# INTERNSHIP OFFER
# BR-2026-234-ARA

Araraquara - SP, Brazil | ON-SITE

## INTERNSHIP HOST

Name of Company
UNESP - Araraquara Faculdade de Ciências Farmaceuticas

Website
http://www.fcfar.unesp.br

Address of Company
Araraquara
Brazil

Number of Employees
1000

Business or Product
University

## STUDENT REQUIRED

General Discipline
Pharmaceutical Studies / Pharmacology

Field of Study

Psychology

Completed Years of Study
3

Language Required
English Good (B1, B2) Or
Spanish Good (B1, B2) Or
Portuguese Good (B1, B2)

Required Qualifications and Skills
Laboratory Work
Previous experience in handling rodents (mice) in a laboratory setting.
Fundamental knowledge of behavioral physiology and psychobiology.

Student Status Requirements
Required during the whole period of the internship

Other Requirements/Information

## INTERNSHIP OFFER

8 - 8 weeks

1400 BRL per Month

800 BRL per Month

Latest Possible Start Date

Within Months
Jul-2026 - Oct-2026

Company Closed WIthin
-

Deductions Expected
0

Payment Method

Arranged by
Student with IAESTE support

Estimated Cost of Living including Lodging
1400 BRL / Month

**Working Environment: Field work**

**Working Hours / Week: 25.0**

1. Support for Sample Collection and Data Integrity
The intern will be expected to support the procedures used to generate samples for ongoing experiments.
Protocol Support: Assisting with the final days of the Social Instability Stress (SIS) protocol and ensuring animals are correctly grouped.

Estrous Cycle Determination: For the female mice, the intern will be trained to collect vaginal samples at the time of euthanasia and assist in analyzing the cell types under a microscope to determine the phase of the estrous cycle (proestrus, estrus, metestrus, diestrus).

2. Brain Tissue Processing and Immunofluorescence
The intern will be trained to perform the complete immunofluorescence protocol.

Brain Slicing: Assisting with, or learning to, section the frozen mouse brains into 35 µm coronal slices using a cryostat. This involves correctly identifying the target regions (mPFC, amygdala, hippocampus) during slicing.

Staining Protocol: Performing the multi-step staining process, which includes:
-Washing the tissue slices in PBS.
-Incubating slices in a blocking solution (containing goat serum and Triton X-100) to prevent non-specific antibody binding.
-Performing the 24-hour incubation with primary antibodies, specifically Anti-ΔFosB (EPR15905) and Anti-5HT2A (ASR-033-GP200UL).
-Washing and incubating the slices with the fluorescent secondary antibodies (Alexa Fluor 488 and Alexa-Fluor 568).

Mounting: Carefully mounting the delicate, stained brain slices onto silanized glass slides and applying the Fluoroshield Mounting Medium + DAPI to stain cell nuclei and preserve the fluorescent signal.

3. Microscopy and Data Analysis
This is the core activity, identifying the pattern of activation.

Image Capture: Assisting in the capture of high-resolution fluorescent images from the prepared slides using the Axio Imager 2 microscope.

Data Quantification: The intern will be trained to use the ImageJ software to quantify the results. This is a critical task and involves:

- Defining the regions of interest (mPFC, amygdala, hippocampus) in the digital images.
- Applying the "Corrected total cell fluorescence" (CTCF) technique to measure the intensity of the ΔFosB and 5HT2A signals.
- Organizing the resulting numerical data for statistical analysis.

## ADDITIONAL INFORMATION

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Deadline for Nomination - 31-Mar-2026

Date - 22-Dec-2025

On Behalf of Receiving Country - IAESTE Brazil