

For the collaboration aspect of human practices, we sent a survey to both Carroll High School and CCA San Diego about their iGEM experiences. Their answers helped shape the iGEM handbook that we made below. The questions from the survey are also included on this page.

Understanding the Components of an iGEM Team

It is important to understand the dedication and requirements needed to start an iGEM team. One person cannot complete an entire iGEM project by themselves. Collaboration and communication with your team members, and others, is the key to success. If your goal is to medal, or just to gain research experience, iGEM can bring the experience you are looking for. The following steps can be followed to start your own iGEM team in high school.

1. What is iGEM?

It is important to familiarize your team with the competition deliverables of iGEM. At the minimum, your team should understand that they need to complete human practices work, code a wiki, a poster, and a judging form (the competition deliverables). The judging form can be found under your account link. The judging criteria can be found [here](#).

2. Gauging Interest

It is important that your peers are interested and committed to starting an iGEM team. iGEM is a large commitment that will take time during the summer, as well as time in the fall. For high school iGEM teams starting school in the fall, it may become difficult to get as much work done as in the summer. Therefore, it is important to get as much lab work and human practices work done in the summer as possible.

Our iGEM team gained many new members by putting out announcements during the school day for interest meetings during lunch, as well as displaying our poster in one of our school hallways. The numbers of members more than doubled in just one year, proving that our method was successful.

3. Advisors and Mentors

An iGEM team needs at least one advisor to guide them along the way. It is also helpful to have a mentor in the lab. Our advisor was our club advisor at school, and our mentors were Dr. Qi Zhang and Rhese Thompson at UNC-Chapel Hill.

4. Choosing a Project

It is helpful to get inspiration from your project from your own community, but you can derive inspiration from many sources. Our project was inspired by a problem that occurred in our community a few years ago, but it is a far-reaching issue. If you are having trouble coming up with a project, you can interview your community leaders for their opinions.

5. Fundraising

There are several ways to raise money for the registration fee for your iGEM team. You can hold bake sales, benefit concerts, and more! Writing grant applications is another important skill you need to learn for iGEM. We were given a grant from our district's Public School Foundation, which allowed much of this project to occur. Fundraising is a fundamental interdisciplinary skill, so it is important to learn about it promptly before starting your iGEM team.

Thank you CCA San Diego and Carroll High School for agreeing to help us with this handbook! Visit Carroll High School's website for an in-depth tutorial on how to make an iGEM website!

The survey questions:

1. How did you get your iGEM team started?
2. What obstacles did you encounter in starting your iGEM team?
3. How did you recruit participants for your iGEM team?
4. How did you find an advisor for your iGEM team?
5. How did you fundraise for the costs in participating in iGEM?
6. How did you decide your project idea for iGEM? Any resources that were helpful?
7. How did you find a lab to do your iGEM work in?
8. Did you set a schedule for your iGEM work? Do you think it would have been helpful?
9. How did you begin designing your website? Did you seek outside help?
9. How did you create your poster? Any resources that were helpful?
10. Did you encounter any obstacles when arranging travel plans?
11. Overall reflections, advice, things that you wish you could do-over? Things you wish you had done? Things you wish you hadn't done?