# Neurotechnology: Opportunities and Challenges

**Milan Cvitkovic**

Integral

# State of the field

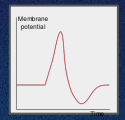
## Goals

Control your phone
Change your mood
Cure Parkinson's disease
"I know kung fu"
Sleep
Treat OCD
Brain-to-brain communication
Customizable personality traits
Decode imagined images
Change energy level
Animal communication
Matrix-level VR
Uploading
Brain cryporeservation
Restore sight to the blind
New senses
Control perception of time
Cure jet lag
and on,

and on,
and on...

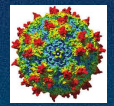
## Technologies

Electricity

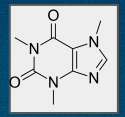



Electromagnetics

Biologics

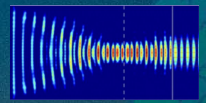


Small molecule




Ultrasound

Peripheral



Combinations

and on,

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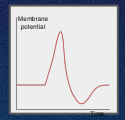
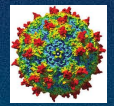
Electricity



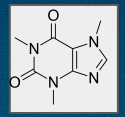
Intracortical electrode arrays

Electromagnetics

Biologics



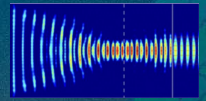
Small molecule



Caffeine

Ultrasound

Peripheral



Combinations

???

and on,

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# Opportunities and Challenges

- Cultural and regulatory change
- AI acceleration
- Hard to beat coffee and keyboards
- Cost and risk of neurotechnology development
  - Venture capital
  - Philanthropy and new institutions for science
  - Decentralized?


Get involved!