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# e-Circulated Newsletter

Faculty of Agriculture and Plantation Management

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Upcoming Events :

**BIONOVA Magazine** 

Biotechnology Day '23



Biotechnology Society of Wayamba University of Sri Lanka (BitSoc) Department of Biotechnology Faculty of Agriculture and Plantation Management Wayamba University of Sri Lanka



# ONLINE WEBINAR

" Undergraduate Research : Develop high-impact skills for a successful future career "

# Join Online 。

Date - 27<sup>th</sup> November 2022 Time - 08:00 pm onwards via Zoom -

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DR.CHATHURANI RANATHUNGE BSc. (Agric.) WUSL, PhD (App. Bin. Sci.) Missipi, USA Senior Research Associate, Computational Biology Eastern Virginia Medical School.

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An online webinar under the topic "Undergraduate research: Develop high-impact skills for a successful future career" was held on 27th November 2022 via Zoom. The webinar was conducted by Dr Chathurani Ranathunge, a senior associate in computational research biology at the Eastern Virginia Medical School. BitSoc organized the webinar to provide students with better knowledge about the impact of undergraduate research skills on their successful future careers. As BitSoc, we acknowledge the quest speaker for the knowledge she shared and adjusting her busy schedules to make the event a success.

# BITSOC FUNDRAISING PROGRAM

A film festival was held for three days by BitSoc members with the intention of raising funds. It was held under the theme of "BitSoc Movie Fest" and all the students from all four batches were invited to watch films. The world-famous film "PINK", then on the second date the film "CHUP" and on the final date one of the most terrible horror films



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"SMILE" was shown at the faculty auditorium. There was an audience of nearly 50 students each day to watch the films. The BitSoc members were able to raise some extra funds by selling ice creams, "Rotee", and popcorn in the midst of the film to make it more interesting.

1928 - Alexander Fleming noticed that a certain mold could stop the duplication of bacteria, leading to the first antibiotic: penicillin.

## ACHIEVEMENTS OF THE STAFF

Prof. D.P.S.T.G. Attanayaka, Chair Professor/ Department of Biotechnology, and Dr B.L.W.K. Balasooriya, Senior Lecturer/ Department of Biotechnology, were awarded a certificate of recognition for conducting high-quality research and publishing in indexed journals in the year of 2021 at 7<sup>th</sup> Wayamba University Research Award (WURA) held on 9<sup>th</sup> December 2022 at Wayamba University of Sri Lanka.



### SUCCESSFUL COMPLETION OF DOCTORAL DEGREE



Dr Mahesh Premarathna a graduate (2013/2014 batch) of the Department of Biotechnology completed his PhD, titled "Microbial Biofilms and their Network Interactions" at the Postgraduate Institute of Science, University of Peradeniya under the supervision of Prof. Gamini Seneviratne and Prof. Sumedha Madawala successfully on 03<sup>rd</sup> February 2023.

Currently, he is working as a postdoctoral research fellow and the coordinator of the Microbial Biotechnology Unit, National Institute of Fundamental Studies.

#### INTEGRATED DEGREE SCHOLARSHIP AT KOREA INSTITUTE OF OCEAN SCIENCE AND TECHNOLOGY

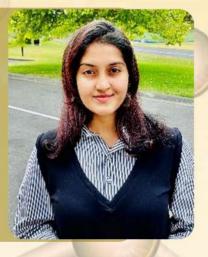
Mrs Dananjani M. Bandara, a graduate (2015/2016) of the Department of Biotechnology received a scholarship for an Integrated (MSc and PhD) Degree in the Marine Biotechnology and Bioresource Research Department, Korea Institute of Ocean Science and Technology from the University of Science and Technology, South Korea. She aims to specialize in Organic Synthesis (Organic Chemistry) during her PhD program.



1982- Insulin, the first biotech drug produced by genetically engineered bacteria for the treatment of diabetes was approved by the Food and Drug Administration, USA.

# PHD SCHOLARSHIP AT FEDERATION UNIVERSITY. MT. HELEN CAMPUS. AUSTRALIA

Mrs Norma Fernando, a graduate (2015/2016) of the Department of Biotechnology received NSW biodiversity trust and Federation University Co-funded scholarship for a Doctoral Degree at Federation University, Mt. Helen Campus, Australia. The title of her project is 'Effects of land management on insect biodiversity conservation in semi-arid New South Wales'. During her PhD program, she aims to specialize in Ecological Conservation.



### **RESEARCH PUBLICATIONS**



Ms Upekkha Abhayarathne, a graduate (2015/2016) of the Department of Biotechnology has presented her research findings under the topic of "Progress towards searching candidate genes for synchronization of mungbean flowering using bioinformatics techniques" at the Young Scientists' Conference on Multidisciplinary Research, 2022 organized by the Young Scientists' Association, National Institute of Fundamental Studies, Kandy, Sri Lanka, which was held

on 10<sup>th</sup> November 2022. The research was conducted under the supervision of Prof. N.S. Kottearachchi, Prof. V. Herath, Dr D.S. Liyanage, and Ms. I.V. Hadungoda.

Mr S.A.V. Viduranga, Temporary Demonstrator of the Department of Biotechnology has presented his research findings under the topic of "Determination of the growth curve of *Chlorella sp.* under optimum conditions in automated growth chambers for biofuel production" at the 2<sup>nd</sup> SLIIT International Conference on Engineering and Technology (SICET 2023) organized by the Faculty of Engineering of Sri Lanka Institute of Information Technology which was held on 25<sup>th</sup> of March, 2023. The research was conducted under the supervision of Dr B.L.W.K. Balasooriya



1972- The DNA composition of chimpanzees and gorillas was discovered to be 99% similar to that of humans. Mr K.K.P.K. Perera, who recently completed his specialization at the Department of Biotechnology presented his research findings under the topic of "Characterization of underutilized legumes as potential substitute for recommended legumes in Sri Lanka" at the second International Conference on Innovation and Emerging Technologies 2022 (ICIET 2022) organized by the Faculty of Technology, University of Sri Jayewardenepura,



Sri Lanka which was held on November 25<sup>th</sup>-26<sup>th</sup>, 2022 and he was able to achieve the award for the best poster presentation under the track of agricultural technologies for sustainability. The research was conducted under the supervision of Dr K.M. Mewan and Mr M.J.M.S. Kurera.



Ms A.M.C.H. Abeysekara, who recently completed her specialization at the Department of Biotechnology presented her research findings under the topic of "Characterization of organic raw materials towards developing an eco-sustainable fertilizer in Sri Lanka" at the second International Conference on Innovation and Emerging Technologies 2022 (ICIET 2022) organized by the Faculty of Technology, University of Sri Jayewardenepura, Sri Lanka, which was held on

November 25<sup>th</sup>-26<sup>th</sup>, 2022. The research was conducted under the supervision of Dr D.R. Gimhani, Dr K.M. Mewan and Mr M.J.M.S. Kurera.

Mr G.H.K Kumuditha, who recently completed his specialization at the Department of Biotechnology has presented his research findings under the topic of "In-silico analysis on the effect of compounds derived from Azadirachta indica, Annona reticulata, Ocimum sanctum on stored-grain pests; towards the development of potential biopesticides at the second International Conference on Innovation and Emerging Technologies 2022 (ICIET 2022) organized by the Faculty of Technology,



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University of Sri Jayewardenepura, Sri Lanka which was held on November 25<sup>th</sup>-26<sup>th</sup>, 2022. The research has been conducted under the supervision of Dr D.R.Gimhani and Dr D.S Liyanage.

1953- James D. Watson and Francis Crick described the structure of DNA.

# SQUANDER: ARTICLE WRITING COMPETITION

Ms Dharani Rathnayake, a 4<sup>th</sup>-year Biotechnology specializing student won 2<sup>nd</sup> place in "SQUANDER" Article Writing Competition for undergraduates, a project by G17 University Ambassador,

Wellassa Uva University of Sri Lanka under the Sustainable **Development** Goal 12-Responsible Consumption and Production. Winners were announced on 17th March 2023.



# **ASTRONOVA 22: CONTENT CREATION COMPETITION**



AstroNova 22 was an online content creation competition conducted by Students for the **Exploration and Development of Space (SEDS)** society, University of Kelaniya started on **Undergraduates** September 2022. from different universities participated in different categories of article writing, short story writing, photography, poem comprehension, and astrophotography. It became delightful news when Mr M. Akeel Shehan, a 3rd-year biotechnology specializing student won 3rd place in the article writing competition which was announced on February 2023.

1997-British scientists, led by Ian Wilmut from the Roslin Institute, Scotland reported the cloning of Dolly: a sheep using DNA from two adult sheep cells.

BitSoc Newsletter - Department of Biotechnology



#### UNIVERSITY START-UP COMPETITION & INTERNATIONAL INVENTION COMPETITION

Mr J.M Lahiru Kavinda, a 3<sup>rd</sup>-year student at the Department of Biotechnology won 2<sup>nd</sup> place in the best university start-up competition organized by AHEAD for Global Entrepreneur Week. Prof. Udith K Jayasinghe, Vice-chancellor, WUSL presented Mr Lahiru with a certificate to honour his remarkable



accomplishment during the Wayamba University Research Congress 2022 held on 9<sup>th</sup> December 2022.

A plywood alternative product invented by Mr Lahiru was selected by Ekva Cohort, a US company connecting Sri Lankan start-ups with US and Canadian investors, as one of the best start-ups during the international invention competition held on 26<sup>th</sup> March 2023 at Shangri-La Hotel, Colombo. This product previously won the best international invention award, honour of invention award, international gold medal for infrastructural engineering, and the national gold medal for infrastructural engineering at "Sahasak Nimawum" competition which was organized by (SLIC, Ministry of Science and Research) in 2017.

#### **BEST SPEAKER 2022: SPEECH COMPETITION**



The Gavel Club at the University of Kelaniya recently organized a speech competition called "Best Speaker 2022", and we're thrilled to announce that Nethmini Wijendrasinghe, 3<sup>rd</sup>-year biotechnology specializing student was able to make it to the semi-finals of the competition which was held on 8<sup>th</sup> January 2023.

1994 - Food and Drug Administration, USA approved the first GM food: the "Flavr Savr" tomato.

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#### SPORTS



Mr Y.G.S. Shehan Gunathunga, a 3<sup>rd</sup>-year student of the Department of Biotechnology participated in Pera Hokey 6's 2023, the inter-university hokey championship organized by the University of Peradeniya as a member of the university hokey team and won 2<sup>nd</sup> runners-up. He also

participated as the vice-captain of the university athletic team in 400x4 relay and 110 m hurdles at the Flying Shoe Meet, the inter-university athletic championship organized by the University of Kelaniya and won 3<sup>rd</sup> place. Mr Shehan was appointed as the track and field vice-captain in 2023 and nominated as a committee member of the Sports Council, WUSL. He was also the main coordinator of the Agri Premier League 2023, the inter-university cricket tournament.

A 3<sup>rd</sup>-year student of the Department of Biotechnology, Mr O.K.T. Nimesh Dananjana was appointed as the vice-captain of the chess team, WUSL in 2023 and participated in the inter-university games in 2022. He was further appointed as the editor of the Chess Club, WUSL, and the FAPM chess team captain in 2023.





Ms A.W.G Priyadarshani, a Biotechnology specialization student in 3<sup>rd</sup> year participated in shot-put under the inter-university games 2022 which was held on 27<sup>th</sup>-28<sup>th</sup> November 2022 in the Sugathadasa Stadium, Colombo.

2002 - Rice became the first crop to have its genome decoded.

**Editor:** Dr P.S. Warakagoda, Senior Lecturer, Department of Biotechnology, FAPM, WUSL. **Editorial Assistance:** Ms H.N. Withana, Temporary Demonstrator, Department of Biotechnology, FAPM, WUSL.

**Design and Paper Setting:** Mr O.K.T.N. Dananjana, 3<sup>rd</sup> Year Biotechnology Specialization Student, FAPM, WUSL.

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