

Dr. NAZIR AHMED LONE
Technical Health Consultant
JSI, Inc; Research and Training Institute
Mailing Address: Ghaznavi House, Naveed Shaheed Road.
Sonikote, Gilgit-15100-Pakistan.
Email. drlonenazir@gmail.com
C. Phone: (0092) 317-7744-475
Skype ID: drnazirahmedlone



RESEARCH INTEREST

Virology, Epidemiology, pathobiology of emerging infectious pathogens, disease surveillance, reporting and develop intervention strategies. Biosafety, biosecurity, risk assessment & management to protect human and animal health and to safeguard food security and environment with “One Health Approach” for a safer and healthier society and better world.

PROFESSIONAL SUMMARY

Dr. Ahmed obtained 18 years of dynamic work experience of serving academia, research & development organizations, regulatory affairs and biotechnology industry in Asia (Pakistan & China) & North America. He obtained excellent leadership, entrepreneurial and management skills and worked with various international organizations in diverse cultures.

Dr. Ahmed obtained postdoctoral training under Fulbright program from Southeast Poultry Research Lab (SEPRL), United States Department of Agriculture (USDA), Athens, GA, USA. He worked on Molecular Virology and Genomics of Avian Influenza Viruses (AIVs) and successfully developed more efficacious vaccines against H7N3 AIV and it has been published in Journal of Vaccine. **He earned degrees of PhD and MS in Microbiology and Doctor of Veterinary Medicine (DVM). Dr. Ahmed developed his skills in diagnostics of animal and human diseases (bacterial and viral) using conventional and molecular methods. He studies courses of microbiology, virology and immunology, antimicrobial agents and tissue culture technology during his MS and PhD studies.**

Currently Dr. Ahmed is working as a Technical Health Consultant with JSI Research and Training Institute, Inc. and providing Technical advice to Department of Health (DoH) Gilgit-Baltistan. He is establishing, monitoring and supervising Provincial and District Disease Surveillance and Response Units (PDRSUs & DDRSUs) and training Rapid Response Teams (RRTs) to combat COVID-19 in Gilgit-Baltistan. Previously Dr. Ahmed served as a Chief Executive Officer of Silk Route International (SRI) Pvt. Ltd. He provides leadership to the company in policy making, developing collaborations with academia and industry, budgeting, coordination, human resource development and management.

Previously Dr. Ahmed served as an Associate Professor, Department of Biosciences, Barrett Hodgson University (BHU), Karachi. **He developed and taught various courses including Microbiology (Bacteriology), Immunology, Virology and Molecular Biology, and supervised lab sessions. He also served as coordinator Bioscience labs and member purchase committee, developed technical specifications for scientific equipment, reagents (media, chemicals, cultures, cell lines / kits etc) and other consumables and ensured their timely supply, installation and operationalization for smooth functioning of labs.** He was member of Board of Faculty (BoF) and Board of Studies (BoS) that approves the proposed teaching programs of the university. Dr. Ahmed conducted various research studies on emerging infectious pathogens and got **more than 15 publications and his work has been published in various prestigious international journals including “Vaccine”, Journal of Clinical Microbiology (JCM), Avian Diseases and Virus Genes (H-index journals).**

Dr. Ahmed worked as an Assistant Professor with a leading research group at the International Institute of Infection & Immunity, Shantou University Medical College, PR China. **He worked on evolution, pathobiology of Avian Influenza Viruses (AIVs) and Astroviruses. He also worked on cell culture for isolation and propagation of viruses and used antibiotic sensitivity / susceptibility test to select appropriate antibiotic to avoid growth of unwanted microorganisms in cell cultures.**

Previously Dr. Ahmed served at Karakoram International University (KIU), Gilgit, as an Assistant Professor, Department of Environmental / Biological sciences. He developed / taught various course including, Environmental Studies, Biosafety and Biosecurity, Occupational Health and Risk Management, Environmental Impact Assessment (EIA), Mountain Area Development and Immunology to undergrad and graduate students. Dr. Ahmed designed and supervised research projects, coordinated staff, supervised research scholars and he is a recognized supervisor of HEC for MS/PhD. He got excellent communication, presentation and management skills, networking ability, participated / organized various conferences, workshops.

Dr. Ahmed worked as a Quarantine Officer / Head of Animal Quarantine Department, Gilgit-Baltistan under Ministry of National Food Security and Research (former MINFAL), Islamabad. **Dr Ahmed established, monitored and supervised veterinary diagnostic labs (for diagnosis of animal and poultry diseases of bacterial, viral and fungal origin) and quarantine station** activities and provided leadership to field staff and dealt regulatory affairs (import and export of livestock, agriculture and food products and biologicals) and played key role to control transboundary zoonotic diseases, at Kunjrab Sost- the gateway of CPEC. Dr. Ahmed is well acquainted with financial rules and utilization of funds as per rules and regulations and served as drawing and disbursement officer (DDO) and dealt financial matters with AGPR. **He is well versed with the national and international regulatory requirements including Pakistan Quarantine Act, PSQCA, 9CFR, USDA, OIE, FAO and WHO and developed SOPs on Biosafety and Biosecurity.** He coordinated with Ministry of Finance, Planning and Commerce, and various other departments including customs, immigration, local administration, department of health, food and agriculture to regulate the business of food stuff, animals and biologicals and to control illegal import/ export. Dr. Ahmed served as a Veterinary Officer at the Department of Livestock and Dairy Development, Gilgit Baltistan as well.

Dr. Ahmed worked with WHO to monitor immunization programs in Gilgit-Baltistan. He also served as a consultant with UNDP and conducted base line studies on Glacial Lake Outburst Floods (GLOFs) in Northern Pakistan and developed technical reports / recommendation to the Ministry of Climate Change / UNDP. Besides professional activities Dr. Ahmed has always been actively participating in providing humanitarian assistance voluntarily to the victims of natural calamities and his role was highly appreciated by the national and international partner organizations during Pakistan Earth quake 2005/06 that took lives of more than 100 thousand people. Dr. Ahmed is member of many professional organizations including **ASM, ABSA, Pak-US Fulbright Alumni Network and lifelong member of PBSA.**

EXPERTISE / SKILLS

- **Management Skills:** Well versed in developing research projects keeping in view the needs of industry and organizational interest and execute them independently. Obtained excellent management and presentation skills including planning, developing and execution of projects, coordination and supervision, staffing, evaluation of progress reports. Well versed with financial rules of government and worked as DDO for the transparent and efficient utilization of government funds from AGPR. Prepared PCIs and executed PSDP project (s) and obtained tacit knowledge of project execution.
- **Coordinator Bioscience Labs.** Served as coordinator bioscience labs (Bacteriology, virology, immunology and molecular biology) and is well versed in developing technical specification lab equipment and consumables, bidding and review process, selection of well reputed contractors, supervise delivery and installation and supervise operationalization of equipment as per SOPs of original manufacturers.
- **Coordinator Sports Committee:** Supervise and coordinate sports activities, formulate policies, develop rules and regulations and SOPs for various sports activities at the BH university.
- **Chairman Food Committee:** Developed rules, SOPs and their execution for to ensure quality food at university.

Technical Skills

- **Molecular Pathology / Pathobiology:** Significant hands-on experience in DNA/ RNA extraction, Polymerase Chain Reaction (PCR), qRT-PCR, Restriction Fragment Length Polymorphism (RFLP), Gel Electrophoresis, Spectrophotometry.
- **DNA Sequencing and data analysis (DNASTAR / MEGA).**
- Trouble shooting, test validation and development of flow charts and SOPs for diagnosis of infectious diseases.
- **Immunology:** Haemagglutination (HA), Haemagglutination Inhibition (HI), Enzyme – Linked-Immunosorbent Assay (ELISA) and Agar Gel Precipitation (AGP) and other immunodiagnostic assays to detect antibodies / antigens.
- **Virology (Emerging Infectious Viral Diseases):** Well versed with techniques of virus isolation, titration, propagation using embryonated eggs / tissue cultures (ELD50, EID50 / plaque assay/TCID50), attenuation, harvesting and inactivation of viruses.
- **Bacteriology:** Isolation and identification of Bacteria by using conventional (culture media, staining, microscopy, biochemical tests) and molecular techniques.
- **Antibiotic sensitivity / susceptibility tests** (Microdilution, macro-dilution, disk diffusion and automated methods), MIC / MBC tests.
- **Vaccine Development:** Well versed with techniques of vaccine strain selection, vaccine development, quality assurance and upscaling at commercial level keeping in view good laboratory (GLP) and good manufacturing (GMP) practices.
- **ABSL-3 Training:** Obtained training and worked in ABSL-3 facilities and worked on pathogenesis and sampling of various strains of Influenza viruses including H7N9 viruses. Good in animal handling, bleeding, euthanasia in ABSL-2/3 facilities.
- **SOPs:** Well versed with international protocols and standard operating procedures / guidelines of WHO, OIE, USDA (9CFR), FDA, EPA, PSQCA and Pakistan Quarantine for health, Food Safety and environmental protection at national

and global level.

- **Biosafety Professional.** Successfully completed **52 Weeks of Biosafety** Training under “One Health Initiative Training Program under the auspices of American Society for Microbiology and Safer Behaviors, USA.

AWARDS / GRANTS / SCHOLARSHIPS

- Fulbright Postdoctoral Scholar Award, 2013-14 (USA) (Approximately 10 Million Pak Rupees)
- Travel Award by Biosecurity Engagement Program (BEP), USA to present research work at 2nd Global Vaccine Congress, Boston, MA. USA.
- Awarded shield of appreciation by PSM in recognition of services rendered for the Society.
- Awarded training program grant “Veterinary Biologicals Training Program at Ames Iowa”.
- Awarded training program grant on “Biosafety and Biosecurity” at Bankok, by CRDF / BEP, USA.
- Awarded various training and international travel grants for participation in International Scientific Conferences including CRDF/ BEP.

Membership:

- American Society for Microbiology (ASM)
- Pakistan Society for Microbiology (PSM).
- Pakistan-U.S. Alumni Network (PUAN)
- American Biological Safety Association (ABSA)
- Pakistan Biological Safety Association (PBSA).
- Fulbright Alumni Association
- Member Executive Committee, Biological Safety Association of Pakistan (BSAP).

Associate Editor

- International Journal of Vaccines and Vaccination
<http://medcraveonline.com/IJVV/editorial-board>.
- [Member editorial committee, EC- Microbiology \(Open access International Journal\).](#)

EDUCATIONAL QUALIFICATIONS

Institution / University / Board	Degree / Certificate	Field of Study	Years
Department of Agriculture (USDA), ARS, SEPRL, 934, College Station Road Athens, GA- 30605, USA	Post-doctorate	Avian Influenza Virus Genomics and Proteomics	18/01/2015
University of Karachi, Pakistan	PhD	Microbiology (Molecular Virology and Immunology)	12/ 7/ 2007
Sindh Agriculture University, Pakistan	M.Sc. (Hons)	Microbiology / Virology /Immunology	11/21/2001
Sindh Agriculture University	DVM	Veterinary Medicine	11/11/1999
College of Veterinary Medicine, Ames Iowa, USA.	Certificate	OIE / IICAB Veterinary Biologics Training Program	2009
American Society for Microbiology (ASM)	Certificate(s)	ASM-52- Weeks of Biosafety, One Health Approach.	2019
CITI Program, University of Miami, IACUC, SEPRL, USDA.	Certificate(s)	Biosafety and Biosecurity, Risk Assessment & Management, GLP, Veterinary Biologics.	2014

Title of PhD Dissertation: Preparation and Efficacy of Combined Live Attenuated and Inactivated Oil Emulsion Infectious Bursal Disease Virus (Gumboro) Vaccines in Broiler”.

WORK EXPERIENCE: TEACHING, RESEARCH & MANAGEMENT EXPERIENCE

Organization/ Institution	Responsibilities
April 6, -Till date. Technical Health Consultant on COVID-19 for Gilgit-Baltistan. JSI, Research and Training Institute, Inc, Islamabad, Pakistan.	• Provide technical help to department of Health in combating COVID-19. • Establish, monitor and supervise Provincial and District Disease Surveillance & Response Units (PDRSUs & DDRSUs) to combat COVID-19 in Gilgit-Baltistan. • Provide technical support to Department of Health to adopt intervention strategies to control COVID-19 pandemic and supported them in assessing the needs of the department in IPC, establishment of disease surveillance system, capacity building of health care providers through trainings. • Supervise and monitor trainings on COVID-19, infection prevention and control (IPC) practices to health professionals (doctors, health managers and paramedics) and prepared rapid response teams (RRTs) at all districts of Gilgit-Baltistan. • Coordinated, supported and organized trainings for Health care providers to manage critical cases of COVID-19 at ICU. • Coordinate and facilitate meetings with senior management at the province including Secretary and DG Health, Secretary Home and funding organization. • Represented JSI-IHSS-SD Activity at provincial level.
November 16, 2019- Till-April 5, 2020 Chief Executive Officer (CEO) Silk Route International, (SRI), Gilgit-15100- Pakistan.	• Provide leadership to the organization in planning, resource development & management, marketing, budgeting, staffing, coordination, monitoring and business development in diverse fields including, diagnostics, biologicals, regulatory requirements, food safety and security, environmental protection & mines and minerals. • Develop linkages with academia and industry at global level. • Value addition and commercialization of products. • Identify, develop and execute new projects. • Consultancy services to public and private sector organizations in health, agriculture, environment and natural resource development. • Introduce innovations and technology to solve complex problems. • Explore and tap potential of natural resources and their value addition through collaborations with well reputed organizations. • Provide platform for business partnerships. • Chairing meetings of Board of Directors. • Provide guidance to directors of the company.
(November 14, 2017- 2019) Associate Professor Department of Biosciences Barrett Hodgson University (BHU), NC-24, Deh Dih, Korangi Creek, Karachi-74900, Pakistan.	• Coordinate and design new courses and develop SOPs for Biosciences. • Supervise junior staff and students. • Coordinator Bioscience Labs. Developed technical specifications for purchase of laboratory equipment, consumables and supplies for Microbiology (Bacteriology, virology, immunology and Molecular Biology) Lab. Supervision and management of faculty, laboratory staff and students to conduct lab sessions. • Member purchase committee of the University • Co-ordinate with senior management and other departments. • Identify projects related to public / animal health specially of emerging infectious diseases (EIDs).

(November 24, 2015-October 30,2017)

Assistant Professor
International Institute of
Infection and Immunity,
Shantou, University
Medical College,22,
Xingling Road, Shantou,
Guangdong,
515041, PR-China

- Mentoring Junior Scientist in developing new projects in diagnostics of viral and bacterial pathogens / laboratory experiments, trouble shooting, data analysis and manuscript writing.

Projects:

- Screening and detection of Astroviruses from Wild Birds and examination of Diversity, Evolution and Host Range.
- Designed / developing new projects on Influenza Virus (H7N3/ H7N9) pathogenicity, immunogenicity, selection of vaccine strains and preparation of more efficacious vaccines for better protection and to reduce viral shedding to environment.

January 18, 2014 - 2015 Fulbright Research Scientist USDA, ARS, SEPRL, 934, College Station Road, Athens, GA-30605- USA	Worked on “identification of molecular markers of pathogenicity of H5N1-HPAIV in ducks”. • Full genome sequencing of H5N1 HPAIV and its analysis. • RNA isolation, conducting PCRs, quantitative RT-PCRs. • Gel electrophoresis, spectrophotometry, gel extraction. • Serological testing of antibody titers through, HI and ELISA. • Record and maintain results of experiments and data analysis. Achievements: Selected adjuvants and prepared efficacious inactivated vaccines against H7N3 AIV for poultry with better protection results. Published a paper in high index journal “Vaccine”.
September 16, 2010- October 8, 2013 Assistant Professor (TTS) Department of Environmental / Biological Sciences, Karakoram International University (KIU), Gilgit.	• Mentored and taught undergrad and grade students, courses including immunology, occupational health, environmental risk assessment and management, virology and mountain area development. • Organized seminars, workshops and conferences in collaboration with national and international organizations (ASM, BEP and PSM). • Managed research laboratory activities, experiments and mentored students in research. • Presented research work in prestigious conferences.
September 13, 2007- 2010 Quarantine Officer (BS-18) Ministry of Food, Agriculture and Livestock, Pakistan	• Established and supervised lab for diagnosis of animal diseases. • Developed SOPs, supervised laboratory and field staff. • Prescribed laboratory tests for diagnosis of animal diseases (bacterial, viral and fungal) & issue health certificates. • Developed technical specifications for lab equipment and consumables. • Member bidding and purchase committee, selected reputable firms / contractors and ensured proper installation and functioning of these equipment. • Managed staff, planned and executed field activities. • Prepared monthly progress reports on activities & expenditures. • Regulated the import / export of livestock and their products. • Coordinated with sister organizations and carried-out operation and management of the station and control of zoonotic diseases / illegal import / export. • Coordinated with national reference Veterinary labs including NVL, customs, immigrations and public health departments. Gave briefings to high-ups/ executives. • Served as DDO and dealt financial matters with AGPR.
September 4, 2004- September 12, 2007 Veterinary Officer (BS-17) Department of Food Agriculture and Livestock, Gilgit.	• Diagnosis and prevention and treatment of animal and poultry diseases. • Training to junior staff. • Management of supporting staff and monitoring of field activities

November 22, 2001- September 2, 2004 Research Officer, Sindh Poultry Vaccine Center, Karachi, Pakistan.	• Supervised IBDV vaccine production unit and also worked for preparation of vaccines against various poultry diseases including ND, AI and Hydro-pericardium syndrome (HPS). • Monitored and evaluated health status of poultry flocks by farm visits and serological tests; Haemagglutination, Inhibition (HI), Enzyme Linked Immunosorbent Assay (ELISA). • Performed autopsies to diagnose poultry diseases. • Recommend appropriate antibiotics after antibiotic sensitivity tests. • Recorded macroscopic lesions and collected specimens for further laboratory investigations.
2002-2006 Lecturer (Visiting) Immunology and Infectious Diseases Research Lab (IIDRL) Department of Microbiology, University of Karachi-Pakistan	• Taught courses of Antimicrobial Agents, Immunology, Virology and Medical Microbiology (bacteriology and virology). • Conducted laboratory sessions for undergraduate and graduate students for isolation, identifications of bacterial and viral pathogens using conventional and molecular methods. • Demonstrated techniques of virus isolation, titration, propagation using embryonated eggs / tissue cultures (ELD50, EID50 / plaque assay/TCID50), attenuation, harvesting and inactivation of viruses. • Demonstrated immunological techniques including Haemagglutination (HA), Haemagglutination Inhibition (HI), Enzyme Linked Immunosorbent Assay (ELISA) and Agar Gel Precipitation (AGP). Animal handling, bleeding, euthanasia. • Demonstrated molecular techniques of DNA/ RNA extraction, Polymerase Chain Reaction (PCR), Restriction Fragment Length Polymorphism (RFLP), Gel Electrophoresis for detection and characterization of pathogens of medical importance. • Demonstrated isolation and identification of gram negative and positive bacteria by using biochemical tests, culture methods and Microscopy. • Demonstrated antibiotic sensitivity and susceptibility tests using disk diffusion method and commercial kits. • Demonstrated minimal inhibitory concentration (MIC) and minimal bactericidal concentration (MBC) tests.
Sindh Institute of Urology and Transplantation (SIUT), Civil Hospital, Karachi.	• Obtained training on Molecular and serological diagnosis of infectious pathogens. • Worked on molecular diagnosis (PCR, RT-PCR/ RFLP) and genotyping of infectious viral pathogens including HBV, HCV, HIV, CMV, IBDV and other zoonotic viruses. • Hands on training in sampling, virus isolation, identification, growth in cell culture and embryonated eggs.

S. No	SELECTED RESEARCH PUBLICATIONS	HEC Category Impact Factor
1	Affhan Shoaib, Nazir Ahmed Lone, Xin Yi (2020).Co-infection with P. aeruginosa impacts virulence of S. aureus and intensifies the severity of infection. Pakistan Journal of Pharmaceutical Sciences (PJPS).Vol. 33 Issue 5, p1933-1937. 5p.	0.596
2	Nazir Ahmed Lone , Erica Spackman and Darrell R. Kapczynski (2017). Immunologic evaluation of 10 different adjuvants for use in vaccines for chickens against highly pathogenic avian influenza virus. Vaccine (2017). http://dx.doi.org/10.1016/j.vaccine.2017.05.010 .	3.41
3	Saeed Khan, Muhammad Shahid, Shaheen Malik, Amanullah Laili, Nazir Ahmed, Mohammad Asif Qureshi, Rameela Rizvi, Suleman Khan, Naseem Ahmed, Ambreen Khokar, Maria Zahid, Ikram Uddin Ujjan, Asif Iqbal, Shaheen Shrafat (2017). Differential Viral Load of HBV and HCV in Co-infected Patients: A Potential Battle between the Viruses. Annals of LUMHS. December 18, Pp: 85-88.	Y
4	Abdul Wajid, Muhammad Wasim, Shafqat F. Rehmani, Tasra Bibi, Nazir Ahmed , Claudio L. Afonso (2015). Complete Genome Sequence of a Recent Panzootic Virulent Newcastle Disease Virus from Pakistan. Genome Announcements. Volume 3 Issue 3	ASM Journal
5	Shafqat Fatima Rehmani, Abdul Wajid, Tasra Bibi, Bushra Nazir, Nadia Mukhtara, Abid Hussain, Nazir Ahmad Lone , Tahir Yaquba, Claudio L. Afonso (2015). Presence of Virulent Newcastle Disease Virus in Vaccinated Chickens Farms in Pakistan. J. Clin. Microbiol. Doi:10.1128/JCM.02818-14.	4.23
6	Wasilenko, Jamie; Pantin- Jackwood, Mary; Khan Taseer Ahmed; Ayaz, Ahmed; Rehmani, Shafqat; Lone, Nazir, Ahmed ; Swayne, David and Erica, Spackman (2012). Characterization of H5N1 highly pathogenic avian influenza viruses isolated from poultry in Pakistan 2006-2008. Virus Genes. 44 (2): 247–252.	1.84
7	Nazir A. Lone , Shafqat F. Rehmani, T. A Khan and Shahana U. Kazmi (2012). Efficacy of Live attenuated and Inactivated Infectious Bursal Disease Virus Vaccines in Broiler. Pak Vet. J. 32(4): 575-578.	1.39
8	Nazir A. Lone , Shafqat F. Rehmani, Shahana U. Kazmi, Rana Muzafar and Shakeel. A. Khan 2009. Molecular Characterization of Pakistani Field Isolates of Infectious Bursal Disease Virus (IBDV). Avian Diseases 53 (2): 306-309.	1.11
9	Mehr un Nisa Iqbal, Nida Fatima, Taseer Ahmed Khan, Ayaz Ahmed and Nazir Ahmed Lone (2015). Lack of association between vitamin D receptor Fok1 polymorphism and urinary tract infections among Karachi Population. International Journal of Biology and Biotechnology 12(4):515 -520.	HEC Recognized (Y)
10	Ayaz ahmed, Taseer a. khan, Benazir kanwal, Yasir raza, Muhammad akram, Shafqat f. rehmani, Nazir A. Lone and Shahana U. Kazmi (2009). Molecular Identification of Agents Causing Respiratory Infections in Chickens from Southern Region of Pakistan during October 2007 to February 2008. Int.J.Agric. Biol.11 (3): 325:328.	0.90
11	Taseer Ahmed Khan, Ayaz Ahmed, Nazir Ahmed Lone , Muhammad Noman Khan, Shafqat Fatima Rehmani (2012). Characterization of Newcastle Disease Virus Isolated During 1995-2009 From Suburbs of Karachi-Pakistan. Pak. Journal of Zoology 44(2), 443-448.	0.40

12	Riaz Ali, Sajida Asghar, Nazir Ahmed Lone and Imran; 2011. Prevalence of Asthenozoospermia and Piyospermia in District Gilgit, Gilgit Baltistan. NRM-Reviews and Research in the Himlayan Watersheds. Volume II.NUFU pp. 91-96.	International (X)
13	Khan S, Mushtaq S, Arshad N and Lone NA (2012). The current Status of Research Bioethics in Pakistan. 1:208.doi: 10.4172/scientific reports.208.	International Journal (X)

14	Joher Hussein, Faiz Muhammad, Nazir Ahmed Lone and Shakeel Ahmed Khan (2020). An Improved Heamagglutination Inhibition test for rapid diagnosis and Stereotyping of avian infectious bronchitis virus. Pak. Journal of Zoology.	W
15	Nazir Ahmed , Shahana U. Kazmi and Shafqat F. Rehmani (2008). Restriction Fragment Length Polymorphism of Pakistani Field Isolates of Infectious Bursal Disease Virus (IBDV). Vaccine (Abstract).	3.0
16	Nazir Ahmed Lone , Darrell Kapczynski and Erica Spackman, 2015. Characterization of 10 adjuvants for inactivated Avian Influenza Virus (AIV) vaccines against challenge with highly pathogenic AIV in chickens. 9 th International Symposium on Avian Influenza, The University of Georgia, Athens GA April 12-15, 2015.	International
17	Nazir Ahmed Lone (2013). KAP studies on GLOFs at Bagrot Valley, Gilgit-Baltistan. Conducted Studies and submitted technical reports to UNDP, Pakistan.	International
18	Nazir Ahmed Lone (2013). A study on the socio-economic impact of the GLOFs in Bagrot valley, at Gilgit-Baltistan. Conducted field studies and submitted technical reports to UNDP, Pakistan.	International
19	*Nazir Ahmed Lone, Shafqat Fatima Rehmani, Abdul Wajid, Taseer Ahmed Khan ⁴ , Saeed Khan (2019). Efficacy of inactivated vaccine against emerging velogenic viscerotropic Newcastle disease virus (vvNDV) Biotech). Submitted and under Review.	W

INTERNATIONAL PRESENTATIONS

- Comparison of several adjuvants for Avian Influenza Virus (AIV) vaccines in chickens. 9th International Symposium on Avian Influenza. The University of Georgia, Athens GA, USA. April 12-15, 2015.
- Efficacy of Combined Live and Inactivated Oil Emulsion Infectious Bursal Disease Virus Vaccines in Broiler” at the 2nd Global Congress on Vaccines held in Boston, MA, USA, 7-9, 2008.
- Restriction Fragment Length Polymorphism of Pakistani Field Isolates of Infectious Bursal Disease Virus (IBDV), presentation at the 2nd Global Congress on Vaccines, in Boston, MA, USA, December 7-9, 2008.

CERTIFICATES / TRAININGS OBTAINED

**International Institute of Infection and Immunity,
Shantou University Medical College, PR-China. (2016)**

- ☐ Inoculation of Influenza H5/H7 Nx viruses in animals (mice and ferrets) in BSL-3 facility.
- ☐ Observation of clinical symptoms (loss of body weight, temperature and nasal secretions etc).
- ☐ Collection of specimens (nasal washes and tissues) for isolation and identification and molecular characterization of various influenza isolates and their phylogenetic analysis.
- ☐ Use of reverse genetics techniques to study pathobiology of influenza viruses and identification of markers of pathogenicity and antigenicity.

Southeast Poultry Research Lab (USDA), USA-2014-2015.

- ☐ quantitative real time PCR (q-RRT-PCR),
- ☐ Preparation of inactivated vaccines against Influenza A (H7N3) viruses using various adjuvant (in-house and commercial) formulations.
- ☐ Biosafety, Biosecurity.
- ☐ Genomics of H5N1 Influenza Viruses
- ☐ Animal handling, bleeding, euthanasia.
- ☐ Completed Collaborative Institutional Training (CITI) training course, offered for research scientist, principle investigators working with select agents in BSL-2/ 3 facilities.

2009

University of Ames Iowa, College of Veterinary medicine, and USDA (APHIS, CVB, NVSL, IICAB).
Completed certificate program on “Veterinary Biologics”. The training covered the topics of development and quality assurance of vaccines and regulatory requirements for obtaining license of products in USA (9CFR-USDA).

Biosecurity Engagement Program (BEP), United States Department of State and American Biological Safety Association (ABSA), Bangkok-Thailand (2008)

Completed certificate program on “Biosafety and Biosecurity”. The training program covered the basic principles of biosafety, biosecurity, risk assessment, characterization and management. Safe handling and shipment of biological agents.

Sindh Poultry Vaccine Center (SPVC), Karachi, Pakistan

Obtained extensive training in virus isolation, identification, propagation of viruses for vaccine development, testing for vaccine safety and efficacy, and commercial vaccine production.

2005

Sindh Institute of Urology and Transplantation (SIUT), Dow university of Health Sciences, Karachi / Immunology and Infectious Diseases Research Lab (IIDRL), Department of Microbiology, University of Karachi.

Completed training program on Molecular Biology and Immunology including DNA/ RNA Extraction, RT- PCR, RFLP, ELISA, INNO LIPA, DEIA for diagnosis and characterization of infectious viruses including Hepatitis B and C viruses, HIV, HSV and CMV.

S #	SELECTED SEMINARS, WORKSHOPS & CONFERENCES ATTENDED / ORGANIZED
1	Completed 52 Weeks of Biosafety Training Program under the auspices of American Society For Microbiology (ASM) and Safer Behaviors, USA during 2019-20.
2	Completed “ One Health Training Program in person Training” organized by PBSA in collaboration with ASM, USA, at COMSTECH Islamabad, during July 22-25, 2019.
3	Attended workshop on “Responsible Conduct in Life Sciences” arranged by Pakistan Biological Safety Association in Collaboration with NIH and Fogarty International, USA, during April 1-5, 2019.
4	Attended 8 th International Maritime Conference (IMC-2019) “Global Geo-Political Transition; Rethinking Maritime Dynamics in the Indian Ocean Region” organized Bahria University, Karachi.
5	Attended 14 th Annual Fulbright & Humphrey Alumni Conference entitled “70 years of Pakistan-US Friendship” December, 9-10, 2017, IBA, Karachi.
6	Attended “The 20th National Telemedicine Educational Symposium” at Shantou University Medical College, PR-China on “My Physician Model”-Educating Physicians in technological Institutes;(Dr. Eliezer Shalev); Training Better doctors: New approaches to medical education in the U.S (Dr. Joseph C. Kolars), 2016.
7	Attended International Conference on “MOUNTAINS AND CLIMATE CHANGE, Resources, Challenges and Opportunities for Better Life and Livelihoods” held at KIU during September 17-19, 2015.
8	Attended various seminars and workshops on Biosafety, Biosecurity, use and care of laboratory animals, risk assessment and communication, mitigation strategies to protect employees, responsibilities of lab directors (all laws, regulation and policies are followed), stand-down training on handling and dealing select agents highly pathogenic avian influenza viruses (HPAIVs) at Southeast Poultry Research Lab (SEPRL), USDA, Athens, GA during January 2014-15.
9	Attended 2014 Fulbright Visiting Scholar Enrichment Seminars on “Climate change and plight of Oceans” in Florida during November 5- 9, 2014.
10	Attended a seminar on “Temporal and Genetic Footprints of the Avian Influenza Virus H5N1, at University of Georgia Athens (UGA), GA, USA on August 29, 2014.
11	Attended a seminar on “New Technology Vaccine Development: A look to the Future, at PDRC, UGA Athens, GA, USA on May 19, 2014.
12	Attended a seminar on “Genomics of Herpes Virus what we have learnt?” (by Stephen Spatz, SEPRL, ARS,USDA) at PDRC, UGA, Athens, GA, USA on April 14, 2014.
13	Attended 2013-14 Fulbright Visiting Scholar Enrichment Seminars on Social Entrepreneurship: Innovating Nonprofits and Developing Communities, Austin, TX, USA, at Hilton Hotel during March 19-22, 2014.
14	Attended Biosafety and Biosecurity Training Course in Bangkok, Thailand, supported by Biosecurity EngagementProgram, United States Department of State and American Biological Safety Association (ABSA) during June 23-28, 2008.
15	Participated as organizing secretary in National Training Seminar on “Biosafety and Biosecurity” under the auspices of U. S Depart of State, Pakistan Agriculture Research Council and Planning Commission of Pakistan during June18-19, 2007, in Islamabad.
16	Workshop on Application of Cell-Culture Technology and Immunodiagnostics, (December 15-20, 2003), organized by Dept. of Microbiology, University of Karachi and Pakistan Society for Microbiology.

Research Supervised:

S. No.	Student's Name	Thesis Title	Year
1.	Zafar Khan	Prevalence of Asthenozoospermia and Piyospermia in District Gilgit, Gilgit Baltistan.	2011
2.	Riaz Ali	Prevalence of Oligospermia and male infertility in Gilgit Baltistan.	2011
3.	Zarin Akbar	Prevalence of pregnancy related Anemia in Female Population of Gilgit.	2012
4.	Shabina Rehmat	Reproductive health related issues in early age married population of Gilgit-Baltistan	2012

PROJECTS

- Completed and managed project entitled “Establishment of Animal Quarantine Station Khunjrab” worth 32 Million Pak Rupees (equals to 0.32US\$) under the Ministry of Food, Agriculture and Livestock, Pakistan. Prepared a revised PC1 for the project entitled ‘Up-gradation and Establishment of Animal Quarantine Stations in Pakistan’ worth RS. 498 Million (4.98 US\$) M/O Food, Agriculture and Livestock, Islamabad.
- Conducted pre-intervention studies as a consultant with UNDP and completed a project on “Reducing risk and vulnerabilities from GLOFs in Northern Pakistan”.
- Completed a collaborative research project on “Minimizing the effect of impaired immunity against Highly Pathogenic Avian Influenza Viruses in Chicken” at USDA, USA during postdoctoral training. The project resulted a research publication in a high indexed journal “Vaccine”.

REFREES

Prof. Dr. Shahana Urooj Kazmi Vice Chancellor Women University Swabi (WUS) Khyber-Pakhtunkhwa (KPK)- Pakistan. Cell # 0092300-8297324. E. Mail: shahana53@hotmail.com	Dr. Erica Spackman, M.S., Ph.D., Research Microbiologist United States Department of Agriculture (USDA), Agriculture Research Services (ARS) Southeast Poultry Research Lab (SEPRL),934 College Station Road, Athens, GA 30605 706-546-3617 (phone), 706-546-3161 (fax) E. Mail: Erica.Spackman@ars.usda.gov
Professor Dr. Muhammad Shakeel A. Khan Vice Chancellor, Barrett Hodgson University, NC-24, Deh Dih, Korangi Creek, Karachi-74900, Pakistan. Email: shakeel.khan@bhu.edu.pk	Dr Zareef Uddin Khan Senior Adviser GHSA & SD JSI Research & Training Institute, Inc. Integrated Health Systems Strengthening & Service Delivery (IHSS-SD) Activity. 22 nd Floor, 55-C, Ufone Tower, Jinnah Avenue, Blue Area, Islamabad. Email: zareef_khan@pk.jsi.com Phone: +92 51-8487620-26 http://www.jsi.com