

A GUIDE TO
**IDEA
GENERATION**

FOR IGEM TEAMS

From
iGEM Team NIT Warangal



Preface

Idea generation is a very crucial process in the iGEM competition. Teams spend a lot of time narrowing it down to a possible project idea.

This short handbook is a handy resource aimed at helping iGEM teams to come up with a project idea for the competition.

**Greetings,
Team iGEM NIT Warangal**

What is Idea Generation?

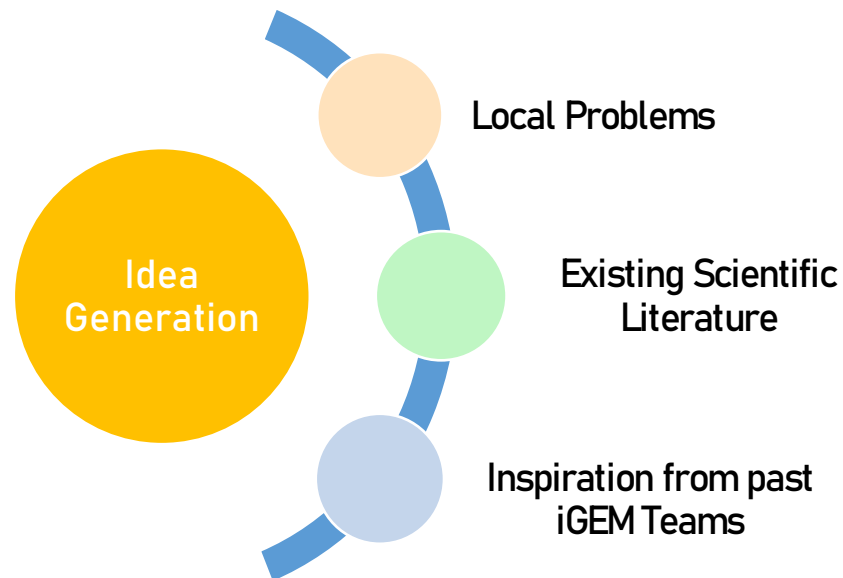
Idea Generation is a process of creating, developing, and communicating ideas. In our opinion, the Idea Generation process is perhaps the most significant task in the iGEM Cycle.

The iGEM competition expects a team to generate ideas that focus on identifying solutions for local problems. The iGEM competition aims to empower teams to use Synthetic Biology to address challenges unique to local environments and engaging local communities in Synthetic Biology. The past editions of the iGEM Competition have given much emphasis to ideas that aim at solving local problems.



(Image source: hbr.org)

Sources of Ideas:



Local Problems: Try to identify problems existing in your locality or community. Analyze if the problem can be addressed using Synthetic Biology efficiently.

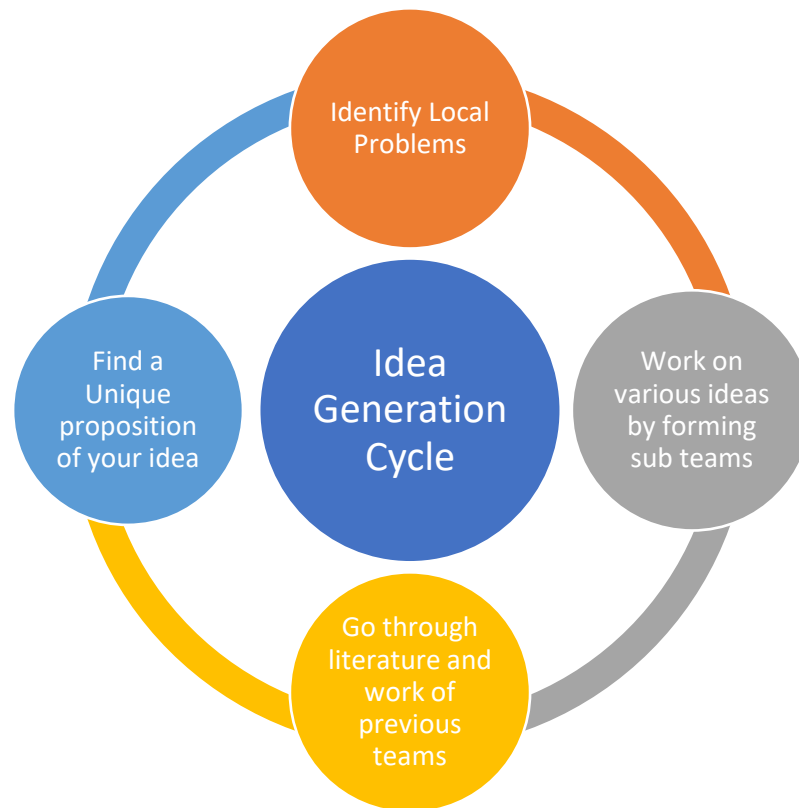
Existing Scientific Literature: Explore existing research and research papers. Try to identify a research gap where your team could potentially work on.

Inspiration from past iGEM Teams: Explore the work done by teams in the previous editions of iGEM. Taking inspiration from their work could definitely help your team in generating new ideas.

Tips for Idea generation from our experience

Our team has spent the majority of the initial period in the iGEM cycle brainstorming for project ideas. Here are some tips we have compiled which may come in handy.

- i. Identify local problems. This can be done by directly approaching people living in the area or by skimming through media reports discussing the issue.
- ii. It is advisable to have more than one (preferably 2-3) project ideas in hand.
- iii. Divide the team into micro teams consisting of 2-3 members. Each team would work on an idea, and then the best idea would be considered as the final project idea.
- iv. Read a lot of literature for a particular idea. Identify if any work has been done to find a solution previously.
- v. Try to find a research gap in the literature and start working towards filling the gap.
- vi. Explore the work of previous iGEM Teams to know if any team has previously worked on a similar problem statement.
- vii. Contact people who have worked previously on a particular idea to get more insights on the problem statement and previously proposed solutions.
- viii. If your problem statement has already been addressed, try to find a Unique Proposition that would make your idea stand out from the other existing solutions.



Footnotes:

We hope that this handbook has helped you in generating your iGEM project ideas effectively. We wish you All the best for your iGEM Journey.

Best Regards from iGEM Team NIT Warangal.

Sources: Image from hbr.org

Content inspired from iGEM website and Blog.