

S T A T E N S S E R U M I N S T I T U T

## Identification and characterization of genes promoting biofilm formation

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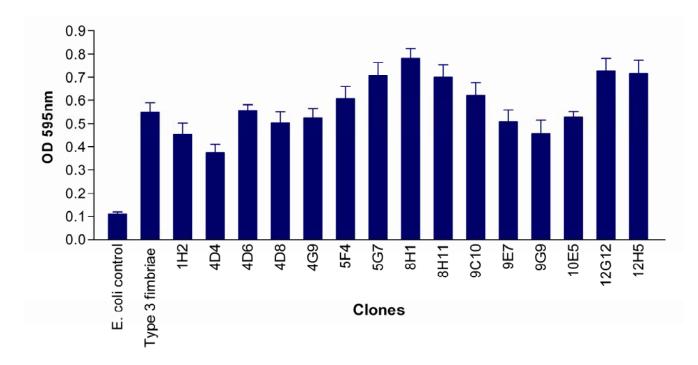
## <u>Klebsiella pneumoniae</u>

**Mutant libraries** 

Screening for biofilm formation in vitro

**Clone libraries** 

*K. pneumoniae* genome library in *E. coli* (1,152 clones) Crystal violet screening for biofilm formation S T A T E N S S E R U M I N S T I T U 1





## **Biofilm formation in vivo**

Infection models: Gastrointestinal colonization/infection

Urinary tract infection

Lung infection



- Compare virulence of WT and biofilm mutants
- Detection and characterization of biofilm formation in infected tissue by fluorescent in situ hybridization (FISH)