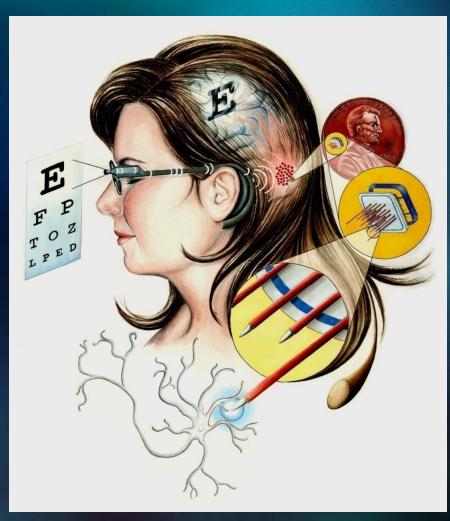




EYES TOWARD THE FUTURE

#### Background



Intra-cortical Visual Prosthesis
Team of IIT

- Development of technology
- Safety and Functional Testing
- Problem: How to proceed with human implantation of the device?

http://neural.iit.edu/visualprosthesis2.htm



## Goals of the Project

To create a comprehensive, scientifically and morally justified framework for the selection of volunteers

To assess the current state of the proposed technology and suggest improvements that would better prepare it for human implantation

### Organization of the Team

**David Gorski** 

**Team Leader** 

Mary DeRoo

Selection SubTeam Leader

> Alex Leasenby Harry Li

**David Gorski** 

Hanna Pyrkh

Electrical/Computer Engineering

Biomedical Engineering

Biochemistry

Mechanical /Aerospace Engineering

Chemical Engineering

Psychology

**Aanchal Taneja** 

Recommendations SubTeam Leader

David Bern
Shanyl Chen
Tom Kelley

**Maham Subhani** 



#### **Progress Towards Goals**

- Team building
- Analyzed and defined the scope of the problem

- Researched the current progress of the sponsor
- Reviewed sponsor's conformation to FDA guidelines

- Further broke down our goals into specific objectives
- Went on a tour of the Chicago Lighthouse

#### Major Obstacles Encountered

An insufficient amount of similar past examples of implants exist

Ethical considerations change depending on the technology

Understanding the application of the equipment requires in-depth knowledge

Group members are inexperienced with neurosurgical dilemmas

### **Anticipated Major Challenges**

Difficulty defining boundaries and justifying the importance of one criterion over another

Possibility of being too broad and unfocused

Difficulty in merging the two subteams' solutions into a final product

**Avoiding bias from the sponsor** 

#### Where We Are Headed

Making a positive step towards the assessment of human implantation by:

1. Converging our research into a framework for subject selection

2. Providing a scientific analysis of what the sponsor has done and needs to do next

3. Compile the collective research into a final report

# Questions?