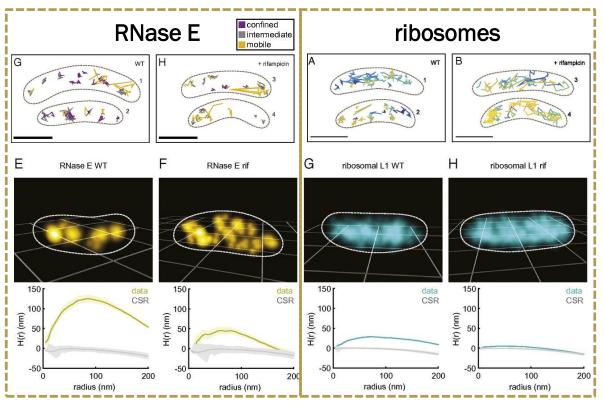
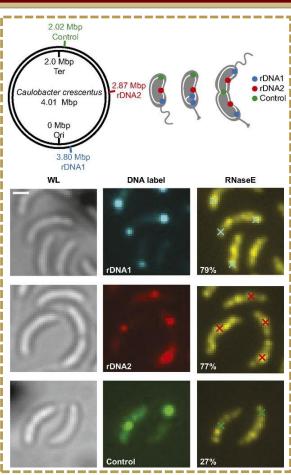


3D spatial organization and dynamics of RNase E and ribosomes in *Caulobacter crescentus*





Upon transcription inhibition, single-particle tracking (SPT) in live cells results show RNase E and ribosomes exhibit decreased confinement and increased diffusion, while super-resolution (SR) images in fixed cells show decreased clustering. These results show that active transcription and RNA substrate availability facilitate confinement and clustering of both RNase E and ribosomes.



RNase E clusters colocalized with two *Caulobacter* rRNA gene loci, indicating that RNA processing can be spatially organized in a bacterium according to its transcriptional profile.