

# CANCER BIOLOGY AND TUMOR IMMUNOLOGY

## An Integrated Online Module Series

### Offered by the

Institute of Biochemistry, Molecular Biology & Biotechnology (IBMBB)  
University of Colombo

Programme Information Last Updated: June 2026

Course Coordinator: Dr. Visula Abeysuriya

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## Understanding Our Online Self-Paced Courses

Our courses are designed to fit your schedule. "Self-paced" means you learn at your own speed, on your own time. There are no fixed class times or live lectures. You can access course materials 24/7 and progress through modules whenever it suits you.

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## About the Program

### Molecular Mechanisms and Immune-Based Therapies

This online certificate program provides a focused and integrated understanding of **cancer biology and tumor immunology**, covering molecular mechanisms of carcinogenesis, genetic and epigenetic alterations, immune surveillance, tumor immune evasion, and modern cancer immunotherapy.

The program is designed for students and professionals in **biomedical sciences, immunology, medicine, and public health**, emphasizing conceptual clarity and clinical relevance.

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## Program Structure (2 Core Modules)

### Module 1 – Cancer Biology: Molecular Mechanisms and Cellular Transformation

- Characteristics of cancer cells
- Cell cycle regulation and checkpoints

- Oncogenes and tumor suppressor genes
- p53, RAS, BRAF, and signaling pathways
- Genetic and epigenetic changes in cancer
- Hallmarks of cancer and precision medicine

## Module 2 – The Immune System and Cancer

- Immune surveillance and immunoediting
  - Tumor antigens (TSA and TAA)
  - Innate and adaptive immune responses to cancer
  - Tumor immune evasion mechanisms
  - Cytokines, inflammation, and cancer
  - Cancer immunotherapy (checkpoint inhibitors, CAR-T, vaccines)
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## Timeline

- The course is conducted in 4-month batches, with the first month reserved for registration.
  - Once registered, you may begin the course at any time and complete it at your own pace within the batch period.
  - **Current Batch (Batch 2): June – October, Registration is open in June, and all learners must complete the course by 31st October, regardless of their registration date.**
  - If you are unable to complete the course within the allocated 4-month course period, an additional 10-day grace period will be provided to complete all course requirements.
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## Assessment

- Online MCQ-based assessment
  - Comprehensive coverage of all four modules
  - **Pass mark: 80%**
  - Only 3 attempts allowed
  - Time-limited assessment
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## Certification

Digital certificates validated and issued every 4 months.

Certificates will be released after the batch end date. Certificates are typically issued approximately 10 days after the course completion deadline.

🏆 **IBMBB Digital Certificate in Vaccinology**

✓ Officially issued by the University of Colombo

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## Course Fees

**Rs. 4,000 (LKR)**

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## How To Apply

[Click here](#) (SSP login)

**SSP Login Instructions:** Enter your email carefully in the SSP login. Course access will only be sent to this email and cannot be changed or transferred to another address later.

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## Course Registration Guide

**Step 1: Click the Registration Link** (SSP login)

**Step 2: Create Your Account** ([Register here](#))

**Step 3: Log In**

**Step 4: Click "Apply for Courses"**

**Step 5: Choose Your Course**

Select Fundamentals in Immunology and Biostatistics Course, then pick the specific courses you want.

**Step 6: Make Payment**

Complete the payment process. Once confirmed, you're officially enrolled.

**Step 7: Check Your Email for LMS Access**

Within 1-3 working days, you'll receive an email with your LMS login details and instructions on how to start your course.

**Check your spam folder if you don't see it.**

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## **Enrollment & Contact**

- Course Coordinator: Dr. Visula Abeysuriya  
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- Scientific Support: Ms. Dishmi Bawanga  
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