10 identical residues) (4). Regardless of the role of *tamA*, there is nevertheless no indication on the basis of present evidence that *tamA* mutations can have a phenotype other than 'partially repressed'.

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The autoregulatory protein Mor and OxyR are identical

In 1980, Diderichsen (2) described the existence in many *Escherichia coli* strains of a phase-variable phenotype that could be distinguished on the basis of colony morphology and the propensity to autoaggregate in broth culture. He also identified a locus, *flu*, whose ON–OFF expression appeared to be responsible for the two different phenotypes. Warne *et al.* (6) later identified an autoregulatory protein, Mor, involved in regulating Flu variation. The *mor* gene (but not *flu*) was cloned, sequenced and mapped to ~89 min on the *E. coli* chromosome.

We have been interested for a number of years in the presence of phase-variable outer-membrane proteins in *E. coli* (1, 4, 5) and the likely identity of one such antigen, termed antigen 43 (Ag43), with the *flu* gene product. During the course of recent studies, we have shown that the DNA-binding protein OxyR is involved in regulating expression of Ag43. OxyR is a redox-sensitive, LysR-type

transcriptional activator known to positively regulate the expression of proteins important under conditions of oxidative stress. However, in the case of Ag43 expression, OxyR acts to repress transcription (3). *oxyR* also maps at ~89 min on the *E. coli* chromosome and computer-assisted homology searches have revealed that Mor and OxyR are actually identical, a fact that may be of some interest to other bacterial surface watchers.

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