The Chemistry Department at Lamar University hosted a Research Seminar, on April 19, 2013. Doctor Cai began the seminar with a brief description of how catheters, that are used on patients in the hospital, can cause urinary tract infections and the growth of a bacteria called CAUTI. In revealing this information, Dr. Cai then introduced what his research at the University of Houston was about which was finding ways to decrease the rate in the growth of this CAUTI bacteria. The research gave the students' facts regarding things that no one would have thought to be true about tools that a hospital uses; which is perceived to be the safest place as far as getting the medical attention you need and the outcome being you getting better not worse. The research also informed the students on what Dr. Cai's solution was to slower the growth of the bacteria, various things that was used to test his hypothesis out, and what he found to be the best way to slower the growth of this CAUTI bacteria. Feedback from the students included:

“…This research seminar showed research that is actually beneficial to the people around me. Other research topics are not always applicable to daily life but this one was...”

Dr. Cai explained what he thought would be the best route as far as decreasing the rate at which the growth of the bacteria was going and it was to test various benign bacteria, in this case E. Colli. The benign E. Colli bacteria acts as a good bacteria that slowers the movement of the CAUTI bacteria but doesn’t completely stops it. Though this is not a treatment to get rid of the bacteria growth, it is still an improvement to getting closer to a treatment. One of the students said:
“...I have never heard much about Biochemistry research...it was very eye-opening and interesting to learn about...”

There were a total of 4 students who attended: 4 undergraduates (all of which were STST participants), 2 were Chemistry majors, 1 with Chemistry and Biology as their major, and 1 Biochemistry major. One area that the students said could be improved was the advertisement for the research seminar. They felt if there was advertisement for the research seminar a week or so ahead of time, there would have been a greater turn out of students who showed up. We have taking into huge consideration what the students have said and it is a suggestion that we will make an effort to integrate in the next research seminar.

Despite the really low turn-out of students, the students thought the information that was presented was very valuable. I feel that this event was very valuable to me and to the other STST students because it allowed students to see how Dr. Cai’s research worked, how it evolved, and what was the outcome of the research in the end. The students agreed saying:

“...Interesting to learn about how the science extends between the different departments and universities...”

-Quiandra Grant
STAIRSTEP Student-Chemistry