#### **BIRAC E-YUVA Centre at PSGRKCW**

**Activities: 2023 - 2024** 

• Workshop: May 22<sup>nd</sup> - 26<sup>th</sup>, 2023

The Centre of Excellence in Life Sciences in association with GRG BIRAC EYUVA Centre has organized "BIO-AI: 5 days Hands-On training in Computational Biology" for our life-science students on May 22<sup>nd</sup> - 26<sup>th</sup>, 2023. Students from Botany, Zoology, Biotechnology, Information technology and Computer science attended the session. This was open to all the students pursuing UG, PG and PhD in their respective fields. Total number of participants was 33. Each day had a theoretical session to teach the basics and a practical session for the students to practice what they have learnt.

# • Doctorpreneurs: Empowering Doctors as Entrepreneurial Innovators at BioNEST: June 17, 2023

On June 17, 2023, Dr. Rijesh, Project Coordinator, served as a speaker for an interactive session on "Doctorpreneurs: Empowering Doctors as Entrepreneurial Innovators" at BioNEST - Dr. Moopen's Medical College, Wayanad, Kerala. The session included an interactive session with over 25 MD students, held from 12 PM to 1 PM, and one-on-one interactions with over 300 MBBS students. The interactions with the MBBS students were held from 2 PM to 3 PM for the 2019 batch and from 3 PM to 4 PM for the 2020 batch. Dr. Rijesh shared insights, personal experiences, and success stories, inspiring the attendees to explore entrepreneurial opportunities within the healthcare industry. The session proved to be informative and motivating, encouraging the students to consider entrepreneurship alongside their medical careers.



## • Workshop on BIO-AI: July 12th to 14th, 2023

The Centre of Excellence in Life Sciences in association with GRG BIRAC EYUVA Centre has organized "BIO-AI: 3 days Hands-On training in Computational Biology" for our life-science faculties and research scholars on July 12<sup>th</sup> to 14<sup>th</sup>, 2023. Faculties and research scholars from Botany, Zoology, and Biotechnology attended the session. The total number of participants was 17. Each day had a theoretical session to teach the basics to advance methods and a practical session for the faculties.







# Third Annual Women Biotech Conclave and Award function and Golden Jubilee Biotech Park for Women visit: July 19, 2023

The Golden Jubilee Biotech Park for Women Society organized its Third Annual Women Biotech Conclave and Award function on July 19, 2023, at the prestigious ITC Grand Chola in Rajendra Hall, Guindy, and Chennai. Dr. B. S. Chitra Devi, along with Dr. Rijesh and our team of innovation fellows, had the valuable opportunity to participate in this significant event. The conclave celebrated and acknowledged the contributions of women in the field of biotechnology, showcasing their achievements and fostering a platform for collaboration and recognition.

Following the enlightening conclave and award function, a subsequent visit was made to the Golden Jubilee Biotech Park for Women Society. During this visit, engaging discussions took place with Dr. Sudhakaran, the General Manager of the society and a pivotal knowledge partner. Conversations revolved around exploring avenues for further collaboration, sharing insights, and strengthening the partnership's strategic objectives. This combined event and subsequent interaction underscored the commitment of our team, led by Dr. Chitra Devi and Dr. Rijesh, to actively engage with the biotechnology community, celebrate women's accomplishments, and enhance our collaboration with valuable partners like the Golden Jubilee Biotech Park for Women Society.













# • E-YUVA Committee meeting –Delhi: July 28, 2023

On July 28, 2023, the E-YUVA Committee meeting convened in Delhi, featuring Dr. Chithra Devi and Dr. Rijesh K. The purpose was to review GRG BIRAC E-YUVA Centre's progress, facilitate interactions with the team, and present a detailed project overview and a 2-minute video tour of the Incubation facility and resources. The meeting's discussions encompassed advancements, challenges, and outcomes, fostering productive exchanges between the EYUVA Committee and team members. Dr. Chithra Devi and Dr. Rijesh K's active participation, along with the informative presentation and video tour, resulted in a productive session that encapsulated the project's trajectory.

## • Interaction session: August 3, 2023

On August 3, 2023 an interaction session with Dr. Ranjith Kumar, Chief Scientific Officer, Viyen Biotech was conducted to our innovation fellows and E-YUVA fellows. He discussed translational research strategies and converting research into a start-up company. This helped our fellows to know about start-up registration, advantages and disadvantages while starting a company. This interaction was held at GRG BIRAC EYUVA Centre benefiting all our fellows.





## • CHED Innovation Expo: August 7th to 8th, 2023

CIIED organized an Innovation Expo to exhibit and display innovative ideas of faculty, students and alumni of our college on August 7<sup>th</sup> to 8<sup>th</sup>, 2023. Our E-YUVA fellows exhibited their work in the expo and got assessed by various jury members. One of the E-YUVA products was chosen as the best prototype of the expo.





## • Guest lecture on Venoms and Poisons: August 17, 2023

On August 17, 2023 GRG BIRAC EYUVA Centre, in association with the Department of Botany under the aegis of The Centre of Excellence in Life Sciences, organized a Guest Lecture on the topic "Venoms and Poisons" with international resource person, Dr. Sakthivel Vaiyapuri, Professor in Cardiovascular & Venom Pharmacology, University of Reading, UK, who have a tremendous and extensive experience in Venom Pharmacology. It helped the participants to get introduced to a new field of applied science and prepare themselves for snake bite and envenomation scenarios.







# • Start-up Thiruvizha 2023: August 19th to 20th, 2023

GRG BIRAC EYUVA Centre, with the support of the Golden Jubilee Biotech Park for Women, participated in the Start-up thiruvizha at the CODISSIA Trade Fair Complex on August 19<sup>th</sup> to 20<sup>th</sup>, 2023. Our E-YUVA Fellows exhibited their prototype at the expo and had a chance to interact with various start-up and IP agencies.









# • Bio- Entrepreneurship Workshop: September 8, 2023

GRG BIRAC E-YUVA Centre in association with the Golden Jubilee Biotech Park for Women Society, Chennai, and the Department of Botany hosted a one-day Bioentrepreneurship workshop on September 8, 2023. Resource persons from Golden Jubilee Biotech Park, Dr. Sudhakaran, Dr. Sheela Sasikumar, and Ms. Hanushree Murali, Director - Jananom Natural Nutrition Pvt. Ltd., have shared their valuable insight on

Bio-Entrepreneurship, various funding and important things to start a company. Finally, fellows and students had a case study to engage themselves in a real time scenario of starting a company, budget split up and presentation of the company.









## • Interaction session for company formation: September 15, 2023

Interaction session with Mr. Gunasekaran, director of Nextron service was conducted at GRG BIRAC E-YUVA Centre on September 15, 2023. He discussed the private limited company registration steps and its benefits to our Innovation fellows. He also discussed the additional services provided by the company which was very helpful to initiate the company registration process.



### • Guest lecture: September 21, 2023

GRG BIRAC E-YUVA Centre, in association with the Department of Botany under the aegis of The Centre of Excellence in Life Sciences, organized a Guest Lecture on the topic "Miracle Moringa Tree: A Nutraceutical Perspective on Cultivation and Product Formulation" by Dr Harinath Kasiganesan, Founder and Director of Akash Institute of Agricultural Medicine, Chennai, TED Talk Speaker & Former Assistant Professor, Medical University of South Carolina, Charleston (MUSC), USA, Former Scientist- Defence Institute of Physiology & Allied Sciences (DIPAS), DRDO, Delhi on September 21, 2023 and finally, Innovation fellows had an interaction with Dr. Harinath regarding formulation of biological compounds and taking it to the entrepreneurship level.





#### • Visit of Dr. Shankaran to BIRAC E-YUVA Centre: November 17, 2023

Dr. Shankaran from Anna university visited our GRG BIRAC E-YUVA Centre and its facilities on November 17, 2023. Then, he interacted with our Undergraduate E-YUVA fellows and innovation fellows. He provided a great insights and ideas about entrepreneurship.



# • Workshop in Fermentation Technology: November 22<sup>nd</sup> to 24<sup>th</sup> 2023

GRG BIRAC E-YUVA Centre, in association with the Department of Botany under the aegis of The Centre of Excellence in Life Sciences, organized a fermentation technology workshop on November 22<sup>nd</sup> to 24<sup>th</sup> 2023 by Mr. M. Prasad and Mr. Manikandan S, Scigenics (India) Private LTD.





## • Global Bio India 2023: December 4<sup>th</sup> -6<sup>th</sup>, 2023

Global Bio-India 2023 was hosted by the Department of Biotechnology (DBT), Ministry of Science & Department of India, along with its Public Sector Undertaking, Biotechnology Industry Research Assistance Council (BIRAC). The event was held in India from December 4<sup>th</sup> -6<sup>th</sup>, 2023. It was acclaimed as the most extensive gathering of biotech start-ups. The primary focus of Global Bio-India 2023 revolved around Biotech Innovation and Bio-manufacturing.





















#### • Venoms and Poisons - Course Introduction: December 22, 2023

The sessions for the first batch of the course commenced on December 22, 2023 with international resource person, Dr. Sakthivel Vaiyapuri, Professor in Cardiovascular & Venom Pharmacology, University of Reading, UK, who have a tremendous and extensive experience in Venom Pharmacology. The course was largely focused on investigating venoms and poisons and their adverse impacts on humans, animals, and on the environment. It also helped the students to get introduced to a new field of applied science and prepare themselves for careers as toxicologists in pharmaceutical industries and various public-private sectors. The course will be run throughout the year.





#### • Interaction session for company formation: December 26, 2023

An Interaction session with Dr. Siva Pathasekaran, Cytiva, Bangalore was held at GRG BIRAC E-YUVA Centre on December 26, 2023. He discussed the private limited company registration steps and its benefits to our Innovation fellows. He also discussed the additional services provided by the company which was very helpful to initiate the company registration process. He shared diverse perspectives and provided ideas for scaleup and commercialization of their products. He discussed the ICMR project - Cardiovascular drug / Biomarkers demands in the commercial market. He shared information about the chipeptoc US which provides grants to start-up's especially to BIRAC.

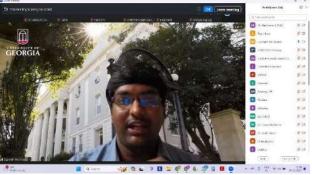




Webinar on "Embark on Your Study Journey: Unlocking Global Opportunity":
 December 29, 2023

GRG BIRAC E-YUVA Centre in association with Department of Botany and The Centre of Excellence in Life Sciences (CoELS) were organized a Webinar on "Embark on Your Study Journey: Unlocking Global Opportunity" on December 29, 2023 from 12.45 pm to 1.45 pm by Mr. Gopinath Mummaleti, Graduate Research Assistant, University of Georgia, Athens, United States of America.

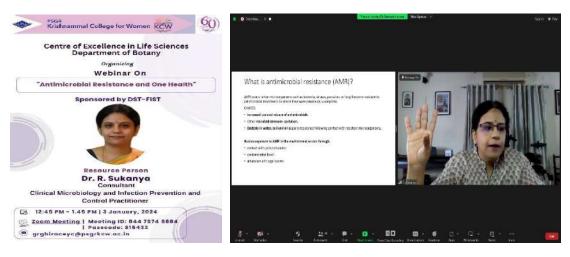




#### **Activities: 2024**

## • Webinar on "Antimicrobial Resistance and One Health": January 3, 2024

In the month of January, Dr. Sukanya, Consultant in Clinical Microbiology and Infection Prevention and Control Practitioner, led a webinar on "Antimicrobial Resistance and One Health" on January 3, 2024, from 12:45 PM to 1:45 PM. This event was organized by the GRG BIRAC E-YUVA Centre in collaboration with the Department of Botany and the Centre of Excellence in Life Sciences (CoELS). The session provided crucial insights into the challenges and strategies related to antimicrobial resistance within the framework of One Health.



• Webinar on "New trends in Antimicrobial Resistance and Natural based Eradication": January 5, 2024

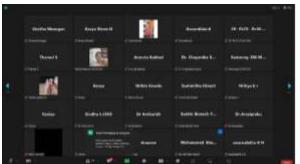
GRG BIRAC E-YUVA Centre in collaboration with the Department of Botany and the Centre of Excellence in Life Sciences (CoELS) organized a webinar titled "New Trends in Antimicrobial Resistance and Natural-Based Eradication" was held on January 5, 2024, from 10:00 AM to 11:00 AM. The session was led by Mr. Karukuvel Raja, Founder and Managing Director of Genolites Research and Development Laboratory, Coimbatore. The webinar provided valuable insights into emerging challenges in antimicrobial resistance and explored natural approaches for its eradication.

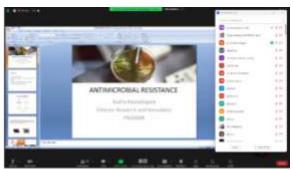




• Webinar on "Awareness on Antimicrobial Resistance": January 24, 2024

GRG BIRAC EYUVA Centre in collaboration with the Department of Botany and the Centre of Excellence in Life Sciences (CoELS) organized a webinar titled "Awareness on





Antimicrobial Resistance" was held on January 24, 2024. The session was led by Dr. Sudha Ramalingam, Director of Research and Innovation at PSGIMSR, who shared valuable insights into the growing issue of antimicrobial resistance and discussed effective strategies to combat it.

### • Lecture Workshop: February 12, 2024

In the month of February, Dr. M.S. Lipin Dev, Director and Partner at VT Ecogreen Technologies Pvt. Ltd., Coimbatore, delivered an insightful lecture on "An Insightful Journey into the World of Bio Start-ups" on February 12, 2024 (Monday) from 10:00 AM to 11:00 AM at Chandra Seminar Hall. This event was organized by the GRG BIRAC E-YUVA Centre in collaboration with the Department of Botany and under the aegis of the Centre of Excellence in Life Sciences. The session provided a valuable and enlightening experience for life science students, enhancing their understanding of bio-entrepreneurship and its benefits.





# Outreach activities for the 2nd Call for Proposals for Fellows under the E-YUVA Scheme: February 10th to March 15th, 2024

In the month of February, the BIRAC E-YUVA Centre formed a team, listed out the potential colleges in Coimbatore and met the Heads of the Department in person. The BIRAC E-YUVA Centre explained and discussed the Fellowship details to the HODs of Biotechnology, Microbiology, Biochemistry (Life Science) department of each college and circulated the flyers. The BIRAC E-YUVA Centre had covered around 25 colleges in person and had also communicated to the Colleges around different districts and states. We have publicized about the same via different social media platforms (Twitter, LinkedIn, WhatsApp). We have advertised the same via BioTecnika.

In the month of March, the BIRAC E-YUVA Centre at PSGRKCW addressed the students of various colleges in Coimbatore City. The BIRAC E-YUVA Centre explained and discussed the fellowship details and benefits of taking up the project under E-YUVA Scheme to the students of first, second and third years of Biotechnology, Microbiology, Biochemistry and other related departments. Also clarified their queries and persuaded

them in applying to the same. We have also provided the flyers and intimated about the webinar "Gain Insights on BIRAC E-YUVA Fellowships: National Webinar for Young Innovators & Entrepreneurs'. The details of the E-YUVA fellowship and its application process were conveyed via mail to the Heads of the Department and Principals to various colleges throughout India (covering major cities like: Chennai, Kochi, Bangalore, Hyderabad, Mumbai, Goa, Kolkata, Delhi, Lucknow).













#### • AMR Conclave: 4th and 5th March, 2024

In the month of March, Two day International Conclave on Antimicrobial Resistance was organized by the Centre of Excellence in Life Sciences in collaboration with GRG BIRAC E-YUVA Centre on 4th and 5th March, 2024 at PSGRKCW. The event brought together experts, researchers, and professionals to engage in discussions on strategies, advancements, and collaborative efforts aimed at combating the growing global challenge of antimicrobial resistance. The conclave provided a platform for sharing knowledge, fostering partnerships, and exploring innovative solutions to address this pressing issue.









## • Online outreach programmes: March 8, 2024

In the month of March, Dr. M.S. Lipin Dev, Director and Partner at VT Ecogreen Technologies Pvt. Ltd., Coimbatore, led a national webinar titled "Gain Insights on BIRAC E-YUVA Fellowships: National Webinar for Young Innovators & Entrepreneurs" on March 8, 2024, from 10:30 AM to 11:30 AM. The event was jointly organized by the GRG BIRAC E-YUVA Centre and the Department of Botany under the aegis of the Centre of Excellence in Life Sciences. This webinar offered enlightening and informative content for life science students, enhancing their understanding of bio-entrepreneurship and its advantages.



#### • Interaction session with Dr. Maria Louis Francis: March 6, 2024

In the month of March, Dr. Maris Louis Francis, Professor of Medicine, University of Miami, USA, visited BIRAC EYUVA Centre and interacted with our Innovation and E-YUVA Fellows on March 6, 2024. She interacted about the higher education opportunities and potential collaborations that she could bring in. Then the interaction

extended with Life science faculties and Deans of the college. It was a great opportunity for our fellows to funding opportunities and collaborations overseas.





## • Bio-Entrepreneurship workshop at PSG TECH: March 13, 2024

In the month of March, BIRAC sensitization workshop on "Bio-Entrepreneurship and intellectual property challenges in the field of Bio-Sciences- Biotech, Medical devices and diagnostics' 'was organized by PSG STEP BioNest on March 13, 2024. Dr. Ramkumar, Project Co-ordinator, Ajay Samuel, Project assistant and our innovation fellows attended the session. It helps to understand the challenges and ways to overcome challenges in Bio-science Intellectual property and Bio-entrepreneurship. Had a chance to interact with BIRAC officials, Mr. Amit Katiyar, Chief manager- Intellectual Property and technology, BIRAC, visited our BIRAC E-YUVA Facility and interacted with our fellows. AJay





## • Visit of GRG incubator CEO to BIRAC E-YUVA Centre: March 15, 2024

In the month of March, Dr. Hetal Sonpal, CEO, GRG incubator, visited our BIRAC E-YUVA Centre and to interact with our Innovation fellows on March 15, 2024, discussing the incubation facilities and challenges faced by our fellows. He was also interested in the innovative products developed by our fellows.





• Interaction session with Dr. Kasturi Venkatesan NASA Scientist: March 16, 2024

In the month of March, Dr. Kasturi Venkatesan, Astromicrobiologist, NASA, visited our campus on March 16, 2024. He presented some interesting astronomical findings and the role of microbes in space science. It was an exciting meet for our fellows to explore a whole new methodologies and genre.



# • Participation in BIRAC 12th Foundation Day New Delhi: March 20, 2024

In the month of March, BIRAC 12th Foundation Day was organized on March 20, 2024 at Scope Complex, New Delhi. Dr. B. S. Chithra Devi, Project Investigator and Dr. Ramkumar G, Project Coordinator was invited for the celebration and had a chance to Interact with **Dr. Peter Hotez**, Dean for the National School of Tropical Medicine, Baylor College of Medicine, USA and **Dr. Maria Elena Bottazzi**, Sr. Associate Dean, National School of Tropical Medicine, Baylor College of Medicine, USA. This celebration is for BIRAC's successful inculcation of a culture of biotech entrepreneurship in the country, aligning with the National Missions of *Start-up India*, *Make-In-India*, and *Atma Nirbhar Bharat*. BIRAC has created a strong network of 75 bio incubation centres and supported more than 4000 beneficiaries across the country. More than 800 biotech products developed through BIRAC support are in the market. BIRAC also played a critical role in the development and commercialization of *Made-in-India* novel vaccines, diagnostics, healthcare delivery, and management solutions during COVID days.





# Project Coordinator visit of SASTRA DEEMED UNIVERSITY and Incubation centre: March 22<sup>nd</sup> and 23<sup>rd</sup>, 2024

In the month of March, on March 22<sup>nd</sup> and 23<sup>rd</sup>, 2024, a visit was conducted to SAASTRA's Technology Business Incubators (TBI), namely Foundation for Innovation and Research (FIRST) and Association of Bio-Inspired Leaders and Entrepreneurs (ABLEST). These incubators are supported by the Department of Science & Technology (DST) and the Department of Biotechnology (DBT), respectively.

During the visit, in-depth discussions were held with Mr. Balakrishnan S, the Manager of Operations at TBI FIRST. He provided comprehensive insights into the available facilities, information about the incubatees and their products, equipment, startup initiatives, mentoring programs, and presented a tour of the Innovation & Training Centre, Rapid Prototyping Centre, incubation areas, and showcased the remarkable 3D-printing capabilities.

During a fruitful discussion with Mr. Nirmal, the Incubation Manager at BioNest (ABLEST) by BIRAC, we explored the range of facilities provided at the BioNest facility. Mr. Nirmal highlighted the key areas of focus at BioNest, which include Agri-tech, Medi-tech, Clini-tech, Diagnostics, Veterinary, and Therapeutics. He underscored the importance of supporting and nurturing startups by offering personalized mentoring, assisting in the development of scalable business strategies, providing research and development spaces, and facilitating connections with industries and investors. Mr. Nirmal shared valuable insights into the status of BioNest, revealing that they currently support 84 startups, both residential and virtual. He also elaborated on the different laboratories available at BioNest, such as Instrumentation, Cell Culture, Bio-Innovation Space, BSL-3-certified labs, and GMP facility labs. Additionally, he discussed aspects related to seed funding, investors, equity, and other significant matters.

Overall, the visit provided valuable insights into the innovative ecosystem fostered by SAASTRA's incubators, highlighting their role in nurturing, and supporting startups in various technology domains.







