



School of Graduate Studies and Research

Invites faculty, staff, and students to attend

Faculty Research Colloquium



Prof. Muhammad Mukhtar

Chair and Professor of Biotechnology Department, School of Arts and Sciences

“Facing and Chasing Viruses – EBOLA and others”

Monday, March 16, 2015 at 3:30 PM
Conference Room - Building D

Abstract

Seminar Objective: To apprise AURAK community about viral infections and how we can control their spread among humans.

Description: Viruses are highly specific infectious agents causing several diseases in humans. Historically, influenza virus infection killed over 50 Million individuals during the Spanish flu of 1918 and recent outbreak of Ebola inflicting significant morbidity and mortality necessitate that every individual should be trained with public health knowledge relevant to viral diseases. The mechanism of viral infection spread varies, i.e., aerosolic transfer simply by sneezing of infected person to involvement of human body secretions. Basic public health knowledge provided in this seminar about the transmission of Ebola, Avian Flu and Middle East Respiratory Syndrome (MERS) viruses will help the participants to acquire necessary information about viral diseases and be a potential help to control the spread in case faced with infection. Both antivirals and vaccines are used for controlling viral infections; however, an effective broad spectrum antiviral is still awaited to be developed. Through global vaccination, eradication of smallpox from this earth was a hope to eliminate several other viral diseases. However, similar strategies for curbing other viral infections have been less successful. For controlling prevalent and emerging viral infections, we propose a global strategy of facing and chasing viruses thus reducing their harm to public. Furthermore, viruses usually circulate in our blood and hide in body cavities making hard to treat them with conventional antivirals. An overview of our scientific contributions in understanding viral sanctuaries in human body (by developing in vitro model of human brain the first ever in the history used for studying the passage of viruses into the central nervous system, a hiding place for viruses) a major obstacle toward curing viral infections will be presented. Based on all the data shared in this presentation a need for the establishment of virology center in Emirates will be highlighted.

About the Speaker

Dr. Muhammad Mukhtar, currently holds the position of Professor/Chair of the Biotechnology Department at the American University of Ras Al Khaimah. He received his Ph.D. in biosciences from the Drexel University of Philadelphia, USA and served at various academic/administrative positions in the United States of America on an outstanding scientist visa for over a decade. In the year 2007, he returned to Pakistan as a Foreign Professor and elevated to four years tenured position of Vice Chancellor at the Islamia University of Bahawalpur (IUB) in the year 2010. Through his strategic management, the IUB emerged as top ranked university of the region. His contribution in academia leadership was recognized with Asian Education Leadership Award 2012 and the Cholistan Education Award 2013. In the field of academic collaboration Professor Mukhtar established first ever Inter-Universities Consortium in Pakistan having a membership of 30 universities from Pakistan and over 32 from USA. Dr. Mukhtar's research interests are to find cures for deadly viral/fungal diseases utilizing modern molecular biology and biotechnology practices. His research team explored the role of cholesterol-depleting drugs (Statins) in HIV-1-related neuronal injury and received “The Atorvastatin Award of the Year 2002-A Focus on Science” bestowed on Dr. Mukhtar from the Pfizer Pharmaceuticals. One of his collaborative articles published in Virology Journal November 2008 issue was featured on the BioMed Central (an International organization publishing over 200 peer-reviewed scientific journals) and also received “Highly Accessed” seal. Dr. Mukhtar as Principal or Co-Investigator, has received several awards from the US National Institutes of Health, the National Plan for Science, Technology and Innovation of the Kingdom of Saudi Arabia, Pfizer Pharmaceuticals, and the Higher Education Commission of Pakistan. Dr. Mukhtar holds specialized Certificates in Research Management, Public Health, and Bioinformatics. Committed to the role of technology in biomedical research, he serves as managing editor of Frontiers in Bioscience and is on the editorial board of national and International journals. He has >100 publications, including peer-reviewed research, review articles, invited articles, book chapters, commissioned articles and critiques to his credit. His scientific comments has been published in the World topmost journal “Nature” entitled “Pakistan Needs Research Ethics and Integrity Body” and added to the European Science Foundation reading list.