

# 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) Farihah Chowdhury

Title of Project Potential Pitfalls in Protein Structure Determination via Protein Crystallography

## 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  
The student developed her research questions, hypotheses, and research plan based on what the members of the high school crystallography BAG initially decided to do when collecting data on insulin.
  - b. designed the methodology for his/her research project  
The crystallization methodology was designed by the student in collaboration with the high school BAG members.
  - c. analyzed and interpreted data  
The student analyzed and interpreted her data on her own, after being taught how to proceed after data collection. All of the data analysis was completed by the student.

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**Continued**

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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.

**Sample Preparation**

Samples were prepared by members of the high school crystallography block allocation group.

**Beamtime**

The student operated the beamline after sufficient training from mentors and under constant supervision from beamline scientists and BAG mentors.

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)?

The student who worked on this particular project worked directly with the beam line scientists who are in charge of running each beam line where experimentation was conducted. This project was part of a larger High School Protein Crystallography Block Allocation Group that included several different projects from the following school districts: Bay Shore, Northport, Shelter Island, East South Manor, Connetquot, and William Floyd.

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.

Vivian Hojanoff

Supervising Adult's Printed Name

Signature

Physicist

Title

Brookhaven National Laboratory

Institution

01/20/20

Date Signed (must be after experimentation) (mm/dd/yy)

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