



ISCB-SC RSG-India DIABETES-HACK

Hackathon guidelines

About the Hackathon:

Welcome to the Hackathon on Type-1 Diabetes—an exciting opportunity for both early career researchers and experienced researchers in the field of Computational Biology. This event is designed to bring together individuals at various stages of their journey in these disciplines, providing a collaborative platform to explore innovative solutions for tackling challenges related to type-1 diabetes.

Who is this Hackathon for?

This hackathon is thoughtfully curated for:

1. **Early-Career Researchers:** If you are just starting your research journey in the Computational Biology/Bioinformatics field, this hackathon is a perfect chance to dive into real-world problem-solving. Engage with the challenges of Type-1 Diabetes, learn from experienced researchers if you participate in the group, and kickstart your journey in these dynamic fields.
2. **Experienced Researchers:** For those with a wealth of experience in Computational Biology, this hackathon provides an opportunity to leverage your expertise for tackling the complexities of Type-1 Diabetes. Collaborate with peers, share your insights, and contribute to innovative solutions that can shape the future of healthcare.

What is the hackathon schedule?

The hackathon will essentially go as follows:

- **27.12.2023 | 09:00 IST** - The hackathon will be introduced to the participants, and the questions will be unveiled. Answer submission will begin at 10:00.

- [28.12.2023 | 17:00 IST](#) - Answer submission will be closed and evaluation will begin; submissions are expected to include solutions along with a brief description of the methodology and the results.
- [30.12.2023 | 17:00 IST](#) - Evaluations will conclude and the top 10 scorers will be invited for a short (5-7 minutes) online presentation describing their solution on 31.12.2023.
- [31.12.2023 | 10:00 IST](#) - Participants from the top 10 scorers will present their results to the jury as well as other participants of the hackathon.
- [31.12.2023 | 14:00 IST](#) - The top 3 teams based on solution and presentation will be declared as winners.

What prior knowledge is required to participate in this hackathon?

In the spirit of inclusivity and to maintain a level playing field for participants of all expertise levels, our hackathon is designed to be accessible to individuals with a basic understanding of molecular biology, statistics, any programming language, and bioinformatics.

If you possess fundamental knowledge in the following areas, you are well-equipped to participate:

- Basic understanding of molecular biology concepts.
- Familiarity with statistical principles.
- Basic knowledge of bioinformatics, such as understanding of various file formats, genome, and nucleic acids like DNA, RNA and protein.

These foundational concepts will provide you with the necessary groundwork to actively.

At the same time, if you're at the other end of the expertise spectrum, take this opportunity to think outside the box and learn from the ways others think about the same problem. Moreover, this is an opportunity for you to familiarize yourself with some of the most commonly encountered questions in this field, and the most widespread tools used to solve those problems.

Types of participation:

1. Group participations (minimum 2 and maximum 4 participants)
2. Solo participants will be grouped with other participants according to their expertise.