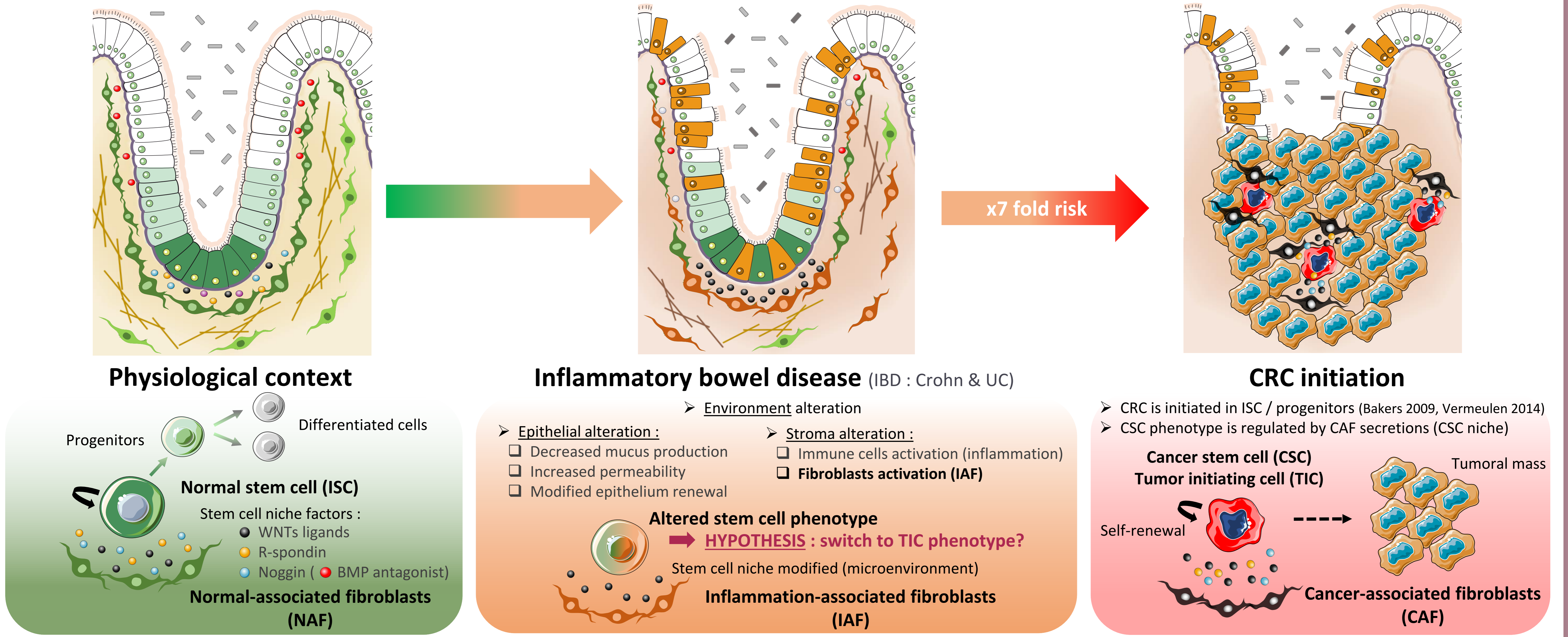
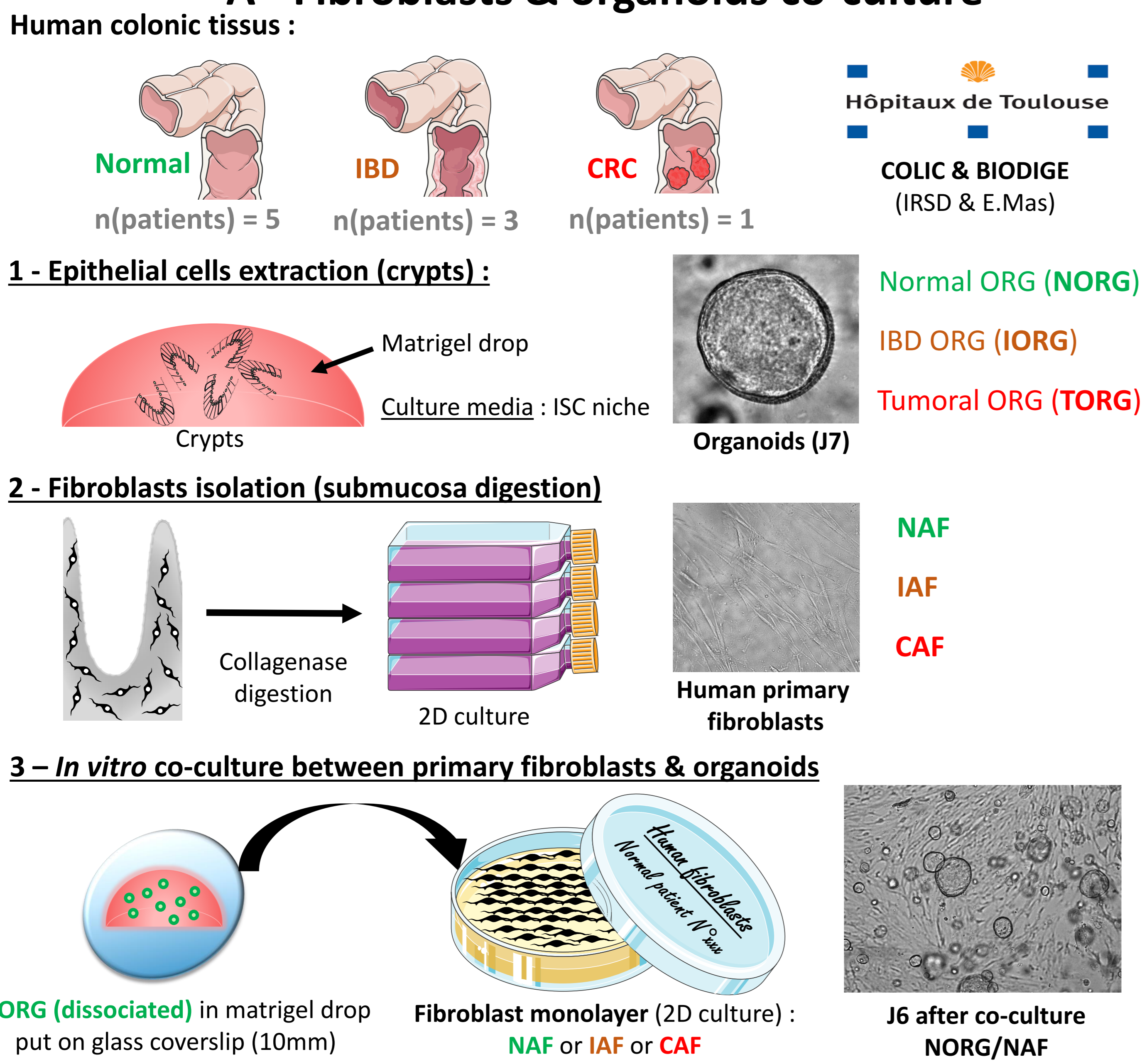


I - INTRODUCTION & OBJECTIVES

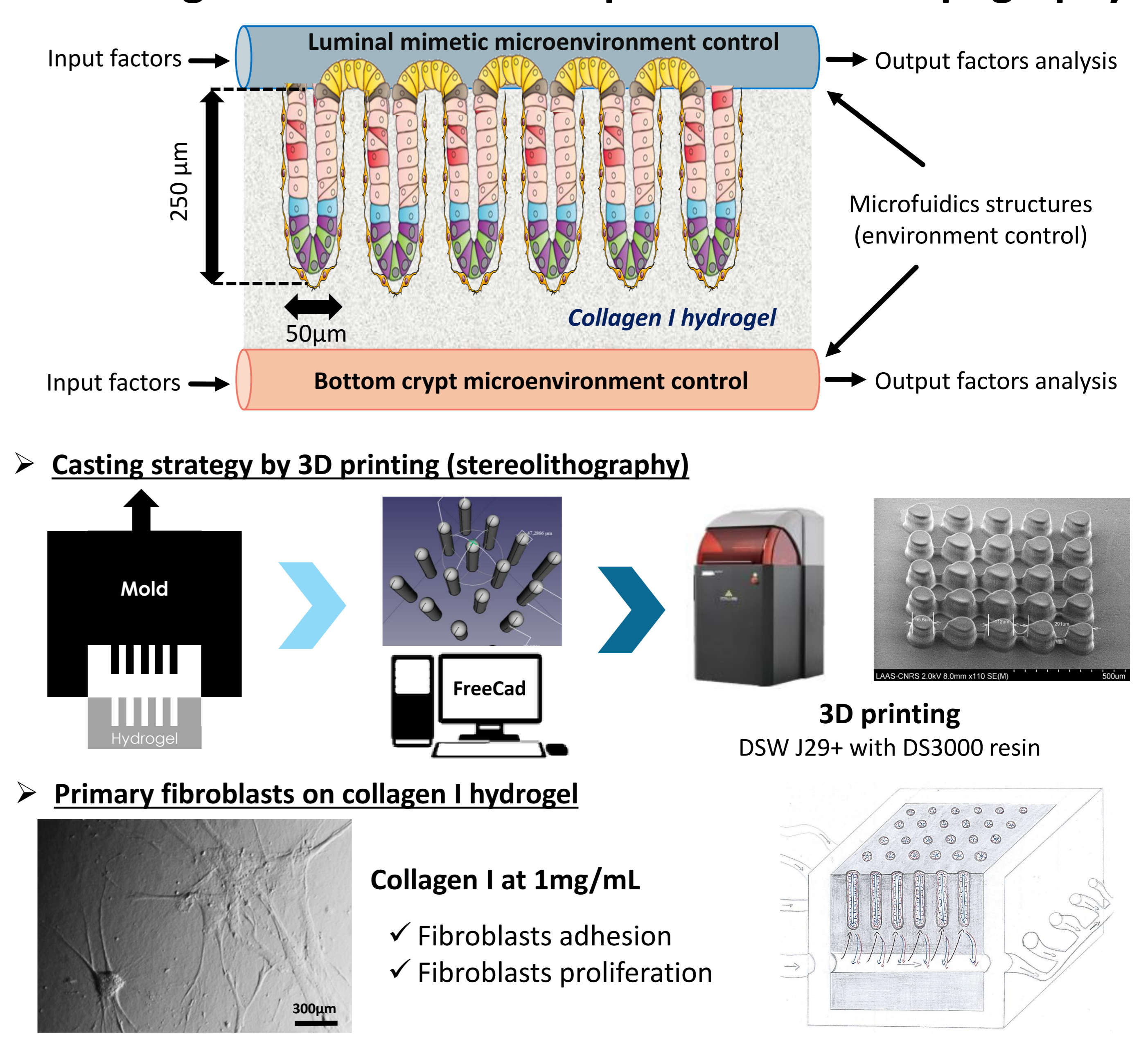


II – EXPERIMENTAL STRATEGIES

A - Fibroblasts & organoids co-culture

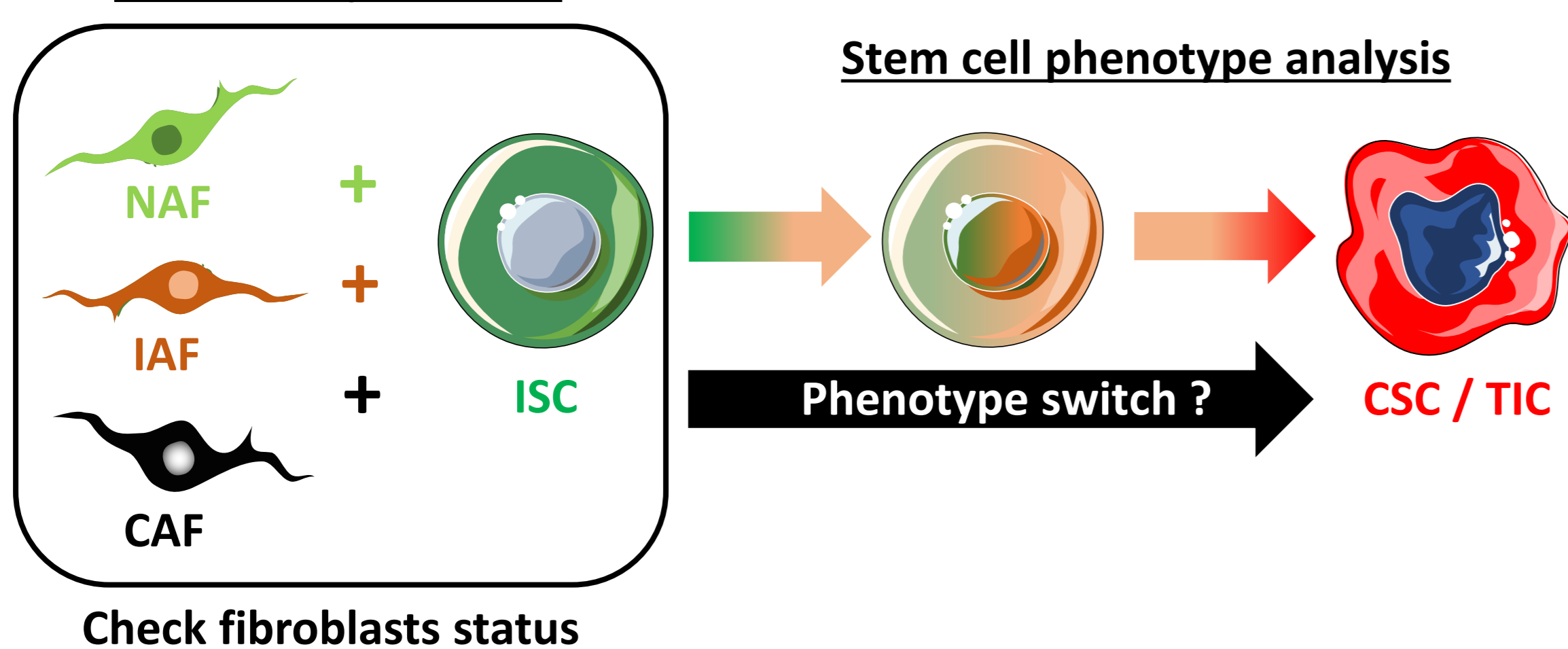


B - 3D gut microdevice to reproduce colon topography



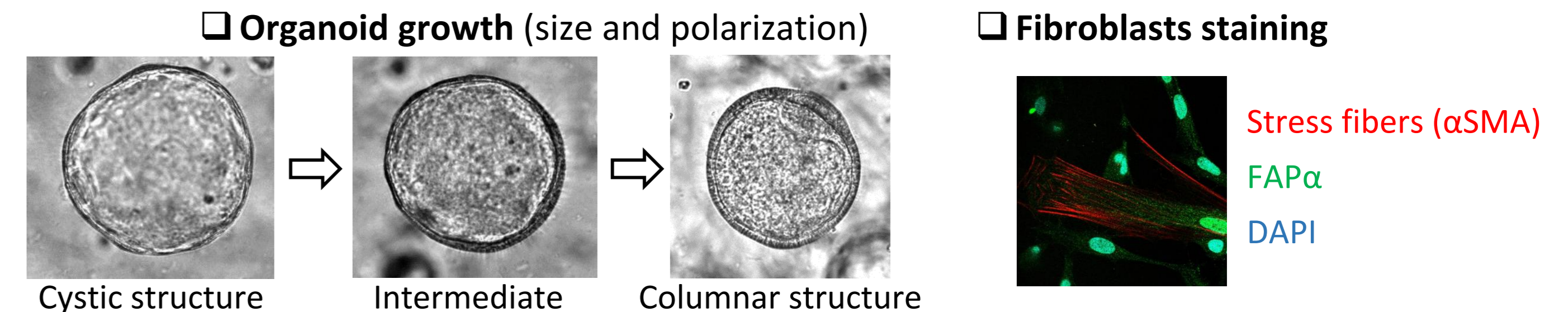
III – OUTPUT ANALYSIS

Co-culture procedure



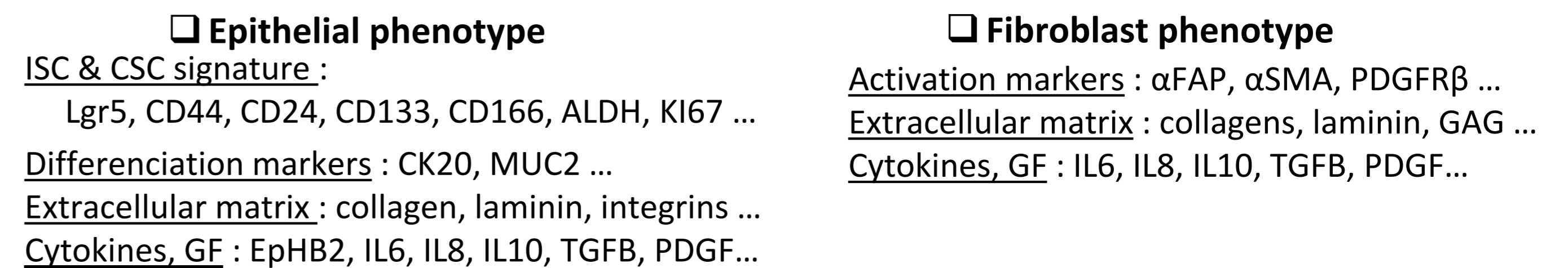
A - Cellular investigations : cellular growth & survival

➤ Microscopy (brightfield & immunostaining)

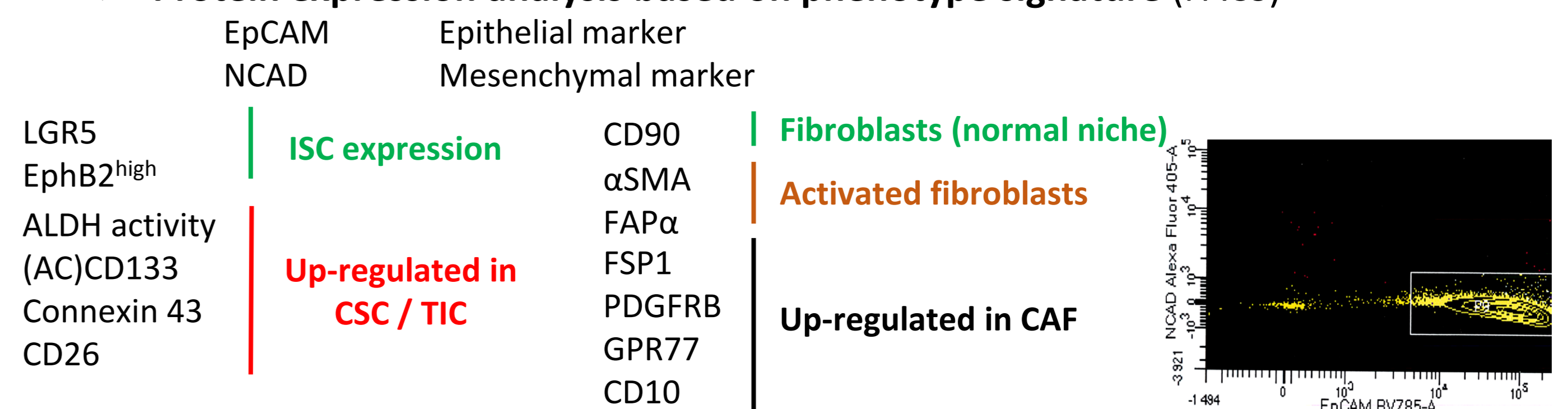


B – Molecular & phenotype investigations

➤ Transcriptomic analysis (Fluidigm / RNAseq)



➤ Protein expression analysis based on phenotype signature (FACS)



IV - CONCLUSION

To study a putative reprogramming of normal stem cell (ISC) to tumor-initiating stem cells (TIC) by fibroblasts depending on their (physio)pathological origin, we performed *in vitro* co-culture between organoids & fibroblasts provided from human colonic biopsis.

During the first year of this project, we established organoids & fibroblasts biological bank, adjusted culture protocols for co-culture experimentation, immunostaining, transcriptomic analysis and first FACS analysis on organoids & fibroblasts markers.