



P.S.R. ENGINEERING COLLEGE  
(An Autonomous Institution, Affiliated to Anna University, Chennai)  
Sevalpatti (P.O), Sivakasi - 626140



2020 Vol 1

Department of Biotechnology

Newsletter



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### Editorial Board

- ✚ **Patron** : Thiru R. Solisamy,  
Correspondent
- ✚ **Co-Patrons** : Dr. B. G. Vishnuram,  
Principal
- ✚ **Convener** : Dr. K. Subramanian,  
Professor & Head/ BT
- ✚ **Chief Editor** : Dr. S. Venkatesh, AP/BT
- ✚ **Co- Editor** : Mr. G. Hariprasath IV BT student



## MESSAGE FROM THE PRINCIPAL

It is an honour and pleasure to release the quarterly newsletter of Department of Biotechnology. Hope every edition of the newsletter helps to trigger the creative and developmental activities of our staff and students. Let this newsletter pave way for academic, co-curricular and extracurricular achievements.



## **Institute Vision**

**To contribute to society through excellence in technical education with societal values and thus a valuable resource for industry and the humanity.**

## **Institute Mission**

- **To create an ambiance for quality learning experience by providing sustained care and facilities.**
- **To offer higher level training encompassing both theory and practices with human and social values.**
- **To provide knowledge based services and professional skills to adapt tomorrow's technology and embedded global changes.**

### **Biotechnology Vision**

- The vision of the Biotechnology Department is to produce graduates capable of effectively using the imparted scientific and technical knowledge to meet the dynamic demands of biotechnological industry with social values.

### **Biotechnology Mission**

- Offering under graduate programme by providing effective and well-balanced curriculum and equip themselves to gear up to the challenges awaiting them.
- Providing the technical, research and intellectual resources that will enable the students to have a successful career in the field of Biotechnology.
- Providing need based training and professional skills to satisfy the needs of society and the industry

**PROGRAMME EDUCATIONAL OBJECTIVES (PEOs)**

**PEO:1** Lead a professional career by acquiring the basic knowledge in the field of specialization and allied Engineering.

**PEO:2** Assess the real life problems and deal with them confidently relevance to the society.

**PEO:3** Engage in lifelong learning by pursuing higher studies and participating in professional organizations.

**PEO:4** Exhibit interpersonal skills and able to work as a team for success.

**PROGRAMME SPECIFIC OUTCOMES (PSOs)**

**PSO:1** Acquire competency in applications of engineering principles to biological systems.

**PSO:2** Able to design and analyze varied biotechnological solutions for industrial applications.

**PSO:3** Apply biochemical and microbial processing techniques for agriculture and medical applications.

**PSO:4** Exhibit interpersonal knowledge to develop futuristic bioengineering solutions.

**PROGRAMME OUTCOMES (POs)**

**A graduate of the Bio-Technology will attain**

**PO:1 Engineering Knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

**PO:2 Problem Analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

**PO:3 Design / Development of Solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

**PO:4 Conduct Investigations of Complex Problems:** Use research-based knowledge and research methods including design of experiments, analysis



**and interpretation of data, and synthesis of the information to provide valid conclusions.**

**PO:5 Modern Tool Usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.**

**PO:6 The Engineer and Society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.**

**PO:7 Environment and Sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.**

**PO:8 Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.**

**O:9 Individual and Team Work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.**

**PO:10 Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.**

**PO:11 Project Management and Finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.**

**PO:12 Life-long Learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.**

## Biotechnology Infrastructure

The Biotechnology Department Laboratory is very modern and function effectively with modern imported equipments like Gas Chromatography, BIOENGINEERING Bioreactor, Thermocycler, CO<sub>2</sub> Incubator, ELISA Reader, 2D Gel Electrophoresis, Fluorescent Microscope, Laminar Air Flow Chamber, UV-Vis Spectrophotometer, Gel Documentation System, Deep Freezer, Refrigerated Centrifuge, Cryostat, Lyophilizer, Microfiltration, Ultrafiltration, Double Pipe Heat Exchanger, Fluidization and Packed Column, Plate and Frame Filter Press and Various Bioinformatics softwares.

## Laboratory

The Laboratories are periodically upgraded as per the curriculum and as per the new developments in Biotechnology.

The Department has an excellent team of young, energetic, experienced and committed faculty members expertised in various areas of Biotechnology.

**The Department has full-fledged laboratories that includes**

Bio-Process Lab

Cell Biology Lab

Genetic Engineering Lab

Immunology Lab

Instrumental Methods of Analysis Lab

Molecular Biology Lab

Microbiology Lab

Chemical Engineering Lab

Computer Lab



## **Biotechnology Association activities**

**Composting pit prepared by faculty member from Department of Biotechnology**



**Hand sanitizer prepared by Department of Biotechnology during pandemic period**





**Department of Biotechnology signed MOU with Aravindh Herbal Lab (P) Ltd on 02.03.2020**



**DEPARTMENT ACTIVITIES**



**Nature of Programme**

- Seminar

**Title of the Programme**  
**Antiviral drug designing**

**Date & No of Participants**

- 06.03.2020 & 90

**Resource Person**

- Dr. P. Selvam, Research Director Aravind Herbal Labs (P) Ltd. Rajapalayam.

**Nature of Programme**

- Science Expo

**Title of the Programme**  
**Intra college level Science Expo- Biolare'20**

**Date & No of Participants**


- 06.03.2020 & 90

**Resource Person**


- Dr.B.G VishnuRam Principal, P.S.R Engineering College
- Dr.C.Marichamy Dean Academics, P.S.R Engineering College

# ONLINE EVENTS ORGANIZED DURING PANDEMIC PERIOD

COVID 19 Awareness Programme  
YouTube COVID-19 Awareness Video



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**Department of Biotechnology**  
Proudly Organizing  
Corona Cognizance 20 – CC'20  
COVID 19 Pandemic Awareness  
30.04.2020

<https://www.youtube.com/watch?v=ObVBOvAsGkw>





## National Webinar on Global Perspective in Biotechnology

The webinar focused on the Global Perspectives in Biotechnology. The guest speakers delivered a speech about Marine technology, Food technology, Chemical reactions, Chromatography Techniques, Biotechnology opportunities in pharmaceutical industries, in vitro conservation of Medicinal plants and its importance, Review on Human Corona virus, Designing of novel antiviral agents against emerging respiratory viruses by various invited speakers. Career Development and Higher Studies. During this topic it was focused about the create impact among the students by their seniors in career as well as higher studies. Our guest shares their experience and suggest some reference Books and websites to improve student's Personal skills, Logical thinking.

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Sivakasi-626140.

**DEPARTMENT OF BIOTECHNOLOGY**

*Delightfully Organized*  
Webinar Series On  
**Global Perspectives in Biotechnology**  
on  
**11.05.2020 to 15.05.2020**  
Live on our Channel **Biosprinkler**

**Speakers:**

- Dr. Antony Suresh, Senior Lecturer, MAISA University, 11.05.2020 (FN), Nanotechnology Approaches Using SPIONs
- Dr. Jaya Prakash, Rajah Serfoji Government College, Thanjavur, 11.05.2020 (AN), Phytochemicals and Its Importance
- Dr. Inbakandan, Scientist I & Head, COB, Sathyabama Institute of Science & Technology Chennai, 12.05.2020 (FN), Artisanal Fish-culture live feed for Aquaculture Industry
- Mrs. Dhanya Raghunath, QC Scientist, Thermo Fisher Scientific, Canada, 12.05.2020 (AN), Study and Job options in Canada
- Dr. P. Kripupakar, Scientist D, CDD, Sathyabama Institute Science & Technology, Chennai, 13.05.2020 (FN), COVID-19 - Role of Biotechnology in combating the disease now and in future.
- Dr. T.S. Anitha, Scientist, Central Inter- Disciplinary Research Facility (CIDRF), SRM, Pudukcherry, 15.05.2020 (FN), Repurposing Drugs: A New era for the treatment of Glioblastoma Multiforme
- Dr. Harikrishnan Hariharan, Assistant professor senior Grade, Salimkhan College of Engineering, Kottayam, Kerala, 13.05.2020 (AN), Actinomycetes : A research Hotspot
- Dr. S. Prabhu, Professor, Sri Venkateswara College of Engineering, Sriperumbudur, 15.05.2020 (AN), Modern Perspective in Stem Cell Techniques
- Dr. Seshadri Sundram, Coordinator, SU TBI, Sathyabama Institute of Science & Technology, 14.05.2020 (FN), Creativity, Innovation and Entrepreneurship
- Ms. Sugumari Vallinayagam, Assistant professor, Karpaga Vinayaga college of Engineering and technology, 14.05.2020 (AN), An In Silico approach to screening the Multi targeted drug to treat COVID-19

**Session Live Link will be send to our registered participants Whatsapp Group before 15mins.**  
**WHO CAN ATTEND?**  
This Webinar Series intended for Students, Faculties, Research scholars and Industrial Persons.  
**Forenoon Session (FN) : 11.00 am to 12.00pm**  
**Afternoon Session (AN) : 04.00pm to 05.00pm**  
E-Certificates will be issued after successful completion of this Webinar series  
**Registration Link:** <https://bit.ly/psrbtwebinar>

### National Webinar on Global Perspectives in Biotechnology

Date 11.05.2020 to 15.05.2020

Dept. Coordinator

Dr. S. Venkatesh

No of Participated

1650

biosprinkler psr

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Global Perspectives in Biotechnology Day-5...  
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Global Perspectives in Biotechnology Day 1...  
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Department of Biotechnology, P.S.R. Engineering college  
221 views · 8 months ago

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## National Webinar series on Recent Trends in Bio-Research

The guest speakers delivered a speech about Mitochondrial dysfunction, Marine technology, Food technology, Biotechnology opportunities in pharmaceutical industries, Designing of novel antiviral agents against emerging respiratory viruses by various invited speakers. Career Development and Higher Studies. During this topic it was focused about the create impact among the students by their seniors in career as well as higher studies.

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DEPARTMENT OF BIOTECHNOLOGY  
Proudly Organizes  
*Lecture Series On*  
**Recent Trends in Bio Research**

Mr. R. SOLAISAMY  
Correspondent, PSR Group of Institution

Dr. B.G. VISHNURAM  
Principal, PSREC

Dr. P. GOVINDARAJ  
Research Scientist, Institute of Bioinformatics Bangalore  
The Mitochondrial Disease : An Overview, 22.05.2020, 11.00am to 12.00pm

Dr. M. NACHAPPAN  
Research Associate,  
Department of Bioinformatics,  
Alagappa University,  
Karaikal  
Advancement in Structural Biology towards Drug Discovery, 22.05.2020, 3.00pm to 4.00pm

Dr. S. BARANIDHARAN  
Assistant Professor, NIT, Andhra Pradesh, Emerging Contaminants in Environment, 23.05.2020, 10.30am to 11.30am

Dr. P. MARICHAMY  
Dean, PSREC

Dr. K. SUBRAMANIAN  
HOD/ BT

Dr. A. SEENIVASAN  
Assistant Professor & HOD  
Department of Biotechnology, NIT, Andhra Pradesh, Biological Reaction Engineering, 24.05.2020, 11.00am to 12.00pm

Dr. I. STANLEY ABRAHAM  
Assistant E. O.R. Sathyabama Institute of Science & Technology Chennai, Importance of IPR in Science, 24.05.2020, 3.00pm to 4.00pm

E-Certificate will be issued to participants  
Registration Link : <http://bit.ly/pwrbiecture>

Only on Our Channel **BIOSFUNCLER**

**You Tube LIVESTREAM**  
For Queries Contact : [psrbtwebinar@gmail.com](mailto:psrbtwebinar@gmail.com)  
<https://www.youtube.com/channel/UCWfKNSjlt5rd83ve8lhA5cw>

### National Webinar series on Recent trends in Bio-Research

Date **22.05.2020** TO **24.05.2020**

Dept. Coordinator

Ms. R. Suganya

No of Participated

1273

<https://www.youtube.com/channel/UCWfKNSjlt5rd83ve8lhA5cw/videos>

Streamed 8 months ago

<p>Recent Trends in Bio Research Day-3 Forenoon 1.8K views · Streamed 8 months ago</p>	<p>Recent Trends in Bio Research Day-2 Forenoon 2.6K views · Streamed 8 months ago</p>	<p>Recent Trends in Bio Research Day-1 Afternoon 3.2K views · Streamed 8 months ago</p>	<p>Lecture series on "Recent Trends in Bio Research" 398 views · 8 months ago</p>	<p>Global Perspectives in Biotechnology Day-5... 1.4K views · Streamed 8 months ago</p>
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## ONLINE EVENTS ORGANIZED

S.No	Nature of Programme	Title of the Programme	Date	No of Participants	Resource Person
1	National Webinar (online)	Phytotherapy for Alcohol dependence: Preclinical Evidences	07.07.2020	132	Dr. Vijayapandi Pandy Professor Chalapathi Institute of Pharmaceutical Science, Andrapradesh



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**DEPARTMENT OF BIOTECHNOLOGY**

Cordially invites you to the  
National Webinar on  
**Phytotherapy for Alcohol dependence: Preclinical Evidences**


Date: 7<sup>th</sup> July, 2020      Time: 02:00 to 03:00 pm

Association with  
Antiviral Research Society






Delegate Speaker  
**Dr. Vijayapandi Pandy**  
Professor  
Chalapathi Institute of  
Pharmaceutical Sciences, Andhra Pradesh



**Thiru R.Solaisamy**  
Chief Patron

**Dr. P. Marichamy**  
Dean (Academic)

**Convenor**  
Dr. K. Subramanian  
HOD/BioTechnology

**Er. S. Vigneshwari Arunkumar**  
Patron

**Dr. B.G. Vishnuram**  
Principal

**Organising secretary**  
Dr. P. Selvam  
President, Antiviral Research Society

## FACULTY ACHIEVEMENTS

Dr. R. Rajeswari received TNSCST project Grant for the project title of "Isolation & structural characteristics of novel gangliosides from *echinoidgonads* with investigation on their mouth & breast anticancer properties" during the academic year 2019 - 2020.

## FACULTY ACHIEVEMENTS

### ATAL Programme

Name of the faculty	Title of the Programme	Duration
Dr. K. Subramanian	AICTE Training and Learning (ATAL) Academy Online FDP on Computer science and Biology	15.12.2020 to 19.12.2020
Dr. R. Rajeswari	AICTE Training and Learning (ATAL) Academy Online FDP on "SYNTHETIC BIOLOGY"	30.11.2020 to 04.12.2020
	AICTE Training and Learning (ATAL) Academy Online FDP on "Synthetic Biology"	14.12.2020 to 18.12.2020
Dr. S. Venkatesh	AICTE Training and Learning (ATAL) Academy Online FDP on "SYNTHETIC BIOLOGY"	30.11.2020 to 04.12.2020
	AICTE Training and Learning (ATAL) Academy Online FDP on "Synthetic Biology"	14.12.2020 to 18.12.2020
Dr. K. Venkadeswaran	AICTE Training and Learning (ATAL) Academy Online FDP on "SYNTHETIC BIOLOGY"	30.11.2020 to 04.12.2020
	AICTE Training and Learning (ATAL) Academy	14.12.2020 to 18.12.2020



	<b>Online FDP on "Synthetic Biology"</b>	
<b>Dr.S.SureshKumar</b>	<b>AICTE Training and Learning (ATAL) Academy Online FDP on "Synthetic Biology"</b>	<b>14.12.2020 to 18.12.2020</b>
<b>Ms. R. Suganya</b>	<b>AICTE Training and Learning (ATAL) Academy Online FDP on "Synthetic Biology"</b>	<b>14.12.2020 to 18.12.2020</b>
<b>Ms. V. Varalakshmi</b>	<b>AICTE Training and Learning (ATAL) Academy Online FDP on "Synthetic Biology"</b>	<b>14.12.2020 to 18.12.2020</b>

## **AICTE Programme**

<b>Name of the faculty</b>	<b>Title of the Programme</b>	<b>Duration</b>
<b>Dr. R. Rajeswari</b>	<b>AICTE sponsored one week online STTP on Interpersonal Skills of Best Behavioral teachers - III</b>	<b>19.10.2020 to 24.10.2020</b>
<b>Dr. S. Venkatesh</b>	<b>AICTE sponsored one week online STTP on Interpersonal Skills of Best Behavioural teachers</b>	<b>21.09.2020 to 26.09.2020</b>
	<b>An Awareness Programme-Green Engineering Concepts and Treatment methods for farmers in rural area series-1</b>	<b>26.10.2020 to 31.10.2020</b>
<b>Dr. K. Venkadeswaran</b>	<b>An Awareness Programme-Green Engineering Concepts and Treatment methods for farmers in rural area series-1</b>	<b>26.10.2020 to 31.10.2020</b>
<b>Ms. R. Suganya</b>	<b>An Awareness Programme-Green Engineering Concepts and Treatment methods for farmers in rural area series-1</b>	<b>26.10.2020 to 31.10.2020</b>

## **WORKSHOPS/FDP/SEMINARS**

<b>Name of the Faculty</b>	<b>Name of the workshop/FDP/STTP</b>	<b>Name of the Institute/Industry</b>	<b>Duration</b>
<b>Dr. K. Subramanian</b>	<b>Outcome based Educational software</b>	<b>Vmedulife software servies</b>	<b>11.06.2020</b>
<b>Dr. R. Rajeswari</b>	<b>AICTE sponsored one week online STTP on Interpersonal Skills of Best Behavioral teachers - III</b>	<b>P.S.R. Engineering College</b>	<b>19.10.2020 to 24.10.2020</b>
	<b>Highlights on Essential tools and Techniques in Biotechnology</b>	<b>Madha Engineering College</b>	<b>08.05.2020 and 09.05.2020</b>
	<b>Discussion on Crisis of Covid-19</b>	<b>Vels Institute of Science, Technology and Advanced studies (VISTAS)</b>	<b>29.04.2020</b>
	<b>Virtual Teaching</b>	<b>Coimbatore Institute of Technology</b>	<b>20.04.2020 and 21.04.2020</b>
	<b>Emotional Intelligence</b>	<b>KG college of Arts and science,</b>	<b>28.04.2020,30.04.2020 and 02.05.2020</b>
<b>Dr. K. Venkadeswaran</b>	<b>Discussion on Crisis of Covid-19</b>	<b>Vels Institute of Science, Technology and Advanced studies (VISTAS)</b>	<b>29.04.2020</b>
	<b>Research Methodology</b>	<b>Bon Secours College for Women, Thanjavur</b>	<b>29.04.2020 to 01.05.2020</b>
	<b>Highlights on Essential tools and Techniques in Biotechnology</b>	<b>Madha Engineering College</b>	<b>08.05.2020 and 09.05.2020</b>
	<b>An Awareness Programme- Green Engineering Concepts and Treatment methods</b>	<b>Paavai Engineering college, Namakkal</b>	<b>26.10.2020 to 31.10.2020</b>



	<b>for farmers in rural area series-1</b>		
	<b>Outcome based Education conducted</b>	<b>Inpod</b>	<b>04.11.2020 to 06.11.2020</b>
<b>Dr. S. Venkatesh</b>	<b>Virtual Teaching</b>	<b>CIT-TLC</b>	<b>20.04.2020 and 21.04.2020</b>
	<b>Discussion on Crisis of Covid-19</b>	<b>Department of Biotechnology, Vels Institute of Science , Technology and Advanced studies, chennai</b>	<b>29.04.2020</b>
	<b>Research Methodology</b>	<b>PG &amp; Research Department of Biotechnology, Bon Secours College for Women, Thanjavur</b>	<b>29.04.2020 to 01.05.2020</b>
	<b>International Online Faculty Development Program on Frontiers in Chemistry</b>	<b>St. Joseph'S College of Engineering Chennai</b>	<b>16.09.2020 to 18.09.2020</b>
	<b>AICTE sponsored one week online STTP on Interpersonal Skills of Best Behavioral teachers</b>	<b>P.S.R. Engineering College</b>	<b>21.09.2020 to 26.09.2020</b>
	<b>An Awareness Programme- Green Engineering Concepts and Treatment methods for farmers in rural area series-1</b>	<b>Paavai Engineering college, Namakkal</b>	<b>26.10.2020 to 31.10.2020</b>
<b>Ms. R. Suganya</b>	<b>An Awareness Programme- Green Engineering Concepts and Treatment methods for farmers in rural area series-1</b>	<b>Paavai Engineering college, Namakkal</b>	<b>26.10.2020 to 31.10.2020</b>

## Student Activities

## Student Activities

### Composting of Organic Wastes

Vermicompost (vermi-compost) is the product of the decomposition process using various species of worms, usually red wigglers, white worms, and other earthworms, to create a mixture of decomposing vegetable or food waste, bedding materials, and vermicast. There is a growing realisation that vermi-composting provides the nutrients and growth enhancing hormones necessary for plant growth. The fruits, flowers and vegetables and other plant products grown using vermi-compost are reported to have better keeping quality. A growing number of individuals and institutions are taking interest in the production of compost utilising earthworm activity. Some of them ventured into commercial production as well. As the cost of production of this compost works out to about Rs.1.5 per kg, it is quite profitable to sell the compost even at Rs.2.50 per kg.

The process of composting crop residues using earthworms comprise spreading the agricultural wastes or fallen leaves and cow dung in layers as 1.5 m wide and 0.9 m high beds of required length. Earthworms are introduced in between the layers @ 350 worms per m<sup>3</sup> of bed volume. The beds are maintained at about 40 - 50% moisture content and a temperature of 20 - 30° C by sprinkling water over the beds. The earthworms being voracious eaters consume the biodegradable matter and give out a part of the matter as excreta or vermi-castings. The vermi-casting containing nutrients is rich manure for the plants.

Of about 350 species of earth worms in India with various food and burrowing habits, *Eisenia fetida*, *Eudrilus eugeniae*, *Perionyx excavatus* are some of the species for rearing to convert organic wastes into manure. The worms feed on any biodegradable matter ranging from coir waste to kitchen garbage and vermicomposting units are ideally suited to locations / units with generation of considerable quantities of organic wastes. One earthworm reaching reproductive age of about six weeks lays one egg capsule (containing 7 embryos) every 7 - 10 days. Three to seven worms emerge out of each capsule. Thus, the multiplication of worms under optimum growth conditions is very fast. The worms live for about 2 years.

We established compost with area of 3.5 X 1.5 m and production of 6 tons per annum in 6 periodical harvests. Here we are inoculation the composting raw materials with soil bacteria and earthworms.



Compost pit preparation and manure collection process as follows

## Composting of Organic Wastes





## Student activity

### Preparing nursery bed in front of Biotechnology Department



### Activities and events during the pandemic period





## SCIENCE EXPO ON BIOLORE'20 ORGANIZED BY DEPARTMENT OF BIOTECHNOLOGY, 10.03.2020

A Intracollege level science exhibition was organized by the Department of Biotechnology. The program was presided by the dignities Thiru. R. Solaisamy, Correspondent, Er. S. Vigneshwari Arunkumar, Director and the Inauguration



**Inauguration of Science Expo**

of Science Expo in Chemical Engineering Laboratory by Dr. B. G. Vishnuram, Principal, Dr. K. Subramaian, Professor & Head and the opening ceremony of Green House was preceded by Dr. P. Marichamy, Dean, Dr. P. Pitchipoo, Professor. The students have presented various models and impressing chart presentations related to science. The



**Green House Inauguration**

different microbial plating's were displayed and the Indian traditional foods (Ragi dosa, navadhaniya payasam, millet laddu etc.,) and medicinal plants (*ocimum tenuiflorum*, *piper longum*, *solanum procumbens* etc.,) were provided through stalls. The students from

various departments as about 680 had visited the science exhibition. This programme was coordinated by Dr. S. Venkatesh & Dr. K. Venkadeswaran and the Vote of thanks was given by Mr. K. Ajith, Student Coordinator.



## Science Expo Event Special sequences



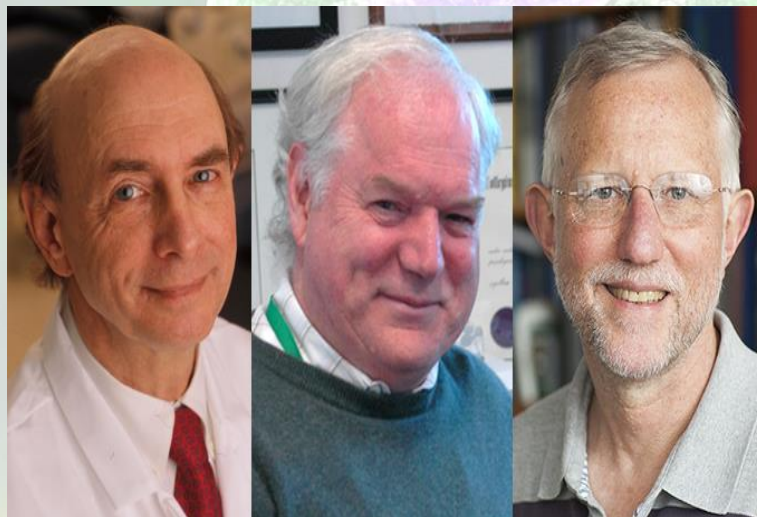


## Biotechnology News

### Hepatitis C discoveries win 2020 Nobel Prize in physiology or medicine

Three virologists have won the Nobel Prize in physiology or medicine for the discovery of the hepatitis C virus.

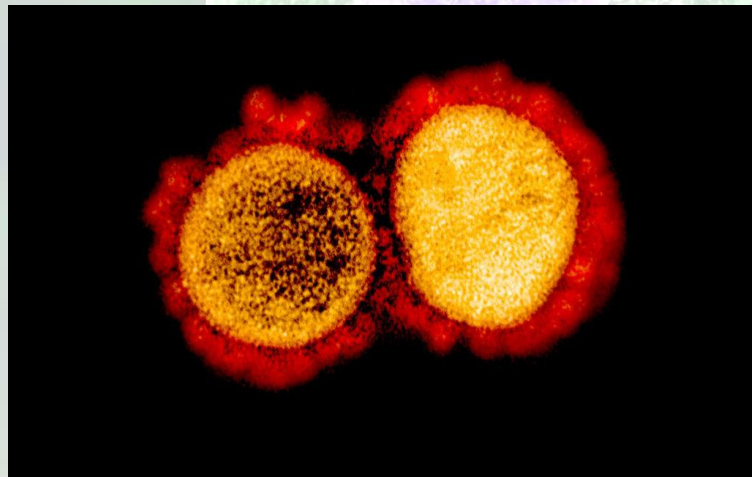
The trio of winners of this year's Nobel Prize in physiology or medicine — Harvey Alter, Michael Houghton and Charles Rice (from left) — all played a role in discovering the hepatitis C virus, which can cause a silent but ultimately deadly disease.



“It’s hard to find something that is of such benefit to mankind,” Thomas Perlmann, Secretary General for the Nobel Committee, said. The discovery “has led to improvements for millions of people around the world.” Houghton is now working on a vaccine against hepatitis C. “Therapeutics alone do not control epidemics,” he said. “You need a vaccine to prevent [infection], not just drugs to treat.”

**There are two versions of the coronavirus. One's not more dangerous than the other**

**In the new study, the team identified two major versions of the SARS-CoV-2 coronavirus, called clade I and clade II, by examining the genetic makeup of the virus from 94 of the cases and 221 genomes in the GISAID coronavirus database. GISAID is a repository that maintains thousands of viral genomes — the complete set of genetic instructions of a virus — compiled by researchers around the world.**

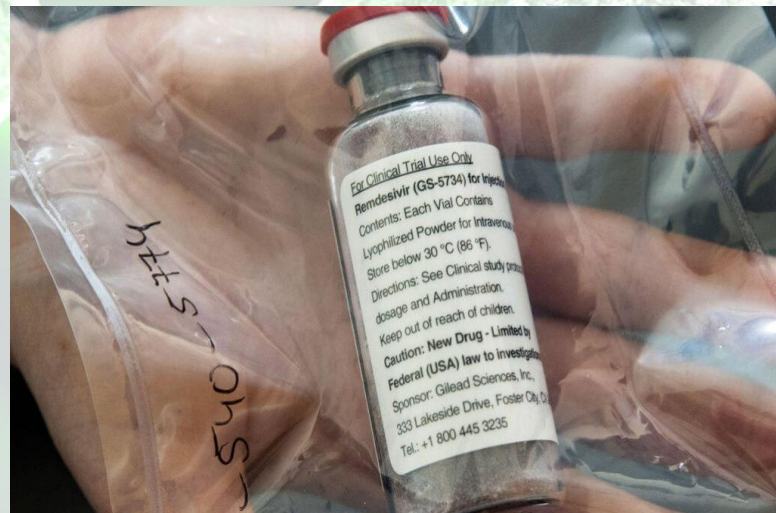


**Those genomes are used in monitoring how the virus is evolving and tracing its path around the world. IL-6 is a protein known as a cytokine, one of many proteins that signal the immune system to rev up defenses. Overactive immune, known as cytokine storms, are a problem for people with severe cases of COVID-19.**



## **Remdesivir is the first drug found to block the coronavirus**

**Remdesivir, an antiviral drug that stops some viruses from making copies of their genetic material, may help COVID-19 patients recover faster. An antiviral drug called Remdesivir is the first treatment to show efficacy against the coronavirus.**



**Preliminary results from a clinical trial comparing the drug with a placebo suggest that remdesivir speeds recovery from COVID-19 by 31 percent, the U.S. National Institute of Allergy and Infectious Diseases.**

**Remdesivir, developed by bio-pharmaceutical company Gilead Sciences, head quartered in Foster City, Calif., mimics a building block of RNA, the corona virus's genetic material. When the virus copies its RNA, remdesivir is incorporated instead of the usual RNA components, stopping the virus's replication. Of the 200 people in the five-day treatment group, 129 went home from the hospital by day 14, while 106 of the 197 people who got the longer treatment were discharged by day 14.**

## Placement Details

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1605004	Chithra Devi.S	VISIONARY RCM
1605005	Esther.A	CHC HEALTH CARE TNQ VISIONARY RCM
1605006	Gayatri.M	CHC HEALTH CARE
1605007	Govindraaj.K	CHC HEALTH CARE
1605008	Gowsalya.C	CHC HEALTH CARE TNQ
1605009	Gowtham.M.L	CHC HEALTH CARE
1605010	Hari Prasad.G	CHC HEALTH CARE
1605011	Jesica Rosy.I	CHC HEALTH CARE
1605012	Kanaga lakshmi.S	CHC HEALTH CARE
1605013	Karthik Kumar.P	CHC HEALTH CARE
1605014	Karthika Sri.M	CHC HEALTH CARE
1605020	Pearlin Rose.L.K	CHC HEALTH CARE
1605021	Priyanka.A	CHC HEALTH CARE TNQ AVANTOR VWR
1605022	Saktheeswari.T	TNQ
1605024	Subramanian.G	CHC HEALTH CARE VISIONARY RCM
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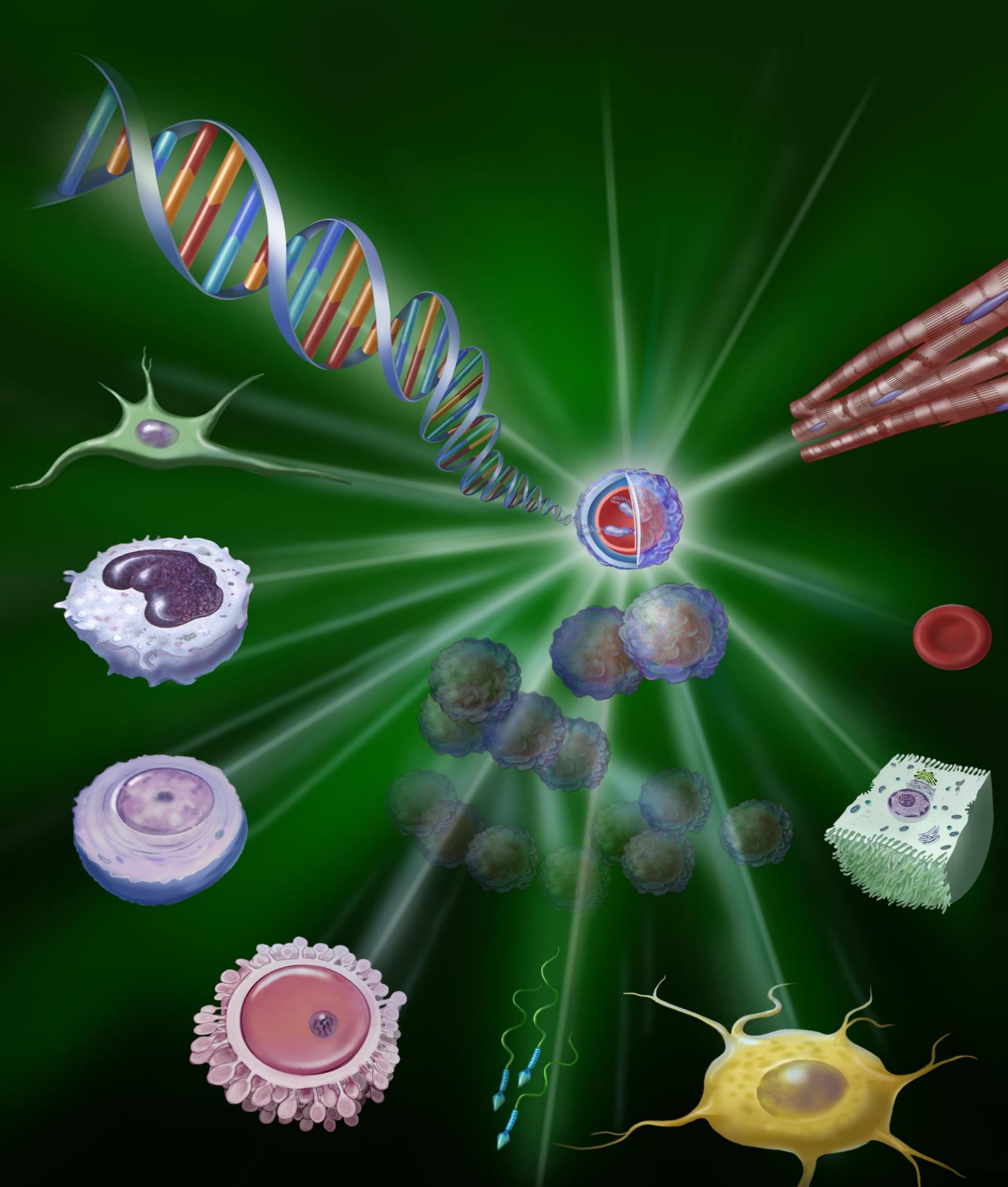
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