

Date: 04/07/2014

Meeting Circular

A meeting is schedule on 07/07/2014 at 1:00 PM in Department of Biotechnology. This meeting will be discussion regarding FDP.

Anand
HOD Head of the Department
Dept. of Bio-Technology
Sapthagiri College of Engineering
No. 57/1, Chikkasandra
Hesaraghatta Main Road
Bangalore -57

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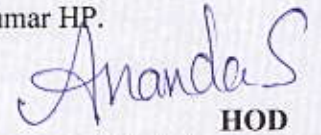
1. HOD of Physics *[Signature]*
2. HOD of Chemistry *[Signature]*

[Signature]
Sapthagiri College of Engineering
Chikkasandra, Hesaraghatta Road,
Bangalore- 560 057

Date: 20-7-2014

Circular


Faculty of Department of Biotechnology and Department of Basic Science are hereby informed to attend five days faculty development programme titled as **Next Generation Sequencing** from 22-7-2014 to 26-7-2014. All the Faculty register their names with Faculty Coordinator Mr Prashanth Kumar HP.




HOD

Department of Biotechnology
Head of the Department
Dept. of Bio -Technology
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No. 57/1, Chikkasandra
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Copy To,

1. HOD of Physics 

2. HOD of Chemistry 



Principal

Sapthagiri College of Engineering
14/5, Chikkasandra, Hesaraghatta Main Road
Bengaluru - 560 057



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 (Affiliated to Visvesvaraya Technological University, Belagavi & Approved by AICTE, New Delhi)
 #14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru - 560057

DEPARTMENT OF BIOTECHNOLOGY AND DEPARTMENT OF BASIC SCIENCE
Jointly Organized Five days Faculty Development Programme

ON

"NEXT GENERATION SEQUENCING"

22-7-2014 to 26-7-2014

Tuesday-Saturday

SCHEDULE

Time Date/Day	9:30AM TO 10:30AM	11:00 AM To 1:00 AM	2:00PM TO 3:00PM	3:30PM TO 4:30PM
22-7-2014 Tuesday	FDP Inaugural Function	General introduction of Genetic material, its isolation and application By Prof Prashanth Kumar HP	LAB SESSION DNA Isolation by CTAB method By Prof Prashanth Kumar HP	
23-7-2014 Wednesday	Sequencing Methods Of DNA Ms Pooja Ramesh		Lab session DNA sequencing by Nanopore Ms Pooja Ramesh	
24-7-2014 Thursday	PCR variants and its applications Dr Ananda S	Next Generation sequencing & its Future prospects Mr. Sachin SIMS & RC	Lab session DNA amplification by PCR Dr Ananda S	
25-7-2014 Friday	Tools for NGS process Dr. Praveen Kumar		Shodhaka Life science private limited - Next Generation Sequencing NGS platform along with sequence analysis	
26-7-2014 Saturday	Shodhaka Life science private limited NGS platform along with sequence analysis			Valedictory Function

#10:30AM-11:00AM- Tea Break, 1:00PM-2:00PM-Lunch Break, 3:00PM-3:30PM - Tea Break

PATORNS

Sri. G Dayanaud

Chairman, SCE

Sri. G D Manoj

Executive Director, SCE

Dr. Puttamadappa C

Principal, SCE

ORGANISERS

Dr. Ananda S

HOD, BT

Dr. Krishna B S

HOD, Chemistry

Dr. Jagadeesh Gowda

HOD, Physcis

Co-ordinator

Prof. Prashanth Kumar H P

AP, Dept of BT

Registration Form
Faculty Development
Programme

Next Generation
sequencing

22-7-2014 to 26-07-2014

Tuesday-Saturday

Participant Details

Name : _____

Dept : _____

College : _____

Mobile : _____

Email ID : _____

Area of Interest : _____

Signature of the Participant



Sapthagiri College of Engineering
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Five Day
Faculty Development
Programme

On

Next Generation
sequencing

22-7-2014 to 26-07-2014

Tuesday-Saturday

Department of Bio-Technology
&
Department of Basic Sciences

About Sapthagiri

Sapthagiri College of Engineering was established in the year 2001 by the Srinivasa Educational and Charitable Trust(R) to implement path breaking student centric education methods. Strengthen Industry Institute Interaction for knowledge sharing. The Institution has collaborative & extension activities by way of MOUs with various organizations for fostering Academic/ Research/ Innovation. The organization provides an ideal ambience to stimulate the teaching-learning process, leadership skills, helping in bringing out skillset to conduct research and development.

About Department of Bio-Technology

Biotechnology(BT) is the third wave in bio-science and represents an interface of basic and applied sciences, where transformation of science into technology is witnessed. The Department of Biotechnology was established in 2004, The courses offered are: B.E., M.Sc. (Engg.) and Ph.D in Biotechnology. The Department imparts quality education to equip students with advanced skills.

The BT department has been recognised as a Research Centre by Visvesvaraya Technological University (VTU), Belagavi. The department has state of the art laboratories. The department is working in many thrust areas of research & has produced more than TWO hundred publications in various National and International peer reviewed journals. Also, department has bagged VTU ranks. Department has received research funds from VGST, KSCST & AGASTHYA FOUNDATION in the thirist areas. Also, department has industry interaction with Genie pvt ltd, Chlorobios, Clintrac pvt ltd, Stelixir, Genelon and so on.

Department of Basic sciences

Basic sciences department consists of Physics, chemistry and Mathematics . All these departments was established in 2001 and are imparting quality education for first years in Engineering. All the Faculty members are encouraged to participate in the conference/workshops and also to publish/present research papers in journals and

conferences. Excellence in research and teaching has been the hallmark of Basic science departments ever since its inception. Our exceptional research profile directly feeds into our teaching experience.

About FDP

The Department of Biotechnology and Department of Basic Sciences is jointly organizing the FDP program "Next Generation Sequencing"

The objective of the programme was to enlighten on the next-generation sequencing generates masses of DNA sequencing data with cost ineffective and less time-consuming than traditional Sanger sequencing.

Major Topics Covered

1. General introduction of DNA and RNA its isolation and application
2. Sequencing Methods of DNA
3. Comparative genomics reveals adaptation by *Alteromonas* sp. SN2 to marine tidal-flat conditions: cold tolerance and aromatic hydrocarbon metabolism



Report of FDP Programme
“Next Generation Sequencing”

The Department of Biotechnology and Department of Basics Science jointly organized the FDP programme on **Next Generation Sequencing** for 5 days from **22-7-2014 to 26-7-2014 (Tuesday-Saturday)**.

The FDP was organized for Faculties of Department of Biotechnology and Basics science.

The massively parallel sequencing technology also known as next-generation sequencing (NGS) which made huge revolution in the biological sciences because of its ultra-high throughput, scalability, and speed. NGS enables researchers to perform a wide variety of applications and study biological systems such as sequence whole genomes, Utilize RNA sequencing (RNA-Seq) to enumerate novel RNA variants and splice sites, DNA methylation and DNA-protein interactions and study microbial diversity in humans or in the environment. The next-generation sequencing generates masses of DNA sequencing data with cost ineffective and less time-consuming than traditional Sanger sequencing.

Objectives of Programme

1. To know about the Next generation sequencing
2. Steps involved in sequencing in the process
3. It's Application
4. Hands on Training

Summary of Event

Day 1: 22-7-2014 Tuesday

The session talk was started with **“General introduction of DNA and RNA its isolation and application”** by **Prof Prashanth Kumar HP, Assistant Professor, and Department of Biotechnology and also the lab session** was conducted by him after the talk.

Day 2: 23-7-2014 Wednesday

Ms Pooja Ramesh, Technical Head, GenEclat (17-02-2016) delivered a lecture on **“Sequencing Methods of DNA”**. The speaker explained the Microbial whole-genome sequencing technique for identifying pathogens and antimicrobial resistance. The protocol for carrying the next generation sequencing and the problems that encounter during extraction and isolation of sample were highlighted followed by lab session.



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Report of FDP Programme “Next Generation Sequencing”

Day 3: 24-7-2014 Thursday

“Next Generation sequencing & its Future prospects” was delivered by **Mr. Sachin, SIMS** highlighted about the prospects of NGS in third world countries.

Dr Ananda S, Prof and Head, Department of Biotechnology

Delivered the Talk on PCR variations and its application. The History, principle and its application was explained. The DNA isolated and preserved were used for amplification in lab session was running the PCR.

Day 4: 25-7-2014 Friday and Day 5: 26-7-2014 Saturday

Session on “Tools for NGS process” delivered by **Dr. Praveen Kumar** was an eye opener for the participants on NGS platforms for running sequences.

Shodhaka Life science private limited

Delivered the talk on Next generation Sequencing, NGS: RNA-Seq, De-novo and Reference assembly, Gene and protein information (e.g., expression, location, function) followed by lab session on different databases of raw sequence retrieval and directory making.

Report of FDP Programme
“Next Generation Sequencing”



Mr. Sachin, SIMS highlighted about the prospects of NGS in third world countries

Report of FDP Programme
“Next Generation Sequencing”



General introduction of DNA and RNA its isolation and application
By Prof Prashanth Kumar HP



Signature of the FDP Co-Ordinator



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ATTENDANCE LIST

Event Name: Next Generation sequencing
 22-7-2014 to 26-7-2014

Sl. No	Faculty Name	DAY-1		DAY-2		DAY-3		DAY-4		DAY-5	
		MS	AS	MS	AS	MS	AS	MS	AS	MS	AS
1	Dr. Krishnamurthy NB	MS	AS	MS	AS	MS	AS	MS	AS	MS	AS
2	Dr. Rohith KC.	MS	AS	MS	AS	MS	AS	MS	AS	MS	AS
3	Prasanth Kumar HP	MS	AS	MS	AS	MS	AS	MS	AS	MS	AS
4	Geomya. C	MS	AS	MS	AS	MS	AS	MS	AS	MS	AS
5	Vinutha Molen	MS	AS	MS	AS	MS	AS	MS	AS	MS	AS
6	Shobha G	MS	AS	MS	AS	MS	AS	MS	AS	MS	AS
7	Blemy Baby Mathew	MS	AS	MS	AS	MS	AS	MS	AS	MS	AS
8	Vijay Kishor	MS	AS	MS	AS	MS	AS	MS	AS	MS	AS
9	Krishnamurthy TP	MS	AS	MS	AS	MS	AS	MS	AS	MS	AS
10	Dr. Sharadhak KS	MS	AS	MS	AS	MS	AS	MS	AS	MS	AS
11	Saranya D	MS	AS	MS	AS	MS	AS	MS	AS	MS	AS

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Principal
 Sapthagiri College of Engineering
 Chikkasandra, Hesaraghatta Road,
 Bangalore-560057

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 Dept. of Bio-Technology
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Event Name: Next Generation sequencing
22-7-2014 to 26-7-2014

Sl. No	Faculty Name	DAY-1		DAY-2		DAY-3		DAY-4		DAY-5	
		MS	AS	MS	AS	MS	AS	MS	AS	MS	AS
1	Roopa.K.P.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Dr. chaitanya lakshmi	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Anasuya. D.M	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
4	Meena S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
5	Tharjua.	#	#	#	#	#	#	#	#	#	#

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ATTENDANCE LIST

Event Name: Next Generation sequencing

22-7-2014 to 26-7-2014

Sl. No	Faculty Name	DAY-1		DAY-2		DAY-3		DAY-4		DAY-5	
		MS	AS	MS	AS	MS	AS	MS	AS	MS	AS
1	Mrs. Shashikala B.S	(P)	(P)	(P)	(P)	(P)	(P)	(P)	(P)	(P)	(P)
2	Mr. Gnanendra D.S	(P)	(P)	(P)	(P)	(P)	(P)	(P)	(P)	(P)	(P)

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Ananda S
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Department of Biotechnology and Department of Basic Sciences

Five Days Faculty Development Programme

on

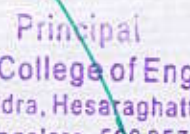
“NEXT GENERATION SEQUENCING”

CERTIFICATE OF PARTICIPATION

This is to certify that Dr/Mr/Ms KRISHNAMURTHY NB of
SAPTHAGIRI COLLEGE OF ENGINEERING has successfully participated in the **Five days**
Faculty Development Program from 22-7-2014 to 26-7-2014.


CO-ORDINATOR


CONVENER


Principal
Sapthagiri College of Engineering
Chikkasandra, Hesarghatta Road,
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PRINCIPAL