

# Associate Professor Xavier Roca

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### My lab's RNA focus:

1. RNA **splicing** regulation and function in human myeloid cells, antiviral genes, immunity & cancer
2. Characterization of human genetic variants affecting **splicing**, therapeutics

### Main methodologies:

1. Experimental:
  - Cell lines & primary myeloid cells
  - Standard molecular biology
  - RNA seq
  - CRISPR, microscopy, FACS...
2. Computational:
  - RNA seq analysis, networks
  - *In silico* splicing features
  - Comparative transcriptomics

### Collaborative potential:

1. Genes regulated by alternative splicing in any model organism
2. Splicing diagnosis of mutations
3. Other RNA processes:
  - Chromatin regulation
  - Noncoding RNAs, long and short
  - Polyadenylation, editing, turnover, transport

