Biotechnology Department

Activities conducted

During the Academic Year

2020-2021

Sl. No.	Activity	Date
1	National Art Competition Theme/Title: "Covid 19 challenges in the current world"	29 th July 2020
2	Workshop Title: Bioinformatic Tools for Genetic Diagnosis of Inherited Diseases	7-11 Dec 2020
3.	National Webinar Title: Drug Discovery and Opportunities in Industry	26 th June 2021

KMICS NATIONAL ART COMPETITION-2020

Theme: "Covid 19 challenges in the current world" Date: 29th July 2020, Time: 10:00 AM to 3:30 PM Venue: Online on 'Zoom' Platform

Convenor: Dr. B. Kiran Kumar, Lecturer in Biotechnology **Resource** Person: Mr. Prakash Dharma, Artist and Architect



The global pandemic situation in 2020 has put the world in lockdown, and this has brought a lot of stress to people of every walk of life and especially the students, who had to soon adapt to novel methods of learning, that is the online classroom. This sudden change has created a lacuna in the minds of students on their missing recreation activities and their interaction with their friends, which is a most important aspect for child psychology for their normal mental activity. To overcome this, an "Art competition" was planned for students of all the ages, where they were motivated for development of creative skills. This will make the students, schedule some time away from computer monitors, and place their imagination on to paper with colours, and finally present their work on the online platform. Since the competition is online, students from all over India were encouraged to participate, as they can present their work from their residence. Shri. Prakash Dharma garu, an Eminent artist, who guides students in learning art works, especially drawing and painting, has been the chief guest and judge for this competition. Faculty members from various departments who have co-ordinated the program are: Ms. Kavitha Varak, Biotechnology; Ms. Uma Devi, English; Ms.Suchetha Patankar, Commerce; Mr. Jalandhar, Computer Science; Ms.Padmaja Alichala, Microbiology; Ms. Reddy Lalithya, Microbiology; Ms. G. Hima Bindu, Chemistry; Ms. Maheshwari, Chemistry; Ms. Priyanka, Physics; Ms. Veda, Physics ; Ms. Vaishnavee, Physics.

Competition has taken place from 10:00 am in the morning, till 3:30pm in the evening. There were two rounds of selection. preliminary screening and final selection. Preliminary screening was conducted in four breakout rooms. Final selection was conducted in a single room. Selected artworks were displayed at KMICS website for one academic year. Recording of the program is available at the following utube link: <u>https://youtu.be/sUnL-Y811iw</u>. All the participants were provided with participation certificates.

We greatly acknowledge principal, Dr. J. Nageswara Rao and, management members: Justice L. Narasimha Reddy garu, President, KMES; Shri J. Narasimha Rao garu, Vice President, KMES; Dr. A. Subramanyam garu, Secretary, KMES; Shri B. Sridhar Reddy garu, Joint Secretary, KMES; Shri. L. Prabhakar Reddy garu, Treasurer, KMES; for providing subscribed Zoom online support and encouraging us to conduct such a program.



Art works which stood first place

Art work by Adepu Veda Sriya, from Hyderabad.





Art work by Vaishali Bharadwaj from Una, Himachal Pradesh

Workshop-December 07-11, 2020

Title: Bioinformatic Tools for Genetic Diagnosis of Inherited Diseases

Convenor: Dr. B. Kiran Kumar

Duration: Five days from 7th December, 2020 to 11th Dec 2020

Total Online Hours: Two hours per day for 5 days = 10 hours

Genesis/Requirement: Students pursuing semester 3 and 5 have Molecular Biology course work. To provide extended add on skill, a workshop was planned to impart skills online

During the workshop, students were exposed to:

(1) Online databases to obtain gene sequences

(2) Demarcate the sequences representing different elements of a gene

(3) Online databases for identifying mutations observed in population

(4) Mapping mutation on gene sequence

(5) Designing primer sequences to amplify a fragment of DNA containing mutation by PCR method.

(6) Identifying Restriction enzyme which can cut a DNA fragment at the mutation site.

Students were provided with hands-on experience on the above by assigning to work on identifying a genetic disorder, identify the gene responsible for the genetic disorder, and develop diagnostic methods to identify the genetic disorder using the above tools.

NATIONAL WEBINAR

Title: Drug Discovery and Opportunities in Industry **Venue:** online on 'Free Conference Call' platform

Convenor: Dr. B. Kiran Kumar; Associate Member: Mrs. P. Aruna Kumari

Date of the program: 26th June, 2021, Day of the week: Saturday.

Time of initiation and Duration: 10:30AM to 12:00 noon, On and a half hour.

Resource Person: Dr. Sarita Sharma, Principal Scientist, Lupin Ltd.

Genesis/Requirement: Students pursuing Biotechnology course, have a paper titled, "Drug designing" as a skill enhancement course. A webinar was therefore planned by inviting scientist from pharmaceutical company, mainly to motivate the students by educating them about the current scenario in the industry and the opportunities they can tap.

Background of the Speaker: Dr. Sarita Sharma has been working as Principal Scientist & Head at Product Characterization Group of Biotech Division, Lupin Limited, India, for the last 9 years, where she with her team is involved in development of cell lines, clones, and Biosimilars. She pursued her doctoral study at Central Drug research Institute, Lucknow, a



Webinar Content:

Dr. Sarita Sharma has reached to the students, by initiating the talk with the most basics on drug discovery, using the terminologies they have learned during the course. She has explained about the challenges in the path of drug discovery, and investments of time and money by the industry, pointing about the opportunities to enter into this field. Further she has explained about her current works on development of therapeutic antibodies. On this aspect, she has added a brief note on the historical methods to current developments.



