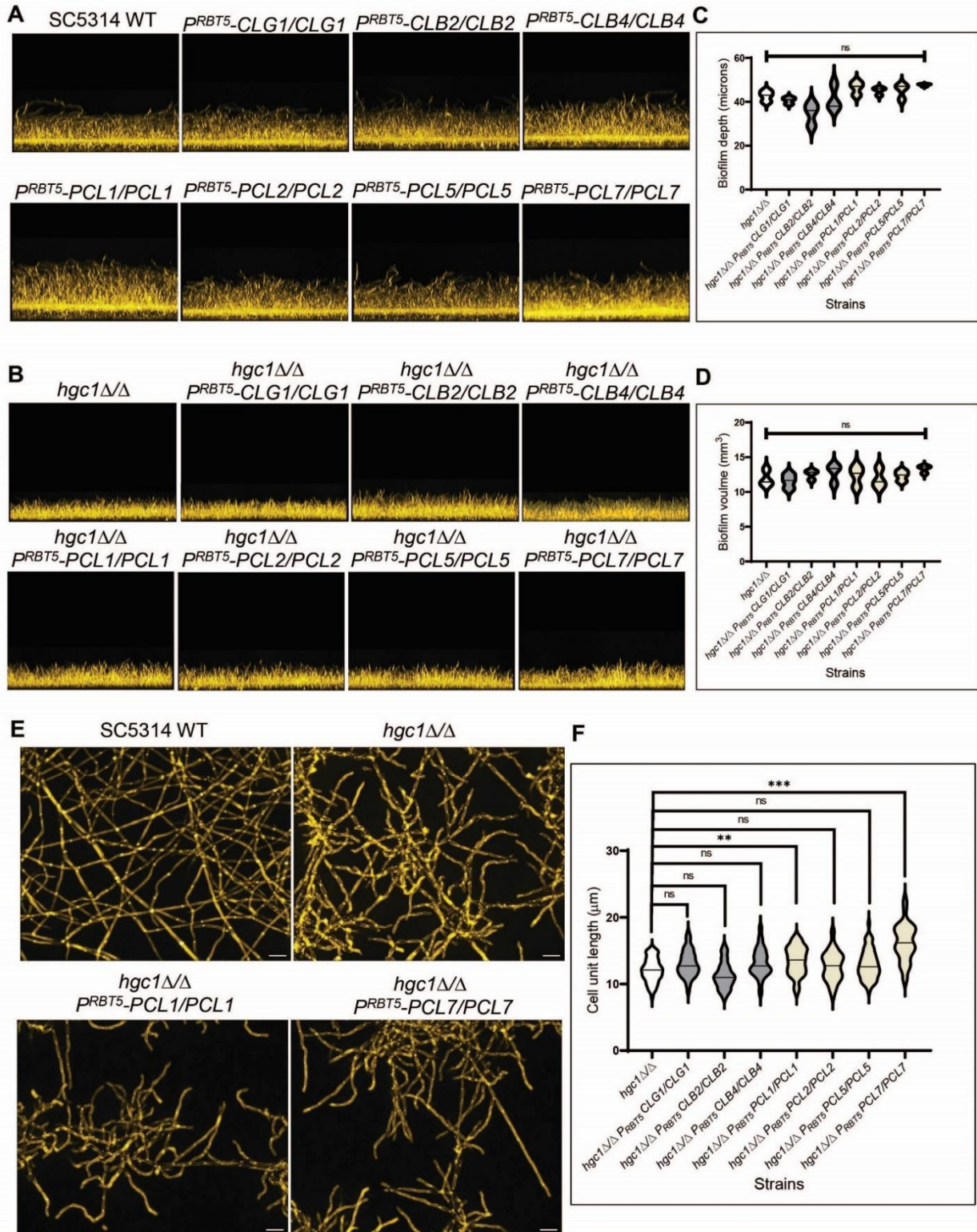


Supplementary Figure S4



**Fig. S4: Overexpression of cyclin genes *PCL1* and *PCL7* induces hyphal growth during biofilm formation in SC5314 *hgc1* $\Delta/\Delta$  mutant. (A) and (B)** Biofilm side view projections. Wild-type SC5314 and its derivative strains were assayed for biofilm formation under *in vitro* conditions. All strains were grown in RPMI at 37°C for 24 hours (96-well plate). Fixed biofilms were stained using Calcofluor white and imaged using a Keyence BZ-X800E fluorescence microscope. Representative side view images are shown, and the vertical scale bar represents the 100  $\mu\text{m}$  in length. **(C) and (D)** Violin plots showing the biofilm depth (in microns) and volume (in  $\text{mm}^3$ ) distributions of the indicated strains respectively. Biofilm depth and volume were measured with the software ImageJ. The significant differences were calculated between the pair of means using Sidak's multicomparison test: ns,  $p > 0.05$ . **(E)** Apical view projections from the biofilms of the indicated strains were obtained using maximum intensity Z-projection of ~20 planes at 0.45  $\mu\text{m}$  step-size. White scale bars in each panel are 100  $\mu\text{m}$  in length. **(F)** Violin plots showing the distribution of cell unit lengths of the indicated strains. Cell unit lengths were quantified with ImageJ, with a minimum of five fields and 50 cells for each strain background. The significant differences were calculated between the pair of means using Sidak's multicomparison test: \*\*,  $p < 0.01$ ; \*\*\*,  $p < 0.001$ .