

Fondo Sociale Europeo Plus 2021/2027

FSE+

Sportello 2025 P.S. 20/24

Sostegno alla realizzazione di dottorati di ricerca

With Decree No. 9526/GRFVG of February 28, 2025, the Friuli Venezia Giulia Region published the Notice regarding the submission of operations for Specific Program No. 20/24, which aims to support higher education through the realization of PhD programs.

Specific Programme 20/24, through the funding of doctoral scholarships, contributes to the achievement of the objectives of the Sustainable Smart Specialisation Strategy (S4). It supports the development or strengthening of integration with the regional production system and/or research organisations, through coordination and collaboration mechanisms with regional enterprises or research bodies, or by leveraging the potential for technology transfer of processes, products, applications, or, more broadly, research outcomes.

- Sportello 2025
- Ciclo 41
- CUP J93C25000640008
- Progetto 2025/6525/11

Dottorato in **Personalized Medicine and Innovative therapies**

"Characterization and Differentiation of Induced Pluripotent Stem Cells (iPSC) from Different Origins: An in vitro Model for the Study of Familial Intrahepatic Cholestasis (FIC)"

Induced pluripotent stem cells (iPSCs) have revolutionized the field of regenerative medicine, offering unprecedented opportunities to understand disease mechanisms and develop new therapeutic strategies. They are obtained by reprogramming somatic cells into a pluripotent state, similar to that of embryonic stem cells, without the ethical issues associated with the use of embryos. Since their discovery in 2006 by Shinya Yamanaka, iPSCs have become a powerful tool for both basic and applied research. iPSCs can be derived from various somatic lines, such as blood, urine, or fibroblasts, offering remarkable versatility for research and clinical applications. However, despite their vast potential, the differences between iPSCs derived from different sources have never been explored in depth, presenting challenges in optimizing their use. A key objective of the project is to understand which is the best starting source of somatic cells to obtain iPSCs with the capacity to differentiate optimally into hepatic cells in vitro.