

## PROBLEM FRIDAY 29th APRIL 2021

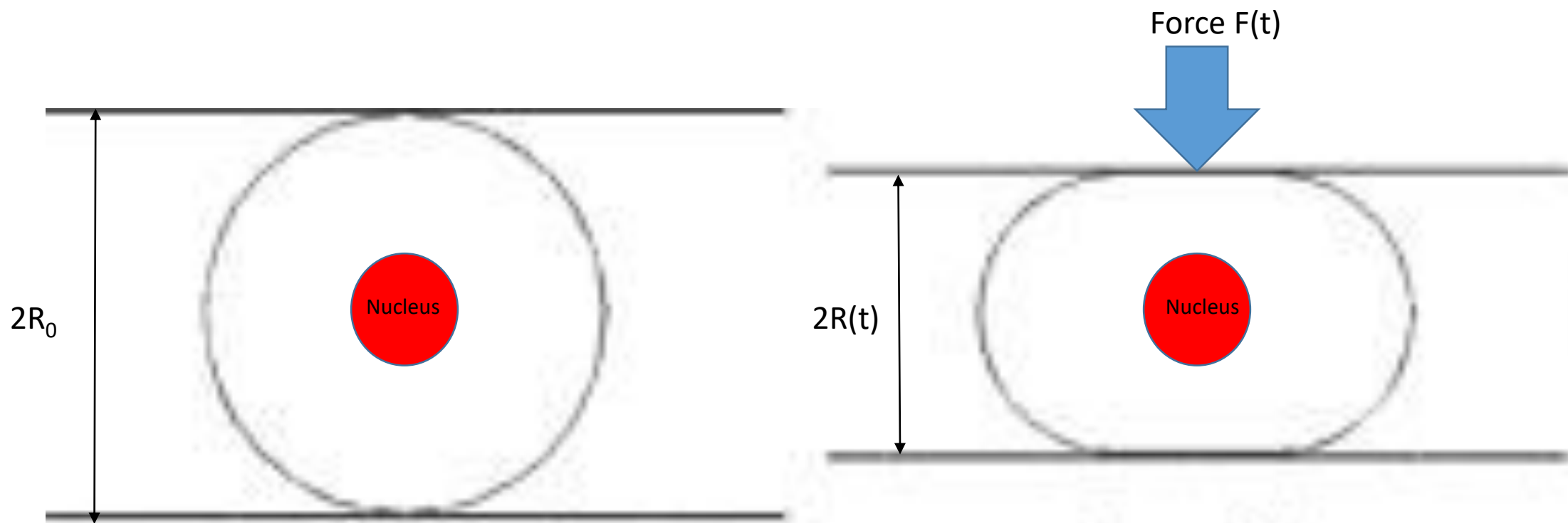
A cell has is compressed to fit in a narrow space (schematic below)

**Your job is to propose a model relating  $F$  and  $\lambda$ .**

Your model should include equations driving the deformation of the cell membrane and of the cytoskeleton.

Choose an appropriate model depending on the cell type you want to consider.

Make assumptions and find quantitative values permitting to solve your model



$$\lambda(t) = R(t)/R_0$$