HISPANIC DISCUSSION WORKSHOP ORGANIZED BY iGEM BOLIVIA

FIRST STEPS AND THE MOTIVATION
iGEM Bolivia started in 2020 as a scientific movement to provide the basis on synthetic biotechnology to young bolivians enabling the access to bioinnovation. As part of our training, we had to understand regulatory and biosafety on transgenic organisms, so we decided to analyze these issues in a more critical and documented way. In that same year, iGEMers attended debate school, where they were able to learn techniques and tools that should be used and organize a Latin American event where we wanted to share this knowledge that was acquired, invite teachers to give the workshop, lastly launch a call so that all teams participating in iGEM can learn more about these tools to be able to contrast opposing thoughts in a more logical way.

For the organizers of the event, this was an opportunity that helped them to fraternize among the iGEM groups in Latin America. The event helped form experiences, also to meet new people, their opinions and to develop new skills so that they can apply them in the debate workshop.

OBJECTIVE
The main objective of this activity is to encourage young adults from Latin America to develop rhetoric and critical thinking skills to analyze topics related to synthetic biology and reach a conclusion, based on documented information.

This event had two parts, one focused on workshops where participants learned about useful tools during a debate and the other where they put all these skills into practice.

ABOUT THE EVENT
The call for the iGEM 2021 Hispanic Debate Tournament was launched on May 31st, with a deadline for registration until June 5th. Apart from the launch of the call, the iGEM Bolivia team was in charge of contacting the interested teams and encouraged participation.

iGEM teams who responded to our invitation belong to: iGEM Ecuador, iGEM FCB - UANL (Universidad Autónoma de Nueva León - Mexico), iGEM UAM (Universidad Autónoma Metropolitana - Mexico).
**Workshop Day 1**
The first workshop was given by Antonio Zarate Ramos where the theme was taught: "Argumentation and Counterargumentation". "Conflict is the basis of argumentation."

The elements of the communication process, the interaction of the sender and the receiver were explained, the concept of argumentation was defined. In addition to the pillars of persuasion: ethics, logic, emotion. Then we moved on to the proper construction of argumentation and the characteristics of modern argumentation:
1. Purpose
2. Announcer
3. Character
Then, we looked at the types of arguments. Everything learned was complemented by a dynamic of argumentation with hypothetical situations. On the basis of the previous exercise, the rapporteur spoke about counter-allegation and finally the subject of dialectics, a fundamental tool in a debate, was seen in detail.

**Workshop Day 2**
On Saturday, June 13, the 2nd workshop given by José Luis Feliciano Chipana was held, being the theme of the workshop: Roles of Judges and Zig Zag Format.
A very important topic when it comes to participating both as a judge or speaker in a debate. In addition, each of the stages was clarified and what each one implies during the debate:
1. Arguments
2. Interrogation
3. Rebuttal
4. Defense
5. Conclusion
Finally, and in order to put into practice what was learned, a "Mock Debate" was carried out, with the participation of members of iGEM Bolivia as speakers and participants of the workshop as panelist judges. This allowed each of the participants to familiarize themselves with the format and solve doubts that were emerging little by little.

**Workshop Day 3**

In this session we touch on the topic: *"If knowledge is Controversial, do we debate?"* Together with the MSc. Gabriela Rivadeneira Caballero tutor of iGEM BOLIVIA, we were able to discuss related issues by adequately transmitting our position in the face of a questioner.

She mentioned that:

"... we must note, the culture, to be able to transmit scientific knowledge to a target group, we will see that knowledge becomes controversial and we have the challenge of being able to transmit this scientific knowledge in a friendly way, so that the target group can understand the topics."

Through this workshop we realized that activities like this allow us to be more friendly and even collaborative with people who have thoughts and ideas
contrary to ours. In short, we must seek to generate and solve any problem in a pleasant and friendly way, in addition to enjoying the moment, not being defensive, but listening, learning and being self-critical of what I am doing and where I will go with its path.

TOURNAMENT
The Debate Tournament was held on Saturday June 19 and Sunday June 20. A total of 8 teams participated.

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<thead>
<tr>
<th>Team</th>
<th>Country</th>
<th>Participants</th>
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<tbody>
<tr>
<td>SYNTHETIC BIOBOTS</td>
<td>México</td>
<td>Karol Tonantzin Garcia Navarro y Daniela Itchel Torres Gómez</td>
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<tr>
<td>Ollin SynBio</td>
<td>México</td>
<td>Carla Jannet Renteria Hernández y Andrés Moreno Morales</td>
</tr>
<tr>
<td>iGEM Bolivia</td>
<td>Bolivia</td>
<td>Virginia Rigoberta Gonzales Mamani y Danna Villca Centellas</td>
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<tr>
<td>Bolivia 1</td>
<td>Bolivia</td>
<td>Paola Alejandra Mamani Arias y Fernanda Callisaya Dávila</td>
</tr>
<tr>
<td>Tec CEM</td>
<td>México</td>
<td>Francisco Javier Castañeda Villagran y Carlo Ariel Flores Carrillo</td>
</tr>
<tr>
<td>UMSA</td>
<td>Bolivia</td>
<td>Yamilka Coronel y Camila Paucara</td>
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The tournaments were held simultaneously in different rooms of the virtual zoom platform, each room had a main judge and 4 panel judges, as well as a moderator and room manager.
In the semifinals they participated with the theme:
• Should Synthetic Biology be restricted to prevent bioterrorism? iGEM Bolivia as affirmative and FCB-UANL as negative.
• Is the use of aborted human embryos for experiments ethical? UAM participated as affirmative and SYNTHETIC BIOBOTS as negative

GRAND FINALE
The iGEM 2021 Hispanic Debate tournament came to an end on Sunday, June 25. There were two Mexican teams: the iGEM UAM team represented by Andrea Sánchez and Ángel Emanuel Martínez Flores and the FCB-UANL team made up of Jorge Alberto Uribe and Julissa Janeth García, who competed for first place.

The day began with words of thanks from: Jean Herdoiza (iGEM Ecuador), Emmanuel Rojas (iGEM UAM), Mónica Michelle Contreras Huanca (Bolivia), Daniel Domínguez (ALLBIOTECH Leader) and the debate award team made up of: Santiago Maldonado Aquino (Main Judge-Bolivia), Damaris Sarmiento (Panel Judge), Eugenio Quispe (Panel Judge), Dolores Guerra (Panel Judge), Misael Poper (Panel Judge), Yandry Luque (Panel Judge).
In this way, the debate began with the motion:
Should biotechnology companies be allowed to patent genetic heritage? With the iGEM UAM team defending the affirmative position and FCB-UANL the negative.
The debate allowed a wide exchange of ideas, questions, refutation and defense of arguments between both teams. The debate was intense and the FCB-UANL team was declared the winner of the 2021 Hispanic Debate Tournament.

This experience was enriching for: speakers, judges and organizers, allowing with this activity to expand their knowledge.

Finally, we had the sponsorship of Allbiotech, who gave us free courses for the winners of the debate. This great event was also shown on the iGEM TV episode for Latin America, where the importance of generating critical thinking around controversial issues about synthetic biology was discussed and where the winners also told us about their experience in this great event.

ORGANIZATION TEAM AND SUPPORT TEAM.
For the event organizers, this was an opportunity that helped them get to know each other among the Latin American IGEM groups, make experiences, meet new people, opinions as well as develop new skills and apply in the debate workshop, with desire and emotion. to be able to repeat the event.

All this is thanks to the help of all those who participated in this great event, contributing their ideas and time to make it successful.

GRAND FINALE
Do not miss the grand finale of this hispanic debate tournament on saturday, june 26 at 18:00. GMT-4.
It will be transmitted from the facebook page of the organizing teams.
Although the workshop and tournament lasted about a month, the organization of the event was an arduous work of months and hours every week to define details of the entire event. We thank the iGEM teams who dedicated many hours of work, provided their social media platforms, their zoom platforms, helped us with the calendar and above all they provided us with an incredible workplace, where we made new friends.

We also want to thank the workshops and judges who helped us supervise the event, always giving us continuous feedback so that all participants can improve their debate skills.

Finally, we thank the participants for the debate workshop as it helped to exchange ideas and acquire knowledge about the topics but also to structure them before the debate.