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Dr. Hadi Mohamad Yassine is an associate professor of infectious diseases, section head of research at the Qatar University (QU) Biomedical Research Center (BRC), and the chair of QU IBC committee. He also serves as an adjunct faculty at Hamad Ben Khalifa University-Doha (2018-Current) and previously at the Catholic University of America (CUA)-Washington D.C (2014/2015). In addition to his administrative duties, he leads the communicable diseases section at the BRC. His research and teaching experiences have been fostered by several years of intensive work at state-of-the-art and multi-disciplinary institutions. After earning a Ph.D. degree from The Ohio State University (OSU) in 2009, he worked at the Vaccine Research Center (VRC) of the National Institute of Health (NIH) for over five years as a postdoctoral fellow and then as a research fellow. He has excellent experience in the basic and applied biomedical fields, including virology, microbiology, immunology, molecular diagnostics, and vaccine development. He has published more than 125 articles, some of which are in top-tier scientific journals like NEJM, Nature, Nature Medicine, Cell, JAMA, AND Lancet. He serves on many committees at QU and other institutions around Qatar. He participated in the organization of several local and international workshops and conferences. He received several awards in recognition of his work and contributed to six patents on new designs of viral vaccines, including COVID-19 vaccine.

**Employment:**

<b>2019-Current</b>	Associate Professor & Section Head of Research	Biomedical Research Center (BRC); and Department of Biological Sciences (DBS)-College of Health Sciences (CHS), Qatar University (QU)	Doha, Qatar
<b>2018-2019</b>	Research Projects Manager	BRC-QU	Doha, Qatar
<b>2015-19</b>	Assistant Professor	BRC-QU; and DBS-CHS	Doha, Qatar
<b>2018-Current</b>	Adjunct Faculty	College of Health and Life Sciences, Hamad Bin Khalifa University (HBKU)	Doha, Qatar
<b>2014-2015</b>	Research Fellow	Vaccine Research Center (VRC), National Institute of Health (NIH)	Bethesda, MD, USA
<b>2014</b>	Adjunct Assistant Professor	Biology Department, Catholic University of America (CUA)	Washington D.C., USA
<b>2010-2013</b>	Postdoctoral Fellow	Vaccine Research Center, NIH	Bethesda, MD, USA
<b>2009-2010</b>	Postdoctoral Fellow	Food Animal Health Research Program, The Ohio State University (OSU)	Columbus, OH, USA
<b>2003-2004</b>	Research assistant	Department of Biology American University of Beirut (AUB)	Beirut, Lebanon

### **Education:**

<b>2004-2009</b>	Graduate Research Associate; <b>Ph.D student</b>	Virology/ Infectious diseases	The Ohio State University	Columbus, OH, USA
<b>2001-2003</b>	Graduate Teaching Assistant; <b>M.Sc. student</b>	Biology/ Microbiology	American University of Beirut	Beirut, Lebanon
<b>1996-2000</b>	<b>Maitrises-es Sciences</b> (Four years);	Biology/ Zoology	Lebanese University	Al-Hadath, Lebanon

### **Teaching Experience**

- **Spring 2021:** Guest lecturer (One lecture: Molecular diagnosis in the field of microbiology: A focus on the molecular diagnosis of COVID-19) BIOM 515 (CHS), molecular diagnostics.
  - **Fall 2020-2021:** Guest lecturer (two lectures), "Good Defense" (Year 2, Unit II). College of Medicine at Qatar University.
  - **Spring 2020 & 2021:** Guest lecturer, Molecular Pathology (Graduate students). College of Health and Life Sciences at HBKU.
  - **Fall 2015-current:** Instructor, Biom324-Medical Virology. Department of Biological Sciences, College of Health Sciences, QU, Doha, Qatar.
  - **Spring 2018-current.** Guest lecturer, BIOM 650-Pathogenic Microbiology (Master's course). Department of Biological Sciences, College of Health Sciences, QU, Doha, Qatar.
  - **Fall 2017:** Guest lecturer. Virology Course. Carnegie Mellon University, Doha, Qatar.
  - **Fall 2014:** Instructor, Bio557- Molecular biotechnology (Master's course). Biology Department, CUA, Washington D.C., USA.
  - **2001-2003:** Graduate teaching assistant, General Biology II Lab and Plant Physiology Lab. Biology Department, AUB, Beirut, Lebanon.
  - **2001-2003:** High school teacher, Biology. Beirut, Lebanon.
  - **2001-2003:** Technical nursing school teacher, Anatomy & Physiology. Beirut, Lebanon.
  - Developed, coordinated and presented at several workshops on topics related emerging infectious diseases, cell culture, and scientific research.
- .....
- Scientists Teaching Science workshop. NIH. February 27, 2013. (Participation)
  - Scientists Teaching Science 9-week course. NIH. Spring, 2013. (Participation)
  - Guided and mentored several undergraduate students, graduate students, and visiting scholars at AUB, OSU, NIH, and QU.

### **Google Scholar Record (As Nov. 2021)**

Citations: >6900

H-index: 39

i10-index: 92

### **Links for publications and Patents**

- <https://scholar.google.com/citations?user=WmbJwiEAAAAJ&hl=en>
- <https://pubmed.ncbi.nlm.nih.gov/?term=Yassine%20hm%20AND%2FOR%20Hadi%20Yassine&sort=date&size=20>
- <https://patents.justia.com/inventor/hadi-m-yassine>

## **Major Research Projects and Interests:**

- **2015-currents:** QU-BRC. Virology, immunology, and epidemiology.
  1. Genetic susceptibility to infectious diseases.
  2. Evolution of coronaviruses in animals and humans.
  3. Influenza complications and underlying mechanisms in disease pathogenesis in diabetic patients in Qatar.
  4. Understanding influenza replication and pathogenicity in gastrointestinal tract.
  5. Characterization of fecal influenza and its impact on gut microbiome.
  6. Microbiome and disease
  7. Epidemiological surveillance and molecular epidemiology of viral meningitis in Qatar.
  8. Genotyping of enteroviruses in clinical samples.
  9. Interplay between viral and bacterial infections and effect on microbiota and clinical illness.
  10. Estimating the burden of viral gastroenteritis and effectiveness of rotavirus vaccine in young children in Qatar.
  11. Air quality in Primary Health Care Centers in Qatar.
  12. Measuring influenza hemagglutinin stem-specific ADCC and CDC activities in human sera using novel stabilized stem probes.
  13. Laboratory-based surveillance and molecular epidemiology of influenza and other respiratory viruses in Qatar: 2012-2016.
  14. Magnitude of RSV fusion protein-specific antibodies in infants and corresponding mothers in Qatar.
  15. Characterization of humoral immune response to coronaviruses infections.
  16. Profiling of antibiotic resistant bacteria in human, animals and environment.
  17. In silico virtual screening approaches for anti-viral drugs.
  18. Genomics of habitats in Qatar.
  19. Whole-genome sequencing of coronaviruses.
  20. Viruses and Autoimmunity.
  
- **2010-2015:** Virology Laboratory and Viral Pathogenesis and Translational Science Core (VPTS), VRC, NIAID, NIH. Virology, immunology, and vaccinology.
  - 1) Development of universal influenza vaccine.
  - 2) Characterization of influenza broadly neutralizing antibodies;
  - 3) RSV and HKU1 coronavirus replication and pathogenesis.**PIs: Dr. Barney S. Graham, Dr. John R. Mascola, and Dr. Gary J. Nabel.**
  
- **2004-2010:** Food Animal Health Research Program, OARDC, OSU. Virology and infectious diseases.
  - 1) Genetic and antigenic characterization of influenza A viruses.
  - 2) Interspecies and intraspecies transmission of Influenza A viruses (H3N2 and H1N1 subtypes).
  - 3) Efficacy of commercial recombinant Newcastle Disease Virus (NDV) vaccines in turkeys.**PI: Dr. Yehia M. Saif.**
  
- **2003-2004:** Department of Biology, AUB. Environmental microbiology.
  - 1) Isolation and molecular characterization of antibiotic resistant bacteria from Lebanese food and environment.**PI: Dr. Steve Harakeh.**

- **2001-2003:** Department of Biology, AUB. Molecular microbiology.
  - 1) Generation and characterization of temperature-sensitive mutants in *E. coli* cell division genes.

**PI: Dr. Medhat Khattar**

**Review Articles and Book Chapters** [first authors → underlined & \* → corresponding author]

1. Reinfections in COVID-19 patients: Impact of virus genetic variability and host immunity. Fakhro A, AlKhatib HA, Al Thani AA, **Yassine HM\***. *Vaccines (Basel)*. 2021 Oct 12;9(10):1168. doi: 10.3390/vaccines9101168.
2. Molecular and Biological Mechanisms Underlying Gender Differences in COVID-19 Severity and Mortality. Z Wehbe, SH Hammoud, HM Yassine, M Fardoun, AF El-Yazbi, AH Eid\*. *Front. Immunol.* 07 May 2021; <https://doi.org/10.3389/fimmu.2021.659339>. (Co-first)
3. Repurposing Ivermectin for COVID-19: Molecular Aspects and Therapeutic Possibilities. Wehbe Z, Wehbe M, Iratni R, Pintus G, Zaraket H, **Yassine HM\***, Eid AH\*. *Front Immunol.* 2021 Mar 30;12:663586. doi: 10.3389/fimmu.2021.663586. (Co-corresponding).
4. Lipid-Lowering Therapies for Atherosclerosis: Statins, Fibrates, Ezetimibe and PCSK9 monoclonal antibodies. Ali AH, Younis N, Abdallah R, Shaer F, Dakroub A, Ayoub M, Iratni R, **Yassine HM**, Zibara K, Orekhov A, El-Yazbi AF, Eid A\*. *Curr Med Chem.* 2021 Feb 21. doi: 10.2174/0929867328666210222092628.
5. Visfatin: An emerging adipocytokine bridging the gap in the evolution of cardiovascular diseases. Dakroub A, Nasser SA, Kobeissy F, **Yassine HM**, Orekhov A, Sharifi-Rad J, Iratni R, El-Yazbi AF, Eid AH\*. *J Cell Physiol.* 2021 Feb 26. doi: 10.1002/jcp.30345.
6. Viral meningitis: an overview. Kohil A, Jemmieh S, Smatti MK, **Yassine HM\***. *Arch Virol.* 2021 Feb;166(2):335-345.
7. Markers Associated with COVID-19 Susceptibility, Resistance, and Severity. AD Fakhroo, AA Al Thani, **HM Yassine\***. *Viruses.* 13 (1), 45.
8. Platforms Exploited for SARS-CoV-2 Vaccine Development. Mathew S, Faheem M, Hassain NA, Benslimane FM, Al Thani AA, Zaraket H, **Yassine HY\***. *Vaccines.* 9 (1), 11.
9. Rapid Antibody-Based COVID-19 Mass Surveillance: Relevance, Challenges, and Prospects in a Pandemic and Post-Pandemic World. Robin Augustine, Suvarthi Das, Anwarul Hasan, Shaheen Abdul Salam, Priya Augustine, Yogesh Bharat Dalvi, Ruby Varghese, Rosita Primavera, **Hadi Mohamad Yassine**, Avnesh S Thakor, Bhavesh D Kevadiya\*. *Journal of Clinical Medicine.* 9 (10), 3372.
10. Seasonality of Respiratory Viral Infections: Will COVID-19 Follow Suit? A Audi, M Allbrahim, M Kaddoura, G Hijazi, **HM Yassine\***, H Zaraket\*. *Frontiers in Public Health.* 8, 576.

11. Immune Modulatory Effects of Vitamin D on Viral Infections. Maheen Siddiqui, Judhell S Manansala, Hana A Abdulrahman, Gheyath K Nasrallah, Maria K Smatti, Nadin Younes, Asmaa A Althani, **Hadi M Yassine\***. *Nutrients* 12 (9), 2879.
12. Challenges in Laboratory Diagnosis of the Novel Coronavirus SARS-CoV-2. Nadin Younes, Duaa W Al-Sadeq, Hadeel Al-Jighefee, Salma Younes, Ola Al-Jamal, Hanin I Daas, **Hadi Yassine**, Gheyath K Nasrallah. *Viruses* 12 (6), 582.
13. How could artificial intelligence aid in the fight against coronavirus? Yassine HM\*, Shah Z *Expert review of anti-infective therapy*. 18 (6), 493-497
14. Immunomodulation induced by host pathogen interaction (Editorial). Yassine HM\*, Moin SM, Cyprian FS, Wheatley AK, Nasrallah GK. *Journal of Immunology Research*. 2019 Aug 29;2019:9710910.
15. Urine tests for diagnosis of infectious diseases and antibiotic resistant pathogens (Book Chapter); Clinical Urine Tests by *IntechOpen*. Eltai N, Alhussain H, Doiphode D, Al Thani AA, **Yassine HM**. Aug 19; DOI: 10.5772/intechopen.89231. <https://www.intechopen.com/online-first/urine-tests-for-diagnosis-of-infectious-diseases-and-antibiotic-resistant-pathogens>.
16. Viruses and Autoimmunity: A Review on the Potential Interaction and Molecular Mechanisms. Smatti MK, Cyprian FS, Nasrallah GK, Al Thani AA, Almishal RO, **Yassine HM\***. *Viruses*. 2019 Aug 19;11(8). pii: E762. doi: 10.3390/v11080762.
17. Impact of Physical Exercise on Gut Microbiome, Inflammation, and the Pathobiology of Metabolic Disorders. Sohail MU, **Yassine HM**, Sohail A, Al Thani AA\*. *Rev Diabet Stud*. 2019;15:35-48.
18. Hepatitis B Virus Molecular Epidemiology, Host-Virus Interaction, Coinfection, and Laboratory Diagnosis in the MENA region: An Update. Al-Sadeq D, Taleb S, Zaid R, Fahad S, Smatti M, Rizeq B, Al Thani AA, **Yassine HM**, Nasrallah GK\*. *Pathogens*. 2019 May 11;8(2).
19. Expression profile of MicroRNA: An Emerging Hallmark of Cancer. Zaheer U, Faheem M, Qadri I, Begum N, **Yassine HM**, Al Thani AA, Mathew S. *Curr Pharm Des*. 2019 Mar 25. oi: 10.2174/1386207322666190325122821.
20. Herbal medicine as an auspicious therapeutic approach for the eradication of Helicobacter pylori infection: A concise review. Ghasemian A, Fattahi A, Shokouhi Mostafavi SK, Almarzoqi AH, Memariani M, Ben Braiek O, Cresswell-Boyes AJ, **Yassine HM**, Mostafavi NSS, Ahmed MM, Mirforughi SA\*. *J Cell Physiol*. 2019 Mar 7. doi: 10.1002/jcp.28363.
21. Viral-Induced Enhanced Disease Illness. Smatti MK, Al Thani AA, **Yassine HM\***. *Front Microbiol*. 2018 Dec 5;9:2991.
22. Human Respiratory Syncytial Virus: Pathogenesis, Immune Responses and Prominent Vaccine Approaches (Review). Taleb SA, Al Thani AA, Al Ansari K, **Yassine HM\***. *European Journal of Clinical Microbiology & Infectious Diseases*. (2018) Oct; 37 (10): 1817–1827.

23. The dual specificity role of transcription factor FOXO in type 2-diabetes and cancer. Fatima K, Mathew S, Faheem M, Mehmood T, **Yassine HM**, Al Thani AA, Abdel-Hafiz H, Al Ghamdy K, Qadri I\*. *Curr Pharm Des*. 2018; 24(24):2839-2848.
24. Food Regulations and Enforcement in Qatar; (Book chapter). Eltai NO, El-Obeid T, Kassem II, **Yassine HM**. *Reference Module in Food Science*. (2018).  
<https://www.sciencedirect.com/science/article/pii/B9780081005965224785?via%3Dihub>
25. Interspecies Transmission of Influenza A Viruses between Swine and Poultry (Review). **Yassine HM**, Lee CW, and Saif YM\*. *Current Topics in Microbiology and Immunology*. (2013); 370:227-40.
26. Interspecies and Intraspecies Transmission of Influenza A Viruses: Host, Viral and Environmental Factors (Review). **Yassine HM**, Lee CW, Gourapura R, Saif YM\*. *Animal Health Research Reviews*. (2010) Jun; 11(1):53-72.

**Published Research Articles** [first authors → underlined & \* → corresponding author]

1. Assessing the performance of a serological point-of-care test in measuring detectable antibodies against SARS-CoV-2. Coyle PV, El Kahlout RA, Dargham SR, Chemaitelly H, Kacem MABH, Al-Mawlawi NHA, Gilliani I, Younes N, Al Kanaani Z, Al Khal A, Al Kuwari E, Jeremijenko A, Kaleeckal AH, Latif AN, Shaik RM, Rahim HFA, Nasrallah GK, **Yassine HM**, Al Kuwari MG, Al Romaihi HE, Tang P, Bertollini R, Al-Thani MH, Abu-Raddad LJ\*. *PLoS One*. 2022 Jan 31;17(1):e0262897.
2. Relative infectiousness of SARS-CoV-2 vaccine breakthrough infections, reinfections, and primary infections. Abu-Raddad LJ\*, Chemaitelly H, Ayoub HH, Tang P, Coyle P, Hasan MR, **Yassine HM**, Benslimane FM, Al-Khatib HA, Al-Kanaani Z, Al-Kuwari E, Jeremijenko A, Kaleeckal AH, Latif AN, Shaik RM, Abdul-Rahim HF, Nasrallah GK, Al-Kuwari MG, Butt AA, Al-Romaihi HE, Al-Khal A, Al-Thani MH, Bertollini R. *Nat Commun*. 2022 Jan 27;13(1):532.
3. Diversity of bacterial pathogens and their antimicrobial resistance profile among commensal rodents in Qatar. Islam MM, Farag E, Hassan MM, Enan KA, Mohammad Sabeel KV, Alhaddad MM, Smatti MK, Al-Marri AM, Al-Zeyara AA, Al-Romaihi H, **Yassine HM**, Sultan AA, Bansal D, Mkhize-Kwitshana Z\*. *Vet Res Commun*. 2022 Jan 27.
4. Immunoinformatics prediction of potential immunodominant epitopes from human coronaviruses and association with autoimmunity. Mathew S, Fakhroo AD, Smatti MK, Al Thani AA, **Yassine HM\***. *Immunogenetics*. 2022 Jan 10:1-17.
5. Metabolic Signatures of Type 2 Diabetes Mellitus and Hypertension in COVID-19 Patients With Different Disease Severity. Elrayess ME, Cyperian FS, Abdallah MA, Emara MM, Diboun I, Anwardeen N, Schuchardt S, **Yassine HM\***. *Front. Med*. 10 January 2022. 8-788687.
6. Introduction and expansion of the SARS-CoV-2 B.1.1.7 variant and reinfections in Qatar: A nationally representative cohort study. Abu-Raddad LJ\*, Chemaitelly H, Ayoub HH, Coyle P, Malek JA, Ahmed AA, Mohamoud YA, Younuskunju S, Tang P, Al Kanaani Z, Al Kuwari E,

Butt AA, Jeremijenko A, Kaleeckal AH, Latif AN, Shaik RM, Abdul Rahim HF, Nasrallah GK, **Yassine HM**, Al Kuwari MG, Al Romaihi HE, Al-Thani MH, Al Khal A, Bertollini R. *PLoS Med.* 2021 Dec 16;18(12):e1003879.

7. Efficacy of Natural Immunity against SARS-CoV-2 Reinfection with the Beta Variant. Chemaitelly H, Bertollini R, Abu-Raddad LJ; **National Study Group for COVID-19 Epidemiology**. *N Engl J Med.* 2021 Dec 30;385(27):2585-2586.
8. Comparison of antibody immune responses between BNT162b2 and mRNA-1273 SARS-CoV-2 vaccines in naïve and previously infected individuals. Al-Sadeq DW, Shurrab FM, Ismail A, Amanullah FH, Thomas S, Aldewik N, **Yassine HM**, Abdul Rahim HF, Abu-Raddad L, Nasrallah GK\*. *J Travel Med.* 2021 Dec 29;28(8):taab190.
9. One year of SARS-CoV-2: Genomic characterization of COVID-19 outbreak in Qatar. Benslimane FM, Al Khatib HA, Al-Jamal O,....., Coyle PV, Al Thani AA, **Yassine HM**\*. *Front. Cell. Infect. Microbiol.*, 17 November 2021 | <https://doi.org/10.3389/fcimb.2021.768883>.
10. BNT162b2 and mRNA-1273 COVID-19 vaccine effectiveness against the SARS-CoV-2 Delta variant in Qatar. Tang P, Hasan MR, Chemaitelly H, **Yassine HM**, Benslimane FM, Al Khatib HA, AlMukdad S, Coyle P, Ayoub HH, Al Kanaani Z, Al Kuwari E, Jeremijenko A, Kaleeckal AH, Latif AN, Shaik RM, Abdul Rahim HF, Nasrallah GK, Al Kuwari MG, Al Romaihi HE, Butt AA, Al-Thani MH, Al Khal A, Bertollini R, Abu-Raddad LJ\*. *Nat Med.* 2021 Nov 2. doi: 10.1038/s41591-021-01583-4.
11. Association of Prior SARS-CoV-2 Infection With Risk of Breakthrough Infection Following mRNA Vaccination in Qatar. Abu-Raddad LJ\*, Chemaitelly H, Ayoub HH, **Yassine HM**, Benslimane FM, Al Khatib HA, Tang P, Hasan MR, Coyle P, Al Kanaani Z, Al Kuwari E, Jeremijenko A, Kaleeckal AH, Latif AN, Shaik RM, Abdul Rahim HF, Nasrallah GK, Al Kuwari MG, Butt AA, Al Romaihi HE, Al-Thani MH, Al Khal A, Bertollini R. *JAMA.* 2021 Nov 1:e2119623. doi: 10.1001/jama.2021.19623.
12. Severity, criticality, and fatality of the SARS-CoV-2 Beta variant. Abu-Raddad LJ\*, Chemaitelly H, Ayoub HH, **Yassine HM**, Benslimane FM, Al Khatib HA, Tang P, Hasan MR, Coyle P, AlMukdad S, Al Kanaani Z, Al Kuwari E, Jeremijenko A, Kaleeckal AH, Latif AN, Shaik RM, Abdul Rahim HF, Nasrallah GK, Al Kuwari MG, Butt AA, Al Romaihi HE, Al-Thani MH, Al Khal A, Bertollini R. *Clin Infect Dis.* 2021 Oct 17:ciab909. doi: 10.1093/cid/ciab909.
13. Waning of BNT162b2 Vaccine Protection against SARS-CoV-2 Infection in Qatar. Chemaitelly H, Tang P, Hasan MR, AlMukdad S, **Yassine HM**, Benslimane FM, Al Khatib HA, Coyle P, Ayoub HH, Al Kanaani Z, Al Kuwari E, Jeremijenko A, Kaleeckal AH, Latif AN, Shaik RM, Abdul Rahim HF, Nasrallah GK, Al Kuwari MG, Al Romaihi HE, Butt AA, Al-Thani MH, Al Khal A, Bertollini R, Abu-Raddad LJ\*. *N Engl J Med.* 2021 Oct 6. doi: 10.1056/NEJMoa2114114.
14. Real-Time SARS-CoV-2 Genotyping by High-Throughput Multiplex PCR Reveals the Epidemiology of the Variants of Concern in Qatar. Hasan MR, Kalikiri MKR, Mirza F, Sundararaju S, Sharma A, Xaba T, Lorenz S, Chemaitelly H, El-Kahlout RA, Tsui KM, **Yassine HM**, Coyle PV, Al Khal A, Bertollini R, Al Thani MH, Abu-Raddad LJ, Tang P\*; National

Study Group for COVID-19 Epidemiology in Qatar. *Int J Infect Dis.* 2021 Sep 12;S1201-9712(21)00709-8.

15. SARS-CoV-2 infection hospitalization, severity, criticality, and fatality rates in Qatar. Seedat S, Chemaitelly H, Ayoub HH, Makhoul M, Mumtaz GR, Al Kanaani Z, Al Khal A, Al Kuwari E, Butt AA, Coyle P, Jeremijenko A, Kaleeckal AH, Latif AN, Shaik RM, Yassine HM, Al Kuwari MG, Al Romaihi HE, Al-Thani MH, Bertollini R, Abu-Raddad LJ\*. *Sci Rep.* 2021 Sep 14;11(1):18182.
16. SARS-CoV-2 Infection Is at Herd Immunity in the Majority Segment of the Population of Qatar. Al-Thani MH, Farag E, Bertollini R, Al Romaihi HE, Abdeen S, Abdelkarim A, Daraan F, Elhaj Ismail AIH, Mostafa N, Sahl M, Suliman J, Tayar E, Kasem HA, Agsalog MJA, Akkarathodiyil BK, Alkhalaf AA, Alakshar MMMH, Al-Qahtani AAAH, Al-Shedifat MHA, Ansari A, Ataalla AA, Chougule S, Gopinathan AKKV, Poolakundan FJ, Ranbhise SU, Saefan SMA, Thaivalappil MM, Thoyalil AS, Umar IM, Al Kanaani Z, Al Khal A, Al Kuwari E, Butt AA, Coyle P, Jeremijenko A, Kaleeckal AH, Latif AN, Shaik RM, Abdul Rahim HF, **Yassine HM**, Nasrallah GK, Al Kuwari MG, Chaghoury O, Chemaitelly H, Abu-Raddad LJ\*; Craft and Manual Workers Seroprevalence Study Group. *Open Forum Infect Dis.* 2021 May 2;8(8):ofab221.
17. Whole-Genome Sequencing for Molecular Characterization of Carbapenem-Resistant Enterobacteriaceae Causing Lower Urinary Tract Infection among Pediatric Patients. Al Mana H, Sundararaju S, Tsui CKM, Perez-Lopez A, **Yassine H**, Al Thani A, Al-Ansari K, Eltai NO\*. *Antibiotics (Basel).* 2021 Aug 12;10(8):972.
18. Predictive Biomarkers of Intensive Care Unit and Mechanical Ventilation Duration in Critically-Ill Coronavirus Disease 2019 Patients. Taleb S, **Yassine HM**, Benslimane FM, Smatti MK, Schuchardt S, Albagha O, Al-Thani AA, Ait Hssain A, Diboun I, Elrayess MA\*. (Co-first, Second after student). *Front Med (Lausanne).* 2021 Aug 12;8:733657. [Equal contribution].
19. Effect of multiple freeze-thaw cycles on the detection of anti-SARS-CoV-2 IgG antibodies. Shurrab FM, Al-Sadeq DW, Amanullah F, Younes SN, Al-Jighefee H, Younes N, Dargham SR, **Yassine HM**, Abu Raddad LJ, Nasrallah GK\*. *J Med Microbiol.* 2021 Aug;70(8). doi: 10.1099/jmm.0.001402.
20. Ziziphus nummularia Attenuates the Malignant Phenotype of Human Pancreatic Cancer Cells: Role of ROS. Mesmar J, Fardoun MM, Abdallah R, Al Dhaheri Y, **Yassine HM**, Iratni R, Badran A, Eid AH, Baydoun E. *Molecules.* 2021 Jul 15;26(14):4295.
21. Can commercial automated immunoassays be utilized to predict neutralizing antibodies after SARS-CoV-2 infection? A comparative study between three different assays. Ismail A, Shurrab FM, Al-Jighefee HT, Al-Sadeq DW, Qotba H, Al-Shaar IA, **Yassine HM**, Abu-Raddad LJ, Nasrallah GK\*. *Front Biosci (Landmark Ed).* 2021 Jul 30;26(7):198-206. doi: 10.52586/4934.
22. Ziziphus nummularia Attenuates the Malignant Phenotype of Human Pancreatic Cancer Cells: Role of ROS. Mesmar J, Fardoun MM, Abdallah R, Al Dhaheri Y, **Yassine HM**, Iratni R, Badran A, Eid AH\*, Baydoun E\*. *Molecules.* 2021 Jul 15;26(14):4295. doi: 10.3390/molecules26144295.



23. mRNA-1273 COVID-19 vaccine effectiveness against the B.1.1.7 and B.1.351 variants and severe COVID-19 disease in Qatar. Chemaitelly H, **Yassine HM**, Benslimane FM, Al Khatib HA, Tang P, Hasan MR, Malek JA, Coyle P, Ayoub HH, Al Kanaani Z, Al Kuwari E, Jeremijenko A, Kaleeckal AH, Latif AN, Shaik RM, Abdul Rahim HF, Nasrallah GK, Al Kuwari MG, Al Romaihi HE, Al-Thani MH, Al Khal A, Butt AA, Bertollini R, Abu-Raddad LJ\*. *Nat Med*. 2021 Jul 9. doi: 10.1038/s41591-021-01446-y.
24. Epidemiology of SARS-CoV2 in Qatar's primary care population aged 10 years and above. Syed MA, Al Nuaimi AS, A/Qotba HA, Nasrallah GK, Althani AA, **Yassine HM**, Zainel AA, Khudadad H, Marji T, Veettil ST, Al-Jighefee HT, Younes S, Shurrab F, Al-Sadeq DW, AlFehaidi AAS, Yfakhroo AI, AlMesafri MA, Al Mujalli H, Al Abdulla SA, Al Kuwari MG, Azad FM, Al Malki BAM, Abdulmalik MA. *BMC Infect Dis*. 2021 Jul 5;21(1):645. doi: 10.1186/s12879-021-06251-z.
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103. Flow cytometry reveals that H5N1 vaccination elicits cross-reactive stem-directed antibodies from multiple Ig heavy chain lineages. Whittle JR, Wheatley AK, Wu L, Lingwood D, Kanekiyo M, Ma SS, Narpala SR, **Yassine HM**, Frank G, Yewdell J, Ledgerwood JE, Wei CJ, McDermott AB, Graham BS, Koup RA, Nabel GJ\*. *Journal of Virology*. (2014) Apr; 88(8):4047-57.
104. A Self-Assembling Influenza Nanoparticle Vaccine Elicits Broadly Neutralizing Antibodies. Kanekiyo M, Wei CJ, **Yassine HM**, McTamney PM, Boyington JC, Whittle JR, Kong WP, Wang L, and Nabel GJ\*. *Nature*. (2013) Jul; 499(7456):102-6.
105. Replication of swine and human influenza viruses in juvenile and layer turkey hens. Ali A, **Yassine H**, Lee CW, and Saif YM\*. *Veterinary Microbiology*. (2013) Apr; 163(1-2):71-8.
106. Structural and Genetic Basis for Development of Broadly Neutralizing Influenza Antibodies. Lingwood D\*, McTamney PM\*, **Yassine HM\***, Whittle JR, Guo X, Boyington JC, Wei CJ, Nabel GJ. *Nature*. (2012) Sep; 489(7417):566-70. (\* **Co-first authors; Listed alphabetically**).
107. Elicitation of Broadly Neutralizing Influenza Antibodies in Animals with Previous Influenza Exposure. Wei CJ, **Yassine HM**, McTamney PM, Gall JG, Whittle JR, Boyington JC, Nabel GJ\*. *Science Translational Medicine*. (2012) Aug; 4(147):147ra114.
108. DNA Priming Improves Influenza Vaccine Immunogenicity in Randomized Phase I Clinical Trials. Ledgerwood JE, Wei CJ, Hu Z, Gordon IJ, Enama ME, Hendel CS, McTamney PM, Pearce MB, **Yassine HM**, Boyington JC, Bailer R, Tumpey TM, Koup RA, Mascola JR, Nabel GJ, Graham BS\* and the VRC 306 Study Team. *Lancet Infectious Diseases*. (2011) Dec; 11(12):916-24.

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110. Potential Role of Viral Surface Glycoproteins in the Replication of H3N2 Triple Reassortant Influenza A viruses in Swine and Turkeys. **Yassine HM**, Khatri M, Lee CW, Saif YM\*. *Veterinary Microbiology*. (2011) Mar; 148(2-4):175-82.
111. Developing Live Attenuated Avian Influenza Virus *in-ovo* Vaccines for Poultry. **Wang L**, **Yassine HM**, Saif YM, Lee CW\*. *Avian Diseases*. (2010); 54(s1):297-301.
112. The High Susceptibility of Turkeys to Influenza Viruses of Different Origins Implies Their Importance as Potential Intermediate Host. **Pillai SP**, Suarez DL, Pantin-Jackwood , **Yassine HM**, Saif YM, Lee CW\*. *Avian Diseases*. (2010); 54(s1):522-526. Review.
113. Characterization of triple reassortant H1N1 influenza A viruses from swine in Ohio. **Yassine HM**, Khatri M, Zhang YJ, Lee CW, Byrum BA, O'Quin J, Smith KA, Saif YM. *Veterinary Microbiology*. (2009) Oct; 139(1-2):132-9.
114. Pathobiology of Triple Reassortant H3N2 Influenza Viruses in Breeder Turkeys and its Potential Implication for Vaccine Studies in Turkeys. **Pillai SP**, Pantin-Jackwood M, Jadhao SJ, Suarez DL, Wang L, **Yassine HM**, Saif YM, Lee CW. *Vaccine*. (2009) Feb; 27(6):819-24.
115. Genetic and Antigenic Relatedness of H3 Subtype Influenza A Viruses Isolated from Avian and Mammalian Species. **Yassine HM**, Lee CW, Suarez DL, Saif YM. *Vaccine*. (2008) Feb; 26: 966—977.
116. Interspecies and Intraspecies Transmission of Triple Reassortant H3N2 Influenza A Viruses. **Yassine HM**, Al-Natour MQ, Lee CW, and Saif YM\*. *Virology Journal*. (2007) Nov; 4(1):129.
117. Antimicrobial-Resistance of *Streptococcus pneumoniae* Isolated from the Lebanese Environment. **Harakeh S**, **Yassine H**, El-Fadel M\*. *Marine Environmental Research*. (2006) Sep; 62(3):181-93.
118. Isolates of *Staphylococcus aureus* and *saprophyticus* Resistant to Antimicrobials Isolated from the Lebanese Aquatic Environment. **Harakeh S**, **Yassine H**, Hajjar S, El-Fadel M\*. *Marine Pollution Bulletin*. (2006) Aug; 52(8):912-9.
119. Antimicrobial-Resistant Patterns of *Escherichia coli* and *Salmonella* Strains in the Aquatic Lebanese Environments. **Harakeh S**, **Yassine H**, El-Fadel M\*. *Environmental Pollution* (2006) Sep; 143(2):269-77.
120. Isolation, Molecular Characterization and Antimicrobial Resistance Patterns of *Salmonella* and *Escherichia coli* Isolates from Meat-Based Fast Food in Lebanon. **Harakeh S**, **Yassine H**, Gharios M, Barbour E, Hajjar S, El-Fadel M, Toufeili I, Tannous R\*. *Science of the Total Environment*. (2005) Apr; 341(1-3):33-44.

121. Isolation and Preliminary Characterization of a New Temperature-Sensitive Allele of the NAD<sup>+</sup> Ligase Gene (LIGA) in Escherichia Coli. **Hadi Yassine** and Medhat Khattar\*. *Master's Thesis at AUB, Beirut, Lebanon*. (May; 2003).  
<https://scholarworks.aub.edu.lb/handle/10938/6584>.

## Patents

1. Predictive biomarkers of duration at intensive care unit and mechanical ventilation in critically ill COVID-19 patients. Application # 63/155,750. March 2021. Elrayess M, **Yassine HM**, Al Thani AA.
2. Prefusion coronavirus spike proteins and their use. U.S. Patent. US Patent App. 17/194,834. Barney S. Graham, **Hadi M. Yassine**, Kizzmekia Corbett, Masaru Kanekiyo, and Michael Gordon Joyce. *[THIS PATENT WAS USED TO DEVELOP COVID-19 VACCINE INCLUDING THE PFIZER AND MODERNA ONES]*
3. Multivalent nanoparticle-based vaccines. US Patent 11,191,727. Inventors: Barney S. Graham (PI), Masaru Kanekiyo and **Hadi M. Yassine**. 2017.
4. Neutralizing antibodies to influenza HA and their use and identification. Publication Number WO2017192589 A1. Peter Kwong, Adrian McDermott, John Mascola, Michael G. Joyce, Adam Wheatley, Paul Thomas, Gwo-Yu Chuang, Cinque Soto, Sarah Andrews, Rebecca Gillespie, Masaru Kanekiyo, Wing-Pui Kong, Kwanyee Leung, **Hadi M. Yassine**, Sandeep Narpala, Madhu Prabhakaran, Jeffrey Boyington. 2016.
5. Stabilized group 2 influenza hemagglutinin stem region trimers and uses thereof (Provisional). No. 62/383,267. Inventors: Jeffrey C. Boyington, Barney S. Graham, John R. Mascola, **Hadi M. Yassine**, Kizzmekia S. Corbett, Syed M. Moin and Lingshu Wang. Filed on September 9, 2016.
6. Novel Influenza Hemagglutinin Protein-Based Vaccines. International patent publication number: WO2013044203 A2, application number: PCT/US12/56822. May 15, 2013. Inventors: Gary J. Nabel (PI), Masaru Kanekiyo, Che-Jen Wei, Patrick M. McTamney, **Hadi M. Yassine**, and Jeffrey C. Boyington. 2015.
7. Stabilized Influenza Hemagglutinin Stem Region Trimmers and Uses Thereof (Provisional). Application no. 62003471. Inventors: Barney S. Graham, John R. Mascola, **Hadi M. Yassine**, Jeffrey C. Boyington, Peter D. Kwong, and Masaru Kanekiyo. Filed on May 27, 2014.
8. Nucleic acid molecules encoding ferritin-hemagglutinin fusion proteins. Publication Number US20170189518 A1. Gary J. Nabel (PI), Masaru Kanekiyo, Che-Jen Wei, Patrick M. McTamney, Hadi M. Yassine, and Jeffrey C. Boyington. 2011.

## **Grants and Funding**

1. Antibody Dependent Enhancement (ADE) and autoimmunity: Causes of Disease Severity in Coronaviruses Infected and Vaccinated Individuals. QUCG-BRC-2022/23-578 (300K QAR for two years). LPI.
2. The double-edged sword of SARS-CoV-2 diversity: a risk factor of disease severity and a source of broadly-neutralizing antibodies. QUCG-BRC-2022-2. (300K QAR for two years). PI (LPI Hebah Al Khatib).
3. Bioinformatic approach to discover plant-derived antimicrobial peptides: in silico selection/engineering and in vitro activity tests against MERS-CoV and SARS-CoV-2. QUCG-CAS-2022-X. (300K QAR for two years). PI (LPI Sergio Crovella)
4. Establishing and Validating a Whole Genome Sequencing protocol for HBV & HDV Genotyping in Qatar. QUST-1-BRC-2022-399 (Student grant 14K QAR). Dec. 2021. **LPI**
5. Dexamethasone Chronotherapy of COVID-19-Induced Acute Respiratory Distress Syndrome. RRC02-0810-210032 (50K USD for one year). Oct. 2021. **PI** (LPI Faleh Tamimi).
6. Evolution of immune escape variants in long-term COVID-19 patients. QUST-2- BRC -2021-175 (Student grant 14000 QAR). May 2021. **LPI**.
7. A pilot study of the immune response to the COVID-19 vaccine in cancer patients in Qatar. MRC-01-21-111 (4,600.00 QAR). 2021. **Investigator** (LPI Said Dermime).
8. Characterization of the cellular and humoral immune responses to the COVID-19 vaccine in healthy population in Qatar. MRC-01-21-113 (34,500.00 QAR). 2021. **Investigator** (LPI Said Dermime).
9. Sequencing SARS-CoV-2 variants in Qatar (724,191 QAR). **QGP/2021/169. LPI & coordinator.** (2020-2021).
10. Coordinator for the collaboration with **Barzan Holding**: Training of young scientists (> 700K QAR/year).
11. Disease pathogenesis of COVID 19 in diabetic patients in Qatar: complications and underlying mechanisms (14000 QAR). **QUST-1-BRC-2021-3.** Jan 2021. **LPI**.
12. Low-Cost Magnetic Lateral Flow Assay Platform for Rapid Food Safety Testing and Point-of-Care Viral Infection Diagnostics in Qatar (520,000 USD). **NPRP13S-0128-200185.** Feb 2021 (for three years). **PI** (Lead PI: Gheyath Nasrallah).
13. Immunoglobulin evolution of pre-existing and newly generated human memory B cell responses to Coronaviruses spike proteins (189,500.00 USD). **PDRA6-0622-20018** (two years). Research Mentor for two years. Jan 2021.

14. Epidemiology of COVID-19 in Primary Health Care Settings and validation of rt-PCR against serology: A Population Based Longitudinal Study (~ 500K QAR). **PHCC/DCR/2020/05/047** (1 year study). PI. (L-PI: Mohamad Syed). May 2020.
15. Validation of selected commercial serological assays for diagnosis of COVID-19 (100,000 QAR). **RRC-2-032** (3 months). PI (L-PI: Gheyath Nasrallah). May 2020.
16. Within-host diversity of severe respiratory syndrome coronavirus-2 (SARS-CoV-2) and its association with clinical outcomes in covid-19 patients (100,000 QAR). **RRC-2-039** (3 months). PI (L-PI: Asmaa Al Thani). May 2020.
17. Epidemiological investigation of the association of renin-angiotestsin system blockade and Covid-19 outcomes: focus on ACE2 expression (100,000 QAR). **RRC-2-076** (3 months). PI (L-PI: Huseyin Yalcin). May 2020.
18. Biosafety and biosecurity capacity building: To Boost Laboratory Safety Practices across Qatar (25,000.00 USD). **CWSP18-W-0119-20015** (1 year). **LPI**.
19. Elucidating the genetic susceptibility to infectious disease in Qatari Population: Targeting Non A-C hepatitis viruses as a public health threat (540,000.00 QAR). **QUHI-BRC-20/21-1** (2 years; 2020-2021). **LPI**.
20. Surveillance, Molecular Epidemiology and Antibiotic Susceptibility Testing of Brucella spp.: A Significant Health Problem in Qatar. **QUCG-BRC-20/21-2** (2 years; 2020-2021). **PI** (L-PI: Dr. Nahla Eltai).
21. Characterization of cross-host transmission, computational prediction and in vitro validation of small molecules inhibitors for Middle East respiratory syndrome coronavirus (MERS-CoV) in Qatar (285,000.00 QAR). **QUCG-BRC-20/21-1** (2 years; 2020-2021). **PI** (L-PI: Dr. Asmaa Al Thani).
22. Nasal Microbiome Analysis in RSV Infected Children (10,000.00 QAR; student grant). **QUST-1-BRC-2020-3** (1 year; 2020). L-PI.
23. Screening and Genotyping of Astroviruses in Children with Acute Gastroenteritis (10,000.00 QAR; student grant). **QUST-1-BRC-2020-3** (1 year; 2020). L-PI.
24. Molecular epidemiology and seroprevalence of hepatitis E virus (HEV) among non-A-C hepatitis patients in Qatar (15,000.00 USD). **UREP24-013-3-003** (1 year; 2019). **Research Mentor**.
25. Molecular Genotyping of Non-Polio Enteroviruses in Qatar (UG student grant; 10,000.00 QAR). **QUST-1-BRC-2019-1** (1 year; 2019-). **L-PI**.
26. Antimicrobial resistance patterns in animals and environment: A one health approach (Masters student grant; 20,000.00 QAR). **QUST-1-BRC-2019-2** (1 year; 2019-). **L-PI**.

27. Prevalence and genotype distribution of human papillomaviruses in rectal cancer in the Middle East region. Prevalence and genotype distribution of human papillomaviruses in rectal cancer in the Middle East region (540,000.00 QAR). *ID is: QUHI-CMED-19/20-1* (2 years; 2019-). **PI** (L-PI: Dr. Alaa Eddin Al Moustafa)
28. Detection, phylogenetic and serological profiling of hepatitis E virus (HEV) among acute non-A-C hepatitis patient in Qatar, and performance validation of new and common commercial assays for detection of HEV-RNA and anti-HEV antibody. (270,000.00 QAR). *QUCG-CHS-19/20-1* (2 years; 2019-). **PI** (L-PI: Dr. Gheyath Nasrallah).
29. Properties of incretin hormone secreting cells in obese-IBD patients in the Qatar community (270,000.00 QAR). *QUCG-CMED-19/20-4* (2 years; 2019-). **PI** (L-PI: Dr. Abdella Mohammed Habib).
30. Salmonellosis among Pediatric Population in Qatar: Prevalence, Antibiotic Resistance, and Molecular and Epidemiology (269,968.5 QAR). *QUCG-BRC-19/20-1* (2 years; 2019-). **PI** (L-PI: Dr. Asmaa Al Thani)
31. Influenza complications and underlying mechanisms in disease pathogenesis in diabetic patients in Qatar (687,696.00 USD). *NPRP11S-1212-170092* (4 years; 2019-). **L-PI**
32. Prevalence of Airborne Antibiotic Resistant Bacteria in PHCC Centers in Qatar (288,000.00 QAR). *PHCC/RC/18/06/002* (2 years; 2019-). **LPI**. (With Dr. Asmaa Al Thani).
33. Bioinformatics and Laboratory Investigations of Emerging Pathogens And Epidemics (24000 USD). *CWSP14-W-0222-18011* (one year; 2018). Grant to organize hands-on workshop. **L-PI**.
34. Epidemiological Surveillance and Molecular Epidemiology Of viral Meningitis in Qatar From 2013-2019 (10,000.00 QAR). *QUST-2-BRC-2018-1* (One year; 2018-); **LPI**.
35. Characterization of Fecal Influenza and Its Impact on Gut Microbiome (300,000.00 QAR). *QUCG-BRC-2018\2019-1*(Two years; 2018-); **L-PI**.
36. FCy Chimeric Receptor T cells and monoclonal antibodies for Glioblastoma multiform immunotherapy: In vitro and in vivo Studies (282,500 QAR X2). *QUHI-BRC-2018\2019-1*(2 Years; Cancelled). **Co-PI** (L-PI: Dr. Hani Marie).
37. Molecular Determinants for Influenza Virus Transmission and Pathogenesis (20000.00 USD/Year for two years). **Bench fees from QNRF to support Ph.D. Student work; L-PI**. (Two Years; 2017-).
38. Magnitude of RSV Fusion Protein-Specific Antibodies in Infants and Corresponding Mothers in Qatar (20,000.00 QAR). *QUST-2-CHS-2017-4; Master's student QU internal grant* (One year; 2017-); **L-PI**.
39. Seroprevalence, detection and phylogenetic analysis of Parvovirus B19V among healthy blood donors in Qatar (15,000.00 USD). *UREP20-020-3-003* (One Year; 2017); **QNRF; Co-PI/Research Mentor** (L-PI: Gheyath Nasrallah).

40. Assessing Humoral Immune Response in MERS Seropositive Individuals (100,000.00 QAR). *QUUG-BRC-2017-1* (1 year; 2017-). *Co-PI* (L-PI: Asmaa Al Thani).
41. Epidemiologic and genotypic characteristics of  $\beta$ - lactam antibiotic resistant gram negative bacteria from children presented with UTI in primary health care in Qatar (100,000.00 QAR). *QUUG-BRC-2017-2* (1 year, 2017-). *Co-PI* (L-PI: Dr. Nahla Eltai).
42. Laboratory-based surveillance and molecular epidemiology of influenza and other respiratory viruses in Qatar: 2012-2018 (145,000.00 QAR). *HMC-MRC/0006/2016* (2 years; 2016-) *PI* (L-PI: Dr. Muna Al Maslamani).
43. Magnitude of RSV Fusion Protein-Specific Antibodies in Infants and Corresponding Mothers in Qatar (100,000.00 QAR). *HMC-MRC/1491/2016* (2 years; 2016-). *PI* (L-PI: Khalid Al Ansari).
44. Estimating the Burden of Viral Gastroenteritis and Effectiveness of Rotavirus Vaccine in Young Children in Qatar (720,000.00 USD). *NPRP9-133-1-025* (3 years; 2016-). *L-PI*.
45. Human genetic susceptibility to severe viral infections in childhood (719,757.00 USD). *NPRP9-251-3-045* (3-years; 2016-). *Consultant* (L-PI: Nico Marr).
46. A platform for large-scale serological profiling of the Qatari population to link individual genome and immune phenotype variation in health and disease (798,952.00 USD). *PPM1-1220-150017* (3 years; 2016-). *PI* (L-PI: Mico Marr).
47. Measuring Influenza Hemagglutinin Stem-Specific ADCC and CDC Activities in Human Sera Using Novel Stabilized Stem Probes (120,000.00 QAR). *QUUG-BRC-BRC- 15\16-1* (2 years; 2016-). *L-PI*.

### **Student's supervision**

#### **Ph.D. Students**

1. Reham Awni El Kahlout, Ph.D. (QU). Supervisor. 2021-current.
2. Abeer Qush; Ph.D. (QU). Co-supervisor. 2021-current.
3. Nadin Younes. Research Mentor (GSRA). 2021-current.
4. Swapna Thomas, Ph.D. (QU). Supervisor. 2020-current.
5. Maria Smatti, Ph.D. (HBKU). Supervisor. 2018-current.
6. Heba Al Khatib, Ph.D. student (HBKU). Supervisor. 2017-2020.

#### **M.Sc. students**

7. Ummay Salma Abu Habib, M.Sc, (QU-CHS). Supervisor. Spring 2021-current.
8. Hadeel Zedan, (QU-CHS). Co-supervisor. Spring 2021-current.
9. Reeham Abdullah Albuainain, M.Sc, (QU-CHS). Supervisor. 2019-2020.
10. Rania Abdullah Albuainain, M.Sc, (QU-CHS). Co- Supervisor. 2019-2020.
11. Israa Al Bashir, M.Sc. Student (HBKU). Supervisor. 2018-2019.
12. Khalil Naser Alismail, (QU-CHS). QU internal Examiner. 2019.
13. Najat Ali A A Al-Buhendi, M.Sc. Student (QU-CHS). Supervisor. 2018-2019.

14. Dalal Ali Alhababi, M.Sc. Student (QU-CHS). Supervisor. 2018-2019.
15. Sara A. Taleb, M.Sc. (QU-CHS). Supervisor. 2017-2018.
16. Reham Awni Al Kahlout, M.Sc. Student (QU-CHS). Committee member. 2017.

### **B.Sc. students**

17. Hala Hazem Abo khaled. Supervisor. Spring 2022.
18. Ruaa Mahmoud Ismail. Supervisor. Spring 2022.
19. Abrar Abaker Abdalla. (QU-CHS). Supervisor. 2020.
20. Maissa Ali Riahi. (QU-CHS). Supervisor. 2020.
21. Tasnim Hisham Ali Mahmoud Alziftawi. (QU-CHS). Supervisor. 2020.
22. Alaa A. ElKheider, B.Sc. (QU-CHS). Supervisor. 2020.
23. Asalet Hijazi, B.Sc. (QU-CHS). Supervisor. 2020.
24. Dana Elasmr, B.Sc. (QU-CHS). Supervisor. 2020.
25. Nasimeh Ahmad Azadi, B.Sc. (QU-CHS). Supervisor. 2019.
26. Tayseer Abdalhamid Bashir Fadl, B.Sc. (QU-CHS). Supervisor. 2019.
27. Sarah Jemmieh, B.Sc. (QU-CHS). Supervisor. 2018.
28. Amira Kohil, B.Sc. (QU-CHS). Supervisor. 2018.
29. Israa Al Bashir, B.Sc. Student (QU-CHS). Research supervisor. 2017.
30. Nour El Dous, B.Sc. Student (QU-CHS). Research supervisor. 2017.
31. Trained and monitored several UG and graduate students as well as visiting scholars at AUB, OSU, and QU.

### **Services and Outreach Activities**

1. Coordinated the sequencing activities of SARS-CoV-2 at QU to inform MOPH, HMC, and other National agencies in Qatar. Deposited more than 6000K sequences at GISAID, more than any other Gulf States.
2. Biosafety and biosecurity capacity building: To Boost Laboratory & occupation Safety Practices across Qatar. <http://www.qu.edu.qa/research/brc/Training/biosafety-and-biosecurity-capacity-building>. February 2021. CWHP-QNRF funded. **Organizer**.
3. The 9<sup>th</sup> QU Annual Research Forum. **UG students' poster Judge**. Qatar University, Doha, Qatar. April 15, 2019.
4. 4th QU Heath Research Symposium. **UG students' poster Judge**. Qatar University, Doha, Qatar. March 30, 2019.
5. WCM-Q 9th Annual Research Retreat. **Poster Judge**. WQM-Q, Doha, Qatar. March 23, 2019.
6. Bioinformatics and Laboratory investigations of emerging pathogens and epidemics Workshop (With practical sessions). **Organizer**. Doha, Qatar, January 14-17, 2019.
7. Antimicrobial Susceptibility Testing and Surveillance Workshop (With practical sessions). **Organizer and MC for the event**. Doha, Qatar, January 22-25, 2018.
8. 4th International Congress on Pathogens at the Human-Animal Interface (ICOPHAI)-CPD accredited. **Organizer, International Organizing Committee Co-Chair, National Organizing Committee Member, and MC for the event**. Doha, Qatar, November 7th to 9th, 2017.
9. Exposure and Toxicological Characteristics of Chemical Agents in the Environment. **Organizer**. Doha, Qatar, November 7th to 9th, 2017.
10. Biosafety Level 3 Laboratory Project. **Coordinator**. 2016-current.
11. International workshop on Emerging Pathogens at the Human-Animal-Environment Interface. **Organizer**. Doha, Qatar, October 2016.



12. Principles of Mammalian Cell Culture Course. **Coordinator**. BRC, QU, August 2016 (presenter 2017-forward).
13. Coordinator for the BSL3 Project. Ongoing.
14. Coordinator for the collaboration with HMC (Microbiology projects). 2015-2018.
15. Coordinator for the collaboration with MOPH (Infectious diseases project). 2015-2018.
16. Biosafety coordinator between September 2015 and February 2016.
17. Organizer of biosafety lectures at BRC, QU.
18. Steps of Scientific Research Workshop Program. **Organizer**. Hamza Intermediate School. November 2015. Doha, Qatar. Presenter.

### **Committees and Groups**

- Qatar Health 2022 and 2nd Qatar Public Health Conference, committee member (Adhoc). 2021-2022.
- Committee to Review QU Publication Reward Policy. 2021-current.
- Promotion Committee (member). Department of Biological Sciences, College of Health Sciences, Qatar University. 2020-current.
- QU ERG Emergency Response Grant. Committee member. 2020-Current.
- Multiple National Committees concerning COVID-19 crisis including: Scientific Reference and Research Taskforce (SRRT); Testing and Therapeutics Working Group (CATTWG); Variant & Wastewater Surveillance Working Group; Serology testing subgroup, Viral genome database; others. 2020-current.
- Qatar law for biological weapon prohibition committee. 2018-current
- HMC-CDC Research Advisory Group. November 2019-current.
- MOPH National Pandemic Preparedness Plan (Adhoc Member). Doha, Qatar. September 2019-on going.
- Qatar University Research Development Committee (Member). Doha, Qatar. September 2019-on going.
- 1<sup>st</sup> Qatar Public Health Conference (MOPH). Scientific advising committee (member). Doha, Qatar, November 2019.
- 4th International PHCC Conference. Scientific committee (member). Doha, Qatar, 2019.
- Qatar University Institutional Biosafety Committee (member). 2018-Current.
- Primary Health Care Corporation (PHCC) Research Committee (member). 2018-2019.
- Qatar Environmental Health Task Force (MOPH; member). 2019.
- Qatar National Health Strategy (2017-2022) - Health Protection Task-Force (Member). 2017-2018.
- HMC Infectious Diseases Epidemiology and Outcomes Interest Group (Ad Hoc).
- Qatar University Infectious Disease Group. 2018- current (Leader from 2018-2019).

### **Professional and Honor Societies**

- American Association for Virology (ASV); 2008-Current.
- American Association for Microbiology (ASM); 2017-2018.
- American Association for Advancement of Science (AAAS); 2008-2010.
- American Association of Avian Pathologists (AAAP); 2004-2009.
- The Ohio State University Chapter of the Honor Society of Phi Kappa Phi for outstanding students; 2006.

### **Awards, Scholarships & Distinctions**

- Research Excellence Award, Health and Biomedical Sciences (50K QAR). QU annual Research Forum and Exhibition, Fall 2021.
- Research Poster Award (faculty), Health and Biomedical Sciences. QU annual Research Forum and Exhibition, Fall 2021.
- Certificate of Appreciation from Qatar Biobank “for recognition of outstanding contribution to the 2<sup>nd</sup> IBCQ international biobanking conference, 2021”.
- Certificate of Honoring & Appreciation, from the office of Research and Graduate Studies (QU) "In recognition for the service in the QU committess (IBC chair-others)". Annual Honoring Ceremony. May 2021.
- Certificate of Honoring & Appreciation, from the office of Research and Graduate Studies (QU) "In recognition for a record of outstanding accomplishment in the Academic Year 2019-2020". Annual Honoring Ceremony. June 2020.
- Best Faculty Poster Award. 2018 Qatar University Research Forum, Doha, Qatar.
- Best Supervisor for Graduate Student Poster Award (for my Master’s Student). 2018 Qatar University Research Forum, Doha, Qatar.
- Charles E. Thorne Memorial Associateship. Ohio Agricultural Research and Development Center (OARDC), OSU, Wooster, OH (2008). \$18,000 award.
- Travel Award. North Central Avian Disease Conference (NCADC), St. Paul, MN (March, 2008).
- AAAS Science Program for Excellence in Science. AAAS (2007-2008).
- Richard B. Rimler Memorial Paper Scholarship: Recognizing Excellence in Poultry Disease Research by a Graduate Student. AAAP/AVMA convention, Washington D.C. (July, 2007).
- Travel award. NCADC, St. Paul, MN (March, 2007).
- Rosenwald Poster Award: Best Student Poster. AAAP/AVMA Convention, Honolulu, HI (July, 2006).
- Selection into OSU Chapter of the Honor Society of Phi Kappa Phi for Outstanding Students. OSU, Columbus, OH (May, 2006).
- B. S. Pomeroy Award: Student Achievement in Avian Diseases Research. NCADC, St. Paul-MN (March, 2006).
- Full Graduate Assistantship at AUB (Master’s Degree). Beirut, Lebanon (2001-2003).

### **Selected Media Highlights**

- Halting Progress and Happy Accidents: How mRNA Vaccines Were Made. THE NEW YORK TIMES. January 15, 2022. <https://www.nytimes.com/2022/01/15/health/mrna-vaccine.html>.
- Can the COVID-19 pandemic be defeated in 2022? Inside Story-Aljazeera English. Jan 2, 2022. <https://www.youtube.com/watch?v=ywmTxQ2xxwY&t=315s>.
- سيناريوهات - أوميكرون.. ما مدى خطورة المتحور الجديد مقارنة بمتحورات كورونا السابقة؟ برنامج سيناريوهات على قناة الجزيرة. 2021/12/2. <https://www.youtube.com/watch?v=eoVbxRCfF-4&t=736s>.
- Wednesday Seminar Series (host). Latest updates on COVID-19 and its vaccines. <https://www.youtube.com/watch?v=pbGN3-0lzuU>.
- Investigating infection. Researchers at QU Biomedical Research Center are determined to find answers in areas other have overlooked. A beacon of academic and research and excellence [QU publication]. Fall 2021.
- The Biomedical Research Center Organizes Seminar on Development of COVID-19 Vaccine. QU Research Magazine; June 2021.
- Helping Critically Ill COVID19 Patients: New Predictive Biomarkers of Length of Stay at the ICU for Better Management and Risk Reduction. QU Research Magazine; June 2021.

- Makkah to Moderna: How the journey to a Covid-19 vaccine began on the Hajj. Lebanese-American virologist Hadi Yassine played a pivotal role in the development of the first Covid-19 vaccine candidate. November 2020. <https://www.thenationalnews.com/world/mena/makkah-to-moderna-how-the-journey-to-a-covid-19-vaccine-began-on-the-hajj-1.1046320>.
- Several TV and newspaper interviews related to COVID-19 crisis (some are listed below).
  - Scientists predict that COVID-19 will become a seasonal virus—but not yet. September 2020. <https://medicalxpress.com/news/2020-09-scientists-covid-seasonal-virusbut.html>. (*Multiple articles in this regard*).
  - علماء عرب يتوقعون أن "كوفيد-19" سيصبح فيروسا موسميا. RT-Arabic; 15-09-2020.
  - Researchers at the QU are keen to find answers in areas others have overlooked. Qatar University news. 08-09-2020. <http://www.qu.edu.qa/about/research-findings/Researchers-at-the-QU-are-keen-to-find-answers-in-areas-others-have-overlooked>.
  - Genetics and Artificial Intelligence Drive Qatar University's Covid-19 Research. Al Fanar Media. 14 April 2020. <https://www.al-fanarmedia.org/2020/04/genetics-and-artificial-intelligence-drive-qatar-universitys-covid-19-research/>.
  - Ghabqa program at Al Rayyan TV, May 8 2020. To talk about latest COVID-19 updates. [https://www.youtube.com/watch?v=GM1Pp9aQC\\_g&feature=youtu.be](https://www.youtube.com/watch?v=GM1Pp9aQC_g&feature=youtu.be).
  - Al Rayyan TV: <https://www.facebook.com/AlRayyanTV/posts/3236341736481448>
  - Qatar TV: <https://twitter.com/qatartelevision/status/1277291446710808576?lang=ar>
  - Qatar TV: <https://twitter.com/qatartelevision/status/1242531759629230085?lang=ar>
  - Wuhan coronavirus: the breakdown. Video interview for HBKU Al Ma'arifa newsletter (The Conversation). February 2020.
  - An interview with TRT-Arabic (News TV) on coronavirus crisis. Feb 25, 2020.
  - From Coronavirus to Coronacrisis, and Back. HBKU and TRT-World websites. (<https://www.hbku.edu.qa/en/news/coronavirus-chls>; <https://www.trtworld.com/opinion/from-coronavirus-to-coronacrisis-and-back-34160>; <https://www.hbku.edu.qa/ar/news/coronavirus-chls>).
  - Al-Mejhar TV show on Al-Rayyan TV: COVID-19 Crisis. (<https://www.youtube.com/watch?v=IM9fkaBzbUc>). Feb 27, 2020.
  - د. هادي ياسين مدير المشاريع البحثية في مركز البحوث الطبية بجامعة قطر: حددنا التسلسل الجيني لفيروس كورونا (الشرق). 31 مايو 2020
  - جهود بحثية لجامعة قطر. (الوطن). 29 مارس 2020
  - «البحوث الحيوية» يكثف جهوده حول «كورونا». (العرب). 31 مارس 2020
  - جامعة قطر توظف علم الوراثة والذكاء الاصطناعي في بحوث كوفيد-19. 14-4-2020. (الفنار للاعلام).
  - لمواجهة كورونا.. كيف ساهمت قطر في تسريع وتيرة البحث والابتكار؟ (الخليج للاعلام). 01-06-2020
  - طالبات العلوم الصحية يبحثن مخاطر انتقال العدوى الفيروسية. (الرؤية). 3 يونيو 2020.
  - علماء مؤسسة قطر يبحثون في تأثير فيروس كورونا على البلدان المختلفة 1 يونيو 2020
- Qatar University professor records breakthrough on coronavirus research. QU Research Magazine (Feature story). May, 2016. [http://www.qu.edu.qa/offices/research/QURO\\_Magazine/issue7/en/index.htm#p=10](http://www.qu.edu.qa/offices/research/QURO_Magazine/issue7/en/index.htm#p=10)
- باحث بجامعة قطر يكتشف البروتين الحامل لفيروس كورونا. (العربي الجديد). 08 مارس 2016.
- A step closer on universal flu vaccine. *The Science Times*, August 26, 2015. (<http://www.sciencetimes.com/articles/7179/20150826/universal-flu-vaccine-step-closer.htm>).
- Universal flu vaccine is no longer science fiction. Scientists report major step in development. *Washington Post*, August 25, 2015. (<https://www.washingtonpost.com/news/to-your-health/wp/2015/08/25/universal-flu-vaccine-is-no-longer-science-fiction-scientists-report-major-step-in-development/>).

- Major step' toward universal flu vaccine: studies. *The Guardian*, August 24, 2015. (<http://www.nrguardiannews.com/2015/08/major-step-toward-universal-flu-vaccine-studies/>).
- Ohio State mobilizes its army of experts to deal with the influenza outbreak. *OSU-On Campus News Paper* (By Jeff McCallister). May 7, 2009.
- Researchers in Wooster on front lines of fighting H1N1 influenza virus. *WKYC (NBC) Channel 3-Cleveland* (by Monica Robins). May 6, 2009.
- H1N1 influenza: Jumping species. *OARDC-YOUTUBE* (OARDC staff). May 04, 2009.
- Swine influenza, medically speaking. *Daily Record-Wooster* (By Christine L. Pratt). April 28, 2009.
- H1N1/2009 outbreak: facts, preparedness and faculty experts. *Public Health Preparedness for Infectious Diseases (PHOID-OSU)*. Spring, 2009.
- Swine influenza virus transmission across species studied. *Nationalhogfarmer.com*. December 18, 2008.
- Bird flu in human: OARDC in national effort to understand, prevent and control it. *OARDC-OSU annual report*. 2005.

### **Editorials and peer-review Activities**

- Associate Editor of Infectious Diseases – Surveillance, Prevention and Treatment for *Frontiers in Medicine*. 2020-current.
- Guest editor; Microorganisms special issue “Personalized Medicine and Infectious Disease Management”. Under preparation.
- Guest editor; *Frontiers in Medicine* Special issue “Personalized Medicine and Infectious Disease Management”. Spring 2021 and Winter 2022.
- Associate Editor of Infectious Diseases – Surveillance, Prevention and Treatment *Frontiers in Public Health*. 2020-current.
- Associate Editor of Virology for the *BMC Infectious Diseases Journal*. 2018- Current
- Review Editor for *Frontiers in Microbiology*. 2017- Current.
- Guest editor for *Journal of Immunology Research*. Special issue “Immunomodulation induced by host pathogen interaction”. 2018-2019.
- Reviewer for Ohio Agricultural Research and Development Center (OARDC)-OSU Research Enhancement Competitive Grant Program.
- Reviewer for Journals: *Plos Pathogens*, *Vaccine*, *Plos One*, *Frontiers Microbiology*, *Veterinary Microbiology*, *Scientific Reports*, *BMC Infectious Diseases*, *Virology Journal*, *Emerging microbes and infections*, and many others.
- Reviewed articles for *Science*, *Nature*, *Nature Medicine*, *Lancet Infectious Diseases*, and *New England Journal of Medicine*.

### **Presentations, Abstracts, Conferences and Workshops**

- Detection of Autoimmune antibodies in Severe but not in moderate or asymptomatic COVID-19 patients. The arab universities and their role in facing the challenges of the corona pandemic- Research and awareness efforts. AARU, June 2021. Attending (Presentation was given by my trainee).
- A One Health Approach to Address COVID-19 in Qatar. PMFG 2020 conference: Precision medicine solutions for managing COVID-19. December 5, 2020. (Invited talk).

- A holistic approach to tackling COVID19: highlights from QU sequencing and serology research. WISH2020, Doha, Qatar;18-NOV-2020. (Invited talk).
- A holistic approach of tackling the COVID-19 at Qatar University. 5th QU Health Symposium. 14-Nov-2020. (Invited speaker).
- A holistic approach of tackling the COVID-19 in Qatar. CHLS seminar series. HBKU, Doha Qatar; 21-10-2020. (Invited talk).
- Viruses Associated with Acute Gastroenteritis in Qatar. Research Outcome Seminar on “Infectious Diseases” Webinar on April 1, 2020.
- Surveillance and molecular epidemiology of aseptic meningitis in Qatar. 22<sup>nd</sup> ESCV annual Meeting, September 2019, Copenhagen, Denmark (Podium).
- Molecular epidemiology of Rotavirus in Children with Gastroenteritis in Qatar. the 69<sup>th</sup> Annual Conference of the Canadian Society of Microbiologists (CSM 2019). June 2019. Sherbrook, Quebec (Poster).
- Infectious diseases research at Qatar University. ‘Joining Forces’ UK-Qatar Health Research Forum. Doha, Qatar. April 30, 2019. Invited speaker.
- Intra-Host and Intra-Population Sequence Diversity of pH1N1 and Associated Clinical Outcomes. 4th QU Health Symposium. Doha, Qatar. March 30, 2019. Podium.
- Universal Influenza Vaccines. Invited speaker. Hamad Bin Khalifa University (HBKU). Doha, Qatar. December 5, 2018. Podium
- Molecular Epidemiology of Rotavirus and Norovirus Strains Circulating among Pediatric Patients with Gastroenteritis in Qatar. MEEGID XIV. Sitges-Barcelona, Spain. November 2018. (Poster).
- Rotavirus Induces Severer Shift in Children Gut Microbiota Upon Coinfection with Pathogenic E. coli compared to Norovirus. 2018 ASV annual meeting. College Park, MD. July 2018. Corresponding author. (Poster).
- Measuring Influenza HA Stem-Specific ADCC in Human Sera Using Novel Stabilized Stem Nanoparticle Probes. QU Health Retreat AND QU Research Forum. Doha, Qatar; April and May 2018. Corresponding author. (Poster).
- Magnitude of RSV Fusion Protein-Specific Antibodies in Infants and Corresponding Mothers. QU Health Retreat AND QU Research Forum. Doha, Qatar; April and May 2018. Corresponding author. (Poster). Award Winner.
- Urinary Tract Infection and Antibiotic Resistance Molecular Pattern among Pediatric Population in Qatar. QU Health Retreat AND QU Research Forum. Doha, Qatar; April and May 2018. Corresponding author. (Poster). Award Winner.
- Mixed Viral-Bacterial Infections and Their Effect on Gut Microbiota and Clinical Illness in Children. QU Health Retreat AND QU Research Forum. Doha, Qatar; April and May 2018. Corresponding author. (Poster).
- Evolution and Dynamics of H1N1 and H3N2 Influenza Viruses in MENA Region from 2009 to 2017. QU Research Forum. Doha, Qatar; April and May 2018. Corresponding author. (Poster).
- Molecular Epidemiology of Rotavirus and Norovirus Strains Circulating among Pediatric Patients with Gastroenteritis in Qatar. QU Health Retreat. Doha, Qatar; April and May 2018. Corresponding author. (Poster).
- Universal influenza vaccines. School of Respiratory Viruses (ISIRV). AUB, Beirut, Lebanon. May 2018. Invited Speaker.
- Immunogenicity testing using viral pseudo-types. School of Respiratory Viruses (ISIRV). AUB, Beirut, Lebanon. May 2018. Invited Speaker.

- Meeting of the Minds: Carnegie Mellon University- Qatar Research Symposium. April 2018. (Judge).
- Weill Cornell Medicine-Qatar 8th Annual Research Retreat. February 17, 2018. (Judge).
- Antimicrobial susceptibility testing: External Quality and Quality Check list. Antimicrobial Resistance Testing and Surveillance Workshop. Jan 2018, Doha, Qatar. (Podium)
- Targeting the Influenza Hemagglutinin Stem to Develop a Universal Vaccine. Biomedical Research Center-Qatar University. September 2017, Doha, Qatar. (Podium)
- Evaluation the In Vitro Susceptibility of Cftazidime-Avibactam and Ceftolozane-Tazobactam against Multidrug-Resistant Pseudomonas aeruginosa Isolates in Qatar. 28th European Congress of Clinical Microbiology and Infectious Diseases (ECCMID). April 24, 2018 (Co-author; Abstract accepted). Co-author.
- Towards a Universal Influenza Vaccine. *QU Research Forum*. May 2017. Doha, Qatar. (Poster). Corresponding author.
- Estimating the Burden of Viral Gastroenteritis in Young Children in Qatar. *QU Research Forum*. May 2017. Doha, Qatar. (Poster). Corresponding author.
- Use of Stabilized Hemagglutinin Stem Probes Demonstrate Prevalence of Broadly Reactive Group 1 Influenza Antibodies in Human Sera. *QU Research Forum*. May 2017. Doha, Qatar. (Poster). Corresponding author.
- Antibiotic Resistance Profile of E. coli Isolated from Fecal Samples of Broiler Chickens in Qatar. *QU Research Forum*. May 2017. Doha, Qatar. (Poster).
- Estimating the Burden of Viral Gastroenteritis in Young Children in Qatar: 2016-2017. *ASM/ASV Conference on Interplay of Viral and Bacterial Pathogens*. May 2017. Bethesda, MD. (Poster).
- Seroprevalence of Middle East Respiratory Syndrome Coronavirus (MERS-Cov) Infection among Healthy and High Risk Individuals in Qatar. *19<sup>th</sup> International Conference on Epidemiology and Infectious Disease*. April 2017, Boston, MA. (Co-author; Poster)
- Hemagglutinin Stem Nanoparticle Generates Heterosubtypic Influenza Protection. *6<sup>th</sup> European Congress of Virology*. October 20, 2016. Hamburg, Germany. (Podium).
- Overview on Emerging Viruses and Efforts to Control Them: Ebola And Zika As Examples. *Emerging Pathogens At The Human-animal-environment Interface Workshop*. October, 2016. Doha, Qatar. (Podium).
- Beta-Catenin Negatively Regulates RSV Replication. S.M. Moin, A. Kumar, M. Chen, C. Peek, H.M. Yassine, A. Ryder, B.S. Graham. *10<sup>th</sup> International RSV Symposium*. September-October 2016. Patagonia, Argentina. (Co-author, poster).
- Structure and Stabilization of Coronavirus Spike Proteins in the Prefusion Conformation. Kirchdoerfer RN, Cottrell CA, Wang N, Pallesen J, Yassine HM, Turner HL, Corbett KS, Graham BS, McLellan JS, Ward AB. *18<sup>th</sup> Annual International Meeting of the Institute of Human Virology*. September 2016. Baltimore, MD. Poster.
- Next Generation Influenza Vaccine Based on HA Stem Immunogen. *Qatar University Health Cluster First Annual Retreat*. June 2016. Doha, Qatar. Podium.
- *The Qatar Foundation Annual Research Conference (ARC'16)*. March 2016. Doha, Qatar. Delegate.
- *Biomarkers Assay using Multiplex technology (Workshop)*. March 2016. Doha, Qatar. Attendee.
- *Sixth Annual WCMC-Q Research Retreat*. February 2016. Doha, Qatar. Delegate and judge.
- *Arab Health Symposium*. January 2016. Dubai, UAE. Delegate.

- *International Conference in Emergency Medicine and Public Health*. January 2016. Doha, Qatar. Delegate.
- *Flow Cytometry Experiment Design and Data Analysis (workshop)*. November 2015. Doha, Qatar. Attendee.
- *Steps of Scientific Research Workshop Program (workshop)*. Hamza Intermediate School. November 2015. Doha, Qatar. Presenter.
- Structure-Based Design Of A Hemagglutinin-Stem Nanoparticle Vaccine Results In Heterosubtypic Influenza Protection. J.C. Boyington, **H.M. Yassine**, P.M. McTamney, C.J. Wei, M. Kanekiyo, W.P. Kong, J.R. Gallagher, L.Wang, Y. Zhang, M.G. Joyce, D. Lingwood, S.M. Moin, H. Andersen, Y. Okuno, S.S. Rao, A.K. Harris, P.D. Kwong, J.R. Mascola, G.J. Nabel, B.S. Graham. *41st Lorne Conference on Protein Structure and Function*. February, 2016. Lorne, Australia.
- Immunization with Heterogeneous Mosaic Array of Influenza HA Receptor-Binding Domain Induces Broadly Neutralizing H1N1 Antibody Responses. M. Kanekiyo, **H.M. Yassine**, A.K. Wheatley, R.A. Gillespie, M. Prabhakaran, S.F. Andrews, A.B. McDermott, R.A. Koup, J.R. Mascola, B.S. Graham. *Vaccine Against Antigenically Variable Viruses*. November, 2015. Ames, IA.
- Cryo-electron microscopy and image analyses of influenza vaccine nanoparticles suggest conformational and orientational design constraints correlated with multivalent binding and increased vaccine response. J. Gallagher, M. Kanekiyo, **H.M. Yassine**, J. Boyington, B. Graham, A. Harris. *NIH Research Festival*. September, 2015. Bethesda, MD. (Podium; Award winner).
- Structure-based Design of a Stabilized Hemagglutinin Stem Elicits a Heterosubtypic Protective Antibody Response to Influenza Virus in Ferrets. J.C. Boyington, **H.M. Yassine**, M. Kanekiyo, J.R. Gallagher, L.Wang, Y. Zhang, M.G. Joyce, D. Lingwood, W.P. Kong, A.K. Harris, P.D. Kwong, S.S. Rao, B.S. Graham and J.R. Mascola. *B-Cell Keystone Symposia*. March, 2015. Banff, Alberta, Canada. (Poster).
- Structural Definition of a Novel Set of Commonly Elicited Group 1/ Group 2 Influenza Neutralizing Antibodies. P.V. Thomas, M.G. Joyce, A.K. Wheatley, J.C. Boyington, A. Druz, C.R. Lees, M. Kanekiyo, **H.M. Yassine**, M.S. Prabhakaran, S.R. Narpala, R.T. Bailer, U. Baxa, J.E. Ledgerwood, B.S. Graham, R.A. Koup, A.B. McDermott, J.R. Mascola, and P.D. Kwong. *B-Cell Keystone Symposia*. March, 2015. Banff, Alberta, Canada. (podium)
- Elicitation of Influenza HA Stem-Directed Heterosubtypic Protective Antibody Response through Structure-Guided Immunogen Design. **H.M. Yassine**, J.C. Boyington, L.Wang, M. Kanekiyo, Y. Zhang, M.G. Joyce, D. Lingwood, W.P. Kong, P.D. Kwong, S.S. Rao, J.R. Mascola, B.S. Graham. *Keystone-Viral Immunity*. January, 2014. Breckenridge, Co. (Poster).
- Synthetic Mosaic Array of Heterogenous Receptor-Binding Domains of Influenza Hemagglutinin Triggers Cross-Reactive B cell Responses. M. Kanekiyo, **H.M. Yassine**, A.K. Wheatley, I.S. Georgiev, P.D. Kwong, A.B. McDermott, R.A. Koup, J.R. Mascola, B.S. Graham. *Keystone-Viral Immunity*. January, 2014. Breckenridge, Co. (Poster).
- Convergent Gene Rearrangement of Influenza-Specific Antibodies with Group 1/ Group 2 Neutralizing Activity. A.K. Wheatley, M.G. Joyce, **H.M. Yassine**, M. Kanekiyo, M.S. Prabhakaran, S.R. Narpala, P.V. Thomas, J.C. Boyington, A. Druz, R.T. Bailer, J.E. Ledgerwood, P.D. Kwong, B.S. Graham, J.R. Mascola, R.A. Koup, A.B. McDermott. *Keystone-Viral Immunity*. January, 2014. Breckenridge, Co. (Poster).
- Beta-Catenin is a Negative Regulator of RSV Replication. S.M. Moin, A. Kumar, C.T. Peek, **H.M. Yassien**, M.C., M.L. Moore, B.S. Graham. *9<sup>th</sup> International RSV Symposium*. November, 2014. Stellenbosch, South Africa. (Poster).

- Elicitation of Influenza HA Stem Neutralizing Antibodies Via Stabilized Stem Nanoparticle Vaccine. *Endemic and Emerging Viral Diseases of Priority in the Middle East and North Africa*. May, 2014. Doha, Qatar. (Invited speaker).
- Rational Design of an Influenza Hemagglutinin Stem Immunogen Enables Elicitation of Stem-Directed Neutralizing Antibodies. J.C. Boyington, C.J. Wei, P.M. McTamney, **H.M. Yassine**, M. Kanekiyo, D. Lingwood, M.G. Joyce, S.Y. Ko, S.S. Rao, H. Andersen, Y. Okuno, J. R. Mascola, P.D. Kwong and G.J. Nabel. *Keystone-Pathogenesis of Respiratory Viruses*. January, 2014. Boston, MA. (Podium).
- Structural and Genetic Basis for Development of Broadly Neutralizing Influenza Antibodies. **H.M. Yassine**, D. Lingwood, P.M. McTamney, J.R. Whittle, X. Guo, J.C. Boyington, C.J. Wei, G.J. Nabel. *Keystone- Immunological Mechanisms of Vaccination*. December, 2012. Ottawa, Canada. (Poster).
- A self-assembling Influenza Nanoparticle Vaccine Elicits Broad and Potent Neutralizing Antibodies. M. Kanekiyo, C.J. Wei, **H.M. Yassine**, P.M. McTamney, J.C. Boyington, J.R. Whittle and G.J. Nabel. *Keystone- Immunological Mechanisms of Vaccination*. December, 2012. Ottawa, Canada. (Poster).
- Elicitation of Broadly Neutralizing Influenza Antibodies Despite prior Influenza Exposure. C.J. Wei, **H.M. Yassine**, P.M. McTamney, J.G.D. Gall, J.R. Whittle, J.C. Boyington, J.E. Ledgerwood, B.S. Graham and G.J. Nabel. *Keystone- Immunological Mechanisms of Vaccination*. December, 2012. Ottawa, Canada. (Poster).
- Use of Novel Hemagglutinin Stem Probes Demonstrate Prevalence of Broadly Reactive Group 1 Influenza Antibodies in the Human Population. **H.M. Yassine**, P.M. McTamney, J.C. Boyington, C.J. Wei, J.E. Ledgerwood, B.S. Graham, G.J. Nabel. *Infectious Diseases Prevention and Therapy*. November, 2012. Philadelphia, PA. (Poster).
- Interspecies and Intraspecies Transmission of Swine-Lineage Influenza Viruses. **H.M. Yassine**, C.W. Lee, Y.M. Saif. *6th Annual Prevention and Control of Avian Influenza in the United States (AICAP) Meeting*. October, 2011. Buffalo, NY. (Podium).
- Structural and Genetic Basis for Maturation of a Broadly Neutralizing Influenza Antibody. **H.M. Yassine**. *Influenza Interest Group (NIAID, NIH)*. September, 2011. Bethesda, MD. (Podium).
- Replication of Swine-lineage Influenza Virus in Juvenile and Adult Turkey Hens. C.W. Lee, Ali A., **H.M. Yassine**, and Y.M. Saif. *American Association of Avian Pathologists (AAAP-AVMA) Annual Meeting*. July, 2011. St. Louis, MO. (Poster).
- Differential Susceptibility of Turkeys to Swine and Human Influenza A Viruses. Ali A., **H.M. Yassine**, Y.M. Saif, and C.W. Lee. *North Central Avian Disease Conference*. March, 2011. St. Paul, Minnesota. (Poster).
- Rational Design of Hemagglutinin Probe for the Identification of Broadly Neutralizing Antibodies against Influenza A viruses. **H.M. Yassine**, C.J. Wei, P. MacTamney, J.C. Boyington, S.Y. Ko, J. Ledgerwood, B.S. Graham, and G.J. Nabel. *Vaccine Research Center Retreat*. October, 2010. Philadelphia, PA. (Poster).
- Elicitation of Hemagglutinin Stem Antibodies Using an Engineered Influenza Stem Trimer. P.M. MacTamney, C.J. Wei, J.C. Boyington, **H.M. Yassine**, X. Chen, J. Lee, and G.J. Nabel. *Vaccine Research Center Retreat*. October, 2010. Philadelphia, PA. (Poster).
- Design of Universal Influenza Vaccine Immunogen. J.C. Boyington, P. Mactamney, C.J. Wei, **H.M. Yassine**, K. Dai, I. Georgiev, Z.Y. Yang, X. Chen, J. Lee, P.D. Kwong, and G.J. Nabel. *Vaccine Research Center Retreat*. October, 2010. Philadelphia, PA. (Poster)
- Influenza Vaccines for Turkeys. Y.M. Saif, **H.M. Yassine** and C.W. Lee. *The 5th International Veterinary Vaccines and Diagnostics Conference*. July, 2009. Madison, WI.



- Interspecies Transmission of Triple Reassortant H3N2 Influenza Viruses between Swine and Turkeys: Molecular Studies. **H.M. Yassine**, Mahesh Khatri, Lee C.W., Saif Y.M. *American Association of Avian Pathologists (AAAP-AVMA) Annual Meeting*. July, 2009. Seattle, WA. (Poster).
- Susceptibility of Chicken T Cells to Low Pathogenic H5 Influenza Viruses. **Mahesh Khatri**, **H.M. Yassine**, Yehia M. Saif and Chang-Won Lee. *American Association of Avian Pathologists (AAAP-AVMA) Annual Meeting*. July, 2009. Seattle, WA.
- Development of DIVA Vaccines for the Control of Triple Reassortant H3N2 Influenza in Turkeys. **Levi Wang**, **H.M. Yassine**, Smitha Pillai, Yehia M. Saif, Chang-Won Lee. *American Association of Avian Pathologists (AAAP-AVMA) Annual Meeting*. July, 2009. Seattle, WA.
- Interspecies Transmission of Triple Reassortant H3N2 Influenza A Viruses between Swine and Turkeys. **H.M. Yassine** and Y. M. Saif. Joint AICAP/CEIRS Influenza meeting. June 2009. Minneapolis, MN. (Podium)
- Studies on Interspecies Transmission of Triple Reassortant H3N2 Influenza A Viruses. **H.M. Yassine**, Mahesh Khatri, Chang-Won Lee, and Yehia M. Saif. *7<sup>th</sup> International Symposium on Avian Influenza*. April, 2009. Athens, GA. (Poster).
- *Tri-State (Ohio, Michigan, and Indiana) Poultry Veterinarians' Annual Meeting*. November, 2008. Fort Recovery, Ohio (Attending).
- Influenza in Turkeys: Antigenic and Genetic Relatedness of H3N2 Viruses. **Y.M. Saif**, **H.M. Yassine** and C.W. Lee. *National Veterinary Services Laboratory (NCSL)*. July, 2008. Ames, IA.
- Genetic Characterization of Triple Reassortant H1N1 Influenza A Viruses. **H.M. Yassine**, Y.J. Zhang, C.W. Lee, B.A. Byrum, J. O'Quin, K.A. Smith, and Y. M. Saif. *American Association of Avian Pathologists (AAAP-AVMA) Annual Meeting*. July, 2008. New Orleans, LA. (Poster).
- Further Investigation on H3N2 Influenza A virus Isolated from Turkey Flocks in the USA. **Y.M. Saif**, **H.M. Yassine**, and C.W. Lee. *7<sup>th</sup> International Symposium on Turkey Disease*. June, 2008. Berlin, Germany.
- Antigenic and Genetic Relatedness of H3N2 Influenza Viruses of Turkey Origin and an H3N4 Duck Vaccine Strain. **H.M. Yassine**, C.W. Lee, Y.M. Saif. *North Central Avian Disease Conference*. March, 2008. St. Paul, MN. (Podium)
- Pathogenicity and Antigenicity of Triple Reassortants H3N2 Influenza Viruses in Poultry. **S.P.S. Pillai**, **H.M. Yassine**, Y.M. Saif, C-W- Lee. *North Central Avian Disease Conference*. March, 2008. St. Paul, MN.
- *Tri-State (Ohio, Michigan, and Indiana) Poultry Veterinarians' Annual Meeting*. November, 2007. Fort Recovery, OH (Attending).
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