

## REPORT ON BIOME'23

### INTERNATIONAL CONFERENCE ON ADVANCES IN BIOLOGY & MEDICINE

Date: 21<sup>st</sup> - 23<sup>rd</sup>, Feb' 2023

**BIOME'23 INTERNATIONAL CONFERENCE ON ADVANCES IN BIOLOGY & MEDICINE** a three-day summit of lectures and seminars on the latest advances in Biology & Medicine with the theme "To bring leaders in biology and medicine together from across the globe" organised by **TSWREIS (Telangana Social Welfare Residential Educational Institution) & TTWREIS (Telangana Tribal Welfare Residential Educational Institution)** in Association with Telangana Life sciences FABA Academy & Heartfulness Education Trust.

The joyful journey to BIOME'23 was stated on 21-02-23 at 6am from college to Kanha Shanti Vanam near Shamshabad with the approval of management and support from Director, principal, vice principal and other faculty members of SNVPMV. After receiving a set of guidelines by faculty 110 students and 6 faculty members (Dr. T. Saritha Jyostna, Dr. Neelima, Leemol Verges, Dr. Divya, Dr. V. Santhoshini & Mrs. M. Swetha) started in buses to learn the new ideology of eminent professor from different continents and their fellow mates.

**Day -1 (21/2/23)** we reached to Kanha Shanti Vanam at 8am sharp and after registration the organisers and volunteers allotted comfort Dome -D (DF2) for students and faculty after freshen up all of us we moved to dining hall for breakfast there we learned the Indian Tradition of taking food after that we went to Seminar Hall near NF4. **Biome'23** volunteers invited us to inaugural ceremony the session started with Lightening lamp by dignitaries and we are surprise to see how foreign speakers are respecting the Indian culture and traditions after that **Sir Ronald Ross IAS Secretary, TSWREIS & TTWREIS** addressed the gathering by explaining the theme & aim of this conference followed by the Chairman, TSCHE, Prof. R. Limbadri, Chief Academic Advisor, Prof. P. Reddanna, Convenor Dr. A.S.N. Pavani, and organising secretary Dr. R. Vasanthi welcome the gathering shown the pathway to student. Next the session is open for scientific seminars.

**INNOVATIVE APPROACHES TO INDUCE UNCONVENTIONAL CELL DEATH IN MULTIDRUG-RESISTANT CANCERS** by Amit K. Tiwari, Ph.D., DABT Professor and Director of International Engagement, University of Toledo. Sir explained Drug development is significantly hindered by the emergence of multidrug resistance (MDR) in malignant solid tumours that are aggressive, such as advanced colorectal cancer and triple negative breast cancer. The second-deadliest disease is CRC, while the deadliest breast cancer is TNBC, which accounts for almost 90,000 fatalities per year. More than 85% of patients with advanced CRC and TNBC develop MDR, mostly as a result of metastasis, ever-expanding ATP-binding cassette transporters, and lower apoptotic sensitivity, which results in earlier relapse and shorter survival. According to our findings, overcoming ADR cancer can necessitate a multimodal strategy.

**F. Scott Hall Department of Pharmacology and Experimental Therapeutics College of Pharmacy and Sciences, University of Toledo** spoke about **Insights into The Toxic Mechanisms Of Synthetic Cathingnes From Studies In Larval Zebrafish**. His including alcohol and nicotine 5 day-post-fertilization larval zebrafish we used to examine the lethal toxicity of a series of structurally related MDMA-like SPC methyl methyl one dimethylone, eutylone, butylone, dibutylone, N-ethylpentylone, and pentylone. All SPC and MDMA caused

lethality in larval zebrafish with pentylone being the most potent, and there evidence for cardiac toxicity as the basis of this lethal toxicity

**Kamal Dua, University of Technology Sydney, The University of Newcastle** explained his experiences during the research on **Novel Therapeutic Interventions for Chronic Airway Diseases** according to his investigations in this area are becoming more challenging because of the complexity of the relationship between the host's defences and microbial virulence. Some of these impediments include patterns of inflammation involved due to various respiratory viruses and multiple genes and their products, which underpin the regulatory mechanisms driving the disease pathology. Such approaches will be of interest for both the biological and formulation scientists to understand and explore the new vistas in the area of pulmonary inflammatory diseases.

**Sai HS. Boddu , College of Pharmacy and Health Sciences, Ajman University, UAE** **An Insight into The Back of The Eye Delivery: Challenges and Opportunities.** Designing an effective therapy for the back of the eye retinal diseases has always been considered as a daunting task due to the anatomic and physiologic barriers, the acellular nature of the vitreous humor, and the longer diffusion distance to reach the retina. A great deal of research is being conducted to develop novel strategies for the non-invasive delivery of drugs to treat diseases of the retina. Finally he concluded through his research application of nanotechnology, especially mixed nanomicelles has shown promising results in attaining therapeutic drug concentrations in the retina.

**Dr. Dharshana Joshi, Physicist, Mentor and Social Entrepreneur Founder, VigyanShala** on the topic **Finding Your Tribe and Building a Rewarding Career In Stem** Madam presentation was organised & well framed with photos of her life cycle. introduce the audience to inculcating a growth mind while thinking of long-lasting rewarding' careers in STEM. They will further deep dive into fundamentals of career exploration and the importance of Interdisciplinarity in emerging STEM The audience will also get a sneak peek into Dr Joshi's journey as a first-generation learner going from Delhi Government school to a PhD in Physics at the University of Cambridge and later build Vigyan Shaala to make quality STEM education and career opportunities accessible to historically marginalized communities.

**Dr. Nooruddin Khan, School of Life-sciences; University of Hyderabad,** on the topic **Vaccinology In Covid Era.** sir developed empirically However, persistent challenges with live attenuated vaccines, including safety issues and poor immunogenicity, have sparked a keen interest in looking for alternative vaccine development state that can elicit better correlates of protective immunity. Using approaches, we have been able to develop a tetravalent vaccine formulation against Dengue V Extrapolating the basic adjuvant work, we have developed highly efficient engineered fragment-based therapy for the treatment of COVID-19, which has successfully completed the Phase II trial and is waiting for DCGI emergency approval for commercialization.

After the scientific sessions we moved to experience the real Kanha Shathivanam flavour by learning the techniques of meditation after completing the dinner the session is open for poster evaluation.

**DAY 2 (22-2-23)** Morning 6 am Kanha Shanti Vanam team conducted the yoga & meditation classes for all after that we moved to East Dome dining hall for Breakfast & tea sharp 8.45 am everyone assemble at auditorium for scientific sessions.

**Frederick E. Williams, college of pharmacy and pharmaceutical research university of Toledo** on **modelling zebrafish as a research tool: scope and practice** sir addressed why

Zebra fish has become a model for preclinical work in drug development, toxicology, and relevant in addressing many human diseases including some behaviour. With sequence homology of 70-80% with humans and orthologues of some 80% of proteins found in human disease, zebrafish are an alternative model which can address many questions, produce large amounts of data quickly, while validating disease models and referring potential drugs to mammals for further validation. The animal lends itself well to high throughput screening which allows for statistical analysis of data which is also necessary for validation of many models.

**Ritu Chakravarti, College of Medicine & Life Sciences, University of Toledo Designing Vaccine for Rheumatoid Arthritis.** Rheumatoid arthritis is an autoimmune disorder. 14-3-3z is a protein that is present in every part of the body i.e., intracellular and extracellular and play a major role in rheumatoid arthritis. The animal studies were performed to determine whether loss of 14-3-3z leads to rheumatoid arthritis. The animals were immunized with 14-3-3z during pre-symptomatic phase. This showed protection against inflammation and suppressed the rheumatoid arthritis. Hence 14-3-3z Immunization can be used as a prophylactic vaccine against rheumatoid arthritis.

**R. Jay Ramapuram, Harrison College of Pharmacy, Auburn University on the topic Fabrication of Oro dispersible films using extrusion-based 3D-printing.** 3D printing method in drug delivery is important and useful for personalized medicine. Pneumatic and syringe-based extrusion techniques were used for making ODF films. The model drug used for 3D printing was found to be Sumatriptan Succinate. Hence 3D printing technology saves time in manufacturing and provides quick dissolving ODFs.

**Pia D. Vogel, Department of Biological Sciences, Centre for Drug Discovery, Design and Delivery, Southern Methodist University, Dallas, U.S.A on the topic Combating Multidrug Resistance in Cancer.** Sir computational, biochemical, biophysical and two- and three-dimensional cell culture approaches to identify novel, drug-like molecules that inhibit the pumps and reverse multidrug chemotherapy resistance of either P-GP or BCRP overexpressing cancer cells, independent of cancer type or chemotherapeutic used. Finally, he presents their efforts in determining the biochemical mechanism of inhibition of these novel inhibitors as well as computational methods to further develop the inhibitors.

**Dr Ranga Reddy Burri, Director, Infection Control Academy of India (IFCAI) on the topic One Health Approach to Contain Silent and Havoc-Wreaking Pandemics.** Sir started his concept One Health is a concept that recognizes our dependence on other living things for survival and emphasizes how essential it is to protect them. It focuses on the interconnection of humans, animals and ecosystems to achieve optimal physical wellbeing for all species. This approach has become increasingly relevant due to its ability to address issues such as zoonotic diseases, food safety concerns, antimicrobial resistance, and climate change or pollution. It provides a holistic solution to protecting our planet's future and safeguarding humanity against potential public health crises.

**Gabriele De Rubis, Faculty of Health, University of Technology Sydney, Broadway on the topic Advanced Drug Delivery Systems for The Delivery of Phytochemicals in The Treatment of Respiratory Diseases.** Chronic Respiratory Disorders (CRDs), including Chronic Obstructive Pulmonary Disease (COPD), asthma, and lung cancer (LC), are among the leading causes of mortality worldwide. Cigarette smoking is the main etiologic factor for these ailments, and current therapeutic approaches are limited by poor efficacy and serious adverse effects. Plant-derived molecules (Phytochemicals) are a promising emerging class of therapeutics with potent anti-inflammatory, antioxidant, and anti-fibrotic properties, but their

clinical application is limited by characteristics such as poor solubility, poor permeability, and an unfavourable pharmacokinetic profile. Advanced drug delivery systems are being explored as flexible systems to overcome these limitations. The nano emulsion achieved potent anti-inflammatory and antioxidant activity through downregulation of cytokines and upregulation of anti-inflammatory cytokines. It also restored the expression of transcripts encoding for antioxidant proteins such as Glutamate-cysteine ligase (GCLC) and Glutathione S-transferase P (GSTP1). In a second study, berberine was encapsulated in a monoolein-based liquid crystalline nanoparticle formulation (BM-LCNs) and tested against transforming growth factor-B (TGF-B)-stimulated human bronchial epithelial cells (BEAS-2B). BM-LCNs significantly counteracted re modelling features induced by TGF-beta such as enhanced cell migration and dysregulated expression of proteins driving the re modelling process. This work provides a blueprint towards the development of effective treatment strategies to target respiratory diseases, ultimately providing a new direction to pulmonary clinics.

Finally after poster evaluation we assemble in auditorium for, most Awaited event of conference for student i.e Gala Dinner all of us wore Black dress code as instructed by organisers and enjoyed the flavour Indian music with instruments by Grand **Symphony and orchestra team of TSWREIS students, this is the one place where students interacted with speakers of various countries for their future plannings.** After gala dinner we went back dome for rest.

**Day 3 (23-2-23):** All faculty members were assembled in Kanha Yoga Centre for back strengthening yoga exercises by Kanha shanti vanam organisers at 7 am till 8.45 am. After a healthy breakfast all of us assembled at auditorium.

**Dr. Rakesh Misra, from CCMB** on the topic **Genome and environmental surveillance to one health.** Sir has explained about the importance of genomic and environmental surveillance in SARS COV - 2. The samples were collected from sewage water and air from various cities in India to understand the genetic similarity, to track the spread of virus and to determine the genetic code of variants. Hence the environmental surveillance plays a great role to control public health during pandemic.

**Dr. Sneha Deshpande, Heartfulness Wellness - CME & Divya Janani Heartfulness Institute, India division** on the topic of **Becoming a better version of yourself The Heart - Brain Connection.** What is the need to change is natural for any being in the universe, and each of us has infinite potential. To design the destiny of humanity, we need to start with ourselves and expand our consciousness to include others. We are endowed with two beautiful instruments - the Heart and the Brain - which serve as a compass to lead us from within.

**Valedictory session** was concluded by the convenor of conference and out of 6 best posters SNVPMV received best 3 Posters for Deepthi shika B. Pharm III yr, Shikha Mahathi from PharmD V yr & Rakshitha Pharm D II yr. With lots of flying colours and boosted inspiration we moved to lunch.

After a delightful lunch we moved to vacate the Dome and boarded the bus at 3 pm from Kanha Shanti Vanam reached to college at 5 pm.

**List Of Poster Presentations-Faculty & Students at Biome -2023**

<b>Name Of the Student\Faculty</b>	<b>Student\Faculty</b>	<b>Code</b>	<b>Date Of Presentation</b>	<b>Title</b>
Leemol Vergese	Faculty	Op-2	21-2-23	Anti-Arthritic Study of An Endemic Plant to Western Ghats of India: Sarcostigma Kleinni
B. Shivani	Student	Op-5	21-2-23	Multiple Uterine Fibroid with Retroverted Uterus in Post-Menopausal Women-Case Study and Literature Review
Siddra Tabassum	Student	Pp-94	22-02-2023	Prescribing Patterns Emergency Drugs in Emergency Department
Ayesha Fatima	Student	Pp-100	22-02-2023	Tetralogy Of Fallot
Sidra Najam	Student	Pp-57	21-02-2023	Case Report of Transvaginal Septum Manifested By Haematocolpus
P.S.Swetha	Student	Pp-75	21-02-2023	Brucellosis-An Infectious Disease
G.Spandhana	Student	Pp-19	21-02-2023	Chronotherapy-Medical Approach
D. Deepthi Shika	Student	Pp-131	22-02-2023	Dtitutedesign And Synthesis of Novel Heterocyclic Substituted Benzimidazole Analogs As Potential Analgesic And Anti Inflammatory Agents
Deeksha Gaikwas	Student	Pp-114	22-02-2023	Preparation And Characterization of Barbaloin Phytosome
Nanapuram Sri Varchana	Student	Pp-121	22-02-2023	Medicated Sweets and Their Therapeutic Benefits –A Review
Chukka Radhika	Student	Pp-113	22-02-2023	Marine Bio Pharmacy – Unexplored Treasure
Farha Hashmi	Student	Pp-117	22-02-2023	Evaluation Of Anti-Arthritic Activity of Zanthoxylum Armantum Leaves Onformalin Induced Arthritis In Albino Rats
B. Megharshini	Student	Pp-81	22-02-2023	Caroli's Disease - A Case Report & Literature Review
Diksha Gupta	Student	Pp-101	22-02-2023	Evaluation of the Clinical Outcomes of Myoinositol, Metformin And Hormonal Drugs Alone And In Combination On Metabolic And

				Hormonal Profile In Women With Pcos: A Prospective Observational Study
Gouda Spandana	Student	Pp-21	21-02-2023	A Case Study on Meconium Aspiration Syndrome
K.Tejasvi	Student	Pp-85	22-02-2023	Analysis Of the Prescribing Patterns of Antibiotics In Tertiary Care Hospital: A Prospective Study
Kendre Deepika	Student	Pp-11	21-02-2023	Evaluation of Impact of Guideline Directed Medical Therapy in Heart Failure Patients with Reduced Ejection Fraction
Maheshwaram Divya	Student	Pp-89	22-02-2023	Assessment of the Clinical Utility Of Targeted Therapy In Human Epidermal Growth Factor Receptor-2 Positive Breast Cancer-A Prospective Study
Nalla Sanjana	Student	Pp-38	21-02-2023	Study On Acute Rejections in Immediate Post Renal Transplantation Period: Epidemiology & Etiology
Sai Shruti Addala	Student	Pp-53	21-02-2023	A Case Series on Pathomechanism of Acute Rejections Immediate Post Renal Transplant
Shika Mahathi	Student	Pp-56	21-02-2023	A Case Series on Pathomechanism of Acute Rejections Immediate Post Renal Transplant
Vemula Manusha	Student	Pp-66	21-02-2023	A Puff of Smoke Tiny Vessel Disease - Case Report on Moya Moya Disease
K. Lakshmi Bhavana	Student	Pp-138		Will Artificial Intelligence Replace Humans in Healthcare?
Aastha Singh	Student	Pp-69	21-02-2023	Twins Study on Human Health in Space
Adike Shravani	Student	Pp-1	21-02-2023	A Case Study on A Rare Condition: Uterus Didelphy
Bashakarlaorm ila Preethu	Student	Pp-6	21-02-2023	Bionic Leg
Etaboina Laxmi	Student	Pp-14	21-02-2023	Limb Length Discrepancy
Guthulasarayu	Student	Pp-18	21-02-2023	Winged Scapula: A Case Report
M. Rakshitha	Student	Pp-30	21-02-2023	A Case Study of Congenital Porencephaly

Miriyala Neha	Student	Pp-34	21-02-2023	Alice In the Wonderland Syndrome: A Case Study
Nomithamedhab yreddy	Student	Pp-40	21-02-2023	Temporomandibular Joint Disorders Prevalent in The Younger Age Population
S. Ravalika	Student	Pp-52	21-02-2023	Laughing Death (Kuru)
V. Nikita Shree	Student	Pp-62	21-02-2023	A Case Study on The Stone Baby (Lithopedion)
Vodnala Sai Malavya	Student	Pp-67	21-02-2023	Budd Chiari Syndrome – A Case Study of Covid-19 Pneumonia

<b>Name Of The Student</b>	<b>Course/Year</b>	<b>Code</b>	<b>Date Of Presentation</b>	<b>Title</b>
Dr.K.Neelima	Faculty	Bb309	22/02/2023	Development and Validation of A Derivative Spectrophotometric Method For The Estimation of Imeglimin In Bulk And Pharmaceutical Dosage Form.
Afsha Tabassum	Student	Pp 107	22/02/2023	Aluminium Phosphide Poisoning: A Case Report & Literature Review
Akanksha Kathikar	Student	Pp 02	21/02/2023	Meta Analysis of Novel and Classic Elephant Trunk Procedures in Thoracic Aortic Disease
Sahaja Asthapuram	Student	Pp 123	22/02/2023	Assessment Of Anti Diabetic Activity of Ethanolic Extract of Bark of Solanum Nigrum in Alloxan Induced Diabetes in Rats
B. Geetanjali	Student	Pp 20	21/02/2023	Cholangiocarcinoma: Case Report and Brief Review of The Literature
Gauri Diggikar	Student	Pp 137	22/02/2023	Non - Steroidal Anti - Inflammatory Drugs Induced Ischemic Colitis - A Case Report
Kaveri Jada	Student	Pp 26	21/02/2023	Clinical Presentations of Breast Disorders in Pregnancy and Lactation
Jakkala Manisha	Student	Pp 118	22/02/023	Evaluation Of Anti Cancerous Effect and Anti-Oxidant Effect of Bark of Dalbergia Latifolia Against Ehrlich Ascites Induced Tumour Models In Mice
Kolan Manisha	Student	Pp 29	21/2/2023	Acute Promyelocytic Leukaemia
K. Bhuvaneshwari	Student	Pp 119	22/02/2023	Evaluation of Anti Diabetic Activity of Alcoholic Extract of Roots of Solanum Nigrum in Rats
Misbha Fatima	Student	Pp 35	21/02/2023	Guillain-Barre Syndrome: Case Report on A Rare Complication
Panakanti Sharvani	Student	Pp 43	21/02/2023	A Case Study on Iga Nephropathy
Jyothsna Pillalamarri	Student	Pp 23	21/02/2023	Couvade Syndrome
Vaishali Suragalla	Student	Pp 63	21/02/2023	Management of Restless Legs Syndrome in Pregnancy and Lactation



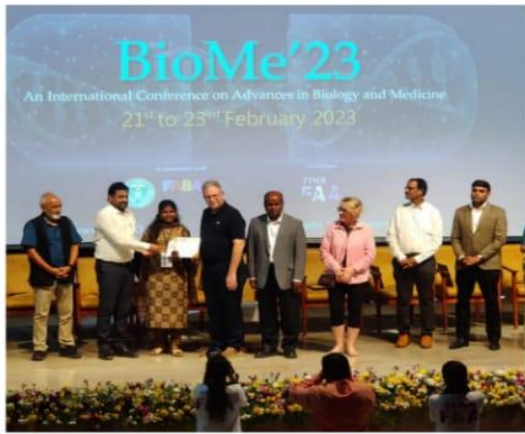
S.Nikitha	Student	Pp 55	21/02/2023	A Comparative Analysis on Betel Nut, Tobacco and Alcohol; Risk Factors of Oral Cancer; A Prospective Analysis
Yelumala Euvani	Student	Pp 15	21/02/2023	Achard Theirs Syndrome
M.Spandana Brighty	Student	Pp 104	22/02/2023	A Prospective Observational Study on Potentially Inappropriate Medication in Cardiology Outpatient in Geriatrics Using Stop/Start Criteria











## POSTER PRESENTATIONS



