



Department of Biotechnology

Newsletter

2019 Vol 1



Inside this Issue

✚ **Message from Principal**

✚ **Biotechnology Association activities**

✚ **Student Activities**

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Message from Principal

“It is an honor 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”

Biotechnology Association Activities

INDUSTRIAL VISIT

Two days industrial training on commercial production of enzyme held at Synkromax Biotech P.Ltd., Chennai on 21/08/2019 and 22/08/2019



An industrial visit to "Synkromax" Biotech Private Limited, Athipattu, Chennai and "National Centre for Banana Institute"(NCBI) at Trichy was organized by biotechnology department on 21st and 22nd august 2019. 55 students and faculties are visited to the industry.

**FACULTY
ACHIEVEMENTS**

Mrs.V. Varalakshmi, Dr.M.AynulRifaya received TNSCST project Grant during the academic year 2018-19.

Dr. K. Subramanian performed as Scientific Review Committee Member in International conference on “Sustainable Development in Energy & Environment” organized by Department of Biotechnology, Kamaraj College of Engineering and Technology during 18.07.2019 to 20.07.2019

Dr. R. Rajeswari performed as a Chair Person in International conference on “Sustainable Development in Energy & Environment” organized by Department of Biotechnology, Kamaraj College of Engineering and Technology during 18.07.2019 to 20.07.2019.

Student Activities

Biotechnology News

FDA has approved the first ketamine-based antidepressant



Doctors have a new weapon in the fight against particularly pernicious depression: a drug based on the powerful anesthetic ketamine.

The drug called Spravato and developed by Janssen Pharmaceuticals, Inc. was approved by the U.S. Food and Drug Administration as a treatment for severely depressed people who haven't responded to two courses of other treatments. The first ketamine-based antidepressant, Spravato is a nasal spray that must be delivered in a doctor's office, and is intended to be used in addition to an oral antidepressant. Ketamine is an anesthetic that's been in use for decades; it is also an illicit drug, known as “Special K” or “Vitamin K,” that can create out-of-body psychedelic

hallucinations. Other antidepressants often take weeks to kick in, but ketamine and related compounds work within hours or days for some people. Some patients experienced the effects of Spravato in two days, a clinical trial found.

And promising early research has led some doctors to begin administering ketamine to people who have shown no improvement from other treatments for severe depression. But large clinical trials and a deeper understanding of side effects are still needed.

Gut bacteria may change the way many drugs work in the body



New research could help doctors choose medications for patients based on their microbiota. Prescribing the best medication may require going with a patient's gut — or at least, the bacteria that live there.

Anecdotal reports have revealed that some gut-dwelling microbes chemically alter oral medications, affecting how well those drugs work. But the scope of this problem has remained unclear. Now, a sweeping survey of these interactions suggests that gut bacteria can modify many drugs and that the genetic makeup of a patient's microbiota may predict that person's response to medications.

Researchers tested the ability of 76 types of bacteria selected to represent the microbial diversity of the human gut to alter the molecular structure of 271 oral drugs, from hormones to antiviral medications. The bacteria were incubated with nutrients and drug solutions in test tubes for 12 hours. In that time, 176, or about two-thirds, of the 271 drugs were modified by at least one bacterial strain, and each strain modified 11 to 95 different drugs. Besides designing pills to avoid certain bad reactions with bacteria, pharmaceutical companies could also develop medications that exploit microbial modifications to enhance or prolong a drug's effect.

Student Awards

Bharatha Kumar.S (III BIOTECH) won the Best Paper Award for his presentation in FUTURA'17 held in Bannari Amman Institute of Technology.

Bharatha Kumar.S (III BIOTECH) won the Best Research Paper Award in the National Level Seminar collaborated with UGC-ICMR(CRME) held in Ayya Nadar Janaki Ammal College.

Bharatha Kumar.S (III BIOTECH) won the Active Volunteer of MMM project in ICMR (Indian Council of Medical Research).

Bharatha Kumar.S & Syed Ali Mohamed.J (III BIOTECH) won the third prize in ADZAP (Non-Technical) held in Kamaraj College of Engineering.

M. Karthika sri (IV BIOTECH) won the Best Presentation Award for her presentation in HACKATHON-2019 held in P.S.R. Engineering college

Sports

R.Atchayaa (II BIOTECH) won Second Prize in Zonal Level Ball Badminton held at VOC College of Engineering, Tuticorin.

M.Gayatri (II BIOTECH) won First Prize in Triple Jump (Zonal meet) held at P.S.R. Engineering College.

I.Jesica Rosy (II BIOTECH) won Second Prize in Zonal Level Ball Badminton held at VOC College of Engineering, Tuticorin.

I.Jesica Rosy (II BIOTECH) won Second Prize in Trovilo (Non-Technical) held at P.S.R.R. Engineering College.

Student Participated Learning

S.No	Name of the students	Events	Date	Venue
1	Ms. I.Jesica Rosy Ms. V. Vaishnavi Devi Ms. P. Chandra Ananthi Ms. T. Saktheeswari Ms. R. Keerthana Ms. S. Nithya Ms. S. Sugapriya Ms. R. Sumitha	National Conference on Recent Advances in Drug Design, Discovery and Development from Natural Products	15-06-2019 to 16-06-2019	Aravindh Herbal Labs (P) Ltd., Organized by Antiviral Research Society

2	Mr. G. Subramanian Mr. M. Ashok Kumar Mr. P. Karthick Kumar	National Conference on Recent Advances in Drug Design, Discovery and Development from Natural Products	15-06-2019 to 16-06-2019	Aravindh Herbal Labs (P) Ltd., Organized by Antiviral Research Society
3	Ms. R. Surekha Ms. A. Esther Ms. S. Chithra Devi	International Conference on Sustainable Development in Energy and Environment	18-07-2019 to 20-07-2019	Kamaraj College of Engineering and Technology, Virudhunagar

Student presented paper in International Conference on Sustainable Development in Energy and Environment organized by Kamaraj College of Engineering and Technology, Virudhunagar



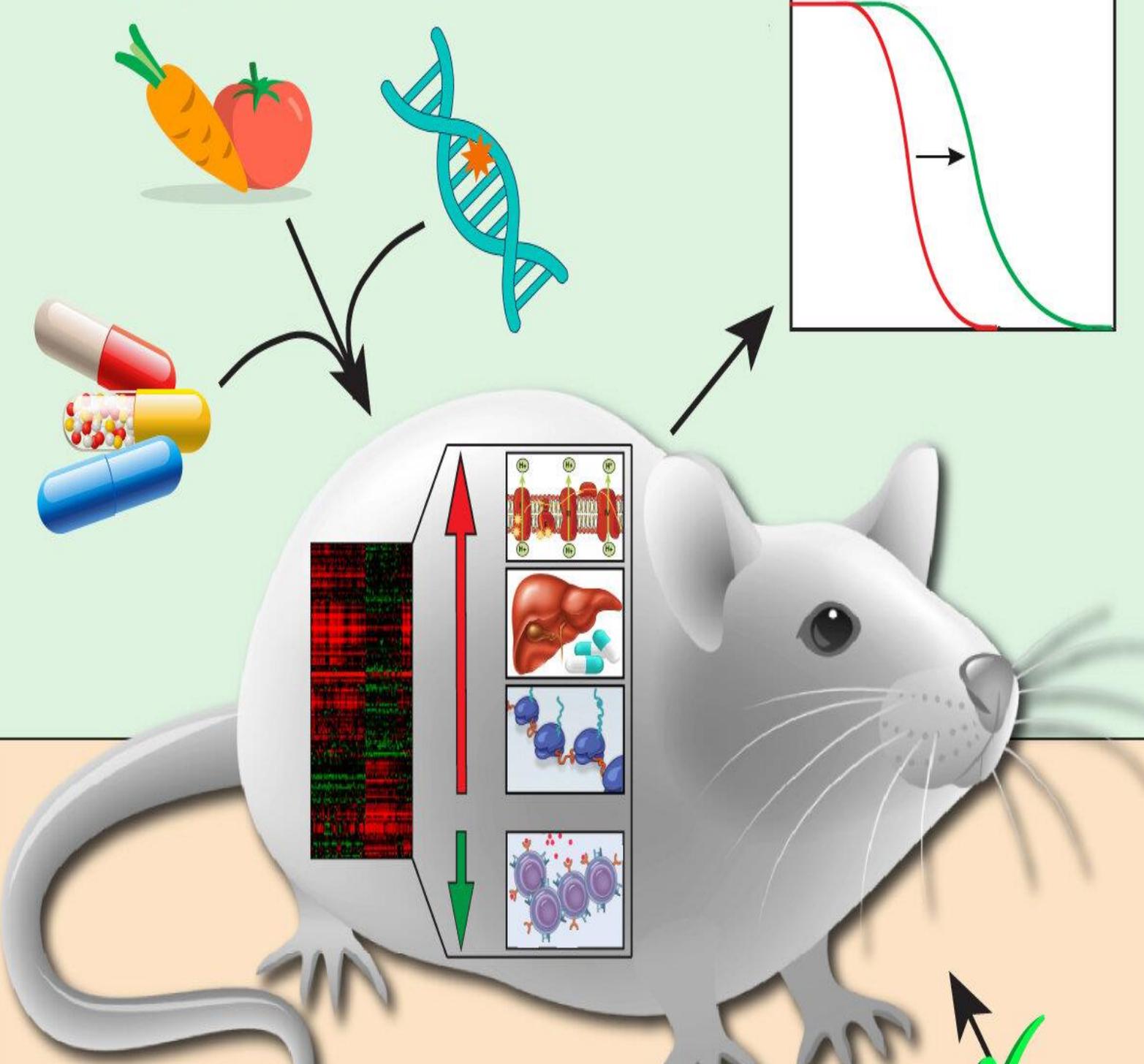
EXPERIMENTAL LEARNING

S.No	Name of the Student	Type of Activity	Date	Organization
1	Ms. K. Sathyapriya	Internship	05-06-2019 to 25-06-2019	Idhayam Parikshan Labs Limited, Virudhunagar
2	Ms. A. Esther Ms. S. Nithya Ms. R. Sumitha	In-Plant Training	17-06-2019 to 19-06-2019	Aavin -VRD 1000 Virudhunagar District Co-Operative Milk Producers Union Ltd, Meenakshipuram, Srivilliputtur

Student placed details (2018 - 2019)

S.NO	REGISTER NUMBER	NAME OF THE STUDENT	NAME OF THE COMPANY
1.	1505001	Abinaya R	CHC Healthcare
2.	1505002	Bharathakumar S	Ramjagenosensore ltd.
3.	1505004	Hema M	Bevy wise networks
4.	1505005	Irine Briny Hepzibha J	SPI Global
5.	1505006	Kalaiselvi V	VRCM
6.	1505007	Karthikadevi M	TNQ
7.	1505008	Muniyaraj K	CHC Healthcare
8.	1505009	Muralidharan K	Scope E Knowledge
9.	1505010	Nandhinidevi M	VRCM, & Scope E Knowledge
10.	1505011	Ponkalaivani S	VWR
11.	1505013	Rajapria V	VWR
12.	1505015	Rama B	SPI Global
13.	1505017	Sangeetha M	CHC Healthcare
14.	1505019	Shajina K	CHC Healthcare & Scope E Knowledge
15.	1505020	Subha Ashley T	ZifoTech Pvt.Ltd., & Bevywise networks
16.	1505021	Syed Ali Mohamed J	AK Seaweed & Scope E Knowledge
17.	1505022	Christypriya A	VRCM
18.	1505301	Muralikrishna R	AK Seaweed

Identification



Application

