Rheumatology and Metabolic Bone Diseases Department, Hospital de Santa Maria, CHLN
Rheumatology Research Unit, Instituto de Medicina Molecular, Faculty of Medicine, University of Lisbon, Lisbon Academic Medical Centre, Portugal

Main research areas of interest

- **Epidemiology/Outcomes research**
  - We have a number of assembled cohorts of rheumatic diseases, including rheumatoid arthritis (RA), systemic lupus erythematosus (SLE), juvenile idiopathic arthritis (JIA), ankylosing spondylitis (AS), psoriatic arthritis (PsA), Sjögren’s syndrome (SjS), systemic sclerosis (SS), auto-inflammatory syndromes, vasculitis, myositis, uveitis, Paget's disease of bone, osteoporosis, osteoarthritis and crystal arthropathies. All of these cohorts have large numbers of patients that are prospectively followed by experts in each area and have attached clinical information registered in the Rheumatic Diseases Portuguese Register, Reuma.pt, and paired biological samples in the Biobank based at the Lisbon Academic Medical Centre.

- **Genetics**
  - DNA stored at the Biobank related to the cohorts described above have allowed collaborative genetic studies.

- **Immunology**
  - At the Rheumatology Research Unit, we have a team with expertise in the immunology of rheumatic diseases, namely on the role of lymphocytes and macrophages in the mechanisms of diseases such as RA, JIA, SLE or spondyloarthritis.

- **Imaging**
  - Through the liaison between the Rheumatology Research Unit and the Rheumatology Department at the Lisbon Academic Medical Centre, we have a special interest in the area of ultrasound application in inflammatory arthritis, including significant experience in minimally invasive ultrasound-guided synovial needle biopsies. We are also interested in the use of ultrasound for diagnostic and monitoring of vasculitis (namely giant cell arteritis) and Sjögren's syndrome.

- **Basic science**
  - One of the main focus of the Rheumatology Research Unit is the relationship between bone and inflammation, namely in the context of the early phase of rheumatic diseases. We have published important work in this field, in areas such as RA and spondyloarthritis. We have biobank collections of blood, synovial membrane and synovial fluid, which enable translational research in the area of synovitis.

- **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 Resaerch (INRA)

Main musculoskeletal and rheumatic diseases investigated: Ankylosing spondylitis/axial spondyloarthritis, Pediatric rheumatology, Rheumatoid arthritis, Scleroderma, Myositis, Osteoporosis and/ Metabolic Bone Disease, Systemic lupus erythematosus / Anti-phospholipid syndrome, Sjögren’s syndrome, Psoriasis / Psoriatic arthritis

**Clinical practice:** We have dedicated disease specific outpatient clinics: lupus, scleroderma, myositis, Sjögren’s syndrome, rheumatoid arthritis, spondyloarthritis, psoriatic arthritis, uveitis, crystal arthritis, metabolic bone diseases, vasculitis, pregnancy in rheumatic diseases (in collaboration with obstetricians), multidisciplinary clinic with orthopaedic surgeons, multidisciplinary clinic with dermatologists. We have a day hospital open 8am-8pm every weekday, which centralizes all the biological prescriptions. We have an ambulatory unit for technical procedures including: densitometry, capilaroscopy, ultrasound, ultrasound guided procedures (including biopsies), mini-arthroscopy, articular and periarticular injections, joint lavage, salivary gland and abdominal fat biopsies, mesotherapy and other techniques.
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: Visitors need to seek own funding

Website:
http://www.chln.min-saude.pt/

Contact persons for possible research collaborations and clinical internship/fellowship and mentorship:

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<td>Name</td>
<td>João Eurico Fonseca</td>
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* Can be contacted for mentorship (regarding rheumatoid arthritis and novel treatments)