



California Science Center
CALIFORNIA STATE SCIENCE FAIR
2001 PROJECT SUMMARY

Your Name (List all student names if multiple authors.) Bobbie Jean Gigliotti	Science Fair Use Only <h1 style="margin: 0;">J0308</h1>
Project Title (Limit: 120 characters. Those beyond 120 will be ignored. See pg. 9) Anti biotic resistant bacteria with the help of plasmid DNA	Division <input checked="" type="checkbox"/> Junior (6-8) <input type="checkbox"/> Senior (9-12)
Preferred Category (See page 5 for descriptions.) 12 - Microbiology	
Abstract (Include Objective, Methods, Results, Conclusion. See samples on page 14.) Use no attachments. Only text inside these boxes will be used for category assignment or given to your judges.	
<p>This experiment is to find out whether the amount of plasmid DNA affect the growth of the E. coli on the antibiotic plates and the antibiotic, "sugar" plates. This project is also trying to prove if bacteria can be antibiotic resistant. This experiment is to learn about genetic transformation. It is to make E. coli K-12 strain: HB101 antibiotic resistant by using plasmid DNA(it is beneficial to bacteria survival)and to see the colonies by using a piece of DNA(which has a green florescent protein)from the jellyfish Aequorea victoria. This can be seen under a florescent lamp. The amount of plasmid will effect the growth of the E. coli and will be antibiotic resistant. The E. coli was antibiotic resistant with the help from the plasmid DNA. Actually the amount of plasmid did not effect the growth of the E. coli. The two loops of plasmid had more effect on the E. coli than the thirty-two loops of plasmid. Very weird!! It must depend on how quickly the E. coli adapt to the plasmid. That is another theory I need to investigate!</p>	
Summary Statement (In one sentence, state what your project is about.) I made E. coli resist an antibiotic(ampicillin) by using plasmid(beneficial to bacterial survival)	
Help Received in Doing Project (e.g. Mother helped type report; Neighbor helped wire board; Used lab equipment at university X under the supervision of Dr. Y; Participant in NSF Young Scholars Program) See Display Regulation #8 on page 4. My science teacher and Carry(biochemist) helped me do my experiment.	