

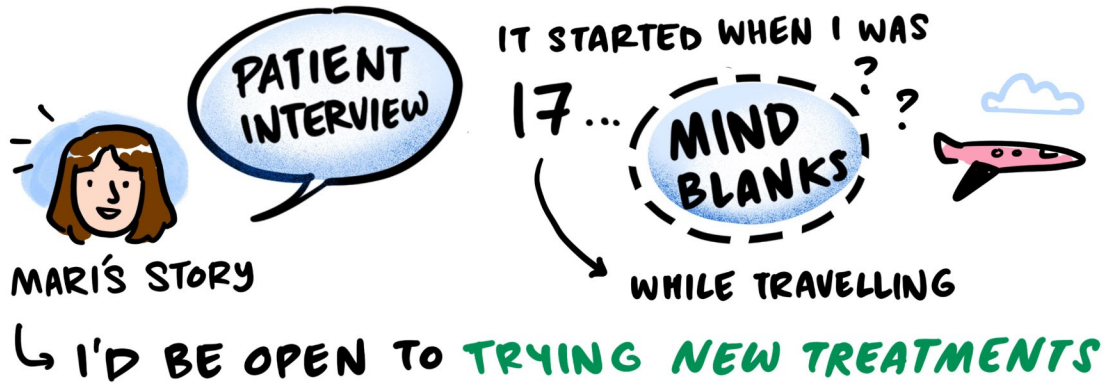
INNOVATIONS IN MEDTECH FOR EPILEPSY

 **PROF. MARK COOK**
DIRECTOR
GRAEME CLARK INSTITUTE

 **DR JOHN HEASMAN**
CHIEF OPERATING OFFICER
EPI-MINDER

 **DR PHILIPPA KAROLY**
SENIOR RESEARCH FELLOW
BIOMEDICAL ENGINEERING,
THE UNIVERSITY OF MELBOURNE

 **PROF. DAVID GRAYDEN (CHAIR),**
CLIFFORD CHAIR OF NEURAL ENGINEERING,
DIRECTOR, MEDTECH PLATFORM,
THE UNIVERSITY OF MELBOURNE



PRESENTATIONS

DR JOHN HEASMAN
EPI-MINDER:



ULTRA LONG-TERM EEG MONITORING IMPLANT

EEG + WEARABLES



+ METABOLIC SENSORS



DR PIP KAROLY:
WITH S E E R



PERSONALISED SEIZURE GAUGE
FOR MORE CONTROL OVER DAILY ACTIVITIES FOR PEOPLE WITH EPILEPSY

DR MARK COOK: CATHETER-DELIVERED DRUGS, DIRECT TO BRAIN, USING A PUMP



Q & A

CHALLENGES:



HOW MUCH DATA?

HAVE THE RIGHT POPULATION SET!

PATIENT WILLINGNESS?

PATIENTS LOVE BEING INVOLVED!



DEVICE PERFORMANCE

DEPENDS ON PATIENT ACTIVITY & OCCUPATION: PREFERENCES

SEIZURE-FREE PERIODS TRACKING

LONG-TERM DRUG DELIVERY

PUMP, DRUG & CATHETER COMPATIBILITY: MUCH TO LEARN

CLINICAL & RESEARCH BALANCE IS CRITICAL