A fundamental property of living cells is their extraordinary ability to sense and respond to a changing environment. In higher eukaryotes, malfunctioning of signaling networks has many devastating consequences such as cancer, diabetes or autoimmunity. Such consequences arise from the inability of cells to properly evaluate information and cooperate. Our main focus is to understand how individual cells use signaling networks to integrate this information, and eventually coordinate collective cell behaviors.

BIOGRAPHY
Dr. Regot received his Ph.D. from Pompeu Fabra University (Barcelona, Spain) in 2011, where he worked with Dr. Francesc Posas studying MAP kinase signaling in yeast. He then worked in Dr. Markus Covert’s lab at Stanford’s Biomedical Engineering Department where he invented a new approach to systematically interrogate protein kinase activity dynamics in live single cells. In 2016 Dr. Regot started his own lab at Johns Hopkins University School of Medicine where he studies how single cell MAP kinase signaling dynamics orchestrate collective cell behaviors.