



vigyaan tantragyaan anuvaadan

DEPARTMENT OF SCIENCE AND TECHNOLOGY

NITTE UNIVERSITY TECHNOLOGY ENABLING CENTRE



DST NU-TEC Chronicle | June to September 2021 र्यानहरू 01 13 vigyan prasaran Science outreach Hands on training workshop on molecular techniques maarga darehan 16 Ideation drive - 2021 Handholding professionals Collaborative meetings with Industry ข่าสีเปลา इลलिक्षेत्रवा द्रुप्ववत इवतपुरावित 07 18 Networking Experts speak tec karyakarta 11 19 इamman International recognition Members of TEC



HANDS ON TRAINING WORKSHOP ON NUCLEIC ACID BASED MOLECULAR TECHNIQUES

21 -25 September 2021

Skill in molecular techniques is very important for translational research as well as for biotechnology-based industries. To contribute to skill enhancement in this area, a five-day hands-on training workshop on molecular techniques was conducted for the undergraduate students during the period of 21 -25 Sept 2021 number of students participated. The course was divided into modules, each organized by a faculty member with an expertise in the area. Comprehensive background lectures were coupled with extensive hands-on experience. The modules focused on basic methods of nucleic acid extraction, conventional PCR, RT PCR, Multiplex PCR, qPCR, LAMP, cloning and expression, DNA finger printing techniques describing both the uses and limitations of these techniques, and comparing the methods with others that yield similar information. A user-friendly training manual was designed for the students for the laboratory session that included all the protocols. The practical sessions focused mainly on developing technical skill and accuracy. Discussion session at the end of the day focused on the importance of each step in the procedure, approaches to troubleshoot during experiment, critical analysis on how, where and when each kind of technique can be put to use. The trainees were provided with certificates in a short valedictory ceremony.











IDEATION DRIVE - 2021 Health and Allied Sciences

DST Technology Enabling Centre in association with the Institution Innovation Council, Nitte (DU) initiated an ideation drive to translate the ideas to technology through innovation. Best selected ideas will get a prize, mentoring support, boot camp training, start up grant support, and business development support

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24 September 2021 to 15 November 2021

Process

Phase 1: Identification of the problem

Phase 2: Discussion of the selected problems

with peers from the domain to develop possible solutions

Phase 3: Development of teams for addressing

the problems and possible solution

Phase 4: Review by the experts

Target Domains

Healthcare: Medical devices, diagnostics, therapeutics, nutrition, drug discovery, development of vaccines, maternal & child health, infectious diseases, Covid-19, rare and neglected diseases, patient care and safety, water & sanitation, solid waste & bio waste management

<u>Digital Health</u>: Artificial Intelligence & Machine Learning, imaging, wearables, IT in healthcare and other related sub-domains





▶ ನಿಟ್ಟೆ ವಿವಿ: ಆರೋಗ್ಯ ಮತ್ತು ಸಂಬಂಧಿತ ವಿಜ್ಞಾನಗಳಲ್ಲಿ ಐಡಿಯೇಶನ್ ಡ್ರೆವ್ ವಿಮರ್ಶಾತಕ ಚಿಂತನೆ ಅಗತ್ಯ: ಡಾ। ಸತೀಶ್ ಕುಮಾರ್ ಭಂಡಾರಿ

ಕಡಿತಗೊಳಿಸಲು ಸಳೀಯ ಆವಿಷಾರವನು ಪ್ರೋತ್ಸಾಹಿಸಬೇಕು ಎಂದು ನಿಟ್ಟೆ ವಿವಿ ಕುಲಪತಿ ಡಾ। ಸತೀಶ್ ಕುಮಾರ್ ಬೆಂಡಾರಿ

ದೇರಳಕಟೆಯ ಕಿ.ಎಸ್. ಹೆಗ್ಗೆ ಆಸತ್ತೆಯ ಚಿಂತನೆ ಸಭಾಂಗಣದಲ್ಲಿ ನಿಟ್ಟೆ ವಿವಿ ಆಶ್ರಯದಲ್ಲಿ ನಡೆದ ಆರೋಗ್ಯ ಮತ್ತು ಸಂಬಂಧಿತ ವಿಜ್ಞಾನಗಳಲ್ಲಿ ಐಡಿಯೇಶನ್ 2021 ಕಾರ್ಯಕ್ರಮದಲ್ಲಿ ಭಾಗವಹಿಸಿ ಮಾತನಾಡಿ, ಶೇ. 80ಕ್ಕಿಂತಹೆಚ್ಚು



ಎಂದರು.

ಕಾರ್ಯಗತಗೊಳಿಸುವ

ಯನ್ನು ಪರೀಕ್ಷಿಸಬೇಕು. ನಾವು ಆರೋಗ್ಯ

ಅತ್ಯುತ್ತಮ ಪರಿಹಾರವಾಗಿದೆ. ಇದನ್ನು . ವೈದ್ಯಕೀಯ ಸಾಧನಗಳನ್ನು ವಿದೇಶಗಳಿಂದ ಸಾಧ್ಯವಾಗಿಸಲು ಐಡಿಯೇಶನ್ ಶಿಜಿರಗಳು ಕಾರ್ಯಗತಗೊಳಿಸಲು ಮೌಲ್ಯಯುತ ಆಮದು ಮಾಡಿಕೊಳಲಾಗುತ್ತಿದೆ. ಇದು ಆಗತ್ಯ ಆರೋಗ್ಯ ಪರಿಣತಿ ಹೊಂದಿರುವ ವಾದ ಆಲೋಚನೆಗಳ ಕಾರ್ಯ ಸಾಧ್ಯತಿ ದ್ಯಾನಿಲಯಗಳು ವಿದ್ಯಾರ್ಥಿಗಳು ಉತ್ಪನ್ಗಳನ್ನು ಮತ್ತು ಬೋಧನ ವಿಭಾಗದ ಕೌಶಲಾಭಿವೃದ್ಧಿ ಸೌಲಭ್ಯ ಗಳೊಂದಿಗೆ ವ್ಯವಹರಿಸುವಾಗ

ಅಂಶಗಳಲ್ಲದ ತಂತ್ರಜ್ಞಾನಗಳು ಹೆಚ್ಚಿನ ಪ್ರಯೋಜನಗಳನ್ನು ನೀಡಲಾರವು ಎಂದು ಅವರು ಹೇಳಿದರು

(ಐಐಸಿ) ಅಧ್ಯಕ್ಷ ಪ್ರೊ! ಜಿ. ಶ್ರೀನಿಕೇಥನ್ ಅಧ್ಯಕ್ಷತೆ ವಹಿಸಿದ್ದರು. ನಿಟ್ಟಿ ವಿವಿ ವಿಭಾಗದ ಸಲಹೆಗಾರ ಪ್ರೊ ಇಡ್ಡಾ ಕರುಣಾಸಾಗರ್ ತಿಬಿರದ ಒಳನೋಟಗಳನ್ನು ನೀಡಿದರು. ಸಂಸ್ಥೆಯ ಕ್ಷೇಮಾ ಇನ್ನೋವೇಶನ್ ಕೌನ್ಲೆಲ್ (ಐಐಸಿ ಸದಸ್ಯ ಶಶಿಕುಮಾರ್ ಶೆಟ್ಟಿ ಪ್ರಸ್ತಾವಿಸಿದರ ನಿಟ್ಟಿ ವಿ.ವಿ. ಸಹಾಯಕ ಎಂಜಿನಿಯರ್ ಅರ್ಜುನ್ ಪೂಂಜ ವಂದಿಸಿದರು



Register your ideas here

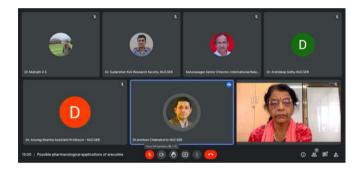


ENABLING PROJECT FORMULATION TO MEET THE INDUSTRY REQUIREMENTS

21 June 2021

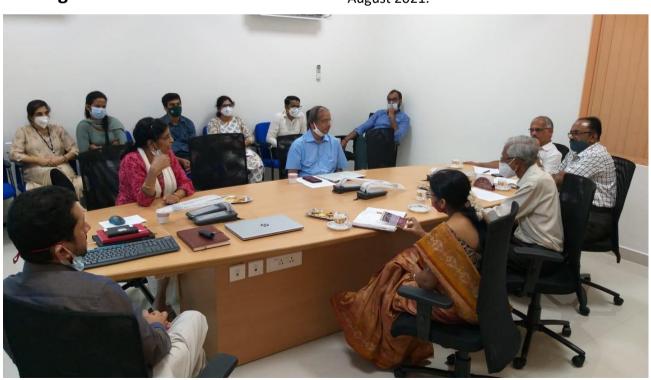


23 June 2021



17 August 2021

Series of discussions were held with industries, D.K , Karnataka CAMPCO development of projects to evaluate the potential anti-cancer property of certain components of areca using three different model systems: zebrafish, drosophila and cell lines. The research will be carried out at Nitte University Centre for Science Education and Research and will be funded by CAMPCO industries. The Community Dentistry Department of ABSMIDS will collect field data on the association between exclusive areca chewing and non-areca associated oral cancer. The entire project has been mentored and facilitated at DST NU-TEC by Prof Indrani Karunasagar and Prof Iddya Karunasagar along with the concerned scientists of NUCSER. This project would be highly significant to the agriindustry as areca is an economically important cash crop in several districts of Karnataka. The project plan was presented to the team from CAMPCO comprising Mr Kishore Kumar Kodgi, President, Mr HM Krishna Kumar, MD, Dr Keshav Bhat, scientist and Mrs Reshma Mallya, GM on 17 August 2021.



The core project investigators

- Dr Anirban Chakraborty, Division of Cancer Biology, NUCSER
- Dr Anurag Sharma, Division of Toxicology, NUCSER
- Dr Sudarshan Kini, Division of Nanotechnology, NUCSER
- Dr Audrey, Dept of Community Dentistry ABSMIDS









Research needed to prove if areca alone without any additives is carcinogenic



| ವೇಣುವಿನೋದ್ ಕೆ.ಎಸ್. ಮಂಗಳೂರು

ಅಡಕೆಯಲ್ಲಿ ಕ್ಯಾನ್ಸರ್ ಕಣಗಳನ್ನು ತಟಸ್ಪಗೊಳಿಸುವ ಗುಣಗಳಿವೆಯೇ ಹೊರತು ಅಡಕೆ ಎಂದಿಗೂ ಕ್ಯಾನ್ಸರ್ ಕಾರಕವಲ್ಲ! ಹೀಗೊಂದು ವೈಜ್ಞಾನಿಕ ಆಧಾರಗಳನ್ನು ರೂಪಿಸುವ ನಿಟ್ಟಿನಲ್ಲಿ ಕ್ಯಾಂಪ್ಯೊ ಹೆಚ್ಡೆ ಇರಿಸಿದೆ. ಮುಂದೆ ಅಡಕೆಗೆ ಬರಬಹುದಾದ 'ಅಪಾಯಕಾರಿ' ಎಂಬ ಹಣೆಪಟ್ಟಿಯನ್ನು ವೈಜ್ಞಾನಿಕವಾಗಿ ಎದುರಿಸುವುದಕ್ಕೆ ಬೇಕಾದ ಸಿದ್ಧತೆ ಇದಾಗಿದೆ. ಈ ಪ್ರಯತ್ನವಾಗಿ ನಿಟ್ಟೆ ವಿಶ್ವವಿದ್ಯಾಲಯದ ವಿಜ್ಞಾನಿಗಳೊಂದಿಗೆ ಸಂಶೋಧನೆಗೆ ಒಪ್ಪಂದ ಮಾಡಿಕೊಳ್ಳಲಾಗಿದ್ದು, ಝೀಬ್ರಾ ಮೀನುಗಳ ಮೇಲೆ ಪ್ರಯೋಗ ನಡೆಯಲಿದೆ. ನಿಟ್ಟೆ ವಿವಿಯ ತಜ್ಞರಾದ ಡಾ. ಇಡ್ಯಾ ಕರುಣಾ ಸಾಗರ್ ಲ್ಯಾಬೊರೇಟರಿ ಇವಾಲ್ಯುವೇಶವ್ ನಡೆಸಲಿದ್ದಾರೆ. ಇದಕ್ಕಾಗಿ ಕ್ಯಾಂಪ್ಕೊ 25 ಲಕ್ಷ ರೂ. ವೆಚ್ಚ ಮಾಡುತ್ತಿದೆ.



Enabling Project and Product Development for Industries



TEC in discussion with founders of 'ANTIDOTE' industry, New Delhi on technology for vegan products – 20 July 2021



Handholding 'TEAM AQUAPONICS and PROSPEX' for a BIG grant proposal development on Nano bubble generation for aquaculture facility - 03 September 2021

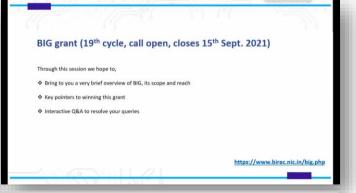


TEC mentors 'AQUAPONICS and PROSPEX' on development of project on aquaponics for Promoting Academic Research Conversion to Enterprise (PACE) grant



Consultancy provided to 'NOM' Piyush Pandey, from Thane Maharashtra on development of various nutraceuticals – 23 September 2021





DST TEC joins hand with SINE: **Society for Innovation and Entrepreneurship** (SINE), IIT Mumbai in collaboration with DST NU-TEC and other ecosystem partners organized a guidance session for potential applicants of DBT '**BIG**' grant on 25 August 2021 which included an overview of the application process, suggestions on how to write a winning grant and key points for the evaluation at every stage.



Registration link: https://form.jotform.com/211451477392457

On the occasion of World environment day, an oration on Biological Diversity Act -2002 (BDA) was organized by DST NU-TEC. Dr Satheesh Kumar Bhandary, Vice Chancellor, Nitte (DU) in his opening remarks to the participants stressed on the need to preserve biodiversity for posterity and ecological balance in nature. He explained the strides made by Nitte University in their continued attempts at achieving carbon neutral campus. In her oration, Dr B Meenakumari, Former chairperson, National Biodiversity Authority, Govt of India and DDG (Fisheries), ICAR enlightened the audience about Biodiversity with a focus on laws applicable to various issues of interest to biomedical scientists such as Intellectual Property Rights (IPR), international collaboration and transfer of clinical and biomedical materials. She impressed upon the students, scientists, industrialists and academicians the importance of abiding by the act and laws and reminded one and all on the serious legal implications of trespassing. On this environment day within the theme 'Reimagine. Recreate. Restore' she appealed to all to understand the value of biodiversity as it helps in ecosystem restoration. In summary, she presented an updated checklist to researchers on how to conduct research involving various biological resources obtained from nature, various sector specific training and awareness programmes through government initiatives. The virtual session was moderated by Dr Indrani Karunasagar, and coordinated by Dr Smitha Hegde.

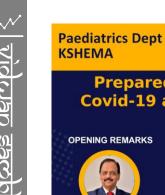
YouTube link: https://youtu.be/I1IsHYdH9sE

Biological Diversity Act - 2002 Challenges in implementation

05 June 2021

India meaa biodiversity hotspot and one of the oldest and biggest repositories of biological and resources with genetic ethnobotanical information and associated traditional knowledge. Today, biodiversity degradation is alobal challenge and accompanied by an irreversible damage. The lack of awareness, sectorial issues. lack cooperation from stakeholders and lack of enforcement mechanisms undermines the act's intent and spirit. Academicians could play a role by involving citizens and creating awareness about the various environmental acts, disseminating information legal institutional on and instruments, economic incentives and plans of the government to protect biodiversity.







DST NU-TEC

Preparedness for the third wave of Covid-19 and prioritisation of children

OPENING REMARKS







Date: June 25, 2021 Time: 9.30 am - 11 am

Nitte DII

Topics to be discussed:

- 1. The spectrum of pediatric Covid-19
- 2. Pediatric Covid-19 in office practice and updates on vaccines
- 3. Preparedness for third wave National and State perspective

MODERATOR



Preparedness for the third wave of Covid-19 and prioritisation of children

25 June 2021

A Webinar on "Preparedness for the third wave of Covid-19 and prioritisation of children" was organized on 25 June 2021 by the Dept of Paediatrics, KSHEMA and facilitated by DST NU-TEC. Prof Dr Satheesh Kumar Bhandary, Vice-Chancellor, Nitte (DU) in his opening remarks complimented the Department of Paediatrics for the choice of a very apt topic as the country is currently in the grip of the pandemic and the dreaded consequences should it affect the children. He further stated that the vaccination drive and guidelines from the government to manage the pandemic is being updated frequently and preparing ourselves for a possible Covid-19 third wave is of utmost importance to prevent the morbidity and mortality. Speakers of the webinar included Dr Santhosh Soans, Past National President, Indian Academy of Paediatrics, and Head of Paediatrics, A.J. Medical College, Mangalore, Dr Swathi Sunil Rao, Associate Professor, Dept of Pediatrics, KSHEMA, Mangalore and Dr Rohit Bharadwaj, Consultant pediatrician, SMART academy, Chennai . Prof. Dr. Indrani Karunasagar, Director, DST NU-TEC welcomed the resource persons and the participants, delving on the urgency to prevent a third wave. The event was coordinated and moderated by Dr Rathika Shenoy, an excellent clinician and Head of Paediatrics, KSHEMA.

YouTube link: https://www.youtube.com/watch?v=I7cdZz33Y9IZ

As per the survey of the first and second wave of Covid-19, children formed a small group (3-4%) of the total Covid-19 cases with 60-70% cases being asymptomatic as seen at the global level. The reasons could range from reduced viral copy numbers they are exposed to differential expression of ACE2 receptor as compared to adults.





Children need to be tested to lessen the spread and even an iota of suspicion should lead them to seek medical attention without any delay. Asthmatic children may not be prone to Covid-19 infection due to other compounding medications and conditions such as steroid treatment, lower IFN production and inverse relation of the allergic sensitization with ACE2 receptor. Parents should not be in denial and addressing the problem early will ensure recovery and less spread.

Continuing Covid reinforcing behaviour, isolating the children from infected individuals, vaccination, uplifting the resources, recruitment and training of health care workers are the main strategies to tackle the third wave. As a a member of Covid-19 taskforce of the district I would urge all practitioners treating children to be watchful for any signs or symptoms of Covid-19 to help manage and to prevent the predicted third wave.





Ethics in
Biomedical
and Health
Research:
Perception
and
Practice

05-08 July 2021

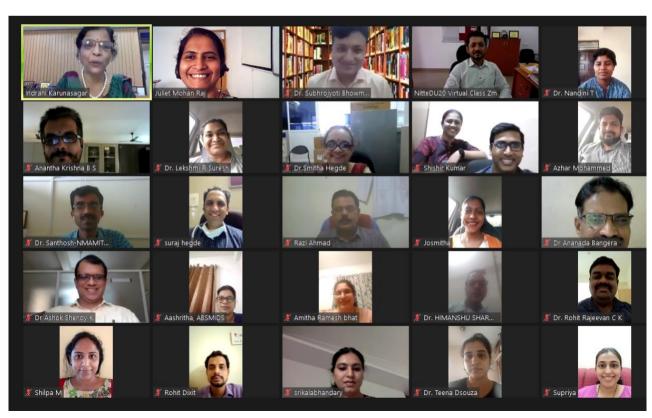
DST NU-TEC & NUCSER hosted a National training workshop on Ethics in Biomedical and

Health Research: Perception and Practice from 5 - 8 July 2021 with a record registration of >1000 candidates from all over India including few members from outside the country reflecting the utility of knowledge expected to be accrued through this programme. Responsible conduct of research is the need of the hour. Dissemination of vital information on all aspects of research is of paramount importance and this workshop is aimed at being an eyeopener to beginners and others involved in biomedical, pharmaceutical and clinical research including trials, each of which is guided by ethical principles. Prof Dr Satheesh Kumar Bhandary, Vice-Chancellor, Nitte (DU) threw open the workshop with his ingenuity and remarks on the rapid advances in the field of medicine and biomedical sciences. All of this, he said opens a plethora of ethical questions on why, when, how, where and what of research adding newer dimensions of responsibility and complex dilemmas for both medical practitioners and researchers. The key speakers of the webinar were Dr Nandini Kumar, Former DDG Sr Grade (ICMR), Vice President FERCI, Dr Animesh Jain, Professor of Community Medicine, KMC Mangalore, Dr Ashok Shenoy Professor of Pharmacology, KMC Mangalore, Dr. Chakrapani M, Professor of Medicine, KMC Mangalore, Dr Ramachandra S.G, Director ICMR- National Animal Resource facility for Biomedical research, DHR Hyderabad, Dr Subhrojyoti Bhowmick, Clinical Director, Peerless hospital & B K Roy Research Center, West Bengal, Dr Iddya Karunasagar, Advisor (Research and Patents), Nitte (DU), Dr Indrani Karunasagar Director, DST NU-TEC and Dr Anirban Chakraborty Director, NUCSER.

Core topics presented and discussed in the workshop included:

- Snippets of Ethical Issues in Academic research
- ICMR Guidelines 2017: General Ethical Issues
- Ethical issues in Biological Material Transfer, and Biobanking Data sets
- ICH Good Clinical Practice Guidelines E6 R(2)
- Ethical Guidelines for Research involving human Subjects including Minors and Vulnerable, Informed consent
- Ethical Issues in Academic Vs Industry Sponsored Clinical Trials
- Public health Research Ethics, Medical Devices 2017
- Ethics in Use of Animals for Biomedical Research
- New Drugs and Clinical Trial Rules 2019
- Serious Adverse Event Reporting Timelines and Compensation for Research Related Injury
- Ethical Issues in Vaccine Development and Trials, Responsible Conduct of Research.
- Responsible Conduct of Research
- Publication Ethics
- Dual Use of Research Concern

The webinar was coordinated and moderated by Dr Smitha Hedge, Dr Anirban Chakraborty, Dr Krishna Kumar and Dr Juliet Mohan Raj. The four-day training workshop had 1042 registrants across the globe and e-certificates were given to the participants based on their attendance and MCQ performance at the end of the workshop.



Strengthening National Food Safety SystemChallenges in the era of Covid19

07 June 2021

An oration on "Strengthening National Food Safety Systems - Challenges in the era of Covid19" was organized by DST NU-TEC on 07 June 2021 commemorating the World Food Safety Day. Dr Alan Reilly, Advisor, WHO and Adjunct Professor at University of Dublin, graced the occasion by an oration appropriate for the event. Dr Indrani Karunasagar, Director Projects and DST NU-TEC accorded a cordial welcome to the speaker and introduced the theme of the webinar to the participants. Dr Iddya Karunasagar, Advisor, Research and Patents Nitte (DU) introduced the speaker, Dr Alan Reilly, who has been a professional and personal friend for over three decades. In his Viceopening remarks, the Hon'ble Chancellor, Nitte (DU) Dr. Satheesh Kumar Bhandary, exalted the role of the United Nations in ensuring food and nutritional all the developing underdeveloped nations of the world. He complimented the TEC for bringing a world class eminent scientist cum bureaucrat to deliver an oration at Nitte (DU). The event was attended by faculty, students, food industry representatives and scientists from across the country.



Registration link: https://form.jotform.com/211462332891453

Dr Alan Reilly, Advisor WHO and CEO, FSA, Ireland spoke about the challenges posed by COVID-19 outbreak on the National food safety systems and how the pandemic is impacting the private and government food sectors. He recognized the need to develop new food strategies and highlighted the steps taken by the WHO and FAO to prepare a Global strategy for food safety (2022-2030). He stressed the importance of occupational health and safety measures that are essential for ensuring COVID-19-free food processing. He deliberated on the possible sources of SARS-CoV-2 exposures in food processing environment and suggested strategies to reduce the risk of transmission in working environment. He foresaw the emergence of zoonotic diseases and antimicrobial resistance as major public health issues and forewarned those involved to have a one health approach for a better alignment in areas of food, human health, animal health, and environment. Such an approach is key to managing risks at the human-animalenvironment interface and could help tackle this pandemic as well as predict, manage and halt the emergence of similar or worse challenges in the future.





World Food Safety Day celebrated at Nitte University, India, with an oration by Prof Alan Reilly

11/06/2021

As a multidisciplinary University offering a Masters Programme in Food Safety and Biotechnology, Nittle University in Mangalore considered it very important to highlight the importance of food safety by celebrating World Food Safety Day on 7 June 2021. The highlight of the celebration was an oration by Professor Allow Reful Safety and the Architectural Food Safety Association (Safety Safety).

Source: Snap shot from codex Alimentarius website



National authorities need to identify and prioritize critical areas of work in food sector and establish Food Safety Emergency Response Plans. There is a requirement of a robust contingency plan for communication i.e. having dedicated websites and food industry liaisons on food related risks as the integrity of food supply chain is vulnerable to food frauds during pandemic.

Covid-19 is not transmitted by food, says WHO expert

MANGALURU, DHNS: "Food has not been implicated in the transmission of Covid-19," former CEO of Food Safety Authority of Ireland and WHO expert Prof Alan Reilly stressed, while delivering the Nitte University's 'World Food Safety Day Oration - 2021',

Prof Alan Rielly spoke on 'Strenthening National Food Safety Systems—Challenges in the Era of Covid-19'.

He outlined the theme of 'World Food Safety Day 2021 - Safe Food Now For A Healthy Tomorrow' and explained how food safety is a shared responsibility of all operators in the foodchain from primary production to final consumption. He elaborated food safety challenges during Covid-19 particularly with evidence coming regarding the role of aerosols in spread of SARS CoV2 and the associated risks to food processing personnel. He emphasised that food has not been implicated in transmission of Covid-19.

Prof Alan Reilly also spoke about the importance of adopting one health approach involving medical, veterinary and environmental specialists in managing food safety issues in the context of emergence of zoonotic diseases as a major public health issue.

Nitte University Vice Chancellor

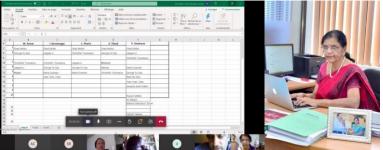
Dr Satheesh Kumar Bhandary highlighted the challenges for implementing food safety in India and measures being taken in the University to ensure that safe and nutritious food is delivered to the students residing in hostels in the University campus.

The event was organised under the Technology Enabling Center funded by the Department of Science and Technology, Government of India. Dr Iddya Karunasagar, advisor, Research, highlighted the importance being given to food-related technologies in the Technology Enabling Center and the relevance of World Food Safety Day.

TEC GOES INTERNATIONAL



Dr Iddya Karunasagar has been appointed as a member of WHO Advisory Group on Critically important Antimicrobials for Human Medicine for a period of three years.



The five member expert international jury of UNESCO nominated for a 6 year term comprising Prof Dr. Indrani Karunasagar, India, Prof Dr Vincent Titanji, Cameroon, Prof Dr Wagida Anwar, Egypt, Prof Dr Umaharan, West Indies and Prof Dr Constantino Phanis, Cyprus met to select awardees for the Equatorial New Guinea International life Science prize of UNESCO

SCIENCEBroadcast

Covid-19 awareness to general Public



Prof Dr Iddya Karunasagar was interviewed for his expert opinion on the topic 'A gain of function project in Covid-19 context' which streamed in India Ahead - 01 June 2021

YouTube link



Prof Dr Iddya Karunasagar was interviewed for his expert opinion on delta plus variants of Covid-19 which streamed in Digvijay 24X7 - June 23 2021

YouTube link



Prof Dr Iddya Karunasagar was also interviewed for his opinion on outbreak of Covid-19 cases in Kerala which streamed in Digvijay 24X7 - 09 July 2021

Miyawaki Urban Forestry Project

The geotagging of nearly 600 saplings that were planted at the Government Higher Primary School Golithattu near Nelyadi, was done as a part of a study to compare a normal forest with the Miyawaki forests or the urban forests that are gaining popularity across India. Dr Smitha Hegde and her team at TEC are assisting the local communities to evaluate the viability of Miyawaki forestry project with use of technology. They geo-tag the trees using precision GPS and monitor their growth over a period of time. They also measure the height and girth of the trees in progression to evaluate their carbon sequestering capacities. Geographical tagging, also known as geotagging, is the adding process of geographical identification data. This data consists of latitude and longitude coordinates. The coordinates could then be used to identify the geo-tagged tree and monitor them through satellite. Smitha Hegde has also authored a paper and submitted it to the Indian forester about Miyawaki forests in Mangaluru. Currently, she has data of more than 3,000 trees.



The need for community involvement in societal projects



Dr Smitha and the team conducting field work: 03 September 2021

Miyawaki Urban forestry is a recent trend in urban afforestation. This style of tree planting facilitates high density planting of native trees in a distance of one to two feet between the trees. The trees planted in this style are fast growing and demonstrate upright growth in competition with each other.

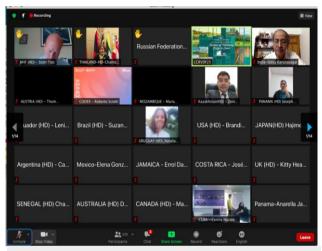


"We have already geo-tagged two Miyawaki forests near Konaje and Mangaladevi and two regular forests developed in a crematorium. Since these sites are in the urban area, we decided to take up the geotagging along with a normal forest so that we have a comparison of the urban and rural areas. The purpose is to see if Miyawaki forests actually grow faster and suit the Indian condition. Since they are planted so close together, I am interested in understanding their synergy and the tree to tree talk, how different species behave when they are together or apart. Maybe, in the future if someone wants to take up Miyawaki, we can give them data on the species that grow well. We are trying to generate some data, and find out if it truly works and if it works, what is the right combination and want to compare the data for a period of 10 years."





Prof Dr Iddya Karunasagar was an invited speaker in the webinar to commemorate world food safety day on 07 June 2021 on the topic Promoting Food Safety and Human Health. He reminded the participants that food safety is a shared responsibility and every individual has a responsible role.



The 25th Session of the Codex Committee on Residues of Veterinary Drugs in Foods (CCRVDF) conducted a virtual seminar during 12-16 July 2021 which included 400 delegates from 186 Codex member countries. Prof Dr Iddya Karunasagar was nominated as part of the Indian delegation

Prof Dr Iddya Karunasagar, delivered an expert lecture on 'Opportunities in improving overall quality in the Fisheries sector' and participated in the Q&A session during the webinar on Standard, Certification, and Traceability In Fisheries Sector organized by Department of Fisheries, Ministry of Fisheries, Animal Husbandry & Dairying, Govt. of India on 29 June 2021



ASPIC broadcast Prof Dr Iddya Karunasagar gave a talk on COVID-19 & SARS CoV-2 Variants in ASPIC broadcast series organised by ASPIC Club Yuvaraja's College, Mysuru on 13 June 2021 YouTube Link



A national webinar on 'knock on effects of climate change in increasing incidence of seafood borne pathogens and toxins' was held on 02 August 2021. Due to their vast experience in the field of *Vibrio* pathogens, climate change and algal blooms, Prof Dr Iddya Karunasagar and Prof Dr Indrani Karunasagar were invited to delivered talks relevant to the topic of the webinar.







Prof Dr Iddya Karunasagar, FSSAI scientific panel member was a resource person at an awareness workshop on 'Codex Activities and Standard setting Process' organized by Food Safety and standards Authority of India on 31 August 2021 wherein he presented a talk on 'Codex process and Risk analysis framework'

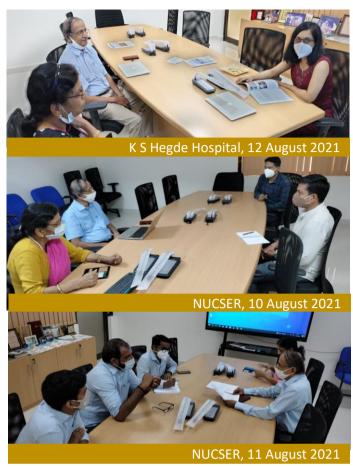




Dr Iddya Karunasagar and Dr Indrani Karunasagar participated as experts in the FAO meeting on 'AMR surveillance' held on 28 June 2021 with a follow up on 19 July 2021

HANDHOLDING AND MENTORING PROJECTS









Finalizing the Indo-Belspo project – 04 September 2021

IPR SUPPORT – PATENTS AND COPYRIGHTS

















DST NU-TEC is glad to help you with entire IPR process Contact details

Dr Iddya Karunasagar Advisor (Research and Patents)

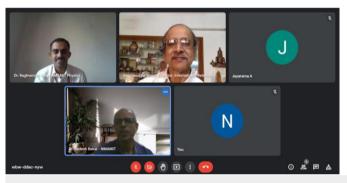
Email: iddya.karunasagar@nitte.edu.in





Formulation of a collaborative interdisplinary project on 'gut microbiome manipulation with probiotic' between KSHEMA and NUCSER - 10 July 2021

ENABLING COLLABORATIVE TRANSLATIONAL RESEARCH PROJECTS THROUGH MENTORING





Collaborative multi-displinary project on 'Design, fabrication, characterization of whispering gallery mode resonator device for the detection of biomolecules' between Alva's Institute of Engineering & Technology (AIET), NMAMIT and NUCSER - 28-July-2021 through 03-August-2021



Discussion on developing an interinstitutional project on SARS-CoV-2 between MMM, Madras Veterinary College and NUCSER facilitated by DST NU-TEC - 22 June 2021



Initiation of discussion of a project on 'Donor-derived cell-free DNA as a non-invasive marker of allograft rejection in kidney transplantation cases' with MMM and NUCSER - 01 August 2021



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Our motto - Science for societal benefits

DST NU-TEC



Innovation happens at the intersection of people process, technology, customers and business ecosystem

Pearl Zhu

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