

# PROJECT RECOMMENDATION

## INSTRUCTIONAL DOCUMENT REGENERON SCIENCE TALENT SEARCH

### INFORMATION FOR STUDENTS

#### **Who should complete the Project Recommendation?**

- The person who is most familiar with the research and the work you did on a daily basis. In many cases that is a graduate student in a lab rather than the head of the lab.
- If your parent is the person closest to your research and completes your Project Recommendation, we recommend requesting an additional Project Recommendation from someone who has experience with you in a lab or research setting, making it clear that they did not mentor this particular research.
- If there is no adult who provided guidance to you, please have a parent or teacher complete this recommendation, stating that is the case.
- If you worked tangentially with a scientific advisor (did not work in their lab, but sought their advisement), this person should complete the recommendation form to share their level of involvement.

#### **When is the Project Recommendation due?**

- The deadline for your Recommender to submit this form is Thursday, November 12, 2020 at 8:00 pm Eastern Time. This deadline is now the same date and time as the student application deadline. We will be unable to accept materials, including recommendations, after this deadline.

#### **How do I request my Project Recommendation?**

- Talk to or email your recommenders to ask them if they would be willing to complete a recommendation on your behalf. Let them know that they should anticipate an automated email from our online system – the sender name will be “Regeneron Science Talent Search.” Then request your Project Recommendation through the online application system.
- We recommend that you request your recommendations the day you open your application to allow your recommenders plenty of time.
- It is your responsibility to remind your recommenders to submit their recommendations before the deadline. We cannot accept any portions of the application, including recommendations, after the application deadline.

#### **How many Project Recommendations should I request?**

- Each applicant must request one Project Recommendation, but may request up to two.
- If you worked closely with more than one mentor, you may request one additional Project Recommendation.

#### **Other things to know about the Project Recommendation:**

- The Society no longer accepts PDF letters of recommendations. Recommenders are now required to answer within the online form.

## PROJECT RECOMMENDATION PREVIEW

Entrants must request that their Recommender complete this form in the online recommendation system. The questions below are asked in the online form.

### RULES QUESTIONS

1. Did the student conduct a non-invasive, non-obtrusive observational or behavioral study on live non-human vertebrate animals?
  - a. Please describe the student's training to work with animals, the supervision under which the work took place, and the student's overall interaction with the animals. (200 words max)
2. Did the student conduct a study of non-human vertebrate animal tissue which was obtained from a pre-existing study and supplied by a supervising scientist?
  - a. Please describe the pre-existing study, provide the title of the IACUC-approved study, the IACUC approval number and date of approval (where required and/or applicable). (200 words max)
  - b. I certify that the student was provided tissue from a pre-existing study and that the animals were not sacrificed, nor were invasive procedures used, solely for the purpose of the student's project.
3. Did the student's research involve either a behavioral or tissue study of human participants?
  - a. Please provide the IRB approval number, title of study and date of approval. Please describe the student's interaction with the human subjects and/or the student's specific role in the larger study. (200 words max)
4. Did you provide the student with pre-existing human data or human tissue?
  - a. I certify that the student was provided with human data/human tissue that was anonymous or appropriately de-identified before it was given to the student AND was in compliance with all privacy and HIPAA laws.
  - b. Explain where and how the human data or human tissue was obtained.
5. Did the student work with PHBAs or hazardous materials? Did the student complete a Risk Assessment?

### PROJECT QUESTIONS

In order to ensure this student entry adheres to Regeneron STS rules, we ask for your support in providing documentation for research projects involving humans and/or vertebrate animals, and in describing the student's level of independence.

1. Do you, or does anyone in your lab, have a familial relationship to the student?
  - a. Such a relationship is not disallowed under Regeneron STS rules, however it is important that it be disclosed. If so, please describe the relationship.
2. Briefly explain how the student became known to you. (75 words max)
  - a. (e.g. personal relationship, summer program, high school partnership, direct communication from student, required or elective high school course)
3. Please describe the nature of your involvement with the student's research. (150 words max)
  - a. What role did you serve for the student? What type of guidance did you provide?
4. How did the student get the idea for the project? (200 words max)
  - a. Was the project assigned; picked from a list of possible research topics; result from discussion with a scientist; arise from work in which the student was engaged; suggested by student?

5. What was the duration and intensity of the student's research experience at your institution?
  - a. Number of weeks, months or years; full-time vs. part-time; resident vs. non-resident, etc.
  - b. Approximate Start & End Dates
6. Provide a brief description of your laboratory/research environment and what the student's role was within this group. (150 words max)
  - a. size, # of scientists/students and their research levels (post-doc, doctoral, undergrad, high school)
7. If there were other high school students in your research group please name them and explain in detail the difference between this student's work and the work of other high school students in your group.
  - a. Name any students who performed research that was similar to this student and explain how this student's work was different and independent from others.
8. For what aspects of the research can you give credit to the student as being his or her own unique contribution?
  - a. Research Question:
  - b. Procedural Design:
  - c. Data Collection:
  - d. Data Analysis:
  - e. Drawing Conclusions:
9. Students may submit published research to Regeneron STS (this is not required), though it is often difficult to determine student contribution to published paper when the student is not the sole or primary author. To your knowledge, how much of the paper that the student is submitting to Regeneron STS is their own contribution, vs. that of your lab group or larger research project? (200 words max)
10. What did the student do that showed creativity and ingenuity?
  - a. Based on your knowledge of the student, please provide examples of how this student demonstrates potential as a scientist. Was he/she creative in his/her science, or creative for a high school student? What is your impression of their knowledge of experimental design, construction or use of equipment, evaluation of data, etc.? (250 words max)
11. Would you hire this student again in the future to work in your lab? Why or why not? In 5 to 10 years, do you believe this student could have a career as a working scientist, engineer or mathematician? (200 words max)
12. How would you rate this student against other high school students you have worked with in the past? Rank Top 1%, Top 5%, Top 10%, Top 25%, Top 50%, Other
13. Please provide any additional information that will help to articulate the work of this student.
14. Does the student have permission to share this research project with the Regeneron Science Talent Search?
  - a. If selected as a finalist (top 40) or scholar (top 300), our science writers will compose short summaries of the research project to share with the public. The student might be interviewed in the media. Through these processes, results might be shared. The Society for Science & the Public does not share student applications, which includes the research report.
15. Is there anything else you would like to share about how the COVID-19 pandemic has impacted your school and/or this particular student? (250 words max)

### **ETHICS AGREEMENT**

I certify that I have presented the full truth regarding the student researcher's experience in my laboratory and have not presented false information. I understand that mentors of Regeneron STS entrants may not benefit financially based on the overall placement of entrants in the competition.

### **TROUBLESHOOTING ISSUES**

Should your Recommender experience any issues with our online process, please encourage them to email [sts@societyforscience.org](mailto:sts@societyforscience.org). Once you request a recommendation from them through the online system, the Recommender should receive an email with instructions. Occasionally these messages are caught in junk mail or strict school email filters, or a recommender could receive requests from multiple students under different email addresses, causing confusion. We are happy to investigate any issues.