

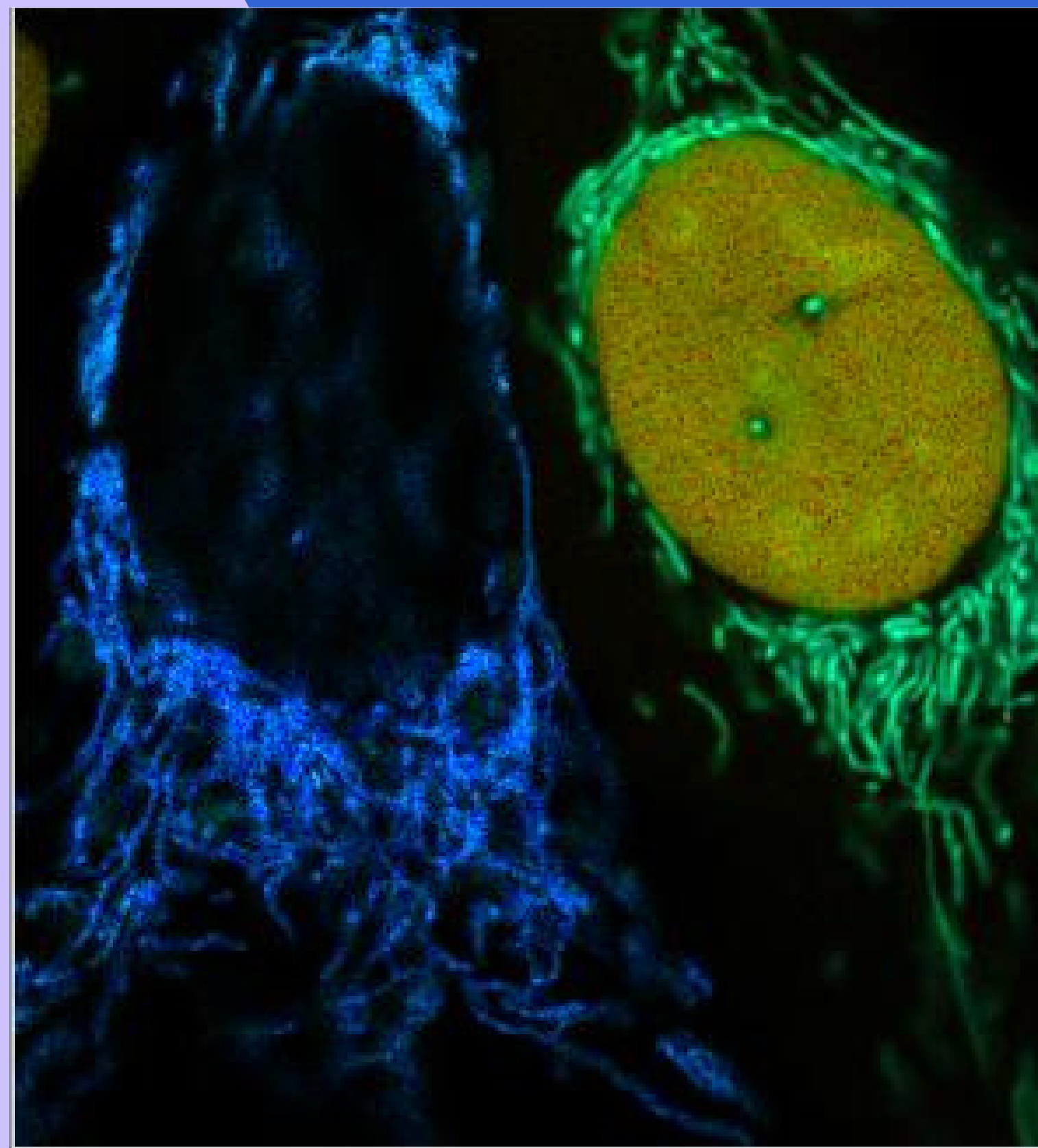
Hands-on-Workshop on Advanced Imaging Applications in Biology

5-9 June 2023

RGCB, BIC Campus, Akkulam, Trivandrum

WORKSHOP HIGHLIGHTS

- *Hands-on training using microscopes from Leica, Zeiss, Nikon, and Olympus.*
- *Basics of microscopy.*
- *Live-cell imaging.*
- *FRET/FRAP/Lifetime and HCS imaging.*
- *Introduction to genetically encoded probes for cell death, calcium, and cell cycle.*
- *Fluorescent probe development and image analysis.*



Day 1 :June 5

**08:30 – 09:30 AM
REGISTRATION**

**09:30 – 10:00 AM
INAUGURATION AND WELCOME ADDRESS**

**10:00 – 11:00 AM
OVERVIEW OF WORKSHOP**

**11:00 – 11:15 AM
TEA BREAK**

**11:15 – 12:30 PM
MICROSCOPY: ADVANCES IN APPLICATIONS**

**12:30 – 01:30 PM
LUNCH**

**01:30 – 02:30 PM
INTRODUCTION TO FLUORESCENT MICROSCOPY**

**02:30 – 05:30 PM
HANDS-ON TRAINING ON FLUORESCENT MICROSCOPY: OPTICS
AND ILLUMINATION**

DAY 2 – JUNE 6

09:30 – 10:30 AM

LIVE- CELL IMAGING APPLICATIONS AND APPROACHES

10:30 – 12:30 PM

DIVERSE LIVE-CELL IMAGING SYSTEM DEMONSTRATION

12:30 – 01:30 PM

LUNCH

01:30 – 05:30 PM

**HANDS-ON TRAINING ON LIVE-CELL IMAGING :
CELL PREPARATIONS, BRIGHTFIELD AND FLUORESCENCE
IMAGING, 2D AND 3D WIDE FIELD IMAGING**

DAY 3 – JUNE 7

09:30 – 10:30 AM

**LIVE-CELL IMAGING FLUORESCENCE PROBES AND
APPLICATIONS**

10:30 – 12:30 PM

**LIVE-CELL PROBE DEVELOPMENT
DEMONSTRATION AND HANDS-ON**

12:30 – 01:30 PM

LUNCH

01:30 – 05:30 PM

**CALCIUM, ATP AND APOPTOSIS IMAGING IN REAL-TIME
DEMONSTRATION AND HANDS-ON**

DAY 4 – JUNE 8

09:30 – 10:30 AM
FRET, FRAP AND FLIM APPLICATIONS

10:30 – 12:30 PM
CONFOCAL IMAGING
DEMONSTRATION AND HANDS-ON

12:30 – 01:30 PM
LUNCH

01:30 – 05:30 PM
FRET, FRAP, AND FLIM IMAGING
DEMONSTRATION AND HANDS - ON

DAY 5 – JUNE 9

09:30 – 10:30 AM
LIFETIME IMAGING FOR INTERACTION STUDIES

10:30 – 12:30 PM
LIFETIME IMAGING
DEMONSTRATION USING FRET PROBES AND HANDS- ON

12:30 – 01:30 PM
LUNCH

01:30 – 04:30 PM
FAST IMAGING AND HIGH-CONTENT IMAGING
DEMONSTRATION AND HANDS-ON

04:30 – 05:30 PM
CERTIFICATE AND CONCLUDING CEREMONY

HANDS-ON WORKSHOP ON ADVANCED IMAGING APPLICATIONS IN BIOLOGY

RAJIV GANDHI CENTRE FOR BIOTECHNOLOGY, TRIVANDRUM
DEPARTMENT OF BIOTECHNOLOGY (SAHAJ)

**Last date of Registration
31st May 2023**

Register fast as limited seats are available.

EQUIPMENTS AVAILABLE:

**LEICA SP 8 FALCON LIFETIME IMAGER
NIKON SPINNING DISC MICROSCOPE
ZEISS AIRYSCAN MICROSCOPE
NIKON AIR CONFOCAL MICROSCOPE**

Who can participate?

PhD scholars

Post docs

Faculty

Scientists

Doctors

Industrial professionals

Course fee

Student: Rs 10000/-

Faculty/Scientist/Doctor: Rs 15000/-

Industrial professionals: Rs.25000/-



FOR QUERIES: trsanthosh@rgcb.res.in Mob:9447117380