

## Regulated Research Institutional/Industrial Setting Form (1C)

This form must be completed **AFTER** experimentation by the adult supervising the student research conducted in a regulated research institution, industrial setting or any work site other than home, school or field.

Student's Name(s) Jack Racer

Title of Project Towards an Animal Model to Study Sporadic ALS

**To be completed by the Supervising Adult in the Setting (NOT the Student(s)) after experimentation:**

(Responses must be on the form as it is required to be displayed at student's project booth; please do not print double-sided.)

The student(s) conducted research at my work site:

1. Did you or your proxy (e.g. graduate student, postdoc, employee) mentor or provide substantial guidance to the student researcher? ☒ Yes ☐ No
  - a. If no, describe your and/or your institution's role with the student researcher and his/her project (e.g. supervised use of equipment on site without ongoing mentorship and sign below).
  - b. If yes, complete questions 2–5.
2. Is the student's research project a subset of your ongoing research or work? ☒ Yes ☐ No

Use questions 3, 4 and 5 to detail how the student's project was similar and/or different from ongoing research or work at your site.
3. Describe the independence and creativity with which the student:
  - a. developed the hypotheses or engineering goals for the research project  

Research Question: Our preliminary results from the College Now program showed that LED exposure caused motor impairment. Jack wanted to know if the exposure also affected the neuromuscular junctions.
  - b. designed the methodology for his/her research project  

We decided the procedure in a lab meeting discussion as a group.
  - c. analyzed and interpreted data  

Data Collection: Jack was entirely responsible, under my supervision.  
Data Analysis: Jack was responsible, under my supervision  
Drawing Conclusions: Jack is currently working on his conclusions.

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## Regulated Research Institutional/Industrial Setting Form (1C) Continued

Student's Name(s) Jack Racer

4. Detail the student's role in conducting the research (e.g. data collection, specific procedures performed). Differentiate what the student observed and what the student actually did.

As his research supervisor, I taught Jack to build his own LED pulse stimulator which he used to manipulate motor behavior in transgenic drosophila. He also learned to analyze neuromuscular junction (NMJ) morphology using fluorescence microscopy.

Jack embodies all the features of a potential scientist. He is inquisitive, data-driven, meticulous in his planning, record keeping, data collection, and analysis. He learned to assemble the LED devices and outperformed my undergraduate seniors in preparing larval abdominal walls for fluorescence microscopy. He was excited to read scientific literature and seems passionate about writing his research paper and to interact with other scientists in the department.

5. Did the student(s) work on the project as part of a group? ☐ Yes ☒ No  
If yes, how many individuals were in the group and who were they (e.g. high school students, graduate students, faculty, professional researchers)?

During the College now program all students got to build LED devices for photoactivation experiments in flies. Jack was the only one who stayed an extra month to do the fluorescence microscopy imaging and analysis, which was his idea.

I attest that the student has conducted the work as indicated above and that any required review and approval by institutional regulatory board (IRB/IACUC/IBC) has been obtained. Copies are attached if applicable.  
I further acknowledge that the student will be presenting this work publicly in competition and I have communicated with the student research regarding any requirements for my review and/or restrictions of what is publicized.

**Pablo M Peixoto**

Supervising Adult's Printed Name

**Baruch College**

Institution

**1 Baruch Way, A\_920, New York, NY, 10010**

Address

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AA89-3A436D94B0EF 39C5C292-6C2E-46D1-  
A602-BEC09BD21716

Signature

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AA89-3A436D94B0EF 39C5C292-6C2E-46D1-  
A602-BEC09BD21716  
Date: 2020.01.05 15:29:50 -0500

**Assistant Professor**

Title

**01/05/2020**

Date Signed (must be after exper-  
imentation) (mm/dd/yy)

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Email/Phone