



**SATHYABAMA UNIVERSITY**

**(DEEMED TO BE UNIVERSITY)**

**Jeppiar Nagar, Rajiv Gandhi Salai**

**Chennai-600119**



**FACULTY OF BIO AND CHEMICAL ENGINEERING**

**DEPARTMENT OF BIOTECHNOLOGY**

***Organizes value added course on***

## **BASIC ANIMAL TISSUE CULTURE TECHNIQUES**

**Date:**

**5/2/18 - 21/2/18**

**TIME: 3.00 PM to 5.00 PM**

### **Resource Persons**

**Dr. M. Parthiban,  
Professor and Head,  
Department of Animal  
Biotechnology**

**Dr. Ratnaprabha,  
Associate Professor,  
Department of Animal  
Biotechnology, TANUVAS**

**Dr. P. Ramadoss,  
Emeritus Professor,  
Department of Animal  
Biotechnology, TANUVAS**

**Dr. M. Bavanilatha,  
Associate Professor,  
Department of Biotechnology,**

**ELIGIBLE STUDENTS FACULTY OF BIO AND CHEMICAL  
ENGINEERING**

**Attendance is mandatory for all classes**

**Organizer**

**Dr. M. Bavanilatha**

**Associate Professor**

**Department of Biotechnology**

**FOR REGISTRATION CONTACT: Dr M. Bavanilatha - 9042757900**



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## **BASIC ANIMAL TISSUE CULTURE TECHNIQUES**

### **Objectives:**

- The goal of this course is to provide the necessary theoretical knowledge on animals cells for in vitro studies, maintenance of animal cells in vitro, manipulation of animal cells in vitro, and application of molecular techniques to in vitro situations.
- Students are going to gain basic knowledge about culturing animal cells. They will get elementary skills how to culture animal cells derived from normal tissues and cancer cell lines.

### **Course Content:**

**TOTAL: 30 hrs**

#### **MODULE 1: BASICS OF ANIMAL CELL CULTURE (15 hrs)**

1. Structure of animal cell
2. Different types of cell culture media, growth supplements, serum free media, balanced salt solution
3. Culture of different tissues and its application
4. Culture of mammalian cells, tissues and organs, primary culture, secondary culture, Continuous cell lines, suspension cultures

#### **MODULE 2: IN VITRO APPLICATION OF ANIMAL CELL CULTURE (15 hrs)**

1. Application of animal cell culture for in vitro testing of drugs, testing of toxicity of Environmental pollutants in cell culture
2. Application of cell culture technology in production Of human and animal viral vaccines and pharmaceutical protein
3. Conventional methods of animal vaccine production, recombinant approaches to vaccine production
4. Commercial-scale production of diagnostic antigens and antisera

### **Outcomes:**

- Students understand the need for continuing education throughout their whole life, including broadening knowledge in cell biology.
- Develop basic aseptic skills for mammalian cell culture and its applications.
- Understand media constituents and media formulation strategies for mammalian cell culture.

## **Schedule for Basic Animal Tissue Culture Techniques**

| DATE       | NAME OF THE INVITED SPEAKER      | TIME              |
|------------|----------------------------------|-------------------|
| 05.02.2018 | Dr.Ramadoss(Invited Speaker)     | 3:00 pm - 5:00 pm |
| 06.02.2018 | Dr.Dhinakar raj(Invited Speaker) | 3:00 pm - 5:00 pm |
| 07.02.2018 | Mr.Narendra Kumar                | 3:00 pm - 4:00 pm |
|            | Dr.Sudha                         | 4:00 pm - 5:00 pm |
| 08.02.2018 | Dr.Valli Nachiyar                | 3:00 pm - 4:00 pm |
|            | Ms.Renuka Devi                   | 4:00 pm - 5:00 pm |
| 09.02.2018 | Dr.Bavanilatha                   | 3:00 pm - 4:00 pm |
|            | Ms.Raji                          | 4:00 pm - 5:00 pm |
| 10.02.2018 | Dr.Usha Nandini                  | 3:00 pm - 4:00 pm |
|            | Dr.Prabhavathy                   | 4:00 pm - 5:00 pm |
| 12.02.2018 | Dr.Parthiban                     | 3:00 pm - 4:00 pm |
|            | Dr.Ramesh Kumar                  | 4:00 pm - 5:00 pm |
| 13.02.2018 | Dr.Masilamani                    | 3:00 pm - 4:00 pm |
|            | Dr.Utthralakshmi                 | 4:00 pm - 5:00 pm |
| 14.02.2018 | Dr.Jayashree Nellore             | 3:00 pm - 4:00 pm |
|            | Dr.Karthik Raja Namachivayam     | 4:00 pm - 5:00 pm |
| 15.02.2018 | Dr.Prakash                       | 3:00 pm - 4:00 pm |
|            | Dr.Bavanilatha                   | 4:00 pm - 5:00 pm |
| 16.02.2018 | Ms.Chinnu Raju                   | 3:00 pm - 4:00 pm |
|            | Dr.Karthik Raja Namachivayam     | 4:00 pm - 5:00 pm |
| 17.02.2018 | Dr.Usha Nandini                  | 3:00 pm - 4:00 pm |
|            | Dr.Utthralakshmi                 | 4:00 pm - 5:00 pm |
| 20.02.2018 | Dr.Karthik Raja Namachivayam     | 3:00 pm - 4:00 pm |
|            | Dr.Utthralakshmi                 | 4:00 pm - 5:00 pm |
| 21.02.2018 | Dr.Ratnaprabha(Invited Speaker)  | 3:00 pm - 5:00 pm |



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## **CERTIFICATE**

This is to certify that **Ms. ILLMA** has been an **Active Participant** in National Workshop on BASIC ANIMAL TISSUE CULTURE TECHNIQUES held from 5/2/18 to 21/2/18, organized by Department of Biotechnology, Faculty of Bio and Chemical Engineering at Sathyabama University, Jeppiaar Nagar, Chennai – 600 119, Tamil Nadu.

**Dr. RAMESHKUMAR**

(Faculty Head- Faculty of Bio &  
Chemical Engineering)  
Sathyabama University

**Dr. M. BAVANILATHA**

(Convener – Dept. of  
Biotechnology)  
Sathyabama University

**DR. MARIAZEENA JOHNSON**

(Director)  
Sathyabama University

**Dr. MARIE JOHNSON**

(Director)  
Sathyabama University