









MINDQUEST LECTURES IN ANTHEM















MindQuest is a forum for people of all ages. We present and discuss on an occasional basis, subjects that increase our awareness about and understanding of the dynamic world around us - be it about science, culture, economy, or social issues.

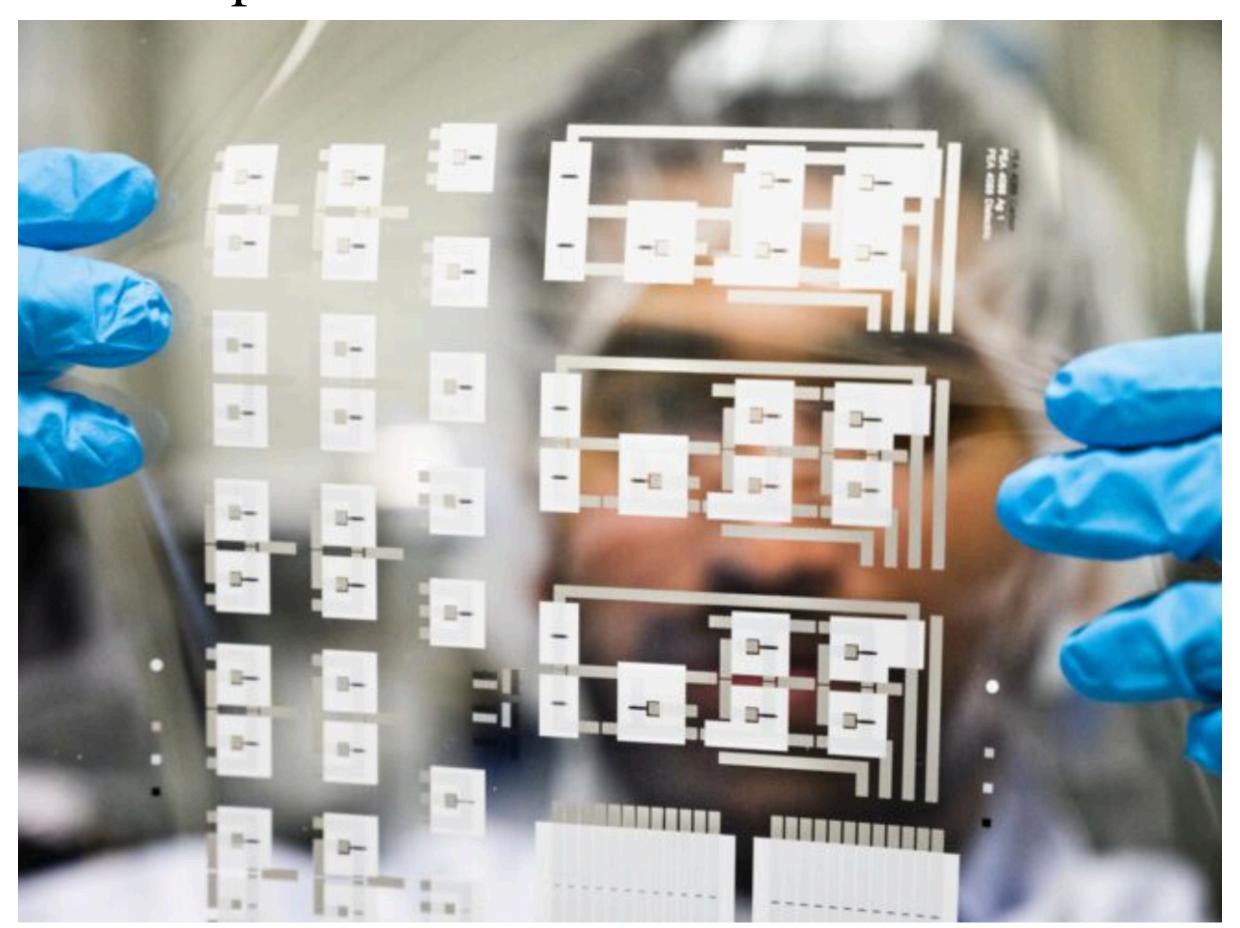
Tech Slam

Researchers at Linköping University have created artificial organic neurons and synapses that can integrate with natural biological systems

When the transistors detect concentrations of ions with certain charges, they switch, producing a signal that can then be picked up by other elements of the transistors systems

Biological neurons operate on these same ion signals

The new artificial neurons were organic electrochemical circuits printed onto thin plastic film form the basis of transistors.



So, what did they use that for:

Sending an electrical impulse from the artificial neurons* to a Venus Flytrap . . . and it triggered it to close the trap

*) < 0.6 V

The future:

Integrating artificial circuitry with biological neurons

Nocebo effect

Clinical trials

Normal

- Test group Participants get active ingredient (drug) —> pos. effect
- Control group Participants get inactive ingredient —> no effect

Clinical trials

Normal

- Test group
 Participants get active ingredient (drug) —> pos. effect
- Control group Participants get inactive ingredient —> no effect

Sometimes

- Test group Participants get active ingredient (drug) —> pos. effect
- Control group Participants get inactive ingredient —> positive effect

Placebo effect

Clinical trials

Normal

- Test group
 Participants get active ingredient (drug) —> pos. effect
- Control group Participants get <u>in</u>active ingredient —> no effect

Other times

- Test group Participants get active ingredient (drug) —> pos. effect
- Control group Participants get <u>in</u>active ingredient —> side effects

Nocebo effect