Supplemental materials for Callaghan, et al. Generation of Xylose-inducible promoter tools for *Pseudomonas* species and their use in implicating a role for the Type II secretion system protein XcpQ in inhibition of corneal epithelial wound closure

Supplemental Fig 1

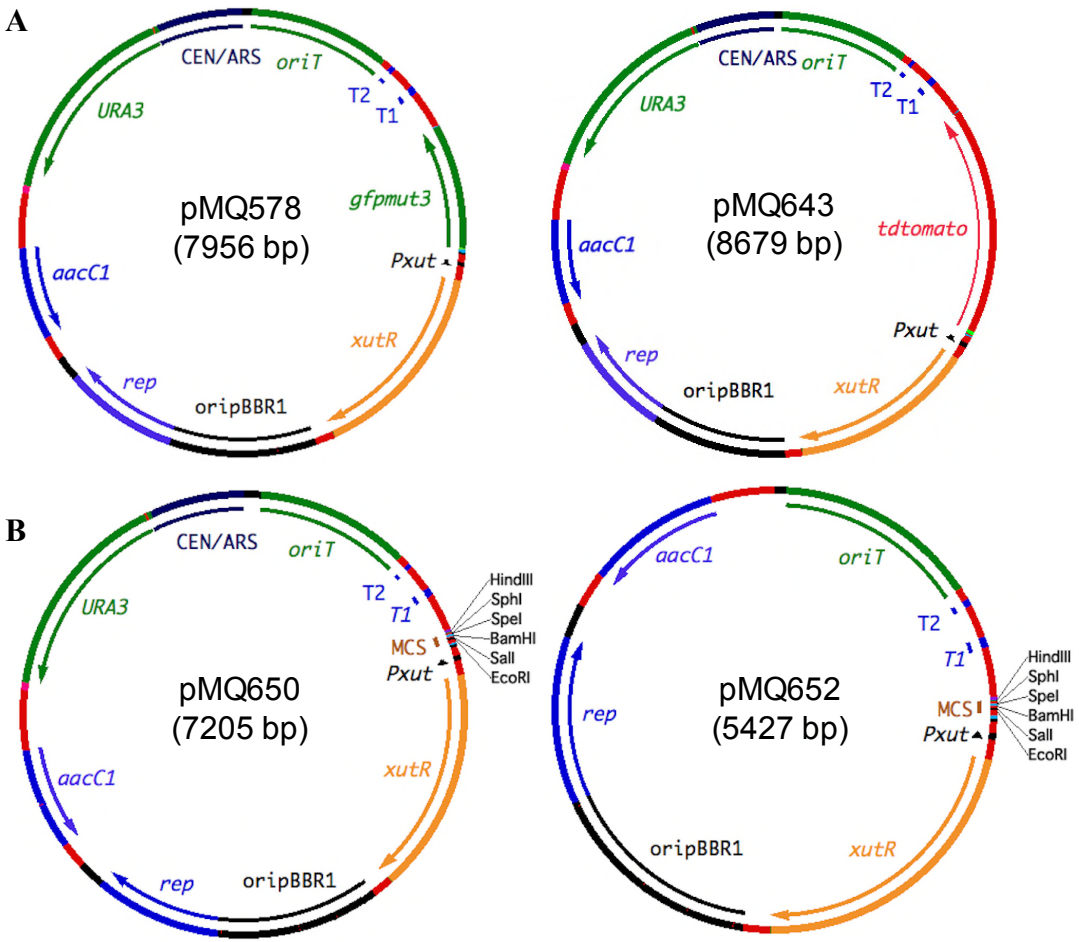

Figure S1. Schematic diagrams of major plasmids made for this study. (**A**) Plasmids for xylose-inducible expression of fluorescent proteins. (**B**) Plasmids with P_{xut} and a multicloning site (MCS) with restriction sites to facilitate cloning.

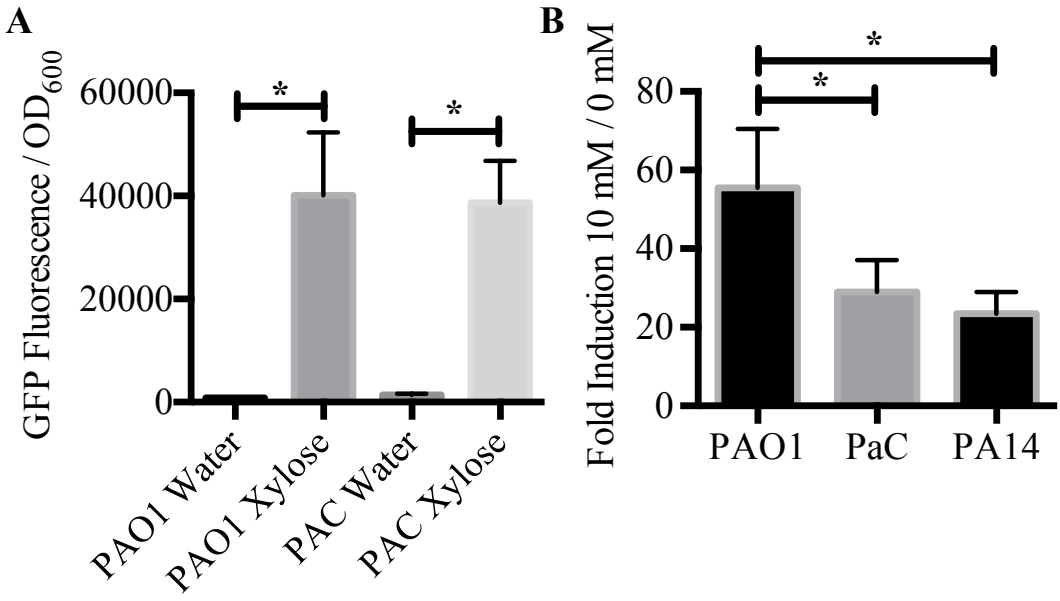

Figure S2. P_{xut} promoter is inducible in additional *P. aeruginosa* strains at 30˚C. Bacteria with pMQ578 were grown overnight in LB broth, washed, and adjusted to OD_{600}=2.0 in PBS with xylose at 10 mM or an equal volume of water as a negative control. GFP fluorescence and culture optical density was measured at 20 h. Mean and SD are shown, n=6 independent cultures. Asterisks indicate significant differences by ANOVA with Tukey's post-test ($p<0.05$). Normalized fluorescence for cultures (**A**) and fold induction of normalized fluorescence of induced versus uninduced cultures (**B**) are shown. P_{xut} was induced in a variety of *P. aeruginosa* strains and was more highly induced in strain PAO1 than PAC and PA14.

Supplemental Fig 3

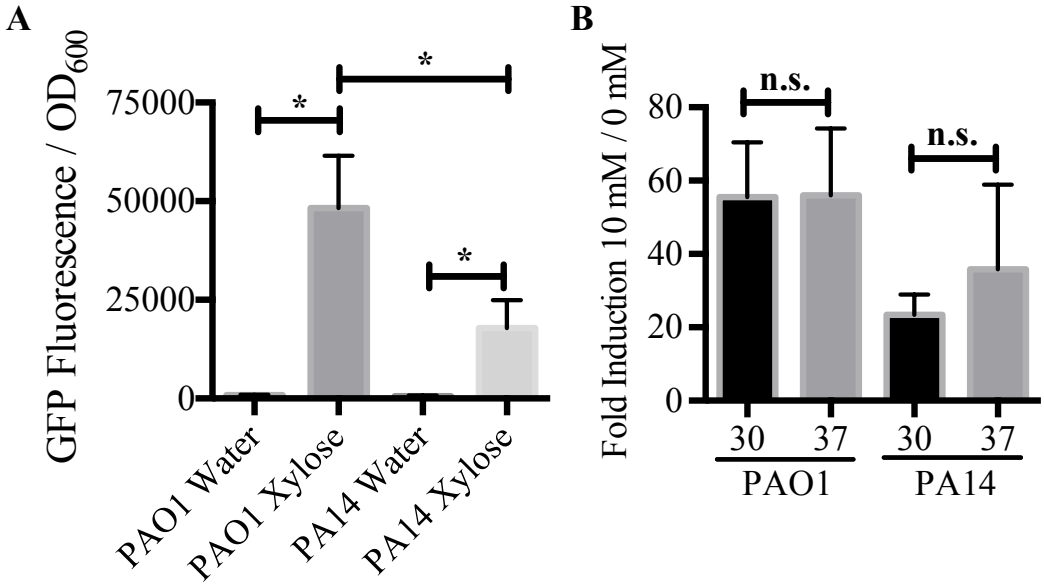

Figure S3. Use of P_{xut} promoter in *P. aeruginosa* strains at 37˚C and comparison of expression at 30˚C. Bacteria with pMQ578 were grown overnight in LB broth at the indicated temperature, washed, and adjusted to OD_{600}=2.0 in PBS with xylose at 10 mM or an equal volume of water as a negative control. GFP fluorescence and culture optical density was measured at 20 h. Mean and SD are shown, n=6 independent cultures. Normalized fluorescence for cultures grown at 37˚C (**A**) and fold induction of normalized fluorescence of induced versus uninduced cultures (**B**) are depicted. The asterisks indicate significant differences by ANOVA with Tukey's post-test ($p<0.05$). n.s. is an abbreviation for not significant. Some data from panel B was also shown in Figure S2B. P_{xut} was more highly inducible in strain PAO1 than PA14. P_{xut} and P_{BAD} were indistinguishable in *P. aeruginosa*. The pMQ578 plasmid has P_{xut}-*gfp*, and pMQ630 has P_{BAD}-*gfp*.