

Employment contract for Master (12 months)

We are looking for candidates for a 12-month Master's degree contract, with the following profile (preferred):

Project title: Harnessing optimized Poly(ester amide)s for easing Parkinson's

Position: Employment contract for master's degree holders

Place: Instituto Pedro Nunes (IPN)

Supervisor: Patrícia Pereira

Start date: 1 April 2026

Summary of the project: The main aim of this proposal is to synthesize and characterize, from a physicochemical and biological point of view, a new polymer-drug conjugate, composed of poly(ester amide)s (PEAs) and DOPA, as a promising therapeutic agent in the treatment of Parkinson Disease via intranasal administration, improving tolerability and reducing adverse events. In addition to the synthesis of PEAs-DOPA conjugates and their physicochemical characterization, mucoadhesive properties, DOPA release kinetics, uptake studies, *ex vivo* permeation investigations through porcine mucosa, as well as cell viability and uptake in different cell lines will be evaluated.

Background and skills: Completed MSc degree in Engineering (Chemical, Biomedical, Materials), Biochemistry, Chemistry, Biotechnology, Biology or any related discipline. Hands-on experience in polymers synthesis and characterization, as well as, molecular biology techniques. Curiosity, resilience and critical thinking.

How to apply: Potential candidates should send their CVs and certificates with subject grades to the following email addresses: nunespereirapatricia@gmail.com, jcoelho3@gmail.com, ana.clo.fonseca@gmail.com, with the message title: Application for the HOPE project, by March 25, 2026

Thank you very much,

Best Regards,

Patricia Pereira