### INTERNATIONAL SUMMER SCHOOL

### **METABOLISM & DISEASES**

July 3rd- July 14th, 2023

Harbin Institute of Technology, Harbin, P. R. China

#### **GENERAL INFORMATION**

The second Harbin Institute of Technology International Summer School of "Metabolism & Diseases" will be hosted by the School of Life Sciences and Technology, Harbin Institute of Technology. Recent outbreaks of COVID-19 and influenza A have highlighted the significance of life and health. The School of Life Sciences and Technology focuses on public safety and well-being topics, such as glucose and lipid metabolism regulation & diseases, tissue engineering, and nanobiotechnology. We have invited international experts and scholars to establish a series of English courses, lectures, symposiums, and hands-on projects rooted in local culture while expanding global perspectives. To broaden students' scientific and cultural knowledge, we have established a platform for learning, communication. and hands-on practice, emphasizing the interconnection and integration of knowledge. We have also designed various experiential growth training methods to encourage well-rounded development through peer-to-peer learning and collaboration. To deepen students' comprehension of the biological underpinnings of life and health, we foster a rigorous academic environment, tap into diverse and open international resources, encourage scholarly exchanges between domestic and international faculty and students, and provide guidance and inspiration for students to become high-level international experts in their respective fields.

## ATTENDANCE REQUIREMENTS

✓ Undergraduate students

- ✓ Interested in life sciences
- ✓ Proficiency in English (able to fluently write, converse, and report in English)

# COURSES AND LECTURES

| Content                      | Detailed information   | Credit | Class<br>Hour |
|------------------------------|--|--------|---------------|
| Internationalization Courses | Regulation of lipid metabolism and diseases  | 1.5    | 24            |
| Academic Frontier Lectures   | Tumor cell biology, structural biology, metabolic biology, tissue engineering, etc | 1.5    | 18            |

# RESEARCH PROJECTS

| Content                    | Detailed information                                 | Credit | Class |
|----------------------------|--|--------|-------|
| Content                    | Detaned information                                  |        | Hour  |
|                            | 1 Immunofluorescence Labeling of Cellular Structure  |        |       |
| Offline                    | 2 Analysis of Protein Structure by Freezing Electron |        |       |
| Practical                  | Microscope and Nuclear Magnetic Resonance            | 1      | 24    |
| Activities                 | 3 Screening and analysis of Differentially Expressed |        |       |
|                            | Genes in Tumors Based in Database                    |        |       |
| Discussion and Interaction | 1 Teacher-student communication and discussion, Q    |        |       |
|                            | & A session  |        |       |
|                            | 2 Student Future Planning Guidance Symposium         |        |       |
|                            | 3 After-class socializing                            |        |       |
| Visiting and<br>Studying   | 1 Visit the School of Life Sciences and the Life     |        |       |
|                            | Center research laboratories, introducing the latest |        |       |
|                            | research achievements and outcomes in life science   |        |       |
|                            | studies at the school and the center.                |        |       |
|                            | 2 Visit HIT Museum and HIT Space Museum              |        |       |

## **CONTACT INFORMATION**

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