#### 脳情報科学

# Functional-Connectivity Neurofeedback for Depression

## ∼ A Search for the Optimal Parameters ∼

#### 概要

We previously established a neurofeedback paradigm in which people with subclinical depression are trained to make their brain activity more "healthy" so that their depressive symptoms decrease. We are now exploring different parameters to try to make this paradigm maximally feasible and clinically effective.

#### 特徴

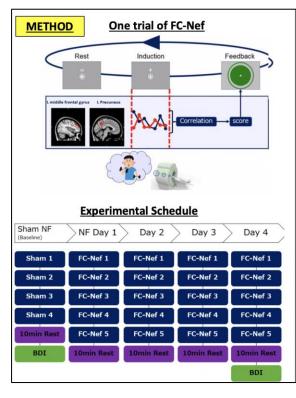
- We have shown that after people with subclinical depression complete FC-Nef training, their depressive symptoms are reduced and their functional connectivity looks "healthier".
- But, the FC-Nef training paradigm is tough, so we tested to see if similar results could be found with less demanding parameters; e.g. shorter trials, which means less time in MRI.
- We replicated original results and found similar results when the FC-Nef trials were shortened, thereby demonstrating one way this task may become more clinically feasible.

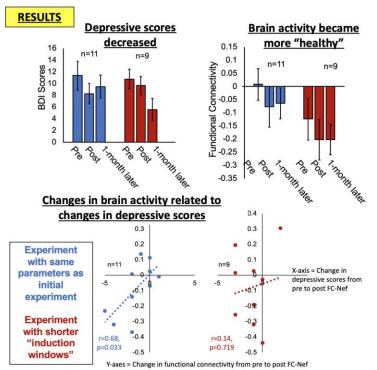
### 今後の展開

We are currently testing to see if this task can be performed to the same effect on non-consecutive days, to better fit patient's schedules. Other parameters will also be tested.

### 対コロナへの関連

■ The number of people with depressive symptoms has greatly increased since the start of the covid-19 pandemic. Progression of this project could help them in the future.







連絡先:脳情報研究所 担当 Jessie Taylor E-Mail:jessietaylor@atr.jp