## **Ethical Issues in your CTE Design Projects**

- Each person should post an ethical consideration (two posts per project group)
- In one sentence please describe the problem you are addressing.
- In one sentence please describe your solution strategy.
- Then describe one ethical or future consideration related to your proposed solution. It is ok to think out of the box here!
- Respond to at least two of your classmates.

In my CTE project there are many ethical concerns as SCI is a traumatic condition afflicting vulnerable patients, desperate for a cure who are very inclined to take personal risks or financial commitments to achieve some sort of improvement in their plight.

Transplantation after SCI in an animal is very different from transplantation in a human with SCI. The translational "distance" between the two transplantations should be reduced as much possible. One way to accomplish this, is to develop mathematical models which simulate cell behaviors, cell-cell interactions or for example can evaluate the effect of stem cell dosage increase and provide insights to the researchers during their in-vitro experiments. The drawbacks of such approach are, that models are approximation of physical systems and not only require to be tuned with real-life data but also be monitored for any drift with new patient data. Ethical considerations include access to personal patient data and education of persons enrolled into clinical trials about the limitations of the experiments and therefore potential risks or adverse events.