

iGEM 2011 Team British Columbia's Guide for How to Start a iGEM High-School team

The purpose of this guide is to provide a universally applicable guide for how to start a high-school iGEM team in the spirit of continuing the mentorship mentality of iGEM. Our team is striving to create a simple system outlining what necessary steps need to take place in order to achieve this goal. This is a new approach to Human Practices and although this is currently only a guide, we are passionate to see this as a working model and ignite collaboration between iGEM universities.

As a new iGEMer, I was impressed by the inherent mentorship model of this competition. It is clear that a team of Undergraduates cannot function in and of themselves. I have experienced firsthand the invaluable support from Graduate students who sacrifice their time and energy to impart their knowledge to us. Also, there is the necessary support and guidance from Faculty advisers who advocate for lab space, network us with other faculty and provide thoughtful advice in times of troubleshooting. It is clear that there is a thread on mentorship within the iGEM community and we wish to extend that into the high-school iGEM division. In doing so, we anticipate growing as individuals and as a team while passing along the tidbits of knowledge we have gathered since graduation.

Currently, we are on step 1 and we will be continuing on with this guide to hopefully have an enthusiastic high-school iGEM team presenting at the 2012 Jamboree!

Please use this guide in a way that is best suited for you. We are hoping that as a result of this Human Practices initiative, we will ignite the passion in other Teams to contribute to iGEM mentoring at the high-school level. It is obvious then that there will be revisions and reworking in order to make this an effective model for all Teams, no matter the country or university.

These are the Expectations for iGEM High-School:

1. Teams will complete a project wiki
2. Teams will develop a poster for their project
3. Team will develop a 20 minute presentation on their project

The Jamboree is in June and all of the expectations need to be achieved before then.

The 2011 Guide to Starting a High-school iGEM team

1. Get the Word Out
 - a. Broadly publicize at high schools in your vicinity
 - b. Seek out programs with youth which are already in motion and ask for their input
 - c. Speak to professors and other students to build contacts within the community
 - d. Offer to give presentations on synthetic biology/iGEM/your project with the underlying intention of inspiring youth to pursue an iGEM project of their own
2. Be Practical
 - a. How will you fund the team?
 - b. What lab space will you use?
 - c. How will you choose the team? Will it be selective or inclusive?
 - d. How much involvement will your team of undergraduates commit to?
 - e. Who will be the HS team adviser?
 - f. What time of year is this most feasible? (The Jamboree is in June)
 - g. How will you train the HS students in iGEM specific techniques?
3. Give it a Go - It will be fun just to try
 - a. Coordinate lab safety training
 - b. Offer a workshop/course on synthetic biology laboratory techniques Provide team strengthening activities (especially if the students are not from the same school)
 - c. Have the team decide on an iGEM project (this takes time)
 - d. Review the judging criteria
4. It's Action Time!
 - a. Confirm lab space, advisers, funding and team structure
 - b. Register your team at http://igem.org/High_School_Division
 - c. Start your project and let the fun/madness begin!
 - d. Provide ongoing support for wet lab troubleshooting, modelling (if applicable), human practices implementation, wiki creation, poster preparation and presenter training.
5. Judging at the Jamboree
 - a. Ensure that you have met all the criteria and are confident in your wiki, poster and presentation.
 - b. Award yourself a Gold medal for being the best mentor ever!
6. Review and Repeat Next Year