

Results of the students efforts

The students sequenced over 12 different candidates for the desired ExoU truncation mutants. Their results helped us to eventually construct each of the 10 deletion mutants correctly. We observed some of the candidate construct had unwanted changes that caused us to reject those candidates and use other candidates that lacked any unwanted changes. After the students completed their project, we finished constructing the 10 deletions mutants and then assayed their effect on the interaction of ExoU with SpcU. We observed that deletions of both the beginning (N-terminus) or end (C-terminus) of ExoU reduced or eliminated interaction of SpcU with ExoU. These results suggest that SpcU and ExoU may interact in a novel manner with two widely separated regions required. We are continuing this project and are working to confirm these observations by other methods. The results these students helped produced were presented in a talk I gave at the Nebraska Microbiology meeting on August 20, 2007 and were a part of the Master's thesis of Suresh Kampalli that was completed in December, 2007. A copy of the powerpoint slide from the talk was also sent.