

Hadi M. Yassine, M.Sc., Ph.D.  
Associate Professor of Infectious Diseases  
Section Head of Research  
Qatar University Biomedical Research Center  
QU-NRC, Building H10, Zone 5, Room D130  
Mobile: +974 7056 5816  
P.O.Box: 2713- Doha-Qatar  
E-mails: [hyassine@qu.edu.qa](mailto:hyassine@qu.edu.qa); [hadi\\_yassine@hotmail.com](mailto:hadi_yassine@hotmail.com) (skype), [hyassine14@gmail.com](mailto:hyassine14@gmail.com).



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 former chair of the QU IBC committee (2020-2023). He also serves as an adjunct faculty at the Center for Food Animal Health - The Ohio State University, and formerly at Hamad Ben Khalifa University-Doha (2018-2022) and 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 200 articles, many of which are in top-tier scientific journals like NEJM, Nature, Nature Medicine, Cell, JAMA, AND Lancet ID. 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 was named a highly cited researcher (top 0.1% worldwide) by Clarivate in 2021, 2022 & 2023. He received several awards in recognition of his work and contributed to seven patents on new designs of viral vaccines, including the COVID-19 vaccine.

**Employment/profession:**

<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>2023-current</b>	Adjunct Faculty	Center for Food Animal Health - The Ohio State University	Wooster, OH
<b>2018-2022</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; M.Sc1);	Biology/ Zoology	Lebanese University	Al-Hadath, Lebanon

### **Teaching Experience**

- **Spring 2023:** Special Topics in Biomedical and Pharmaceutical Research/ QUHC 715. One Lecture; Inflammation. Ph.D. Course. (With Dr. Asad Zeidan [a.zeidan@qu.edu.qa](mailto:a.zeidan@qu.edu.qa))
  - **Spring 2021-2023:** 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. (with Dr. Hatem Zayed Ibrahim [hatem.zayed@qu.edu.qa](mailto:hatem.zayed@qu.edu.qa)).
  - **Fall 2020-current:** Guest lecturer at College of Medicine-QU providing various lectures about "Good Defense" AND "Latent infections and HIV". (Coordinator: Mohamed Maged Mohamed Abdelmonem Emara [memara@qu.edu.qa](mailto:memara@qu.edu.qa)).
  - **Spring 2020 & 2021:** Guest lecturer, Molecular Pathology (Graduate students). College of Health and Life Sciences at HBKU. (with Dr. Dr. Ayman Al Haj Zen [aalhajzen@hbku.edu.qa](mailto:aalhajzen@hbku.edu.qa)).
  - **Fall 2015-current:** Instructor, Biom324-Medical Virology. Department of Biological Sciences, College of Health Sciences, QU, Doha, Qatar.
  - **Spring 2018-2020.** Guest lecturer, BIOM 650-Pathogenic Microbiology (Master's course). Department of Biological Sciences, College of Health Sciences, QU, Doha, Qatar. (with Dr. Gheyath Khaled Nasrallah [gheyath.nasrallah@qu.edu.qa](mailto:gheyath.nasrallah@qu.edu.qa)).
  - **Fall 2017:** Guest lecturer. Virology Course. Carnegie Mellon University, Doha, Qatar. (with Dr. Ihab Younis [iyounis@andrew.cmu.edu](mailto:iyounis@andrew.cmu.edu))
  - **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 OCT 2023)**

Citations: >15200

H-index: 58

i10-index: 153

## **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://www.scival.com/overview/summary?uri=Customer/413002/Researcher/3265813>
- <https://www.webofscience.com/wos/author/record/1841613>
- <https://orcid.org/0000-0001-7592-2788>
- <https://www.scopus.com/authid/detail.uri?authorId=23098797900>
- <https://patents.justia.com/inventor/hadi-m-yassine>

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

- **2015-currents:** QU-BRC. Virology, immunology, and epidemiology.
  1. Constraints of ruminant production in smallholder animal farms in Qatar: Defining problems and improving health through alternative modalities
  2. Genetic susceptibility to infectious diseases.
  3. Evolution of coronaviruses in animals and humans.
  4. Influenza complications and underlying mechanisms in disease pathogenesis in diabetic patients.
  5. Understanding influenza replication and pathogenicity in gastrointestinal tract.
  6. Characterization of fecal influenza and its impact on gut microbiome.
  7. Microbiome and disease.
  8. Epidemiological surveillance and molecular epidemiology of viral meningitis.
  9. Genotyping of enteroviruses in clinical samples.
  10. Interplay between viral and bacterial infections and effect on microbiota and clinical illness.
  11. Estimating the burden of viral gastroenteritis and effectiveness of rotavirus vaccine in young children.
  12. Air quality in Primary Health Care Centers.
  13. Measuring influenza hemagglutinin stem-specific ADCC and CDC activities in human sera using novel stabilized stem probes.
  14. Laboratory-based surveillance and molecular epidemiology of influenza and other respiratory viruses in Qatar: 2012-2016.
  15. Magnitude of RSV fusion protein-specific antibodies in infants and corresponding mothers in Qatar.
  16. Characterization of humoral immune response to coronaviruses infections.
  17. Profiling of antibiotic resistant bacteria in human, animals and environment.
  18. In silico virtual screening approaches for anti-viral drugs.
  19. Genomics of habitats in Qatar.
  20. Whole-genome sequencing of coronaviruses.
  21. 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. Role of genetics in eleven of the most common autoimmune diseases in the post-genome-wide association studies era. Ali FHM, Smatti MK, Elrayess MA, Al Thani AA, **Yassine HM\***. *Eur Rev Med Pharmacol Sci*. 2023 Sep;27(18):8463-8485.
2. Metabolomics Approaches for the Diagnosis, Treatment, and Better Disease Management of Viral Infections. Al-Sulaiti H, Almaliti J, Naman CB, Al Thani AA, **Yassine HM \***. *Metabolites*. 13 (8), 948.
3. A review of rapid food safety testing: using lateral flow assay platform to detect foodborne pathogens. Younes N, **Yassine HM**, Kourentzi K, Tang P, Litvinov D, Willson RC, Abu-Raddad LJ, Nasrallah GK\*. *Crit Rev Food Sci Nutr*. 2023 Jun 23:1-23.
4. Editorial: Personalized medicine and infectious disease management. Haddad-Boubaker S\*, Mbarek H, **Yassine HM\***. *Front Med (Lausanne)*. 2023 May 12;10:1191147.
5. A new One Health Framework in Qatar for future emerging and re-emerging zoonotic diseases preparedness and response. Bansal D, Jaffrey S, Al-Emadi NA, Hassan M, Islam MM, Al-Baker WAA, Radwan E, Hamdani D, Haroun MI, Enan K, Nour M, Coyle PV, Al Marri A, Al-Zeyara AA, Younus NM, **Yassine HM**, Al Thani AA, Darkhshan F, Khalid M, Marhous H, Tibbo M, Alhosani M, Taha T, Wannous C, Al Hajri M, Bertollini R, Al-Maslamani MA, Al Khal A, Al Romaihi HE, Al Thani SMBHBJ, El Idrissi A, Farag EA.\*. *One Health*. 100487; 2023.

6. Nanomedicine for Cancer. Younis NK, **Yassine HM**, Eid AH\*. *Curr Med Chem*. 2022 Dec 28.
7. Antibody-Dependent Enhancement (ADE) and the role of complement system in disease pathogenesis. Thomas S, Smatti MK, Ouhtit A, Cyprian FS, Almaslamani MA, Thani AA, **Yassine HM\***. *Mol Immunol*. 2022 Nov 10;152:172-182.
8. Will the influenza A(H3N8) cause a major public health threat? **Yassine HM\***, Smatti MK. *Int J Infect Dis*. 2022 Sep 5:S1201-9712(22)00499-4.
9. Microbiome engineering to combat antimicrobial resistance and upsurge productivity of food animals: a systematic review. Johar AA, Abu-Rub LI, Al Mana H, **Yassine HM**, Eltai NO\*. *Animal Production Science*. <https://doi.org/10.1071/AN22233>. September 22.
10. Biological Properties of SARS-CoV-2 Variants: Epidemiological Impact and Clinical Consequences. Hoteit R, **Yassine HM\***. *Vaccines (Basel)*. 2022 Jun 9;10(6):919.
11. Bacterial indoor air contaminations in hospitals in MENA region: a systematic review. Abu-Rub LI, Johar AA, Al Mana H, Abdelrahman HA, Althani AA, Qotba H, **Yassine HM**, Eltai NO\*. *Int J Environ Health Res*. 2022 Jun 6:1-15.
12. Emerging COVID-19 variants and their impact on SARS-CoV-2 diagnosis, therapeutics and vaccines. Fernandes Q, Inchakalody VP, Merhi M, Mestiri S, Taib N, Moustafa Abo El-Ella D, Bedhafi T, Raza A, Al-Zaidan L, Mohsen MO, Yousuf Al-Nesf MA, Hssain AA, **Yassine HM**, Bachmann MF, Uddin S, Dermime S\*. *Ann Med*. 2022 Dec;54(1):524-540.
13. Will Host Genetics Affect the Response to SARS-CoV-2 Vaccines? Historical Precedents. Smatti MK, Alkhatib HA, Al Thani AA, **Yassine HM\***. *Front Med (Lausanne)*. 2022 Mar 11;9:802312.
14. Burden and disease pathogenesis of influenza and other respiratory viruses in diabetic patients. Thomas S, Ouhtit A, Al Khatib HA, Eid AH, Mathew S, Nasrallah GK, Emara MM, Al Maslamani MA, **Yassine HM\***. *J Infect Public Health*. 2022 Mar 9;15(4):412-424.
15. 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.
16. 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)
17. 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).
18. 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.

19. 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.
20. Viral meningitis: an overview. Kohil A, Jemmieh S, Smatti MK, **Yassine HM\***. *Arch Virol*. 2021 Feb;166(2):335-345.
21. Markers Associated with COVID-19 Susceptibility, Resistance, and Severity. AD Fakhroo, AA Al Thani, **HM Yassine\***. *Viruses*. 13 (1), 45.
22. 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.
23. 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.
24. Seasonality of Respiratory Viral Infections: Will COVID-19 Follow Suit? A Audi, M AlIbrahim, M Kaddoura, G Hijazi, **HM Yassine\***, H Zaraket\*. *Frontiers in Public Health*. 8, 576.
25. 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.
26. 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.
27. How could artificial intelligence aid in the fight against coronavirus? **Yassine HM\***, Shah Z *Expert review of anti-infective therapy*. 18 (6), 493-497
28. 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.
29. 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>.
30. 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.

31. 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.
32. 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).
33. 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.
34. 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.
35. Viral-Induced Enhanced Disease Illness. Smatti MK, Al Thani AA, **Yassine HM\***. *Front Microbiol*. 2018 Dec 5;9:2991.
36. 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.
37. 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.
38. 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>
39. 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.
40. 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.

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

1. Estimating protection afforded by prior infection in preventing reinfection: Applying the test-negative study design. Ayoub HH, Tomy M, Chemaitelly H, Altarawneh HN, Coyle P, Tang P, Hasan MR, Al Kanaani Z, Al Kuwari E, Butt AA, Jeremijenko A, Kaleeckal AH, Latif AN, Shaik RM, Nasrallah GK, Benslimane FM, Al Khatib HA, **Yassine HM**, Al Kuwari MG, Al Romaihi HE, Abdul-Rahim HF, Al-Thani MH, Al Khal A, Bertollini R, Abu-Raddad LJ\*. *Am J Epidemiol*. 2023 Dec 7:kwad239.
2. Seroprevalence of hepatitis E virus (HEV) among male craft and manual workers in Qatar (2020-2021). Younes N, **Yassine HM\***, Nizamuddin PB, Kourentzi K, Tang P, Ayoub HH, Khalili M, Coyle PV, Litvinov D, Willson RC, Abu-Raddad LJ, Nasrallah GK\*. *Heliyon*. 2023 Oct 31;9(11):e21404.
3. SARS-CoV-2 infection and effects of age, sex, comorbidity, and vaccination among older individuals: A national cohort study. Mahmoud MA, Ayoub HH, Coyle P, Tang P, Hasan MR, **Yassine HM**, Al Thani AA, 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, Abu-Raddad LJ\*, Chemaitelly H\*. *Influenza Other Respir Viruses*. 2023 Nov;17(11):e13224.
4. Characterization of the Efficacy of a Split Swine Influenza A Virus Nasal Vaccine Formulated with a Nanoparticle/STING Agonist Combination Adjuvant in Conventional Pigs. Patil V, Hernandez-Franco JF, Yadagiri G, Bugybayeva D, Dolatyabi S, Feliciano-Ruiz N, Schrock J, Suresh R, Hanson J, **Yassine H**, HogenEsch H, Renukaradhya GJ\*. *Vaccines* (Basel). 2023 Nov 10;11(11):1707.
5. History of primary-series and booster vaccination and protection against Omicron reinfection. Chemaitelly H\*, Ayoub HH, Tang P, Coyle PV, **Yassine HM**, Al Thani AA, Al-Khatib HA, Hasan MR, 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, Abu-Raddad LJ\*. *Sci Adv*. 2023 Oct 6;9(40):eadh0761. d
6. Follow up and comparative assessment of IgG, IgA, and neutralizing antibody responses to SARS-CoV-2 between mRNA-vaccinated naïve and unvaccinated naturally infected individuals over 10 months. Younes S, Nicolai E, Al-Sadeq DW, Younes N, Al-Dewik N, Abou-Saleh H, Abo-Halawa BY, Eid AH, Pieri M, Liu N, Daas HI, **Yassine HM**, Nizamuddin PB, Abu-Raddad LJ, Nasrallah GK\*. *J Infect Public Health*. 2023 Aug 22;16(11):1729-1735.
7. Short- and longer-term all-cause mortality among SARS-CoV-2- infected individuals and the pull-forward phenomenon in Qatar: a national cohort study. Chemaitelly H\*, Faust JS, Krumholz HM, Ayoub HH, Tang P, Coyle P, **Yassine HM**, Al Thani AA, Al-Khatib HA, Hasan MR, 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, Abu-Raddad LJ\*. *Int J Infect Dis*. 2023 Sep 16;136:81-90.

8. Genome-Wide Association Study Identifies Several Loci for HEV Seropositivity. Smatti MK, Al-Sarraj YA, Albagha O, **Yassine HM\***. *iScience*. 2023 Aug 10;26(9):107586.
9. Seroprevalence of herpes simplex virus type 1 and type 2 among the migrant workers in Qatar. Nasrallah GK, Dargham SR, Al-Sadeq DW, Amanullah FH, Shurrab FM, Nizamuddin PB, Chemaitelly H, Ayoub HH, Abdeen S, Abdelkarim A, Daraan F, Ismail A, Mostafa N, Sahl M, Suliman J, Tayar E, Kasem HA, Aagsalog 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 Kuwari E, Coyle P, Jeremijenko A, Kaleeckal AH, Abdul Rahim HF, **Yassine HM**, Al Thani AA, Chaghoury O, Al Kuwari MG, Farag E, Bertollini R, Al Romaihi HE, Al Khal A, Al-Thani MH, Abu-Raddad LJ\*. *Viol J*. 2023 Aug 22;20(1):188.
10. Bivalent mRNA-1273.214 vaccine effectiveness against SARS-CoV-2 omicron XBB\* infections. Chemaitelly H\*, Ayoub HH, AlMukdad S, Faust JS, Tang P, Coyle P, **Yassine HM**, Al Thani AA, Al-Khatib HA, Hasan MR, 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, Abu-Raddad LJ\*. *J Travel Med*. 2023 Aug 9:taad106.
11. Population immunity of natural infection, primary-series vaccination, and booster vaccination in Qatar during the COVID-19 pandemic: an observational study. Qassim SH, Chemaitelly H, Ayoub HH, Coyle P, Tang P, **Yassine HM**, Al Thani AA, Al-Khatib HA, Hasan MR, 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, Abu-Raddad LJ\*. *EClinicalMedicine*. 2023 Jul 20;62:102102.
12. Effects of previous infection, vaccination, and hybrid immunity against symptomatic Alpha, Beta, and Delta SARS-CoV-2 infections: an observational study. Altarawneh HN, Chemaitelly H, Ayoub HH, Tang P, Hasan MR, **Yassine HM**, Al-Khatib HA, Al Thani AA, 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, Abu-Raddad LJ\*. *EBioMedicine*. 2023 Jul 27;95:104734.
13. Assessment of Broadly Reactive Responses in Patients With MERS-CoV Infection and SARS-CoV-2 Vaccination. Zedan HT, Smatti MK, Thomas S, Nasrallah GK, Afifi NM, Hssain AA, Abu Raddad LJ, Coyle PV, Grivel JC, Almaslamani MA, Althani AA, **Yassine HM\***. *JAMA Netw Open*. 2023 Jun 1;6(6):e2319222.
14. Enhancing the sensitivity of rapid antigen detection test (RADT) of different SARS-CoV-2 variants and lineages using fluorescence-labeled antibodies and a fluorescent meter. Nasrallah GK, Ali F, Younes S, Al Khatib HA, Al-Thani AA, **Yassine HM\***. *Heliyon*. 2023 Jun;9(6):e17179.
15. Intake of Caffeine Containing Sugar Diet Remodels Gut Microbiota and Perturbs Drosophila melanogaster Immunity and Lifespan. Qush A, Al Khatib HA, Rachid H, Al-Tamimi H, Al-Eshaq A, Al-Adwi S, **Yassine HM**, Kamareddine L\*. *Microbes Infect*. 2023 May 9:105149.

16. The retrospective study of the metabolic patterns of BCG-vaccination in type-2 diabetic individuals in COVID-19 infection. Anwardeen NR, Cyprian FS, **Yassine HM**, Al-Thani AA, Abdallah AM, Emara MM, Elrayess MA\*. *Front Immunol*. 2023 Apr 5;14:1146443.
17. Influenza Prevalence and Vaccine Efficacy among Diabetic Patients in Qatar. Thomas S, Emara MM, Ouhtit A, Nader JD, Nasrallah GK, Coyle PV, AlThani AA, Al Maslamani MA, **Yassine HM\***. *Journal of Infection and Public Health*. March 2023.
18. Long-term COVID-19 booster effectiveness by infection history and clinical vulnerability and immune imprinting: a retrospective population-based cohort study. Chemaitelly H, Ayoub HH, Tang P, Coyle P, **Yassine HM**, Al Thani AA, Al-Khatib HA, Hasan MR, 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, Faust JS, Abu-Raddad LJ\*. *Lancet Infect Dis*. 2023 Mar 10:S1473-3099(23)00058-0.
19. Persistence of spike-specific immune responses in BNT162b2-vaccinated donors and generation of rapid ex-vivo T cells expansion protocol for adoptive immunotherapy: A pilot study. Mestiri S, Merhi M\*, Inchakalody VP, Taib N, Smatti MK, Ahmad F, Raza A, Ali FH, Hydrose S, Fernandes Q, Ansari AW, Sahir F, Al-Zaidan L, Jalis M, Ghoul M, Allahverdi N, Al Homsy MU, Uddin S, Jeremijenko AM, Nimir M, Abu-Raddad LJ, Abid FB, Zaqout A, Alfheid SR, Saqr HMM, Omrani AS, Hssain AA, Al Maslamani M, **Yassine HM**, Dermime S\*. *Front Immunol*. 2023 Feb 2;14:1061255.
20. Screening and diagnostic testing protocols for HIV and Syphilis infections in a health care setting in Qatar: Evaluation and recommendations. Nasrallah GK, Al-Buainain R, Younes N, Dargham SR, Al-Sadeq DW, Elhassan M, Al-Shaar I, **Yassine HM**, Al Abu-Raddad LJ, Emara MM, Ismail A\*. *PLoS One*. 2023 Feb 7;18(2):e0278079.
21. BNT162b2 antigen dose and SARS-CoV-2 omicron infection in adolescents. Chemaitelly H, Ayoub HH, Coyle P, Tang P, **Yassine HM**, Al Thani AA, Al-Khatib HA, Hasan MR, 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\*. *Lancet Infect Dis*. 2023 Feb 1:S1473-3099(23)00005-1.
22. Vaccine evaluation and genotype characterization in children infected with rotavirus in Qatar. Mathew S, Al Khatib HA, Al Ibrahim M, Al Ansari K, Smatti MK, Nasrallah GK, Ibrahim E, Al Thani AA, Zaraket H, **Yassine HM\***. *Pediatr Res*. 2023 Jan 19.
23. Protection against Reinfection with the Omicron BA.2.75 Subvariant. Chemaitelly H, Tang P, Coyle P, **Yassine HM**, Al-Khatib HA, Smatti MK, Hasan MR, Ayoub HH, Altarawneh HN, 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, Abu-Raddad LJ\*. *N Engl J Med*. 2023 Jan 18.
24. Detection of Antinuclear Antibodies Targeting Intracellular Signal Transduction, Metabolism, Apoptotic Processes and Cell Death in Critical COVID-19 Patients. Nasrallah GK, Fakhroo AD, Khan T, Cyprian FS, Al Ali F, Ata MMA, Taleb S, Zedan HT, Al-Sadeq DW, Amanullah FH,

Hssain AA, Eid AH, Abu-Raddad LJ, Al-Khal A, Al Thani AA, Marr N, **Yassine HM\***. *Mediterr J Hematol Infect Dis*. 2022 Nov 1;14(1):e2022076.

25. Protection from previous natural infection compared with mRNA vaccination against SARS-CoV-2 infection and severe COVID-19 in Qatar: a retrospective cohort study. Chemaitelly H, Ayoub HH, AlMukdad S, Coyle P, Tang P, **Yassine HM**, Al-Khatib HA, Smatti MK, Hasan MR, 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, Abu-Raddad LJ\*. *Lancet Microbe*. 2022 Nov 11:S2666-5247(22)00287-7.
26. Evaluation of commercially available fully automated and ELISA-based assays for detecting anti-SARS-CoV-2 neutralizing antibodies. Zedan HT, **Yassine HM\***, Al-Sadeq DW, Liu N, Qotba H, Nicolai E, Pieri M, Bernardini S, Abu-Raddad LJ, Nasrallah GK\*. *Sci Rep*. 2022 Nov 8;12(1):19020.
27. Neutralizing antibodies against SARS-CoV-2 are higher but decline faster in mRNA vaccinees compared to individuals with natural infection. Abou-Saleh H, Abo-Halawa BY, Younes S, Younes N, Al-Sadeq DW, Shurrab FM, Liu N, Qotba H, Al-Dewik N, Ismail A, **Yassine HM**, Abu-Raddad LJ, Nasrallah GK\*. *J Travel Med*. 2022 Nov 7:taac130.
28. COVID-19 Vaccine Protection among Children and Adolescents in Qatar. Chemaitelly H, AlMukdad S, Ayoub HH, Altarawneh HN, Coyle P, Tang P, **Yassine HM**, Al-Khatib HA, Smatti MK, Hasan MR, 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*. 2022 Nov 2.
29. Comparative analysis of within-host diversity among vaccinated COVID-19 patients infected with different SARS-CoV-2 variants. Al-Khatib HA, Smatti MK, Ali FH, Zedan HT, Thomas S, Ahmed MN, El Kahlout RA, Al Bader MA, Elgakhlab D, Coyle PV, Abu-Raddad LJ, Al Thani AA, **Yassine HM\***. *iScience*. 2022 Oct 25:105438.
30. Assessment of Indoor Air Quality of Four Primary Health Care Centers in Qatar. Abdelrahman H, Abu-Rub L, Al Mana H, Alhorr Y, Al Thani AA, Qotba H, **Yassine HM**, Eltai NO\*. Microorganisms. *Microorganisms*. 2022, 10(10), 2055.
31. Seroprevalence of camel brucellosis in Qatar. Alhussain H, Zughair SM, Gawish A, Mahmoud MH, **Yassine HM**, Al Thani A, Obied TE, Al-Zeyara AM, Eltai NO\*. *Trop Anim Health Prod*. 2022 Oct 20;54(6):351.
32. Molecular Epidemiology, Genetic Diversity, and Vaccine Availability of Viral Acute Gastroenteritis in the Middle East and North Africa (MENA) region. Elbashir IE, Aldoos NF, Mathew S, AlThani AA, Emara MM\*, **Yassine HM\***. *Journal of Infection and Public Health*. 2022 November; 15; 11; 1193-1211.
33. Immune Imprinting and Protection against Repeat Reinfection with SARS-CoV-2. Chemaitelly H, Ayoub HH, Tang P, Hasan MR, Coyle P, **Yassine HM**, Al-Khatib HA, Smatti MK, 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, Abu-Raddad LJ\*. *N Engl J Med*. 2022 Oct 12.

34. Protective Effect of Previous SARS-CoV-2 Infection against Omicron BA.4 and BA.5 Subvariants. Altarawneh HN, Chemaitelly H, Ayoub HH, Hasan MR, Coyle P, **Yassine HM**, Al-Khatib HA, Smatti MK, 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, Tang P, Abu-Raddad LJ\*. *N Engl J Med*. 2022 Oct 5.
35. Duration of immune protection of SARS-CoV-2 natural infection against reinfection. Chemaitelly H\*, Nagelkerke N, Ayoub HH, Coyle P, Tang P, **Yassine HM**, Al-Khatib HA, Smatti MK, Hasan MR, 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, Abu-Raddad LJ\*. *J Travel Med*. 2022 Sep 30:taac109.
36. Effects of SARS-CoV-2 Alpha, Beta, and Delta variants, age, vaccination, and prior infection on infectiousness of SARS-CoV-2 infections. Qassim SH, Hasan MR, Tang P, Chemaitelly H, Ayoub HH, **Yassine HM**, Al-Khatib HA, Smatti MK, Abdul-Rahim HF, Nasrallah GK, Al-Kuwari MG, Al-Khal A, Coyle P, Gillani I, Kaleeckal AH, Shaik RM, Latif AN, Al-Kuwari E, Jeremijenko A, Butt AA, Bertollini R, Al-Romaihi HE, Al-Thani MH, Abu-Raddad LJ\*. *Front Immunol*. 2022 Sep 13;13:984784.
37. Viral metagenomics analysis of stool specimens from children with unresolved gastroenteritis in Qatar. Hijazi G, Dakroub F, Khoueiry P, El-Kurdi A, Ezzeddine A, Alkalamouni H, Alansari K, Althani AA, Mathew S, AlKhatib HA, **Yassine HM\***, Zaraket H\*. *Infection, Genetics and Evolution*. <https://doi.org/10.1016/j.meegid.2022.105367>. September 14, 2022.
38. Validation of a Novel Fluorescent Lateral Flow Assay for Rapid Qualitative and Quantitative Assessment of Total Anti-SARS-CoV-2 S-RBD Binding Antibody Units (BAU) from Plasma or Fingerstick Whole-Blood of COVID-19 Vaccinees. Younes N, Al-Sadeq DW, Shurrab FM, Zedan HT, Abou-Saleh H, Abo-Halawa BY, AlHamaydeh FM, Elsharafi AE, Daas HI, Thomas S, Aboalmaaly S, Al Farsi A, Al-Buainain R, Ataelmannan S, Paul J, Al Saadi AS, **Yassine HM**, Majdalawieh AF, Ismail A, Abu-Raddad LJ, Nasrallah GK\*. *Vaccines (Basel)*. 2022 Aug 15;10(8):1318.
39. COVID-19 Disease Severity in Persons Infected With Omicron BA.1 and BA.2 Sublineages and Association With Vaccination Status. Butt AA, Dargham SR, Coyle P, **Yassine HM**, Al-Khal A, Abou-Samra AB, Abu-Raddad LJ\*. *JAMA Intern Med*. 2022 Aug 22.
40. Protection of Omicron sub-lineage infection against reinfection with another Omicron sub-lineage. Chemaitelly H, Ayoub HH, Coyle P, Tang P, **Yassine HM**, Al-Khatib HA, Smatti MK, Hasan MR, 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, Abu-Raddad LJ\*. *Nat Commun*. 2022 Aug 9;13(1):4675.
41. Identification of Prognostic Metabolomic Biomarkers at the Interface of Mortality and Morbidity in Pre-Existing TB Cases Infected With SARS-CoV-2. Diboun I, Cyprian FS, Anwardeen NR,

**Yassine HM**, Elrayess MA, Rahmoon SM, Sayed SK, Schuchardt S, Khatib M, Bansal D, Farag EABA, Emara MM\*, Abdallah AM\*. *Front Cell Infect Microbiol*. 2022 Jul 22;12:929689.

42. COVID-19 risk score as a public health tool to guide targeted testing: A demonstration study in Qatar. **Abu-Raddad LJ\***, Dargham S, Chemaitelly H, Coyle 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 One*. 2022 Jul 19;17(7):e0271324.
43. Human herpes simplex virus-6 (HHV-6) detection and seroprevalence among Qatari nationals and immigrants residing in Qatar. **Al-Sadeq DW**, **Zedan HT**, Aldewik N, Elkhider A, Hicazi A, Younes N, Ayoub HH, Raddad LA, **Yassine HM\***, Nasrallah GK\*. *IJID Reg*. 2021 Dec 16;2:90-95.
44. Effects of Previous Infection and Vaccination on Symptomatic Omicron Infections. **Altarawneh HN**, Chemaitelly H, Ayoub HH, Tang P, Hasan MR, **Yassine HM**, Al-Khatib HA, Smatti MK, 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, Abu-Raddad LJ\*. *N Engl J Med*. 2022 Jul 7;387(1):21-34.
45. Duration of mRNA vaccine protection against SARS-CoV-2 Omicron BA.1 and BA.2 subvariants in Qatar. **Chemaitelly H**, Ayoub HH, AlMukdad S, Coyle P, Tang P, **Yassine HM**, Al-Khatib HA, Smatti MK, Hasan MR, 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, Abu-Raddad LJ\*. *Nat Commun*. 2022 Jun 2;13(1):3082.
46. Effects of BA.1/BA.2 subvariant, vaccination, and prior infection on infectiousness of SARS-CoV-2 omicron infections. **Qassim SH**, Chemaitelly H, Ayoub HH, AlMukdad S, Tang P, Hasan MR, **Yassine HM**, Al-Khatib HA, Smatti MK, Abdul-Rahim HF, Nasrallah GK, Al-Kuwari MG, Al-Khal A, Coyle P, Kaleeckal AH, Shaik RM, Latif AN, Al-Kuwari E, Jeremijenko A, Butt AA, Bertollini R, Al-Romaihi HE, Al-Thani MH, Abu-Raddad LJ\*. *J Travel Med*. 2022 May 27:taac068.
47. Soluble ACE2 and angiotensin II levels are modulated in hypertensive COVID-19 patients treated with different antihypertension drugs. **Elrayess MA**, Zedan HT, Alattar RA, Abusriwil H, Al-Ruweidi MKAA, Almuraikhy S, Parengal J, Alhariri B, **Yassine HM**, A Hssain A, Nair A, Al Samawi M, Abdelmajid A, Al Suwaidi J, Omar Saad M, Al-Maslamani M, Omrani AS, Yalcin HC\*. *Blood Press*. 2022 Dec;31(1):80-90.
48. COVID-19 Disease Severity in Children Infected with the Omicron Variant. **Butt AA**, Dargham SR, Loka S, Shaik RM, Chemaitelly H, Tang P, Hasan MR, Coyle PV, **Yassine HM**, Al-Khatib HA, Smatti MK, Kaleeckal AH, Latif AN, Zaqout A, Almaslamani MA, Al Khal A, Bertollini R, Abou-Samra AB, Abu-Raddad LJ\*. *Clin Infect Dis*. 2022 Apr 11:ciac275. doi: 10.1093/cid/ciac275.

49. Immunoinformatics prediction of potential immunodominant epitopes from human coronaviruses and association with autoimmunity. Mathew S, Fakhroo AD, Smatti M, Al Thani AA, **Yassine HM\***. *Immunogenetics*. 2022 Apr;74(2):213-229.3
50. Effect of mRNA Vaccine Boosters against SARS-CoV-2 Omicron Infection in Qatar. Abu-Raddad LJ\*, Chemaitelly H, Ayoub HH, AlMukdad S, **Yassine HM**, Al-Khatib HA, Smatti MK, 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. *N Engl J Med*. 2022 Mar 9:NEJMoa2200797.
51. Protection against the Omicron Variant from Previous SARS-CoV-2 Infection. Altarawneh HN, Chemaitelly H, Hasan MR, Ayoub HH, Qassim S, AlMukdad S, Coyle P, **Yassine HM**, Al-Khatib HA, Benslimane FM, 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, Tang P, Abu-Raddad LJ\*. *N Engl J Med*. 2022 Feb 9:NEJMc2200133.
52. Effectiveness of mRNA-1273 and BNT162b2 Vaccines in Qatar. Abu-Raddad LJ\*, Chemaitelly H, Bertollini R; **National Study Group for COVID-19 Vaccination**. *N Engl J Med*. 2022 Feb 24;386(8):799-800.
53. Low risk of serological cross-reactivity between the dengue virus and SARS-CoV-2 IgG antibodies using advanced detection assays. Shurrah FM, Al-Sadeq DW, Amanullah FH, Al-Absi ES, Qotba H, **Yassine HM**, Abu-Raddad LJ, Nasrallah GK\*. *Intervirology*. 2022 Feb 8.
54. Human herpes simplex virus-6 (HHV-6) detection and seroprevalence among Qatari nationals and immigrants residing in Qatar. Al-Sadeq DW, Zedan HT, Aldewik N, Elkhider A, Hicazi A, Younes N, Ayoub HH, Raddad LA, **Yassine HM\***, Nasrallah GK\*. *IJID Regions*. 90-95, 2022/3/1.
55. Waning mRNA-1273 Vaccine Effectiveness against SARS-CoV-2 Infection in Qatar. Abu-Raddad LJ\*, Chemaitelly H, Bertollini R; **National Study Group for COVID-19 Vaccination**. *N Engl J Med*. 2022 Jan 26:NEJMc2119432.
56. Characterizing the effective reproduction number during the COVID-19 pandemic: Insights from Qatar's experience. Bsat R, Chemaitelly H, Coyle P, Tang P, Hasan MR, Al Kanaani Z, Al Kuwari E, Butt AA, Jeremijenko A, Kaleeckal AH, Latif AN, Shaik RM, Nasrallah GK, Benslimane FM, Al Khatib HA, **Yassine HM**, Al Kuwari MG, Al Romaihi HE, Al-Thani MH, Al Khal A, Bertollini R, Abu-Raddad LJ\*, Ayoub HH\*. *J Glob Health*. 2022 Feb 5;12:05004.
57. 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.

58. 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.
59. 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.
60. 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.
61. 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.
62. 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.
63. 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.
64. 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>.
65. 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.
66. 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.

67. 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.
68. 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.
69. 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.
70. 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.
71. 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.
72. 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.
73. 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].

74. Effect of multiple freeze-thaw cycles on the detection of anti-SARS-CoV-2 IgG antibodies. Shurrah 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.
75. 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.
76. Can commercial automated immunoassays be utilized to predict neutralizing antibodies after SARS-CoV-2 infection? A comparative study between three different assays. Ismail A, Shurrah 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.
77. 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.
78. 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.
79. 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, Shurrah F, Al-Sadeq DW, AlFehaidi AAS, Yfakhroo AI, AlMesaiфри 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.
80. Epidemiology Profile of Viral Meningitis Infections Among Patients in Qatar (2015–2018). Mathew S, Al Khatib HA, Al Ansari K, Nader J, Nasrallah GK, Younes NN, Coyle PV, Al Thani AA, Al Maslamani MA, **Yassine HM**\*. *Front. Med*. 8: 663694. 2021.
81. Profiling of Intestinal Microbiota in Patients Infected with Respiratory Influenza A and B Viruses. Al Khatib HA, Mathew S, Smatti MK, Eltai NO, Pathan SA, Al Thani AA, Coyle PC, Al Maslamani MA, **Yassine HM**\*. *Pathogens*. 10 (6), 761.
82. Level of Maternal Respiratory Syncytial Virus (RSV) F Antibodies in Hospitalized Children and Correlates of Protection. Taleb SA, Al-Ansari K, Nasrallah GK, Elrayess MA, Al-Thani AA, Derrien-Colemyn A, Ruckwardt TJ, Graham BS, **Yassine HM**\*. *Int J Infect Dis*. 2021 Jun 9:S1201-9712(21)00504-X.

83. Molecular and biological characterization of influenza A viruses isolated from human fecal samples. Al Khatib HA, Coyle PV, Al Maslamani MA, Al Thani AA, Pathan SA, **Yassine HM\***. *Infect Genet Evol*. 2021 Jun 18;93:104972.
84. Associations of Vaccination and of Prior Infection With Positive PCR Test Results for SARS-CoV-2 in Airline Passengers Arriving in Qatar. Bertollini R, Chemaitelly H, **Yassine HM**, Al-Thani MH, Al-Khal A, Abu-Raddad LJ\*. *JAMA*. 2021 Jun 9:e219970. doi: 10.1001/jama.2021.9970.
85. Analytic comparison between three high-throughput commercial SARS-CoV-2 antibody assays reveals minor discrepancies in a high-incidence population. Nasrallah GK\*, Dargham SR, Shurrab F, Al-Sadeq DW, Al-Jighefee H, Chemaitelly H, Al Kanaani Z, Al Khal A, Al Kuwari E, Coyle P, Jeremijenko A, Kaleeckal AH, Latif AN, Shaik RM, Rahim HFA, **Yassine HM**, Al Kuwari MG, Qotba H, Al Romaihi HE, Tang P, Bertollini R, Al-Thani MH, Althani AA, Abu-Raddad LJ\*. *Sci. Rep.* 2021 Jun 4;11(1):11837. doi: 10.1038/s41598-021-91235-x.PMID: 34088944.
86. The Spectrum of Antibiotic Prescribing During COVID-19 Pandemic: A Systematic Literature Review. Al-Hadidi SH, Alhussain H, Abdel Hadi H, Johar A, **Yassine HM**, Al Thani AA, Eltai NO\*. *Microb Drug Resist*. 2021 Jun 1. doi: 10.1089/mdr.2020.0619.
87. Pfizer-BioNTech mRNA BNT162b2 Covid-19 vaccine protection against variants of concern after one versus two doses. Abu-Raddad LJ\*, Chemaitelly H, **Yassine HM**, Benslimane FM, Al Khatib HA, Tang P, 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. *J Travel Med*. 2021 May 28:taab083. doi: 10.1093/jtm/taab083.
88. SARS-CoV-2 seroprevalence in the urban population of Qatar: an analysis of antibody testing on a sample of 112,941 individuals. Coyle PV, Chemaitelly H, Ben Hadj Kacem MA, Abdulla Al Molawi NH, El Kahlout RA, Gilliani I, Younes N, Al Anssari GAAA, Al Kanaani Z, Al Khal A, 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, Bertollini R, Abu-Raddad LJ\*. *iScience*; 24 May 2021, 102646. <https://doi.org/10.1016/j.isci.2021.102646>.
89. Effectiveness of the BNT162b2 Covid-19 Vaccine against the B.1.1.7 and B.1.351 Variants (Letter to the editor). Abu-Raddad LJ\*, Chemaitelly H, Butt AA, & **National Study Group for COVID-19 Vaccination**. *N Engl J Med*. 2021 May 5; NEJMc2104974. doi: 10.1056/NEJMc2104974.
90. Salmonella Infections among Pediatric Population in Qatar: Phenotypic Resistance and Associated Genotypic Determinants. Eltai NO, Al Hadidi S, Abdelrahman H, Al Thani AA, Ibrahim E, **Yassine HM**, Doiphod S\*. *Journal of Bacteriology and Mycology*. 8 (3), 1170.
91. Detection of antinuclear antibodies targeting intracellular signal transduction, metabolism, apoptotic processes and cell death in critical COVID-19 patients. Fakhro AD, Nasrallah GK\*, Khan T, Cyprian FS, Al Ali F, Ata MM, Taleb S, Hssain AA, Eid AH, Abu-Raddad LJ, Al-Khal A, Al Thani AA, Marr N, **Yassine HM\***. *Research Square (preprint)*. May 2021.

92. In silico virtual screening of lead compounds for major antigenic sites in respiratory syncytial virus fusion protein. S Mathew, S Taleb, AH Eid, AA Althani, **HM Yassine\***. *Emergent materials*, 1-11 (May 2021). <https://doi.org/10.1007/s42247-021-00213-6>.
93. SARS-CoV-2 infection is at herd immunity in the majority segment of the population of Qatar. Mohamed H Al-Thani, Elmoubasher Farag, Roberto Bertollini, Hamad Eid Al Romaihi, Sami Abdeen, . . . . ., Mohammad Shaik, Hanan F Abdul Rahim, **Hadi M Yassine**, Gheyath K Nasrallah, Mohamed Ghaith Al Kuwari, Odette Chaghoury, Hiam Chemaitelly, Laith J Abu-Raddad\*. *Open Forum Infectious Diseases*. 2021. <https://doi.org/10.1093/ofid/ofab221>.
94. SARS-CoV-2 antibody-positivity protects against reinfection for at least seven months with 95% efficacy. Abu-Raddad LJ\*, Chemaitelly H, Coyle P, Malek JA, Ahmed AA, Mohamoud YA, Younuskuju S, Ayoub HH, 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. *EClinicalMedicine*. 2021 May;35:100861. doi: 10.1016/j.eclinm.2021.100861.
95. Herd Immunity against Severe Acute Respiratory Syndrome Coronavirus 2 Infection in 10 Communities, Qatar. Jeremijenko A, Chemaitelly H, Ayoub HH, Alishaq M, Abou-Samra AB, Al Ajmi JAAA, Al Ansari NAA, Al Kanaani Z, Al Khal A, Al Kuwari E, Al-Mohammed A, Al Molawi NHA, Al Naomi HM, Butt AA, Coyle P, El Kahlout RA, Gillani I, Kaleeckal AH, Masoodi NA, Thomas AG, Nafady-Hego H, Latif AN, Shaik RM, Younes NBM, Rahim HFA, **Yassine HM**, Al Kuwari MG, Al Romaihi HE, Al-Thani MH, Bertollini R, Abu-Raddad LJ\*. *Emerg Infect Dis*. 2021 May;27(5):1343-1352. doi: 10.3201/eid2705.204365.
96. Epidemiological impact of prioritising SARS-CoV-2 vaccination by antibody status: mathematical modelling analyses. Ayoub HH, Chemaitelly H, Makhoul M, Al Kanaani Z, Al Kuwari E, Butt AA, Coyle P, Jeremijenko A, Kaleeckal AH, Latif AN, Shaik RM, Abdul Rahim HF, Nasrallah GK, **Yassine HM**, Al Kuwari MG, Al Romaihi HE, Al-Thani MH, Bertollini R, Al Khal A, Abu-Raddad LJ\*. *BMJ Innovations*. 2021 Apr;7(2):327-336. doi: 10.1136/bmjinnov-2021-000677.
97. Identification of potential natural inhibitors of the receptor-binding domain of the SARS-CoV-2 spike protein using a computational docking approach. SM Mathew, F Benslimane, AA Althani, **HM Yassine\***. *Qatar Medical Journal*. 2021 Mar 12;2021(1):12. doi: 10.5339/qmj.2021.12.
98. Prevalence and Phylogenetic Analysis of Parvovirus (B19V) among Blood Donors with Different Nationalities Residing in Qatar. Abdelrahman D, Al-Sadeq DW, Smatti MK, Taleb SA, AbuOdeh RO, Al-Absi ES, Al-Thani AA, Coyle PV, Al-Dewik N, Qahtani AAA, **Yassine HM**, Nasrallah GK\*. *Viruses*. 2021 Mar 24;13(4):540. doi: 10.3390/v13040540.
99. Microbiome profiling of rotavirus infected children suffering from acute gastroenteritis. Sohail MU, Al Khatib HA, Al Thani AA, Al Ansari K, **Yassine HM\***, Al-Asmakh M\* (co-corresponding). *Gut Pathog*. 2021 Mar 29;13(1):21. doi: 10.1186/s13099-021-00411-x.
100. Mathematical modeling of the SARS-CoV-2 epidemic in Qatar and its impact on the national response to COVID-19. Ayoub HH, Chemaitelly H, Seedat S, Makhoul M, Al Kanaani

Z, Al Khal A, Al Kuwari E, Butt AA, Coyle P, Jeremijenko A, Kaleeckal AH, Latif AN, Shaik RM, Rahim HA, **Yassine HM**, Al Kuwari MG, Al Romaihi HE, Al-Thani MH, Bertollini R, Abu Raddad LJ\*. *J Glob Health*. 2021 Jan 16;11:05005. doi: 10.7189/jogh.11.05005.

101. Clinical manifestations associated with acute viral gastroenteritis pathogens among pediatric patients in Qatar. Abdel-Rahman ME, Mathew S, Al Thani AA, Ansari KA, **Yassine HM\***. *J Med Virol*. 2021 Feb 9. <https://doi.org/10.1002/jmv.26859>.
102. Evaluation of Antibody Response in Symptomatic and Asymptomatic COVID-19 Patients and Diagnostic Assessment of New IgM/IgG ELISA Kits. Al-Jighefee HT, **Yassine HM**,.... Nasrallah\* GK. *Pathogens*. 2021 Feb 3;10(2):161.
103. Diagnostic Efficiency of Three Fully Automated Serology Assays and Their Correlation with a Novel Surrogate Virus Neutralization Test in Symptomatic and Asymptomatic SARS-COV-2 Individuals. Younes S, Al-Jighefee H, Shurrah F, Al-Sadeq DW, Younes N, Dargham SR, Al-Dewik N, Qotba H, Syed M, Alnuaimi A, **Yassine HM**, Tang P, Abu-Raddad LJ, Nasrallah GK\*. *Microorganisms*. 2021, 9(2), 245
104. Distinct antibody repertoires against endemic human coronaviruses in children and adults. Khan T, Rahman M, Al Ali F, Huang SS, Ata M, Zhang Q, Bastard P, Liu Z, Jouanguy E, Beziat V, Cobat A, Nasrallah GK, **Yassine HM**, Smatti MK, Saeed A, Vandernoot I, Goffard JC, Smits G, Migeotte I, Haerynck F, Meyts I, Abel L, Casanova JL, Hasan MR, Marr N\*. *JCI Insight*. 2021 Jan 26:144499.
105. Demographic and Clinical Characteristics of Early Travel-Associated COVID-19 Cases. Marei RM, Emara MM, Elsaied OM, Nasrallah GK, Chivese T, Al-Romaihi HE, Althani MH, Al Thani AA, Farag EA, **Yassine HM\***. *Front Public Health*. 2020 Dec 23;8:573925.
106. Epidemiological, molecular, and clinical features of rotavirus infections among pediatrics in Qatar. Mathew S, Al Ansari K, Al Thani AA, Zaraket H, **Yassine HM\***. *Eur J Clin Microbiol Infect Dis*. 40-6; 1177-1190. 2021.
107. Two prolonged viremic SARS-CoV-2 infections with conserved viral genome for two months. Abu-Raddad LJ\*, Chemaitelly H, Malek JA, Ahmed AA, Mohamoud YA, Younuskunju S, 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**, Al Kuwari MG, Al Romaihi HE, Al-Thani MH, Bertollini R. *Infect Genet Evol*. 2020 Dec 24;88:104684. doi: 10.1016/j.meegid.2020.104684.
108. Assessment of the risk of SARS-CoV-2 reinfection in an intense re-exposure setting. Abu-Raddad LJ\*, Chemaitelly H, Malek JA, Ahmed AA, Mohamoud YA, Younuskunju S, Ayoub HH, Al Kanaani Z, Al Khal A, Al Kuwari E, Butt AA, Coyle P, Jeremijenko A, Kaleeckal AH, Latif AN, Shaik RM, Rahim HFA, **Yassine HM**, Al Kuwari MG, Al Romaihi HE, Al-Thani MH, Bertollini R. *Clin Infect Dis*. 2020 Dec 14:ciaa1846.
109. Seroprevalence of West Nile Virus among Healthy Blood Donors from Different National Populations Residing in Qatar. Dargham SR, Al-Sadeq DW, **Yassine HM**, Ahmed M,

Kunhipurayil H, Humphrey JM, Abu-Raddad LJ, Nasrallah GK\*. *Int J Infect Dis*. 2020 Nov 25:S1201-9712(20)32487-5. doi: 10.1016/j.ijid.2020.11.175.

110. Host Genetic Variants Potentially Associated With SARS-CoV-2: A Multi-Population Analysis. Smatti MK, Al-Sarraj YA, Albagha O, **Yassine HM\***. *Front. Genet.*, 02 October 2020.
111. Within-host diversity of SARS-CoV-2 in COVID-19 patients with variable disease severities. Al Khatib HA, Benslimane FM, Elbashir IE, Coyle PV, Al Maslamani MA, Al-Khal A, Al Thani AA, **Yassine HM\***. *Front. Cell. Infect. Microbiol.* 10: 575613. doi: 10.3389/fcimb.
112. Performance evaluation of five ELISA kits for detecting anti-SARS-COV-2 IgG antibodies. **Yassine HM**, Al-Jighefee H, Al-Sadeq DW, Dargham SR, Younes SN, Shurrah F, Marei RM, Hssain AA, Taleb S, Alhussain HA, Al-Nesf MA, Al-Khal A, Qotba H, Althani AA, Tang P, Abu-Raddad LJ, Nasrallah GK\*. *Int J Infect Dis*. 2020 Oct 27:S1201-9712(20)32246-3
113. Organ-specific toxicity evaluation of stearamidopropyl dimethylamine (SAPDMA) surfactant using zebrafish embryos. Ola Al-Jamal, Hadeel Al-Jighefee, Nadin Younes, Roba Abdin, Maha A Al-Asmakh, A Bahgat Radwan, Mostafa H Sliem, Amin F Majdalawieh, Gianfranco Pintus, **Hadi M Yassine**, Aboubakr M Abdullah, Sahar I Da'as, Gheyath K Nasrallah\*. *Science of The Total Environment*. 741, 140450.
114. Detection of SARS-CoV-2 RNA by direct RT-qPCR on nasopharyngeal specimens without extraction of viral RNA. Hasan MR, Mirza F, Al-Hail H, Sundararaju S, Xaba T, Iqbal M, Alhussain H, **Yassine HM**, Perez-Lopez A, Tang P\*. *PLoS One*. 2020 Jul 24;15(7):e0236564.
115. The prevalence of HEV among non-AC hepatitis in Qatar and efficiency of serological markers for the diagnosis of hepatitis E. Enas S Al Absi, Duaa W Al-Sadeq, Makiyeh Khalili, Nadin Younes, Nader Al-Dewik, Sara K Abdelghany, Somaia S Abouzid, Asma A Al Thani, **Hadi M Yassine**, Peter Coyl, Gheyath Nasrallah\*. *BMC Gastroenterology*. DOI:10.21203/rs.3.rs-92849/v1.
116. Molecular epidemiology of influenza, RSV, and other respiratory infections among children in Qatar: A six years report (2012-2017). Al-Romaihi HE, Smatti MK, Al-Khatib HA, Coyle PV, Ganesan N, Nadeem S, Farag EA, Al Thani AA, Al Khal A, Al Ansari KM, Al Maslamani MA, **Yassine HM\***. *Int J Infect Dis*. 2020 Apr 9;95:133-141.
117. Identification of mcr-8 in Clinical Isolates From Qatar and Evaluation of Their Antimicrobial Profiles. Nahla O Eltai, Brianna Kelly, Hassan A Al-Mana, Emad B Ibrahim, **Hadi M Yassine**, Asmaa Al Thani, Muna Al Maslmani, Christine Lammens, Basil B Xavier, Surbhi Malhotra-Kumar\*. *Frontiers in Microbiology*. 11, 1954.
118. White Button Mushroom, *Agaricus bisporus* (Agaricomycetes), and a Probiotics Mixture Supplementation Correct Dyslipidemia without Influencing the Colon Microbiome Profile in Hypercholesterolemic Rats. Asad F, Anwar H, **Yassine HM**, Ullah MI, Rahman A, Kamran Z, Sohail MU. *Int J Med Mushrooms*. 2020;22(3):235-244.

119. Systematic Review of the Respiratory Syncytial Virus (RSV) Prevalence, Genotype Distribution, and Seasonality in Children from the Middle East and North Africa (MENA) Region. **Yassine HM**, **Sohail MU**, Younes N, Nasrallah GK\*. *Microorganisms*. 8 (5), 713.
120. Antimicrobial Resistance of Commensal Escherichia coli Isolated from Food Animals in Qatar. **Alhababi DA**, Eltai NO, Nasrallah GK, Farg EA, Al Thani AA, **Yassine HM\***. *Microb Drug Resist*. 2020 Apr;26(4):420-427.
121. Antibiotic resistance profile of commensal *Escherichia coli* isolated from healthy sheep in Qatar. **Eltai NO**, Al Thani AA, Al-Hadidi SH, Abdfarag EA, Al-Romaihi H, Mahmoud MH, Alawad OK, **Yassine HM\***. *J Infect Dev Count*. 2020 Feb 29;14(2):138-145.
122. Antibiotic resistance and virulence patterns of pathogenic Escherichia coli strains associated with acute gastroenteritis among children in Qatar. **Eltai NO**, Al Thani AA, Al Hadidi SH, Al Ansari K, **Yassine HM\***. *BMC microbiology* 2020 (1), 1-12.
123. 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.
124. Prevalence of Antibiotic-Resistant Escherichia coli Isolates from Local and Imported Retail Chicken Carcasses. **Eltai NO**, **Yassine HM**, El-Obeid T, Al-Hadidi SH, Al Thani AA, Alali WQ\*. *Journal of Food Protection* 83 (12), 2200-2208.
125. 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\*. *Nature communication*. 2020; 11 (1), 1-12.
126. 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\***. *Journal of Infection in Developing Countries*. 2020, 14 (02), 138-145.
127. 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.
128. 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.
129. 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).

130. 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.
131. 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.
132. Epidemiology of Respiratory Infections among Adults in Qatar (2012-2017). Al Romaihi HE, Smatti MK, Ganesan N, Nadeem S, Farag E, Coyle PV, Nader JD, Al-Khatib HA, Elmagboul EB, Al Dhahry S, Al-Marri SA, Al Thani AA, Al Khal A, Al Maslamani MA, **Yassine HM\***. *PlosOne*. PloS one 14 (6), e0218097.
133. 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).
134. 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.
135. 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.
136. 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.
137. 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. *MBio*. 2019 10 (1).
138. 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\***. *Journal of Immunology Research*. 2019. <https://doi.org/10.1155/2019/1386740>.

139. 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\*. *Nanomaterials*. 2019 Jan; 9, 122.
140. 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.
141. 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.
142. 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.
143. 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.
144. 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.
145. 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.
146. 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.
147. 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.
148. 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.

149. 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.
150. 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 Mujalli H, Shehata Z, Alex M, Al Thani AA, Yassine HM\*. *Vaccines (Basel)*. 2017 Oct 10;5(4).
151. 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.
152. 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.
153. 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.
154. 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.
155. 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.
156. 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.
157. 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-Nicodemos RA, Bailer RT, Ledgerwood JE, Nabel GJ, Graham BS, Koup RA, McDermott AB\*. *Journal of Immunology*. (2015) Jul; 195(2):602-10.

158. 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.
159. 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.
160. 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.
161. 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**).
162. 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.
163. 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.
164. 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.
165. 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.
166. 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.
167. 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.
168. 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.

169. 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.
170. 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.
171. 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.
172. 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.
173. 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.
174. 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.
175. 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.
176. Isolation and Preliminary Characterization of a New Temperature-Sensitive Allele of the NAD+ 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 & intellectual properties**

1. Rapid Assurance Antibody Test (RAABT) (Application # 63349924). Elrayess M, Cyprian FS, **Yassine HM**.
2. Methods of predicting covid-19 infection severity (QF Ref 2022-018; KLG 5600234.00702). **Yassine Hm**, Elrayess M, Cyprian FS.
3. Biomarkers for predicting intensive care unit stay duration for mechanically ventilated COVID-19 patients. US Patent App. 17/719,338. March 2021. Elrayess M, **Yassine HM**, Al Thani AA.
4. 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]**

5. Multivalent nanoparticle-based vaccines. US Patent 11,191,727. Inventors: Barney S. Graham (PI), Masaru Kanekiyo and **Hadi M. Yassine**. 2017.
6. 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.
7. 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.
8. 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.
9. 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.
10. 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. Biomolecules and Machine Learning approach to understand Respiratory Viral Diseases Prognosis in Pediatric Population. Qatar University Internal Funding. 300K QAR. LPI.
2. Development of ready-made broad virus family targeted therapeutics for immediate response to future pandemics. ARG01-0522-230279. ~700K USD. PI (LPI: Dr. Asmaa AlThani).
3. Development of a polyvalent SARS-CoV-2, Influenza, and RSV subunit/nanoparticle vaccine. ARG01-0521-230249. ~700K USD. PI (LPI: Dr. Mohamad Emar).
4. Sero-prevalence of vector-borne viral diseases in camels in Qatar. QUST-2-BRC-2023-1650. 7000 QAR. LPI.
5. Prevalence of EBV in Patients with Multiple Sclerosis in Qatar. QUST-1-BRC-2023-883. 7000 QAR. LPI.
6. Characterization and magnitude of SARS-CoV-2 immune response among previously infected and vaccinated (Moderna vs Pfizer vs AstraZeneca) individuals. QUCG-CHS-23/24-170. (~300K QAR). PI (LPI: Gheyath Nasrallah).
7. Constraints of ruminant production in smallholder animal farms in Qatar: Defining problems and improving health through alternative modalities. MME03-1128-210032. (~485,000 USD for three years). LPI

8. COVID-19 Genomics – MENA’: towards molecular surveillance of SARS-CoV-2 genomes during the vaccination period within the Middle East and North Africa. Wellcome Trust grant-Subcontract from KAUST. 224845/Z/21/Z (327,000.00 USD). Co-PI. (QU PI Abdalla Musa Abdalla).
9. 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.
10. The double-edged sword of SARS-CoV-2 diversity: a risk factor of disease severity and a source of broadly-neutralizing antibodies. QUCG-CENG-22/23-547. (300K QAR for two years). PI (LPI Hebah Al Khatib).
11. Bioinformatic approach to discover plant-derived antimicrobial peptides: in silico selection/engineering and in vitro activity tests against MERS-CoV and SARS-CoV-2. QUST-2-CAS-2021-499. (300K QAR for two years). PI (LPI Sergio Crovella).
12. Seroprevalence SARS-COV2 antibodies among naturally infected and vaccinated individuals in the Qatar University community. UREP28-173-3-057. Research Mentor. ~30K USD. (LPI: Gheyath Nasrallah).
13. The influence of pre-existing immunity on emergence of immune escape mutations in SARS-CoV-2 spike protein. UREP28-164-3-048. Research Mentor. ~20K USD. (LPI: Hebah Al Khatib).
14. Low-Cost Magnetic Lateral Flow Assay Platform for Rapid Food Safety Testing and Point-of-Care Viral Infection Diagnostics in Qatar. GSRA8-L-1-0501-21022. 264,958.00 USD. Research Mentor.
15. 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**
16. Dexamethasone Chronotherapy of COVID-19-Induced Acute Respiratory Distress Syndrome. RRC02-0810-210032 (50K USD for one year). Oct. 2021. **PI** (LPI Faleh Tamimi).
17. Evolution of immune escape variants in long-term COVID-19 patients. QUST-2- BRC -2021-175 (Student grant 14000 QAR). May 2021. **LPI**.
18. 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).
19. 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).
20. Sequencing SARS-CoV-2 variants in Qatar (724,191 QAR). **QGP/2021/169. LPI & coordinator.** (2020-2021).
21. Coordinator for the collaboration with **Barzan Holding**: Training of young scientists (> 700K QAR/year).
22. Disease pathogenesis of COVID 19 in diabetic patients in Qatar: complications and underlying mechanisms (14000 QAR). **QUST-1-BRC-2021-3.** Jan 2021. **LPI**.
23. 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).
24. 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.

25. 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.
26. 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.
27. 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.
28. 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.
29. Biosafety and biosecurity capacity building: To Boost Laboratory Safety Practices across Qatar (25,000.00 USD). **CWSP18-W-0119-20015** (1 year). **LPI**.
30. 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**.
31. 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).
32. 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).
33. Nasal Microbiome Analysis in RSV Infected Children (10,000.00 QAR; student grant). **QUST-1-BRC-2020-3** (1 year; 2020). **L-PI**.
34. 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**.
35. 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**.
36. 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**.
37. 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**.
38. 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)
39. 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).
40. 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).
41. 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)

42. 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**
43. 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).
44. 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**.
45. 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**.
46. Characterization of Fecal Influenza and Its Impact on Gut Microbiome (300,000.00 QAR). *QUCG-BRC-2018\2019-1*(Two years; 2018-); **L-PI**.
47. 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).
48. 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-).
49. 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**.
50. 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).
51. 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).
52. 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).
53. 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).
54. 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).
55. 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**.
56. 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).
57. 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).
58. 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. Mohamad Khatatneh, Ph.D. (QU). Supervisor. 2021-current.
2. Reham Awni El Kahlout, Ph.D. (QU). Supervisor. 2021-current.
3. Abeer Qush; Ph.D. (QU). Co-supervisor. 2021-current.
4. Nadin Younes. Research Mentor (GSRA). 2021-current.
5. Angelin Mary Philip (CHLS-HBKU). Committee member; 2021-2022.
6. Swapna Thomas, Ph.D. (QU). Supervisor. 2020-current.
7. Maria Smatti, Ph.D. (HBKU). Supervisor. 2018-2023.
8. Hebah A. Al Khatib, Ph.D. student (HBKU). Supervisor. 2017-2020.

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

9. Fatma Hassan Mohamed Ali. Supervisor. Spring 2022-Current.
10. Ummay Salma Abu Habib, M.Sc, (QU-CHS). Supervisor. Spring 2021-Spring 2022.
11. Hadeel Zedan, (QU-CHS). Co-supervisor. Spring 2021-current.
12. Reeham Abdullah Albuainain, M.Sc, (QU-CHS). Supervisor. 2019-2020.
13. Rania Abdullah Albuainain, M.Sc, (QU-CHS). Co- Supervisor. 2019-2020.
14. Israa Al Bashir, M.Sc. Student (HBKU). Supervisor. 2018-2019.
15. Khalil Naser Alismail, (QU-CHS). QU internal Examiner. 2019.
16. Najat Ali A A Al-Buhendi, M.Sc. Student (QU-CHS). Supervisor. 2018-2019.
17. Dalal Ali Alhababi, M.Sc. Student (QU-CHS). Supervisor. 2018-2019.
18. Sara A. Taleb, M.Sc. (QU-CHS). Supervisor. 2017-2018.
19. Reham Awni Al Kahlout, M.Sc. Student (QU-CHS). Committee member. 2017.

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

20. AlMaha Atif A AlSaiari. Fall 2023
21. Nada Mohammed Al-Karbi. Fall 2023
22. Mathayel Ayedh M M Al-Saad. Spring 2023.
23. Alyaa Abdulsalam A M Alajji. Supervisor. Spring 2023.
24. Hala Hazem Abo khaled. Supervisor. Spring 2022.
25. Ruaa Mahmoud Ismail. Supervisor. Spring 2022.
26. Abrar Abaker Abdalla. (QU-CHS). Supervisor. 2020.
27. Maissa Ali Riahi. (QU-CHS). Supervisor. 2020.
28. Tasnim Hisham Ali Mahmoud Alziftawi. (QU-CHS). Supervisor. 2020.
29. Alaa A. ElKheider, B.Sc. (QU-CHS). Supervisor. 2020.
30. Asalet Hijazi, B.Sc. (QU-CHS). Supervisor. 2020.
31. Dana Elasmr, B.Sc. (QU-CHS). Supervisor. 2020.
32. Nasimeh Ahmad Azadi, B.Sc. (QU-CHS). Supervisor. 2019.
33. Tayseer Abdalhamid Bashir Fadl, B.Sc. (QU-CHS). Supervisor. 2019.
34. Sarah Jemmieh, B.Sc. (QU-CHS). Supervisor. 2018.
35. Amira Kohil, B.Sc. (QU-CHS). Supervisor. 2018.
36. Israa Al Bashir, B.Sc. Student (QU-CHS). Research supervisor. 2017.
37. Nour El Dous, B.Sc. Student (QU-CHS). Research supervisor.2017.
38. Trained and monitored several UG and graduate students as well as visiting scholars at AUB, OSU, and QU.

### **Services and Outreach Activities**

1. One Health Symposium with MOPH; Spring 2023. Presenter.

2. Phase 1 of the Communicable Diseases Research Prioritization Exercise in Qatar (MOPH). Spring 2023.
3. JOINT RISK ASSESSMENT LEAD (for Zoonotic Diseases). Spring 2023. Presenter.
4. COVID-19 Biorepository Scientific Review Committee Terms of Reference. Fall 2020-2023.
5. 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 State.
6. Temporary pathologist at MOPH-National Reference Laboratory (NRL). 2020-2021.
7. 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. CWSP-QNRF funded. **Organizer**.
8. The 9<sup>th</sup> QU Annual Research Forum. **UG students' poster Judge**. Qatar University, Doha, Qatar. April 15, 2019.
9. 4th QU Health Research Symposium. **UG students' poster Judge**. Qatar University, Doha, Qatar. March 30, 2019.
10. WCM-Q Annual Research Retreat. **Poster Judge**. WQM-Q, Doha, Qatar. (Three times)
11. Carnegie Mellon University. Annual Research Retreat. **Poster Judge**. (Two times)
12. Bioinformatics and Laboratory Investigations of emerging pathogens and Epidemics Workshop (With practical sessions). **Organizer**. Doha, Qatar, January 14-17, 2019.
13. Antimicrobial Susceptibility Testing and Surveillance Workshop (With practical sessions). **Organizer and MC for the event**. Doha, Qatar, January 22-25, 2018.
14. 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.
15. Exposure and Toxicological Characteristics of Chemical Agents in the Environment. **Organizer**. Doha, Qatar, November 7th to 9th, 2017.
16. Biosafety Level 3 Laboratory Project. **Coordinator**. 2016-current.
17. International workshop on Emerging Pathogens at the Human-Animal-Environment Interface. **Organizer**. Doha, Qatar, October 2016.
18. Principles of Mammalian Cell Culture Course. **Coordinator**. BRC, QU, August 2016 (presenter 2017-forward).
19. Coordinator for the collaboration with HMC (Microbiology projects). 2015-2018.
20. Coordinator for the collaboration with MOPH (Infectious diseases project). 2015-2018.
21. Biosafety coordinator between September 2015 and February 2016.
22. Organizer of biosafety lectures at BRC, QU.
23. Steps of Scientific Research Workshop Program. **Organizer**. Hamza Intermediate School. November 2015. Doha, Qatar. Presenter.

### **Committees and Groups**

- Graduate Studies Office Advisory Committee; Vice President for Research and graduate studies office. 2023-on.
- Department of Biological Sciences-CHS-QU Recruitment Committee. 2022-2023
- Qatar Health 2022 and 2nd Qatar Public Health Conference, committee member (Adhoc). 2021-2022.
- Committee to Review QU Publication Reward Policy. 2021.
- Promotion Committee (member). Department of Biological Sciences, College of Health Sciences, Qatar University. 2020-2022.

- QU ERG Emergency Response Grant. Committee member. 2020-Current.
- Committee to Review QU Publication Reward Policy (Member). 2020.
- Multiple National Committees concerning the 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 University Infectious Diseases Research Network. Chair then Co-Chair. 2018-onward.
- 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. (Leader from 2018-2019).

### **Professional and Honor Societies**

- American Association for Virology (ASV); 2008-Current.
- World Society for Virology (WSV). 2023-current.
- American Association for Microbiology (ASM); 2017-2018.
- American Association for Advancement of Science (AAAS); 2008-2010.
- American Association of Avian Pathologists (AAP); 2004-2009.
- The Ohio State University Chapter of the Honor Society of Phi Kappa Phi for outstanding students; 2006.

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

- Highly Cited Researcher (Clarivate) for 2021, 2022, & 2023.
- Best faculty poster award at the annual QU research forum; Fall 2023.
- Top prize for innovation by the strategic innovation entrepreneurship and development office (SIEED office) at QU.
- Highly Cited Researcher, Clarivate (Web of Science), 2021, 2022, AND 2023.
- 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**

- الجزيرة هذا الصباح <https://mediaview.aljazeera.com/video/MKrij6HWvV>.
- 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 others have overlooked. A beacon of academic and research and excellence [QU publication]. Fall 2021. <http://www.qu.edu.qa/about/research-findings/Researchers-at-the-QU-are-keen-to-find-answers-in-areas-others-have-overlooked>.
- The Biomedical Research Center Organizes Seminar on Development of COVID-19 Vaccine. QU Research Magazine; June 2021. <http://www.qu.edu.qa/newsroom/BRC/QU%E2%80%99s-Biomedical-Research-Center-organizes-seminar-on-Covid%E2%80%93vaccine-development>.

- 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. [http://www.qu.edu.qa/static\\_file/qu/research/magazine/english\\_15\\_may\\_2021.pdf](http://www.qu.edu.qa/static_file/qu/research/magazine/english_15_may_2021.pdf).
- 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» يكتف جهوده حول «كورونا». (العرب). 31 مارس 2020
  - جامعة قطر توظف علم الوراثة والذكاء الاصطناعي في بحوث كوفيد-19. 14-4-2020. (الفرار للاعلام).
  - لمواجهة كورونا.. كيف ساهمت قطر في تسريع وتيرة البحث والابتكار؟ (الخليج للاعلام). 01-06-2020
  - طالبات العلوم الصحية يبحثن مخاطر انتقال العدوى الفيروسيّة. (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. [https://www.youtube.com/watch?v=s22\\_oUUGdmY](https://www.youtube.com/watch?v=s22_oUUGdmY).
- Swine influenza, medically speaking. *Daily Record-Wooster* (By Christine L. Pratt). April 28, 2009.
- Under the microscope at OARDC. *Daily Record-Wooster*. <https://www.the-daily-record.com/story/news/2009/04/28/under-microscope-at-oardc/19473786007/>.
- 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. <https://www.nationalhogfarmer.com/health-diseases/swine-flue-virus-transmission-across-species>.
- Bird flu in human: OARDC in national effort to understand, prevent and control it. *OARDC-OSU annual report*. 2005.

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

- Guest editor. One Health-Special Issue. One Health in the Eastern Mediterranean Region for One Health.
- 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”. <https://www.frontiersin.org/research-topics/22717/personalized-medicine-and-infectious-disease-management>.
- Associate Editor of Infectious Diseases – Surveillance, Prevention and Treatment *Frontiers in Public Health*. 2020-2023.
- 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**

- QRDI (Q NRF) Research Outcome Seminar (ROS). November 2023.
- The communicable diseases research prioritization exercise. Doha, Qatar, June 2023 (Zoonotic Diseases Group Chair).
- World Society of Virology; Riga Latvia; June 2023. Antibody-Dependent Cellular Cytotoxicity (ADCC) in Response to SARS-CoV-2 Infection and COVID-19 Vaccines (Podium).
- One Health Week Symposium; Doha, Datar. One Health & Academic Institutions: Experience of Qatar University (Invited Speaker).
- Qatar Infectious Disease Conference 2023. Coronavirus evolution: What is next (Invited Speaker). Feb 2023.
- Technical workshop to establish genomic surveillance network in the Eastern Mediterranean Region (EMR) for emerging & re-emerging infectious diseases. Moderator. Jordon. Feb 2023.
- Consultative meeting on strategic guidance for prevention and control of emerging and re-emerging vector-borne and zoonotic infectious diseases in the Eastern Mediterranean Region. Speaker (Arboviruses in Qatar). Jordon. Jan 2023.
- Focus Group on Revisiting emerging viral infections (Series of meetings organized by NIH-NIAID). Attending and presenting. July 2022. Online.
- Immunotherapy for Infectious Diseases Conference (I IDC 2022). Pavia, Italy, June 2022. Speaker.
- One Health Week, including Qatar One Health Framework Endorsement Workshop. March 2022. Organizer and Speaker.
- 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-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. *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. Yassine**, 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. *7th 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).
- Do We Need Better Vaccine for the Ohio Turkeys? **S.P.S. Pillai**, **H.M. Yassine**, S. Jadhao, D.L. Suarez, M. Pantin-Jackwood, Y.M. Saif, C.W. Lee. *OARDC Conference*. April, 2007. Columbus, OH. (Poster).
- Interspecies Transmission of Influenza A Viruses: Host Range Determinants of H3N2 Triple Reassortants (TR) Transmission between Pigs & Turkeys. **H.M. Yassine**, C.W. Lee, Y.M. Saif. *American Association of Avian Pathologists (AAAP-AVMA) Annual Meeting*. July, 2007. Washington D.C. (Podium, Richard B. Rimler award winner).
- Interspecies Transmission of H3N2 Influenza A viruses between Swine and Turkeys. **H.M. Yassine**, C.W. Lee, Y.M. Saif. *North Central Avian Disease Conference*. March, 2007. St. Paul, Minnesota. (Podium).
- Pathogenicity and Antigenicity of Different Lineage of H3N2 Viruses in Turkeys. **S.P.S. Pillai**, **S.P.S.**, **H.M. Yassine**, S. Jadhao, D.L. Suarez, Y.M. Saif and C.W. Lee. *Midwest Poultry Consortium Research Summit Annual Meeting*. March, 2007. St. Paul, MN. (Poster).
- Interspecies and Intraspecies Transmission of H3N2 Influenza A Viruses. **H.M. Yassine**, C.W. Lee, Y.M. Saif. *AI-CAP Annual Meeting*. February, 2007. College Park, MD. (Podium)
- *Tri-state (Ohio, Michigan, and Indiana) Poultry Veterinarians' Annual Meeting*. November, 2006. Fort Wayne, IN (Attending).
- Antigenic and Genetic Studies on H3N2 Influenza-A Viruses Isolated from Swine and Turkeys. **H.M. Yassine**, C-W Lee, E. Gonder and Y.M. Saif. *American Association of Avian Pathologist (AAAP-AVMA) Annual Meeting*. July, 2006. Honolulu, HI. (Poster, Rosenwald student best poster award winner-blue ribbon).
- Genetic and Antigenic Relatedness between Turkey and Swine H3N2 Influenza Viruses. **H.M. Yassine**, C.W. Lee, Saif YM. *North Central Avian Disease Conference*. March, 2006. St. Paul, MN. (Podium, Pomeroy award winner).
- Antibiotic Resistance of Staphylococcus aureus Isolated from Aquatic Environment in Lebanon. **S. Harakeh**, **H.M. Yassine**, S. Hajjar and M. El-Fadel. *World Conference on Magic Bullets*. September, 2004. Nürnberg, Germany. (Poster).
- Designing Competency-Based Questions to Test Scientific Reasoning in Middle School Life and Earth Sciences. **M. Al-Zein** and **H.M. Yassine**. *The Seventh Annual. Science and Math Teacher's Conference (SMEC VII)*. December, 2003. AUB, Beirut, Lebanon.

## **References**

**Asmaa A. Al Thani.** Ph.D. Director of Biomedical Research Center & Dean of College of Health Sciences, Qatar University, Doha, Qatar. Email: [aaja@qu.edu.qa](mailto:aaja@qu.edu.qa). Tel: +974-4403-4787.

**Barney S. Graham.** Retired. M.D., Ph.D. Deputy Director. Vaccine Research Center, National Institute of Allergy and Infectious Diseases, National Institute of Health. Email: [bgraham@mail.nih.gov](mailto:bgraham@mail.nih.gov). Tel: 301-594-8468.

**John Mascola.** M.D. Director. Vaccine Research Center, National Institute of Allergy and Infectious Diseases, National Institute of Health. Email: [jmascola@nih.gov](mailto:jmascola@nih.gov). Tel: 301-496-1852.

**Kayvon Modjarrad.** MD, PhD. Associate Director for Emerging Infectious Diseases, Walter Reed Army Institute of Research, Walter Reed Army Institute of Research & US Military HIV Research Program. Email: [kayvon.modjarrad@gmail.com](mailto:kayvon.modjarrad@gmail.com) AND [kayvon.modjarrad.civ@mail.mil](mailto:kayvon.modjarrad.civ@mail.mil).

**Yehia M. Saif.** D.V.M., Ph.D. Retired Professor and Head. Food Animal Health Research Program, Ohio Agricultural Research and Development Center, The Ohio State University. Email: [saif.1@osu.edu](mailto:saif.1@osu.edu). Tel: 330-263-3743.