

4th International Conference on Infectious Diseases



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 09, 2026
SEPTEMBER

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EVENT



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Keynote Speakers



Bernd Blobel,
University of Regensburg,
Germany



Shree Niwas Chaturvedi,
Centre for Aptitude Analysis and
Talent Search, India



Thomas J. Webster,
Brown University,
USA

Thank You All



ORAL PRESENTATIONS

SEPTEMBER
09, 2026

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Mutiat Ibrahim,

University Hospital
Birmingham, UK

Biography

Dr. Mutiat Ibrahim, MD, MPH, is an NHS Physician at University Hospital Birmingham, UK. She has a strong interest in infectious diseases and clinical medicine, with a focus on the diagnosis and management of complex infections. In 2026, she is presenting her clinical case, "From Sore Throat to Septic Emboli: A Case of Lemierre's Syndrome," at the International Conference on Infectious Diseases.

From Sore Throat to Septic Emboli: A Case of Lemierre's Syndrome

Abstract:

Background: Lemierre's syndrome is a rare, potentially life-threatening complication of oropharyngeal infection, marked by septic thrombophlebitis of the internal jugular vein with metastatic infection, typically pulmonary. Diagnosis is challenging as it can mimic community-acquired pneumonia or pulmonary embolism. We report a case caused by *Fusobacterium necrophorum* and *Streptococcus anginosus* group, complicated by bilateral septic pulmonary emboli and cavitating nodules.

Case presentation: A 43-year-old woman presented with a 5-day history of sore throat, productive (later blood-stained) cough, fever, headache, myalgia, pleuritic chest pain, neck swelling and breathlessness. She was tachycardic and hypoxic with markedly raised CRP (427 mg/L) and D-dimer (1062 µg/L FEU). CT pulmonary angiography excluded embolism but showed bilateral consolidation and pulmonary nodules. Blood cultures grew *Fusobacterium necrophorum* and *Strep. anginosus*. Fevers persisted despite antimicrobials, prompting further investigation.

Management and outcome: Antibiotics were escalated (co-amoxiclav/ clarithromycin → piperacillin-tazobactam/clarithromycin → metronidazole after culture results). Persistent pyrexia led to head and neck CT, showing bilateral tonsillitis with internal jugular and facial vein thrombophlebitis, confirming Lemierre's syndrome, plus progressive cavitating nodules (septic emboli) and a new pleural effusion. No drainable collection was found, so ENT input wasn't needed. Meropenem (increased to 2 g TDS) and clindamycin were started after multidisciplinary review; anticoagulation was given for 12 weeks. The effusion wasn't amenable to drainage. She improved, stepped down to oral amoxicillin and metronidazole for a total 4-week course, and reported full symptom resolution at follow-up, though she missed her follow-up CT.

Discussion: This case highlights the diagnostic difficulty of Lemierre's syndrome, which initially mimicked pneumonia and PE, with PE excluded on initial CTPA. Positive cultures, persistent fever and progressive cavitating nodules prompted head/neck imag-

ing, revealing thrombophlebitis and confirming diagnosis. Pulmonary findings reflected septic embolization from the thrombosed vein. Absence of a visible abscess does not exclude the diagnosis. Management requires prolonged anaerobic-directed antimicrobials, source control where relevant, and individualised, multidisciplinary decisions on anticoagulation.

Conclusion: Lemierre's syndrome should be considered with severe oropharyngeal infection, persistent sepsis and pulmonary features like haemoptysis, cavitating nodules or septic emboli. A negative CTPA does not exclude septic pulmonary embolization. Early recognition, blood cultures, targeted imaging and multidisciplinary care are key to good outcomes.

Keywords: Lemierre's syndrome; Septic thrombophlebitis, Internal jugular vein thrombosis; Septic pulmonary emboli, *Fusobacterium necrophorum*; *Streptococcus anginosus*; antibiotics; anticoagulation; multidisciplinary approach



Ayesha Khalid,

Frontier Corps Hospital,
Pakistan

Biography

Dr. Ayesha Khalid, a Clinical Microbiologist with Fellowship of the College of Physicians and Surgeons Pakistan and Diplomate ship of the Royal College of Pathologists (UK), heads Pathology at Frontier Corps Hospital, Quetta. With over 12+ publications and over a decade of research experience, she coled Fleming Fund Country Grant II, advancing stewardship and microbiology diagnostics nationwide.

A Multicenter Analysis of Antimicrobial Resistance and Utilization Among ICU Patients: Insights from Tertiary Care Centers of a Lower Middle Income Country

Abstract:

Antimicrobial resistance (AMR) has emerged as a formidable global health threat, particularly in intensive care units (ICUs) where critically ill patients are highly vulnerable to multidrugresistant organisms. The challenge is further magnified in lower middleincome countries, where stewardship programs and surveillance systems are often limited.

This multicenter study is conducted to delineate the resistance patterns of bacterial pathogens isolated from ICU patients, to assess the prevalence of resistant strains in the Balochistan region of Pakistan, and to quantify antimicrobial consumption using standardized metrics.

A descriptive crosssectional study is being undertaken across two tertiary care hospitals in the Quetta city of Balochistan. All ICU patients receiving antimicrobial therapy during their admission from June 2025 to June 2026, were included until discharge, transfer, or death. Clinical specimens—including respiratory secretions, blood, urine, stool, cerebrospinal fluid, catheter tips, and pus—were processed following the American Guidelines. Bacterial isolates were identified using API galleries, and susceptibility testing was performed via KirbyBauer disk diffusion in accordance with Clinical and Laboratory Standards Institute (CLSI) breakpoints. Antimicrobial consumption was evaluated in adult ICUs (total 24 beds across both centers) during the second quarter of 2026 (April to June), expressed as defined daily doses per 100 occupied bed days (DDD100).

This study provides a comprehensive overview of AMR and antimicrobial utilization in critically ill populations of a resourceconstrained region. The findings are expected to inform infection control strategies and stewardship interventions. Detailed results, including resistance profiles and consumption trends, will be shared in subsequent reports.



Jayeshkumar Kanani,

Surat Municipal Institute
of Medical Education and
Research, India

Biography

Dr. Jayeshkumar Kanani has over 14 years of experience including 8 years of experience in the field of forensic medicine and Toxicology. Appointed in 2016 as an autopsy medical officer, he has conducted over 4,000 autopsies, providing invaluable medico-legal expertise in death investigations. His expertise extends to histopathological studies, scientific writing, court testimonies, and mentoring students in forensic medicine. Dr. Kanani has published many peer-reviewed papers in international journals such as Elsevier, BMC, and SpringerNature, with most as the first author. He has demonstrated exceptional skill in managing the publication process, and successfully publishing articles with tight deadlines. His research interests include general medicine, forensic medicine, Toxicology, Surgery, Cardiology, Pathology, Oncology, and Neurology. He is passionate about contributing to the academic and professional community and welcomes opportunities to collaborate on research and editorial endeavours

Silent Aortic Catastrophe: Autopsy Insights into Fatal Rupture of a Saccular Descending Thoracic Aneurysm

Abstract:

Background: Thoracic aortic aneurysms, particularly those involving the descending thoracic aorta, are uncommon and frequently remain clinically silent until catastrophic rupture. Saccular aneurysms represent a rare morphological subtype and are believed to carry a higher risk of rupture compared with fusiform aneurysms, yet they are often underrecognized in clinical practice.

Case Description: We report an autopsy-based analysis of a 56-year-old male with a history of hypertension and diabetes mellitus who experienced sudden collapse and was declared dead on arrival. There were no preceding symptoms suggestive of cardiovascular or neurological disease. Postmortem examination revealed massive left-sided hemothorax (2750 g) secondary to rupture of a saccular aneurysm of the descending thoracic aorta. A transverse tear measuring 2.5 cm was identified, associated with a DeBakey type III aortic dissection extending distally.

Pathological Findings: Gross examination demonstrated a thin-walled saccular aneurysm with mural thrombus. Histopathological evaluation showed medial degeneration with necrosis, fibrosis, fibrin deposition, hyalinization, and mixed inflammatory infiltrates at the rupture site. Additional findings included advanced atherosclerosis of the aorta and features of healed myocardial infarction, highlighting underlying chronic cardiovascular pathology.

Discussion: This case underscores the deceptive and lethal nature of descending thoracic saccular aneurysms, which may remain asymptomatic despite significant rupture risk. Sudden death in such cases is frequently misattributed to myocardial infarction or cerebrovascular events, leading to underestimation of true disease prevalence.

Conclusion: Early recognition and proactive monitoring of high-risk individuals, particularly those with hypertension, are crucial. Autopsy findings play a vital role in elucidating hidden cardiovascular causes of sudden death and emphasize the need for improved diagnostic strategies to prevent fatal outcomes.



**Yogesh Kumar
Gupta,**

Rukmani Birla Hospital,
India

Biography

Dr. Yogesh Kumar Gupta is currently the Lab Head and Senior Consultant in Microbiology, and the Head of Infection Control at Rukmani Birla Hospital, Jaipur. He completed his MBBS from SMS Medical College, Jaipur, and MD in Microbiology from SP Medical College, Bikaner, along with specialized training in critical care (IDCC) and infection control. His key areas of interest include hospital infection control, antimicrobial stewardship, laboratory quality management, and healthcare accreditation. He is a Principal Assessor for NABH, a Technical Assessor for NABL, and actively contributes to setting infection prevention standards. Dr. Gupta has conducted multiple CMEs on antimicrobial stewardship and surgical prophylaxis, and regularly lectures in microbiology and critical care forums. He has organized three consecutive CME-cum-certificate courses on infection control, accredited by the Rajasthan State Medical Council. He is also the Founder of the Rajasthan State Chapter of the Indian Association of Medical Microbiologists and currently serves as an Executive Member of its national body.

Impact of Rapid Molecular Diagnostics Using the BioFire® Meningitis/Encephalitis Panel on Antimicrobial Days of Therapy and Stewardship Outcomes: A Real-World Clinical Evaluation

Abstract:

Background: Delayed etiological diagnosis in suspected meningitis and encephalitis often necessitates prolonged empirical broad-spectrum antimicrobial therapy. Rapid syndromic molecular diagnostics, such as the BioFire® Meningitis/Encephalitis (ME) Panel, have the potential to function as a clinical intervention by enabling earlier pathogen identification and antimicrobial optimization within routine clinical practice.

Objectives: To assess the clinical impact of BioFire® ME Panel implementation on antimicrobial days of therapy (DOT), time to optimal therapy, and antimicrobial stewardship outcomes in patients with suspected central nervous system (CNS) infections.

Methods: We conducted a retrospective, before–after interventional clinical study at a tertiary-care center, comparing patients managed prior to BioFire® ME Panel implementation (Pre-BioFire group, n=80) with those managed after implementation (Post-BioFire group, n=80). Baseline demographic and clinical characteristics were comparable between groups. The primary outcome was total antimicrobial DOT. Secondary outcomes included time to optimal therapy, antimicrobial de-escalation or discontinuation, length of hospital stay, and in-hospital mortality.

Results: Implementation of the BioFire® ME Panel was associated with significant reductions in median antimicrobial DOT, including vancomycin (6 vs 4 days; 33.3%; $p<0.05$), third-generation cephalosporins (10 vs 4 days; 60.0%; $p<0.05$), carbapenems (6 vs 4 days; 33.3%; $p<0.05$), and acyclovir (6 vs 2 days; 66.7%; $p<0.01$). Overall antimicrobial exposure was reduced by 50% (median DOT 8 vs 4 days; $p<0.01$). Median time to optimal therapy decreased from 96 hours to 24 hours ($p<0.05$), facilitating earlier targeted therapy and stewardship-guided de-escalation.

Conclusions: In this real-world clinical evaluation, rapid syndromic molecular testing using the BioFire® ME Panel functioned as an effective diagnostic intervention, significantly reducing antimicrobial exposure and accelerating time to optimal therapy in suspected CNS infections. Integration of rapid diagnostics with active antimicrobial stewardship represents a clinically impactful strategy to optimize antimicrobial use.



**Dessalegn
Temesge Leye,**

Addis Ababa Science & Technology University, Ethiopia

Biography

Dr. Dessalegn Temesgen Leye is a pedagogic (MSc) and Biochemist (PhD, since 1997). Delivered Biochemistry and nutrition as well as research methodology based courses at HEIs. Recently, he is highly concentrates on how flaws in School Feeding systems cause permanent physiological dysfunctions; ways of infectious diseases preventions; and vaccination issues.

Framing the meanings of Effective, Efficacy, and Feasibility can reduce deceptions-hesitancy against medication & vaccination

Abstract:

The vaccination principle has given rise to different terminologies used to identify how good a vaccine is, or how harmful a vaccine is to us. For the latter definition, the term antivaxxer day by day has become a stronger word that attracts every one of us. In particular, it become more popular during the COVID-19 pandemic era. On the other side, those who are pro vaccination too, have their own well organized fighters, mainly: members of the Big Pharma industry, their affiliated social media, as well as some journals. Certainly, such highly polarized two groups at the end of the day should move us to common consensus! Unless, if without science-based agreements/justifications one of them wins, the vaccination issues may lead us into chaos chaos that is flowering today! Moreover, what will be worse is – such tendency will transmitted to medication too. This is why in our results of a three-year (2021-2024) intensive study on Are intramuscularly injectable vaccines feasible to stop respiratory-based pathogens? except experimental-clinical case studies-metadata, we have been forced to collect data on the three meanings as well as their impacts. We analyzed, politicians speeches, Social Media posts, vaccines developers positions, and of course antivaxers rhetoric-movements. We postulate that to minimize speculations within vaccination principles and medications as well, the mentioned differences should be categorized with clear definitions by relevant stakeholders. If not, neglecting the child vaccination, autism, etc., at least in future pandemic, there will be more worsening messes, chaos, and even deadly conflicts than in the COVID-19 era! About which, we will brief in the conferences event.



**Ntwali Kabundula
Herve,**

Rodolphe Merieux Labora-
tory, Democratic Republic Of
The Congo

Biography

Ntwali Kabundula Herve is a Laboratory scientist at Rodolphe Merieux Laboratory INRB-Goma, Head of consultation and clinical analyses department, researcher infectious diseases, clinical biology and quality management system. I focus on strengthening diagnostic systems for emerging viruses, play a key role in the Mpox and Ebola response in North-Kivu through quality management and personnel training.

Implementation of quality management and biosafety in Mpox outbreak re sponse at the Rodolphe Merieux Laboratory, INRB-Goma, Democratic Republic of the Congo

Abstract:

This study presents the systematic implementation of a quality management system and enhanced biosafety protocols for Mpox outbreak response at the Rodolphe Merieux Laboratory INRB-Goma, maintaining diagnostic reliability is a critical challenge. Using the Slipta 2023 checklist, aligned with ISO 15189:2022 and ISO 15190:2020, we conducted a cross sectional descriptive study from January 2023 to July 2025. The baseline audit revealed an overall score of 39%, highlighting significant gaps in technical documentation and metrology. The implementation phase involved developing eight core standard operating procedures including equipment management, risk assessment and non-conformity handling alongside intensive staff capacity building. Structural improvements were achieved in sample reception and laboratory workflow optimization. Performance was monitored through monthly key performance indicators focused on environmental control and analytical accuracy. Our results demonstrate that a robust quality management significantly improves diagnostic reliability and personnel safety during infectious disease outbreaks in resource limited settings. This structured approach serves as a scalable and replicable model for other laboratories facing similar public health emergencies.



Nambafu Joan,
Makerere University,
Uganda

Biography

Miss Nambafu Joan graduated with a bachelor's degree in science technology- biology from Kyambogo University in 2015. She later enrolled and completed her master of science in immunology and clinical microbiology from Makerere University in 2025. She is currently a PHD student at Makerere University. She is an author and co-author.

Prevalence of protective levels of anti-HBs antibodies among 15-17 year old adolescents at Kawempe division Kampala-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 break-through HBV infections (Exposure, Acute and chronic infections) and the prevalence of protective levels of vaccine specific antiHBs 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 (51.7%), Females; 139 (48.3%). First dose recipients; 26 (9.0%), Second dose recipients; 45 (15.6%) and Third dose recipients; 217 (75.4%). Combo test results: Participants at exposure (Combo susceptible); 221 (76.7%), Acute infections; 4 (1.5%), Chronic infections; 3 (1.0%) and vaccine protected 60 (20.8%). Titer test results: Responders; 22 (36.7%) and non-responders were 43 (66.2%). In conclusion: Hepatitis B vaccine 3 dose coverage was good at 75.4%. 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 in-completion of HBV doses. The prevalence of acute and chronic infections in our study was moderately high at 1.5% and 1.0%. Our study recorded a low prevalence of protective anti-body titers at 33.8% possibly due to genetics.



POSTER PRESENTATIONS



SEPTEMBER
09, 2026



VIRTUAL EVENT

Mouna Fakkar,

Ministry of National
Education, Morocco

Biography

Mouna Fakkar is affiliated with the Ministry of National Education, Morocco. Her academic interests include infectious diseases and molecular diagnostics, with a focus on emerging infections and advances in diagnostic technologies. She is presenting a poster titled "Molecular Diagnostics for Emerging Infectious Diseases: Current Advances and Future Perspectives" at the 2026 conference.

Molecular Diagnostics for Emerging Infectious Diseases: Current Advances and Future Perspectives

Abstract:

Emerging infectious diseases continue to pose a major threat to global public health due to rapid pathogen evolution, international travel, climate change, and increasing antimicrobial resistance. According to the World Health Organization (WHO), infectious diseases remain among the leading causes of morbidity and mortality worldwide. The COVID-19 pandemic alone resulted in more than 777 million confirmed cases and over 7 million reported deaths globally, highlighting the urgent need for rapid, accurate, and reliable diagnostic technologies. In addition, antimicrobial resistance (AMR) is associated with approximately 4.95 million deaths annually, making it one of the greatest global health challenges.

This review explores recent advances in molecular diagnostic technologies for the early detection and surveillance of emerging infectious diseases. It highlights the application of Polymerase Chain Reaction (PCR), Real-Time PCR (qPCR), Loop-Mediated Isothermal Amplification (LAMP), CRISPR-based diagnostic systems, Whole-Genome Sequencing (WGS), and Next-Generation Sequencing (NGS) in identifying bacterial, viral, fungal, and parasitic pathogens. Compared with conventional culture-based methods, molecular diagnostics significantly reduce detection time from 24–72 hours to less than 2–4 hours, while offering superior sensitivity, specificity, and pathogen characterization.

The review also discusses the integration of artificial intelligence, bioinformatics, and digital surveillance systems into molecular diagnostics to improve outbreak prediction, epidemiological monitoring, and real-time decision-making. These technologies strengthen global preparedness against emerging pathogens and support more effective public health interventions.

Despite remarkable progress, several challenges remain, including high implementation costs, limited laboratory infrastructure in low-resource settings, the need for standardized diagnostic protocols, and continuous pathogen evolution. Future perspectives emphasize the development of affordable point-

of-care molecular diagnostics, AI-assisted interpretation, portable sequencing platforms, and integrated global surveillance networks to enhance infectious disease prevention, early diagnosis, and pandemic preparedness.

Keywords: Emerging Infectious Diseases, Molecular Diagnostics, PCR, CRISPR, Next-Generation Sequencing, Whole-Genome Sequencing, Artificial Intelligence, Clinical Microbiology, Antimicrobial Resistance.



KEYNOTE PRESENTATIONS



SEPTEMBER
09, 2026



VIRTUAL EVENT



Bernd Blobel,

University of Regensburg,
Germany

Biography

Dr. Bernd Blobel is an internationally recognized expert in health informatics, digital health, biomedical informatics, and healthcare information systems. He studied Mathematics, Physics, Medicine, Informatics, and related disciplines, earning a PhD in Physics and a Habilitation in Medicine and Informatics. He has held senior positions at the University of Magdeburg, Fraunhofer IIS, and the University of Regensburg, with extensive involvement in health digitalization and electronic health record strategies worldwide. Dr. Blobel has authored more than 600 scientific publications, edited numerous books, and supervised PhD researchers internationally. He has represented Germany in major international standards organizations, including HL7, ISO, CEN, IEEE, and SNOMED, and continues to contribute to international higher education and digital health development. He is also a Fellow of several international academies.

Managing Healthcare Transformation towards Personalized, Preventive, Predictive, Participative Precision Medicine Ecosystems

Abstract:

For realizing pervasive and ubiquitous health and social care services, health and social care system have to undergo an organizational, methodological and technological transformation towards personalized, participative, preventive, predictive precision medicine. For designing and managing the resulting highly complex, distributed and dynamic ecosystem, we must consistently and formally represent the system and its components from the perspective of all actors from different domains including the subject of care, using different methodologies, knowledge, language and experiences. The granularity level of the considered components may range from elementary particles up to the society and universe. This must be done, using a system-theoretical, architecture-centered, ontology-based and policy-driven approach. Over the last 30 years, the author developed the necessary model and framework, which is meanwhile standardized as ISO 23903 Interoperability and Integration Reference Architecture. The approach has been defined as mandatory for any specification or project at ISO, CEN, IEEE, etc. addressing more than one domain. The presented approach enables design, implementation and management of intelligent and ethical health and social care systems as well as knowledge-based communication and cooperation of all actors involved. Thereby, it manages also security, privacy and trust in detail. The Keynote introduces necessary standards and methodologies for designing and managing 5P medicine ecosystems as well as practical examples.



Shree Niwas Chaturvedi,

Centre for Aptitude Analysis
and Talent Search, India

Biography

Shree Niwas Chaturvedi holds a Ph.D. in Nuclear and Radiochemistry from the Department of Chemistry, Banaras Hindu University, India. His doctoral work examined chemical effects of nuclear transformations in iodine compounds and indium complexes. He remains engaged in research, science education, and outreach.

From Atoms to Immunity: A Radiochemical View of Infectious Disease

Abstract:

Infectious diseases are usually discussed in the language of cells, pathogens, and populations. Yet every infection begins much earlier, at a scale that is rarely addressed directly the scale of atoms, energy transfer, and molecular transformation. At this level, disease is not a clinical event but a chemical one. This keynote examines infectious diseases from the perspective of radiochemistry, where radioactive tracers and nuclear techniques allow biological processes to be followed with exceptional sensitivity. Radiochemical methods are expected to explore early molecular events in infection, long before symptoms appear, and to track subtle post-infection changes that may persist even after apparent recovery. These approaches have clear relevance for prophylactic strategies, diagnostic precision, and the evaluation of therapeutic response.

Radiochemistry also offers a unique advantage in studying pathogen–host interactions. By tracing molecular pathways rather than end-stage outcomes, it becomes possible to identify vulnerable stages in infection where intervention can be both early and targeted. This is particularly important in an era where resistance, latency, and long-term complications increasingly challenge conventional approaches. In the final part of the lecture, infectious disease is placed within a wider chemical context. The same molecular principles that govern infection and immunity once governed the emergence of life itself. From prebiotic chemistry to self-organizing molecular systems, life arose from interactions that were chemical before they were biological. Understanding disease at the molecular level, therefore, does more than improve treatment it reconnects modern medicine with the deeper chemical logic of life. By moving deliberately from atoms to organisms, this talk argues for a broader, integrative view of infectious disease one in which chemistry is not a supporting discipline, but a foundational one.



Thomas J. Webster,
Brown University, USA

Biography

Prof. Thomas J. Webster is a distinguished biomedical engineer and researcher with a **Ph.D. from RPI** and an **H-index of 136**. He has founded more than a dozen companies whose FDA-approved medical products have benefited over **30,000 patients**. Currently a **Professor and Chief Scientific Officer at Novaurum**, he specializes in biomedical materials and advanced medical technologies. With **1,350+ publications and 55,000+ citations**, he has received numerous international research honors, including recognition among the world's most influential and highly cited scientists. He is a **Fellow of 8+ professional societies** and former President of the U.S. Society for Biomaterials.

Eliminating Infectious Disease: 45,000 Patients and Still Counting

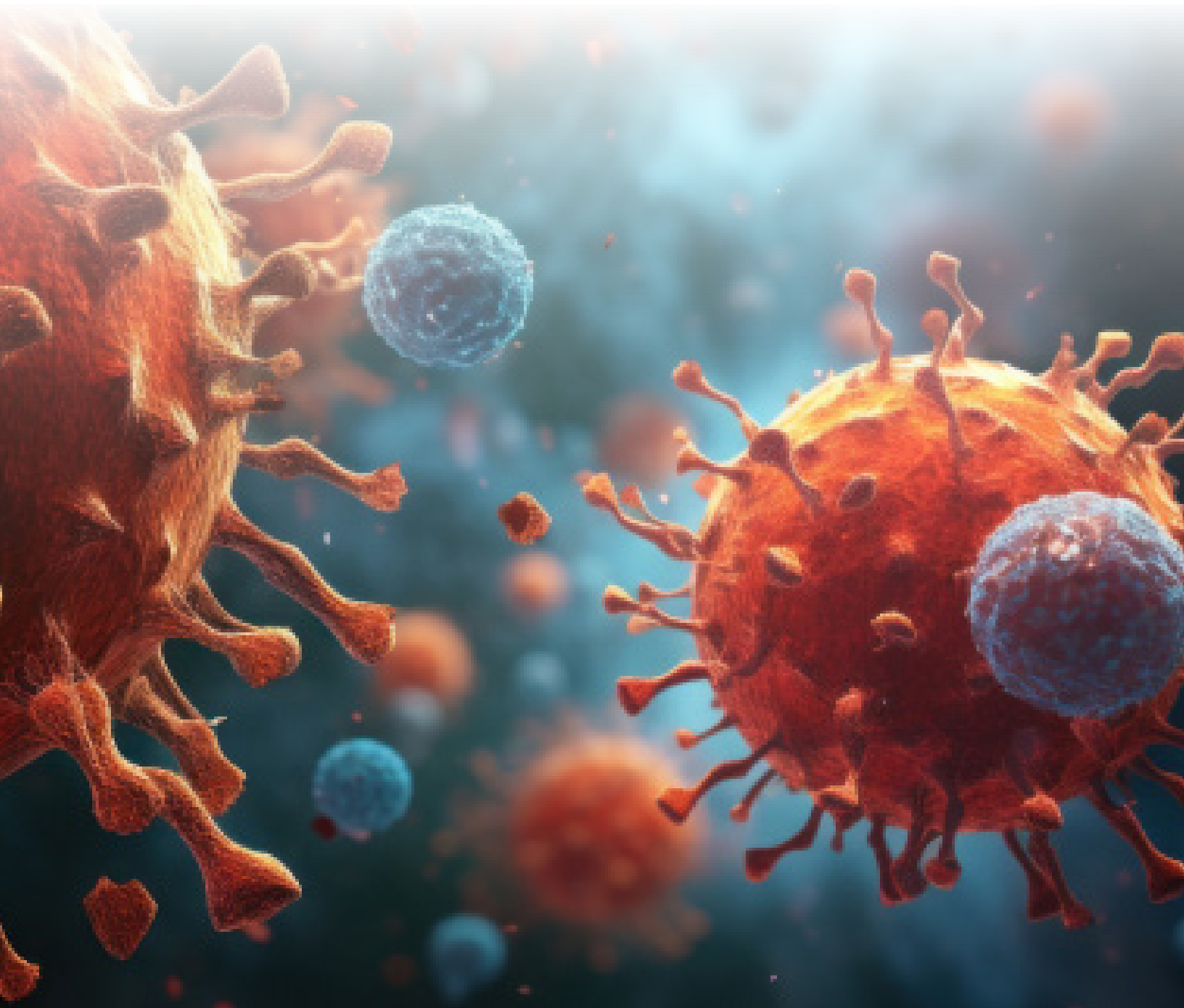
Abstract:

Nanomedicine has already revolutionized medicine. This is because nanomaterials can mimic the size of natural components of tissue to increase tissue growth, inhibit infection, and limit inflammation. The surface energy of nanomaterials can also be easily controlled to in turn mediate initial protein adsorption that can promote neuron function. This invited presentation will summarize how nanomaterials can be designed, fabricated, and used to inhibit infection for numerous applications including stimulate neuronal cell function to treat numerous neurological disorders. Results from over 45,000 patients will be presented. Specifically, as just one nanomaterial example, spinal screws with nanoscale surface features were implanted into over 45,000 patients and no reports of infections were found. Moreover, as another example, carbon nanotubes were implanted with stem cells into stroke-induced rat brains and demonstrated statistically faster return of motor function compared to stem cells alone. Impressively, carbon nanotube implantation alone into stroke-induced rats returned motor function faster than stem cells alone after as early as 7 days. Moreover, neural probes have been modified to have nanoscale surface features that reduce glial scar tissue formation and infection without the use of drugs or antibiotics. Moreover, 4D printed materials (materials that can change shape remotely and with respect to time) have been used to deliver stem cells to the brain to treat numerous disorders. This presentation will cover other nanomaterials that can improve medical device function and describes human clinical studies with very promising results.

SUPPORTING JOURNAL

Journal of Pathology and Diagnostic Microbiology

<https://scitechjournals.com/journal-of-pathology-and-diagnostic-microbiology>



LIST OF JOURNALS

Cardiovascular Diseases and Therapeutics

Journal of Aesthetic Surgery and Medicine

Journal of Global Entrepreneurial Management

Immunology Research and Immunotherapy

Journal of Healthcare and Advanced Nursing

Journal of Gynecology and Maternal Health

Journal of Chemistry and Analytical Biochemistry

Journal of Environmental Toxicology Research

Journal of Nutrition and Diet Management

Journal of Alternative Medicine and Therapies

Journal of Nanotechnology and Nanobiotechnology

Journal of Oral Diseases and Treatment

Journal of Skin Health and Cosmetics

Journal of Pharmacology and Drug Delivery

Journal of Mental Health and Behavioural Science

Journal of Neonatology and Pediatric Care

Journal of Pulmonary and Respiratory Diseases

Journal of Neuroimaging and Neuromedicine

Journal of Diabetes and Clinical Endocrinology

Journal of Anesthesia and Pain Management

Journal of Physics Optics and Photonics Sciences

Journal of Family Medicine and Clinical Research

UPCOMING CONFERENCES

SEPTEMBER - CONFERENCES

4TH INTERNATIONAL CONFERENCE ON
INFECTIOUS DISEASES
SEPTEMBER 09-10, 2026 | VIRTUAL EVENT

OCTOBER - CONFERENCES

4TH INTERNATIONAL CONFERENCE ON
**INNOVATIONS AND ADVANCES IN CANCER
RESEARCH AND TREATMENT**
OCTOBER 08-09, 2026 | VIRTUAL EVENT

WORLD CONGRESS ON
AUTISM RESEARCH & INNOVATION
OCTOBER 15-16, 2026 | PARIS, FRANCE

WORLD CONGRESS ON
**TRAUMA, CRITICAL CARE AND EMERGENCY
MEDICINE**
OCTOBER 15-16, 2026 | PARIS, FRANCE

3RD WORLD CONGRESS ON
NANOTECHNOLOGY
OCTOBER 29-30, 2026 | BERLIN, GERMANY

4TH INTERNATIONAL CONFERENCE ON
**NEUROLOGY & NEUROLOGICAL
DISORDERS**
OCTOBER 15-16, 2026 | PARIS, FRANCE

4TH GLOBAL CONGRESS ON
**ADDICTION MEDICINE, BEHAVIORAL
HEALTH & PSYCHIATRIC RESEARCH**
OCTOBER 15-16, 2026 | PARIS, FRANCE

3RD GLOBAL EVENT ON
MATERIALS SCIENCE AND ENGINEERING
OCTOBER 29-30, 2026 | BERLIN, GERMANY

3RD INTERNATIONAL CONFERENCE ON
OPTICS AND LASER TECHNOLOGY
OCTOBER 29-30, 2026 | BERLIN, GERMANY

NOVEMBER - CONFERENCES

WORLD CONGRESS ON
**CLINICAL AND EXPERIMENTAL
DERMATOLOGY**
NOVEMBER 23 - 24, 2026 | BARCELONA, SPAIN

4TH INTERNATIONAL CONFERENCE ON
SURGERY AND ANESTHESIA
NOVEMBER 26-27, 2026 | BARCELONA, SPAIN

5TH INTERNATIONAL CONFERENCE ON
PRIMARY HEALTH CARE
NOVEMBER 26-27, 2026 | BARCELONA, SPAIN

5TH INTERNATIONAL CONFERENCE ON
OTOLARYNGOLOGY-ENT SURGERY
NOVEMBER 26-27, 2026 | BARCELONA, SPAIN

MARCH - CONFERENCES

4TH WORLD CONGRESS ON

PHYSICAL MEDICINE AND REHABILITATION

MARCH 18–19, 2027 | BARCELONA, SPAIN

4TH INTERNATIONAL CONGRESS ON

PSYCHOLOGY & BEHAVIORAL SCIENCES

MARCH 18–19, 2027 | BARCELONA, SPAIN

4TH INTERNATIONAL CONFERENCE ON

DERMATOLOGY & SKINCARE

MARCH 18–19, 2027 | BARCELONA, SPAIN

APRIL - CONFERENCES

INTERNATIONAL CONFERENCE ON

ARTIFICIAL INTELLIGENCE IN HEALTHCARE, BUSINESS AND STARTUP

APRIL 15 - 16, 2027 | BARCELONA, SPAIN

2ND INTERNATIONAL CONGRESS ON

DIGITAL HEALTH INNOVATIONS AND ADVANCED NURSING PRACTICE

APRIL 22-23, 2027 | AMSTERDAM, NETHERLANDS

WORLD SUMMIT ON

CLINICAL TRIALS, AI AND HEALTHCARE TECHNOLOGIES

APRIL 22-23, 2027 | AMSTERDAM, NETHERLANDS

4TH GLOBAL SUMMIT ON

NURSING AND MIDWIFERY

APRIL 22-23, 2027 | AMSTERDAM, NETHERLANDS

MAY - CONFERENCES

4TH INTERNATIONAL CONFERENCE ON

GYNECOLOGY AND OBSTETRICS

MAY 20 - 21, 2027 | PARIS, FRANCE

GLOBAL CONGRESS ON

NEPHROLOGY AND KIDNEY HEALTH

MAY 20 - 21, 2027 | PARIS, FRANCE

5TH PEDIATRICS & NEONATOLOGY

PEDIATRICS & NEONATOLOGY

MAY 20 - 21, 2027 | PARIS, FRANCE

4TH INTERNATIONAL CONFERENCE ON

AI IN HEALTHCARE, INDUSTRY & REGULATORY AFFAIRS

MAY 20 - 21, 2027 | PARIS, FRANCE

6TH INTERNATIONAL CONFERENCE ON

GLOBAL ENTREPRENEURSHIP SUMMIT

MAY 20 - 21, 2027 | PARIS, FRANCE

JUNE - CONFERENCES

4TH EUROPEAN CONFERENCE ON

DENTISTRY AND ORAL HEALTH

JUNE 17 - 18, 2027 | BERLIN, GERMANY

4TH INTERNATIONAL CONFERENCE ON

OPHTHALMOLOGY & VISION SCIENCE

JUNE 17 - 18, 2027 | BERLIN, GERMANY

NOVEMBER - CONFERENCES

INTERNATIONAL CONFERENCE ON

**AUTISM RESEARCH AND
NEURODEVELOPMENTAL DISORDERS**

NOVEMBER 11 - 12, 2027 | AMSTERDAM, NETHERLANDS

Upcoming Conference

We wish to engage with you again in 2027...

5TH INTERNATIONAL CONFERENCE ON INFECTIOUS DISEASES & GLOBAL HEALTH

SEPTEMBER 23–24, 2027 | AMSTERDAM, NETHERLANDS

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Scitechseries Publishing Limited
71-75 Shelton street, Covent Garden,
London, WC2H 9JQ
Phone: +44-2045874848
Email: info@scitechseries.com

Questions? Contact
Phone: +44 2045874848
WhatsApp: +44 7383507342