

### **FACULTY MENTOR**

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## **PROJECT TITLE**

Developing Virtually Reality to Treat and Understand the Neurobiology of Anorexia Nervosa

#### **PROJECT DESCRIPTION**

"Anorexia nervosa (AN) is an eating disorder associated with food avoidance and severe weight loss that most commonly occurs in females (American Psychiatric Association, 2013) It is the third most common chronic illness among adolescents (USDHHS, 2000) with a mortality rate of 12 times higher than the death rate associated with all causes of death for females 15-24 years old (Arcelus et al., 2011).

The goal of this pilot study is to adapt AN meal support to virtual reality (VR) environments with a shift of focus on exposure to systematically treat fears in AN, and transfer this behavior to in vivo eating.

Specific Aim 1.: To develop a VR application for the treatment of youth with AN

Specific Aim 2.: To pilot the VR application in individuals with AN

Specific Aim 3.: To develop analytical procedures for ET data collected with build in the head mount display eye tracker, during the exposure for VR environment.

Specific Aim 4: To explore the neuroscience behind food avoidance in AN

This project is remote

# **INTERNS NEEDED**

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## **PREREQUISITES**

Students should have programming experience that can be used to create virtual environments. We have access to a large eating disorder clinic as well as EEG. The task for the students would be to develop virtual environments under the direct supervision of the principal investigators Drs. Frank and Gola. learning