

Title : Biochemical characterization of polysaccharide degradation systems

12 months

Starting February 1st/March 1st 2021

Gross salary: between 2648.79 and 3768.24 € per month according to experience

The project

The ANR project "PULmarin" aims at ascribing function to polysaccharide utilization loci (PUL) identified in bacterial strains living in marine environment and in gut microbiome. The role of the applicant will be to participate in the biochemical characterization of targeted enzymes and to attribute a function to predicted PUL.

The objectives:

The applicant will produce recombinant enzymes (glycoside hydrolases, polysaccharides lyases, sulfatases) selected by our partner (CAZy members, AFMB Marseille). The targeted enzymes will be screened on a unique collection of polysaccharides available in the laboratory. The most interesting enzymes will be characterized by chromatography and spectroscopy methods in order to describe finely all the steps of the degradation of complex polysaccharides.

Skills

Diploma : PhD/thèse

The applicant should have a good experience in molecular biology and protein expression (e.g. E. coli). Knowledges in polysaccharide and polysaccharide degradation enzymes are recommended. Due to the manipulation of a large data set, the applicant must demonstrate autonomy and rigor.

The Institute

The "Centre de Recherches sur les Macromolécules Végétales" CERMAV-CNRS (Grenoble) is a fundamental research center devoted to Glycosciences, with strong and multidisciplinary expertise that spans from chemistry, physical-chemistry, biology to material sciences. All the facilities and expertises required for the achievement of the project are available in the laboratory.

Contact:

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