



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

STEM CELLS AND THEIR APPLICATIONS

Date: 12th June 2017 to 28th June 2017

Time: 3.00 PM to 5.00 PM

Resource Persons

**Dr. Mangala Gowri
Professor,
Department of Animal
Biotechnology,
TANUVAS**

**Dr. R. Secunda, M.D
Assistant Professor,
Department of Microbiology,
Stanley Medical College.**

**Dr. K. Brinda,
Associate Professor,
Department of Animal
Biotechnology, TANUVAS**

**ELIGIBLE STUDENTS: SCHOOL 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



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

STEM CELLS AND THEIR APPLICATIONS

Objectives:

- To understand the special nature of stem cells
- Describe the structure and location of stem cells in humans and in plants and explain the differences between plant and animal cell growth
- Describe how stem cells have the potential to treat diseases and understand the controversy surrounding this research

Course Content:

TOTAL: 30 hrs

MODULE 1: The Science of Stem Cells (15 hrs)

1. Introduction to Stem Cells
2. How Do Stem Cells Work?
3. Using Stem Cells to Study Disease
4. Using Stem Cells to Treat Disease

MODULE 2: Therapeutic Applications Of Human Pluripotent Stem Cells (15 hrs)

1. Principles of cell replacement therapy and application of pluripotent stem cells in cell replacement therapy.
2. Application of pluripotent stem cells in neuronal disease management and treatment.
3. Application of pluripotent stem cells in ocular and cardiovascular diseases management and treatment.
4. Application of pluripotent stem cells in the treatment of autoimmune complications and cancer management and treatment.

Outcomes:

- Describe stem cells as an undifferentiated cells capable of producing cells of many different types.
- Compare and contrast embryonic and adult stem cells.
- Analyze the potential impact of therapeutic uses for stem cells in treating disease.
- Evaluate the practical risks and benefits, as well as social and ethical issues, of the use of stem cells in medical research and treatments.

Schedule for Stem cells and its Applications

DATE	NAME OF THE INVITED PERSON	TIME
12.06.2017	Dr.Mangla Gowri(Invited speaker)	3:00 pm - 5:00 pm
13.06.2017	Dr.R.Secunda(Invited Speaker)	3:00 pm - 5:00 pm
14.06.2017	Dr.Prabhavathy	3:00 pm - 4:00 pm
	Dr.Bavanilatha	4:00 pm - 5:00 pm
15.06.2017	Dr.Valli Nachiyar	3:00 pm - 4:00 pm
	Dr.Usha Nandini	4:00 pm - 5:00 pm
16.06.2017	Dr.Bavanilatha	3:00 pm - 4:00 pm
	Dr.Sudha	4:00 pm - 5:00 pm
17.06.2017	Ms.Renuka Devi	3:00 pm - 4:00 pm
	Dr.Jayashree Nellore	4:00 pm - 5:00 pm
19.06.2017	Dr.Ramesh Kumar	3:00 pm - 4:00 pm
	Dr.Bavanilatha	4:00 pm - 5:00 pm
20.06.2017	Dr.Sudha	3:00 pm - 4:00 pm
	Dr.Bavanilatha	4:00 pm - 5:00 pm
21.06.2017	Ms.Renuka Devi	3:00 pm - 4:00 pm
	Dr.Utthralakshmi	4:00 pm - 5:00 pm
22.06.2017	Dr.Prakash	3:00 pm - 4:00 pm
	Ms.Renuka Devi	4:00 pm - 5:00 pm
23.06.2017	Dr.Valli Nachiyar	3:00 pm - 4:00 pm
	Dr.Bavanilatha	4:00 pm - 5:00 pm
24.06.2017	Ms.Renuka Devi	3:00 pm - 4:00 pm
	Dr.Jayashree Nellore	4:00 pm - 5:00 pm
26.06.2017	Ms.Raji	3:00 pm - 4:00 pm
	Ms.Subashini	4:00 pm - 5:00 pm
27.06.2017	Ms.Renuka Devi	3:00 pm - 4:00 pm
	Ms.Chinnu Raju	4:00 pm - 5:00 pm
28.06.2017	Dr.K.Brinda(Invited Speaker)	3:00 pm - 5:00 pm



SATHYABAMA UNIVERSITY

(DEEMED TO BE UNIVERSITY)
Jeppiar Nagar, Rajiv Gandhi Salai
Chennai-600119



FACULTY OF BIO AND CHEMICAL ENGINEERING
DEPARTMENT OF BIOTECHNOLOGY

CERTIFICATE

This is to certify that **Mr. Aravind** has been an **Active Participant** in National Workshop on Stem Cells and Their Applications held from 12th to 28th June 2017, organized by Department of Biotechnology, Faculty of Bio and Chemical Engineering at Sathyabama University, Jeppiaar Nagar, Chennai – 600 119, Tamil Nadu.

Dr.B.S. NAVEEN PRASAD

(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