

## **SUPER Mentor Best Practices**

(according to past SUPER mentors!)

### **On finding the right student:**

- Interview the student to ensure that the designed SUPER project aligns with the student's interests (*see questions to ask prospective students below*)
- Give the students multiple project options to choose from so they are working on something that interests them

### **On getting the student set up:**

- "Daily check-ins to get started the first two weeks."
- "Exploring resources available at the University together."
- "I explained all the steps that we usually follow in a scientific experiment, how to plan it and what we're looking for, to give them the general idea but then I started giving small tasks discussing with them what we should have done next. In this way, the student seemed to learn what we should do and why."

### **On check-ins:**

- "Only the old strategy of regular meetings and setting (reasonable) goals for the coming week. Zoom has been good to make sure that these meetings happen."

--- Additional helpful guides (credit to SDSS) ---

### **Questions to ask prospective SUPER scholars:**

- What are your personal goals? What will success look like to you? What do you most hope to get out of this experience?
- What classes have you taken? What research experience do you have? These questions will help you assess what the student knows and is interested in.
- What skills do you want to develop? And what is your current skill level? What type of skills/support do you think you might need for this project? For mentor and intern - what is the plan to develop needed skills before and during the experience?
- How do you like to work? Do you like group projects? Both group and individual work skills are probably necessary.
- What is the student's confidence level in: tools, skills, subject matter, independent work? Working with a freshman versus a senior can be a very different experience, for example, in terms of maturity and ability to work independently, so consider what type of student is needed to fit project needs.
- For computational projects, does the lab or students have access to enough computing power? How can that be assessed and set up before the intern begins? Note that

computer RAM on personal laptops was an issue for a number of remote students last year, so consider/evaluate technological capabilities if working on a data heavy project.

- Without crossing the privacy line, ask where the student will be located during the research experience if not invited back to campus (some undergrads are on campus now, depending on their circumstances). Think about timezones and WiFi access for meetings and connectivity, and if the student's situation is compatible with the project and your personal work schedule.
- Think through the ideal output (i.e. paper, conference presentation) and ownership of the ideas. Who will be lead author of a publication? What will it take for the intern to be the lead? Most undergrads will not be ready to be the lead author, yet for SUPER we expect that the students can take ownership of one thread of the research.

### **Tracking Progress and Expectations**

1. Keeping research logs and tracking work
  - a) Many mentors found it useful to encourage their students to keep daily or weekly research logs to track progress and questions.
    - i. Possible things to include:
      1. A daily/weekly summary report on what was done and problems encountered
      2. Documentation of action items at the beginning of each day/week, and assessment of progress at the end of the day/week
      3. Running list of completed action items, problems encountered, and goals/milestones
      4. Details of methodological steps taken and any/all results
    - ii. Not only is this good practice for the students, but also can also serve as useful documentation of the student's work
    - iii. Other used running slides (i.e. Google Slides or PowerPoint) to document analysis and results
  - b) Some mentors also provided weekly readings and short summary assignments of papers, as a way to keep the student immersed and thinking critically about key literature
2. Discuss early on how you expect mentees' to share and store documents
  - a) Find a shared way to store files (i.e. Google Drive, other shared folders)
  - b) Discuss good data management and documentation practices
  - c) Establish regular habit of backing up data and cleaning folders
3. Expectations discussions
  - a) What are your final goals for the program? Discuss this upfront from the start. Mentors found that having clear goals, such as a paper or conference presentation, worked well to push both the mentors and mentees to get results.
  - b) Set the stage that the student will/should be sharing incomplete work. Students can be shy to share work before it is in final form. Encourage them to write early and often, providing feasible writing milestones and regular feedback.
  - c) Some mentors required their students to do an annotated bibliography at the beginning, helping them get an introduction into key literature for their study and also developing a skill that they can take forward.

- d) These are challenging times, and everyone needs a break sometimes! Both the mental health of you and your mentee are of utmost importance. Foster a working relationship where it is OK to take the occasional personal day here and there as needed. In addition, encourage and discuss maintaining a positive work-life balance.

### **End of the Program**

At the end of the research program, your student will hopefully ask you about a potential letter of recommendation. Be honest with your student if you don't feel you can write a positive letter (rare, but it does happen). We highly encourage you to start a practice of taking notes about your student - stories of their independence, intellectual curiosity, critical thinking, work ethic, and all the things that you will see on the tools/resources below.

- The Muse has an article on [“How to Write a Grad School Recommendation Letter”](#)
- Wordvice has an article on [“Graduate School Recommendation Letter Templates and Examples”](#)
- It can also be helpful to work off of a template -- [GSI at UC Berkeley](#) has an [example letter template](#) for formatting and other potential strong language. Stanford University logos [can be found here](#).

Further, the mentor-mentee relationships that are formed are often one of the most rewarding parts of the SUPER experience for your student! We hope you will keep in contact with your mentee after the program, including answering questions about your career path, grad school advice, connecting with them on LinkedIn, etc., and overall be a resource they can turn to in the future.