Opportunities for Progress 1

Watching small Brains Work

Advantages: **most of the genetic tools needed are already available to visualize neurons, parts of neurons, circuits of neurons; animals show complex behaviors that have been well studied**

Problems: **small size of brains, limited mapping of brain circuitry; animals have to be immobilized to view what's happening; centralized core facilities needed**

Opportunities for Progress 2

Virtual Conferencing and Virtual Teaching

Problems: ***Conferences:*** **Getting funding for traditional interdisciplinary conferences is difficult, the price is high, the amount of work involved in organizing a conference is enormous, attendance at conferences is limited, investigators who are not well known are not invited to specialized conferences;** ***Teaching:*** **up to date specialized courses are not available at all colleges and universities - we may be losing many next generation investigators**

A partial solution: **Invest heavily in setting up video conferencing capability throughout the US. Set up NSF organized databanks of courses and seminars**

To the Funding Decision-Makers

Invest *heavily* in individual investigator-initiated research grants. Build flexibility into the system that would allow for rapid access to funding for exploratory collaborative ventures both within the same field and outside of the field when the time for such ventures is appropriate.

If funding is limited do not go the route of large Center Grants. There is little compelling evidence that a million dollars a year given to an often artificially formed (based on funding) group of investigators, is going to generate more first rank fundamental scientific contributions, than five $200,000 awards to outstanding young or established investigators.