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I'm an associate professor of infectious diseases and the research projects manager at the Qatar University Biomedical Research Center (BRC). In addition to my administrative duties, I lead the communicable diseases section at BRC. My 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 in 2009, I worked at the Vaccine Research Center (VRC)-National Institute of Health (NIH) for over five years as a postdoctoral fellow and then as a research fellow. I also served as an adjunct faculty at Catholic University of America (CUA)- Washington D.C in 2014/2015 academic year. I have an excellent experience in the basic and applied biology fields including virology, microbiology, immunology, molecular diagnostics, and vaccine development. I have published more than 65 articles (cited >2300 times based on google scholar), some of which are in top-tier scientific journals like Nature, Nature Medicine, Cell, Lancet Infectious Diseases, and Science Translational Medicine. I serve on many committees at QU and other institutions around Qatar. I have participated in organization of several local and international workshops and conferences. I received several awards in recognition of my work and contributed to seven patents on new designs of viral vaccines.

**Employment:**

<b>2019-Current</b>	Associate Professor	Biomedical Research Center (BRC); and Department of Biological Sciences (DBS)-College of Health Sciences (CHS), Qatar University (QU)	Doha, Qatar
<b>2019-Current</b>	Research Projects Manager	BRC-QU	Doha, Qatar
<b>2015-19</b>	Assistant Professor	BRC-QU; and DBS-CHS	Doha, Qatar
<b>2019-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; Ph.D student	Virology/ Infectious diseases	The Ohio State University	Columbus, OH, USA
<b>2001-2003</b>	Graduate Teaching Assistant; M.Sc. student	Biology/ Microbiology	American University of Beirut	Beirut, Lebanon
<b>1996-2000</b>	Maitrises-es Sciences (Four years);	Biology/ Zoology	Lebanese University	Al-Hadath, Lebanon

**Teaching Experience**

- **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 of Jan, 2020)**

<https://scholar.google.com/citations?user=WmbJwiEAAAAJ&hl=en>

Citations: >2400

H-index: 21

i10-index: 32

## **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 MERS-CoV 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.
  
- **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**

1. 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.
2. 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>.
3. 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.
4. 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.
5. 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).
6. 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.
7. 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, Mirforoughi SA. *J Cell Physiol*. 2019 Mar 7. doi: 10.1002/jcp.28363.
8. Viral-Induced Enhanced Disease Illness. Smatti MK, Al Thani AA, **Yassine HM\***. *Front Microbiol*. 2018 Dec 5;9:2991.
9. 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.
10. 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.

11. 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>
12. 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.
13. 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

1. Inter- vs Intra-Host Sequence Diversity of pH1N1 and Associated Clinical Outcomes. Al Khatib HA, Al Maslamani MA, Coyle PV, Thompson RI, Farag EA, Al Thani AA, **Yassine HM\***. Accepted in *Microorganisms*. 8 (1), 133.
2. Glycan repositioning of influenza hemagglutinin stem facilitates the elicitation of protective cross-group antibody responses. Boyoglu-Barnum S, Hutchinson GB, Boyington JC,....., **Yassine HM**,....., Graham BS, Kanekiyo M. Accepted in *Nature communication*. Jan 2020.
3. Antibiotic Resistance Profile of Commensal Escherichia coli Isolated from Healthy Sheep in Qatar. Eltai NO, Al Thani AA, Al-Hadidi SH, Farag EA, Al Romaihi H, Mhamoud MH, Alawad OK, **Yassine HM\***. Accepted in *JIDC*. Jan 2020.
4. Profiling the Oral Microbiome and Plasma Biochemistry of Obese Hyperglycemic Subjects in Qatar. Sohail MU, Elrayess MA, Al Thani AA, Al-Asmakh M, **Yassine HM\***. *Microorganisms*. 2019, 7(12), 645.
5. Measuring influenza hemagglutinin (HA) stem-specific antibody-dependent cellular cytotoxicity (ADCC) in human sera using novel stabilized stem nanoparticle probes. Smatti MK, Nasrallah GK, Al Thani AA, **Yassine HM\***. *Vaccine*. 2019 Nov 14. 38 (4), 815-821.
6. The Current Status of Cytomegalovirus (CMV) Prevalence in the MENA Region: A Systematic Review. Al Mana H, **Yassine HM**, Younes NN, Al-Mohannadi A, Al-Sadeq DW, Alhababi D, Nasser EA, Nasrallah GK. *Pathogens*. 2019 Oct 31;8(4).
7. Comparative phylogenetic and residue analysis of Hepatitis C virus E1 protein from Middle East and Africa region. Sohail MU, Al Thani AA, **Yassine HM\***. *Hepatitis Monthly*. 2019 ; 19(8):e92437.
8. Activation Dynamics and Immunoglobulin Evolution of Pre-existing and Newly Generated Human Memory B cell Responses to Influenza Hemagglutinin. Andrews SF, Chambers MJ, Schramm CA, Plyler J, Raab JE, Kanekiyo M, Gillespie RA, Ransier A, Darko S, Hu J, Chen X, **Yassine HM**, Boyington JC, Crank MC, Chen GL, Coates E, Mascola JR, Douek DC,

Graham BS, Ledgerwood JE, McDermott AB. *Immunity*. 2019 Jul 16. pii: S1074-7613(19)30294-8.

9. Epidemiology of Respiratory Infections among Adults in Qatar (2012-2017). Al Romaihi HE, Smatti MK, et al.....**Yassine HM\***. Accepted for publication in *PlosOne*. PloS one 14 (6), e0218097.
10. Demographics and Epidemiology of Hepatitis B in the State of Qatar: A Five-Year Surveillance-Based Incidence Study. Al Romaihi HE, Ganesan N, Farag EA, Smatti MK, Nasrallah GK, Himatt SM, Derbala MF, Alshamali M, Mahadon LK, Khogali HS, Sallam M, Al Thani AA, Al Thani M, Al Kaabi S, **Yassine HM\***. *Pathogens*. 2019 May 21;8(2).
11. Epidemiological, Molecular, and Clinical Features of Norovirus Infections among Pediatric Patients in Qatar. Mathew S, Alansari K, Smatti MK, Zaraket H, Al Thanin AA, **Yassine HM\***. *Viruses* 2019, 11(5), 400.
12. Epidemiological and genetic characterization of pH1N1 and H3N2 influenza viruses circulated in MENA region during 2009-2017. Al Khatib HA, Al Thani AA, Gallouzi I, **Yassine HM\***. *BMC Infect Dis*. 2019 Apr 11;19(1):314.
13. Mosaic nanoparticle display of diverse influenza virus hemagglutinins elicits broad B cell responses. Kanekiyo M, Joyce MG, Gillespie RA, Gallagher JR, Andrews SF, **Yassine HM**, Wheatley AK, Fisher BE, Ambrozak DR, Creanga A, Leung K, Yang ES, Boyoglu-Barnum S, Georgiev IS, Tsybovsky Y, Prabhakaran MS, Andersen H, Kong WP, Baxa U, Zephir KL, Ledgerwood JE, Koup RA, Kwong PD, Harris AK, McDermott AB, Mascola JR, Graham BS\*. *Nat Immunol*. Feb 2019.
14. Design of nanoparticulate group 2 influenza hemagglutinin stem antigens that activate unmutated ancestor B cell receptors of broadly neutralizing antibody lineages. Corbett KS\*, Moin SM\*, **Yassine HM**, Cagigi A, Kanekiyo M, Tsybovsky Y, Wheatley A, Andrews SF, Gillespie R, Wang L, Zhang Y, Joyce MG, Crank MC, Kong WP, McDermott AB, Mascola JR, Graham BS, Boyington JC. Accepted for publication in *MBio*. Jan 2019.
15. Comparative Serological Study for the Prevalence of Anti-MERS Coronavirus Antibodies in High and Low Risk Groups in Qatar. El-kahlout RA, Nasrallah GK, Farag EA, Wang L, Lattwein E, Müller MA, El Zowalaty ME, Al Romaihi HE, Graham BS, Althani AA, **Yassine HM\***. Accepted for publication in *Journal of Immunology Research*. Jan 2019.
16. Impaired Liver Size and Compromised Neurobehavioral Activity are Elicited by Chitosan Nanoparticles in the Zebrafish Embryo Model. Abou-Saleh H, Younes N, Rasool K, Younis MH, Prieto RM, **Yassine HM**, Mahmoud KA, Pintus G, Nasrallah GK\*. Accepted for publication in *Nanomaterials (MDPI)*. 2019 Jan; 9, 122;
17. Mixed Viral-Bacterial Infections and Their Effects on Gut Microbiota and Clinical Illnesses in Children. Mathew S, Smatti MK, Al Ansari K, Nasrallah GK, Al Thani AA, **Yassine HM\***. Accepted for publication in *Scientific Reports*. 2019 Jan; 9:865.



18. Computational screening of known broad-spectrum antiviral small organic molecules for potential influenza HA stem inhibitors. Mathew S, Al Thani AA, **Yassine HM\***. *PlosOne*. 2018 Sep 4;13(9):e0203148.
19. Comparative of Extended Spectrum  $\beta$ -Lactamases Enterobacteriaceae Causing Lower Urinary Tract Infection among Pediatric Population. Eltai NO, Al Thani AA, Al AnSari K, Deshmukh AS, Wehedy E, Hadidi S, **Yassine HM\***. *Antimicrobial Resistance and Infection Control*. 2018 Jul 28;7:90.
20. Performance evaluation of five commercial assays in assessing seroprevalence of HEV antibodies among blood donors. Al-Absi ES, Al-Sadeq DW, Younis MH, Yassine HM, Abdalla OM, Mesleh AG, Hadwan TA, Amimo JO4, Thalib L, Nasrallah GK. *J Med Microbiol*. 2018 Sep;67(9):1302-1309.
21. Evolution and Dynamics of the Pandemic H1N1 Influenza Hemagglutinin Protein from 2009 to 2017. Al Khatib HA, Al Thani AA, **Yassine HM\***. *Archives of Virology*. Arch Virol. 2018 Nov;163(11):3035-3049.
22. Prevalence of antibiotic resistant Escherichia coli isolates from fecal samples of food handlers in Qatar. Eltai NO, **Yassine HM**, Al Thani AA, Abu Madi MA, Ismail A, Ibrahim E, Alali WQ. *Antimicrobial Resistance & Infection Control*. 2018 Jun 26;7:78.
23. Use of Stabilized Hemagglutinin Stem Probes Demonstrate Prevalence of Broadly Reactive Group 1 Influenza Antibodies in Human Sera. **Yassine HM\***, McTamney PM, Boyington JC, Ruckwardt TJ, Crank MC, Smatti MK, Ledgerwood JE, Graham BS. *Scientific Reports*. 2018 Jun; 8(1):8628.
24. Two-Component Ferritin Nanoparticles for Multimerization of Diverse Trimeric Antigens. Georgiev IS, Joyce MG, Chen RE, Leung K, McKee K, Druz A, Van Galen JG, Kanekiyo M, Tsybovsky Y, Yang ES, Yang Y, Acharya P, Pancera M, Thomas PV, Wanninger T, **Yassine HM**, Baxa U, Doria-Rose N, Cheng C, Graham BS, Mascola JR, Kwong PD. *ACS Infect Dis*. 2018 May ;4(5):788-796.
25. Antibiotic Resistance Profile of Commensal Escherichia coli Isolated from Broiler Chickens in Qatar. Eltai NO, Abdfarag EA, Al-Romaihi HE, Wehedy E, Mahmoud MH, Alawad OK, Al-Hajri MM, Al Thani AA, **Yassine HM\***. *J Food Prot*. 2018 Jan; 25:302-307.
26. Prevalence and molecular profiling of Epstein Barr virus (EBV) among healthy blood donors from different nationalities in Qatar. Smatti MK, **Yassine HM**, AlMarawani A, AbuOdeh R, Taleb SA, Althani AA, Nasrallah GK. *PLoS One*. 2017 Dec 11;12(12):e0189033.
27. Improving Influenza Vaccination Rate among Primary Healthcare Workers in Qatar. Elawad KH, Farag EA, Abuelgasim DA, Smatti MK, Al-Romaihi HE, Al Thani M, Al Mujalli1 H, Shehata Z, Alex M, Al Thani AA, **Yassine HM\***. *Vaccines (Basel)*. 2017 Oct 10;5(4).
28. Reconstituted B cell receptor signaling reveals carbohydrate-dependent mode of activation. Villar RF, Patel J, Weaver GC, Kanekiyo M, Wheatley AK, **Yassine HM**, Costello CE, Chandler

KB, McTamney PM, Nabel GJ, McDermott AB, Mascola JR, Carr SA, and Lingwood D. *Scientific Reports*. 2016 Oct 31;6:36298.

29. Vaccine-Induced Antibodies that Neutralize Group 1 and Group 2 Influenza A Viruses. Joyce MG, Wheatley AK, ThomaIFs PV, Chuang GY, Soto C, Bailer RT, Druz A, Georgiev IS, Gillespie RA, Kanekiyo M, Kong WP, Leung K, Narpala SN, Prabhakaran MS, Yang ES, Zhang B, Zhang Y, Asokan M, Boyington JC, Bylund T, Darko S, Lees CR, Ransier A, Shen CH, Wang L, Whittle JR, Wu X, **Yassine HM**, Santos C, Matsuoka Y, Tsybovsky Y, Baxa U; NISC Comparative Sequencing Program., Mullikin JC, Subbarao K, Douek DC, Graham BS, Koup RA, Ledgerwood JE, Roederer M, Shapiro L, Kwong PD, Mascola JR, McDermott AB. *Cell*. (2016) Jul;166(3):609-23.
30. Prefusion structure of a human coronavirus spike protein. Kirchdoerfer RN, Cottrell CA, Wang N, Pallesen J, **Yassine HM**, Turner HL, Corbett KS, Graham BS, McLellan JS, Ward AB. *Nature*. (2016) Mar; 531(7592):118-21.
31. Prefusion F-specific antibodies determine the magnitude of RSV neutralizing activity in human sera. Ngwuta JO, Chen M, Modjarrad K, Joyce MG, Kanekiyo M, Kumar A, **Yassine HM**, Moin SM, Killikelly AM, Chuang GY, Druz A, Georgiev IS, Rundlet EJ, Sastry M, Jones GS, Yang Y, Zhang B, Nason M, Capella C, Peeples M, Ledgerwood JE, McLellan JS, Kwong PD, Graham BS. *Science Translational Medicine*. (2015) Oct; 7(309):309ra162.
32. Hemagglutinin-stem nanoparticles generate heterosubtypic influenza protection. **Yassine HM**, Boyington JC, McTamney PM, Wei CJ, Kanekiyo M, Kong WP, Gallagher JR, Wang L, Zhang Y, Joyce MG, Lingwood D, Moin SM, Andersen H, Okuno Y, Rao SS, Harris AK, Kwong PD, Mascola JR, Nabel GJ, Graham BS. *Nature Medicine*. (2015) Sep; 21(9):1065-70.
33. Evaluation of candidate vaccine approaches for MERS-CoV. Wang L, Shi W, Joyce MG, Modjarrad K, Zhang Y, Leung K, Zhou T, **Yassine HM**, Kanekiyo K, Yang ZY, Lees C, Becker M, Subbarao K, Denison M, Rao S, Kwong P, Mascola, Kong WP, Graham B. *Nature Communications*. (2015) Jul; 6:7712.
34. H5N1 vaccine-elicited memory B cells are genetically constrained by the IGHV locus in the recognition of a neutralizing epitope in the HA stem. Wheatley AK, Whittle JR, Lingwood D, Kanekiyo M, **Yassine HM**, Ma SS, Narpala SR, Prabhakaran MS, Matus-Nicodemus RA, Bailer RT, Ledgerwood JE, Nabel GJ, Graham BS, Koup RA, McDermott AB. *Journal of Immunology*. (2015) Jul; 195(2):602-10.
35. 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.
36. 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.



37. 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.
38. 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**).
39. 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.
40. 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.
41. Characterization of an H3N2 Triple Reassortant Influenza Virus with A Mutation at the Receptor Binding Domain (Asp190Ala) that Occurred Upon Virus Transmission from Turkeys to Pigs. Yassine HM, Khatri M, Lee CW, Saif YM. *Virology Journal*. (2010) Sep; 7:258.
42. 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.
43. 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.
44. 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, C.W. Lee. *Avian Diseases*. (2010); 54(s1):522-526. Review.
45. 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.
46. 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.
47. 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.
48. 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.

49. 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.
50. 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.
51. 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.
52. 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.
53. 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. Novel, Multivalent, Nanoparticle-Based Vaccines for Influenza Virus. Publication Number WO2016109792 A3. Inventors: Barney S. Graham (PI), Masaru Kanekiyo and **Hadi M. Yassine**. 2017.
2. 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.
3. Prefusion coronavirus spike proteins and their use. U.S. Patent. Application No. 62/412,703. Barney S. Graham, **Hadi M. Yassine**, Kizzmekia Corbett, Masaru Kanekiyo, and Michael Gordon Joyce. Filed on October 25, 2016
4. 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.
5. 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.

6. 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.
7. 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. 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). **L-PI**.
2. 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).
3. 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 (385,000.00 QAR). **QUCG-BRC-20/21-1** (2 years; 2020-2021). **PI** (L-PI: Dr. Asmaa Al Thani).
4. Nasal Microbiome Analysis in RSV Infected Children (10,000.00 QAR; student grant). **QUST-1-BRC-2020-3** (1 year; 2020). L-PI.
5. 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.
6. 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**.
7. 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**.
8. 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**.
9. 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)

10. 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).
11. 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).
12. 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)
13. 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**
14. Prevalence of Airborne Antibiotic Resistant Bacteria in PHCC Centers in Qatar (288,000.00 QAR). *PHCC/RC/18/06/002* (2 years; 2019-). **PI**. (L-PI: Dr. Asmaa Al Thani).
15. 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**.
16. 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-); **Student grant-Research Mentor**.
17. Characterization of Fecal Influenza and Its Impact on Gut Microbiome (300,000.00 QAR). *QUCG-BRC-2018\2019-1*(Two years; 2018-); **L-PI**.
18. 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).
19. 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-).
20. 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**.
21. 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).

22. 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).
23. 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).
24. 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).
25. 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).
26. 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*.
27. 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).
28. 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).
29. 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. Maria Smatti, Ph.D. (HBKU). Supervisor. 2018-current.
2. Heba Al Khatib, Ph.D. student (HBKU). Supervisor. 2017-Current.

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

3. Reeham Abdullah Albuainain, M.Sc, (QU-CHS). 2019-Current
4. Israa Al Bashir, M.Sc. Student (HBKU). Supervisor. 2018-2019.
5. Khalil Naser Alismail, (QU-CHS). QU internal Examiner. 2019.
6. Najat Ali A A Al-Buhendi, M.Sc. Student (QU-CHS). Supervisor. 2018-2019.
7. Dalal Ali Alhababi, M.Sc. Student (QU-CHS). Supervisor. 2018-2019.
8. Sara A. Taleb, M.Sc. (QU-CHS). Supervisor. 2017-2018.
9. Joanna Salibi, M.Sc. Student (AUB). Committee member. 2017-Current.
10. Reham Awni Al Kahlout, M.Sc. Student (QU-CHS). Committee member. 2017.

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

11. Alaa A. ElKheider, B.Sc. (QU-CHS). Supervisor. 2020.

12. Asalet Hijazi, B.Sc. (QU-CHS). Supervisor. 2020.
13. Dana Elasmr, B.Sc. (QU-CHS). Supervisor. 2020.
14. Nasimeh Ahmad Azadi, B.Sc. (QU-CHS). Supervisor. 2019.
15. Tayseer Abdalhamid Bashir Fadl, B.Sc. (QU-CHS). Supervisor. 2019.
16. Sarah Jemmieh, B.Sc. (QU-CHS). Supervisor. 2018.
17. Amira Kohil, B.Sc. (QU-CHS). Supervisor. 2018.
18. Israa Al Bashir, B.Sc. Student (QU-CHS). Research supervisor. 2017.
19. Nour El Dous, B.Sc. Student (QU-CHS). Research supervisor. 2017.
20. Trained and monitored several UG and graduate students as well as visiting scholars at AUB, OSU, and QU.

### **Services and Outreach Activities**

1. 19<sup>th</sup> QU Annual Research Forum. **UG students' poster Judge**. Qatar University, Doha, Qatar. April 15, 2019.
2. 4th QU Health Research Symposium. **UG students' poster Judge**. Qatar University, Doha, Qatar. March 30, 2019.
3. WCM-Q 9th Annual Research Retreat. **Poster Judge**. WQM-Q, Doha, Qatar. March 23, 2019.
4. Bioinformatics and Laboratory investigations of emerging pathogens and epidemics Workshop (With practical sessions). **Organizer**. Doha, Qatar, January 14-17, 2019.
5. Antimicrobial Susceptibility Testing and Surveillance Workshop (With practical sessions). **Organizer and MC for the event**. Doha, Qatar, January 22-25, 2018.
6. 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.
7. Exposure and Toxicological Characteristics of Chemical Agents in the Environment. **Organizer**. Doha, Qatar, November 7th to 9th, 2017.
8. Biosafety Level 3 Laboratory Project. **Coordinator**. 2016-current.
9. International workshop on Emerging Pathogens at the Human-Animal-Environment Interface. **Organizer**. Doha, Qatar, October 2016.
10. Principles of Mammalian Cell Culture Course. **Coordinator**. BRC, QU, August 2016 (presenter 2017-forward).
11. Coordinator for the BSL3 Project. Ongoing.
12. Coordinator for the collaboration with HMC (Microbiology projects). 2015-2018.
13. Coordinator for the collaboration with MOPH (Infectious diseases project). 2015-2018.
14. Biosafety coordinator between September 2015 and February 2016.
15. Organizer of biosafety lectures at BRC, QU.
16. Steps of Scientific Research Workshop Program. **Organizer**. Hamza Intermediate School. November 2015. Doha, Qatar. Presenter.



### **Committees and Groups**

- HMC-CDC Research Advisory Group. November 2019-current.
- MOPH National Pandemic Preparedness Plan (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 Hoch).
- 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**

- 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**

- 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)
- 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.ngrguardiannews.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.

### **Peer-review Activities**

- 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, and others.
- Reviewed articles for Science, Nature, Nature Medicine, and New England Journal of Medicine (Through PIs).

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

- 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-Avibactab 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. *6th 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).
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