

**Title: SOCS/CRC: A longitudinal colorectal cancer collection for the discovery of new biomarkers and therapeutic targets**

**Elisabeth LETELLIER (1)**

*1) Molecular Disease Mechanisms (MDM) group, University of Luxembourg (UL)*

We have established a comprehensive longitudinal National Colorectal Cancer Cohort, designed to support biomarker discovery and the development of novel therapeutic strategies. Leveraging this resource, we have identified pathogenic bacterial species associated with colorectal cancer, alongside prognostic and predictive biomarkers relevant to disease progression and treatment response. Importantly, the cohort has enabled the derivation of patient-specific organoid lines, which we use for personalized medicine approaches, including drug screening and repurposing studies. The cohort is now fully characterized at the metagenomic and transcriptomic levels, with metabolomic profiling currently underway, aiming to create a deeply annotated, multi-omics dataset integrated with longitudinal clinical metadata. This resource offers a powerful platform for translational colorectal cancer research, bridging basic discovery and clinical application.

**SPEAKER BIOSKETCH: Dr. Elisabeth LETELLIER (UL)**

**NAME, SURNAME:** Elisabeth, LETELLIER

**TITLE:** Professor, PhD

**CURRENT POSITION AND OTHER RELEVANT PROFESSIONAL ACTIVITIES AND ACCOMPLISHMENTS:**

Professor Elisabeth Letellier leads the Molecular Disease Mechanisms (MDM) group within the Department of Life Sciences and Medicine (DLSM) at the University of Luxembourg (UL). She completed her PhD in Molecular Biology at the German Cancer Research Center (DKFZ) in Heidelberg, Germany, and subsequently conducted a postdoctoral fellowship in collaboration with ApoGenix. In 2009, Dr. Letellier joined the DLSM at UL. She transitioned to an independent investigator role and has been co-directing the MDM group since 2020. Her research primarily focuses on elucidating the mechanisms that drive tumor initiation and progression in colorectal cancer, with particular emphasis on the role of the tumor microenvironment.

**SPEAKER BIOSKETCH:** Dr Daniel LEONARD, (HRS)

**NAME, SURNAME:** Daniel Leonard

**TITLE:** MD, PhD, Colorectal Surgeon, Professor of Surgery

**ORCID ID:** 0000-0002-9787-2133

**EDUCATION:**

MD, Université Catholique de Louvain (2002)

Specialization in General Surgery (DES), Université Catholique de Louvain (2008)

PhD in Medical Sciences, Université Catholique de Louvain (2015)

**CURRENT POSITION**

Colorectal Surgeon, Hôpitaux Robert Schuman, Groupe Chirurgical Zitha (2024 – present)

Consultant Colorectal Surgeon, Cliniques Universitaires Saint-Luc (2024 – present)

Adjunct Teacher, University of Luxembourg (2024 – present)

Clinical Academic Professor, UCLouvain (2023 – 2024)

Clinical Associate Professor, UCLouvain (2015 – 2023)

Senior and Associate Consultant, Colorectal Surgery Unit, Cliniques Universitaires Saint-Luc (2010 – 2024)

Research Fellow, Mayo Clinic, Rochester, USA (2009)

Assistant Consultant, Hôpital Saint-Antoine, Paris (2008 – 2009)

**AWARDS AND HONORS:**

Saint-Luc Foundation Fellowship – Visiting Clinician, Mayo Clinic (2009)

Saint-Luc Foundation Fellowship – Clinical Researcher (2012 – 2014)

**AND OTHER RELEVANT PROFESSIONAL ACTIVITIES AND ACCOMPLISHMENTS:**

Vice-Dean for Internships, Faculty of Medicine, UCLouvain (2019 – 2024)

President, Belgian Section of Colorectal Surgery, Royal Belgian Society of Surgery (2023 – 2024)

Board Member, Familial Adenomatous Polyposis Association (since 2008)

Vice-President, Francophone Group for Enhanced Recovery After Surgery (GRACE) (since 2014)