

Marie Skłodowska Curie Action–Postdoctoral Fellowship 2026 (MSCA-PF-2026)

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Department /Institute / Centre Name/Location	Grupo de Aplicaciones del Procesado de Señal (GAPS), Señales, Sistemas y Radiocomunicaciones (SSR) / Information Processing and Telecommunications Center (IPTC), ETSI Telecomunicación, Madrid	
Research Area	Information Science and Engineering (ENG) Mathematics (MAT)	G1-Computer science and informatics M2-Applied Mathematics
Research team/group	<p>The Grupo de Aplicaciones en Procesado de Señal (GAPS) is a research group with a considerable experience in signal processing research focused on theory and applications, including speech, health, navigation and security. We have made recent contributions to fields such as causal inference, explainable AI, multimodal survival analysis, synthetic data generation, federated learning and few-shot learning, to mention some. The group has considerable experience on national and international research projects, including several ongoing European projects, which allow us to have a network of national and international partners. More details on the webpage: https://www.gaps.ssr.upm.es/</p>	
Keywords	Deep Generative Models; Interpretable Artificial Intelligence; Kolmogorov Arnold Networks; Causal Inference	
Research Focus	<p>Interpretable Deep Generative Models for causal inference in health</p> <p>Reliable causal reasoning is essential in healthcare, where decisions directly affect patient outcomes. Yet many machine learning methods prioritize predictive accuracy over causal validity and interpretability, while deep generative models remain largely disconnected from causal modeling frameworks.</p> <p>This research line aims to develop interpretable by design causally informed deep generative models explicitly designed for medical applications. The objective is to integrate representation learning with principled causal approaches under realistic constraints such as limited data, confounding, and missing information.</p> <p>Potential directions include interpretable architectures (e.g., KANs), normalizing flows, variational autoencoders or diffusion models, combined with causal discovery and counterfactual inference tools. The topic is intentionally broad, welcoming postdoctoral researchers with expertise in machine learning, causal reasoning, statistics, or computational medicine.</p>	
Applications: documents to be submitted and deadlines	Candidates must send, via e-mail, their CV, letter of motivation and two letters of reference before 28 th April 2026 to j.parras@upm.es , clearly indicating in the mail subject “EOI MSCA PF 2026”.	