

# **Steering Committee Meeting, Winter Quarter 2020**

## Graduate Bioinformatics Council (GBIC) Student Updates

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# 1. Student Initiatives Update

## a. GBIC / Student Events and Activities

- **Monthly journal clubs** where recent BISB/BMI student publications are featured and discussed over food and drinks. *Coordinator:* Clarence Mah (2nd Year, BISB)
- **Quarterly wellness events** for students to discuss and reflect upon their experiences in graduate school in a judgement-free zone. We stress that information discussed at these events remain only amongst people that were there, except in the case of self-harm, harm onto others, or threats of harm.
  - *Coordinator:* Jonathan Pekar (2nd Year, BISB)
- **Community outreach events** to broaden the common knowledge of bioinformatics in the community.
  - *Coordinator:* Jennifer Havens (2nd year, BISB).
  - *Additional Students Involved:* Luisa Amaral (2nd Year, BISB), Clarence Mah (2nd Year, BISB), Jennifer Nguyen (2nd Year, BMI), Michelle Ragsac (2nd Year, BISB), James Sorrentino (3rd Year, BISB), and Joe Solvason (2nd Year, BISB)
  - Expanding Your Horizons (EYH) is a career day catered towards middle through high-school girls where GBIC is creating an hour-long interactive workshop to teach attendees about viruses
  - San Diego Festival of Science and Engineering (SDFSE) EXPO Day at Petco Park is an all-day science expo attended by thousands of kids (K-12) where we demo a lego sequencing machine in partnership with the Undergraduate Bioinformatics Club (UBIC) and UCSD Scientista,
  - S.T.E.M. fair at Wangenheim Middle School on March 13th
- **Program apparel**
  - *Coordinators:* Dana Nachmanson (3rd Year, BISB), Michelle Ragsac (2nd Year, BISB) and Clarence Mah (2nd Year, BISB)
  - Branded T-Shirts: Program t-shirts were ordered for current first year students as they were unable to get t-shirts during bootcamp
  - Branded Patagonia sweaters: Currently coordinating with the BISB and Bioengineering Departments (Elizabeth Soos) to place a bulk order after an interest form sent out with 45 responses from faculty, staff, alumni, and current students
- **Genetics, Bioinformatics and Systems Biology Colloquium (GBSBC) seminar series**
  - *Coordinators:* Hratch Baghdassarian (2nd Year, BISB), Jonathan Pekar (2nd Year, BMI), Joe Solvason (2nd Year, BISB), Andrey Bzikadze (3rd Year, BISB), Cynthia Wu (3rd Year, BISB), Lina Zheng (3rd Year, BISB), Bahar Behsaz (5th Year, BISB)
- **Outcome:**
  - Successful student community building events, community outreach efforts, and seminar series
- **Areas of Improvement:**
  - Many faculty are directly contacting students for program apparel, students have expressed that this should be organized by program administrators
  - Difficult to get funding for program apparel
  - GBSBC seminar students have experienced increased amounts of responsibility because of decreased administrative support
- **Suggested Actions:**
  - Increased administrative support in planning the prospective speakers' visits after they have been confirmed
  - Program administrators should coordinate a consistent stock of program apparel

## b. GBIC / Student Recruitment Efforts

### i. GRE Search Service

The GRE Search Service allows institutions to collect student demographic information at a price in order to recruit for their programs (e.g. gender, desired graduate degree, citizenship status, etc.) GBIC partnered with Anh Pham (2nd Year, BMI) to recruit prospective applicants using the GRE Search Service ([https://www.ets.org/gre/institutions/recruitment/search\\_service](https://www.ets.org/gre/institutions/recruitment/search_service))

- *Additional Students Involved:* Michelle Ragsac (2nd Year, BISB); Jennifer Havens (2nd Year, BISB)

- **Outcome:**

- 3,301 students contacted
- 29 students submitted applications
- 8 students selected for interview (*either candidate for direct admit or invited for interview*)

- **Areas of Improvement:**

- Emails were sent only 1 ½ weeks prior to app. deadline; should be done further in advance
- Large workload for students:
  - Coordinating with GRE Search Services
  - Developing HTML email template to distribute
  - Coordinating with faculty to request funding

- **Suggested Actions:**

- Program administration and faculty management of this recruitment effort for subsequent years

### ii. Diversity Recruitment for BISB

This year, GBIC organized attendance of two students to diversity-focused conferences with the goal of recruiting students to our program.

- **Outcome:**

- Jennifer Havens (2nd Year, BISB) was sent to ABRCMS to represent BISB at a joint booth with the Graduate Division, Biomedical Sciences, Bioengineering, and other departments.
- Joaquin Reyna (2nd Year, BISB) was sent to SHPE to present a poster
  - Reported having poster at a conference likely not helpful in recruiting applicants to UCSD as compared to having a booth

- **Areas of Improvement:**

- SHPE attendance was funded by T32 travel award which students have expressed concern over:
  - Students on training grant are mostly unaware they have travel funding
  - Using a trainee's travel award, which they could have used for a conference of their own choosing, for program recruitment is likely not appropriate and should come from different funding source

- **Suggested Actions:**

- Continue of funding support for booths at diversity recruitment conferences
- Skip sending students to present posters at diversity recruitment conferences
- Notify T32 trainees of their travel award

## 2. Recruitment Weekend 2020 Recap

The planning of recruitment weekend is a large logistical affair that required significant effort from current students involved with GBIC, and program admins Calandra, Savannah, and Jade. We acknowledge the time contributions from faculty for interviews and applicant feedback.

- **Outcome:**
  - Overall, put together successfully despite administrative turnover and limited time
  - **Strong graduate student turnout and participation** on several key aspects of recruitment weekend, including providing transportation for interviewees to campus, etc. (see Table 1 for list of contributors).
    - Table 1: (see attached)  
<https://docs.google.com/spreadsheets/d/1lIbJK81jGcGsloMUoyrnQaR3-WucmcJgsC2v0pvCW40/>
- **Areas of Improvement:**
  - Large graduate student burden **both in time and money**
    - Recruits were driven to and from the airport by students with no reimbursement for gas or mileage on personal vehicles.
    - Dinner required large out-of-pocket payment by students for later reimbursement
      - One student was required to apply for a higher credit limit to cover the costs
    - Hours of logistical planning were required by graduate students
    - Interviewees noted that the emphasis on “student-run” raised alarm for program organization for some, and interviewees noticed the lack of faculty presence during recruitment
  - Organization :
    - Division of tasks across students and administration resulted in costly oversights
    - Interviewees felt rushed from interview to interview and voiced that this made them feel stressed, and that their repeated tardiness would negatively impact the interviews
    - Interview schedules not provided to all BISB candidates until day-of
  - Interviewee accommodations not requested until prompted by students:
    - Dietary restrictions (*food ran out for students with dietary restrictions at Fri. dinner*)
    - Mobility restrictions
  - Insufficient general UCSD program logistics provided to interviewees during the weekend:
    - Stipend information, health care benefits, housing information, housing conditions, etc. are not explicitly shared with interviewees which is commonplace at other universities
- **Suggested Actions:**
  - Reimbursement for gas / mileage for recruit transportation by students
  - Student planning burden moved to administrative support
    - Unsustainable to rely on this extent of student volunteer coordinators
    - Explicitly decide scope of recruitment commitments of graduate students
  - Interview schedules should be sent to all interview candidates prior to interview day
  - Interviewees should be given opportunity to request reasonable accommodation and dietary restrictions

- More faculty involvement in recruitment weekend

### 3. Student Survey Summary

On February 4th, 2020, GBIC sent out a survey to Bioinformatics & Systems Biology students to gather student feedback about the program prior to the steering committee meeting: <https://forms.gle/Ey7vcoEFDx49P3vC8>. **A total of 35 students responded, (7 BMI and 28 BISB).**

#### a. Administration Sentiment

Due to the recent administration turnover, in our survey we wanted to gather a better understanding of student needs for administrative resources and faculty support. For this question we pulled from previous year surveys for comparison. The higher proportion of “Yes” in 2019 in **Figure 1** is likely due to Jade’s presence all year, further suggesting the need for continuity and consistency in our administrative resources.

**Note:** Students are very appreciative of the extreme workload and excellent job that Calandra has done but recognize that it is a temporary placement.

Figure 1. Student Satisfaction with Administrative Resources Provided by Program In Past 3 Years. In 2020, the majority of students which responded to this question were “No” (16/34 students) and “Somewhat” (13/34 students) satisfied with the current administrative resources provided by the program. Five students reported that they are satisfied.

Who do you usually go to for advice or getting questions answered about the program?

34 responses

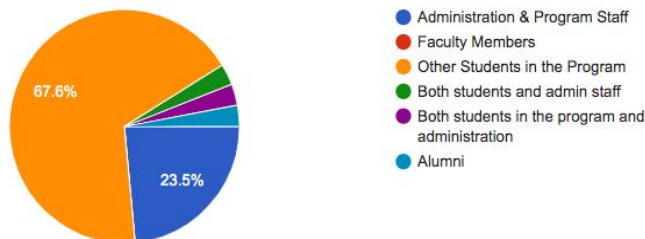


Figure 2. Student Administrative Support Network. Most of the respondents approach other students within the program in order to get administrative questions answered or to get advice (23/34 students), other respondents approach administration and program staff (8/34). The other respondents approach faculty, alumni, or a combination of all the above.

**Desired Qualities of a Successful Program Administrator (24 responses)**

When asked about what qualities they look for in successful program administrator, students noted that they wanted this individual to be:

- **Approachable, proficient and dependable** at providing administrative support to students
  - Knowing what/how to fill program forms
  - Knowledgeable on:
    - Class offerings
    - Qualification exams / advancement to candidacy / thesis defense

### Improving Administrative Support (23 responses)

Students were asked what changes in administrative support they believe they or other students could benefit from. Nearly all of the respondents to this question wanted **a consistent and dedicated program administrator(s)** to support students within the program, but students also acknowledged that the faculty are currently working on filling the open position left by Jade Hermes. Respondents suggest:

- **Most Popular Suggestion:** Consider hiring multiple administrators to decentralize the role
  - Students empathize with the significant workload on a single individual and could identify the program administrator's extremely high workload
  - Consequently, students inappropriately share the burden of administration
- Accurately and comprehensively outline the role of program administrator for prospective applicants

## b. Program Sentiment

As a whole, do you feel supported by the department? This is not necessarily about the experience with your PI, but with the program itself.

34 responses

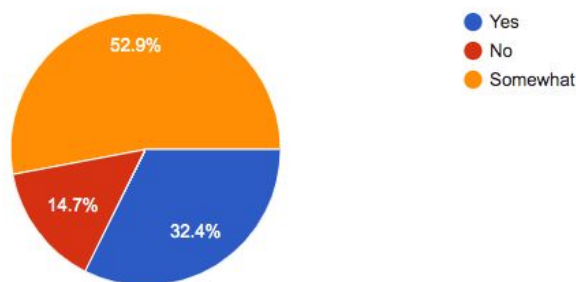


Figure 3. Student Sentiment Towards Program Support. The majority of respondents felt "Somewhat" (18/34 students) supported by the program and "Yes" (11/34 students) supported by the program. A minority of students felt not supported by the program (5/34 students).

### Improving Program Sentiment (18 responses)

When students were asked if they do not feel entirely supported by the program, how would they want to be supported by the program, most answers fell under **increasing transparency and faculty support**.

As a whole, students wanted **more clarity from the department** regarding program requirements, program expectations from administrators and faculty, and program benefits (e.g. healthcare). Students believe

transparency would boost confidence in the department and confidence in their own graduate school success. Some of the items students wanted more clarity on:

- **Individual funding sources**, especially when a student is not on the program's training grant so they know if they can apply for other grants and fellowships (e.g. Genetics Training Grant, Quantitative Integrative Biology Training Grant)
- **Concrete program timelines** with regards to getting set-up for their Qualifying and Senate Examinations, course requirements and program goals for completing requirements, and processes for completing these requirements (e.g. how to find a TA-ship)
- **Faculty involvement** in program administration (e.g. hosting program retreats, bootcamp activities, etc.) in events that are primarily student-run
- **Program requirements and commitments**, especially for first-year courses, that are given to faculty within the program so that they are aware of student workloads
  - "The Bioinformatics curriculum is much more dense and demanding compared to Biomedical Sciences, Chemistry, and Biology. Bioinformatics faculty who have students from multiple disciplines are often not aware of the rigorousness of course requirements, especially during rotations, placing stress and pressure on students."

### c. Program Compensation:

#### Program Funding & Living in San Diego

With the recent protests and national coverage towards incorporating a "Cost of Living Adjustment" (COLA)<sup>12345</sup> across the UC Campuses which spread from UCSC, and with continued student demands for a higher stipend since the Spring Quarter 2019 Town Hall Meeting, we wanted to gather student input on financial support provided by the program.

"Rent burden" is defined by housing scholars as spending more than 30% of wages on rent<sup>6</sup>. In **Figure 4**, we asked graduate students how much of their stipend is spent towards rent and other living expenses. In this question, 90.9% of respondents spent 30%+ of their stipend towards rent.

<sup>1</sup> <https://www.santacruzsentinel.com/2020/02/18/uc-santa-cruz-grad-students-still-on-strike-in-shadow-of-firing-threat/>

<sup>2</sup> <https://www.ksbw.com/article/ucsc-graduate-students-threatened-with-being-fired-by-uc-president/30972098>

<sup>3</sup> <https://newrepublic.com/article/156591/wildcat-strike-grows-housing-crisis>

<sup>4</sup> <https://www.nytimes.com/2020/02/13/us/california-mountain-messenger.html>

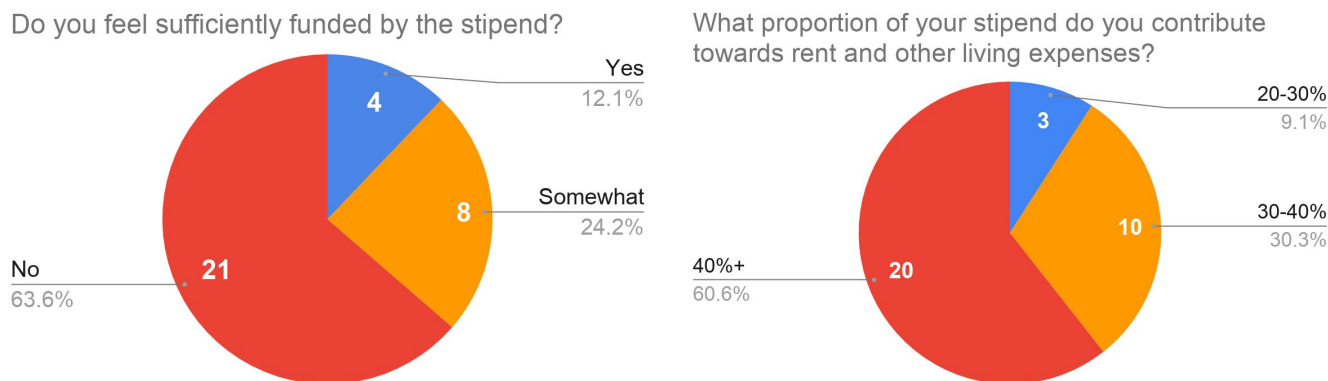
<sup>5</sup> <https://www.insidehighered.com/news/2020/02/11/uc-santa-cruz-grad-assistants-strike-living-wage-tough-rental-market>

<sup>6</sup> <https://www.washingtonpost.com/education/2020/02/14/graduate-strike-uc-santa-cruz-leads-arrests/>

<sup>7</sup>

<https://www.nbcbayarea.com/news/california/uc-president-threatens-to-fire-striking-uc-santa-cruz-grad-students/2236165>

<sup>8</sup> [https://www.huduser.gov/portal/pdredge/pdr\\_edge\\_featd\\_article\\_092214.html](https://www.huduser.gov/portal/pdredge/pdr_edge_featd_article_092214.html)



**Figure 4. Student Spending Towards Living in San Diego.** There were 34 students that responded. The majority of students (90.9%) contribute more than 30% of their wages on rent, which is considered to be “rent burden”. Approximately 60.6% of students contribute more than 40% of their wages on rent.

### Non-academic Funding

As a whole, students in our program did not feel sufficiently funded by the stipend. Many students report having additional non-academic funding sources (e.g. family, spouse assistance, prior saving from working).

Responses to whether they had **non-academic funding** included:

- “It would be difficult to make ends meet without the income of my spouse.”
- “Yes, working spouse.”
- “I have a little money left over in a 529 account set up by my parents”
- “Luckily I have savings from having worked in industry previously, but without these additional savings I would find myself quite pressed for funds to be able to keep myself happy while in the program.”

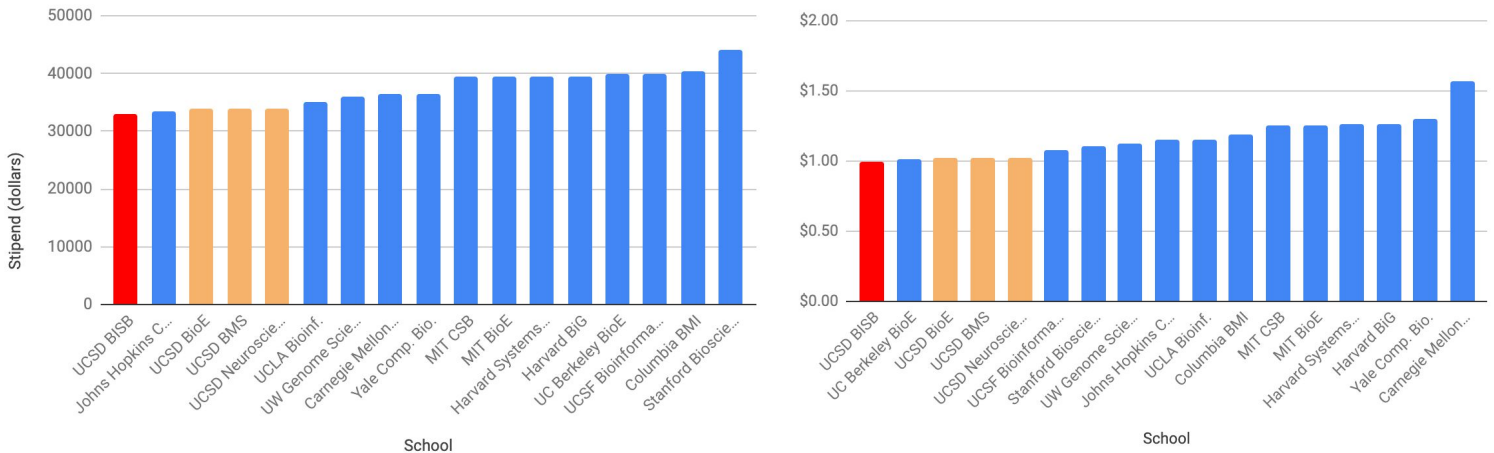
### Regarding Compensation at Comparable Programs

Several students also commented that our compensation is lower compared to other similar programs at other universities as well as at UCSD (e.g. Bioengineering, Biomedical Sciences, Biology). Respondents were also concerned with the lack of a mechanism to increase the stipend in order to keep up with the rate of inflation in the area, similar to how UC Employee wages have gradual, automatic increases.

Furthermore, we are consistently undercompensated compared to our peers at other institutions. As mentioned, our funding does not increase every year, while other schools increase the stipend typically between 2 and 5% per year (information came directly from calls to institutions in **Figure 5**). In **Figure 5**, the current stipends for other programs at UC San Diego and at competitive institutions are compared, including both the raw stipend amounts and a living wage index (wage / cost of living salary in the given region<sup>9</sup>). In both analyses, UCSD’s Bioinformatics program is comparatively the worst.

<sup>9</sup> <http://livingwage.mit.edu>





**Figure 5. Stipend Comparison.** UC San Diego's BISB/BMI program's stipend is compared to the stipends of other programs at UC San Diego and at rival programs in other institutions. These numbers were acquired both by internet searches and direct conversations with staff at these schools. Raw stipend amounts for each program on the left. Living wage index (wage / cost of living salary) on the right.

#### Additional Student Comments Summary (8 responses)

- Generally, many students are dissatisfied with the amount of support currently provided by the program
  - There are concerns with how the program is handling administrative matters, especially given the high turnover of program administrators
- Students request structure and policy in how student concerns are heard and then addressed
  - i.e. many of these concerns were raised at Town Hall meetings in previous years and remain issues
- Additionally, one student commented on the lack of a physical PDF for program guidelines that students can easily access. Only having a website to serve as a program resource is frustrating to students, as this can be easily modified by program faculty without the oversight of version control.
  - For example, program guidelines are easily available to graduate students in BMS and Biology.
  - This individual asked for a document-controlled resource for students and faculty that would provide expectations of the program for each stakeholder
- Multiple students commented on the lack of the program's support in helping take care of their mental health, frequently referencing the suicides at similar programs in other schools
  - Students were upset that certain faculty felt mental health problems were derived from working hard and were just "part of graduate school"
- One student expressed regret in coming here because of the overall lack of support and structure for students from different backgrounds