

Report of the 2019 BSD Graduate Teaching Committee

Committee Members:

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Process: The Committee worked together electronically to develop a survey on teaching training which was delivered to all BSD graduate students in Spring Quarter 2019.

Primary Survey Outcomes:

1. Of 450 enrolled students 221 responded to our survey (a 49% response rate).
2. A substantial proportion of students aspire to careers that involve some teaching (26% definitely and 31% probably), only 15% state that they “doubt it” or “definitely not”.
3. Most students are comfortable discussing their teaching aspirations with their primary mentor (only 8% are “uncomfortable”).
4. ~2/3 of respondents had completed one or two of their required TAs. Most reported that these have given them “some” preparation in teaching although close to 1/3 state that TAs have “not really” or in a few cases “definitely not” prepared them. Respondents report that their preparation is strongest for conducting a class session and grading assignments/exams. Preparation is weaker for teaching effectively, and writing exams. Preparation is weakest for course design.
5. 30% of respondents would “definitely” value an opportunity to be instructor of a course. Much of that interest is maintained even if significant additional preparatory training would be needed – although a sizeable proportion state that time constraints would prevent them from moving ahead.
6. 44% would “definitely” value an opportunity to teach a “module” of a course for a few weeks.
7. 34% would “definitely” value an opportunity to design a course. Interestingly, comments focus on the lack of opportunity to be trained in this area when in fact the CCT offers a course on the topic.
8. Student awareness of CCT offerings is lacking. 23% of respondents “know nothing” about the CCT and 37% “know it exists but not much more”.

A summary of student responses by program is shown below.

CLUSTER	PROGRAM	SENT (450)	RESPONDED (221)	% responded
BIOMED	CABI	36	17	47.22%
BIOMED	IMMU	33	16	48.48%
BIOMED	MICR	19	13	68.42%
BIOMED	MOMN	13	7	53.85%
DARWIN	ECEV	20	9	45.00%
DARWIN	EVOL	22	3	13.64%
DARWIN	ORGB	18	9	50.00%
MOLBIO	BCMB	28	18	64.29%
MOLBIO	DVBI/DRSB	22	9	40.91%
MOLBIO	GENE/GGSB	33	18	54.55%
MOLBIO	HGEN	18	9	50.00%
MOLBIO	MGCB/CMB	31	14	45.16%
NEURO	CPNS	26	10	38.46%
NEURO	NURB	32	18	56.25%
UNCLUSTERED	BIOPHYS	33	19	57.58%
UNCLUSTERED	ISTP	38	18	47.37%
UNCLUSTERED	MPHY	16	9	56.25%
UNCLUSTERED	PBHS	12	5	41.67%

The Committee then met in person on three separate occasions through Summer 2019; a summary of the major findings and related recommendations is provided below.

Finding # 1: There is a lack of awareness of teaching-related resources on campus

Survey data indicate that student awareness of Chicago Center for Teaching (CCT) offerings is lacking. Faculty on the committee confirmed that they too were unaware of the range of options at CCT, and also confuse CCT courses with the BSD's TA training course.

Recommendation: Students and Faculty should be made more aware of teaching-related resources on offer.

Specifics:

1.1. Kiki Zissimopoulos will be invited to speak at the annual new student **orientation** (*this occurred in Aut Qtr 2019*) and to speak to the graduate program directors annually.

1.2. A “**road map**” document that outlines teaching training opportunities, both within BSD and at the CCT, and provides links to online resources, is being developed by committee members and when complete will be shared with students and faculty and posted on line at UChicagoBiosciences.

1.3. More BSD students will be encouraged to consider becoming **CCT fellows** — one forum for this is BSD’s quarterly TA meeting.

1.4. To continue to enhance student knowledge of teaching and teacher-training opportunities BSD should also coordinate an **annual information session** with Kiki Zissimopoulos and the CCT fellows (*This occurred Feb 5th 2020*).

Finding # 2: The BSD TA-ship program needs updating

Both faculty members and students lack a consistent understanding of the goals of the divisional TA-ship program. Students feel they lack good opportunities to develop as teachers and/or are receiving insufficient mentorship as they serve as TAs.

Recommendation: Improve current TA-ship mechanisms to offer more clarity, better opportunity, and more effective mentorship.

Specifics:

2.1. **Written guidelines** for faculty and students on the goals and expectations of TA-ships will be developed –modeled on documents currently in use in other divisions.

2.2. A clear “**menu of options**” for TA contact with students that meets the divisional requirement will be developed. Options include a mentored lecture/lectures (absolute maximum of 3 contact hours), discussion sessions where there is at least one opportunity for faculty feedback, running laboratory sections with in-lab mini lectures.

2.3. The sign-up form for TA-ships will be re-structured as a “**compact**”, designed to encourage the faculty member and TA to work together on outlining their plans and reflecting on goals, rather similar to current lab rotation documents.

2.4. A comprehensive **online catalog of teaching opportunities** should be developed (in conjunction with the college), each of which includes a range of appropriate opportunities within that class. E.g.: “TAs will be expected to run a weekly discussion session but have the option to additionally develop and deliver one mentored lecture”. There should also be a tick box where the faculty member can indicate if they are willing to provide “extended teaching-related mentorship to students interested in developing teaching skills beyond the standard divisional requirement”.

2.5. A short **online application process** for TA-ships should be established, in which prospective TAs provide their credentials to faculty seeking a TA. This will require a real time list of open versus filled positions to be in place. Both the catalog and the application processes should be developed with input from the BSCD instructors.

2.6. A new option, of teaching the same course twice for the divisional requirement, but only when significant progressive responsibility is added, should be evaluated by the faculty TA committee. This would allow students to become familiar with material the first time they take the class and deliver more of it the second (a maximum of 3 contact hours of lecture material may be delivered by the TA).

2.7. The committee agreed that the BSD's TA training course has value with (i) helping students feel confident enough to TA, or (ii) in a remedial context after a bad teaching experience. However, the course is inappropriate for senior students who are highly unlikely to go on to teach again at UChicago. Course access should be limited to students in their 4th year or earlier (beginning with students who matriculated in AUT '19). *(Note: GEAC—the Graduate Education Advisory Committee— felt that students should typically only be allowed to register for the TA course after an initial TAship if they petition the standing TA committee for permission).*

Finding # 3: A subset of students is seeking more extensive teaching experience, frequently as part of their professional development towards a career that includes significant teaching

Recommendation:

Develop mechanisms that allow select students to gain more extensive course design and delivery experience where desired and appropriate.

Specifics:

3. 1. The concept of a “**student teacher**” position will be evaluated further. The broad concept is that the student would first TA a specific class, and after also taking the CCT Pedagogy or Course Design course, would return the next year to take on a significantly larger role in the same class. To count as a “student teacher”, rather than merely a second TA-ship, a piece of curricular development would be necessary and the student would be required to teach a “module” of ~2 weeks. This will take some significant advance planning and likely be something only a few student/faculty pairs will embark upon. An instructor of record would need to function in setting up the experience, and evaluating it. The overall concept would require approval from the BSCD governing committee, GEAC, and the graduate program heads. Given the time commitment, this experience would be subject to pre-approval by the student's thesis adviser (as are TA-ships subsequent to the divisional requirement). If approval is denied, the policy for internships could be invoked.

3.2 Opportunities to **teach outside** UChicago classes could be better advertised to the students. A variety of opportunities are potentially open to BSD student teachers beyond the UChicago standard college/graduate classes. The UChicago Summer Session is an option for

recent graduates. Short term opportunities such as Collegiate Scholars Program – UChicago (30 instruction hours in summer), Expanding your Horizons, Clubes de Ciencias (grant funded short term teaching in Mexico and the US; currently BSCD's Oscar Pineda is involved), Citizen Science at Bard College (3 weeks in January) could all be better advertised, perhaps by developing new pages on the UChicagoBiosciences website and/or using promotion via myCHOICE. Once again the policy on internships will likely need to be invoked

3.3. myCHOICE and/or UChicagoGRAD will be encouraged to run sessions with alumni at smaller/liberal arts colleges, both recent hires and those involved in hiring decisions, to ensure our community has an up to date understanding of the qualifications and experience needed for such jobs.