- 1. Inhalation Toxicology of Automotive emissions as Affected by an oxidation exhaust catalyst
  - a. I found this paper to be very interesting as I have done a little research myself on toxicology with rats and found this paper to be interesting and enlightening in several different ways. What surprised me about this paper was the somewhat dramatic increase in survival of infant rats from 0% in TAME I with no catalyst to 100% in TAME J and K with the catalyst. I did also find it surprising that the catalyst did not reduce NOx but ended up shifting the chemical balance to reduce toxic reactions. I do have some questions in regard to this study such as: Would different animal models or potential human exposure show more subtle or possibly cumulative effects? So overall in this paper the researchers were trying to see if using oxidation exhaust catalysts would make car emissions less harmful to health or if they could create more dangers. What I took away is that using a catalytic converter makes car exhaust much less harmful at least from the short term studied.
- 2. A comprehensive understanding of ambient particulate matter and its components on the adverse health effects based from epidemiological and laboratory evidence
  - a. This study focused on how real-world traffic air pollution affected healthy people's lungs. What surprised me is that even short exposure which was around two hours caused measurable effects on the lungs and the most obvious lung responses didn't show up right away but they showed up 24 hours after exposure. It also wasn't just vulnerable groups being affected but also healthy people. Some questions that I have regarding this study/paper would be
    - i. What would happen with longer or repeated exposure?
    - ii. Another interesting thought is that would people with asthma or lung disease react more strongly?
  - b. So in conclusion breathing real-world traffic air even for just two hours can trigger lung inflammation and affect immune responses even in healthy adults. The study showed that both gases and particles can be harmful and that short-term exposures matter specifically in those urban areas with heavy traffic.