Rheumatology Department / Insermm U1173; Ambroise Paré Hospital; Versailles-Saint Quentin University, Paris, France

Main research areas of interest

- **Epidemiology/Outcomes research**
  - Our department is considered as world leading imaging center in ultrasound with expertise ranging from the methodological and proof-of-concept approach through to large national and international clinical trials and cohort studies. Our department is also involved in clinical epidemiological studies of the chronic inflammatory disease through collaboration with general population cohort (GAZEL).

- **Genetics**
  - Genetics and genomics of spondyloarthritis are two of the main research axes of the research unit associated to our department (University of Versailles-St-Quentin/INSERM UMR 1173). We have access to a large collection of DNA and RNA samples from spondyloarthritis patients (in particular familial spondyloarthritis) and all the genotyping and sequencing (including NGS) facilities are available in our laboratory.

- **Immunology**
  - Immunology is a major axis of the research unit associated to our department (INSERM U1173). It is focused on studying the pathophysiology of spondyloarthritis and psoriatic arthritis and their relationship with inflammatory bowel disease, through pre-clinical animal studies (HLA-B27 transgenic rats) and human studies involving patients.

- **Imaging**
  - In imaging the main research topic is focused on methodological validation of ultrasound as outcome measurement instrument for both clinical therapeutic trials and clinical decision making (mostly diagnostic and prognostic) studies predominantly on chronic rheumatic diseases. The focus lies predominantly from methodological concept to more technical features and analytical issues of imaging applied to chronic rheumatic diseases.

- **Basic science**
  - The molecular impact of HLA-B27 is studied in cell lines and drosophila. This part of the project involves cellular and biochemical approaches.

- **Other**
  - The implication of microbiota in chronic inflammatory arthritis is studied in patients and animal model (HLA-B27 transgenic rat). This project implicates a strong collaboration with metagenomics facility at National Institute for Agronomicla Research (INRA)

Main musculoskeletal and rheumatic diseases investigated: Ankylosing spondylitis/axial spondyloarthritis, Rheumatoid arthritis, Psoriasis / Psoriatic arthritis

Practical information: The centre can provide research opportunities for: PhD students, clinical research fellows, medical students, specialty trainees, basic scientists, clinical internship/fellowship
Duration of stay: 3-4 years (eg PhD) is the maximum duration of stay
Funding: Some funding might be available via institute.

Website: [http://www.2ic.uvsq.fr](http://www.2ic.uvsq.fr)

Contact persons for possible research collaborations and mentorship:

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<th>Contact details person 1</th>
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<th>Contact details person 3</th>
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<tr>
<td>Immunology</td>
<td>Maxime Breban*</td>
<td>Maria-Antonietta D'Agostino*</td>
<td>Félicie Costantino</td>
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<tr>
<td>Imaging/outcome research</td>
<td><a href="mailto:maxime.breban@aphp.fr">maxime.breban@aphp.fr</a></td>
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* Can be contacted for mentorship