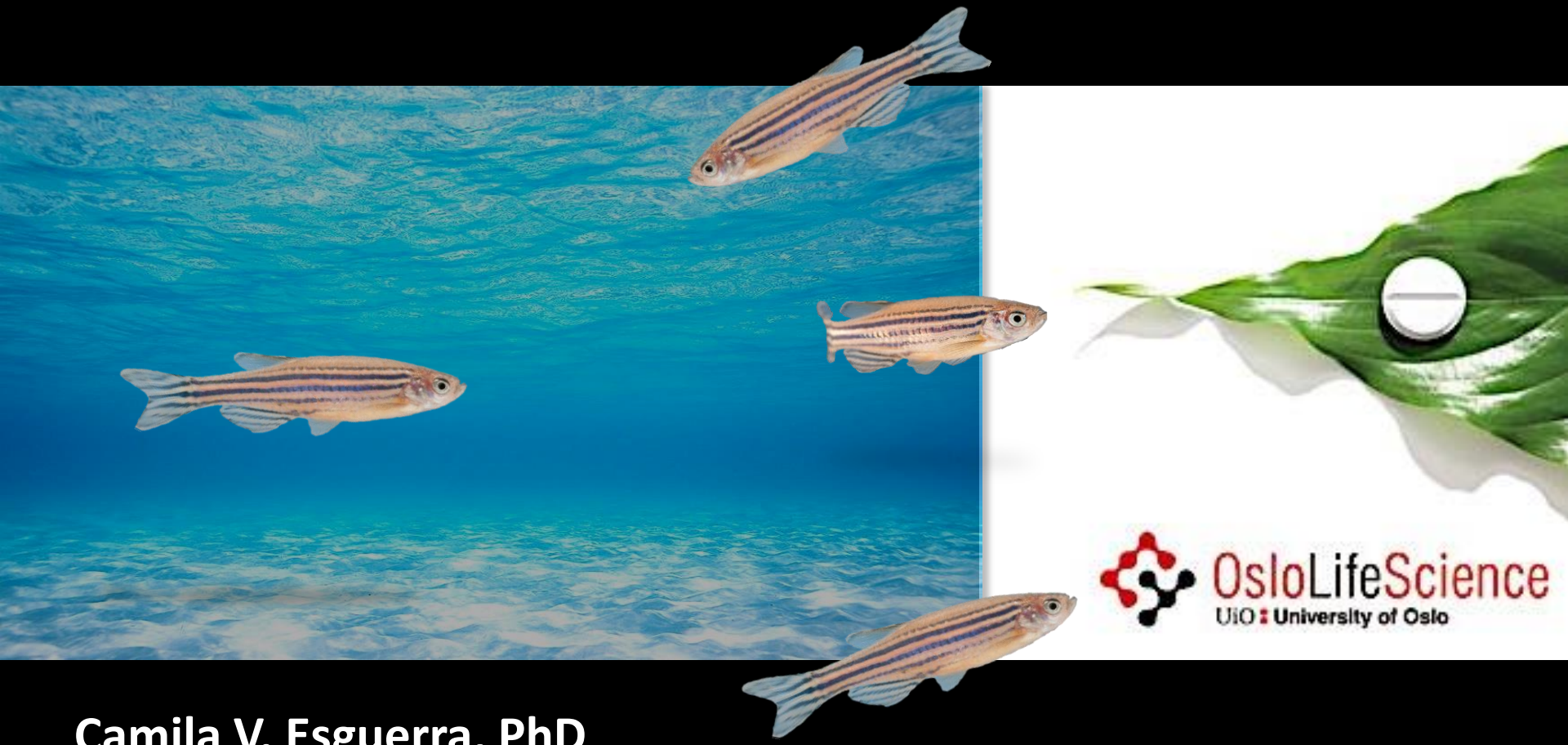
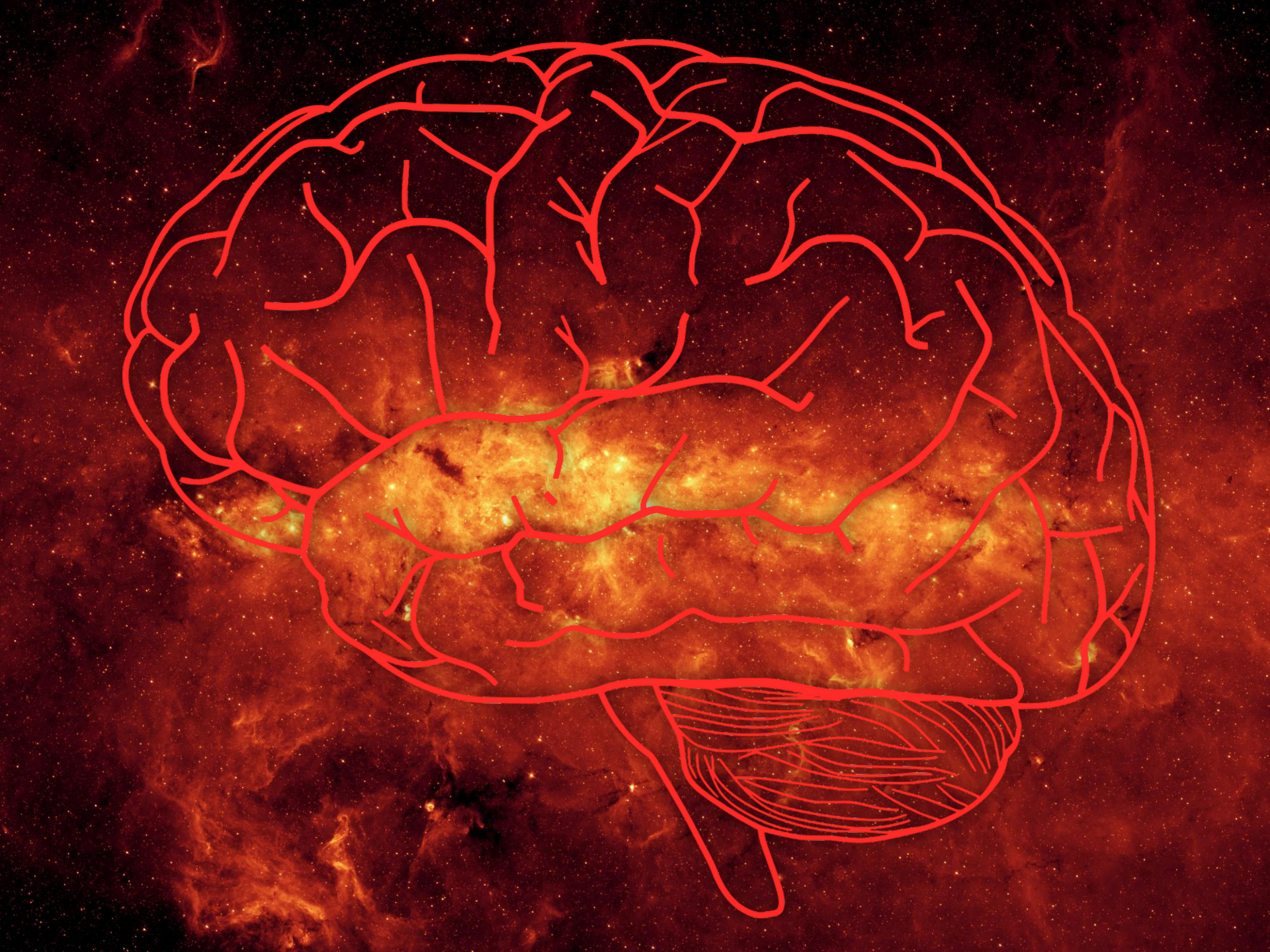
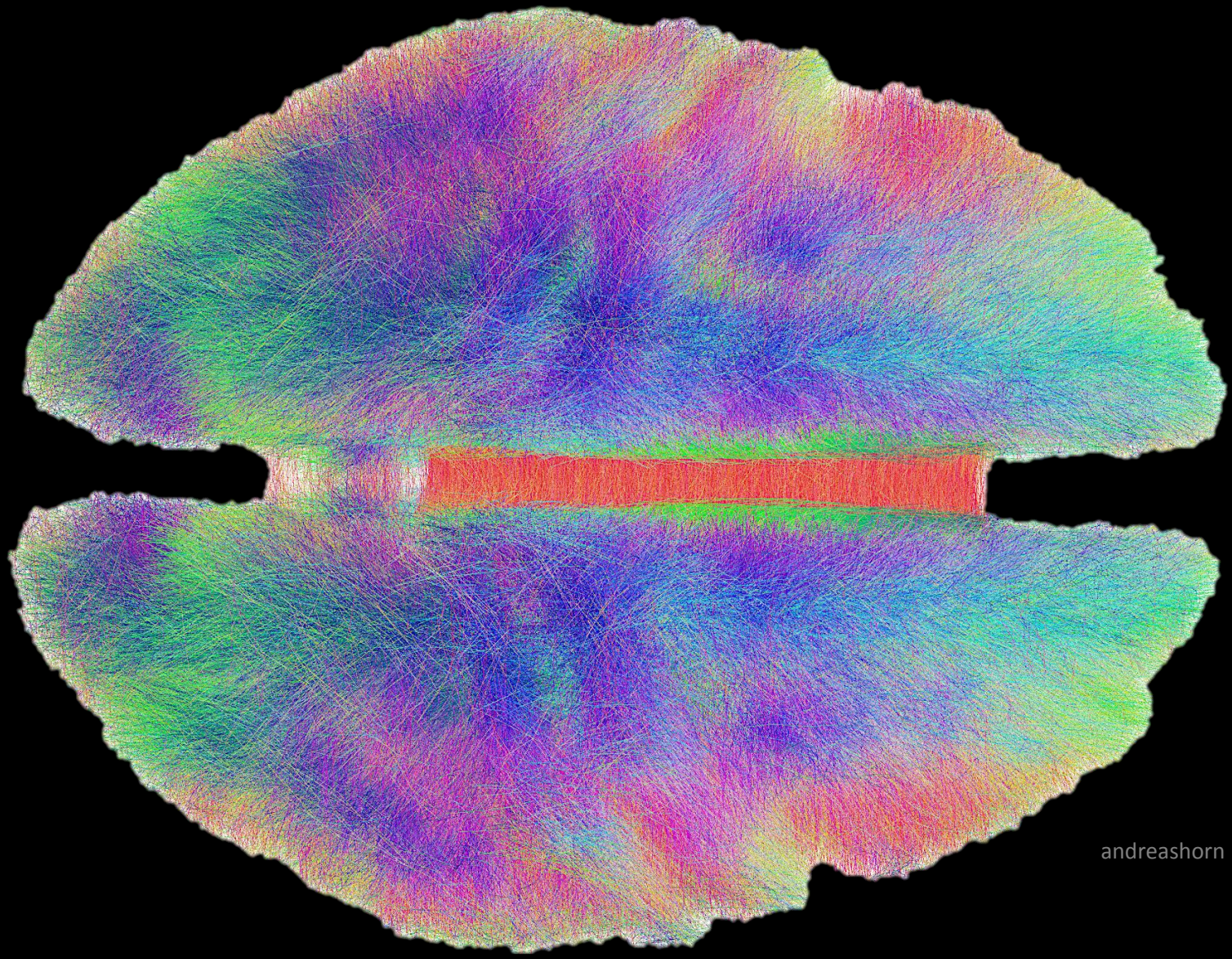
# From Models to Molecules: Using Zebrafish to Understand and Treat Epilepsy



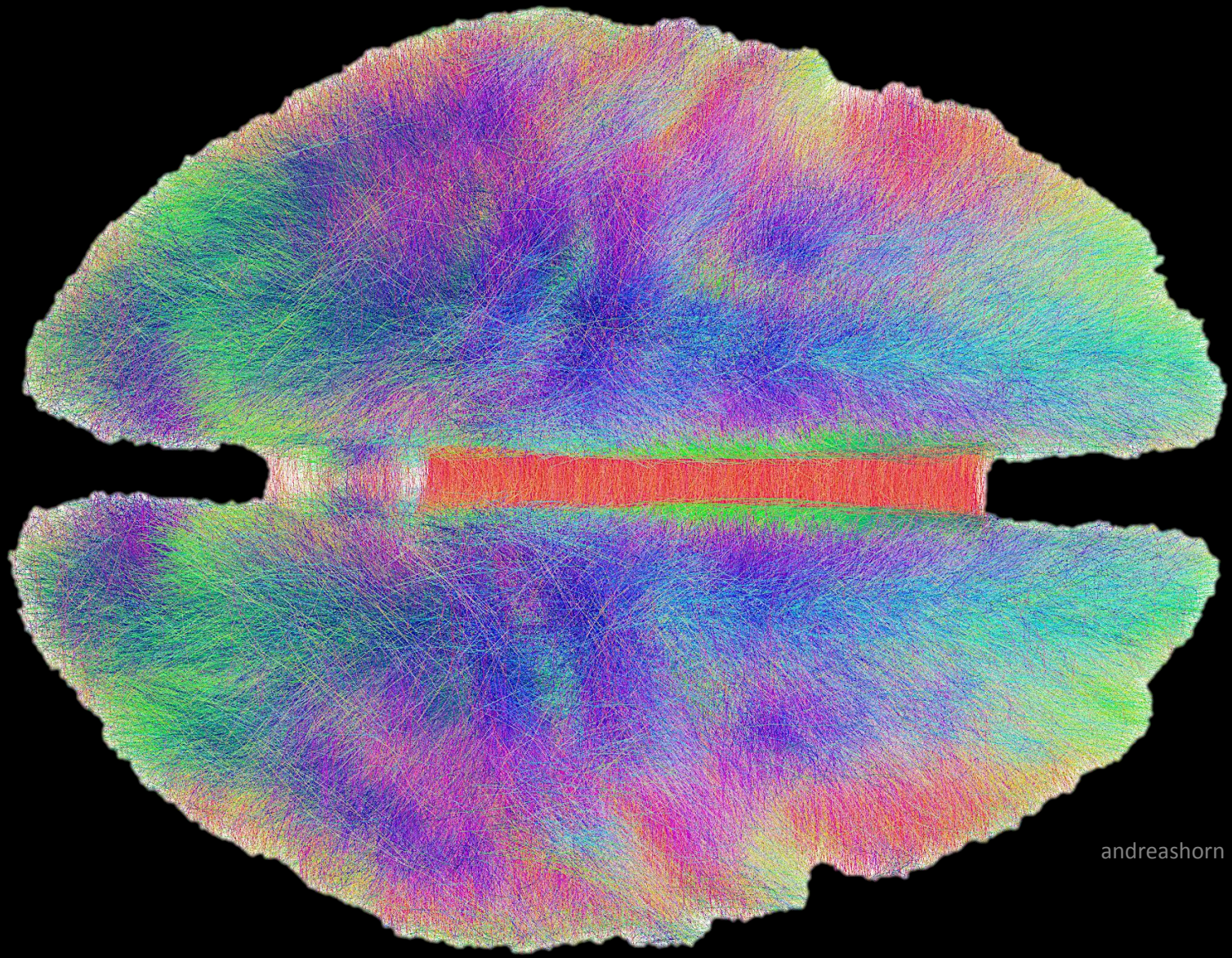

**Camila V. Esguerra, PhD**
**Chemical Neuroscience Group**
**Biotechnology Centre of Oslo and School of Pharmacy**






# The Human Brain Connectome

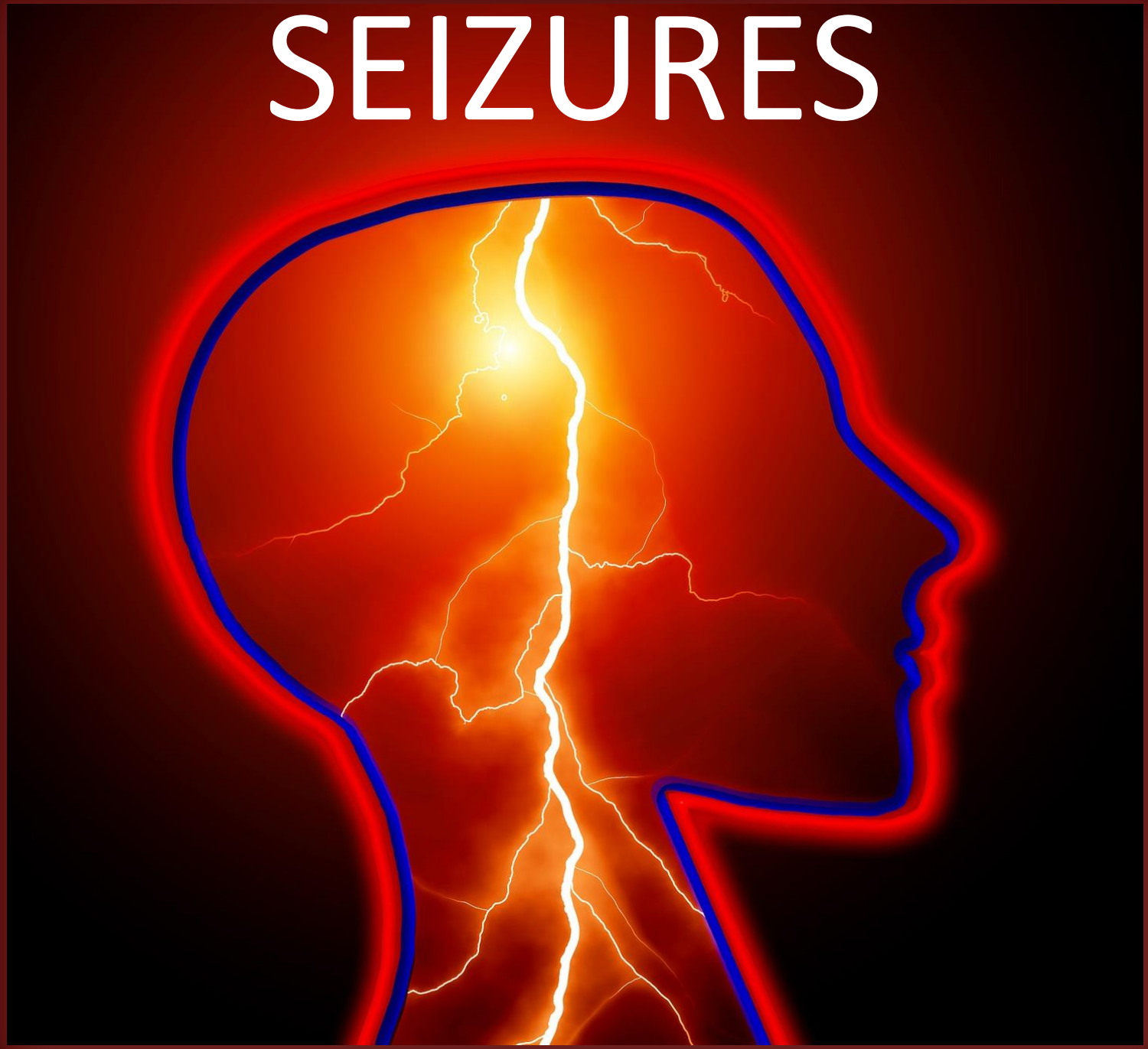

20,000,000,000



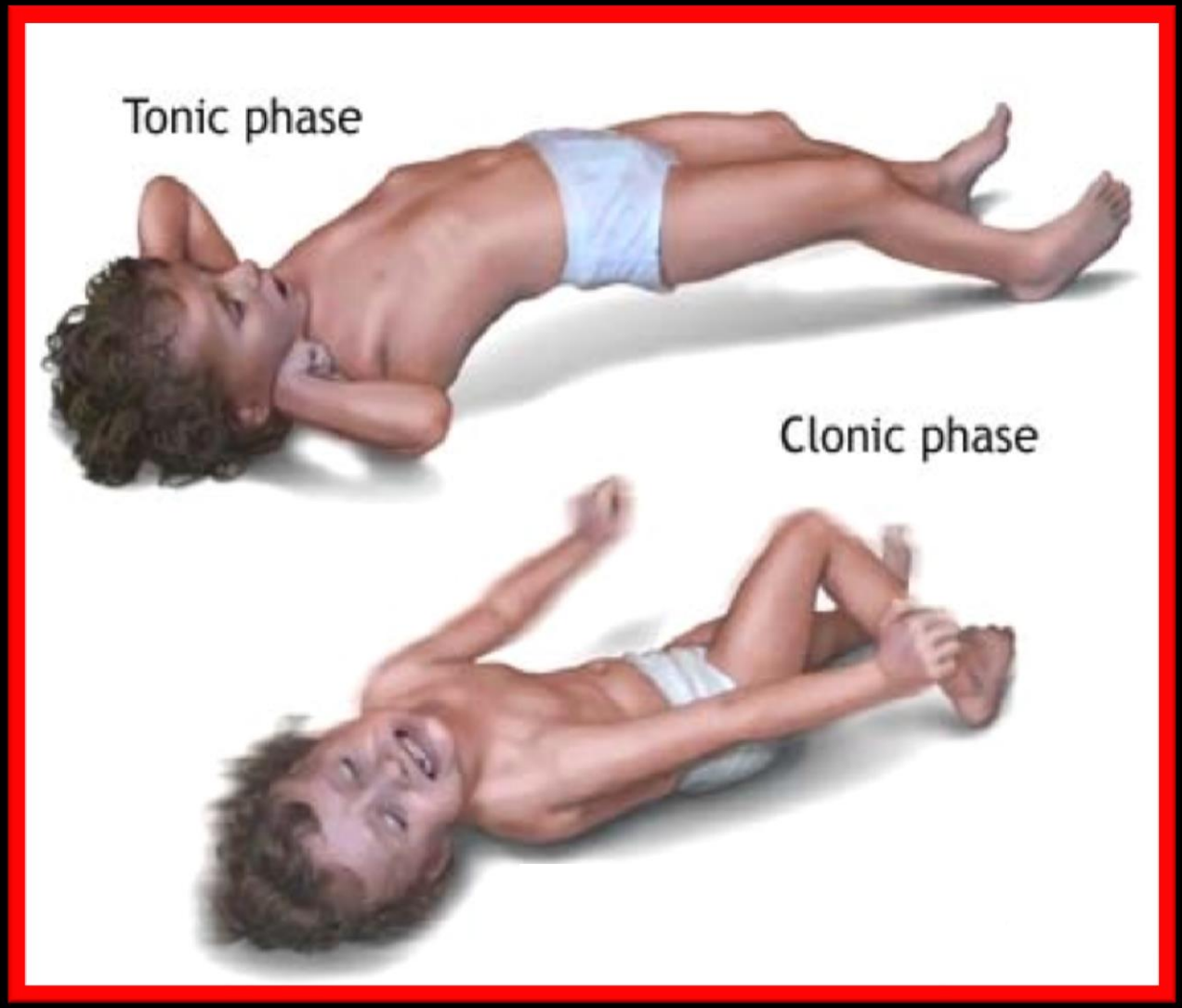

1,000,000,000,000,000

How does a normal brain become abnormal?

# SEIZURES



# CONVULSIONS



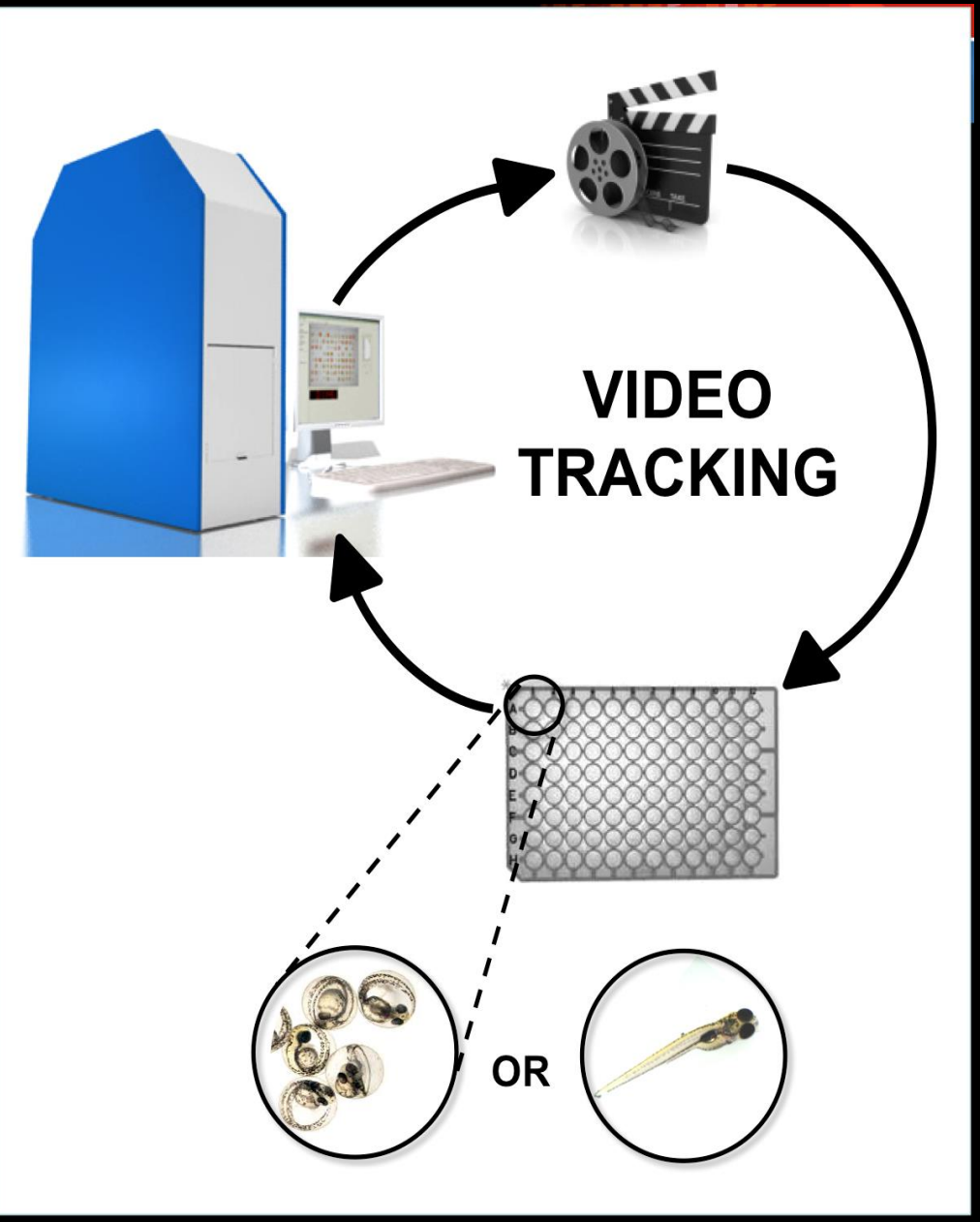
Chronic & Common

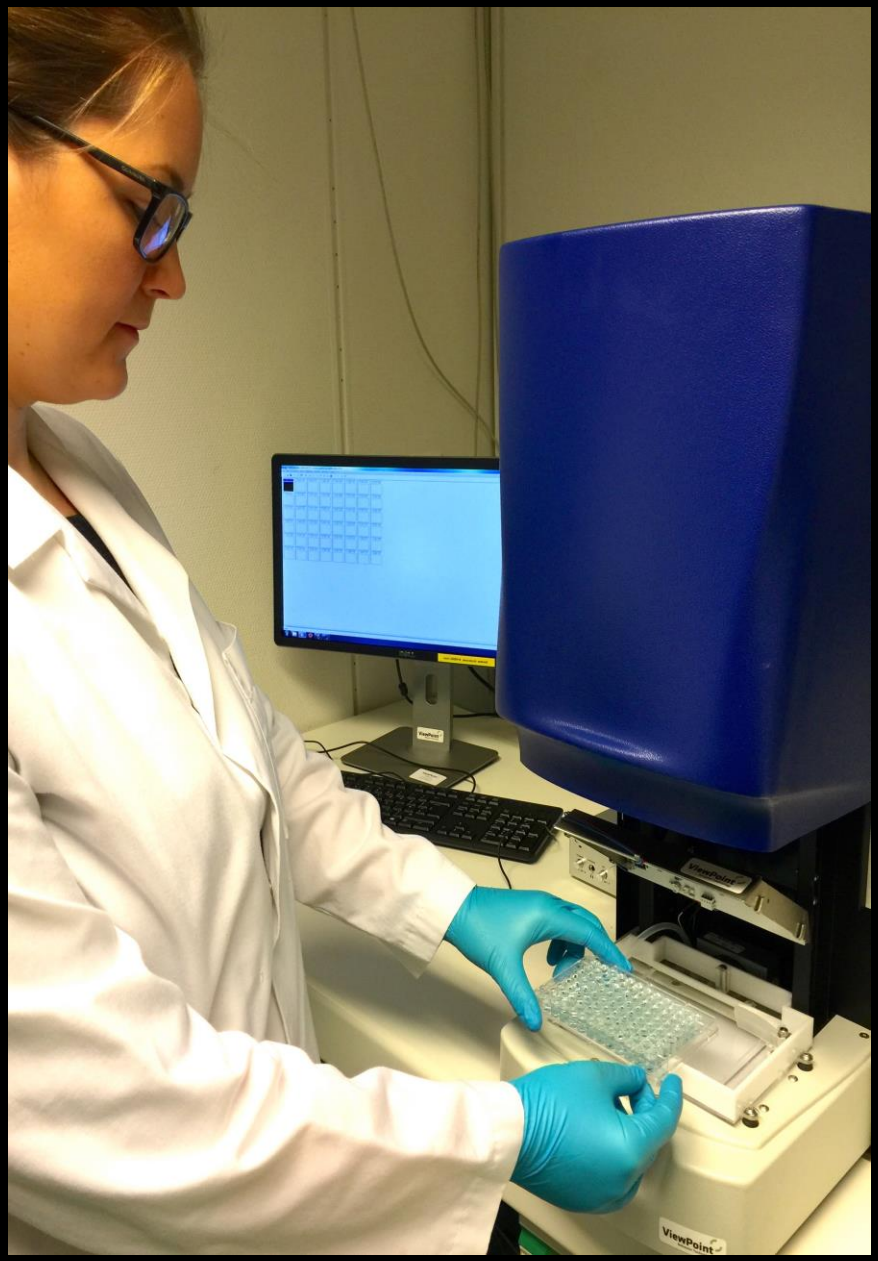
Drug Resistance

Life Impact

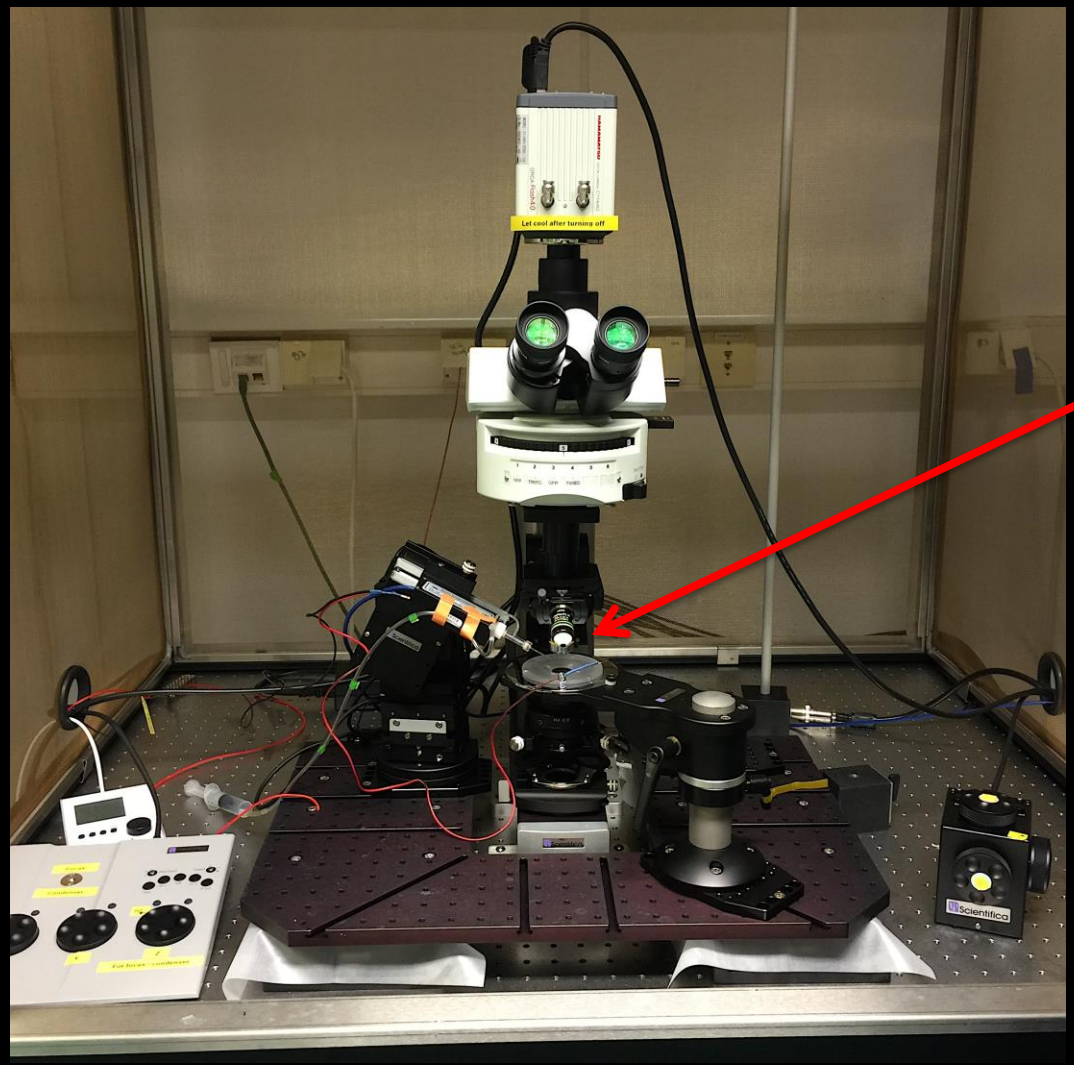
Multiple Causes

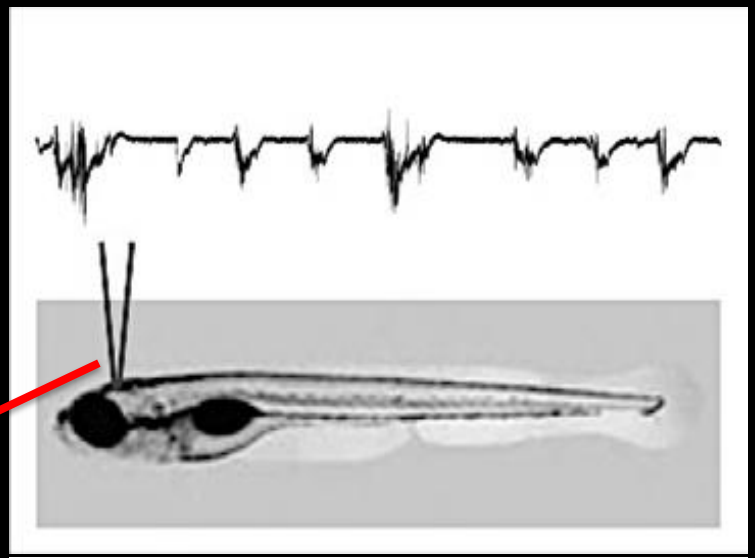
Cure

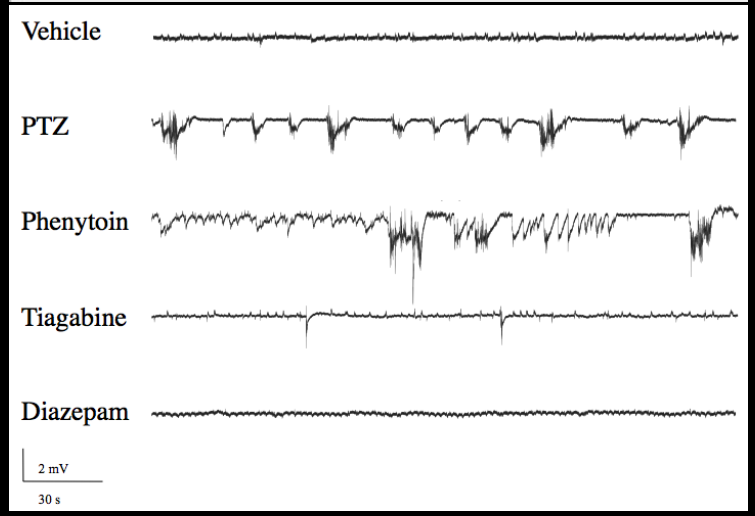

VIDEO
TRACKING
OR


ViewPoint

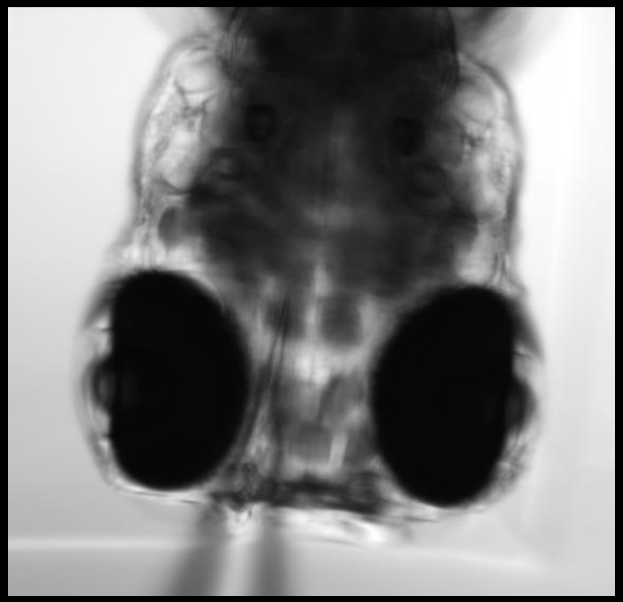
# Electroencephalograph (EEG)





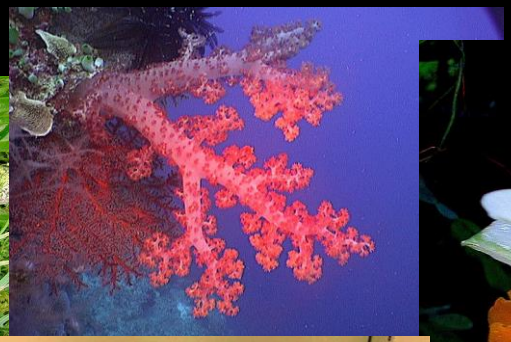
# Brain Imaging



Visualizing seizures in a 4 day-old zebrafish

# How do find new drugs?

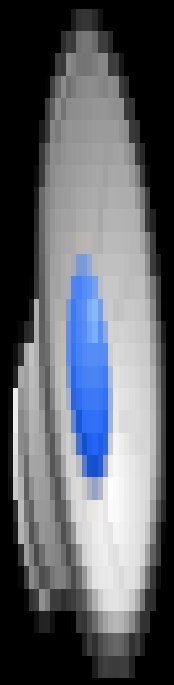
# Medicines from Nature

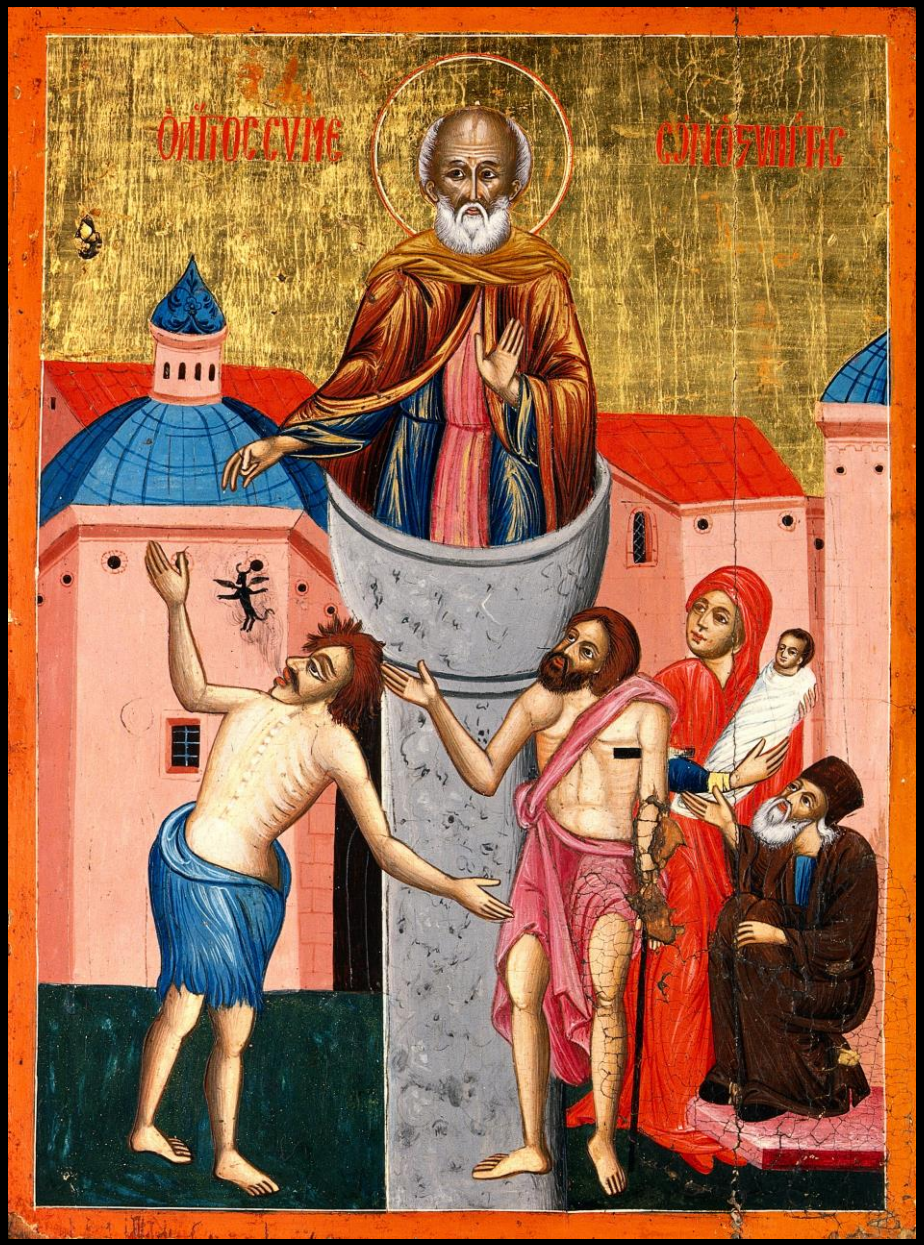







# Searching for SAFE drugs





Saint Simeon Stylites the elder

Wellcome Trust

new KNOWLEDGE
therapeutic SAFETY
seizure FREEDOM

HOPE

# Tusen Takk!

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