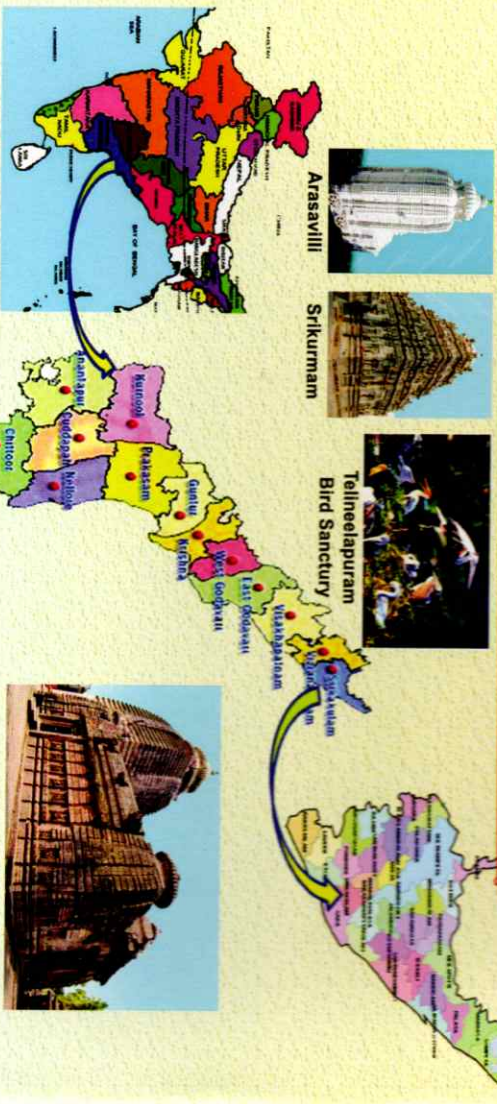


## ABOUT SRIKAKULAM

Srikakulam district is one of the nine districts in the Coastal Andhra region of the Indian state of Andhra Pradesh. It is the extreme Northeastern District of Andhra Pradesh situated within the Geographic Co-Ordinates of 18°-20' and 19°-10' of Northern latitude and 83°-50' and 84°-50' of Eastern longitude. It was formerly known as Chittoor with ~ 190 km of sea coast. It has great historical significance in the medieval and later history of Kalinga. The earliest history of Srikakulam dates back to the ages of the Eastern Ganga Dynasty. Srikakulam has tropical wet and dry climate with annual aggregate rainfall of 1075 mm. Srikakulam is tremendous affluent in biodiversity and exhibits a mixed variety of flora and fauna. The District has two Natural Regions: Hilly Region called Agency Area, mostly inhabited by Tribal Population and the Plain Area. There are two famous rivers, Vamsadhara and Nagavali flow from North to East in the District and a total of 10 irrigation projects associated such as Vamsadhara, Madduvilasa, Dabasingi Reservoir etc. Significant Buddhist shrines and monasteries abound here such as Salinundam and Dantapuram. Pilgrim Centers like Srikurumam, Srimukhalingam, Arasavelli, and Ravvalasa. Srikurumam, a village 13 km from the district is famous for the Srikurumam Temple- the only temple in the world where Lord Vishnu resides in the form of a tortoise. Arasavelli temple is the only Sun Temple where the Sun God is worshipped. Konnamma Temple, which is esteemed pan India for its lively celebration of Dasara (Dussehra) festival, is located at the nearby Korni village. Jamia Masjid, the mosque built under the patronage of Sher Muhammad Khan of the Qutubshahi dynasty of Hyderabad in 1641 is perhaps the oldest structure in the city and a fascinating visit for tourists. The beautiful garden surrounding the mosque adds further grace to this monument.

## How to reach Srikakulam & the Venue



**BY FLIGHT:** The nearest airport to Srikakulam district is Visakhapatnam (VTZ) Airport & from there, Srikakulam is 100 km by road. Air India, Air Deccan, Air Costa, Air Asia, Indigo & Jet Airways operate flights from all major cities such as Chennai, Tirupati, Hyderabad, Kolkata, Bengaluru, Delhi, Mumbai, Port Blair, Raipur & Bhubaneswar to Visakhapatnam.

**BY TRAIN:** Srikakulam has its own major railway station named Srikakulam Road (CHE). One can avail trains from most of the major cities across the country to reach Srikakulam. From there the town/venue is ~10 km can be reached by availing autos or taxis easily available outside of the station. Another option is to reach Visakhapatnam (VSKP) & from there, Srikakulam is ~ 100 km by road.

**BY BUS:** Srikakulam is well connected via road to all key places of Andhra Pradesh. NH5 (National Highway 5) that connects Chennai to Kolkata passes directly through the place. The APSRTC (Andhra Pradesh Road Transport Corporation) operates buses which ply to and from Srikakulam, Vishakhapatnam, Vizianagaram, Vijayawada, Rajahmundry, Kakinada, Eluru, and Guntur. Bus service to Visakhapatnam starts from 5.00 a.m. and ends at 9.00 p.m. Buses are available at a regular interval of 20 minutes. Apart from this you also have the option to avail express buses too and which are available from 5.30 in the morning to 10.15 at night at intervals of 15 minutes.

## Invitation

### Science Academies' Refresher Course on Recent Trends in Molecular Biology Technology: Concepts & Practice

02<sup>nd</sup>-15<sup>th</sup> March-2021

Organised by



Department of Biotechnology  
Government Degree & PG College (Men)-Srikakulam

Department of Biotechnology  
&  
Dr. B. R. Ambedkar University-Srikakulam

Course Director

Coordinator



**Prof. P. SUJATHA**

PRINCIPAL, COLLEGE OF SCIENCE  
Dr. B. R. AMBEDKAR UNIVERSITY,  
SRIKAKULAM



**Prof. E. VIJAYAN**, FNASc,

CUSAT-Cochin



**M. PRADEEP**

HEAD-DEPT. OF BIOTECHNOLOGY  
GOVT. DEGREE COLLEGE (Men)-  
SRIKAKULAM  
CELL: 8985745820/8555911961



## INDIAN ACADEMY OF SCIENCES ([www.ias.ac.in](http://www.ias.ac.in))

Founded in 1934 by Sir C V Raman the Indian Academy of Sciences, Bangalore was registered as a Society on 27 April, 1934 with the main objective of promoting the progress and upholding the cause of science. The Academy began functioning with 65 Founding Fellows and the formal inauguration took place at the Indian Institute of Science. On the same afternoon its first general meeting of Fellows was held during which Sir C V Raman was elected President and the draft resolution of the Academy was adopted. In the same month of 1934, the first issue of the Academy's earliest publication was published. The Academy from its very beginnings has taken great interest and initiative in publishing science research and today publishes 10 science journals in different disciplines, uses an online submission and review management system that's trackable, papers are peer reviewed and published content is made available online and open access. The Academy's contribution to science and society is also reflected through its policies, values and its range of activities which include: The Academy Fellowship; Annual and Mid-Year Meetings; Science Education Programmes; Sponsorship of Discussion Meetings; The Women in Science Panel; Repository of Scientific Publications of Academy Fellows; Oral History Archives; Committee on Scientific Values; Raman Chair Professorship; Jubilee Chair Professorship; Publications of the Academy; Contributions to Science Policy.

## NATIONAL ACADEMY OF SCIENCES, INDIA ([www.nasi.org.in](http://www.nasi.org.in))

The National Academy of Sciences, India was founded in the year 1930, with the objectives to provide a national forum for the publication of research work carried out by Indian scientists and to provide opportunities for exchange of views among them. The National Academy of Sciences envisions the cultivation and promotion of Science & Technology in all its branches through: Promoting scientific and technological research related to the problems of societal welfare; Publication of proceedings, journals, memoirs, transactions and other works as may be considered desirable; Organizing meetings and hold discussions on scientific and technological problems; Undertaking, through properly constituted committees and bodies, the scientific work(s) of technological or public importance; Co-operating with other organizations in India and abroad, having similar objects, and to appoint representatives of the Academy to act on national and international bodies; Securing and managing funds and endowments for the promotion of science and technology; Organizing a Science Library; Performing all other acts, matters and things that may assist in, conduce to, or be necessary for the fulfillment of the above mentioned aims and objects of the Academy. Creating an adequate impact of the Academy all over the country, by opening Chapters of the Academy in other cities in the country, where reasonable number of Fellows and Members are available.

## INDIAN NATIONAL SCIENCE ACADEMY ([www.insa.nic.in](http://www.insa.nic.in))

A premier science Academy in the country, it plays crucial role in promoting, recognizing and rewarding excellence. An important task of the Indian National Science Academy is to publish journals, organize scientific discussions and bring out monographs and other publications. The Academy promotes public awareness and understanding of science. Acting as a link between the scientific community and planners, it advises the government on critical issues relating to science and technology. It also serves as a forum for interactions among scientists within and outside the country. It recognizes outstanding young scientists, engineers and technologists through award of medals/prizes and by providing modest financial support for pursuing research. Senior scientists are honored through election to its Fellowship. Academy also provides different awards/medals and the prestigious Research Professorships. Superannuated fellows of the Academy can be supported through Senior Scientist and Honorary Scientist schemes. The Academy has established exchange programmes with different overseas Academies to facilitate visits of Indian scientists to research institutions abroad and of foreign scientists to India for lectures/scientific discussions.

**About the Course Director:** Prof. Dr. Edathil Vijayan, FNASc, is an eminent scientist, academician and teacher having outstanding contributions in the field of Neuro-Endocrinology. Currently he is UGC Visiting Professor in the Department of Biotechnology, Cochin University of Science and Technology & President to Society for Biotechnology India (SBTI). He was born in 1943 at Thrissur, Kerala, obtained B.Sc.(Hons.), M.Sc. and Ph.D. from Banaras Hindu University in 1971. Immediately after Ph.D. he joined Department of Zoology, Center for Advanced Studies in Endocrinology, Delhi University as Faculty. Awarded Ford Foundation post-doctoral Fellowship with Dr. S. M. McCann at University of Texas Southwestern Medical School at Dallas, USA 1974-78. On return selected as Associate Professor, School of Life Sciences in newly established Hyderabad Central University and rose to the rank of full Professor shortly. He was awarded Alexander von Humboldt Fellowship at Max-Planck Institute for Biophysical Chemistry Göttingen, Germany (1981-83). He was invited as Professor and Head, Department of Biochemistry & Molecular Biology and Dean, School of Life Sciences, Pondicherry Central University in 1988 and continued in that position till 2006. His research interests were Neuroendocrinology/mammalian reproduction, Neuropeptides and Neurotransmitters, generously supported by DST grants. Published over 105 papers in international journals of repute including Nobel Foundation Symposium Volume and contributed Chapters in several Books. Supervised 12 Ph.D. and 15 M.Phil. Scholars and served as Chairman, Board of Studies, Member Academic Council and Executive Council of several Universities and Expert Committees of DST, ICMR, CSIR, UGC and UPSC and NAAC. He is also Ph.D. examiner for over 40 Indian and foreign Universities. Life Member of several Professional Societies including Endocrine Society USA and Max-Planck Alumni Association Germany. Recipient of several Awards including Dr. Subhas Mukherjee Memorial India Oration Award, Physiological Society of India Oration Award, President, Endocrine Society of India, Council Member International Neuroendocrine Federation (INF), Emeritus Member Endocrine Society USA and served on the Editorial Boards of several Journals in Endocrinology, Physiology, Neuroendocrinology and Immunoneuroendocrinology. He is widely traveled across the world, participated as invited speaker in numerous National and International Conferences/Symposia. On superannuation in 2006 Dr. Vijayan was selected as ICMR-Emeritus Medical Scientist and joined the Department of Biotechnology, CUSAT and continued as UGC visiting Professor till 2013. Settled in Kochi he keeps very active and frequent visitor to Europe, USA and South Asian Countries as invitee to various scientific meetings/conferences. (Contact: [drvijayan@cusat.ac.in](mailto:drvijayan@cusat.ac.in) & [eyvmenon@gmail.com](mailto:eyvmenon@gmail.com))

Two-week Refresher Courses (RC) form an important segment of the activities of the Science Academies' Programmes organized by the Joint Science Education Panel of the three Science Academies. The primary focus is to enhance the quality of science education at undergraduate and graduate levels. This is an all-India programme primarily aimed at helping motivated teachers improve their background knowledge and teaching skills and thus add value to their teaching. The proposed RC on practical applications of Molecular Biology in various fields of life sciences is an extraordinary event, particularly in North Coastal Andhra Pradesh, India. Thus, such an RC would definitely augment the quality of life sciences education at undergraduate (UG) and postgraduate (PG) levels and would also keep the teachers up to date with modern developments in the field. This would add worth to their teaching especially in the context of modern UGC model syllabus for the UG courses. The themes for the RC include applications of Molecular Biology techniques in various fields like Neurobiology, Biodiversity conservation, Animal Health Care, Development and Aging, Transgenesis, Gene therapy, Forensic Science, Microbiology and Plant Taxonomy etc. The topics are very carefully chosen to address the need of life sciences teachers at all levels. Prof. Edathil Vijayan, FNASc, ICMR-Emeritus Medical Scientist, President of Society for Biotechnologists India (SBTI) will be the course director. Mr. Pradeep Madhanchi, Head-Department of Biotechnology, Government Degree & PG College (Men), Srikakulam & Prof. P. Sujatha, Department of Biotechnology, Dr. B. R. Ambedkar University, Srikakulam will be the course coordinators. Applications for attending the RC are invited from teachers with experience in teaching UG and/or PG Courses in life sciences. The organizers may consider selecting a few interested Research Scholars & M.Sc. students too. 35 participants will be accepted (Outstation = 25 & Local = 10) for the course. Selected participants will be provided with roundtrip bus/train (three-tier AC) fare by the shortest route and local hospitality during the course, in addition to course materials.

## DETAILS OF RESOURCE PERSONS

**Dr. E. Vijayan**, FNASc, Professor, Department of Biotechnology Cochin University of Science & Technology Cochin-Kerala  
Mail: [drvijayan@cusat.ac.in](mailto:drvijayan@cusat.ac.in)

**Dr. V. S. Ramachandran**, FNASc, Professor, Department of Botany Bharatiyar University Coimbatore-Tamilnadu  
Mail: [vsrbotany@gmail.com](mailto:vsrbotany@gmail.com)

**Dr. P. Kondaiah**, FNASc, Professor, Department of MRDG Indian Institute of Sciences Bangalore-Karnataka  
Mail: [paturu@iisc.ac.in](mailto:paturu@iisc.ac.in)

**Dr. P. Prakash Babu**, Professor, Department of Life Sciences, University of Hyderabad Gachibowli-Hyderabad-Telangana  
Mail: [prakash@uohyd.ac.in](mailto:prakash@uohyd.ac.in)

**Dr. D. Benet Bosco Dhas**, Chief Executive Officer 30M Genomics Private Limited West Godavari, Andhra Pradesh  
Mail: [benetbiotech@gmail.com](mailto:benetbiotech@gmail.com)

## PROGRAM SCHEDULE - 02-03-2021

9:30 AM = Registration  
9:45 AM = Welcome address by Course Director (Prof. E. Vijayan)  
9:50 AM = Introduction about the Course by Coordinators  
9:55 AM = Vote of Thanks

## 02-03-2021 to 14-03-2021

Academic Sessions: 10.00 AM to 5.30 PM

| Date       | 10.00AM-11.15AM | 11.30AM-11.50AM | 11.30AM-12.45PM | 12.45PM-2.00PM | 2.00PM-5.30PM |
|------------|-----------------|-----------------|-----------------|----------------|---------------|
| 02-03-2021 | Lecture-1       |                 | Lecture-2       |                |               |
| 03-03-2021 | Lecture-3       |                 | Lecture-4       |                |               |
| 04-03-2021 | Lecture-5       |                 | Lecture-6       |                |               |
| 05-03-2021 | Lecture-7       |                 | Lecture-8       |                |               |
| 06-03-2021 | Lecture-9       |                 | Lecture-10      |                |               |
| 07-03-2021 | Lecture-11      |                 | Lecture-12      |                |               |
| 08-03-2021 | Lecture-13      | TEA BREAK       | Lecture-14      |                |               |
| 09-03-2021 | Lecture-15      |                 | Lecture-16      |                |               |
| 10-03-2021 | Lecture-17      |                 | Lecture-18      |                |               |
| 11-03-2021 | Lecture-19      |                 | Lecture-20      |                |               |
| 12-03-2021 | Lecture-21      |                 | Lecture-22      |                |               |
| 13-03-2021 | Lecture-23      |                 | Lecture-24      |                |               |
| 14-03-2021 | Excursion       |                 |                 |                |               |

Practical Session with intervening Break of 30 Min (A total of 42 h Practical Sessions @ 3h/Day)

## 15-03-2021

10:00 AM = Evaluation Exam  
11:00 AM = Valedictory Session & Certificates Distribution  
12:00 Noon = Oath of Thanks  
12:30 PM = Lunch follows Dispersion



# Science Academies' Refresher Course in Recent Trends in Molecular Biology Technology: Concepts & Practice



02<sup>nd</sup> – 15<sup>th</sup> March, 2021



Organised by  
Department of Biotechnology of  
Government Degree & PG College (Men) & Dr. B. R. Ambedkar University-Etcherla  
Srikakulam, Andhra Pradesh

[www.gcmsklm.ac.in](http://www.gcmsklm.ac.in)

Course Director  
**Prof. E. Vijayan, FNASc**  
Cochin University of Science & Technology  
Cochin

Course Coordinator  
**Mr. M. Pradeep**  
Head, Department of Biotechnology  
Government Degree & PG College (Men)  
Srikakulam, Andhra Pradesh  
Cell: 8555911961/8985745820  
Mail ID: [mpsep15@gmail.com](mailto:mpsep15@gmail.com)

Course Coordinator  
**Prof. P. Sujatha**  
Head, Department of Biotechnology  
Dr. B. R. Ambedkar University  
Srikakulam, Andhra Pradesh  
Cell: 9985025972  
Mail ID: [drpsujatha@gmail.com](mailto:drpsujatha@gmail.com)

**DAY: 01**

**02.03.2021**

**INAUGURAL PROGRAMME:** Science Academies' Refresher course on Recent Trends in Molecular Biology Technology: Concepts & Practice was inaugurated by Prof. N Venkatarao, Vice chancellor, Dr.Br. Ambedkar University in the presence of Prof. E. Vijayan, Director of the Refresher Course. Firstly, lighted lamp fire by the organizers and followed by the prayer section. The pre note was delivered by Prof. N. Venkatarao, Vice chancellor, Dr.Br. Ambedkar University in virtual mode. Prof. E. Vijayan, Director of the Refresher Course explained significance of this refresher course and how was this course sanctioned. Prof. Kamaraju, Registrar, Dr.Br. Ambedkar University and Prof. Tulasi Rao, DOA, Dr.Br. Ambedkar University, Prof. P. Sujatha, Course Co Ordinator and Head of the Department of Biotechnology, Dr.Br. Ambedkar University, Sri M. Pradeep, Course coordinator and Head of the Department of Biotechnology, Govt. Degree College for Men, Srikakulam. All delegate members are felicitated by Course coordinators. Followed by 02 Lecture delivered by Prof. E. Vijayan, CUSAT-Cochin



**Prof. E. Vijayan, CUSAT, Cochin – RC Course Director explaining the Program Essence**

After the lunch, the session was started with lecture delivered by Dr Benet Bosco Dhas, founder of 30M



Genomics lab on Molecular diagnostics and he explained various types of diagnostics and difference between DNA vs Gene vs Genomics, followed by practical sessions



**Dr Benet Bosco Dhas, founder of 30M Genomics Pvt. Ltd. Lecture on Molecular diagnostics**

**DAY: 02**

**03.03.2021:**

In second day 02 lectures were delivered by Prof. E. Vijayan, FNASC on Disruptive Technologies Capable of Changing our World. He explained various advance technologies such as Water made by the Sun, Fuel from an Artificial Leaf, Artificial intelligence, Precision Farming, Mapping every cell, Getting Lab meat on plate etc. & Developments in\ endocrinology from 1930 to present year.



**Prof. E. Vijayan, CUSAT, Cochin delivering a Lecture on Neuro Endocrinology**

Post lunch, the Practical session was started by Dr Benet Bosco Dhas, founder of 30M Genomics explained how DNA isolation from human blood cells, after that Participants were divided in groups and practiced.

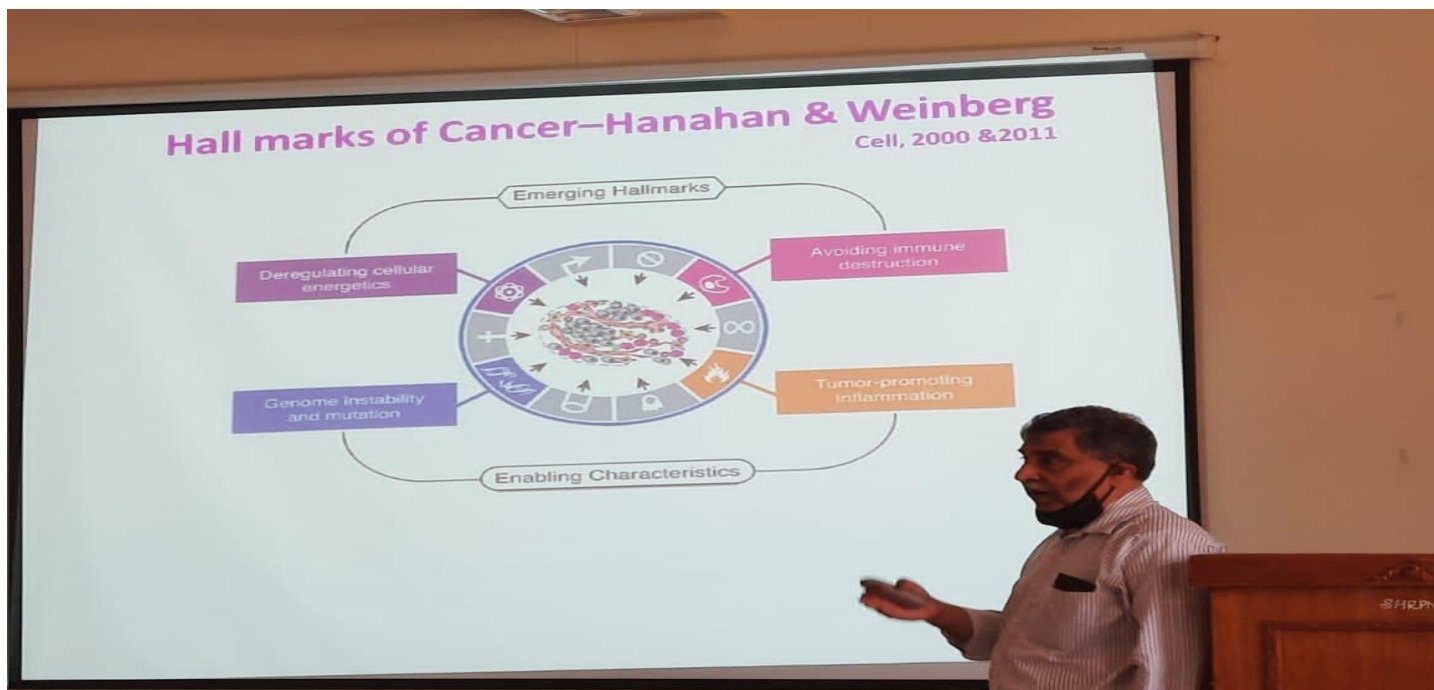


**Dr Benet Bosco Dhas, founder of 30M Genomics, Practical Session on DNA Isolation from Blood**

**DAY: 03**

**04.03.2021:**

In third day, the morning lectures were delivered by Prof. Paturu Kondaiah, Molecular Reproduction, Development and Genetics, IISc, Bengaluru, where he gave wonderful explanation on Molecular Oncology.



**Prof. Paturu Kondaiah, IISc-Bangalore Lecture on Molecular Oncology**

Afternoon session, the practical session was started by Dr Benet Bosco Dhas, founder of 30M Genomics lab. He



explained various DNA isolation methods and Gel electrophoresis. Then the participants involved in the practical.

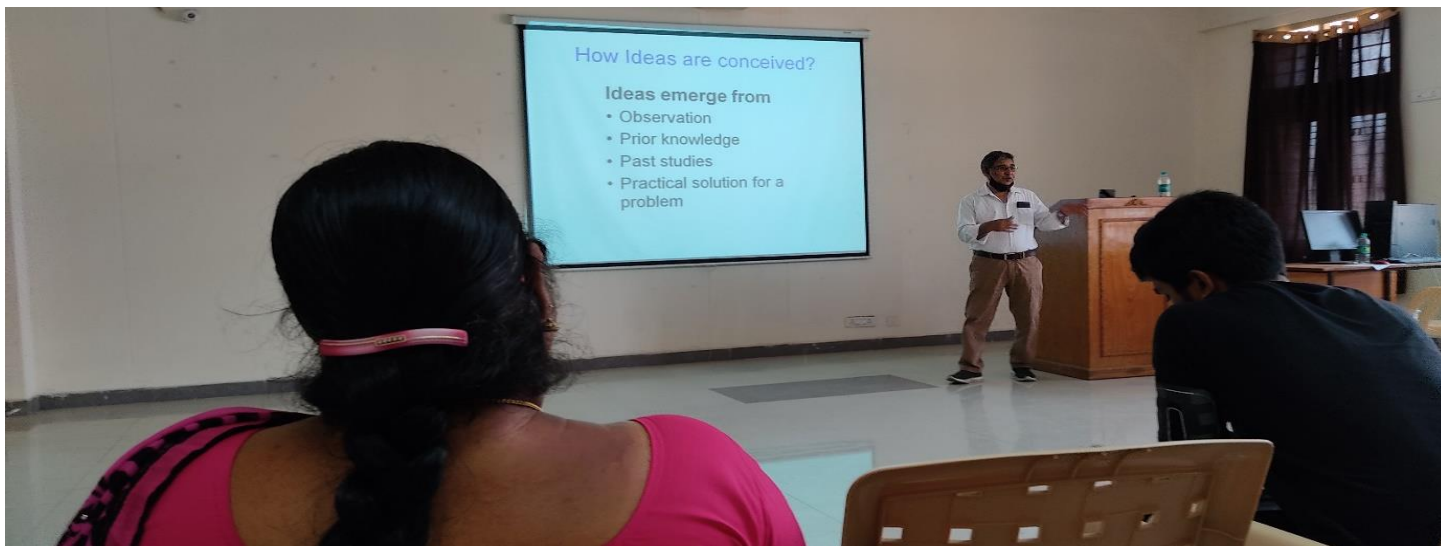


**Practical Session on Agarose Gel Electrophoresis**

**DAY: 04**

**05.03.2021:**

The first 02 sessions were by Prof. Paturu Kondaiah, Molecular Reproduction, Development and Genetics, IISc, Bengaluru on research communication and types of grants in research followed by practical sessions



**Prof. Paturu Kondaiah, IISc-Bangalore Lecture on Research Grants**

**DAY: 05**

**06.03.2021:**

The whole day engaged by Prof. Rama Rao Malla, Department of Biotechnology & Biochemistry, GITAM University, Visakhapatnam. The lecture on Cellular and Molecular approaches: Cancer drug Discovery and Development was delivered by He explained cancer assays such as MTT Assay, LDH Assay, SRB Assay, Alkaline comet Assay etc. Another lecture on Cell cycle regulators: Potential target of phyto chemical therapeutics was delivered. He explained TNBC – Triple Negative Breast Cancer and significance of CDKs in Cell cycle regulation.



**Prof. M. Rama Rao, GITAM-Visakhapatnam Lecture on Cell Cycle Regulation**

**DAY: 06**

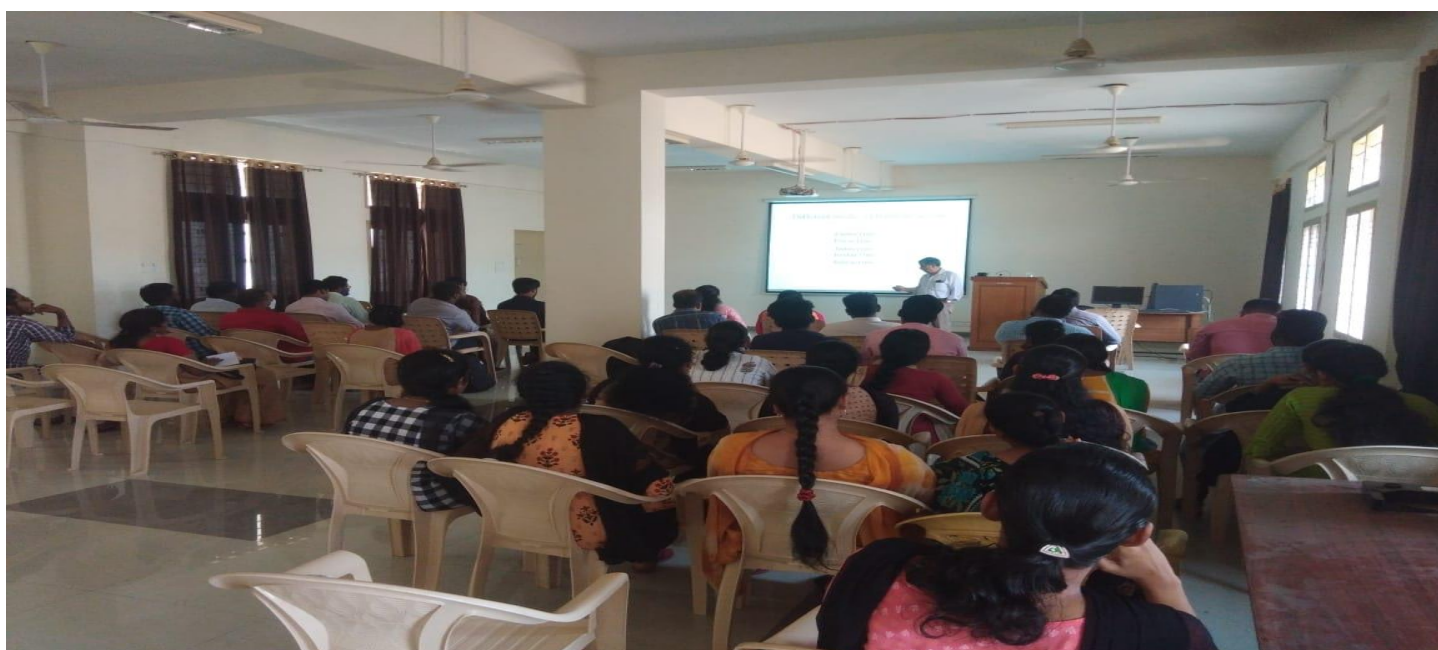
**07.03.2021:**

The whole day Prof. Prof. Paturu Kondaiah, Molecular Reproduction, Development and Genetics, IISc, Bengaluru gave wonderful lecture on Hormones, Growth Factors & Signal Transduction. He explained scientifically such as hormones mechanism and steroid functions in the cell. Later he explained on Breast and Brain Cancer in human beings. Glioblastoma and Astrocytoma are clearly explained.





**Prof. P. Kondaiah, IISc-Bangalore delivering a lecture on Hormones & Growth factors**



**Prof. P. Kondaiah, IISc-Bangalore delivering a lecture to the RC Participants**

### **DAY: 07**

**08.03.2021:**

The whole day Dr Benet Bosco Dhas, founder of 30M Genomics Pvt. Ltd gave detailed explanation on polymorphism, mutation and SNPs and followed by practical session. He showed how to cast the Agarose gel.





### Practical Session on RNA Isolation

**DAY: 08**

**09.03.2021:**

The whole day Dr Benet Bosco Dhas, founder of 30M Genomics Pvt. Ltd gave detailed explanation on c DNA synthesis and Expression analysis followed by practical session.



### Practical Session on Gene Expression Analysis

**DAY: 09**

**10.03.2021:**

In the Morning session Dr Benet Bosco Dhas, founder of 30M Genomics lab revealed about difference types of primers and Lamp assay. He gave detailed how to conduct Lamp assay and its significance also. Post lunch, the practical session was continued on bioinformatics and gave detailed study on gene sequences through

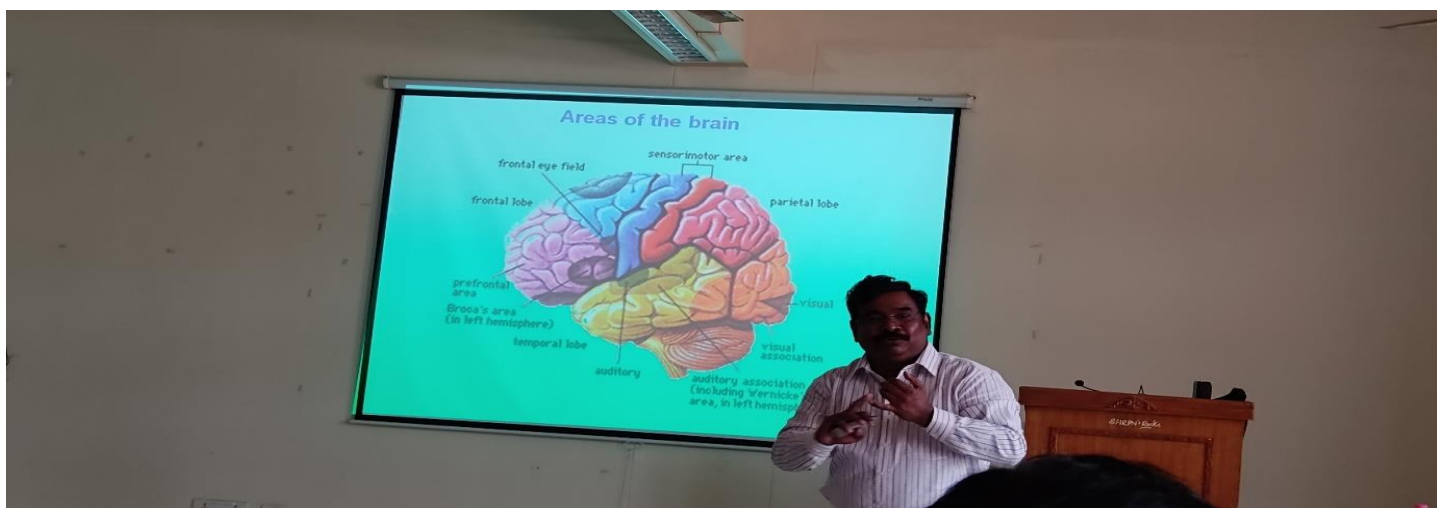


information technology such as website [ucsc.genome.edu](http://ucsc.genome.edu) & NCBI etc.



### **Practical Session on Bioinformatics**

Afternoon that lectures on Fundamental of Neuroscience and Neurological diseases were delivered by Prof. P. Prakash Babu, Department of Biotechnology and Bioinformatics, University of Hyderabad. He explained blood brain barrier, blood CSF barrier and arrangement of cells in the CNS & significance of Brocas area for speech.



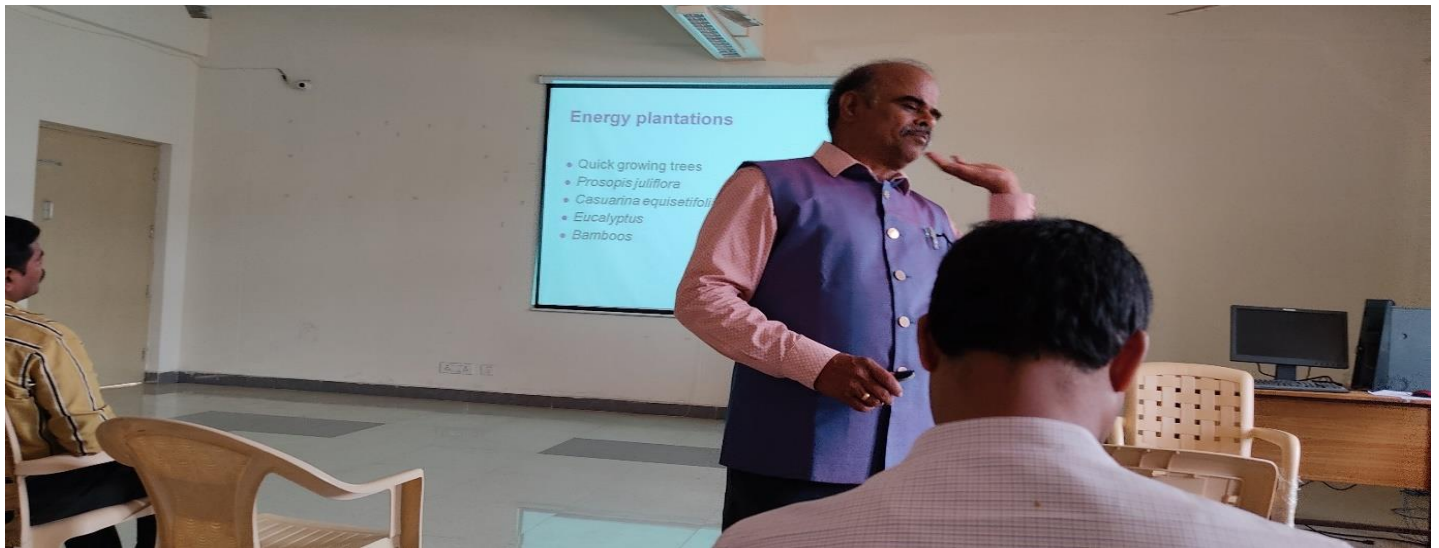
**Prof. P. Prakash Babu, University of Hyderabad delivering a lecture on Neuroscience**

### **DAY: 10**

**11.03.2021:**

Prof. V S Ramachandran, Former professor in Bharatiyar University, Coimbatore gave lectures on Bio-diversity conservation. He explained Indian hotspots, Biodiversity utilization and conservation of medical plants of southern India.





**Prof. V S Ramachandran, Bharatiyar University of Coimbatore delivering Lecture on Biodiversity**

After lunch, Prof. P. Prakash Babu, Department of Biotechnology and Bioinformatics, University of Hyderabad gave lecture on cerebrovascular diseases in human beings. He explained brain functions, cerebrovascular diseases such as arteriosclerosis, aneurysm, arterio- venous malformation (AVMs) and various brain tumors. He also gave insights on Pathophysiology of Malaria and Cerebral Malaria.



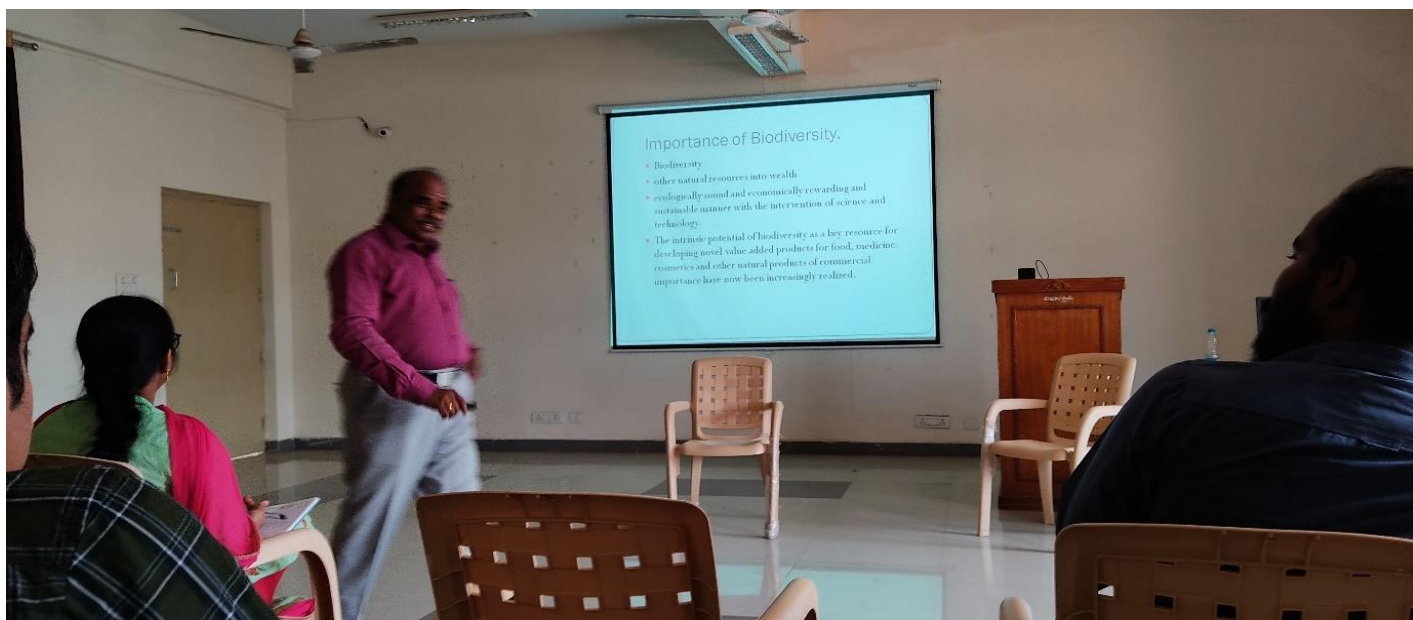
**Prof. P. Prakash Babu, University of Hyderabad delivering a lecture on Cerebral Malaria**

## DAY: 11

**12.03.2021:**

Importance of Biodiversity was delivered by Dr V S Ramachandran, Former professor, Bharatiyar University, Coimbatore. He gave detailed account on Ethnobotany, Plant wealth of India & Traditional knowledge.





**Prof. V S Ramachandran, Bharatiyar University of Coimbatore delivering Lecture on Traditional Knowledge**

After lunch all the participants went for botanical field trip under guidance of Prof. V S Ramachandran, Former professor, Bharatiyar University, Coimbatore and Course coordinator Sri M. Pradeep at Reserve forest, Donubai area, Seethampeta Mandal, Srikakulam District. Dr V S Ramachandran revealed scientific names of local plants and their economic and medical importance.



**Field trip under guidance of Prof. V S Ramachandran, Bharatiyar University, Coimbatore**



**13.03.2021:**

The whole day Lectures on Origin of Death was interpreted with suitable examples by Prof. P. Prakash Babu, Department of Biotechnology and Bioinformatics, University of Hyderabad. He revealed Programmed cell death (PCD) and mechanism of apoptosis and significance of apoptosis in animals and plants.



**Prof. P. Prakash Babu, University of Hyderabad delivering a lecture on Programmed Cell Deaths**

**DAY: 13**

**14.03.2021:**

Participants visited Covid Test Center at RIMS Medical College-Srikakulam under guidance of Course coordinator Sri M. Pradeep and Dr V S Ramachandran. Dr. Avinash, Research Scientist, RIMS Medical college revealed how to conduct Covid test such as swab collection, RNA extraction, RNA amplification and c DNA preparation with RT PCR etc.



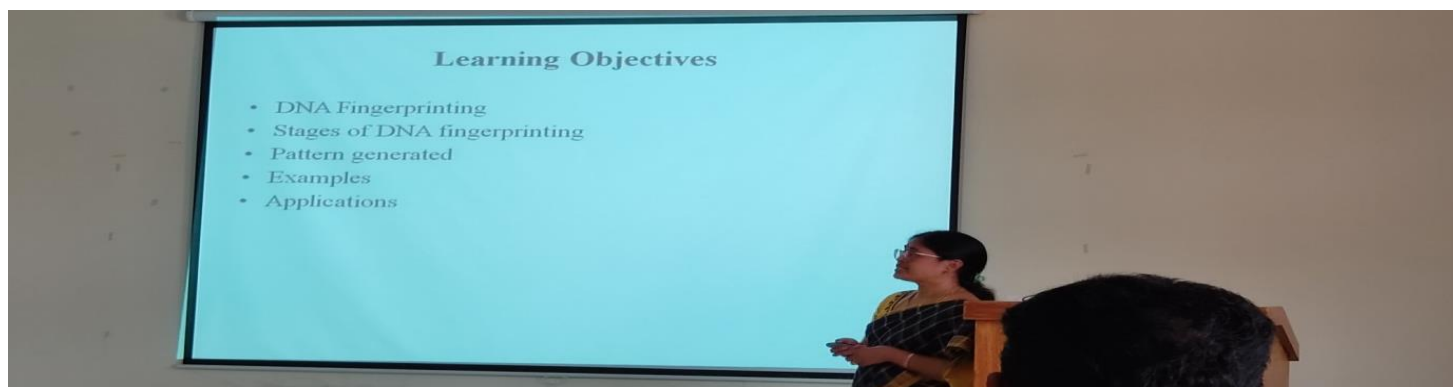


**RC Participants visited to Covid center and performed Covid test**

**DAY: 14**

**15.03.2021:**

Lectures on DNA finger printing was delivered by Prof. Surekha, Department of Biotechnology and Bio informatics, GITAM University. She explained basics of DNA fingerprinting, stages and process of DNA fingerprinting. In another session, Prof. Surekha, Department of Biotechnology and Bio informatics, GITAM University gave lecture on transgenic plants and functions of T-DNA and Transfection to host cell.



**Prof. Surekha, Department of Biotechnology and Bio informatics, GITAM University**

Later, the Lecture on Novel Tetracycline analogue SBR 22 from Bay Bengal Ocean was relieved by Prof. P. Sujatha, Department of Biotechnology, Dr B. R. Ambedkar University, Srikakulam. In this lecture, she explained broad significance of antibiotics, molecular action of antibiotics and screening and isolation of antibiotics.





**Lecture by Prof. P. Sujatha, Department of Biotechnology, Dr B. R. Ambedkar University**

### **VALEDICTORY**

The valedictory session was conducted by M Pradeep, course coordinator in the presence of Prof. P Sujatha, Principal of Science and Technology, Dr Br Ambedkar University, Dr. Swapnavahini, Head of Biotechnology, Dr Br Ambedkar University, Prof Kamaraju, Dean of Examination, Dr Br Ambedkar University. M. Pradeep, Course coordinator is involved in this programme and gave brief note and suggestions in this programme. Some participants such as King Immanuel, Dileep Kumar, Dariya and Sunitha gave their experiences on this programme. After that, Certificates of Refresher Course were presented to the participants by University Dignitaries. Oath of thanks was conducted by Dr. Polinaidu, Lecture in Zoology, Government Degree College (Men)-Srikakulam.



**Certificates Distribution**

### **Paper Clippings**



# ప్రయోగాలతో విస్తృత పరిజ్ఞానం

● ఐఏఎస్ఈ ప్రొఫెసర్ పోటూరి గొండయ్య ఎచ్చెర్ల క్యాంపస్: ఉన్నత విద్యలో విద్యార్థులు ప్రయోగాలకు ప్రధానత ఇవ్వాలని బెంగళూరుకు చెందిన ఐఏఎస్ఈ ప్రొఫెసర్ పోటూరి గొండయ్య అన్నారు. డాక్టర్ బీఆర్ అంబేడ్కర్ విశ్వవిద్యాలయం లో వర్సిటీ, శ్రీకాకుళం ప్రభుత్వ పురుషుల కళాశాల బయోటెక్నాలజీ విభాగాల ఆధ్వర్యంలో నిర్వహిస్తున్న 15 రోజుల బోధనా సిబ్బంది ప్రత్యేక నైపుణ్య శిక్షణ కార్యక్రమం కొనసాగుతోంది. ఈ కార్యక్రమం లో గురువారం పాల్గొన్న ప్రొఫెసర్ పోటూరి గొం

డయ్య మాట్లాడుతూ ప్రయోగాల ద్వారా మాత్రమే విస్తృత పరిజ్ఞానం సాధ్యం అవుతుందన్నారు. విద్యార్థులు బృందాలుగా విడిపోయి ఆలోచనలు పంచుకుంటే మంచి ఫలితాలు వస్తాయన్నారు. ప్రస్తుతం మన దేశంలో అనేక ప్రయోగాలు నిరంతరం జరుగుతున్నాయన్నారు. భారత్ బయోటెక్, ఫార్మా రంగాలు ప్రపంచంలో మెరుగైన ఫలితాలు సాధిస్తున్నాయన్నారు. వ్యాధుల నియంత్రణలో ప్రయోగాలు పాత్ర కీలకమన్నారు. అనంతరం డీఎన్ఎ వర్గీకరణ, రసాయనాలు వర్గీకరణ పరీక్షలు నిర్వహిం



ప్రయోగాలు నిర్వహిస్తున్న దృశ్యం

చారు. ఈ కార్యక్రమంలో సైన్స్ కళాశాల ప్రిన్సిపాల్ పీలా సుజాత, శిక్షణ పర్యవేక్షకులు ఎం.ప్రదీప్ పాల్గొన్నారు.

# ప్రయోగాలతోనే దేశ ప్రగతి

● బీఆర్ఎయూ సైన్స్ కళాశాల ప్రిన్సిపాల్ సుజాత

ఎచ్చెర్ల క్యాంపస్: ప్రయోగాలపైనే దేశ ప్రగతి ఆధార పడుతోందని డాక్టర్ బీఆర్ అంబేడ్కర్ విశ్వవిద్యాలయం సైన్స్ కళాశాల ప్రిన్సిపాల్ పీలా సుజాత అన్నారు. వర్సిటీ, శ్రీకాకుళం ప్రభుత్వ పురుషుల డిగ్రీ కళాశాల బయోటెక్నాలజీ విభాగాల ఆధ్వర్యంలో నిర్వహిస్తున్న బోధనా సిబ్బంది నైపుణ్య శిక్షణలో భాగంగా శుక్రవారం ప్రయోగాలపై అవగాహన కలిపించారు. ఈ సందర్భంగా ఆమె మాట్లాడుతూ.. ప్రస్తుతం ఎదుర్కొంటున్న ప్రతి సమస్య, సవాళ్లకు సైన్స్ పరిష్కారం చూపిస్తోందన్నారు. కోవిడ్-19కు ప్రస్తుతం రూపొందించిన వాక్సిన్ సైన్స్ బయోటెక్ ప్రగతేనని పేర్కొన్నారు. వైద్యం, ఆరోగ్యం, వ్యవ



ప్రయోగాల్లో విద్యార్థులు

సాయం, వాణిజ్యం, రవాణా ఇలా అనేక రంగాల్లో సైన్స్ ప్రగతి సాధిస్తోందని వివరించారు. భవిష్యత్తులో మరిన్ని నూతన అవిష్కరణలు అవసరమన్నారు. పరిశోధనలను విద్యార్థులు విద్యలో భాగంగా చేసుకోవాలన్నారు. కార్యక్రమంలో శిక్షణ సమన్వయకర్త డాక్టర్ ఎం.ప్రదీప్ పాల్గొన్నారు.



# పరిశోధనల దిశగా ముందుకు..

● హైదరాబాద్ కేంద్రీయ విశ్వవిద్యాలయం  
ఆచార్యులు ప్రకాశ్ బాబు

ఎచ్చెర్ల,  
న్యూస్ టుడే:  
ఉన్నత విద్యా  
సంస్థల్లో బోధ  
నరంగంలో  
పని చేస్తున్న  
ఆచార్యులు,  
అధ్యాపకులు  
బోధనతో



**మాట్లాడుతున్న ప్రకాశ్ బాబు**

పాటు పరిశోధనల దిశగా ముందుకు సాగాలని హైదరాబాద్ కేంద్రీయ విశ్వవిద్యాలయం (సెంట్రల్ యూనివర్సిటీ) ఆచార్యులు, డీన్ ఆఫ్ మెడికల్ సైన్సెస్ డా. ప్రకాష్ బాబు అన్నారు. అంబేడ్కర్ విశ్వవిద్యాలయంలో వర్సిటీ, శ్రీకాకుళం ప్రభుత్వ పురుషుల డిగ్రీ కళాశాల సంయుక్తంగా ఇండియన్ అకాడమీ ఆఫ్ సైన్స్ సహకారంతో గడిచిన 11 రోజులనుంచి నిర్వహిస్తున్న రిఫ్రెషర్ కోర్సులో శుక్రవారం ఆయన ముఖ్య వక్తగా పాల్గొని మాట్లాడారు. ఈ సందర్భంగా మొదడుపనితీరు, నాడీసంబంధ వ్యాధులు, బ్రెయిన్ స్ట్రోక్, బ్రెయిన్ ట్యూమర్, ఎపి లిప్సీ వంటి వ్యాధులపై జరుగుతున్న పరిశోధనలపై వివరించారు. కార్యక్రమంలో కోర్సు కోఆర్డినేటర్లు డా. పీలా సుజాత, ప్రదీప్ లు పాల్గొన్నారు.



## జైషధ మొక్కలపై విస్తృత పరిశోధనలు అవసరం

ఎచ్చెర్ల, మ్యాన్యుటే: జైషధ మొక్కలపై విస్తృత పరిశోధనలు అవసరమని భారతీ యార్ యూనివర్సిటీ, కోయంబత్తూరు ఆచార్యులు డా. వి.ఎస్.రామచంద్రన్ అన్నారు. ఎచ్చెర్ల అంబేద్కర్ విశ్వవిద్యాలయంలో వర్గిణీ, శ్రీకాకుళం ప్రభుత్వ పురుషుల డిగ్రీ కళాశాల సంయుక్తంగా ఇండియన్ అకాడమీ ఆఫ్ సైన్స్ సహకారంతో గడిచిన 14 రోజుల నుంచి నిర్వహిస్తున్న పునాచరణ తరగతులు ఆదివారంతో ముగిశాయి. చివరి రోజు ఆచార్యులు, పరిశోధకులు సీతంపేట మండలంలోని గిరిజన ప్రాంతాన్ని సందర్శించి అభ్యుదయ, జైషధ మొక్కలను పరిశీలించారు. ఆ ప్రాంతంలో జైషధ మొక్కల ప్రాముఖ్యం గురించి వివరించారు. కావ్య క్రమంలో కోర్సు కోఆర్డినేటర్లు డా. పీటా సుజాత, ఎం.ప్రదీప్, తదితరులు పాల్గొన్నారు.



సీతంపేటలో జైషధ మొక్కలను పరిశీలిస్తున్న డా.వి.ఎస్. రామచంద్రన్, ఆచార్యులు, పరిశోధకులు విద్యార్థులు.

**నేడే ఆనందపురం పంచాయతీ వార్డు ఎన్నిక**

## నేర పరిశోధనలో డీఎన్ఎ ఫింగర్ ప్రింట్స్ కీలకం

ఎచ్చెర్ల, మ్యాన్యుటే: నేర పరిశోధనలో డీఎన్ఎ ఫింగర్ ప్రింట్స్ కీలకం అని డిశావెట్టుం గతం విశ్వవిద్యాలయం ఇయోకెమెట్టి విభాగదర్శి ఆచార్య ఎం.సురేష్ ఆచార్యులు ఎచ్చెర్లలోని అంబేద్కర్ విశ్వవిద్యాలయంలో ఆరుగురు పునాదులైన శిక్షణ తరగతుల ముగింపు సమావేశం సోమవారం అరిగింది. ఈ కార్యక్రమంలో పాల్గొన్న ఆమె మాట్లాడుతూ డీఎన్ఎ ఫింగర్ ప్రింట్స్ పూర్తి జీవిత మొత్తం ప్రాథమికంగా పేరు పొందిన వ్యక్తికి ప్రత్యేకంగా ప్రధానాధికారులు వాటిని సూచించే మార్కరులను యాంటీబయోడీక్షన్ ఉత్పత్తి చేసే యాక్టివేషన్లతో గుర్తించి తెలియజేశారు. అందుకే ఈ పరిశోధన అధ్యయనం ప్రధాన పునాదుల అంశం అని ఈ కార్యక్రమంలో కోర్సు కోఆర్డినేటర్ ఎం.ప్రదీప్



ప్రధానపాఠశాలకు యాంటీబయోడీక్షన్ శిక్షణ పూర్తిచేసుకున్న అధ్యాపకులు

ఇయోకెమెట్టి విభాగదర్శి డా. కె.నర్సిరాజుతో యు.కె.ఎస్.ఎస్. డీన్ ఎం.ఇంద్రావర్మ, తదితరులు పాల్గొన్నారు.

### కొంప ముంచిన నోటా

చిర్రాపల్లి, మ్యాన్యుటే: పురపాలక సంఘంలో చేలా ఓట్లు అభ్యర్థులు గెలుపును తలచుకుంటున్నారని జైషధ పరిశోధనలో మొత్తం జైషధ చేలా ఓట్లు వరకు వచ్చి అభ్యర్థుల పరిశోధన అందుకు వేలాలు వచ్చి వార్డులో చేలా ఓట్లు పరమం కోంపెనెంట్

### జీవేసుకోలేని అభ్యర్థులు వీరు..!

విద్యార్థులు ఎప్పుడో పోటీలన్నీ తమకు ఓటమిగా మారిన అందరినీ అభ్యర్థులు అయితే తమ ఓటమిని విజయంగా మార్చుకోవాలి అని ఆచార్యులు పుర పరిశోధనలో ఆరు ఏడు వార్డుల్లో జైషధ అభ్యర్థులుగా పోటీ చేసిన అందరినీ అభ్యర్థులు మార్గం ఈసారి ఎప్పుడో తమకు తాము జీవేసుకోలేనివారైపోయారు.

సుంగళివారం మార్చి 16, 2021

**మేమున్నాం..**  
**మీకు తెలిసినా**  
మొత్తం 10 గిం: పరిధి  
మొత్తం 10 గిం: పరిధి  
మీరు పంపించాల్సిన ఫోన్ నెంబర్ 9440

### తల్లిబడ్డల హత్య కేసు

నరసన్నపేట, మ్యాన్యుటే: పరాయి స్త్రీ వార్డు కుమార్తెలను గొంతుమరిచి హత్యకు తెగిపారు. ఈ కేసు 11వ నంబర్ పులిలోని గురైన విషయం తెలిసిందే. దర్యాప్తు అధికారి నర్సిరాజు కార్యాలయంలో విలేజ్లో మాట్లాడుతూ వార్డు లలో, కుమార్తె లామెల గొంతుతో ప్రమేయం ఉన్న రమేష్ తల్లి అరెస్టు చేసినట్లు చెప్పారు. ముగ్గురు గొంతు పాటు రిమాండ్ విధించినట్లు తెలిపారు.

Report Submitted by

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