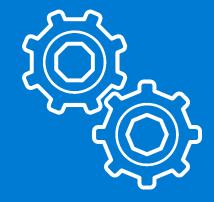


Now we know about the basics of Synthetic biology and some applications of it.So, now we will dive into the ideation process behind any project.



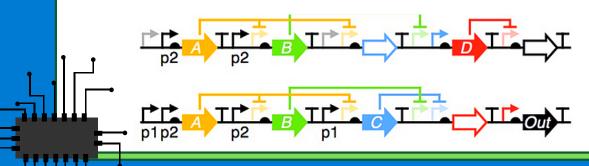
### HOW TO BUILD A SYNBIO PROJECT

Choose a real-world problem you would like to solve. Brainstorm!

Find out which exact part of the problem you would like to target for troubleshooting.



How will your genetic circuit look like?



Which protein will you choose to solve your problem? What will be the mechanism of troubleshooting?

In which organism would you like to insert your gene of interest? What is your chassis organism?

Think about any side effects that might happen due to this GMO. How will you solve these?



How do you visualize your SynBio product to be used in real world?



You have successfully designed your GMO!

For inspiration, you can visit previous year iGEM projects at <a href="https://igem.org/Competition">https://igem.org/Competition</a>



# RESEARCH INSTITUTES IN INDIA

### IISER



















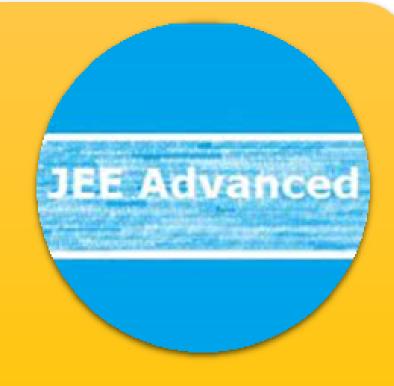
#### SCB

- \* Qualified or **appearing in 12**<sup>th</sup> with **Science** as mandatory subject
- \* The **Cut-off percentage** must be obtained in order to be eligible.
  - \*Eligible candidates appear for IAT
- \*The application portal) will open in **the first week of June**



#### KVPY

- \* A valid **KVPY fellowship** commencing
  for year 2021-2022
- \* Meet cut-off criteria
- \*The application portal) will open in **the first week of June**



#### JEE ADVANCED

- \* General category candidates must qualify JEE Advanced 2021 & will have to obtain rank within 10000 in Common Rank List (CRL).
  - \*For reserved category, the **category rank** will be considered.
- \* The application portal will open **after the declaration of the IIT-JEE results**.

### IISER APTITUDE TEST

Online (computer-based) mode

The test is tentatively scheduled to be held in mid-August or later.

Each subject will consist of **15 questions**. Total **60 questions** in the question paper.

Correct answer 3 marks. Negative marking: 1 mark



### WHAT AFTER IISER?

- · ACADEMIA (RESEARCH)
- ACADEMIA (TEACHING)
- INDUSTRY (RESEARCH & DEVELOPMENT)
- · INDUSTRY (SALES/MANAGEMENT)
- · LEGAL ADVISOR
- SCIENTIFIC WRITING
- PATENT OFFICER/GRANT WRITE
- GOVERNMENT SERVICES: SCIENTIST, SENIOR SCIENTIST, PRINCIPAL SCIENTIST







### NISER/CEBS

NEST EXAM.

