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) Suchir Misra

Title of Project Abstract text mining to create an exhaustive disease-disease correlation database

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 initiated this computational project to find a plethora of disease-disease associations motivated by his work last year on one specific association (craniosynostosis-cancer).

   b. designed the methodology for his/her research project
      The student designed the methodology (downloading all PUBMED abstracts) mostly by himself. We helped him on a few issues during the progress of the project.

   c. analyzed and interpreted data
      The student carried out the analysis himself, with us providing some help whenever problems arose.

(Continued on next page)

Student's Name(s)   Suchir Misra

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.

We let the student choose his summer project himself. Because he discovered a connection between craniosynostosis and endometrial cancer aided by a list of craniosynostosis-mutated genes last summer, he wondered whether he could do the same for all diseases. He decided to use PUBMED abstracts to classify disease genes as any gene name co-appearing with a disease. It was an ambitious project with a huge dataset to mine and a long computing time. He developed the Python script all by himself to download all relevant abstracts. Though the student had weekly meetings with us during the summer to discuss any problems, the student was the one to carry out all tasks.

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)?

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.

Wentian Li	_Wentian Li_ Digitally signed by Wentian Li Date: 2019.11.20 11:04:31 -05'00'	Investigator
Supervising Adult's Printed Name	Signature	Title
Feinstein Institute for Medical Research		11/20/2019
Institution		Date Signed (must be after experi-mentation) (mm/dd/yy)
350 Community Dr, Manhasset NY 11030		wli@northwell.edu/(516)-562-1076
Address		Email/Phone