

CAMBRIDGE SCHOLARS PROGRAM PARTICIPANT COMMENTS MICHAELMAS 2021

Shubh Agrawal '22, Physics, Michaelmas Term/Corpus Christi College

Living in and studying at Cambridge have been an exhilarating time. The past eight weeks or so have gone by fast. I live in a single in Corpus Christi College, with my window overlooking Trumpington Street, right next to the city center of Cambridge. The College and the city are beautiful and filled with their own history and culture - both of which blend into the familiar modern college experience, making being here a unique experience.

Classes for me are at the Cavendish Laboratory, home to its own history of physics. It is quite humbling to browse the department museum on its first floor, which houses the experimental apparatuses Thomson used to discover the electron and Chadwick used to discover the neutron. I walk about forty minutes every day to go to lecture at Cavendish in West Cambridge, and on my way, I see the Corpus Clock, a strange art fixture belonging to our college. I walk by King's, Queen's, Trinity Hall, and the university library. Cambridge is a place filled by beautiful architecture, and you get to simply exist in the midst of it all.

I did two Part 3 and two Part 2 courses, all of them in the physics department except one at the Institute of Astronomy. I also did a term of experimental senior thesis by correspondence. I loved the course content of all my classes, and the lecturers really know what they are doing and are passionate about what they teach. The supervision system allows you to interact more deeply with your course content. You don't need to get everything perfect, instead you need to understand the material on its fundamentals and ask your questions.

I was initially geared up to come here last year but decided to defer a year due to COVID. This did vary my course choices which had its pros and cons. Had I been here last year, I would have been predominantly Part 2, which would have helped me collaborate more broadly. However, Part 3 courses are excellently interesting, so I am happy I decided to defer. Additionally, the social part of Cambridge was essentially back to normal this year. We were of course encouraged to wear masks and socially distance, particularly in the department building, doing so (along with contact tracing) was mandatory. At the same time, night clubs, pubs, and restaurants were all open, events were not affected at all, and societies were back in full force. I was able to enjoy the social aspect of Cambridge as someone normally would.

I am happy that I chose to be here in Michaelmas. As all new undergraduates and postgraduates also come here this term, there were several activities specifically geared towards us during Orientation week. Being in senior year, a lot of them did seem to be repetitions of what we have already experienced and in fact taught underclassmen, it was nice to get to feel comfortable not knowing people here and introducing ourselves without awkwardness. It was also easier to form study groups for my advanced level

classes with the new postgraduates. I got to experience matriculation, consisting of class photographs, a signature ceremony, and a formal dinner, which was amazing. Of course, an essential part of the Cambridge experience is formal halls. Though Corpus did not have halls regularly this term due to wage shortages, I still got to go to a couple of special dinners. I would also recommend Michaelmas over Lent term due to the general weather. England being at a high latitude experiences very short days during the winter (the Sun goes down around 4 pm right now!). So, the last week has been really chilly and dark, which is not something conducive for adventurous activities. About societies, the main thing distinguishing this place from Caltech is that there is a much more major influence of students with non-STEM aspirations. I got to take part in some athletic groups, some political action groups, and some chill clubs like board games and roleplaying activities. Punting in the River Cam is a thing you should not miss doing here. Academic societies like the physics, astronomy, and rocketry also organize regular talks and observation nights. Michaelmas offers you the chance to get to know all these clubs at the Fresher's Fair. I would recommend looking at some of these clubs before getting to Cambridge and trying things out as soon as possible. Eight weeks is not a long time, and academics pile up during the final weeks of term, as most of your supervisions would be then.

Cambridge is well connected by rail. You can get to London in about an hour, which makes for an ideal day trip. In London, I was able to visit the British and Natural History Museums, the Tower Bridge, a cable car line over the river, Westminster, 221B Baker Street (Sherlock Holmes), and a bunch of small shops and cafes. Another day trip I would recommend is Ely (fifteen minutes by train), home to a magnificent cathedral, nice antiquity displays, and some key museums about England's history.

This will be an expected cliché, but my favorite thing about Cambridge is the people. You get to talk to so many different people, from different backgrounds, and with different academic and professional aspirations. My most memorable memories are going to about playing games or hanging out with people here. It is definitely harder to interact and be social here, particularly because Cambridge does not have something like the house system geared towards making new students feel welcome or as active collaboration as Caltech does. You will need to put in the effort to go to events or activities, find new people, and introduce yourself. If you are an introvert like me, you need not be scared, as this could be over dinner, walking to class, or playing board games. But, at the end, I am confident that if you choose to come to Cambridge, it would be one of the most memorable and fun terms for you, as this place is filled with interesting people with great stories.

Myra Cheng '22, Engineering, Cambridge Michaelmas/St. John's College

The past two months have been an incredible experience. Socially, the term is full of events and fun things to do from beginning to end. During Michaelmas term, the first weeks are filled with events specifically for Freshers (first-year Cambridge students). St. John's College had a week of orientation events, which are a great opportunity to meet other students. One of my favorite parts of Cambridge has been the people that I have

met. In stark contrast to Caltech, many of my friends here are humanities majors, and it is very refreshing to not talk about anything related to STEM with them. I've also had some fun discussions with STEM majors and learned a lot about the academic system here, which is very different than the US. For example, British students choose to study either the humanities or the sciences at the beginning of high school, so people are always very surprised when I tell them about my double major in computer science and history at Caltech. The student body feels much more heterogeneous compared to Caltech. There are a lot of international students here (mostly from other European countries), and it's so interesting to hear their perspectives.

In the first week, societies have welcome events from barbecues to an introductory "blind wine tasting" to free dance classes. I joined the Pole Sports Society, which offers pole dancing classes for all levels (I go to the beginner ones), and St. John's rowing society, the Lady Margaret Boat Club. The people in these societies have been very welcoming, and it's been a good way to meet people from other colleges beside St. John's. St. John's is such a big college (like the size of Caltech) that I feel like I could never leave its grounds and still have a great time – it has a beautiful library, a cafeteria, sporting grounds, and castle-like Gothic architecture.

The classes here strike a good balance between being challenging enough that I am learning new material and leaving me with ample free time to enjoy my experience abroad. My favorite class here has been Climate Change Mitigation, through which I have met other students who are passionate about the environment. The professor who teaches the class seems to be very active in this space. For example, he was asking us for feedback on his Op-Ed about COP26, which he published a week later in a prominent news magazine.

Cambridge is a wonderful place to study in. It is very much a student/college town, so it is super convenient to do everything – the grocery store, clubs, bars, parks, cinemas, etc. are just a short walk away, even closer than the department building where my classes are held. The architecture of the town is so regal and beautiful that it is enjoyable to take walks in central Cambridge, although it is also easy to get out of Cambridge. I have gone to London a few times and also taken day trips to other places in the UK such as Canterbury. I have also enjoyed the vibrancy of the arts scene here – the student plays and musicals have impressed me. I went to my first drag show during the weekend of Halloween. Beyond these trips, I have also enjoyed the more relaxed socializing of baking and cooking together, learning about others' life experiences, and sharing wine and cheese.

There are a lot of fun traditions -- while nobody celebrates Thanksgiving here, everyone seems to get into the Christmas spirit a month early with "Bridgemas" (short for Cambridge Christmas). I feel a bit like I am studying in Hogwarts, especially at the formal dinners where everyone wears gowns, sits in a dimly lit hall with long tables, and feasts on a three-course meal.

The Covid restrictions here have been quite light, especially compared to California/Caltech – all the events and societies are operating without any Covid restrictions, and masks are optional in most settings beside classes. It is very easy to get a pack of rapid Covid lateral flow tests (LFT) at any pharmacy for free, so many social events ask you to bring a negative LFT to get in. Also, since many students here have spent so much of the past two years in online school, they are very eager to socialize.

I have loved my study abroad experience at Cambridge, and I would definitely do it again if given the option.

Antonia Liu '22, Math, Cambridge Michaelmas, Corpus Christi College

Cambridge, as a town, feels like a fiction. I almost felt that if I scratched at the ancient bricks and stained glass, this odd little city would reveal itself to be a movie set rather than the real thing. Yet somehow, this place exists, with its many students, faculty, and townspeople. And even more surprisingly, my American ass found herself sitting in a tiny little room in Corpus Christi College, occasionally wearing a gown to head to formal dinner, or gearing up in rainboots to give punting a go.

Cambridge is an isolated bustling city, with a market at the center of city that has changing vendors, abundant numbers of gorgeous chapels and churches, and a hearty mix of independent shops and restaurants alongside massive commercial chains. One such chain is Pret A Manger, which I frequented due to their free coffee subscription trial. However, although vibrant with chatter and excitement, Cambridge also has an eerie peace to it, a confidence and self-assurance that can only come from persevering through nearly a millennium. Of course, much of this pride and power comes from the university and its academics.

As an Information and Data Sciences option at Caltech, I mostly took statistics and probability courses in Part II Maths, which I found to be intense although on par with the difficulty of courses at Caltech. For all of my courses, I had four example sheets (what they call sets here) and a supervision for each sheet to discuss solutions. I find that many problems in math can be solved with little tricks, and at Caltech, for the questions that I would need just a bit more support on to get correct, I would go to the weekly OH for the course, or ask some of my friends for hints. However, the culture here is very uncollaborative and independent, with most of the support coming from the supervisions. Although my supervision partners were happy to work with me on some of the sheets, there were multiple times that other students would tease us, telling us to solve the problems separately. There are no rules against collaborating, but I think that many of the mathmos (what they call math majors here) believe in finding solutions themselves.

Additionally, since the supervisions are the main form of academic support, and they only occur every two weeks, many times I would receive clarifications on concepts far too late, and the lecture material would be far ahead what we were covering in supervisions. This made the lecture material harder to follow, especially since Caltech courses typically have weekly sets which force me to review recent material. Needless to say, I much prefer the structure of the courses at Caltech, and the shorter term here (8 weeks) further exacerbated the issues I had with the academics. These woes were counterbalanced with the fact that the courses here transfer to Caltech as credit/no credit rather than for letter grades, and we don't need to take the end-of-year exams. I personally think that although the coursework was comparable to Caltech, adjusting to this new system made it much harder than just the pure academics.

As for the benefits of coming during Michaelmas, I think the biggest one is the ability to participate in freshers' events. Many people are open to meeting others during the beginning of term, and that helped me integrate into Corpus social life. One thing that was a bit odd is that since I'm a senior right now, the freshers are 3 years younger, and we're really on a different step in life. Another benefit of Michaelmas is the societies fair, and although I did attend the club fair and went to a handful of society events, none of them really clicked for me.

Although I thought that COVID would be more worrisome, it did not feel like a concern here. Most people don't wear masks, and there's also no concern about whether you're vaccinated. I think that COVID in the background made me uncomfortable at clubs and other social events, but for the most part, I don't think that it greatly impacted me.

Overall, even with the struggles to adjust academically, I think that the term here has been pretty fun. I think that the reason why I might have not enjoyed this experience as much as I would've is because I'm also yearning to get back to Caltech after the year online, and this "break" at Cambridge, which would've typically served as a refresh away from Pasadena, felt more like a buffer before returning. I'm grateful for having had the experience here, and I've learned so much about the UK.

Max Popken '22 Computer Science Michaelmas Pembroke

I quite enjoyed going to Pembroke for Michaelmas term. The college is quite nice and the people are lovely. I would say overall the ambience is not too different from Caltech. There is certainly far more in common in the academics and social life than there are differences.

A couple of key differences though:

- The people at Cambridge seem more mature than at Caltech. Especially some of the older (third/fourth year) students have lived on their own, worked, travelled a bit so they are not children anymore. This can be very relieving.

- You have some more independence from the university. You will eat and drink outside the university (the college food is bad), which I quite enjoy. This gives you a bit more variety. Also, the academic buildings are far away.
- People drink normally. You can just go to a pub and drink with your friends (although it's expensive), and most colleges have bars. People don't get super drunk in somebody's room, and drink more socially.
- Supervisions. Basically, an hour-long one-on-one office hour with the TA to go over the homework and make sure you understand everything. Great system would definitely like to see something similar at Caltech.
- Academics. No obligatory homework (for Cambridge students, for you yes but not graded), just exams in May. People tend to focus more on understanding material than just cramming sets. Supervisions are there to help you.

Michaelmas term is great until about halfway through when all of a sudden, it's freezing. It sucks because when it turns cold, you're close enough to the end that it's not worth buying a nice jacket anymore.

The room is a bit more spacious than at Caltech, like a double. Pretty similar though, you do get housekeeping once a week though so that's nice. Bathrooms are a bit cleaner too.

Formal dinners are cool but strange if you're not used to the old university medieval style. Fun to see though, should definitely go to at least one.

Trips to London are easy, 50 min by train. There's a lot more to do and see in London. Cambridge is surprisingly small, so would recommend going, especially if you've never been. I used an app called omio to get cheap train tickets; don't buy from national rail.

This term pretty much everything was online, which was a bit disappointing but understandable. Don't know how much will be in person next year, although it seems like partially online learning might become permanent.

Would recommend for:

- You want to get strong academics at a different university.
- You want a slightly more sophisticated social life than at Caltech.
- You like old architecture.

Would not recommend for:

- You want to experience something totally new (try Australia, Denmark, Scotland).
- You feel comfortable and at home at Caltech.

Alexander Wang '22, Computer Science, Michaelmas Term/St. John's College

Studying abroad at Cambridge so far has been one of the highlights of my undergraduate experience. Although I did a lot of research on the school and the program during the application process and just prior to arriving, nothing beats actually being here in person. Spending a term at another institution in another country via study abroad has been an unparalleled opportunity to experience a new culture while still being able to get Caltech units towards my degree.

Studying at Cambridge has exposed me to the very different structure of undergraduate education in the UK compared to the US. The most prominent difference has been that students in the UK study almost exclusively a single subject and a good portion of their curriculum is completely predetermined. As a computer science major at Caltech, I studied in the Computer Science Tripos at Cambridge and took 5 CS courses this term. While some of these courses did have some interdisciplinary connections, such as a course on Bioinformatics, this is more or less the extent of interdisciplinarity within the Cambridge curriculum, which opts for a streamlined and focused study of a particular subject, as opposed to the more elective-driven structure of a Caltech degree. Another significant difference is the method of assessment. While grades at Caltech are based on problem sets and exams for each course, assessment at Cambridge is almost exclusively based on year-end exams. While study abroad students don't stay for the exams, this difference in assessment methodology does show up in the structure of supervision work and how instruction takes place. Regarding lectures and supervisions, I studied abroad during the second year after the initial COVID outbreak, so while everything was definitely trending towards returning to normal, there were still many remnants of quarantine guidelines. Specifically, online and hybrid structures were still used for many lectures and supervisions, depending on both student and instructor preferences.

Outside of the classroom, while there were also still some remaining pandemic precautions, I got quite lucky in coming here this second year because the majority of clubs and societies were back to operating normally. Cambridge societies are delineated as being university-wide or college-wide, so in the former, you meet and interact with a lot of people coming from all of the various colleges that make up Cambridge, whereas in the latter, you'll be spending time with people that are members of your college and likely live pretty close to you. My activities were mostly concentrated in sports teams, as I played on the university water polo team and the St. John's College basketball team and also rowed with St. John's Boat Club, the Lady Margaret Boat Club.

Speaking of St. John's, I have absolutely loved being a member of this college. John's is one of the larger colleges at Cambridge, so I got a chance to meet a lot of new people upon arriving. The JCR (which is the equivalent of student council) hosted many welcome activities, which I definitely recommend going to, as well as a few Ents during the term, which are Cambridge college parties sponsored by the college. John's is also

very centrally located in the city center of Cambridge, with many restaurants and grocery stores and other shops very conveniently nearby.

I think Michaelmas term is also a really good time to study abroad in Cambridge, since you arrive at the beginning of the year, so it is quite convenient to be oriented with both your college and the overall university (e.g., Fresher's Fair and Sports Fair) alongside the new first-years. The weather is also quite nice in the first half of the term, although it has more recently gotten quite cold, so I can't imagine how much colder it gets later on. Regardless, I have loved my experience at Cambridge and would highly recommend studying abroad here to anyone. As a final note, if you do end up studying here, a bicycle is a very worthwhile investment, as many places you may need to go, such as lecture theaters or sports facilities, are a manageable cycle away but a rather long walk away.