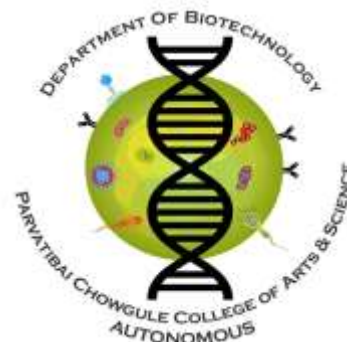




# BIOBYTES



DEPARTMENT OF BIOTECHNOLOGY

Parvatibai Chowgule College of Arts & Science Autonomous

VOLUME 11, ISSUE 2

March 2021

## HIGHLIGHTS

- ❑ Faculty and student activities
- ❑ Alumni talk series
- ❑ Guest talks

## CONTENTS

- ❑ Faculty activities.....02
- ❑ Student activities.....04
- ❑ Biochrome Activities.....08-11

## EDITORIAL

Here's wishing you all a Happy and Healthy New Year 2021..!!! We still hope that we can tide over the current COVID-19 situation triumphantly. Just to provide a short distraction from the current buzz of events we bring to you our most awaited departmental newsletter of this year 2021.

We are happy to share a few of the faculty's and students achievements. We bring to you a series of Biotech alumni talks to facilitate students in choosing their right career path.

Also, do not skip out on the interesting section that enlists the various fun learning and informative activities conducted by our very own Biotechnology club-"Biochrome"!!. Happy reading!

**“DO NOT WORRY, AS THIS COVID- 19 PANDEMIC IS A PASSING PHAGE”** 😊

- By, Dr. Starlaine Mascarenhas & Ms. Hashma Mujawar, Assistant Professors in Biotechnology

1. Dr. R. Kanchana, Asst. Professor participated in State Level Webinar on "Haematological Biomarkers in the diagnosis of COVID-19" on 03<sup>rd</sup> February 2021 organized by Government College of Arts, Science and Commerce, Khandola. Marcela-Goa
2. Ms. Madhavi M. Motankar, Asst. Prof. in Biotechnology participated in following;
  - 1) National E-Webinar on 'Career Opportunities in Plant Sciences' organized by Botany Dept New Arts, Commerce and Science College Parner, Ahmednagar on 12<sup>th</sup> February 2021.
  - 2) E-Bioinformatics Workshop on Sequence Analysis conducted by 'National Biotechnology E-conclave HyGene – The Challenge of Change Department of Plant Biotechnology and the Department of Agriculture, College of Agriculture, Kerala Agricultural University at Thiruvananthapuram on 23<sup>rd</sup> February 2021.
  - 3) Scored 38/40 in the Quiz on National Science Day organized by Vigyan Setu Foundation Bridging Science & Society, Government of India on 28<sup>th</sup> February 2021.
  - 4) Two Days 'Research Grant Writing Workshop' for Faculty and Researchers organized by Directorate of Higher Education, Government of Goa in Collaboration with Government College of Arts Science & Commerce, Quepem, Goa from 16<sup>th</sup> to 17<sup>th</sup> March 2021.
  - 5) National Multidisciplinary E-conference on 'Research in Science and Technology for the Sustainable Development' organized by Atul Vidya Mandir, Wardha's Rajarshee Shahu Science College Chandur, Amravati sponsored by Indian Science Congress Association, Amravati, Maharashtra on 23<sup>rd</sup> March 2021.
3. Ms. Hashma Mujawar and Dr. Starlaine Mascarenhas, Assistant Professors, were resource persons for conducting a 'Certificate course on Data Computation in the Applied Biological Sciences using Graph Pad Prism' for life science students from 10<sup>th</sup> February to 31<sup>st</sup> March 2021. This program was conducted as an initiative to provide internship opportunities to life science students by Dr. Nandini Vaz Fernandes, Dean of Life Sciences, HOD-Zoology.
4. Dr. Starlaine Mascarenhas Asst. Prof participated in the following;
  - 1) Successfully completed AICTE Training And Learning (ATAL) Academy organised 'Online Faculty development programme on "Aqua-food technology (Emerging Food Processing Technologies: Prospects and Challenges for Food and Nutrition Security)' from the 04<sup>th</sup> January 2021 to 08<sup>th</sup> January 2021 at Tezpur University.
  - 2) Attended 'International popular lecture series on Environment and Health' organized by the Department of Biotechnology from 1<sup>st</sup> to 4<sup>th</sup> February 2021.
5. Ms. Hashma Mujawar, Asst. Professor in Biotechnology and Dr. Aduja Naik, Asst. Professor in Biochemistry respectively, initiated a Startup named 'Mushroom Connect....Let's Grow!'.

- By, Ms. Madhavi M. Motankar, Asst. Professor in Biotechnology

## STUDENTS ACTIVITIES

1. Ms. Swati Kumari Mishra, S.Y.B.Sc. Biotechnology student bagged 'First prize' in South Goa District in the 'District Youth Parliament 2020' on 'National Education Policy 2020 will transform education in India' conducted on 30<sup>th</sup> December 2020. She also bagged 'First prize' in the 'State Youth Parliament 2020' on the topic 'Supercharging Youth for New India' on 5<sup>th</sup> January 2021 and represented the Goa State for the 'National Youth Parliament Festival 2021 – NYPF2021' at New Delhi held on 12<sup>th</sup> January 2021 organised by the Government of India, Ministry of Youth Affairs and Sports, New Delhi.



Fig.01 & 02: Ms. Swati Mishra, recipient of 1<sup>st</sup> prize - State Youth Parliament 2020

2. T.Y.B.Sc. Biotechnology students, Ms. Selcea Savia D'Costa bagged the 'First prize' and Ms. Scimran Maria DaCosta bagged the 'Third prize' for the Scientoon Competition conducted on the National Science Day in College.
3. Ms. Inoska Mendes & Ms. Sarah Kandekar, having completed their Bachelor's Degree in Biotechnology in the academic year 2019 - 20 presented a paper titled 'Sustainable Approach to Organic Farming in Self Designed Vermicompost Integrated Aquaponics Unit' (based on their TYBSc project) at International Conference (in Virtual mode) on Affordable Strategies for Health, Environment & Food Technology between 22<sup>nd</sup> and 23<sup>rd</sup> December 2020 organized by Department of Biotechnology Engineering, N.M.A.M. Institute of Technology, Nitte, Karkala. The project was guided by Ms. Vallanka Dias, Asst Prof, Dept. of Biotechnology, who also participated in the conference.

-By, Ms. Madhavi M. Motankar & Ms. Vallanka Dias, Asst. Professor's in Dept. of Biotechnology

## Biochrome - Biotechnology Club activities

Biotechnology club -Biochrome conducted 'Online Innovative Photography Competition' on the theme 'Microorganisms as Bio-helpers' and 'Various growth phases of self-grown Micro-greens' on 11th January 2021. 'Online Essay writing competition' on the theme 'Biotechnology - Present and Future', 'Bio War - Pros and Cons' and 'Bye-Bye Covid-19' was conducted on 15<sup>th</sup> January 2021.

On behalf of the Department of Biotechnology, Ms. Madhavi M. Motankar, Assistant Professor in Biotechnology & Coordinator of Biochrome, organized a series of Webinars for the Life Sciences students of our college through Google meet as follows by;

### Biotechnology Guest Talk Series on 'Career Guidance in Biotechnology'

1. Dr. Mani Ramakrishnan, Adjunct Faculty, HOD of PG Bio-Sciences, Visiting Scientist to DNA Barcoding Lab, UAS - GKVK, Bangalore and Applied Genomics Lab, ICRISAT at Telangana, Chief Editor of an Annual Multidisciplinary Journal from Presidency University, Bangalore on 20<sup>th</sup> March 2021 at 10:30am.
2. Dr. Tamal Raha, Founder of the Integrated Biopharma and Pharma Solution (IBPS) - Drug Development & Regulatory/Clinical Strategy Expert Goa, India on 10<sup>th</sup> April 2021 at 10:30am.

### Biotechnology Alumni Talk Series on 'My Career journey in Biotechnology'

1. Ms. Joans Pires, Masters in Biomaterials and Tissue Engineering from the University College London (UCL) on 13<sup>th</sup> February 2021 at 11:30am.
  2. Ms. Sakshi Ahluwalia, Masters in Biomedical Science from the National University of Ireland, Galway presently working as an Associate Biotech Production Specialist at Regeneron Pharmaceuticals Inc. Ireland on 27<sup>th</sup> February 2021 at 4pm.
  3. Ms. Maclaez Vaz, Masters in Applied Bioinformatics from the Cranfield University Bedford, United Kingdom on 6<sup>th</sup> March 2021 at 11:30am.
  4. Ms. Chaitra Shetty, Masters in Clinical Virology from Manipal University, Karnataka presently working as Molecular Virologist at Srinivas Institute of Medical Sciences and Research Centre, Mangalore on 13<sup>th</sup> March 2021 at 7 pm.
  5. Ms. Ankita Chattopadhyay Masters in Applied Microbiology from Vellore Institute of Technology, Vellore presently a PhD Scholar at Jawaharlal Nehru Centre for the Advanced Scientific Research (JNCASR), Bangalore on 27<sup>th</sup> March 2021 at 7 pm.
- By, Ms. Madhavi M. Motankar Coordinator of Biochrome - Biotechnology Club

### Biotechnology – Present and Future

“We proudly alter God’s creation.....We are biotechnologists”. A meme I found on the internet, that pretty accurately sums up the work of a biotechnologist. So, what is the thing these biotechnologists exactly do? Well, they are expertise on the study of biotechnology, which in turn means they add the knowledge of biology and technology together to produce a better way of living life. Now, biotechnology overlaps with various other fields in science, which can make people unrelated to the science a tad bit of confused. Thanks to the ongoing situation now even the `once upon a time clueless or uninterested people` see every biotechnologist as a worthy potential vaccine creator.

Well, that is an honour really!

Now, the works of a biotechnologist doesn’t just end at making vaccines. If I go on to write about the achievements of a biotechnologist or a biotech company, I might exceed the word limit of 1500 words, to be honest. So, let me list out a few works of the past, to which for me were quiet the breakthrough. In the agricultural sector, introduction of high yielding variety seeds (HYV) has improved food quality and also made farmers yield a good harvest. Bio-pesticides, bio fertilizers etc. have saved soil from the harsh effects of chemical based products. The food sector is flourishing as well. Healthy products have made it to the shelves of stores and are available to everyone. Genetic disorders and faulty genes in embryonic stages, now, can be corrected using genetic biotechnology. The environment is benefitting because of biotechnology. The list can go on and on and no one is complaining..... only some activist who believe in conventional and traditional methods.

I believe both sides must be heard. we do not want our biotechnologist to join evil scientist Dr. Heinz Doofenshmirtz. Anyway, jokes apart, biotechnology uses methods not so very ethical and traditional and this could hurt the sentiments of people. Canned and processed food is considered bad for health, use of animals, for the study of diseases and testing vaccines and their side effects, was pulled up, the stigma around test tube born babies are a few examples on how some works of biotechnologist that are not welcomed. One more disadvantage would be that many amenities, like IVFs and treatment of genetic disorders, can be available only for the rich class and decent earning population. Biotechnology has taken the front seat among other fields of sciences and it surely isn’t going to step back in the coming years. Biotechnology is the need of the hour, as the world braces itself to fight issues like food insecurities, global warming, pandemics or epidemics etc.

The quest to fully understanding science is endless. There won’t be a day on earth, where we sit down and say we have got the answers to everything. Ill end by quoting Jonah Lehrer “Every brilliant experiment, like every great work of art, starts with an act of imagination”.

- By, Ms. Bliza Rodrigues (bagged First prize in Biochrome Essay Writing Competition)



## Biochrome - Biotechnology Club activities

### Whatsapp University

The world is in a continuous change, if you stop for a while and take a look around you, you will most likely realise how many things have changed completely over the course of just a complete decade.

The rise of popularity of Facebook, Twitter, WhatsApp has changed our life in a tremendous way and we are not even aware of it! With the rise of popularity of social media platforms, the world has become a global village with information spreading across the continents within a second.

Today people are not only known by what they are in the real world but also by what they are like in the virtual world. Of all the social media platforms WhatsApp has its own unique identity and popularity among people. It is easy to use, free from any kind of advertisement; your contact gets directly imported into this app for an easy access. You can chat, share your location, photos, videos etc. with your friends and family members. WhatsApp group of school, and colleges and offices are just like right and left hand of the people.

If it is so useful then why it is being criticized constantly? Why it is hub of violence, hatred etc. What is the truth behind this fastest growing university of this world? Perhaps it is the only University which offers no defined course and graduating from this university is nearly impossible because the vast ocean of knowledge makes sure that you learn something new every day and the syllabus has no definite boundary.

It is the only university where you will meet educated moron and qualified illiterates. Here you get to see the hidden artist, writers and poets at their best in your grandfather and grandmother and in uncles and aunties sharing and forwarding good morning messages to good night quotes with love and heart emoticons dancing around Sun, moon, stars and greenery.

This university is favourite lovemaking spot of millions of love birds, its one notification is enough to make or break a day of lakhs of people around the globe. It is the only University which remains open 24 into 7 with no sunset. There are so many chatting apps but still WhatsApp is the king of all the apps.

If it is so useful where the problem lies? Frankly speaking there is absolutely no problem with this app. Problem lies with the people who are part of this university. Forward this message to 10 people and you will get to hear a good news by this evening, forward this to all your contact if you love your mother, forward this to 15 people who are important in your life including me if I am one, forward this to 50 people otherwise be ready for a bad luck. Seriously! We are living in 21st century to witness this? Sharing will bring me good luck and ignoring the same will bring bad luck! did you become millionaire....contd

## Biochrome - Biotechnology Club activities

sharing that shit or you died coz you ignored? It is understood when it is a shared and forwarded by some illiterates but when you see educated people doing the same. It doesn't end here. Our so called WhatsApp University reveals number, powerful facts and figures every day for example-: Bengali is the sweetest language spoken on Earth, Jana gana mana is the world best National Anthem, people of India are the friendliest etc.

These fake facts have full potential of hitting your soft spot and then common sense goes flat. This University is hub of propoganda whose slightest shadow is enough to burn peace and, fuel and encourage bloodshed, mass protest, and religious attack, at the end shaming humanity. Some of the deans of this university are the greatest believer of hatred, terrorism and violence.

Their heart is at peace when they see innocent fighting and dying a painful death on the name of religion, caste and creed. It is unbelievable that along with illiterate educated moron also fall trap to their dirty plans and they end up sharing and forwarding fake messages without cross checking it and in a way they end up being part of some terrorist attack, religious violence etc.

In this world where everything is available on fingertips people need to be conscious socially and act responsible. Before sharing any kind of news they need to cross check with some trusted media and websites in order to break the chain reaction of fake messages, along with this it is their duty to report the same and stop their relatives and friends from falling trap to such propogandas.

It really pricks heart when you see your own friends and relatives coming up with medicines and ways to get rid of diabetes, cancer, corona etc. People need to understand that government is smart to fund millions of rupees on research for finding medicines to cure these deadly diseases.

We cannot deny the fact that these self-educated and employed doctors are putting thousands of lives at risk.

If we use this app judiciously I think the world could be just fine. Such apps are created to save time, energy and bring our love ones closer. If you look at the pros and cons it is more of a blessing than anything else.

‘Use technology for saving time use it for gain with a brain’

- By, Ms. Swati Mishra, S.Y.B.Sc. Biotechnology

**Editor: Ms. Hashma Mujawar, Ms. Starlaine Mascarenhas & Ms. Madhavi M. Motankar Asst. Professor's in Biotechnology**

**Reports and pictures were contributed by the Faculty of the Department of Biotechnology;**

**Dr. R.Kanchana, Ms. Madhavi M. Motankar, Miss Vallanka Dias, Dr. Starlaine Mascarenhas, Ms. Hashma Mujawar**