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) Noah Kava

Title of Project Osteopontin in lupus nephritis

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? 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. ☑ Yes ☐ No

3. Describe the independence and creativity with which the student:
   a. developed the hypotheses or engineering goals for the research project

      In his 8 to 10 week time in our lab, Noah, worked towards aims of the osteopontin project.

   b. designed the methodology for his/her research project

      This work was carried in a double blind manner. The samples Noah analyzed were de-identified and coded.

   c. analyzed and interpreted data

      Noah was assigned to analyze the imaging data of patient samples. His affinity towards number crunching proved to be crucial for this work. He was meticulos in analyzing the samples and identifying outliers.

      As a result, after Noah's work, when we compared the clinical notes we observed that stage IV lupus patients have high osteopontin expressing tubules.

(Continued on next page)

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

Student's Name(s) Noah Kava

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.

Noah used immunofluorescence images and designed algorithms to quantify osteopontin and macrophages in the kidney. Using this algorithm, Noah quantified number of osteopontin producing cells as well as CD68 and CD163 expressing macrophages in lupus kidneys. He deligently applied statistical methods to establish coorelation of osteopontin expressing cells with renal macrophages. Dr. Timothy Niewold and I supervised Noah in this effort.

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)?

Noah worked with me, interacted with professional scientists, professors, lab technicians, DCM trainers. However, the data he analyzed was his individual contribution.

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.

Amrutesh S. Puranik	amrutesh puranik	Ph.D
Supervising Adult's Printed Name	Signature	Title
NYU Langone Health		10-22-2019
Institution		Date Signed (must be after experimentation) (mm/dd/yy)
NYU Langone Health, 500 1st avenue, New York		amrutesh.puranik@nyulangone.org
Address		Email/Phone