Neurofeedback Therapy for Treatment of OCD

**OCR Number:** OCR 6980

**Description:**

**Functional near-infrared spectroscopy (fNIRS)-driven feedback for psychiatric symptoms**

- Many neuropsychiatric conditions, including OCD, are characterized by regionally abnormal brain activity.
- Only ~60% of patients respond to standard OCD interventions and these options affect the entire brain causing undesirable off-target effects.
- Studies have revealed hyperactivity of a specific brain region, the OFC, in patients with OCD making it an attractive therapeutic target.
- NIRS-driven neurofeedback therapy is optimized for such conditions: it is more affordable than fMRI, portable, non-invasive and targeted to control activity of affected neural areas.
- In NIRS, the signal reflects the metabolic activity of a defined brain area and patients can use the visual readout of this activity to learn via trial-and-error to control its activity.
- This therapy can lead to altered functional connectivity within the targeted circuitry that persists even in the absence of ongoing efforts at control.
- **Lead Innovator:** Chris Pittenger, MD/PhD

**PI:** Christopher Pittenger

**Licensing Contact:** Christopher Unsworth
christopher.unsworth@yale.edu