

REF: MSRCASC-A/WS/CIR/2024-25/41

Date: 25/07/2024

CIRCULAR

This is to inform the HOD's and the faculty members of the Lifesciences departments that Dept of Biotechnology & Genetics is hosting a Guest lecture for I Sem BSc life sciences students on 18th July at 10:00 AM in Kuvempu seminar hall. The guest speaker is Dr Gokul Kesavan, Founder-Vertex, Research and Education, and the title of the talk is "SCIENCE TO CURE: The Path from Sickle Cell Disease to CRISPR Breakthroughs". It is compulsory for all the faculties of life sciences who are engaging the I Sem to attend the guest lecture.

Dr. Radha Dayanidhi

HOD - Biotechnology & Genetics

125/a/24

Dr. Vatsala G

Principal Principal

M.S.Ramaiah College of Arts, Science & Commerce-Autonomous
MSRIT POST, MSR Nagar

Bengaluru - 560 054



Dr Gokul Kesavan

PATRONS

Dr. M.R. Jayaram, Chairman, GEFSr. M.R. Janakiram, Director, GEFSri M.R. Kodandaram, Director, GEFSri B.S. Ramaprasad, CE, GEFSri G. Ramachandra, COF, GEFDr. Vatsala G. Principal, MSRCASC Dr. Anandappa Iramukhadavar, Registrar (Academics)
Prof. Suresh J. Deputy Registrar, Admin & Evaluation
Prof. Jayarama B.S., Vice Principal

ABOUT THE GUEST LECTURE 'Science to Cure: The Path from Sickle Cell Disease to CRISPR

Breakthroughs'

Join us to explore the journey from the discovery of sickle cell disease (SCD) in the 1950s to the latest CRISPR breakthroughs. Despite extensive research, efficient treatments for SCD remain elusive. However, CRISPR-based gene therapies, born from studies of bacterial immune systems, offer new hope.

OUTCOMES

- It deepens the understanding of SCD and gene therapy while igniting your passion for scientific research and its potential to solve societal problems.
 - Discover genetic research's past, present, and future, and envision a world transformed by science.

M S Ramaiah College of Arts, Science, and Commerce-Autonomous

Department of Biotechnology and Genetics in association with Vertex Research and Education Organizes SCIENCE TO CURE: The Path from Sickle Cell Disease to CRISPR Breakthroughs

July 18, 2024, 10 AM - 11 AM

Venue: Kuvempu Seminar Hall ORGANIZING COMMITTEE

Dr. Lakshmikanth R.N. Associate Prof Head (PG)

Dr. Channarayappa. Professor Dr. Ramesha N. Professor Dr. D. R. Jayashree, Professor Dr. Ramakrishnaiah T.N., Assistant Professor Dr. Radha Dayanidhi, Assistant Professov Head(UG)

Dr. Vinutha M, Assistant Professor Ms. Beaulah Angel, Assistant Professor Dr. Pramod Prakash Desai, Assistant Professor

Dr. PavithraKumari H.G. Assistant Professor Dr. Muktha H, Assistant Professor Dr. Satish Babu, Assistant Professor Dr. Vinay Hegde, Assistant Professor

Prof. Pushpa H., Vice Principal

Department of Biotechnology

Report on the Guest Lecture: "Science to Cure: The Path from Sickle Cell Disease to CRISPR Breakthroughs"

Date and Venue:

July 18, 2024, at Kuvempu Seminar Hall

Audience:

First-semester life sciences students

Resource Person:

Dr. Gokul Kesavan, Founder and Scientist, Vertex Research and Education

Overview:

The orientation program for first-semester life sciences students at MSRCASC featured a guest lecture titled "Science to Cure: The Path from Sickle Cell Disease to CRISPR Breakthroughs." The lecture was delivered by Dr. Gokul Kesavan, a scientist and the founder of Vertex Research and Education. The session aimed to ignite curiosity among the students and to demonstrate the unexpected pathways research can take, ultimately leading to significant scientific breakthroughs. The talk was divided into two parts:

Part 1: History and Characteristics of Sickle Cell Disease (SCD)

Dr. Kesavan began by discussing the history of Sickle Cell Disease, noting that the defective haemoglobin structure responsible for SCD was identified as early as 1951. Despite this early discovery, effective therapies for SCD remain elusive, highlighting the complexities and challenges in medical research and treatment development.

Part 2: From Bacterial Defense Mechanisms to CRISPR Breakthroughs

The seminar then transitioned to the groundbreaking development of CRISPR-based gene editing. Dr. Kesavan explained how curiosity-driven research into bacterial defense mechanisms against viruses led to the discovery of CRISPR. This revolutionary gene-editing technology has since opened new avenues in genetic research and therapy.

Dr. Kesavan emphasized that SCD was the first disease to be targeted using CRISPR technology, with numerous clinical trials currently underway. These trials aim to treat SCD and other genetic diseases, showcasing the potential of CRISPR to transform medical science and patient care.

Interactive Session:

The students demonstrated great enthusiasm and curiosity, asking insightful questions about the potential drawbacks and long-term consequences of CRISPR-based therapies. The discussions also covered broader topics such as genetically modified organisms (GMOs) and transgenics, further enriching the seminar experience.

Conclusion:

The seminar was a resounding success, effectively engaging the students and exposing them to the transformative power of scientific research. The presence of faculty members, including the Heads of all life science departments, underscored the importance of the guest lecture and added to its significance.

Acknowledgments:

The orientation program organizers and the Biotechnology & Genetics department at MSRCASC extend their gratitude to Dr. Gokul Kesavan for his enlightening presentation and valuable insights. The seminar has undoubtedly inspired the students to pursue their scientific endeavors with curiosity and determination.









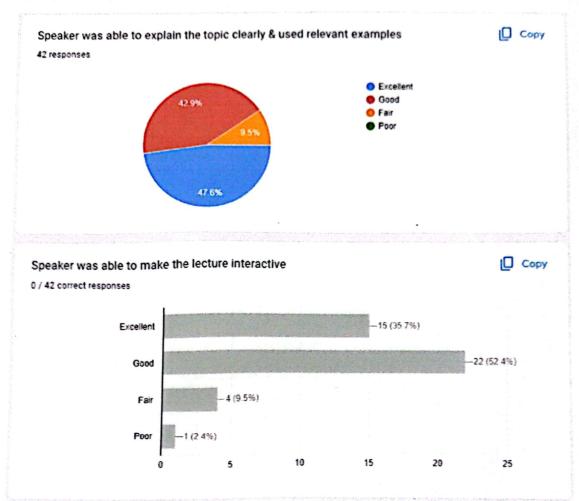
Glimpses of the guest lecture "Science to Cure: The Path from Sickle Cell Disease to CRISPR Breakthroughs" by Dr. Gokul Kesavan, Founder and Scientist, Vertex Research and Education.

M.S. Ramaiah College of Arts, Science & Principal
M.S.Ramaiah College of Arts, Science & Commerce-Autonomous
MSRIT POST, MSR Nagar
Bengaluru - 560 054

SI No	Name	Reg No	Class/Sec	Signature
25	Kushi Bajreka	0266	Sich BZE	Stastis.
26	Chandri Gupta		Suit of E	chart.
27	Mohenma d Zain		Sich' BIM	CON
28-	Duja Arun Lunar	0378	See B 13 F III	Aque
29.		U18EV2850149	Sech Jem	F
30	Alhigyon Barwah	U18EV2350 169	Seca Icem	A. Barurah
31	ARDHENDU SENGUPFA	U18EY238 0159	SecATsem	A. Sen gupta
32	Avantik a Roy	UISEVR350014		Avantika Roy
32	Sayani Barna	U18EV235003		
33	Smaksli Das	VI8 EV23500B	Sec 1 sem	bangle"
34.	Alfin. B. George	W18EV 2350005	Sec 4I sen	Als
35.	Amal Krishna	418612380158	Sec: A I sun	The state of the s
36	ARIJEET KUMAR	U18EV233004		
77	Navyatha Shree	U18EV23 80004	Sec Alsen	Days
38.	Agnishum Das	V18EV2350109	Sec A I Sem	Apri.
39.	Yuviha Sasin	U18EV&35086	Sec C Isem	jurika.
40.	Sona kumari.s	U18EN235119	See B I Sem	Sovery The
41	Aishnagga	U 18 E V23500 77	SecCTsen	b '
42	Vaishnavii G. Hegde	U18EV235008	Sec C Isem	vaishnaui
43	Shriya Gegchalli	V18 EV236089	0 6	A
49.	Bidhisa Das	V18EY23 SOO 78		Bidhay Da.
45.	Graham himas Crup	U18EY235003		
46.	Anagha Pravin	U18EV2350187	Sec C Isem	Masher
47.	Arkaprabha Dev	U18EV2380131	Sec'c'Isen	Anke
48.	Physhan Basavaraj	U17EU230061		Blue
49	aThanija	018E023018		Oden
50	Sushma	018E028038	Sece	Sush
51	Riddhi. C	U18EV23D138		0.
52	Sulyan Ahmed &	018E V 230058		sofyan
53	Tejahum. RS	UI & E V230026		I OX'IA
64	Sandhyars	VIREV230173		. 111
56	Kenthana. S	018E1230112		test
57	Yashasuni. M	U18 EV230021		
88	Priyadaishin. K	U186V230157		Paris
	Rakshitha. B.R	U18EV23015 +	See Dear	Dol. A
60	Samana-l	U18EV23017	(a co	Tuken
61.	Harshith			I AND
01.	rusu-in	U18EV230039		L COM

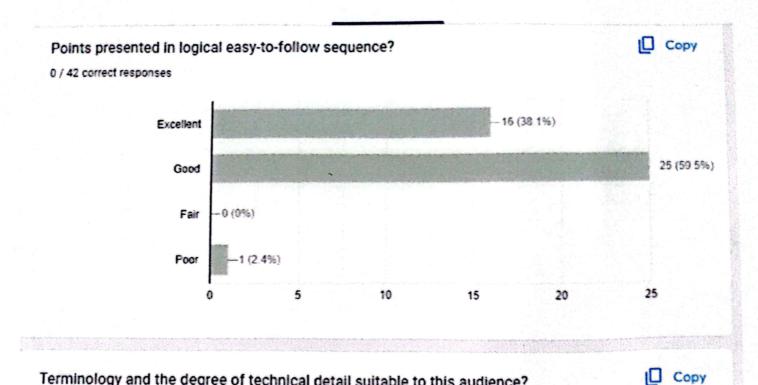
SI No	Name	Reg No	Class/Sec	Signature
620	K.S Aishwaya	U18 Ev2380110	LSt SumBSC	KS Sighaya.
63.	Karthik	US EV2350816		
64.	Schalsh	U1 8 = V2350388		Salvas
65.	Manasa	UISEV 230/35		Brush -
66.	Lisha. S	VL8 EV 2350022		, hhs
67	Maliathving Gt	UL8 EV2350031	-11-	Mahathurgo
				0
			The state of the s	
			,	
		-		
			H-EVILLE	

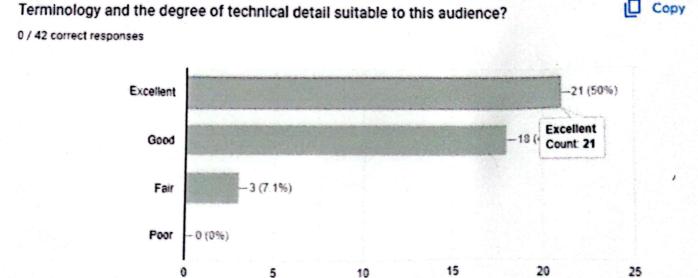
Feedback analysis Of Gokul'sleture



Principal
M.S.Ramaiah College of Arts, Science &

Commerce-Autonomous
MSRIT POST, MSR Nagar
Bengaluru - 560 054

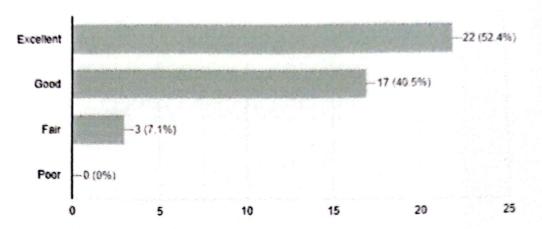




Did the speaker answer the questions well, giving concise and informative replies?

O Copy

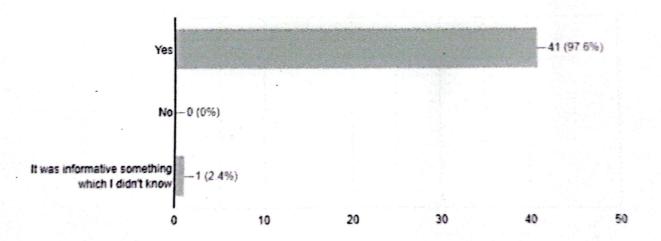
0 / 42 correct responses



Speaker was able to positively influence my views towards the topic

□ Сору

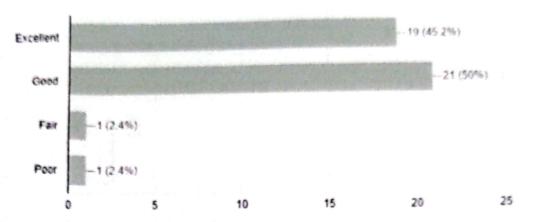
0 / 42 correct responses



Relevance of material to topic set:

L Copy

0 / 42 correct responses



The presentation indicates the speaker's knowledge and understanding of the subject was:

□ Сору

0 / 42 correct responses

