Call for Selection for the award of no. 1 research contract pursuant to art. 22 of Law no. 240/2010, Scientific-Disciplinary Sector IBIO-01/A – Bioengineering, at the facilities of the Research Unit of Intelligent Health Technologies and of Departmental Faculty of Engineering of the Campus Bio-Medico University of Rome (competition code: CDR/06_25).

Competition code: CDR/06_25

Departmental Faculty/Research Unit of affiliation	Departmental Faculty of Engineering/ Intelligent Health Technologies
Place of activity	Campus Bio-Medical University of Rome Via Alvaro del Portillo, 21 – Roma
Scientific Disciplinary Group	09/IBIO-01 – Bioengineering
Scientific-Disciplinary Sector	IBIO-01/A – Bioengineering
Project title	Design and development of a device for electrochemical monitoring of the cell culture differentiation process.
Description of the research project	The project aims to develop an innovative platform for monitoring the cell differentiation process, using on non-destructive and cost-effective analysis techniques. The candidate will contribute to the design and implementation of a device capable of in-line, real-time detection of metabolites and electrolytes (e.g., glucose, lactate, calcium) in cell cultures. The project is structured into several integrated phases: device fabrication and functionalization of sensing surfaces; detection of target biomarkers using various electrochemical techniques (potentiometric and galvanic); and development of a dedicated user interface for data management and visualization. The project will offer the opportunity to acquire multidisciplinary expertise in the fields of tissue engineering, electrochemistry, and the development of integrated sensor systems.
Scientific Supervisor	Dott. Joseph Lovecchio
Maximum number of publications	3
Language knowledge and skills	Advanced knowledge of the English language
Date, time and place of interview	**8th January, 2026, 3:00 p.m.** Remote candidates on **Microsoft** platform

Funding body	MUR
Funding programme/call	Progetto SISTINE - Unleashing the full potential of Tissue Engineering using Machine Learning-inspired standard metrics, project number FIS-2023-03542, linea di finanziamento Bando MUR FIS 2 - Fondo Italiano per la Scienza (FIS), Principal Investigator Dott. Joseph Lovecchio, CUP J53C24004210001
Grant agreement number	FIS-2023-03542
CUP	J53C24004210001