

# MENTOR MANUAL

The Science and Health Education Partnership  
High School Intern Program  
University of California, San Francisco  
Summer 2024

**UCSF** Science and Health  
Education Partnership



# INDEX

<u>1. PROGRAM OVERVIEW AND KEY DATES</u> .....	1
<u>2. MEETING YOUR INTERN</u> .....	2
<u>3. SAMPLE INTERN CALENDAR AND TIMESHEET</u> .....	4
<u>4. WEEKLY SUMMARIES</u> .....	6
<u>5. SAMPLE ABSTRACTS AND POSTERS</u> .....	14

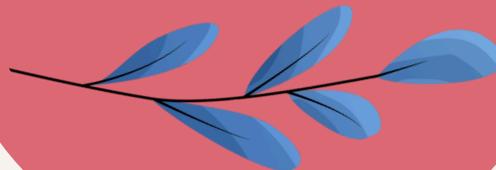
## HIGH SCHOOL INTERN PROGRAM MENTOR MANUAL

### The Science and Health Education Partnership

Rising high school seniors from San Francisco public schools are engaged in research at UCSF for 8 weeks during the summer.

#### June 10 - August 2

Students come from a wide variety of San Francisco public schools and are all from backgrounds underrepresented in science.



# KEY DATES

Program orientation for interns:

**Monday, June 10**

Lab start date:

**Tuesday, June 11th**

UCSF Holiday:

**Wednesday, June 19th**

College visit for interns:

**June - TBD**

UCSF Holiday:

**Thursday, July 4th**

Final Intern Talks:

**Thursday, July 21**

**Poster Session and  
Celebration:**

**Thursday, August 1st**

**5:30-7pm**

**Mission Bay**

# MEETING YOUR INTERN

The student you meet ***has been accepted into the program.*** We think they'll be a good match with you and your lab. Schedule a meeting with the intern; they have been instructed to initiate contact with you, but please feel free to contact them if you have specific scheduling or time constraints. If meeting in person, consider meeting somewhere easy for them to find and then walk together to your lab.

## 1 Goals of the meeting:

- Get to know one another!
- In terms accessible to a high school student, discuss the overall research goals of your lab and the project that the intern would be involved with.
- Discuss your summer work schedule with the intern and find out about theirs (other job, summer school, personal responsibilities, etc.).
- If possible, you can also provide a brief tour of the lab.

## 2 What can you expect during the meeting?

Our interns come from a wide variety of life and school experiences and all have expressed interest and enthusiasm in this program to us. You may get a sense of that in this meeting but some of our interns need time to get comfortable talking with you. We offer you the questions on the next page to help you and your intern get to know one another.

## Questions you can ask the intern:

- What school do you go to? What do you like about school?
- What science classes have you taken? What do you like about science at school?
- What are you looking forward to this summer (in the program or otherwise)? Do you have any goals for yourself this summer?
- What sounds interesting to you about this research? Do you have any previous research experience? (If so, what did you do? What did you like about it? What did you dislike about it?)
- How are you feeling about this summer? Is there anything I can do to make sure you feel supported during this internship?

<-- What do you like to do in your free time? What's your favorite book/musician/tv show? -->

<-- How/when did you become interested in science? -->

<-- What is your schedule like this summer? -->

### 3 After the meeting:

After your meeting with the intern, send us your impressions via email. It is important for us to know if you have any serious concerns about mentoring the intern, or if you are made aware of a scheduling conflicts. Your impressions will be kept strictly confidential between you and SEP.

## What might the intern want to know?

- How did you become a scientist?
- What research does your lab do? What is interesting to you about this research?
- How did you learn to do your research?
- How do people interact with one another in the lab? Is your lab a friendly place?
- What happens if you mess up or an experiment fails?
- What are my responsibilities going to be?
- Why have you chosen to be a mentor? What do you hope to gain from this experience?

# 2024 SUMMER CALENDAR – JUNE

MON	TUE	WED	THU	FRI
3	4	5	6 Intern meetings with Lizz/Lakisha	7 Intern meetings with Lizz/Lakisha
10 First Day of HIP (full day orientation)	 Tuesday Meeting 1pm-5pm	12	13 Career Talk 9am-10am	14 <b>UC Personal Insight Question 1- draft 1</b>
17	18 Tuesday Meeting 1pm-5pm	19 UCSF HOLIDAY	20 Career Talk 9am-10am	21 <b>UC Personal Insight Question 1- draft 2</b>
24	25 Tuesday Meeting 1pm-5pm	26 Mentor Workshop 2	27 Career Talk 9am-10am	28 <b>UC Personal Insight Question 2- draft 1</b>

# 2024 SUMMER CALENDAR – JULY

MON	TUE	WED	THU	FRI
1	2 Tuesday Meeting 1pm-5pm	3	4 UCSF HOLIDAY	5 <b>UC Personal Insight Question 2- draft 2</b>
8	9 Tuesday Meeting 1pm-5pm <b>Abstract draft #1</b>	10	11 Family Financial Aid Night 5-7pm	12
15	16 Tuesday Meeting 1pm-5pm <b>Abstract draft #2</b>	17 Mentor Workshop 3	18 <b>Practice Talk 1 (Mission Bay)</b>	19 <b>Practice Talk 1 (Parnassus)</b>
22 <b>Practice Talk 2 (Mission Bay)</b>	23 <b>Practice Talk 2 (Parnassus)</b>	24	25 <b>Research Talks</b>	26
29 <b>Abstract and Poster Due</b>	30 HIP Posters Print	31	 <b>POSTER SESSION &amp; CELEBRATION</b> Mission Bay 5:30-7pm	2

# WEEK 1

## JUNE 7 – 14

### KEY DATES

- Interns Tuesday meeting: Tuesday, 1pm–5pm
- Interns should start in lab this week! Aim for Tuesday (morning only) or Wednesday.
- Career talk for interns: Thursday, 9–10am

## ORIENTATION

Before the program begins interns will meet 1:1 with Lizz and Lakisha for program overview and expectations review, summer goal setting, getting UCSF ID.

Program Orientation for Interns– June 10

- Community building with all interns
- Mission Bay scavenger hunt
- Introductory pipetting skills
- Program logistics: Timesheets; UCSF shuttle access; My Access & UC Learning Center trainings (HIPPA, lab safety)

## WEEK 1

*Help your intern get comfortable! Give them a tour of the lab and work space, including bathroom locations, where they can store personal items, where they can store and eat lunch, where they can get water, and other basic necessities. Other activities:*

1. Introduce intern to your colleagues and lab mates
2. Have lunch with your intern a few times this week
3. Take tours of your campus
4. **Set a schedule with your intern \*they are in lab 20 or 30 hrs/wk\***
5. Discuss lab norms: Do people talk much? Do people listen to music while they work? Do you take breaks? Is it ok to be on the phone?)
6. Be clear about dress code, safety, and cleanliness expectations

# WEEK 2

## JUNE 17 – 21

### KEY DATES

- Interns Tuesday meeting: Tuesday, 1pm–5pm
- **UCSF HOLIDAY:** Weds, June 19
- Career talk for interns: Thursday, 9–10am

## WEEK 2

*This week your intern will continue learning protocol & procedure, lab skills, and science content in order to build upon their experiences from last week.*

### SUGGESTIONS FOR THE WEEK

- Invite other lab members to join you and your intern for coffee or lunch! Encourage discussion about what your lab members do and how they got into a career in science.
- Start a **learning reflections slide deck**: each week your intern can summarize what they did and learned. This can eventually be the start of their talk and poster!

### WHAT ELSE IS HAPPENING?

College counseling! This includes:

- Individual meetings with our college counselor to discuss transcripts, college options and opportunities, and financial aid
- Group meetings with our college counselor to learn about types of colleges, how to access and complete college applications, and other topics related to planning for college.
- Writing assignments leading to well-developed drafts of UC-specific application questions by the end of the summer.

Talk with your intern about going to college. What was your path to college? How did you choose where to go? How did you pick your major? What was college like? How did you get to graduate school? If you didn't go to college in the US, is there someone in your lab who did and is willing to share their experiences?

# WEEK 3

## JUNE 24 – 28

### KEY DATES

- Interns Tuesday meeting:  
Tuesday, 1pm-5pm
- **Mentor Workshop:**  
**Wednesday, June 26**
- Career talk for interns:  
Thursday, 9-10am

# WEEK 3

Your intern should continue working and learning with you in lab this week. They may still be getting the hang of techniques and learning new ones.

## SUGGESTIONS FOR THE WEEK

- If your intern hasn't attended a lab meeting or journal club, invite them! Don't forget that they will likely need help understanding what is happening. Plan to debrief together after the meeting.
- This is a good week to check in about a few things: is the schedule you set together working for both of you? Is your intern getting comfortable with the lab environment? Is your teaching style working for them?

## WHAT ELSE IS HAPPENING?

This week we will lead an introductory lesson & activity on writing abstracts. The interns will be asked to answer some basic and easy questions about lab:

1. What is your lab's research?
2. What is your part of the project (i.e. what is your research?)
3. How is this project relevant to biomedicine and human health?

We encourage interns to try and answer these questions themselves FIRST. Then, check in together to fill in the gaps.

# WEEK 4

## JULY 1 – 5

### KEY DATES

- Interns Tuesday meeting: Tuesday, 1pm–5pm
- **UCSF HOLIDAY:** Thursday, July 4
- Abstract draft #1 due next Tuesday, July 9

# WEEK 4

This is our halfway point through the program! Project due dates and deadlines will come up quick in the next four weeks. Check out the “Key Dates” on the left for a reminder each week.

## SUGGESTIONS FOR THE WEEK

- Get your intern talking about their project as much as possible. This helps them hear where there are gaps in understanding and can support their eventual research talk development.
- This is a good time to plan ahead for writing/editing the abstract, creating a talk and creating a poster. Do you have examples you can show them?

## WHAT ELSE IS HAPPENING?

In this week’s intern meeting, we’ll begin drafting abstracts. Using last week’s assignment, interns will try writing a few sentences in each of the following sections:

1. Background
2. Aim/Question
3. Methods
4. Results\*
5. Discussion\*

### FIRST ABSTRACT DRAFT DUE NEXT TUESDAY, JULY 9

\*We know most won’t be able to write results or discussion yet, and may still be learning how to do methods.

# WEEK 5

## JULY 8 – 12

### KEY DATES

- Interns Tuesday meeting: Tuesday, 1pm–5pm
- Abstract draft #1 due this week on Tuesday
- Abstract draft #2 due next Tuesday, July 16
- Practice talk #1 next week—each intern has an assigned time: please ask them about it.

## WEEK 5

Well into the research at this point, you may notice that interns are able to work more independently and feel more empowered as a researcher. We love this for them!

### SUGGESTIONS FOR THE WEEK

- Set some internal deadlines for you and your intern so that you can support their work before it's due to us. They will get feedback on their first abstract draft this week.

#### SECOND ABSTRACT DRAFT DUE NEXT TUESDAY, JULY 16

- Your intern may need help with time management over the next few weeks. Help them set aside time in lab to work on their assignments so they don't have to take much work home with them.

### WHAT ELSE IS HAPPENING?

In this week's Tuesday meeting, interns will participate in a workshop on Creating Science Talks. They will see and evaluate examples of former interns' talks.

**Practice talks begin next week.** Each intern meets with Lizz and Lakisha twice before giving their actual talk.

Thursday, July 11: Family Financial Aid Night. Interns and their families are invited to attend a workshop offered by our college counselor with a focus on the financial components of applying and attending college.

# WEEK 6

## JULY 15 – 19

### KEY DATES

- Interns Tuesday meeting: Tuesday, 1pm–5pm
- Abstract draft #2 due this week on Tuesday
- Practice Talks (interns only)
  - Thursday – Mission Bay
  - Friday – Parnassus
- **Mentor Workshop**  
**Wednesday, July 17**

# WEEK 6

This week we begin practicing research talks with all interns, to prepare for the research talks they'll give next week. During the practice session, each intern will present as though they are giving their talk, no matter how much content they have. Our expectation for practice session #1 is that the interns have at least an outline with placeholder slides for what they can fill in over the next week.

### SUGGESTIONS AND DEADLINES FOR THE WEEK

- **Abstract draft #2 is due this week on Tuesday, July 16**
- Practice Talk #1 at Mission Bay (Th, 4/18) and Parnassus (F, 4/19). Interns will practice and give their talks at or near the campus where they work.
- Help your intern prepare for their talk. Though this presentation should be the intern's own work, you may have images or videos from previous presentations to share with them.
- Practice Talk #2 next week on Monday and Tuesday.
- Final Talks are next week on Thursday, July 25.

# WEEK 7

## JULY 22 – 26

### KEY DATES

- Practice Talks (interns only)
  - Monday – Mission Bay
  - Tuesday – Parnassus
- **Research Talks:  
Thursday July 25**
- **Final abstract and poster due  
next Monday, July 29**

# WEEK 7

The summer is wrapping up and we are preparing for big milestones and celebrations! The interns give their Research Talks this week. Then almost immediately they are asked to submit their final abstract and their poster.

## SUGGESTIONS AND DEADLINES FOR THE WEEK

- Practice Talk #2 at Mission Bay (M, 4/22) and Parnassus (T, 4/23).
- **Research Talks are THIS WEEK on Thursday, July 25. Please invite your lab colleagues and PI!**
- Intern's final abstract and poster are due next week on Monday, July 29th. We will not have time to do anything but minor edits.

**Please make sure your intern's poster and abstract are ready for printing when they send them to us next Monday.**

# WEEK 8

## JUL 29 – AUG 2

## WEEK 8

This is the last week of the program!

**FINAL ABSTRACT AND POSTER DUE BY 6PM MONDAY, JULY 29**

*\*Reminder. Lizz and Lakisha won't have time for poster review; please review the poster and abstract with your intern before they turn it in.*

Since this is the last week of work for the interns, we encourage you and your lab to plan some small event to say farewell.

## POSTER SESSION & CELEBRATION

We invite you and your lab to come support your intern and celebrate their accomplishments this summer!

**Thursday, August 1**

5:30–7pm

Mission Bay, Genentech Hall

Refreshments provided