

# **Peers Alley Media**

1126 59 Ave East, V5X 1Y9, Vancouver BC, Canada WhatsApp No: +1 (506) 909-0537 Contact us: virology@sciencespotlight.org

# 3<sup>RD</sup> GLOBAL Virology Congress

#### September 25-26, 2025 | Berlin, Germany

#### Theme:

Next-Gen Virology: Cutting-Edge Approaches for Viral Disease Management and the Integration of Therapeutics, Innovation, and Global Health Strategies

#### Sub-themes:

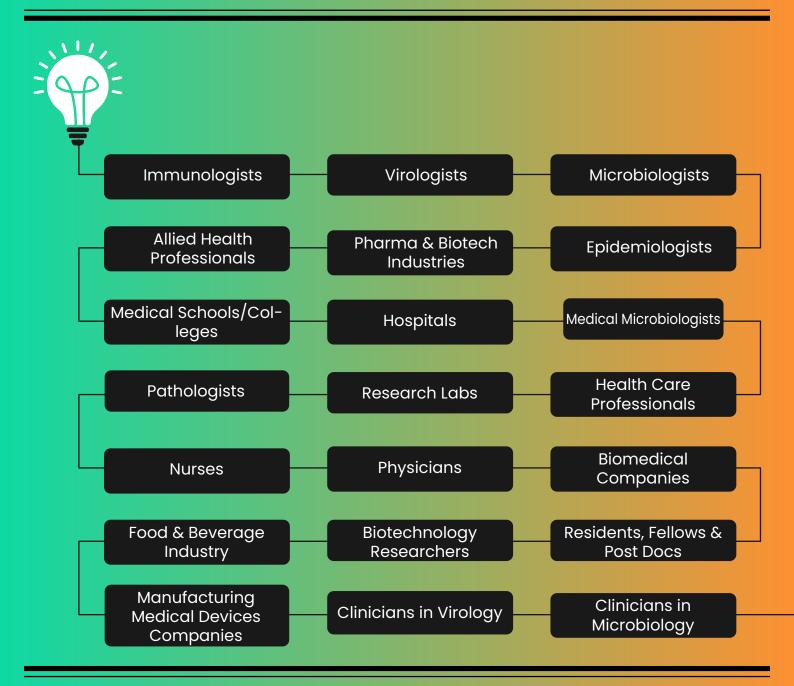
- Viral Evolution and Adaptation: Implications for Public Health
- Advancements in Viral Therapeutics
- Innovations in Viral Genomics
- The Role of Artificial Intelligence in Virology
- Public Health Communication and Education
- Global Health Security and Pandemic Preparedness
- Host-Virus Interactions: Unraveling Molecular Mechanisms
- Emerging Viral Threats: Surveillance, Identification, and Preparedness
- Innovations in Antiviral Therapeutics: From Bench to Bedside
- Vaccine Development and Immunization Strategies: Progress and Challenges
- One Health Approach to Viral Diseases: Integrating Human, Animal, and Environmental Perspectives
- Technological Innovations in Virology: Tools for Detection, Diagnosis, and Research

# **FUTURE VIROLOGY 2025**

https://future-virology.peersalleyconferences.com

2	DAYS WITH MORE THAN 45 SESSIONS, KEYNOTES & ORAL Presentations
12+	INNOVATIVE FEATURED SPEAKERS
20+	HOURS OF Networking events
60+	INTERNATIONAL SPEAKERS
125+	EDUCATIONAL SESSIONS

# WHO Should Attend?



# **WELCOME MESSAGE**

#### **Jacques Pouyssegur**

University Côte d'Azur, France; Scientific Center, Monaco

#### **Dear Colleagues:**

I attended as plenary speaker and session Chair

"Future Virology 2024" held in Barcelona sept 22-23, 2024.

This "Future Virology 2024" h`as scientifically been a great success due to the excellence of selected speakers from Japan, USA, EU, Canada... and time allotted to questions in sessions and coffee breaks. It is also my pleasure to report the excellence of the organization, as well as the quality of scientific booklets (abstracts, bio) promoted by Conference Director Annie Shirel.

I strongly recommend my colleagues to attend the next:

3rd Global Virology Congress September 25-26, 2025 Berlin, Germany

Dear Colleagues and Friends,

On behalf of the scientific committee, it is our great pleasure to announce and warmly invite you to the 3rd Global Virology Congress, scheduled for September 25–26, 2025, in Berlin, Germany. This event, Future Virology 2025, continues the proud tradition of these meetings, offering a platform to showcase the latest breakthroughs in molecular virology and advances in the prevention, diagnosis, and treatment of a wide range of viral diseases.

The congress will provide a global forum with an interdisciplinary approach. Designed to foster insightful exchanges and meaningful discussions, it offers ample opportunities for networking and establishing fruitful collaborations. The event will feature keynote presentations, mini-plenary sessions, posters, and interactive discussions on novel advancements in managing and treating various established, emerging, and reemerging viral diseases, with special attention to preparing for future pandemics. Key topics will address current clinical challenges, offering valuable insights to help clinicians select the most effective treatments for viral infections. Attendees will also benefit from research findings that are essential to the evolving landscape of virology and viral treatment strategies.

Moreover, the congress serves as an excellent opportunity for virologists, epidemiologists, pathologists, physicians, and all healthcare professionals to exchange best practices, share experiences, and gain expert updates from leading academic and clinical professionals worldwide. Whether you are a young scientist at the start of your career or an experienced researcher with years of accomplishments, this congress offers the ideal platform to stay at the forefront of virology in 2025.

Your participation and contributions will undoubtedly add to the success of the event. We look forward to welcoming you in Berlin!

> Best Regards, Michael I Bukrinsky The George Washington University School of Medicine and Health Sciences, USA



#### **Michael I Bukrinsky**

The George Washington University School of Medicine and Health Sciences, USA



# **PRESENTATION FORUM**



#### **KEYNOTE FORUM / MINI-PLENARY SESSIONS**

Presentations under Keynote Forum or Mini-Plenary Sessions includes abstracts with remarkable research value selected by the program committee. These significant speeches are delivered by globally recognized honorable speakers and it is open to all registrants.



#### DISTINGUISHED SPEAKERS FORUM (ORAL ABSTRACT SESSIONS)

In this forum, speakers and experts of the research field gets an opportunity to showcase their noble research work that involves comprehensive research findings. These formal oral presentations include a wide range of talks covering basic research to advanced research findings in accordance to the theme and scientific sessions of the conference.



#### STUDENT FORUM

#### **POSTER SESSION**

This session is particularly introduced to encourage more number of student participation at international conferences, however it is not restricted only to students since it is also available for the participants with language barrier. There are specific guidelines to be followed to prepare the poster. Poster topic should be selected only from relevant scientific sessions with in-depth technical details.



#### YOUNG INVESTIGATORS FORUM

An exclusive opportunity for students and young investigators to present their research work through a formal oral presentation. Young Investigators Forum provides a global platform for young researchers and scholars to showcase their valuable contribution to the scientific world and to get acknowledged by the global scientific community of experts. It is an excellent opportunity to recognize young scientific assets with promising research ideas. These oral presentations are of shorter time duration with 10–15 minutes of informative and precise presentations in relevant scientific sessions.



### EDUCATIONAL WORKSHOPS/RESEARCH WORKSHOPS/ CORPORATE WORKSHOPS/MINI- SYMPOSIA

With an aim of transferring knowledge among the participants, workshops are introduced as a part of international conferences. These interactive and occasionally practical sessions gives an opportunity for participants to engage in detail discussion. Workshops are mostly scheduled for 60 to 90-minutes. It may range from learning about a specific topic relevant to international education, products and research which sometimes involves practical demonstration. It helps in enhancing skills, knowledge and understanding of the research field in depth through interactive discussions.



#### HIGHLIGHTS OF THE DAY SESSIONS

"Highlights of the Day Sessions" is introduced to discuss and focus a ray upon previous day ORAL ABSTRACT presentations by experts to summarise the key findings. It helps in getting better insights into the various dimensions of the topic.



#### MEET THE PROFESSOR @ NETWORKING SESSIONS

This session involves open discussion between the experts and session attendees, it gives enough time for getting answers to specific questions and doubts. It is an opportunity for attendees to increase their professional networking, sometimes also leads to an excellent collaboration opportunity.



#### EDUCATIONAL SESSIONS/ TRAINING PROGRAMS

Educational Sessions or training programs are specifically designed for a better understanding of the latest findings and technologies. These are generally 45-minute sessions that gives an exposure to the multidisciplinary field, that provides in-depth learning experiences and address educational needs. 7



# **REGISTER & PARTICIPATE**

# in

# **FUTURE VIROLOGY 2025**

https://future-virology.peersalleyconferences.com

TYPES OF ACADEMIC REGISTRATIONS	TYPES OF BUSINESS REGISTRATIONS			
Speaker Registration	Speaker Registration			
COMBO A (Registration + 2 Night Accommodation)	COMBO A (Registration + 2 Night Accommodation)			
COMBO B (Registration + 3 Night Accommodation)	COMBO B (Registration + 3 Night Accommodation)			
Delegate Registration	Delegate Registration			
TYPES OF STUDENT REGISTRATIONS	TYPES OF ADDITIONAL REGISTRATIONS			
Registration	Accompanying Person			
YIF	E-Poster			
COMBO A (Registration + 2 Night Accommodation)	Virtual Presentation			
COMBO B (Registration + 3 Night Accommodation)	Workshops			
Posters	Start-Ups			

# TIME TO CONNECT

# WITH YOUR PEERS



# 3<sup>RD</sup> GLOBAL VIROLOGY CONGRESS

SEPTEMBER 25-26, 2025 | BERLIN, GERMANY

Speaker Slots Filling Quickly

### SUBMIT YOUR ABSTRACT NOW

Title: Diverse Head-to-Tail Sequences in the Circular Genome of Human Bocavirus Genotype 1 Among Children with Acute Respiratory Infections Implied the Switch of Template Chain in the Rolling-Circle Replication Model

Speaker Name: Linqing Zhao

Affiliation: Capital Institute of Pediatrics, Beijing, China

#### Abstract:

Head-to-tail sequences have been reported in human bocavirus (HBoV) 1-4. To reveal their features and functions, HBoV DNA was screened among respiratory specimens from pediatric patients with acute respiratory infection (ARI) between April 2020 to December 2022, followed by HBoV genotyping. Head-to-tail sequences were detected using nested PCR, TA cloning, and Sanger sequencing, which were confirmed by MNGS and amplicon sequencing. The Mfold web server was utilized to predict the secondary structure. The results indicated that head-to-tail sequences were detected in 42 specimens through TA cloning from 351 specimens positive for HBoV1 DNA, yielding 92 sequences into 32 types and 2 categories. Additionally, head-to-tail sequences were detected in 16 specimens by amplicon sequencing, yielding 60 sequences categorized into 23 types. The 374nt type detected in 13 specimens contains variants 374a and 374b, different in the unpaired loop regions of the palindrome or complementary reverse sequences, which implied the switch of template chains in process of replication. The MNGS results in three specimens confirmed the presenting of circular genome in copies below 1%. In conclusion, head-to-tail sequences of HBoV1 were common in children with ARI and high diverse in length and sequences. The variants may be generated by the switch of template chain in the rolling-circle replication model.



# 3<sup>RD</sup> GLOBAL Virology Congress

SEPTEMBER 25-26, 2025 | BERLIN, GERMANY

# SUBMIT YOUR ABSTRACT NOW

Speaker Slots Filling Quickly

# Title: The clinical value of P-wave terminal force in lead V1 in evaluating pericardial thickness in tuberculous constrictive pericarditis

Speaker Name: Yanhong Ren

Affiliation: Zhejiang University School of Medicine, Hangzhou, China

#### Abstract:

**Aim** To investigate the relationship between p wave terminal force (Ptfv1) and pericardial thickness in patients with tuberculous constrictive pericarditis.

Methods From January 2018 to October 2022, 95 patients with tuberculous constrictive pericarditis who needed pericarditis dissection in a hospital were collected, and 3 patients who did not meet the criteria were excluded, a total of 92 cases. The absolute value of Ptfv1 in conventional electrocardiogram was tested before surgery, and pericardial thickness was measured by echocardiography and chest CT. Pericardial thickness was measured after pericardial dissection. Pearson correlation analysis was used, R software was used to make scatter plot, and nonparametric square test was used. The correlation of postoperative measurements with echocardiography, chest CT and absolute value of Ptfv1 was analyzed. Results Pearson correlation analysis was conducted with postoperative measurements and echocardiography measurements, postoperative measurements and chest CT measurements, and postoperative measurements and absolute value of Ptfv1. Pearson correlation analysis showed that the correlation coefficients between postoperative measurements and echocardiography, chest CT and Ptfv1 values were statistically significant. Scatter plot and nonparametric Chi-square test showed that postoperative measurements were consistent with absolute values of echocardiography, chest CT and Ptfv1 (p < 0.05). And this study found that the distribution of the value of Ptfv1 $\geq$ 5 was higher than the value of Ptfv1<5 after pericardiectomy (0.95:0.05) in the absolute value of Ptfv1≥0.04 which measured before pericardiectomy. The hypothesis was statistically significant (p<0.05).

**Conclusion** The absolute value of Ptfv1 in electrocardiogram can be used as an auxiliary diagnostic index to evaluate pericardial thickness in tuberculous constrictive pericarditis. Keywords P-wave terminal force in lead V1, Tuberculous constrictive pericarditis, Pericardial thickness.



# 3<sup>RD</sup> GLOBAL Virology Congress

SEPTEMBER 25-26, 2025 | BERLIN, GERMANY

### SUBMIT YOUR ABSTRACT NOW

Speaker Slots Filling Quickly

Title: Transmission Dynamics of Alpha, Delta, and Omicron Variants of COVID-19 in Laos

Speaker Name: Linxiong Wu

Affiliation: Kunming Medical University, China

#### Abstract:

**Objectives**: This study aims to investigate the transmission dynamics of the Alpha, Delta, and Omicron variants of SARS-CoV-2 in Laos and assess how non-pharmaceutical interventions (NPIs) and vaccinations affect their spread.

**Methods**: We developed a transmission model, which included disease reporting, to analyze the spread of COVID-19 in Laos from April 2021 to May 2022. The model accounted for changes in transmission rates due to people's behaviors, control measures, and the emergence of three variants. Bayesian inference was used to calibrate the model to data on confirmed cases, deaths, and recoveries.

**Results**: The model accurately captured the three waves of COVID-19 in Laos. The Alpha variant had a basic reproduction number (R0) of 1.55 (95% CrI: 1.47–1.64), the Delta variant had an R0 of 1.88 (95% CrI: 1.77–2.01), and the Omicron variant had an R0 of 3.33 (95% CrI: 2.84–3.74). Among the variants, the Delta variant had the highest severity, with a case fatality rate (CFR) of 1.05% (95% CrI: 0.96–1.15%). In comparison, the Alpha variant had a CFR of 0.38% (95% CrI: 0.21–0.60%), and the Omicron variant had a CFR of 0.28% (95% CrI: 0.18–0.39%). Counterfactual simulations indicated that vaccination significantly reduced infections and deaths, even in the presence of immune escape variants.

**Conclusions**: Even with immunity waning and the escape of new variants, vaccination was still the major contributor to control COVID-19 and combining behaviour changes and vaccination would best suppress future outbreaks of COVID-19.



# 3<sup>RD</sup> GLOBAL VIROLOGY CONGRESS

SEPTEMBER 25-26, 2025 | BERLIN, GERMANY

### SUBMIT YOUR ABSTRACT NOW

Speaker Slots Filling Quickly

#### Title: MIPC, The Universal Antiviral Cells

#### Speaker Name: M. Fawzy Abdelatty

Affiliation: Heidelberger Center for Cellular Therapy, Germany

#### Abstract:

MIPC are therapeutic Methylation Induced Pluripotent Cells which are prepared from peripheral blood samples. For patients, these samples can be obtained from autologous, heterologous or xenographic sources. These cells are very potent in infection prevention and control. They have the potential to eliminate infections (viral or bacterial) and antibiotics resistant hospital infections within hours. The preparation and handling of these cells is very simple and has no negative side effects. The cells do not only remove the infection but can also regenerate the organs damaged due to this infection effectively. MIPC will make it possible to start treating a pandemic infection, even before characterizing the microbe. They can even be used as a prophylactic measure in such cases. Examples for treating different pathogens are presented.



# 3<sup>RD</sup> GLOBAL VIROLOGY CONGRESS

SEPTEMBER 25-26, 2025 | BERLIN, GERMANY

# SUBMIT YOUR ABSTRACT NOW

Speaker Slots Filling Quickly

#### Title: How AI can help predict viral evolution to accelerate vaccine and therapeutic design

#### Speaker Name: Debora S. Marks

Affiliation: Harvard Medical School, USA

#### Abstract:

There's now a fantastic opportunity to use the advances in artificial intelligence for pandemic preparedness. Advances in AI/deep generative modeling open the door to optimizing vaccines, therapeutics and diagnostics that are effective for longer and have pan-strain coverage. It is now possible to imagine developing AI-based computational methods that can anticipate viral evolution and its mutational paths, in the context of pressure from host responses and antiviral therapeutics.

In this talk I will describe how we, have built the first computational platform– EVEvax–that can be applied across the board to pandemic threat viruses, showing evidence with SARS-CoV-2, H5N1 and Lassa as examples. This game-changing advance has been enabled not only by the revolution in AI but also by the availability of a huge corpus of evolutionary sequencing information across many, diverse viral families. Crucially, the EVE-vax platform can be applied prior to pandemics to assess viral escape from our immune system, give early warning and generate candidate immunogens that may protect against future and existing variation.



# 3<sup>RD</sup> GLOBAL Virology Congress

SEPTEMBER 25-26, 2025 | BERLIN, GERMANY

### SUBMIT YOUR ABSTRACT NOW

Speaker Slots Filling Quickly

#### Title: HIV-1 budding control by inducible inhibition of ESCRT-III

#### Speaker Name: Cécile Boscheron

Affiliation: University Grenoble Alpes, CEA, CNRS, France

#### Abstract:

HIV-1 budding, like many other cellular processes, relies on the Endosomal Sorting Complex Required for Transport (ESCRT) machinery, which is essential for virus release via membrane fission. The core membrane remodeling complex, composed of ESCRT-III and VPS4, is highly conserved. However, understanding the native architecture of ESCRT-III at HIV-1 budding sites is limited due to spatial resolution constraints and its transient recruitment. To overcome this challenge, we developed a drug-inducible tool to transiently inhibit HIV-1 budding by extending the lifetime of ESCRT-III at budding sites. We engineered autoclavable CHMP2A, CHMP3, and CHMP4B fusion proteins with the hepatitis C virus NS3 protease, designed to be converted into VPS4-deficient variants upon NS3 inhibitor treatment. We characterized these CHMP-NS3 fusion proteins through immunoblotting, fluorescence-based localization studies, transmission electron microscopy, and live-cell imaging, both in the presence and absence of the protease inhibitor Glecaprevir. Our results demonstrate that CHMP-NS3 fusion proteins accumulate rapidly and remain stable upon drug administration. CHMP2A-NS3 and CHMP4B-NS3 significantly inhibited virus-like particle (VLP) release, while CHMP3-NS3 alone had no effect but synergized with CHMP2A-NS3. Localization analyses revealed the redistribution of CHMP-NS3 fusion proteins to the plasma membrane, endosomes, and HIV-1 Gag VLP budding sites. Electron and video microscopy further revealed a drug-dependent accumulation of CHMP2A-NS3 and CHMP4B-NS3, leading to delayed HIV-1 Gag-VLP release.

These findings provide novel insights into the functional consequences of ESCRT-III inhibition during HIV-1 budding. Our approach enables precise temporal control over CHMP2A-NS3, CHMP3-NS3, and CHMP4B-NS3 expression, facilitating targeted inhibition of distinct HIV-1 budding stages. Initially developed for HEK293 and HeLa cells, this assay can be adapted to study a wide range of ESCRT-III-driven cellular processes across different cell types.



# 3<sup>RD</sup> GLOBAL Virology Congress

SEPTEMBER 25-26, 2025 | BERLIN, GERMANY

# SUBMIT YOUR ABSTRACT NOW

Speaker Slots Filling Quickly

#### Title: Stoichiometric antivirals- A comparative study of virucidal and virustatic properties Speaker Name: Hien Thi Tran

Affiliation: Institute of Materials, École Folytechnique Fédérale de Lausanne, Switzerland

#### Abstract:

Viral infections, such as those caused by herpes simplex viruses (HSV) and influenza, continue to pose a significant global health challenge, emphasizing the need for effective antiviral therapies. We have developed multivalent entry inhibitors (MEIs) that have an irreversible inhibition mechanism (virucidal) as opposed to the commonly found reversible one (virustatic). MEIs are typically composed of core structures connected to multiple functional groups that are engineered to bind to viruses. In between the core and the functional groups, we inserted alkyl linkers and showed that such linkers, when long enough, were responsible for a change in inhibition mechanism due to their hydrophobicity. In a recent paper, we showed that MEIs with a benzene core were very effective broad-spectrum antivirals. Surprisingly, we found that when identical linkers were terminated by  $[SO]_3^-$  groups the inhibition mechanism was virustatic while [SO 2 \_4^- termination ensured a virucidal mechanism. This is a surprising result as these functional groups should have minimal influence on the molecules hydrophobicity. In this paper we investigated in depth this difference, with the aim of understanding the molecular properties that are needed to ensure a virucidal inhibition. We present systematic studies of MEIs differing in core, linker length, and terminal groups (by  $\mathbb{I}$ SO ] \_3^-vs [[SO]] \_4^-). We measured the MEIs ability to bind to viral proteins, as well as to common proteins and their partition coefficient. We find that the inhibition mechanism correlates with the overall hydrophobicity of the MEI not just with the hydrophobicity of the linkers, and thus the terminal group does play a role. We believe that this paper presents new design principles for generating virucidal MEIs.



# 3<sup>RD</sup> GLOBAL Virology Congress

SEPTEMBER 25-26, 2025 | BERLIN, GERMANY

# SUBMIT YOUR ABSTRACT NOW

Speaker Slots Filling Quickly

# Title: Alternative Root Canal irrigation solutions which is Non-Cytotoxic And High Antibacterial effectiveness.

Speaker Name: Tahir Ataözden

Affiliation: Biruni University, İstanbul, Turkey

#### Abstract:

**Aim**: Root Canal irrigation solutions and medicine in endodontic treatment is available for to use alternative materials (N acetyl cysteine, boric acid, (chitosan) different concentrations mouse fibroblast cell L929 for to Check the Cytotoxicity and Q. aureus Biofilms for to check antibacterial effectiveness of in vitro aspect evaluation was aimed.

**Equipment Method**: Cell culture test for experiment groups; Chitosan 2048ug/ml- 4ug/ml 10 in different concentration, N Acetyl cysteine (NAC) 50 mg/ml- 0.39 mg/ml between 8 in different concentration, Boric Acid (NA) 64 mg/ml- 0.125 mg/ml between 10 Sodium in different concentration Hypochlorite (NaOCl) 10.5%-5.25 %-2.625% rates 3 different prepared in concentration was created. Antimicrobial test for article concentrations Chitosan 1- 0.002mg/ml, NAC 25- 0.195 mg/ml, Boric acid 32- 0.0625mg/ml aspect was carried out. Prepared microplate at 37°C 18 hour incubation was released. Study Results group intra- and groups inter- data by comparison analysis was done.

**Findings**: Positive control group the one which... To NaOCl according to all experiment groups more is cytotoxic. Chitosan 128 microgram/ml also first acute toxic the effect of has shown. Q. Aureus on MIC value whereas 0.031 mg/ml is. Antimicrobial dose on the border toxic has been found. N Acetyl Cysteine (NAC) MIC value 1,563 mg/ml while first 24 per hour 25-50 mg/ml in doses toxic It has been found. That is antimicrobial dose on the border toxic It is not has been observed. Boric Acid MIC value 4 While mg/ml This at the rate first 24 per hour cytotoxic not while toxic effect dose and to time connected aspect is increasing. NaOCl all in their concentrations and time in the intervals - best antimicrobial agent found however -most cytotoxic aspect has been observed.

**Conclusion**: Experiment in groups used NAC and Boric Acid antimicrobial dose borderline cytotoxicity in terms of other from groups moreGood has been found.



# 3<sup>RD</sup> GLOBAL Virology Congress

SEPTEMBER 25-26, 2025 | BERLIN, GERMANY

## SUBMIT YOUR ABSTRACT NOW

Speaker Slots Filling Quickly

**FUTURE VIROLOGY 2025** 

# Title: Predicting Immune Dysfunction and Clinical Outcomes Through TTV-Virome Analysis in COPD Patients

Speaker Name: Patrizia Russo

Affiliation: Life Promotion San Raffaele University, Italy

#### Abstract:

**Introduction**: The non-pathogenic Torquetenovirus (TTV) is the main representative of the Anelloviridae family. Studies have shown that immunocompromised patients exhibit higher TTV viral loads in the blood compared to healthy controls ( $\geq$  4 log10 copies/mL), which is associated with increased clinical frailty and poor prognosis (patients with COPD). The primary aim of this study is to determine whether TTV viral load ( $\geq$  4 log10 copies/mL) in the blood can serve as a reliable marker of immune system functionality and, consequently, as an indicator of a more favorable or unfavorable prognosis in a cohort of COPD patients.

**Methods:** Serum samples from 102 COPD patients were collected and analyzed using real-time polymerase chain reaction (RT-PCR) to quantify TTV viral load. PBMCs, stored in liquid nitrogen, were used for immunophenotypic analysis of circulating T lymphocytes (CD45, CD3, CD4, CD8, CD45RA, CD197, CD183, CD184, CD186, CD127, CD25) thus allowing the evaluation of cytotoxic T lymphocytes, regulatory T cells, and Th1, Th2, and Th17 subsets.

Statistical analysis was performed using SPSS software, version 23. The heterogeneity of contingency tables was assessed using Fisher's exact test. Differences in data distribution were calculated using the non-parametric Mann-Whitney test. Correlations between non-normally distributed continuous variables were evaluated using Spearman's rho coefficient.

**Results:** Among the patients, 62.75% had TTV viremia levels > 4 log10 copies/mL. Higher TTV viremia correlated with a reduction in CD8 lymphocytes and a significantly lower 5-year survival probability.

**Conclusion:** Patients with TTV levels  $\geq$  4 log10 copies/mL exhibited the lowest survival probability, likely due to reduced immunological activity. This study raises key scientific questions regarding the role of TTV in COPD. Specifically, it explores whether TTV may serve as a potential marker of poor prognosis in COPD and whether rehabilitation strategies for these patients could be tailored based on immunological status and/or viremia levels.



# 3<sup>RD</sup> GLOBAL Virology Congress

SEPTEMBER 25-26, 2025 | BERLIN, GERMANY

# SUBMIT YOUR ABSTRACT NOW

Speaker Slots Filling Quickly

#### Title: Precision Mapping of Influenza A Virus RNA Dynamics and Antiviral Responses Using an Advanced CRISPR- Cas12 Platform

Speaker Name: Tran Anh Tu

Affiliation: Chang Gung University, Taiwan

#### Abstract:

Influenza A virus (IAV) remains a significant global health threat, necessitating advanced tools to decode viral behavior and inform therapeutic strategies. Here, we introduce a groundbreaking CRISPR-Cas12-based platform that precisely distinguishes and quantifies viral RNA species—vRNA, cRNA, and mRNA—across the infection cycle. This platform achieves unparalleled sensitivity, detecting as few as 100 RNA copies, and delivers a tenfold improvement in speed and accuracy compared to traditional methods. Focusing on viral segments 5 (NP) and 6 (NA), our study revealed novel early infection dynamics, including an unexpected vRNA decline within 0-40 minutes postinfection, followed by recovery, challenging existing replication models. We validated the platform across MDCK and A549 cells, a mouse model, and clinical nasopharyngeal samples, demonstrating its robustness and translational relevance. Its broad detection range (10<sup>2</sup>–10<sup>10</sup> copies) enables comprehensive monitoring of RNA kinetics from early to late infection stages. In addition to RNA dynamics, we evaluated the effects of antiviral drugs—Baloxavir, Favipiravir, Molnupiravir, and Ribavirin— highlighting their distinct impacts on RNA synthesis at various stages of infection. These findings offer critical insights into drug mechanisms and their influence on viral replication. Looking ahead, we aim to refine and validate this platform through high- resolution time-course analyses of viral RNA dynamics, focusing on the early infection stage where we observed the novel vRNA pattern. These studies will integrate live-cell imaging to visualize real-time RNA changes and RNA stability assays to elucidate the mechanisms behind these dynamics. Furthermore, we will investigate ribonucleoprotein (RNP) complex dynamics and their role in RNA stability and function. Building on these findings, we plan to optimize the platform for zoonotic and avian influenza strains, enabling strain-specific RNA dynamics detection and contributing to understanding virulence and transmission. Expanding to other clinically significant RNA viruses, this adaptable system holds the potential to transform viral diagnostics, deepen our understanding of viral biology, and accelerate antiviral drug development.



# 3<sup>RD</sup> GLOBAL Virology Congress

SEPTEMBER 25-26, 2025 | BERLIN, GERMANY

# SUBMIT YOUR ABSTRACT NOW

Speaker Slots Filling Quickly

# Title: Capacity-building performance in the biological confirmation of bacterial meningitis in the Democratic Republic of the Congo in 2021

**Speaker Name: Berthe Noelle** 

Affiliation: Democratic Republic of the Congo

#### Abstract:

**Context:** Bacterial meningitis is a major cause of mortality worldwide, particularly in the Democratic Republic of the Congo. The main causative pathogens are *Neisseria meningitidis, Streptococcus pneumoniae,* and *Haemophilus influenzae*. However, its etiological diagnosis remains difficult to establish in low-income countries due to a lack of equipment, reagents, consumables, and insufficient capacity-building efforts. Our objective is to assess the effectiveness of capacity-building in the biological confirmation of bacterial meningitis.

**Methods:** Cerebrospinal fluid (CSF) samples were collected and inoculated into Trans-Isolate medium (culture), while another portion was placed in a dry tube for Polymerase Chain Reaction (PCR) analysis. Samples were obtained from suspected cases meeting the standard case definition from patients in the Tshopo province of the Democratic Republic of the Congo. Culture was performed on-site in Tshopo, while molecular biology analyses were conducted at the National Institute of Biomedical Research laboratory.

**Results:** Since the beginning of the epidemic, from June to December 2021, a total of 231 cerebrospinal fluid samples were collected, of which 47 tested positives by molecular biology (20%). Among them, 43 (92%) were *Neisseria meningitidis* W, 2 (4%) were *Streptococcus pneumoniae*, and 2 (4%) were *Haemophilus influenzae* type b. The same samples were cultured, with 14 cultures testing positive (6%), including 13 (93%) for *Neisseria meningitidis* W and 1 (7%) for *Haemophilus influenzae* non-type b. Furthermore, PCR analysis of the 231 CSF samples detected 20% of bacterial meningitis cases, whereas culture only detected 6%.



# 3<sup>RD</sup> GLOBAL Virology Congress

SEPTEMBER 25-26, 2025 | BERLIN, GERMANY

## SUBMIT YOUR ABSTRACT NOW

Speaker Slots Filling Quickly

# Title: CRITICAL REFLECTION REGARDING HOW THE CONFEDERATION OF AFRICAN FOOTBALL HAS MANAGED THE OUTBREAKES OF CORONAVIRUS AND EBOLA

Speaker Name: David Bogopa

Affiliation: Nelson Mandela University, South Africa

#### Abstract:

The outbreaks of both ebola virus and coronavirus caught the Confederation of African Football napping in 2014 and 2019 respectively. On both counts, the CAF planned football fixtures were brought to a halt. Part of the problem is that the 2014 Africa Cup of Nations Tournament was cancelled due to the outbreak of ebola in West Africa countries. Moreover, the 2020 Africa Cup of Nation Tournament could not take place because of coronavirus outbreak. This paper provides a critical reflection on the CAF administrative capabilities in matters pertaining to the management of viruses. The objectives of this research are two-fold, firstly, the investigation of the CAF strategic interventions in dealing with viruses. Secondly, proposing recommendations with the view of resolving problems. This is a mixed method study which include qualitative and quantitate approaches. A sample of 20 participants constitute the interviews conducted for the study. Good governance is used in this research as a conceptual framework to understand the CAF modus operandi. The preliminary results reveal that CAF need to devise some drastic measures to avoid future risk of cancelling football events.



# 3<sup>RD</sup> GLOBAL Virology Congress

SEPTEMBER 25-26, 2025 | BERLIN, GERMANY

### SUBMIT YOUR ABSTRACT NOW

Speaker Slots Filling Quickly

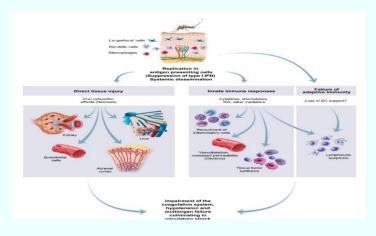
# Title: Natural Rift Valley fever virus infection in sheep and alpaca as a model of the pathogenic mechanism of the disease

#### Speaker Name: Lieza Odendaal

Affiliation: University of Pretoria, South Africa

#### Abstract:

*Rift Valley fever (RVF) phleboviral* (RVFV) is mosquito-borne and causes mortality and morbidity in ruminants, camelids and humans. The virus is likely maintained at low levels in tropical environments where sporadic clinical cases and abortions are overlooked. During episodes of above-normal rainfall, devastating epidemics occur. Cases in animals always precede human cases, including miscarriage. However, due to limited surveillance, RVF is often diagnosed in humans before being noted in livestock. Therefore, the principal objective of this study was to describe the host response and viral antigen distribution in the organs of sheep and alpacas in different age groups and propose an updated hypothesis of the pathogenesis of RVF. Samples (n=260) were obtained from animals that died naturally from RVF in an epidemic and studied using post-mortem examination, histology, and immunohistochemistry. The placenta (n=35) was also examined. The most frequently observed lesion is random necrosis, particularly in the liver. Lesions supportive of vascular endothelial injury are effusions in body cavities and oedema. Viral antigen is prominent in endothelial cells and macrophages in many organs. In the kidney, viral antigen is in the peri-macular cells including the juxtaglomerular and granular extraglomerular mesangial cells. Lymphocyte necrosis is pronounced in lymphoid tissues and other anatomical locations where lymphocytes occur. The early targets of the virus are likely Dendritic cells or macrophages in the skin. RVFV spreads systemically, following suppression of type I IFN production which results in infection and necrosis of cells in many organs. Failure of both the innate and adaptive immune responses to control infection is exacerbated by apoptosis of lymphocytes. An excessive pro-inflammatory cytokine and chemokine response leads to microcirculatory dysfunction. Additionally, impairment of the coagulation system results in widespread haemorrhages. Fatal outcomes result from multiorgan failure, oedema in many organs (especially the lungs and brain), hypotension and circulatory shock.



# **FUTURE VIROLOGY 2025**

https://future-virology.peersalleyconferences.com



# 3<sup>RD</sup> GLOBAL VIROLOGY CONGRESS

SEPTEMBER 25-26, 2025 | BERLIN, GERMANY

# SUBMIT YOUR ABSTRACT NOW

Speaker Slots Filling Quickly

Title: Mitochondria mediated immunomodulation associated with SARS-CoV2 pathogenesis

Speaker Name: Reshu Saxena

Affiliation: Amity School of University Punjab, India

#### Abstract:

The COVID-19 disease caused by the severe acute respiratory syndrome corona virus 2 (SARS-CoV-2) has emerged as a fatal pandemic. This virus has been shown to invade the mitochondria of immune cells and impair their functions causing cell death. Disrupting the mitochondria-immune cell interactions could be a promising therapeutic strategy for COVID-19. The study aims to provide a mechanistic insight into the interaction between coronavirus and mitochondrial biology in immune cells. Here, we utilized K18-hACE2-Tg mice model to understand the mitochondrial modulation associated with SARS-CoV-2 infection. Using Flow cytometric analysis, microscopy and qPCR studies perturbations in Mitochondrial biogenesis and dynamics was seen in immune cells post SARS-CoV2 infection. Further, an increase in ROS and mitophagy was observed in immune cells indicating a decline in mitochondrial activity and potential involvement of mitochondria in SARS-CoV-2 infection. OXPHOS-Glycolysis study through kit-based assay and SCENITH assay with flow cytometric analysis showed reduced ATP production and metabolic switching within T cells upon infection. Thus, mitochondrial health may become a biomarker for SARS-CoV-2 infection risk and progression. A mechanistic insight into the mitochondria mediated intervention of immune cells in SARS-CoV2 pathogenesis is crucial to understand the disease process and identify potential drug targets.



# 3<sup>RD</sup> GLOBAL Virology Congress

SEPTEMBER 25-26, 2025 | BERLIN, GERMANY

## SUBMIT YOUR ABSTRACT NOW

Speaker Slots Filling Quickly

# Title: Mycobiota associated with "Grapevine Trunk Disease" in San Juan, Argentina

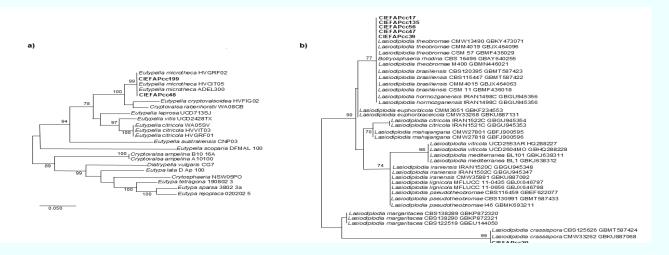
#### Speaker Name: Melisa Belén Rosa Manzano

Affiliation: Instituto de Ciencias Básicas (ICB), Argentina

#### Abstract:

In recent decades, in San Juan, Argentina, grapevine trunk disease has become one of the most damaging phytosanitary problems affecting crops. In this country, this disease is commonly known as "Malvon leaf", and has only been studied in vineyards in the province of Mendoza. In this comprehensive study, the mycobiota associated with grapevine crops destined for fresh grapes of the Superior seedless and Cardinal varieties was meticulously analyzed. Morphological studies and molecular analyses confirmed the presence of several fungal species, including Arambaria cognata, Acremonium sp., Alternaria alternata, Alternaria sp., Eutypella microtheca, Lasiodiplodia crassispora, Lasiodiplodia theobromae, Phaeoacremonium parasiticum, and Phoma sp. Pathogenicity tests conducted on one-year-old plant trunks for E. microtheca, L. theobromae, and L. crassispora complied with Koch's postulates. This is the first record of these three species in Argentine vineyards and highlights the urgent need to consider them as a significant threat to the region's viticultural heritage and sustainability (Figure 1).

**Figure 1**. Maximum likelihood trees from (a) E. microtheca sequences and related species generated from ITS and  $\beta$ -TUB combined datasets. (b) L. theobromae and L. crassispora ITS sequences. Bootstrap values resulting from 1000 replicates are shown at the branch points.



# **FUTURE VIROLOGY 2025**



# 3<sup>RD</sup> GLOBAL Virology Congress

SEPTEMBER 25-26, 2025 | BERLIN, GERMANY

# SUBMIT YOUR ABSTRACT NOW

Speaker Slots Filling Quickly

Title: Neutrophil to lymphocyte ratio: Association with microcirculatory changes detected by nail fold Capillaroscopy in scleroderma patients and its relation to disease severity

Speaker Name: Rahma Ahmed Soliman Ahmed Elziaty

Affiliation: Ain Shams University, Egypt

#### Abstract:

Microvascular alteration in scleroderma patients is well documented. Microcirculatory changes can be visualized by nailfold capillary microscopy (NFC) examination which is a safe and noninvasive technique. This study aims to identify possible association between neutrophil-to-lymphocyte ratio (NLR) and microvascular changes detected by nailfold capillaroscopic examination in scleroderma patients.

#### Results

The study was conducted on 25 patients with systemic sclerosis. On studying the correlation of NLR with laboratory parameters, we found significant positive correlations with erythrocyte sedimentation rate "ESR" and C-reactive protein "CRP" values (p = 0.000). Regarding the clinical manifestations, higher NLR was significantly related to the presence of digital ulcer (p = 0.023) and Raynaud's phenomenon (p = 0.015). There was significantly negative relation between NLR with cyclophosphamide treatment. Regarding NFC examination's results, there was significant negative correlation of NLR with capillary number/mm (p = 0.000) and significant positive correlation of NLR with capillary width (p = 0.005), and a significant relation of NLR with the presence of capillary hemorrhage and presence of active scleroderma pattern (p = 0.010) was also reported.

#### Conclusion

High N/L ratio as a marker of inflammation was found to reflect severity of systemic sclerosis and is associated with larger capillary diameter and lower capillary number in nailfold capillaroscopy. Active scleroderma pattern was associated with high N/L ratio. Further longitudinal studies are needed to determine the frequency of nailfold video-capillaroscopy and N/L ratio.



# 3<sup>RD</sup> GLOBAL Virology Congress

SEPTEMBER 25-26, 2025 | BERLIN, GERMANY

## SUBMIT YOUR ABSTRACT NOW

Speaker Slots Filling Quickly

#### Title: Innovative Use of Green Synthesis Gold Nanoparticles in Dual Function: Drug Delivery and Photothermal Therapy

#### Speaker Name: Shaimaa M. I. Alexeree

Affiliation: Cairo University, Egypt

#### Abstract:

Gold nanoparticles (AuNPs) have garnered significant attention in biomedical applications due to their unique physicochemical properties, which enable dual functionality in drug delivery and photothermal therapy (PTT). This abstract investigates the potential for AuNPs to work in concert as therapeutic agent carriers and as efficient agents for localized hyperthermia in the treatment of cancer. The ability of AuNPs to absorb light, particularly in the near-infrared (NIR) spectrum, facilitates their use in PTT. Upon NIR irradiation, AuNPs undergo localized surface plasmon resonance (LSPR), converting absorbed light energy into heat, which induces hyperthermia and selectively destroys tumor cells. This photothermal effect can be finely tuned by modifying the size, shape, and surface chemistry of the nanoparticles, allowing for enhanced targeting and reduced off-target effects. In addition to their photothermal capabilities, AuNPs serve as versatile drug delivery systems. Their high surface area-to-volume ratio allows for the conjugation of various therapeutic agents, including chemotherapeutics and nucleic acids. This targeted delivery is achieved through functionalization with ligands that recognize specific biomarkers on cancer cells, thereby enhancing the accumulation of drugs at tumor sites while minimizing systemic toxicity. Recent advancements in nanoparticle design have led to multifunctional systems that integrate both drug delivery and photothermal therapy. By encapsulating chemotherapeutic agents within AuNPs that also exhibit photothermal properties, it is possible to achieve a synergistic therapeutic effect enhancing drug efficacy while simultaneously applying localized heat to the tumor.



# 3<sup>RD</sup> GLOBAL VIROLOGY CONGRESS

SEPTEMBER 25-26, 2025 | BERLIN, GERMANY

# SUBMIT YOUR ABSTRACT NOW

Speaker Slots Filling Quickly

Title: Efficacy and Safety of CT-P47 versus Reference Tocilizumab: 32-Week Results of a Randomized, Active-Controlled, Double-Blind, Phase III Study in Patients with Rheumatoid Arthritis, including 8 Weeks of Switching Data from Reference Tocilizumab to CT-P47

Speaker Name: Jakub Trefler

Affiliation: National Medical Institute of the Ministry of the Interior and Administration, Poland

#### Abstract:

#### **Background:**

CT-P47 is a biosimilar of tocilizumab developed for the treatment of rheumatoid arthritis (RA), targeting the interleukin-6 receptor. The objective of this phase III study was to compare the efficacy, safety, pharmacokinetics (PK), and immunogenicity of CT-P47 with reference tocilizumab (r-TCZ) in patients with moderate-to-severe RA. Here, we present Week 32 results only.

**Methods:** This multicentre, double-blind study randomized patients 1:1 to receive either CT-P47 or r-TCZ (8 mg/kg) every 4 weeks. After 20 weeks of treatment, patients receiving r-TCZ were re-randomized to either continue r-TCZ or switch to CT-P47. The study's primary efficacy endpoints were the change from baseline in Disease Activity Score 28 (DAS28) at weeks 12 and 24. Secondary endpoints included ACR response, remission rates, and PK. Safety and immunogenicity profiles were also assessed.

**Results**: A total of 471 patients were randomized (234 to CT-P47, 237 to r-TCZ). At week 12, the change from baseline in DAS28 was -3.01 for CT-P47 and -3.00 for r-TCZ, with treatment differences within predefined equivalence margins. At week 24, the change from baseline in DAS28 was -3.77 for CT-P47 and -3.67 for r-TCZ. Secondary efficacy outcomes, including ACR responses (ACR20, ACR50, ACR70), remission rates, and EULAR responses, showed comparable improvements between groups up to week 32. Safety profiles were similar, with no significant differences in adverse events, and no significant immunogenicity issues were observed during that time.

**Conclusions**: The results of this study demonstrate that CT-P47 is equivalent to r-TCZ in terms of efficacy, with comparable safety, PK, and immunogenicity profiles in patients with RA, including after switching from r-TCZ to CT-P47. These findings support the use of CT-P47 as a suitable alternative to r-TCZ for the treatment of RA.



# 3<sup>RD</sup> GLOBAL Virology Congress

SEPTEMBER 25-26, 2025 | BERLIN, GERMANY

# SUBMIT YOUR ABSTRACT NOW

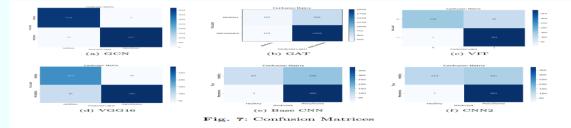
Speaker Slots Filling Quickly

# Title: Generative Attention Mechanisms for Chest X-Ray Medical Image Synthesis and Diagnosis of Pediatric Pneumonia

#### Speaker Name: Kakooza Williams

Affiliation: Uganda and Makerere university, Uganda

Abstract: Pediatric pneumonia poses a significant global health challenge, requiring timely and accurate diagnosis through chest X-rays. While deep learning models offer promising advancements in diagnostic accuracy, their adoption in clinical practice is hindered by two major barriers: the scarcity of high-quality, well-annotated, and balanced datasets and the lack of transparency in model decision-making processes, often referred to as the "black-box" nature of AI. This study aims to overcome these challenges by leveraging generative AI to address dataset limitations and explainable AI (XAI) techniques to enhance model transparency and trustworthiness among clinicians. The research focuses on synthesizing pediatric chest X-ray images, evaluating classification models, and implementing explainable mechanisms to support decision-making in medical imaging. Generative Adversarial Networks (GANs) were employed to generate diverse synthetic pediatric chest X-ray images, with random noise to mitigate mode collapse during training. Using transfer learning, four classification models—Vision Transformers (ViT), Graph Convolutional Networks (GCN), VGG16, and a custom Convolutional Neural Network (CNN)—were developed and evaluated. Accuracies of 85.0%, 99.6%, 79.3%, and 75.0% were achieved, respectively. Graph Attention Networks (GAT) were integrated into GCNs to capture intricate relationships, while interpretability techniques such as Generative Adversarial Saliency Maps, Gradient Attention Rollout, Integrated Gradients, and Grad-CAM were applied to provide visual insights into model decisions. GANs effectively addressed dataset scarcity, enhancing the diversity of training data. GCN achieved the highest classification accuracy of 99.6%, supported by GAT for improved explainability. Saliency maps and gradient-based methods provided clear visualizations of model reasoning. This comprehensive approach demonstrates the potential of generative and explainable AI in advancing pediatric pneumonia diagnosis. By addressing data limitations and fostering model interpretability, this work paves the way for greater trust and adoption of AI-driven diagnostic tools in clinical settings.



Model	Accuracy	Class	Precision	Recall	F1_score	Support
GCN 99.68	99.68	Normal	0.99	1	1	4118
		Pneumonia	1	0.99	1	4278
GAT 75	Normal	0.57	0.25	0.35	783	
		Pneumonia	0.77	0.93	0.84	2155
VIT	VIT 85	Normal	0.99	0.61	0.76	243
		Pneumonia	0.8	1	0.89	390
VGG16 79.3	Normal	0.68	0.85	0.76	234	
		Pneumonia	0.9	0.76	0.82	390
Base CNN 75	Normal	0.99	0.36	0.53	243	
		Pneumonia	0.71	1	0.83	390
CNN2	CNN2 78	Normal	0.94	0.46	0.62	243
		Damara	0.75	0.00	0.95	200



# 3<sup>RD</sup> GLOBAL Virology Congress

SEPTEMBER 25-26, 2025 | BERLIN, GERMANY

## SUBMIT YOUR ABSTRACT NOW

Speaker Slots Filling Quickly

# Title: Use of a fractional dose of inactivated polio vaccine (fIPV) to increase IPV coverage among children under 5 years of age in Somalia

#### Speaker Name: Hiirad Mohamed Mohamoud

Affiliation: United Nations Children's Fund (UNICEF), Somalia

#### Abstract:

**Background:** Global efforts reduced incidence of polio cases from 350,000 in 1988 to 22 cases in 2022 globally. There have been no wild poliovirus (WPV) cases seen in Somalia since August 2014. However, in 2017, there was a surge in the number of cases of circulating vaccine-derived poliovirus type 2 (cVDPV2), even with different intervention responses using monovalent oral polio vaccine type 2 (mOPV2). This study aimed to assess the use of fractional inactivated polio vaccine (fIPV), a smaller dose of the polio vaccine, equal to 1/5 of a standard dose, as an innovative polio vaccination delivery model, and identify the main opportunities for and challenges to the use of fIPV in the future for vaccinations.

**Methods:** The study used two designs: a quasi-experimental design used to pilot fIPV in five districts and a cross-sectional study using both quantitative and qualitative approaches to collect primary data. A simple random sampling method was used to select 2 out of the 5 pilot districts for household surveys to study 768 participants. Key informant interviews and focus-group discussions were used to collect data from key frontline health workers and health/immunization officials involved in the campaigns. Secondary data from the pilot campaigns were analyzed, such as admins tentative pilot data, lot quality assurance sampling (LQAS) and post-campaign communication assessments.

**Results:** A total of 131,789 children aged 4–59 months were included for the pilot. Among these, 126,659 (96.1%) and 126,063 (95.6%) children were vaccinated in rounds 1 and 2, respectively. Out of the 768 households assessed, 99.9% had their children vaccinated. Nearly half of the few children who were not vaccinated were reported to be due to the parent of the child not being at home (48%). Ninety-seven percent of the qualitative study interviewees were satisfied with fIPV injection and recommended its use for routine immunization.

**Conclusions:** The study findings are promising in the use of fIPV in mass campaigns to realize better coverage and global polio eradication. fIPV will potentially be used by policymakers in the design of polio eradication campaigns that integrate the fIPV vaccine into routine or supplementary immunization.



# 3<sup>RD</sup> GLOBAL Virology Congress

SEPTEMBER 25-26, 2025 | BERLIN, GERMANY

# SUBMIT YOUR ABSTRACT NOW

Speaker Slots Filling Quickly

Title: Cq values as an indicator for COVID-19 outcomes: a study of the correlation between laboratory parameters

Speaker Name: Seyedmahdi Hosseini Bafghi

Affiliation: Mashhad University of Medical Sciences

#### Abstract:

**Objective:** The ongoing outbreak of the respiratory disease COVID-19 poses a major global health threat. This pandemic is unprecedented in recent human history. The aim of this study was to investigate the relationship between cycle quantitation (Cq) and laboratory parameters in COVID-19 patients, assessing whether Cq levels could provide valuable insights into disease progression.

**Methods:** This study included 234 participants, divided into case and control groups. COVID-19 was diagnosed using real-time PCR (qPCR) testing. In addition, blood tests—including complete blood count (CBC), C-reactive protein (CRP), erythrocyte sedimentation rate (ESR), lactate dehydrogenase (LDH), D-dimer, IgG, and IgM—were conducted. Statistical analysis was performed using SPSS 22 software.

**Results:** COVID-19-positive cases exhibited significantly higher levels of neutrophil-to-lymphocyte ratio (NLR), platelet-to-lymphocyte ratio (PLR), D-dimer, ESR, CRP, and LDH compared to healthy controls. Additionally, lymphocyte and platelet counts were significantly lower in the case group. A statistically significant positive correlation was found between Cq levels and lymphocyte count (r = 0.124, P = 0.014). Conversely, a statistically significant inverse correlation was observed between Cq levels and NLR (r = -0.208, P = 0.017). Furthermore, an evaluation of hematological, inflammatory, and biochemical indices in COVID-19 patients using the ROC curve demonstrated strong sensitivity and specificity.

**Conclusion:** Our outcomes indicated a significant association between Cq levels and PLR, NLR, Ddimer, CRP, and ESR in COVID-19 patients. Consequently, including the report of laboratory parameters alongside Cq values offers a promising prognosis.



# 3<sup>RD</sup> GLOBAL Virology Congress

SEPTEMBER 25-26, 2025 | BERLIN, GERMANY

## SUBMIT YOUR ABSTRACT NOW

Speaker Slots Filling Quickly

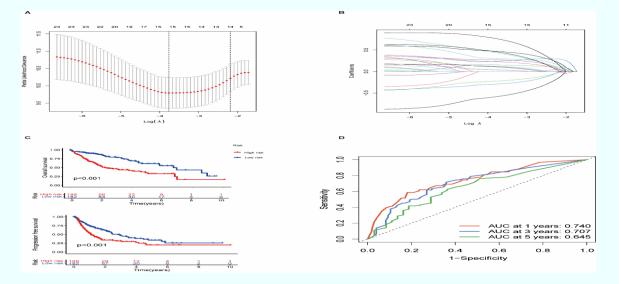
# Title: A Novel Ubiquitination-Related Gene Signature for Overall Survival Prediction in Patients with Liver Hepatocellular Carcinoma

Speaker Name: Senlin Li

Affiliation: Southern Medical University, Guangzhou, China

#### Abstract:

Liver Hepatocellular Carcinoma (LIHC) is a highly heterogeneous disease, necessitating the discovery of novel biomarkers to enhance individualized treatment approaches. Recent research has shown the significant involvement of Ubiquitin-related genes (UbRGs) in the progression of LIHC. However, the prognostic value of UbRGs in LIHC has not been investigated. In this study, the mRNA expression profiles and clinical data were obtained from public databases of LIHC patients. The least absolute shrinkage and selection operator (LASSO) Cox regression model was employed to construct a multigene signature in the TCGA cohort. Our results showed that a twelve UbRGs signature was developed to categorize patients into two risk groups, with significant differences in expression between LIHC and normal tissues. Patients in the high-risk group exhibited significantly reduced overall survival (OS) and progression-free survival (PFS) compared to those in the low-risk group. The risk score was identified as an independent predictor for OS in multivariate Cox regression analyses. Receiver operating characteristic (ROC) curve analysis confirmed the predictive capacity of the signature. Functional analysis revealed enrichment of immune-related pathways and differences in immune status between the two risk groups. The risk score was correlated with 35 Transcription Factors (TFs) and 26 eRNA enhancers, and positively associated with Tumor Mutation Burden (TMB). Patients in the high-risk group demonstrated decreased sensitivity to targeted and chemotherapeutic drugs than those in the low-risk group. In conclusion, our study identified a twelve UbRGs signature that may serve as a prognostic predictor for LIHC patients and provide valuable insights for cancer treatment.



# **FUTURE VIROLOGY 2025**

Æ



# 3<sup>RD</sup> GLOBAL Virology Congress

SEPTEMBER 25-26, 2025 | BERLIN, GERMANY

# SUBMIT YOUR ABSTRACT NOW

Speaker Slots Filling Quickly

Title: Structural Violence of Neoliberalism: Health in Ruins in Times of a Pandemic

#### Speaker Name: VIJAY KUMAR YADAVENDU

Affiliation: Patliputra University, India

#### Abstract:

STRUCTURAL VIOLENCE is a generic term for political, economic, and all forms of social structural oppression. The world lives in this era of social and economic chaos and gradients of expropriation, dispossession, and inequality. Over the last half century, across the globe, both corporate capitalism and rights are constantly mutating and evolving. In this paper, my central argument is that the prevalent radicalized social and public health inequalities are embedded in this neoliberal economic model of the market and the "profit-first" philosophy that encompasses both structural politics and economics. History is witness to the fact that hegemonic corporate neoliberalism legitimizes increasing inequalities and inherently perpetuates a systemic injustice of dispossession, exploitations, and violence. The structural violence of neoliberalism has eroded the foundational ethics and logic of the political legitimacy of the state and collectivity.

Even during the dark times of the zoonotic spillover pandemic of COVID-19, the preexisting social health inequality increased exponentially. This long pandemic has exacerbated the fragility and fissures of the existing global social order and its discrimination, prejudices, and inequalities due to systemic social and class-related issues. It has also rationalized structural violence and disaster capitalism that has furthered the consolidation of state-sanctioned surveillance, disciplinary confinement, and unprecedented social and political control. In this scenario, the socio-psychological dispositions intertwined with market mechanisms strengthen the case for an individual-centric profit-making private sector in health care, which effectively forfends the dynamics of the interaction of individuals and their environment with its consequent impact on health.



# 3<sup>RD</sup> GLOBAL Virology Congress

SEPTEMBER 25-26, 2025 | BERLIN, GERMANY

### SUBMIT YOUR ABSTRACT NOW

Speaker Slots Filling Quickly

#### Title: Development of an innovative antiviral textiles

Speaker Name: Narayanan Gokarneshan

Affiliation: Department of Textile Chemistry, India

#### Abstract:

Cotton textiles are ubiquitous in daily life and are also one of the primary mediums for transmitting viruses and bacteria. Conventional approaches to fabricating antiviral and antibacterial textiles generally load functional additives onto the surface of the fabric and/or their microfibers. However, such modifications are susceptible to deterioration after long-term use due to leaching of the additives. Here we show a different method to impregnate copper ions into the cellulose matrix to form a copper ion-textile (Cu-IT), in which the copper ions strongly coordinate with the oxygencontaining polar functional groups (for example, hydroxyl) of the cellulose chains. The Cu-IT displays high antiviral and antibacterial performance against tobacco mosaic virus and influenza A virus, and Escherichia coli, Salmonella typhimurium, Pseudomonas aeruginosa and Bacillus subtilis bacteria due to the antimicrobial properties of copper. Furthermore, the strong coordination bonding of copper ions with the hydroxyl functionalities endows the Cu-IT with excellent air/water retainability and superior mechanical stability, which can meet daily use and resist repeated washing. This method to fabricate Cu-IT is cost-effective, eco-friendly and highly scalable, and this textile appears very promising for use in household products, public facilities and medical settings.



# 3<sup>RD</sup> GLOBAL Virology Congress

SEPTEMBER 25-26, 2025 | BERLIN, GERMANY

# SUBMIT YOUR ABSTRACT NOW

Speaker Slots Filling Quickly

# Title: Eco-Friendly Cotton Fabric Treatment with Henna and Babool Bark for Antibacterial and UV Protection

#### Speaker Name: Neetapoonia

Affiliation: Department of Apparel and Textile Science, India

#### Abstract:

The textile processing industry faces significant environmental challenges due to the high chemical content in its effluents, particularly synthetic dyes. To mitigate these effects, two primary strategies are implemented: developing efficient effluent treatment systems and adopting eco-friendly dyes and mordants. Natural dyes, sourced from tree waste or easily cultivated plants, have gained global attention as a sustainable alternative. This study explores the application of natural dyes on cotton fabrics and evaluates their potential to enhance functional properties. Since natural dyes often require metallic salt mordants to improve dye uptake and fastness, their affinity for fibers like cotton can be limited. To overcome this challenge, the study utilizes bio mordants—specifically henna and harad—to enhance cotton fabric dyeability. Additionally, it examines their impact on the fabric's antibacterial and ultraviolet (UV) protection properties. The results reveal that babool barkdyed cotton fabric, pretreated with henna and hared; exhibits improved dye absorption, UV protection, and antibacterial activity. Notably, henna-treated fabric demonstrates significant bacterial reduction (93.35% against E. coli and 88.07% against S. aureus) and superior UV protection, achieving a UPF rating of 56.89. The combination of henna treatment and babool bark dyeing enhances dye absorption, producing darker shades with higher UPF values. This study underscores the potential of bio mordants and natural dyes as sustainable alternatives in textile processing, offering an eco-friendly approach to improving cotton fabric properties while reducing the environmental impact of conventional chemical treatments.



# 3<sup>RD</sup> GLOBAL Virology Congress

SEPTEMBER 25-26, 2025 | BERLIN, GERMANY

# SUBMIT YOUR ABSTRACT NOW

Speaker Slots Filling Quickly

# Title: Accelerated cognitive aging in chronically infected HIV-1 positive individuals despite effective long-term antiretroviral therapy

Speaker Name: P. L. Natarajan

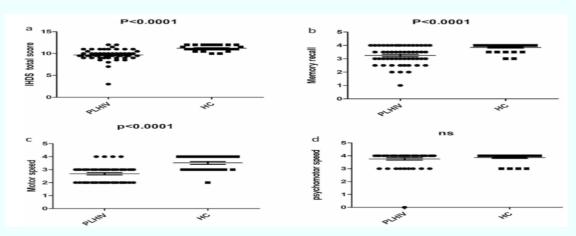
Affiliation: ICMR-National Institute for Research in Tuberculosis, India

#### Abstract:

**Objectives / Scope**: People living with HIV (PLHIV) are known to be at a higher risk of developing an array of agingrelated diseases despite well-adhered combined antiretroviral therapy (cART). The present study aimed to investigate the impact of chronic HIV infection on neurocognitive function in virally suppressed PLHIV.

**Methods**: This cross-sectional study enrolled HIV-positive individuals (PLHIV; n = 32; on uninterrupted cART) randomly from a tertiary care ART Centre in Chennai, South India. HIV-uninfected individuals matched for age and gender served as Healthy Controls (HC). All individuals provided a detailed clinical history and underwent neuropsychological assessment using the International HIV Dementia Scale (IHDS). Plasma proteome analysis was per-formed using the Proximity extension assay (PEA) with the Olink® neuroexploratory panel, and untargeted metabolomics was performed using Ultra-High-Performance Liquid Chromatography/Mass Spectrometry/Mass Spectrometry.

**Results**: Despite a median duration of 9 years on first-line cART and suppressed viremia, a significant proportion of PLHIV registered significant levels of asymptomatic neurocognitive impairment, with 71% of these individuals scoring ≤ 10 in the IHDS test. We also observed significant alterations in a number of proteins and metabolites that are known to be associated with neuroinflammation, neurodegeneration, cognitive impairment, and gastrointestinal cancers, in the PLHIV group.





# 3<sup>RD</sup> GLOBAL Virology Congress

SEPTEMBER 25-26, 2025 | BERLIN, GERMANY

### SUBMIT YOUR ABSTRACT NOW

Speaker Slots Filling Quickly

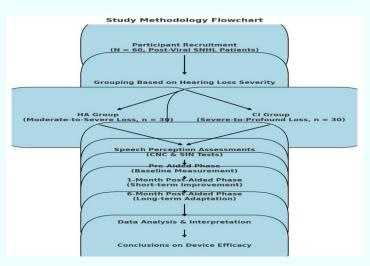
#### Title: The Role of Hearing Aids and Cochlear Implants in Post-Viral Hearing Loss: A Speech Perception Analysis

Speaker Name: Sunder Bukya

Affiliation: Mahindra University, India

#### Abstract:

Background: Viral infections, including cytomegalovirus (CMV), measles, mumps, rubella, and COVID-19, have been identified as causes of sensorineural hearing loss (SNHL). Post-viral hearing loss, particularly high-frequency sloping SNHL, significantly affects speech perception. While hearing aids (HAs) and cochlear implants (CIs) serve as primary rehabilitative options, their efficacy in restoring speech perception among post-viral SNHL patients remains underexplored. This study evaluates the impact of amplification devices on speech perception by analyzing pre- and post-aided conditions. Methodology: A cohort of 60 individuals (ages 18-55) with confirmed post-viral SNHL was recruited. Participants were categorized into two groups: (1) moderate-to-severe loss fitted with hearing aids (HA group) and (2) severe-to-profound loss fitted with cochlear implants (CI group). Speech perception was assessed using the Consonant-Vowel Nucleus-Consonant (CNC) word test and the Speech-in-Noise (SIN) test. Evaluations were conducted in three phases: (1) Preaided phase: Baseline speech perception scores were recorded; (2) Short-term postaided phase: Speech perception was reassessed after one month of device use; (3) Long-term post-aided phase: A final evaluation was conducted after six months. Results: All participants' speech recognition scores were significantly reduced in the pre-aided phase. One-month post-aid fitting, CNC scores improved by 30% and SIN scores by 25% in the HA group, while the CI group showed a 45% and 40% improvement, respectively. At six months, CNC and SIN scores increased by 50% and 40% in the HA group, while the CI group exhibited superior gains of 70% and 65%. Conclusion: Both HAs and CIs significantly enhance speech perception in post-viral SNHL, with CIs offering superior long-term benefits. Early intervention and tailored rehabilitation strategies are crucial for optimizing outcomes. Future research should explore neuroplasticity and speech perception recovery to refine device programming.



## **FUTURE VIROLOGY 2025**

https://future-virology.peersalleyconferences.com



# 3<sup>RD</sup> GLOBAL Virology Congress

SEPTEMBER 25-26, 2025 | BERLIN, GERMANY

# SUBMIT YOUR ABSTRACT NOW

Speaker Slots Filling Quickly

**FUTURE VIROLOGY 2025** 

# Title: Should we test and treat the fever triggers or the fever that creates the immune system against the fever triggers?

Speaker Name: Yacob Mathai Kunnathazhath.

Affiliation: Marma Health Centre, India

#### Abstract: Fever is one of the least knowledgeable topics in modern science.

Looking at medical journals and medical books, modern science does not even know the basic facts about fever. Modern science does not know what the purpose of fever is, what fever is, what to do to get a fever, how to diagnose it, and how to treat it because of a lack of precise definition.

#### What are the triggers of fever? What are they?

Fever triggers are substances and their actions that trigger the immune system to induce fever. These substances reduce heat, increase inflammation, and reduce blood flow.

Fever triggers include water below body temperature, soft drinks, ice cream, weather, medications including paracetamol<sup>2</sup> that reduce body heat and increase inflammation, etc. Decreased blood flow due to severe inflammation is the sole trigger for fever. Any substance that is cooling or reducing temperature (antipyretic) is a fever stimulant because it increases inflammation and reduces blood flow. Antipyretics are the only substances needed to induce fever in any organism. By using antipyretics in anyone, anyone can reduce the body's heat energy and cause inflammation and fever within a few hours.

The causes of fever triggers, the triggers of fever, and the substances produced by the immune system fight against the triggers of fever, their functions are not the same, and they are opposite to each other.

Fever triggers caused by external factors are always harmful to the body, but a fever that builds immunity against it is always beneficial to the body.

Fever is the body's defense mechanism against the triggers (inflammation) of fever.

**The current definition of fever does not mention any fever-triggering substances.** Therefore, fever triggers are not included in fever testing or treatment.

Rather than identifying and eliminating the triggers of fever, today's definition, testing, and treatment focus on identifying and eliminating the substances the immune system produces to fight against the triggers of fever. **Today's fever treatment destroys the substances that create immunity against the triggers of fever and increase the triggers of fever**.

In addition, today fever is diagnosed and treated as hyperthermia, the opposite of fever. Eliminating fever, which creates immunity against fever stimuli, and treating fever as hyperthermia will increase morbidity and mortality. It is not a treatment according to any scientific law in the world today, but a murder attempt. **The treatment of fever triggers is to reduce fever triggers.** The only solution against fever triggers is to increase blood flow and reduce inflammation. This is an immutable scientific fact. **The basic elements necessary for a scientific treatment are not provided in fever treatment.** 

**Fever should be checked and treated, not for the fever, but for its triggers.** The only solution against fever triggers is to increase blood flow and reduce inflammation. This is an immutable scientific fact.



# 3<sup>RD</sup> GLOBAL Virology Congress

SEPTEMBER 25-26, 2025 | BERLIN, GERMANY

#### SUBMIT YOUR ABSTRACT NOW

Speaker Slots Filling Quickly

### Title: Transcriptomic molecular signatures for the evaluation of inflammation in viral infections

#### Speaker Name: Edward Hitti

Affiliation: King Faisal Specialist Hospital & Research Centre, Saudi Arabia

#### Abstract:

Human genes are highly regulated at the level of post-transcription including the control of mRNA decay and translation. Conserved sequence elements like AU-rich elements (AREs) are located within mRNAs and promote decay. They can respond to inflammatory signaling and alter protein expression during different phases of inflammation. Morbidity and mortality in viral infection patients have been associated with dysregulated inflammation, a process that include aberrant post-transcription.

RNA-seq data from transcriptomic studies were used to investigate possible differential expression of mRNAs that contain AREs after viral infections. ARE-mRNAs turned out to be significantly more upregulated after viral infections, in vitro, compared to non-ARE mRNAs. The ARE-response was noticeably different between different viruses. ARE-mRNAs were also preferentially upregulated in the blood of COVID-19 patients. The level of the ARE-response could be linked to the severity status of patients. We also show that globally, ARE-mRNAs had a tendency to become downregulated after glucocorticoid (GC) treatment. A drug regularly used in the treatment of COVID-19 patients. Several ARE-mRNAs were, however, exceptionally strongly upregulated by GC treatment. The upregulated ARE-mRNAs tend to code for anti-inflammatory mediators like DUSP1 and ZFP36. mRNA stability experiments indicate that not only the downregulated, but also the upregulated ARE-mRNAs are destabilized by Dex-treatment. We propose that the overall outcome of GC treatment results in the decrease of mRNA abundance of pro-inflammatory ARE-mRNAs by destabilization while enhancing the levels of anti-inflammatory ARE-mRNAs by transcription that overcomes destabilization

Our observations contribute to the understanding of the effect of viral infection and treatment at a transcriptomic scale. The differential post-transcription between viruses and patients may be used to for the assessment of patient severity status and response to treatment



# 3<sup>RD</sup> GLOBAL Virology Congress

SEPTEMBER 25-26, 2025 | BERLIN, GERMANY

#### SUBMIT YOUR ABSTRACT NOW

Speaker Slots Filling Quickly

Title: Stromal tumor-infiltrating lymphocyte levels are associated with immune checkpoint proteins in triple negative breast cancer patients receiving neoadjuvant chemotherapy

Speaker Name: Bushra Wasim Khan

Affiliation: Ziauddin University, Pakistan

#### Abstract:

Stromal tumor-infiltrating lymphocytes (TILs) are currently being considered as a prognostic factor in triple-negative breast cancer (TNBC) and their association with the tumor immune microenvironment is less clear. To address this knowledge gap, we aimed to evaluate the expression and association of Programmed cell death-1 (PD-1), its ligand (PD-L1) and lymphocyte activation gene-3 (LAG-3) checkpoint proteins with TILs in neoadjuvant chemotherapy (NACT) treated TNBC patients. Patients (n=54; aged 24-45 years) were classified into two groups: thirty-nine received anthracycline-containing, taxane- (A+T group) and fifteen received anthracycline/taxane /carboplatin (A+T+C group) in combinations. Immunohistochemistry (IHC) and hematoxylin and eosin (H&E)-staining were used for the evaluation of PD-1, PD-L1, LAG-3 and TIL respectively in TNBC patients' biopsies who received NACT. Among 54 TNBC patient biopsies, twenty patients showed PD-L1 positive expression (66.67%) on tumor cells, significantly associated with a larger tumor size (p=0.036). However, the clinical response rate was greater (92.31%) with carboplatin based NACT, with a significant reduction in tumor size in thirty-nine patients. In the same group, PD-L1-positive tumor cells showed a significant result (p=0.0001) in fifteen patients with high TILs (93.75%). There were intermediate levels of TILs among nineteen patients (100%) with LAG-3-positive immune cells and only ten patients (25.64%) had high TIL levels (p=0.0001).

TILs are the most reliable immune markers and are significantly associated with PD-1, PD-L1 and LAG-3 in carboplatin based NACT treated group of TNBC patients. Anti-PD-1/PD-L1 and anti-LAG-3 therapy alone or in combination with chemotherapy may be promising treatments for a subset of TNBC patients.



# 3<sup>RD</sup> GLOBAL Virology Congress

SEPTEMBER 25-26, 2025 | BERLIN, GERMANY

#### SUBMIT YOUR ABSTRACT NOW

Speaker Slots Filling Quickly

### Title: MASS MEDIA AND THE PROMOTION OF SUSTAINABLE HEALTH IN NIGERIA: THE COVID-19 EXPERIENCE

#### Speaker Name: Adenike Omotayo Okeya

Affiliation: Ajayi Crowther University

#### Abstract:

The media is crucial in nation building as the government can hardly survive without effective use of the mass media and this is where sustainable health in Nigeria comes in. It is no longer news that in December 2019, the world woke up to the report of a novel viral infection, coronavirus (COVID-19), with its first case reported in China's Wuhan territory. The upper respiratory tract virus has since been called a global pandemic after cases were recorded in most continents. It is also an established fact that a lot of people have lost their lives and loved ones to this disease. This study looked at mass media and the promotion of sustainable health in Nigeria using the covid-19 experience as a focus. The theoretical framework used for the study is the agenda setting theory. The paper observed that media played an active role in creating awareness at the early stages of the covid-19 pandemic but after sometime the media did not pay much attention to sustainable health in Nigeria and recommends that the mass media must ensure that promotion of sustainable health in Nigeria and recommends that the mass media must ensure that promotion of sustainable health in Nigeria and the promotion of sustainable health in Nigeria and recommends that the media platforms known to communicate to the people.



# 3<sup>RD</sup> GLOBAL Virology Congress

SEPTEMBER 25-26, 2025 | BERLIN, GERMANY

#### SUBMIT YOUR ABSTRACT NOW

Speaker Slots Filling Quickly

#### Title: Transmission dynamics of a stochastic model of Chikungunya virus

#### Speaker Name: Milad Fahimi

Affiliation: Semnan University, Semnan

#### Abstract:

In this paper, we construct and formulate a novel mathematical model for the spread of epidemic diseases with vaccination especially for Chikungunya transmitted virally in Brazil. This model includes seven biological components consisting of susceptible (S), exposed (E), infected (I), recovered (R), vaccinated (V), quarantined (Q) and dead individuals (D). This study considers various parameters that affect the spread of the Chikungunya disease and fills gaps in other models and epidemiology data. According to the fluctuating essence of studying epidemic diseases, especially Chikungunya, implementation of stochastic differential equations and Brownian motion is one of the innovations of this comprehensive model compared to other simple models for Chikungunya transmission. Additionally, we calculate the basic reproduction number by the next-generation matrix method in order to demonstrate the level of the Chikungunya virus outbreak. Moreover, dynamical analysis is presented as a theoretical foundation of our proposed epidemic model. We introduce specific conditions in which the disease tends to extinct stochastically. Moreover, numerical simulation and data fitting are performed using Euler–Maruyama method to illustrate and validate the efficiency of the proposed model and its accordance using real data for the Chikungunya outbreak in Espirito Santo, Brazil.



# 3<sup>RD</sup> GLOBAL Virology Congress

SEPTEMBER 25-26, 2025 | BERLIN, GERMANY

#### SUBMIT YOUR ABSTRACT NOW

Speaker Slots Filling Quickly

Title: The effects of melatonin supplementation on neurobehavioral outcomes and clinical severity in rodent models of multiple sclerosis; a systematic review and meta-analysis

Speaker Name: Amirreza Naseri

Affiliation: Tabriz University of Medical Sciences

#### Abstract:

**Background:** Through the antioxidant and anti-inflammation pathways, melatonin is proposed as a safe and effective intervention in neurological diseases. This study aims to evaluate the effects of melatonin supplementation on the neurobehavioral and clinical outcomes in animal models of multiple sclerosis (MS).

**Methods**: This study was conducted following the PRISMA statement. Animal studies that reported the effects of melatonin in preclinical MS models, including the experimental autoimmune encephalomyelitis (EAE) and cuprizone model for demyelination are included in this study. A systematic search in PubMed, Web of Science, Embase, and Scopus up was conducted in April 2023. The collaborative Approach to Meta-Analysis and Review of Animal Experimental Studies (CAMARADES) critical appraisal tool was used for the quality assessment of the studies and the quantitative synthetizes were conducted using the comprehensive meta-analysis software.

**Results:** Out of 542 studies, finally 21 studies, including 14 studies in the EAE model and 7 studies of the toxic demyelination method with cuprizone were included. The route of administration was intraperitoneal in 18 studies, oral in 2 studies, and subcutaneous in 1 study. The quantitative synthesis of the EAE clinical severity scale was associated with significant differences (standardized mean difference [SDM]: -2.52; -3.61 to -1.42; p-value<0.01). In subgroup analyses, the difference was statistically significant in the mouse subgroup (SMD: -2.60; -3.74 to -1.46; p-value<0.01).

**Discussion**: This study encountered that melatonin may be associated with improved behavioral and cognitive outcomes of preclinical models of MS with acceptable safety profiles.



# 3<sup>RD</sup> GLOBAL VIROLOGY CONGRESS

SEPTEMBER 25-26, 2025 | BERLIN, GERMANY

#### SUBMIT YOUR ABSTRACT NOW

Speaker Slots Filling Quickly

### Title: Effect of Sunset Yellow on Testis: Molecular Evaluation, and Protective Role of Coenzyme Q10 in Male Sprague-Dawley Rats

#### Speaker Name: Zahra khodabandeh

Affiliation: Shiraz University of Medical Sciences

#### Abstract:

**Objectives**: In recent years, Sunset Yellow (SY) has been widely used as a food additive, sparking debates about its potential toxicity. This research aims to investigate SY's effects at both the molecular and histopathological levels, along with the protective benefits of Coenzyme Q10 (CoQ10) supplementation in male rat testes.

**Methods**: Forty-two male Sprague-Dawley rats were randomly divided into six groups (n = 7) and given daily oral gavages for six weeks. The groups included: a low dose of Sunset Yellow (2.5 mg/kg/day), a high dose of Sunset Yellow (70 mg/kg/day), CoQ10 (10 mg/kg/day), CoQ10 with the low dose of Sunset Yellow, CoQ10 with the high dose of Sunset Yellow, and deionized water as a control. After anesthesia, the rats' testes were removed for molecular and histological analysis.

**Results:** The findings showed a dose-dependent rise in the expression of oxidative stress genes (Sod, Gpx, and Cata) and a notable decrease in the expression of the steroidogenic acute regulatory (Star) gene (P value < 0.05) with increasing SY doses. Histological results supported these outcomes. Additionally, there was no significant distinction between rats treated with CoQ10 along with low doses of Sunset Yellow (CoQ10+LD) and control rats given low doses of Sunset Yellow (SY-LD).

**Conclusions:** This study illustrates that SY, as an artificial food dye, has harmful effects on the male reproductive system, while the utilization of CoQ10 can alleviate the negative impacts of SY exposure.



# 3<sup>RD</sup> GLOBAL Virology Congress

SEPTEMBER 25-26, 2025 | BERLIN, GERMANY

#### SUBMIT YOUR ABSTRACT NOW

Speaker Slots Filling Quickly

### Title: Samuel Darling returns from the tomb - Advanced AIDS still challenges medicine: a case report

#### Speaker Name: Gabriel Moreira Accetta

Affiliation: São Paulo State University, Brazil

#### Abstract:

Samuel Darling was an American pathologist, born in 1872, who during his work in Panama in 1905, described an invasive cell pathogen causing an unlicensed endemic illness, which was pursuing with whitish granulomatous lesions in lungs, liver, spleen, and bone marrow. At the time, Darling noted that this microorganism, along with the lesions it caused, had histological characteristics similar to those found in cells affected by the AMASTIGOTA form of protozoa of the genus Leishmania spp., And thus presented them as a new pathogenic species than described as a microorganism oval shaped, wrapped in a colorless capsule, like the protozoan Leishmania, and named *Histoplasma capsulatum*.

Male patient, 63 years old, from Piraju -SP, has been referred in emergency room at the Botucatu Hospital das Clínicas complaining of inappetence, weakness and abdominal pain associated with diarrhea, as well as weight loss of about 10 kg in about 3 months.

Patient also reveals that 1 month ago he had started with cough associated with night sweats. Regarding the clinical picture, research and diagnosis is carried out with HIV seropositive testing. In determining its symptomatology with external adjacent exams such as high digestive endoscopy an oroesophageal moniliasis and colonoscopy examination with colon biopsy histopathological diagnosis (HSTP) of intestinal leishmaniosis.

Opted to hospitalize the patient, for treatment: moniliasis oroesophagian and leishmaniasis and investigation of other possible opportunistic infections.

He carried out an active investigation with identification of: Cryptococcus neoformans, tuberculosis and CMV.

In instituting research of the pulmonary for OI with bronchoscopy procedure was identified in pulmonary biopsy, alveoli filled with vacuotalized macrophages, "foamy", showing in the cytoplasm numerous small gem spores, characteristic of pulmonary histoplasmosis. Given this fact, the possibilities of diagnosis error in the external examination of the colon HTP were served, due to similarities known in the histopathological aspect of intestinal infection by histoplasma and leishmania in their form of amastigote. Being requested from the Pathology Service of the Hospital das Clínicas de Botucatu, the revision of the external laboratory blades. Concluding that the first sample performed was also histoplasmosis in the intestinal site.

This clinical case brings up a reflection on that even after 10 decades since the discovery of the etiological agent *Histoplasma capsulatum* it is also possible to find diagnostic failures that may affect the patient's erroneous treatments. Especially in patients living with AIDS. Therefore, so far, the year 2025, there is also the reflection of risky arbitrics by health professionals about the realization of inaccurate diagnoses.

**FUTURE VIROLOGY 2025** 



# 3<sup>RD</sup> GLOBAL Virology Congress

SEPTEMBER 25-26, 2025 | BERLIN, GERMANY

#### SUBMIT YOUR ABSTRACT NOW

Speaker Slots Filling Quickly

### Title: Knowledge, attitude and acceptance regarding bone marrow transplantation in caregivers of beta-thalassemia major patients

#### Speaker Name: Purva Reddy Jayaram

Affiliation: Bangalore Medical College and Research Institute, India

#### Abstract:

**Objective**: Knowledge, Attitude, and Acceptance regarding Bone marrow transplantation in caregivers of beta-thalassemia major patients.

**Methods**: A cross-sectional study was conducted among the caregivers of pediatric patients with beta-thalassemia major in blood transfusion centres in Bangalore, India. Their knowledge, attitude, and acceptance regarding bone marrow transplantation were assessed using a validated questionnaire. The study aimed to identify factors that influence caregivers' decision about bone marrow transplantation.

**Results:** Among 500 participants, 449 completed the questionnaire (response rate 89.9%). The predominant portion of participants were male, the majority of whom had either a high school or undergraduate degree. A little more than half the participants belonged to below the poverty line . The knowledge, attitude, and acceptance of the caregivers towards bone marrow transplantation were shown to depend on gender, education and socio-economic status of the care-giver. The results of this study revealed that male caregivers generally exhibited higher levels of knowledge and had a better attitude towards bone marrow transplantation as compared to their female counterparts. Furthermore, higher education and socio-economic status were associated with better knowledge, more favourable attitudes and a higher acceptance towards the procedure.

The side effects and fatalities seen post transplantation, fear of failure of the procedure, fear of fatality, and the pain associated with the procedure were factors that further influenced their decision. Economic difficulties and the inability to find a suitable match were other note-worthy barriers especially in a developing country such as India.



# 3<sup>RD</sup> GLOBAL Virology Congress

SEPTEMBER 25-26, 2025 | BERLIN, GERMANY

#### SUBMIT YOUR ABSTRACT NOW

Speaker Slots Filling Quickly

### Title: Exploring STK3 in melanoma: a systematic review of signaling networks and therapeutic opportunities

Speaker Name: Matin Baghani

Affiliation: Shahid Beheshti University of Medical Sciences

#### Abstract:

Melanoma is an aggressive cancer that disregards both the MAPK and Hippo signaling pathways. This systematic review explores STK3 function in the Hippo pathway to regulate networks and its therapeutic potential in melanoma. From 1991 to 2024, we studied how STK3 interacts with the MAPK/ERK pathway to promote apoptosis and inhibit tumor growth. A comprehensive literature search was conducted using MEDLINE, Google Scholar, Scopus, and Web of Science databases. Our analysis revealed that STK3 controls cell growth, apoptosis, and metastasis via the Hippo and MAPK pathways, functioning as a melanoma tumor suppressor. Key therapeutic strategies identified include direct STK3 activation, inhibition of downstream effectors like YAP/TAZ, and combination approaches with existing BRAF inhibitors. Despite these advancements, challenges in STK3 drug development persist, warranting further investigation. This review provides critical insights into STK3's role in melanoma pathogenesis and identifies potential vulnerabilities for therapeutic intervention.



# 3<sup>RD</sup> GLOBAL Virology Congress

SEPTEMBER 25-26, 2025 | BERLIN, GERMANY

#### SUBMIT YOUR ABSTRACT NOW

Speaker Slots Filling Quickly

Title: A Cloud-Centric Approach to Digital Preservation in Institute of Virology Libraries: Advancing Future Research Innovations in Developing Countries

#### Speaker Name: Hassan Mallam Ibrahim

Affiliation: Nasarawa State University

#### Abstract:

Long-term access to research data and intellectual resources, especially in specialized libraries including virology research institutes in developing nations, depends on proper digital preservation. However, these initiatives face significant challenges, including technical know-how, inadequate funds, and technology obsolescence, in carrying out sustainable digital preservation services. Traditional on-premise solutions are often costly and difficult to scale, necessitating the adoption of innovative alternatives. To improve the provision of information services in institutes of virology libraries. This paper examines a cloud-centric approach to digital preservation. It offers a comprehensive framework that incorporates five essential elements: organization, human, social, technological, and environmental. It assesses potential barriers to adopting cloud-enabled digital preservation for advancing future research in virology. The framework places a strong emphasis on choosing suitable cloud-based preservation platforms, putting strong data security and storage plans into place, and developing human competencies through regular training. Furthermore, it presents cutting-edge service delivery models that make use of cloud computing to provide effective and dynamic access to virology research resources, especially in collaborative research settings and virtual learning environments. This study fills in gaps in the literature by addressing specific challenges faced by virology institute libraries in developing nations and offers solutions for long-term digital preservation. Subsequently, by demonstrating the revolutionary potential of cloud-enabled strategies in ensuring scalable, cost-effective, and user-focused library services, the proposed framework underscores the urgent need for such services in the virology research community. It supports the critical role that libraries at virology research institutes play in advancing global health advancement and emphasizes the importance and impact of their work.



# 3<sup>RD</sup> GLOBAL Virology Congress

SEPTEMBER 25-26, 2025 | BERLIN, GERMANY

#### SUBMIT YOUR ABSTRACT NOW

Speaker Slots Filling Quickly

### Title: Electrochemical DNA-based disposable chip for the detection of Klebsiella pneumoniae: a prominent causal agent for urinary tract infections

Speaker Name: Florien Nkurunziza

Affiliation: Department of Bio-Sciences and Technology

#### Abstract:

The aim of this study was to develop an electrochemical DNA sensor for the detection of Klebsiella pneumoniae, a prominent causal agent of UTI, by immobilizing a 5'NH2labelled ssDNA probe specific to the fimH gene of Klebsiella pneumoniae (K. pneumoniae) on a GQD- modified, screen-printed, disposable electrode. The present study involved the synthesis of graphene quantum dot (GQD)-based nanoparticles using a hydrothermal method and characterized them using Fourier transform infrared (FTIR) spectroscopy, particle size analysis and fluorescence spectroscopy. The synthesized nanoparticles were drop cast onto a screen- printed carbon electrode (SPCE) surface and used in electrochemical biosen sors for detecting Klebsiella pneumoniae, which is among the world's leading pathogens causing urinary tract infections. In this study, a specific NH2-labelled probe was immobilized onto a GQD-fabricated electrode surface, and the electro chemical response was recorded by cyclic voltammetry (CV), differential pulse voltammetry (DPV), and electrochemical impedance spectroscopy (EIS). Electrode surface characterization was performed using FE-SEM and FTIR spectroscopy. This nanofabricated chip was found to be very specific, user friendly, less time consuming and affordable to everyone. The sensor was also validated with patient samples and showed an excellent sensitivity and LOD of 70.5 mA/mm2/ng and 0.002 pg/ $\mu$ l respectively using CV.



# 3<sup>RD</sup> GLOBAL Virology Congress

SEPTEMBER 25-26, 2025 | BERLIN, GERMANY

#### SUBMIT YOUR ABSTRACT NOW

Speaker Slots Filling Quickly

### Title: Epidemiological studies on lower respiratory tract infection in children in the District Bannu

Speaker Name: Muhammad Ashraf Khan

Affiliation: Elementary and Secondary Education Department, Pakistan

#### Abstract:

**Objectives**: The study demonstrated the prevalence of lower respiratory tract infections in children admitted to the Women and Children Hospital Bannu from February through November 2019.

Scope: Lower respiratory tract infections are the leading cause of death in children globally

**Methods:** The cross-sectional study was conducted by obtaining indoor data from the official record maintained in the children's wards of the District Women and Children Hospital, Bannu.

**Results:** Males accounted for 649 (61.6%) and females 405 (38.4%) cases out of 1054 cases of the disease. Age group of  $\leq$  6 months showed 36.2% prevalence, followed by >6 m  $\leq$ 1y (25.6%), >1y $\leq$ 2 y (17.1%), >2 y $\leq$ 5 y (14.3%), >5  $\leq$  10 y (6.0%), and>10 y $\leq$ 15 y (0.8%). Pediatric patients of age  $\leq$  2 y and  $\leq$ 5 y contributed 78.9% and 93.3% to overall disease, respectively. The disease was at its peak in February (17.9%) while lowest in May (5.5%). The age group ( $\leq$ 6 m) was the dominant group in all months except August when replaced by the age group (>6 m $\leq$ 1y). The disease revealed higher prevalence during February-April and October-November.

**Conclusions:** Different age groups showed variation in the prevalence of the disease with an age group of  $\leq 5$  y contributing the largest share and seasonal peaks in the disease occurred. The present findings help in adopting strategies for effective control of the disease in different age groups of the children for their peak season.



# 3<sup>RD</sup> GLOBAL Virology Congress

SEPTEMBER 25-26, 2025 | BERLIN, GERMANY

#### SUBMIT YOUR ABSTRACT NOW

Speaker Slots Filling Quickly

### Title: Remedies and Vaccinations Against Infectious Diseases in the Ottoman Balkans (16th–18th Centuries)

Speaker Name: Yana Mihaylova Georgakieva

Affiliation: Sofia University, Bulgaria

#### Abstract:

This paper explores the remedies and practices related to the prevention and treatment of infectious diseases as recorded in several Ottoman medical manuscripts preserved in the Oriental Department of the National Library of Bulgaria, with particular attention to marginal recipes. While various remedies were recommended, the emergence of rudimentary vaccination practices against smallpox was also observed and documented by Western travelers.

The study draws upon these medical manuscripts, many of which contain marginal notes reflecting the practical and popular medical knowledge of the time. These marginalia, often written by non-expert practitioners or readers, provide valuable insights into the circulation and adaptation of medical knowledge outside formalized medical texts. The recipes frequently include herbal ingredients, protective amulets, and other prophylactic measures against infectious diseases, highlighting the coexistence of scientific and folkloric approaches to disease prevention.

Additionally, this paper addresses the accounts of Western travelers who documented effective vaccination techniques against smallpox practiced in the region, thereby providing further insight into the dissemination of preventive methods.

This research contributes to the broader understanding of Ottoman medical history and regional responses to infectious diseases, emphasizing the importance of manuscripts as living documents that capture both official and vernacular medical traditions.



# 3<sup>RD</sup> GLOBAL Virology Congress

SEPTEMBER 25-26, 2025 | BERLIN, GERMANY

#### SUBMIT YOUR ABSTRACT NOW

Speaker Slots Filling Quickly

#### Title: Continuous Improvement and Innovation During Covid-19 in East Africa: Implications for Future Tourism Policy and Planning

#### **Speaker Name: KIPKOSGEI BITOK**

Affiliation: Kenyatta University

#### Abstract:

Continuous improvement and innovation are important attributes of tourism growth and business success. However, the spread of the COVID-19 pandemic created a new threat to global and Africa's health, wellbeing, and the economy of people. The pandemic highlighted a critical need for public health capacity and a call for improvements and innovations within the tourism industry. The objectives of this paper include an assessment of the impact of COVID-19 on the tourism industry in East Africa; analysis of the innovations and digitization initiatives in hospitality and tourism sectors in the region during the pandemic; and exploration of policies and plans of innovation for rebuilding the post-pandemic tourism industry. The scope of the study covers the East Africa region, where innovations in the hospitality and tourism sectors showcase significant milestones in fighting pandemic spread and encouraging international travel and tourism. Several research methods were employed to review the literature and analyze the data, using a mixture of secondary sources of data. The secondary data sources included a review and analysis of a range of publications on the status of continuous improvements and innovations from the region, and documentation from the Partner States on the status of hospitality and tourism sectors. The findings provide an analysis of policy research on the linkages between continuous improvements during COVID-19 and the performance of tourism at the regional and national or domestic levels. The findings evaluated innovations in the tourism industry during and after the pandemic period across East Africa. The paper propounds a continuous improvements and innovation framework for tourism during and post-COVID-19, and recommends unique opportunities for rethinking policies and plans for rebuilding tourism.



# 3<sup>RD</sup> GLOBAL Virology Congress

SEPTEMBER 25-26, 2025 | BERLIN, GERMANY

#### SUBMIT YOUR ABSTRACT NOW

Speaker Slots Filling Quickly

### Title: Monitoring of Antibiotic Resistance Patterns Within Al-Karak Governmental Hospital, Jordan, in 2022

#### Speaker Name: Tahrir Radwan Mohammad AL Nawayseh

Affiliation: Infection Prevention and Control Al-Karak Governmental Hospital, Jordan

#### Abstract:

Antimicrobial resistance is considered one of the foremost global public health challenges, and its prevalence is increasing. In Jordan, particularly in Al-Karak Governorate, there is a lack of sufficient data on antimicrobial resistance to make accurate assessments. The main aim of the current study was to evaluate antibiotic resistance trends in clinical specimens from 2022 and assess antibiotic resistance patterns. The emphasis on the WHO antibiotic classification as Access, Watch, and Reserved (AWaRe) was adopted in the current study. Results: Among Gram-positive bacteria, Enterococcus faecalis exhibited 100% susceptibility to nitrofurantoin and 96% to vancomycin, Streptococcus viridans exhibited 100% susceptibility to teicoplanin, while CoNS (coagulase-negative Staphylococci) showed moderate resistance to Trimethoprim + Sulfamethoxazole (63%) and clindamycin (47%). Among Gram-negative bacteria, Escherichia coli and Klebsiella pneumoniae displayed high susceptibility to fosfomycin (E. coli: 95%, K. pneumoniae: 80%) and amikacin (E. coli: 93%, K. pneumoniae: 81%). Resistance was notable for trimethoprim + sulfamethoxazole (E. coli: 47%, K. pneumoniae: 53%) and nitrofurantoin (K. pneumoniae: 30%). Pseudomonas aeruginosa exhibited the highest proportion of XDR strains (15%), followed by K. pneumoniae (11%) and E. coli (4%), while PDR strains were found in P. aeruginosa (6%), K. pneumoniae (3%), and E. coli (0.6%). XDR was observed in 4% of CoNS and 3% of S. viridans ( $\alpha$ ), with Staphylococcus aureus exhibiting both XDR and PDR at 1%. Methods: A cross-sectional retrospective study of bacterial species and their antimicrobial susceptibility was carried out at a hospital in Al Karak, Jordan, from January to December of 2022, the study included 1187 isolates from all locations in Al-Karak Governmental Hospital. Conclusions: The significant prevalence of XDR and PDR strains in key pathogens, particularly P. aeruginosa and K. pneumoniae, underscores the need for a robust Antimicrobial Stewardship Program (ASP) and infection control measures at Al-Karak Governmental Hospital. High susceptibility in several Access group antibiotics (e.g., amikacin and nitrofurantoin) supports their prioritization in empirical therapy, while the emergence of resistance in Watch and Reserved antibiotics highlights the necessity for rational use. These findings are very important for adjusting the local strategies to lower the spread of resistant strains and improve clinical outcomes.



# 3<sup>RD</sup> GLOBAL Virology Congress

SEPTEMBER 25-26, 2025 | BERLIN, GERMANY

#### SUBMIT YOUR ABSTRACT NOW

Speaker Slots Filling Quickly

#### Title: PREVALENCE OF PROTECTIVE LEVELS OF ANTI-HBs ANTIBODIES AMONG 15– 17YEAR OLD ADOLESCENTS IN KAWEMPE DIVISION

#### Speaker Name: Joan Nambafu

Affiliation: Makerere University, Uganda

#### Abstract:

Liver related cancer and cirrhosis mortality rates have been reduced globally by the Hepatitis B vaccine however decay still happens. We aimed at determining the prevalence of breakthrough HBV infections and the prevalence of protective levels of vaccine specific anti-HBs antibody titers amongst 15–17-yearold adolescents in Kawempe division, Kampala, Uganda. A cross-sectional study. Sample size: 288 participants. The results showed; Males;149, Females;139. First dose recipients; 26Second dose recipients; 45 and Third dose recipients; 217.Combo test results: Participants at exposure: Acute infections; 4, Chronic infections;3 and vaccine protected 60. Titer test results: Responders; 22 and non-responders were 43. In conclusion Hepatitis B vaccine 3 dose coverage was good at 75.4% due to introduction of the HBV birth dose and screening of pregnant mothers however more awareness programmers are required. The study revealed an exposure rate of 76.7% for adolescents who had primarily been vaccinated owing this to genetics, Storage, Usage of overdue medicines and incompletion of HBV doses. The prevalence of acute and chronic infections in our study was moderately high at 1.5% and 1.0% respectively due to indulgence in sexual intercourse at a young age plus having many sex partners, Use of drugs, Body piercings and body tattooing plus not knowing the HBV status especially to young mothers. There was a low prevalence of protective anti-body titers at 33.8% possibly due to genetics. We request for similar studies to see whether nutritional status, Gender and ethnicity do affect vaccine intake.



# 3<sup>RD</sup> GLOBAL Virology Congress

SEPTEMBER 25-26, 2025 | BERLIN, GERMANY

Speaker Slots Filling Quickly

#### SUBMIT YOUR ABSTRACT NOW

Title: Urban intensity and runoff effects on oxidative stress and pathological severity in the testes and ovaries of blue crabs, Callinectes amnicola within a tropical lagoon system (Nigeria)

Speaker Name: Jerome Fisayo Christie

Affiliation: Institute for Oceanography and Marine Research

#### Abstract:

The spread of impermeable surfaces in urban coastal areas increases runoff, carrying pollutants that degrade surface water quality and impact the stress responses of coastal fauna. This study investigated oxidative stress and gonad health in male and female Callinectes amnicola (blue crabs) from urban and suburban regions of Lagos Lagoon. Gonadal damage in the crabs was linked to estrogenic metals (Cu, Zn, Pb, Cd) and antioxidant responses (MDA, GSH, GPx, CAT, and SOD). Urban male crabs showed higher oxidative stress, with elevated MDA and lower GSH and CAT levels, alongside regressive gonadal changes due to increased Pb, Cd, and Zn exposure. Suburban crabs, however, displayed more intersex conditions (ovotestes) correlated with elevated Cu levels in lagoon sediment. These results highlight severe testicular disruption in urban males and ovarian dysgerminomas in suburban females, indicating a sex-specific impact of pollution on reproductive health. The study identifies two primary reproductive toxicity risks: (1) male testicular damage and regressive lesions in urban crabs, caused by increased lipid peroxidation and oxidative stress, and (2) female endocrine disruption, with ovotestes in suburban populations potentially leading to nonviable follicles. These findings emphasize that urban blue crabs face significant risks across both sexes, while suburban populations are more affected by female-specific risks. The study underscores the need for targeted environmental management to address the different stressors impacting these populations.

Keywords: Decapod crustacean; Dysgerminoma; Ovotestes; Oxidative stress; Sex-specific risks; Urban coastal environment.



# 3<sup>RD</sup> GLOBAL Virology Congress

SEPTEMBER 25-26, 2025 | BERLIN, GERMANY

#### SUBMIT YOUR ABSTRACT NOW

Speaker Slots Filling Quickly

Title: In silico and in vitro investigation of the role of galactose-specific C-type lectin in transmission of the West Nile virus through Culex pipiens

#### Speaker Name: Javad Dadgar Pakdel

Affiliation: Pasteur Institute of Iran

#### Abstract:

**Background**: The West Nile virus (WNV) poses a significant public health challenge due to its potential to cause West Nile fever (WNF) and neuroinvasive diseases such as encephalitis and meningitis. Mosquitoes from the Culicidae family, particularly Culex (Cx.) pipiens, are key vectors in the transmission of WNV, making effective vector control strategies vital for preventing outbreaks. The mosquito's galactose-specific C-type lectins, notably mosGCTL-1, play an essential role in pathogen binding through its carbohydrate recognition domain (CRD). However, the potential of this molecule as a candidate for a transmission-blocking vaccine (TBV) has not yet been explored.

**Methods**: The initial phase involved an Insilco study to predict the interaction between the mosGCTL-1 epitopes with MHC-II molecules. The binding affinity of L-fucose and CTLM, as the high-affinity ligands for the C-type lectin, as a receptor, was evaluated through docking studies. Following this, laboratory experiments assessed the infection rates of female Cx. pipiens in the presence of polyclonal antibodies and WNV.

**Results**: The Insilco analyses indicated that the target molecule is well-presented by the MHC-II and has the potential features to elicit a robust antibody response. Docking results were encouraging and correlating with the about 30% blocking activity of WNV in Cx. pipiens in our in vitro assay.

**Conclusions**: The findings suggest that mosGCTL-1 could be a minor component of the WNV transmission process. It is evident that a multitude of other lectin-dependent molecules, including DC-SIGN and CLEC5A, warrant further investigation in future research.



# 3<sup>RD</sup> GLOBAL Virology Congress

SEPTEMBER 25-26, 2025 | BERLIN, GERMANY

#### SUBMIT YOUR ABSTRACT NOW

Speaker Slots Filling Quickly

### Title: The effect of organic and inorganic decavanadates compounds on the viability of both IGR39 and MDA-MB-231 cell lines

#### Speaker Name: KSIKSI Regaya

Affiliation: University of Tunis El Manar

#### Abstract:

Decavanadates compounds are known for their biological activities such as: insulin-mimetic, antineoplastic, antiparasitic and antimicrobial properties [1-2]. Interestingly, several research works have shown the significant antitumor activity of decavanadate compounds on several cancer cell lines [3] and some of the studied decavanadate compounds exhibit low toxicity in vivo [4]. In this work, we will study the effect of some organic and inorganic decavanadate compounds on the viability of IGR39 and MDA-MB-231 cell lines. The molecules were prepared by slow evaporation at room temperature. The structural characterisation, performed by X-ray diffraction on a single-crystal. This study was evaluated using the standard MTT (3-(4,5-dimethylthiazol-2-yl)-2,5-diphenyltetrazolium bromide) assay. Different effects were obtained depending on the nature of the cation. In this work we will give a comparative study according to the structure of the molecules tested. These work contributed to better understand the structure-function relationship of the decavanadate compounds, in order to develop the next generation antitumor drugs, targeting specific cancer cells.



# 3<sup>RD</sup> GLOBAL Virology Congress

SEPTEMBER 25-26, 2025 | BERLIN, GERMANY

#### SUBMIT YOUR ABSTRACT NOW

Speaker Slots Filling Quickly

### Title: The global prevalence of Chlamydia trachomatis genital infection in pregnant women: a meta-analysis

Speaker Name: Newsha Olfat

Affiliation: Student Research Committee, Kermanshah University of Medical Sciences

#### Abstract:

**Background:** Chlamydia trachomatis genital infection is one of the most common bacterial sexually transmitted infections, with serious implications for maternal and neonatal health. This infection increases the risk of ectopic pregnancy, fetal infections, and respiratory complications such as bronchitis and pneumonia. This systematic review and meta-analysis aimed to assess the global prevalence of this infection among pregnant women.

**Methods:** A comprehensive search was conducted using major databases including PubMed, ScienceDirect, Embase, Web of Science, Scopus, and Google Scholar up to October 2023. After removing duplicates and applying inclusion/exclusion criteria, 44 studies were selected for metaanalysis.

**Results:** The global prevalence of genital Chlamydia trachomatis infection in pregnant women was estimated at 8.4% (95% CI: 5.8%-12.1%). The meta-regression analysis showed a statistically significant decrease in prevalence with increasing sample size and publication year (p < 0.05).

**Conclusion:** The prevalence of genital Chlamydia trachomatis infection among pregnant women is influenced by various factors including age, socioeconomic status, geographical location, and individual behavior. Comprehensive prevention, screening, and treatment programs, especially for high-risk pregnant women, are crucial.



# 3<sup>RD</sup> GLOBAL Virology Congress

SEPTEMBER 25-26, 2025 | BERLIN, GERMANY

#### SUBMIT YOUR ABSTRACT NOW

Speaker Slots Filling Quickly

Title: The effects of melatonin supplementation on neurobehavioral outcomes and clinical severity in rodent models of multiple sclerosis; a systematic review and meta-analysis

Speaker Name: Amirreza Naseri

Affiliation: Tabriz University of Medical Sciences

#### Abstract:

**Background:** Through the antioxidant and anti-inflammation pathways, melatonin is proposed as a safe and effective intervention in neurological diseases. This study aims to evaluate the effects of melatonin supplementation on the neurobehavioral and clinical outcomes in animal models of multiple sclerosis (MS).

**Methods**: This study was conducted following the PRISMA statement. Animal studies that reported the effects of melatonin in preclinical MS models, including the experimental autoimmune encephalomyelitis (EAE) and cuprizone model for demyelination are included in this study. A systematic search in PubMed, Web of Science, Embase, and Scopus up was conducted in April 2023. The collaborative Approach to Meta-Analysis and Review of Animal Experimental Studies (CAMARADES) critical appraisal tool was used for the quality assessment of the studies and the quantitative synthetizes were conducted using the comprehensive meta-analysis software.

**Results**: Out of 542 studies, finally 21 studies, including 14 studies in the EAE model and 7 studies of the toxic demyelination method with cuprizone were included. The route of administration was intraperitoneal in 18 studies, oral in 2 studies, and subcutaneous in 1 study. The quantitative synthesis of the EAE clinical severity scale was associated with significant differences (standardized mean difference [SDM]: -2.52; -3.61 to -1.42; p-value<0.01). In subgroup analyses, the difference was statistically significant in the mouse subgroup (SMD: -2.60; -3.74 to -1.46; p-value<0.01).

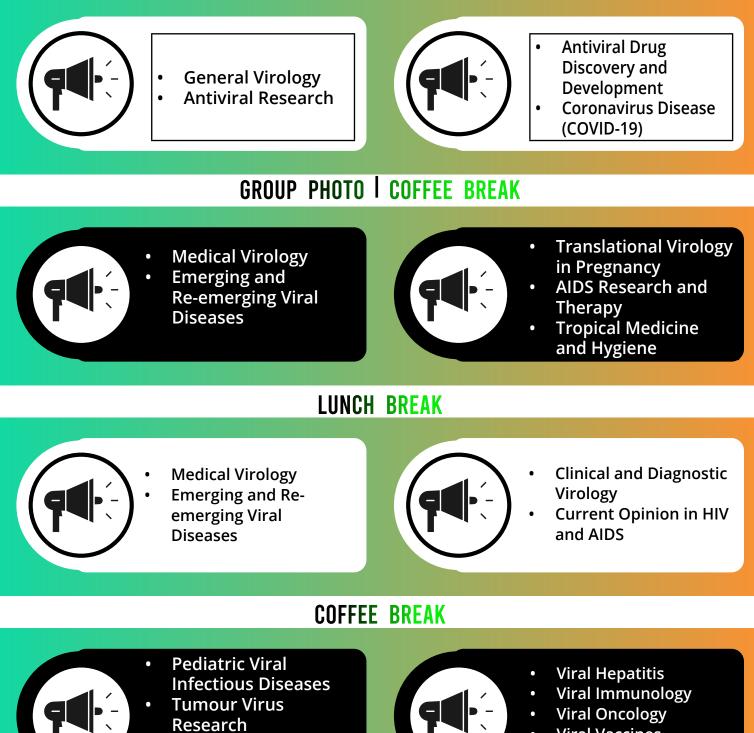
**Discussion**: This study encountered that melatonin may be associated with improved behavioral and cognitive outcomes of preclinical models of MS with acceptable safety profiles.



## CONCURRENT **EDUCATIONAL SESSIONS**



**THURSDAY - SEPTEMBER 25, 2025** 



Vector-Borne and **Zoonotic Diseases** 



- Viral Oncology
- Viral Vaccines
- NeuroVirology



## CONCURRENT EDUCATIONAL SESSIONS



### FRIDAY - SEPTEMBER 26, 2025



- Plant and Agricultural Virology
- Gut Pathogens



Insect vector and virus epidemiology Diagnosis And Treatment Of Infectious Diseases

### GROUP PHOTO I COFFEE BREAK

- Viral Vectors
  - Vaccines
  - Virus-Cell, Virus-Microbe, and Virus-Host Interactions



- Viral Vectors
- Vaccines
- Virus-Cell, Virus-Microbe, and Virus-Host Interactions

### LUNCH BREAK

- Gene Delivery
- Immune Responses and Viral Modulation of Immune Responses



- Viral Structure and Assembly
- Arboviruses
- Influenza (Flu)
- Zika Virus

### **COFFEE BREAK**



- Staphylococcal Infection
- Tuberculosis
- West Nile Virus



- Herpes
- Hepatitis
- Ebola
- Dengue

### GLIMPSES INTO OUR PAST CONFERENCES



### GLIMPSES INTO OUR PAST CONFERENCES









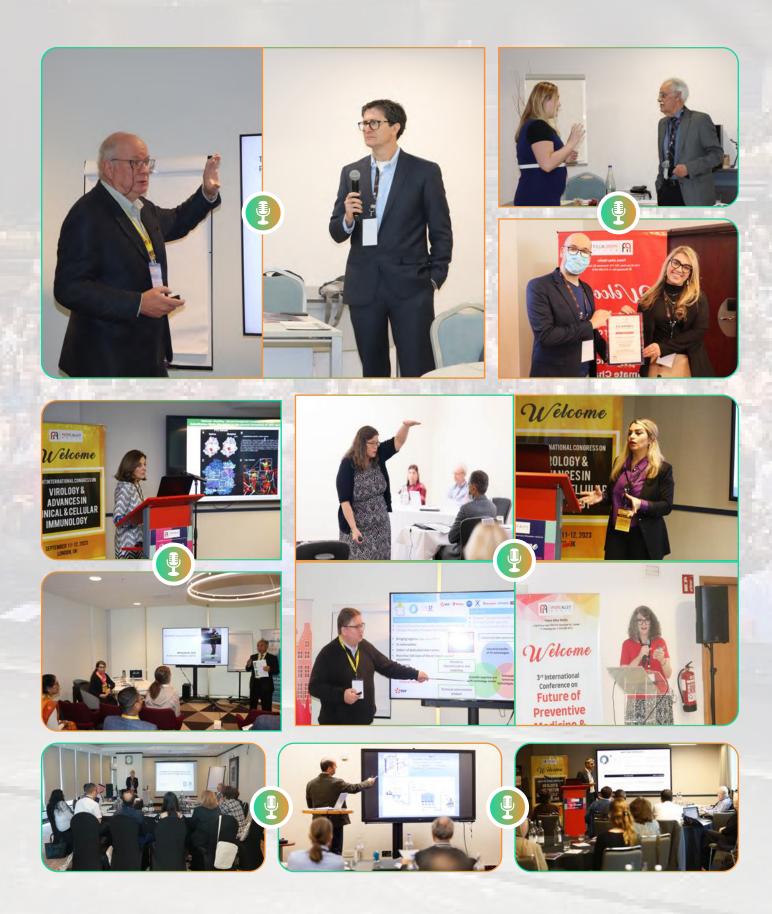




### HONORING DISTINGUISHED SPEAKERS @ OUR PAST CONFERENCES



# **MEET THE PROFESSOR SESSIONS**@ OUR PAST CONFERENCES



## **YOUNG RESEARCHER SESSIONS** @ OUR PAST CONFERENCES



# **BOOK LAUNCHES**@ OUR PAST CONFERENCES

























### WE LOVE & SUPPORT PEERS ALLEY MEDIA CONFERENCES



### NETWORKING... Conferencing... Fostering

### Attending a Conference isn't all about Learning and Networking



A right choice of conference destination is an important aspect of any international conference and keeping that in consideration, *Future Virology 2025* is scheduled in the Beautiful city "Berlin'.



Brandenburger Tor



Holocaust Memorial



Jüdisches Museum



Soviet Memorial



Hop-On Hop-Off Bus and Boat



Rixdorf



Great Art at the Van Gogh Museum



Oude Haven, Rotterdam



Oude Kerk's Tower

# SPEAKER'S TESTIMONIALS



BARCELONA

## **FUTURE VIROLOGY 2024**

https://future-virology.peersalleyconferences.com/

NN NN



Excellent quality of talks from Japan, USA, EU Canada, at Future Virology 2024. It contributes excellent for my professional development even for a just retired scientist.

Great speakers from US, EU Japan and EXCELLENT coverage of the meeting organization as well as excellence in booklets!!

Congratulations Annie!!!

#### JACQUES POUYSSEGUR UNIVERSITY CÔTE D'AZUR, FRANCE; SCIENTIFIC CENTER, MONACO

101 101

Given the wide spectra of covered topics, the quality of talks at Future Virology 2024 was good. For the next event, I would suggest focusing on viral immunology issues related to human medical virology. I established useful contacts that may lead to future collaboration.

You did an excellent job organizing the event and selecting speakers.



MICHAEL I BUKRINSKY THE GEORGE WASHINGTON UNIVERSITY SCHOOL OF MEDICINE AND HEALTH SCIENCES, USA

#### NN NN



The quality of the talks at Future Virology 2024 were good. Since my subject material was so different than the other presentations, there was not a lot I was able to gain from the other talks that I could apply to my own work. However, speaker selection was fine. In the future, a little bit more focus on subtopics would be helpful so that talks would complement each other better.

### MARK A. FEITELSON

NN NN

The quality of talks at Future Virology 2024 was excellent, all speakers were edge experts in the presented topic, and the talks themselves were very interesting and enriching, at least to me, and I think for everybody as there were a good number of questions in most of them reaffirming the interest of the audience.

I am veterinarian and epidemiologist working with epizootic outbreaks of animals and zoonotic diseases, so many of the talks were not directly related to my area of work, but they were very interesting for my personal domain. The few talks on animal health topics were very interesting and I made good contacts with all of them that will be explored for further communication between us.

I would like to applause specially the one health approach considered in the talk selection which contribute to the practical implementation of this important concept bringing together human and animal health along with research.

#### **GERMAN CACERES GARRIDO** *MINISTRY OF AGRICULTURE, FISHERIES AND FOOD (MAPA), SPAIN*

MM

The Quality of talks at Future Virology 2024 was very hard! New ideas for the research and possibilities to create new collaboration groups.

### FILOMENA FIORITO





NN NN

The quality of talks at Future Virology 2024 was commendable, with speakers delivering insightful and current information. As my major is biophysics, the conference had a moderate impact on my development.

Peers Alley Media did an excellent job in managing the event and selecting thought-provoking speakers.

NOHA ALI SALEH IMAM ABDULRAHMAN BIN FAISAL UNIVERSITY, SAUDI ARABIA





Very high-quality of talks at Future Virology 2024.

### JOHN PAUL BEN SILANG

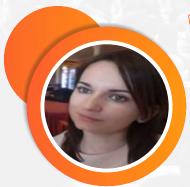
DIRECTOR OF NURSING RESEARCH, HAMAD MEDICAL COR-PORATION, QATAR

101 101

The Future Virology 2024 talks are high quality, very good.

#### **VLADIMIR KURĆUBIĆ** UNIVERSITY OF KRAGUJEVAC, SERBIA





#### 101 101

Everything was excellent at Future Virology 2024 conference! The level of scientific works by the professors from all over the world, was very good!

The knowledge was really updated!

About Peere Alley Media I am very thankful for such organizations of conferences! Very correct group and with high standards!

### **NOHA ALI SALEH**

IMAM ABDULRAHMAN BIN FAISAL UNIVERSITY, SAUDI ARABIA

#### NN NN

I would like to express my appreciation for the exceptional quality of organization at Future Virology 2024. Everything was executed flawlessly, contributing to a seamless experience for all attendees. The talks were not only well-structured but also incredibly engaging, showcasing a range of innovative ideas and research that sparked meaningful discussions. Each presentation offered valuable insights that I found both intriguing and thought-provoking.

Overall, I would definitely regard this event as a significant opportunity for my professional development. The knowledge and perspectives gained from the speakers will undoubtedly aid me in my career. I sincerely thank everyone involved for creating such a remarkable experience.



**DENADA KRESHPAJ** UNIVERSITY OF VLORE "ISMAIL QEMALI", ALBANIA NN NN



My experience at 2nd Global Virology Congress (Future Virology 2024) was by far the best experience.

I am impressed by the quality of the presentations and the variety of topics.

Studies provided new and important data's that complete our knowledge and influence new ideas for further studies. Also, an interesting part was the discussion between presentations, triggered by the appropriate selection of topics.

#### DEONA TARAJ UNIVERSITY OF VLORE "ISMAIL QEMALI", ALBANIA

#### NN NN

I am appreciating the wonderful event Future Virology 2024. This is not easy from various academic and professional experts from different countries through virtually.

The selection of speakers is well from different field of application and it was useful and gaining knowledge about different application.

I gained knowledge from some new fields and technology and it will be useful for our research. Really Peers Ally Media made successful of conference and support to the participants.

### RAMALINGAM BALASUBRAMANIYAN

ICMR-VECTOR CONTROL RESEARCH CENTRE, INDIA



#### NN NN



I really appreciate the selected speakers and the research presentations were helpful. I am thankful for inviting me and I too participated and presented my work at Future Virology 2024.

### **KRISHNAVENI** R

VIJAYANAGARA SRI KRISHNADEVARAYA UNIVERSITY, INDIA



# SPEAKER'S TESTIMONIALS

### **FUTURE VIROLOGY 2023**

https://future-virology.peersalleyconferences.com

### **Testimonials**



#### Michael Bukrinsky The George Washington University, USA

The talks of Future Virology 2023 were very interesting and the topics covered a very wide area of knowledge.

I am at the advanced stage of my career, when further development can be only incremental. But I learned some interesting new facts and approaches. I am not sure I will be able to use them in my studies, but I will mention them in my lectures to students.

The talks were very interesting, and the speakers did a good job.



#### Muhammad Ashraf Khan

Elementary and Secondary Education Department, Pakistan

The event Future Virology 2023 works well by introducing myself, my research work, and new findings and contributing to the existing knowledge of the world.

Peers Alley Media, Canada did a good job.



#### Mousa Qatawneh

Queen Rania children's Hospital, Jordan

#### Greetings.

Thank you for the outstanding conference. The quality of talks was very high. It increased our knowledge regarding the last updates in the medical field.

The event was great.



#### Jacques Pouyssegur

#### University Cote d Azur, France

First CONGRATULATIONs to bring this meeting to a great success considering the competition in the VIROLOGY topic.

The format of 20 minutes well respected talks was good and personally I appreciated the variety of topics as well as the quality of the presentations and above all the quality of the Abstract Booklet.

I was not able to assist to all talks and some were absolutely outstanding like the one of Alfredo Berzal-Herranz from Spain. I will certainly invite him for a seminar in our Institute in Nice.

Again, THANK you so much ANNIE for the high quality of this event.

### **Testimonials**



#### Sabin KC

Gandaki Medical College, Nepal

#### Greetings!

It was a wonderful time with you all. I would like to thanks global virology congress for giving me this opportunity.

### Ikuma Kasuga

Tokyo Medical University, Japan

I enjoyed the meeting.

The content, program plan and speakers selection were all excellent.

Thank you very much for your perfect job, and all the best!



#### Alberto E Munoz Universidad de Buenos Aires, Argentina

The quality of the presentations at Adv. Immunology 2023 were very good.

Peers Alley Media, Canada did a good job in the selection of speakers.



**Michael Kolman** Advocate Lutheran General Hospital, USA

Thank you for the opportunity!

The quality of talks at the conference was great. I felt like I learned a lot regarding a multitude of immunology topics. I do think that this was a great experience and will look very good on my CV!

### **Testimonials**



#### Silvia Anett Meja Rodrguez Proderma, El Salvador

The quality of the talks were very good and impressive. The event did contribute a lot to my professional development and enhanced my curriculum. And yes Peers Alley Media did a good job giving instruction that were helpful for the presentation and information in general.



#### **Mousa Qatawneh** Queen Rania children's Hospital, Jordan

Queen Rahla childrens Hospital, Jord

Greetings.

Thank you for the outstanding conference. The quality of talks was very high. It increased our knowledge regarding the last updates in the medical field.

The event was great.

# SPONSORS/ MEDIA PARTNERS





### **Peers Alley Media**

1126 59 Ave East, V5X 1Y9, Vancouver BC, Canada WhatsApp No: +1 (506) 909-0537 https://future-virology.peersalleyconferences.com

### **FUTURE VIROLOGY 2025**

###