

Expression of Interest – UPM Supervisor

Marie Skłodowska Curie Action –Postdoctoral Fellowship 2025 (MSCA-PF-2025)

Contact Person/Scientist in charge Name	Alfonso
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Department /Institute /Centre Name	Dpt. de Inteligencia Artificial (DIA)
Address	Campus de Montegancedo (Boadilla del Monte)
Province	Madrid
Research Area	Information Science and Engineering (ENG) Life Sciences (LIF) Mathematics (MAT)
Brief description of the Centre/Research Group	Laboratorio de Inteligencia Artificial (LIA-UPM) <u>www.lia.upm.es</u> is an interdisciplinary research group in UPM formed by researchers and professors working in Systems and Synthetic Biology, DNA Computing, and Artificial Intelligence applied in biomedicine and microbiology.
	www.lia.upm.es
Project description	We offer one research position to collaborate in an European Pathfinder research project:
	Project SPECTRA-BREAST : <u>www.spectrabreast.eu</u> Spectra-BREAST aims to enhance breast-conserving surgery by developing a cutting-edge intraoperative tool for real-time, accurate assessment of tumor resection margins.
	The project brings together a strong consortium of 6 partners, including 1 research hospital, 3 academic research centers, and 2 innovative companies.
	Running from 2025 to Dec. 2028, Spectra-BREAST is funded with approximately €3 million by the European Innovation Council under the Pathfinder Open 2024 framework (Call HORIZON-EIC-2024-PATHFINDEROPEN-01-01).
	SpectraBREAST introduces an innovative, multimodal technology that combines Hyperspectral Imaging (HSI), fiber-optic Raman Spectroscopy (RS), and advanced Al algorithms. This integrated system will provide real-time, high-accuracy feedback on tumor margins within a few minutes, helping surgeons identify and remove residual cancerous tissue during the initial surgery. This solution aims to significantly reduce reoperations, improve patient outcomes, and lower healthcare costs.
Applications: documents to be submitted and	LIA group is in charge of the AI modelling of HSI and Raman spectra. CV, letter of motivation, letter of references.
deadlines	Deadline: April 30, 2025.
	Email: arpaton@fi.upm.es (Alfonso Rodríguez-Patón)