

Sylvie Ricard-Blum - Short CV (20260529)

Sylvie Ricard-Blum received a PhD in Biochemistry in 1986 from the University Lyon 1 for her work on the biochemical and biophysical characterization of collagens IX and XI. Afterwards she worked for 10 years in Pasteur Institute in Lyon on the mechanisms of collagen cross-linking in fibrosis. Then she moved to the Institute of Structural Biology in Grenoble to work with Michel van der Rest and characterize the biomolecular interactions involved in the assembly and functions of the extracellular matrix (ECM) with a focus on endostatin, a matricryptin of collagen XVIII. In 2004 she moved to the University Lyon 1 where she got a position of Professor in Biochemistry, coordinated the Master program in Biochemistry and was Director of the Interdisciplinary Sciences - Health Doctoral School. She is an Emeritus Professor of Biochemistry at the University of Lyon since 2025. She has been Secretary and President of the French Society for Matrix Biology, and President of the International Society for Matrix Biology (ISMB). She served on the ISMB council as a member and as the editor of the newsletter and was awarded the ISMB Distinguished Investigator Award in 2025. She is editor and a member of the steering committee of the HUPO Proteomics Standard Initiative (HUPO-PSI), and is Editor-in-Chief of Matrix Biology and Matrix Biology Plus journals.

Her work, combining biochemistry, biophysics, bioinformatics and systems biology, aims at studying ECM structure - interaction - function relationships to characterize the multimolecular complexes and interaction networks formed in the pericellular and extracellular matrix, and to decipher the molecular mechanisms rewiring these networks in diseases. Her team has developed ECM protein and glycosaminoglycan arrays to screen ECM interactions, identified hundreds of ECM interactions, built and analyzed numerous ECM interactomes including those of endostatin, glycosaminoglycans, syndecans, lysyl oxidases and membrane collagens. Her team has created and regularly updates the ECM interaction database MatrixDB (<https://matrixdb.univ-lyon1.fr/>).