



# ***DARPA*Tech**

## ***2002 Symposium***

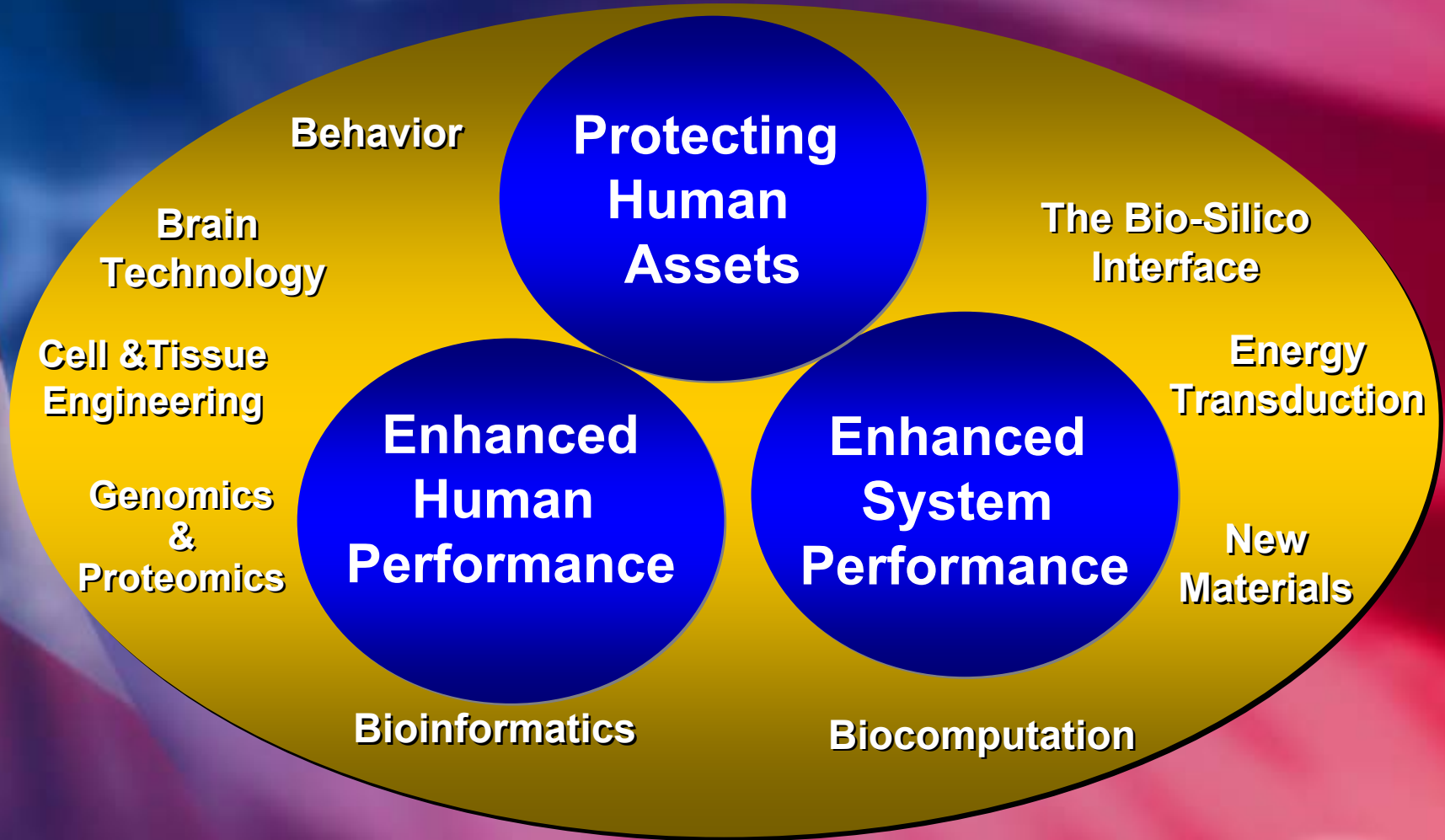
*Transforming*  
***Fantasy***

# The Brain Machine Interface: Augmenting Human Performance

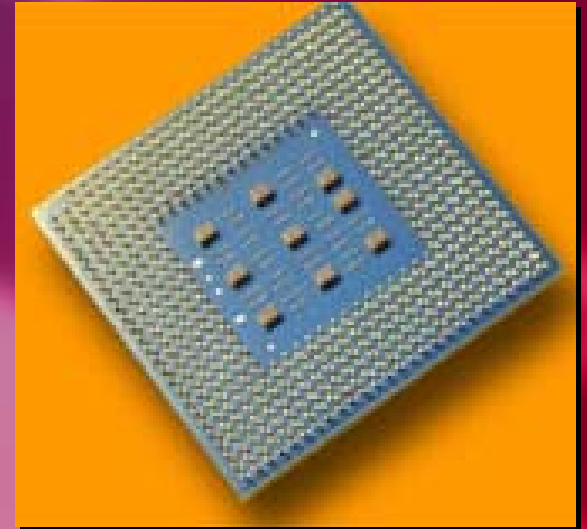
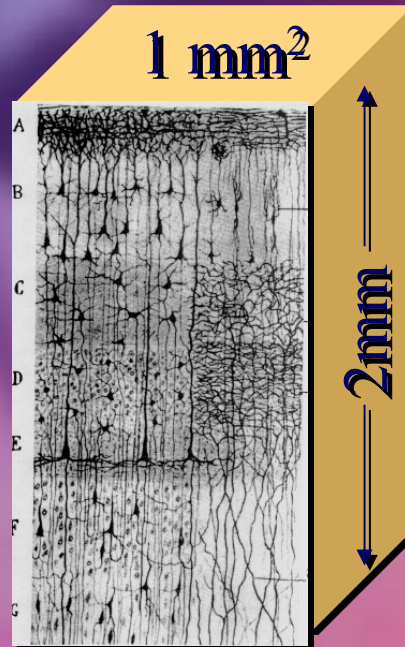
Eric Eisenstadt  
Defense Sciences Office



# Biology... DARPA's Future Historical Strength

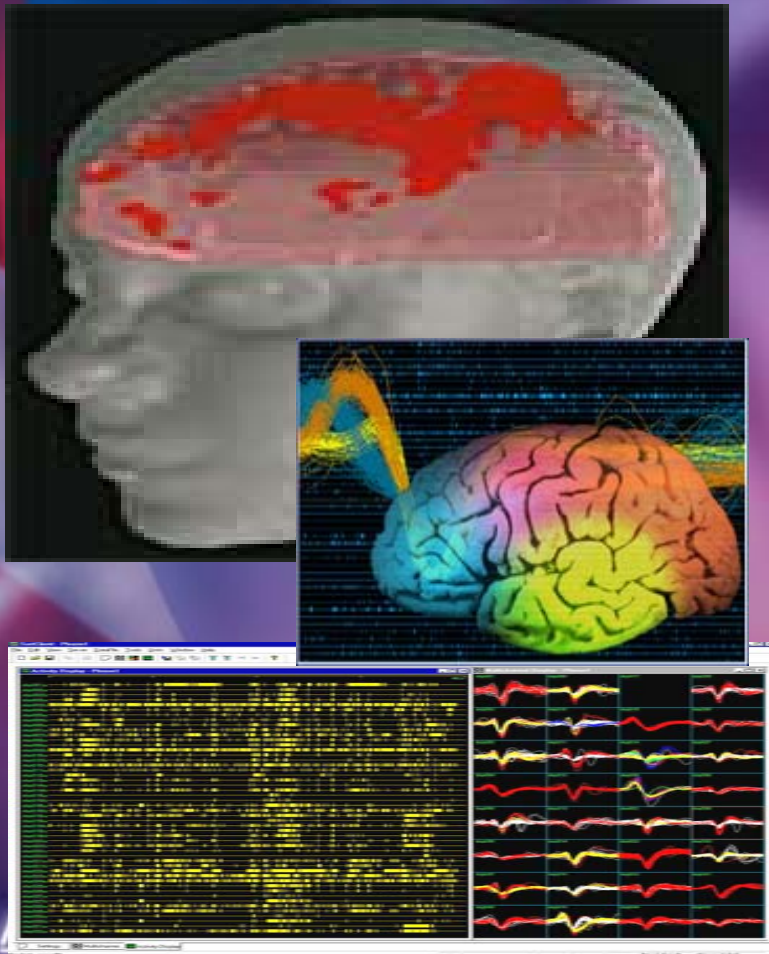


# Brains vs. Electronics



# Brain Fundamentals

From Pharmacology and Physiology  
to Learning and Behavior



- ▶ Improving brain processing and retention of data
- ▶ Evaluating Target sites and Molecules for pharmacological interventions



# Insect Locomotion and Mimetics



# Intelligent Machines: Insect Visual Processing In an Autonomous Helicopter



# Real Time Two Way Behavioral Communication



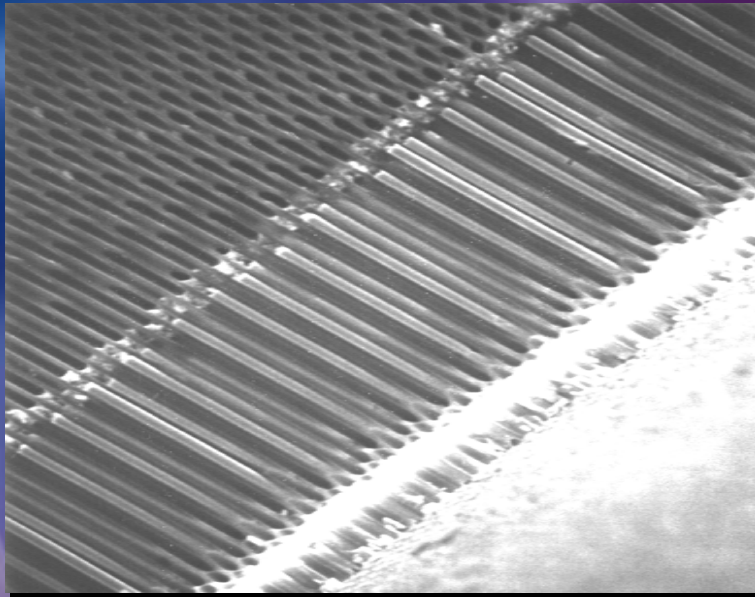


# Rat Meets Tony



# Retinal Prosthetic

## Nanochanneled Glass



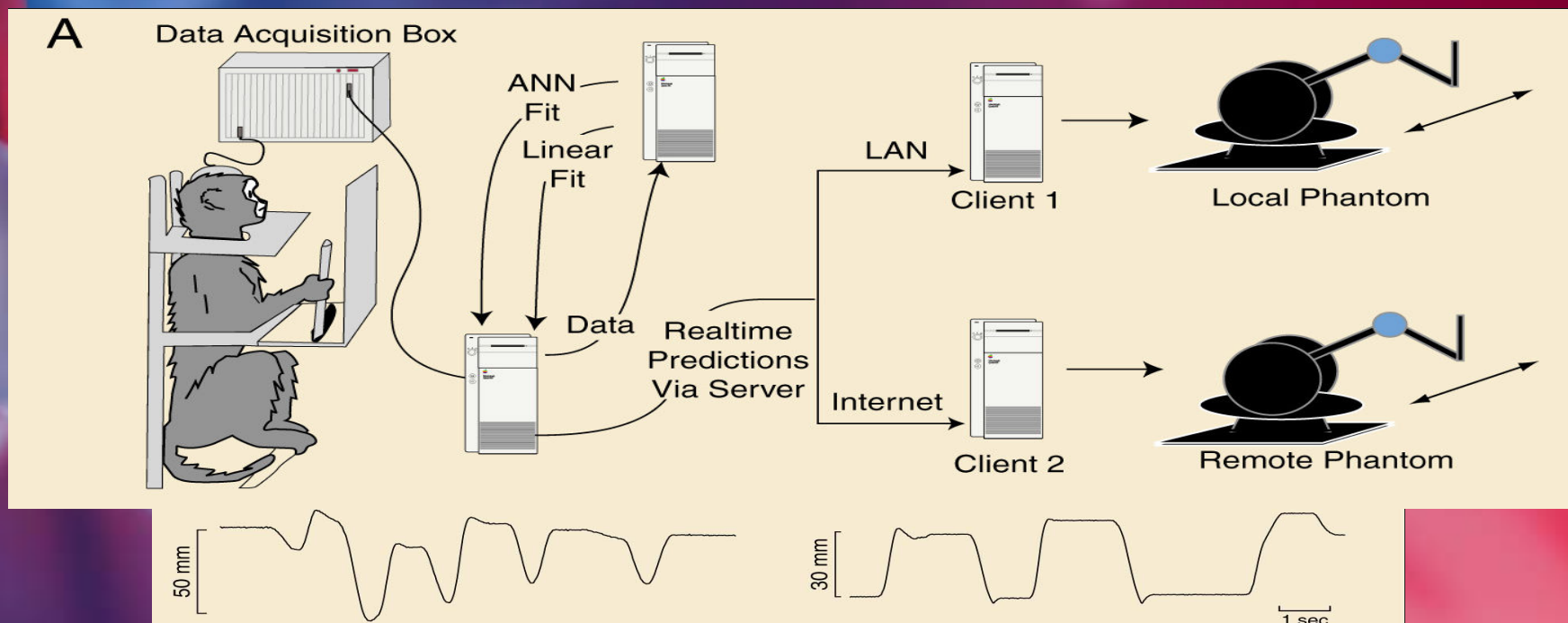
← 30 →



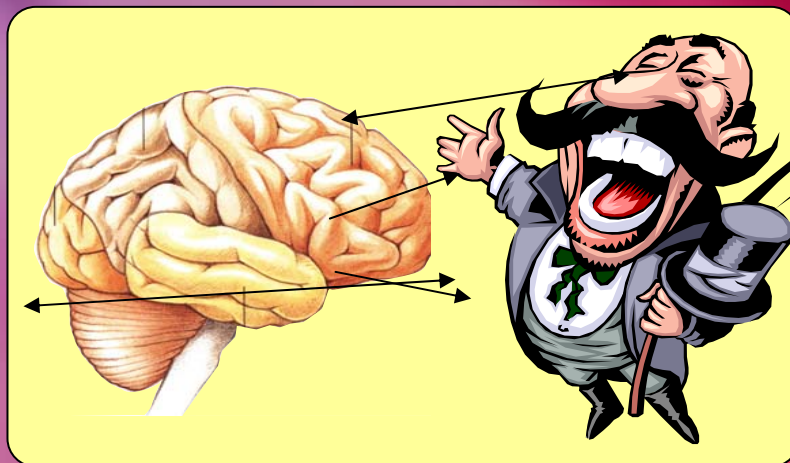
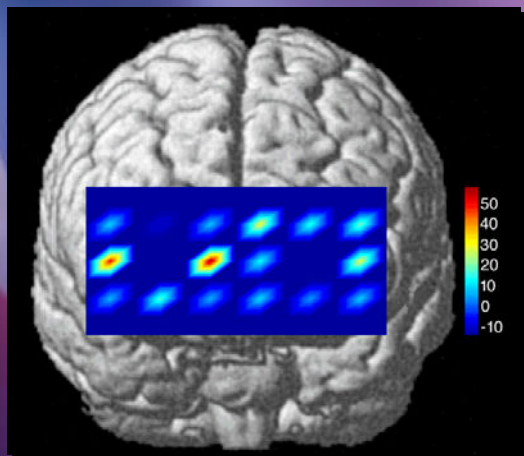
Chip output from  
digital camera input

# Brain Machine Interface

## Control devices & machines with thought



# Deception Detection





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