarkers of prothrombotic states in patients under 55 years with venous thromboembolic disease, acute ischaemic stroke, or acute myocardial infarction. VEREMA project.
- Applied clinical development of the self-management model of oral anticoagulant treatment. ORION project. Retrospective analysis of the clinical outcomes from patient self-management of anti-vitamin-K treatment at the Hospital de Sant Pau. NCT3532724
- Mathematical models of prediction of the individual risk of thromboembolic disease in general population (RETROVE Project) and in cancer patients (MIRTO Project).
- CITA project. Centre for Antithrombotic Therapy Management. Research into a new ambulatory management model for patients receiving any kind of antithrombotic therapy (anti vitamin-K, new oral anticoagulants, low molecular weight heparins, antiplatelets) by incorporating new educational programmes, specialized nursing and new communication technologies.

**Main Lines of Research**
- Study QTL detected in GAIT-1 families in relation to phenotypes of haemostasis with thrombosis risk (resistance to activated protein C, factor VIII, homocysteine, factor XII, body mass index and others).
- Replicate QTL related to thrombosis in GAIT-1 families by means of the linkage analysis using new GAIT-2 families.
- Conduct genome-wide association study (GWAS) of phenotypes involved in GAIT-1.
- GWAS of phenotypes included in GAIT-2.
- Analyse RNA expression in the GAIT-2 families.
- Investigate miRNA associated with thromboembolic disease in GAIT-2.
- To complete the recruitment of the cohorts included in MIRTO Project (Modeling the Individual Risk of Thrombosis in Oncology), with the goal of establishing an individual risk score for venous thromboembolism (RETROVE sub-project) and for ischaemic stroke (SINO subproject) in patients with cancer.
- Research plasma proteins associated with the risk of venous thromboembolism by using high affinity proteomics developed at Karolinska Institutet. VEREMA project, joint collaboration between the European case-control studies VEBIOS (Sweden), RETROVE (from our unit) and MARTHA (France).
- Investigation on laboratory management of DOACs.
- Search for new universal laboratory methods for the assessment of any kind of oral anticoagulant (AVK and DOACs).
- To finish the recruitment of patients for the ORION project.

**Challenges**

**Active Grants**
- Note: Total amount granted to PI. It does not include indirect costs.

**Grants Awarded in 2017**

**Note**: Total amount granted to PI. It does not include indirect costs.

**Theses**
Collaborations with other IIB Sant Pau Groups

- Genomics of Complex Diseases (GAIT1, GAIT2, RETROVE, VEREMA and MIRTO Project).
- Stroke Unit (HERO and MIRTO Project).
- Vascular Surgery (GAIT2, genetics of venous insufficiency).
- Medical Oncology (MIRTO Project).
- Clinical Haematology (MIRTO Project).
- Digestive Diseases (HEPACO).

External Collaborations

- Cardiovascular Research Network (RIC).
- Karolinska Institutet, Stockholm, Sweden: GAIT2 and VEREMA.
- La Timone Hospital, Marseille, France: GAIT2 and VEREMA.

Scientific Production


IF: 0.796


IF: 8.725


IF: 2.339


IF: 2.779


IF: 2.600


IF: 0.796


IF: 2.779


IF: 2.363

Other Publications


