

- **Tripartite Research Project (UMFCD Internal Grant Competition 2025)**

Title: *The Role of the Gut Microbiome in Molecular Alterations and microRNA Regulation in Colorectal Cancer*

Institutions: "Carol Davila" University of Medicine and Pharmacy (UMFCD) of Bucharest, Romania; Colțea Clinical Hospital, and the National and Kapodistrian University of Athens, Greece

Team:

Simona-Nicoleta Turcu (Fundeni Clinical Institute)

Assoc. Prof. Dr. Florin Grama; Draga-Maria Mandi (Colțea Clinical Hospital)

Prof. Dr. Maria Gazouli (School of Medicine, National and Kapodistrian University of Athens, Greece)

Overview:

This international collaborative study explores how the gut microbiome—particularly *Fusobacterium nucleatum*, influences molecular changes and microRNA (miRNA) regulation in colorectal cancer. Focusing on Romanian patients with stage II (high-risk) and stage III colon cancer, the project combines genomic and microbiome analyses to identify new biomarkers and therapeutic targets that may improve outcomes and guide personalised treatment strategies.

Future Plans

The Romanian Society of Coloproctology (SRCP) is committed to shaping the next chapter of coloproctology in Romania through growth, collaboration, and excellence. Building on the society's solid foundation and increasing international engagement, our focus for the coming years will be on sustainable development and meaningful impact, both nationally and within the ESCP network.

Our strategic priorities include:

- **Expanding national collaboration** by connecting centers across the country and creating a structured network that promotes consistent training, data exchange, and shared clinical experience in colorectal care.
- **Enhancing education and training**, with hands-on workshops, live surgery courses, and multidisciplinary symposia designed to strengthen technical expertise and teamwork between surgeons, gastroenterologists, and allied professionals.
- **Establishing a national clinical and research registry** to facilitate outcome monitoring, evidence generation, and integration into European audits and studies.

- **Empowering the next generation**, through dedicated mentorship programmes, trainee fellowships, and young specialist sessions that encourage active involvement in ESCP activities and leadership pathways.
- **Fostering international partnerships** by developing joint projects and scientific exchanges with other European societies, reinforcing Romania's contribution to global knowledge and innovation in coloproctology.
- **Promoting awareness and prevention**, through public education initiatives and advocacy for national screening and early detection of colorectal disease.

Through these initiatives, SRCP aims to strengthen the Romanian community of coloproctology, promote excellence in patient care, and position Romania as an active and forward-looking partner within the European Society of Coloproctology.