

**Dr. Jibran Sualeh Muhammad, MBBS, Ph.D.**

M27-125, College of Medicine, University of Sharjah, Sharjah-27272, United Arab Emirates

Email: [jmuhammad@sharjah.ac.ae](mailto:jmuhammad@sharjah.ac.ae); Phone: +97165057293 Ext: 7293; Fax: +97165585879**PROFESSIONAL EXPERIENCES**

- **Associate Professor** (06/2021 to present)\*  
Department of Basic Medical Sciences, College of Medicine, University of Sharjah, United Arab Emirates
- **Assistant Professor** (08/2017 to 06/2021)  
Department of Basic Medical Sciences, College of Medicine, University of Sharjah, United Arab Emirates
- **Assistant Professor** (10/2016 to 08/2017)  
Department of Biological and Biomedical Sciences, Medical College, The Aga Khan University, Pakistan
- **Research Fellow and Teaching Assistant** (08/2012 to 09/2016)  
Department of Gastroenterology, Faculty of Medicine, University of Toyama, Toyama, Japan
- **Instructor/Lecturer** (08/2011 to 08/2012)  
Department of Biological and Biomedical Sciences, Medical College, The Aga Khan University, Pakistan
- **Teaching Assistant** (10/2010 to 07/2011)  
Department of Biological and Biomedical Sciences, Medical College, The Aga Khan University, Pakistan
- **Clinical Research Associate** (03/2010 to 09/2010)  
Department of Internal Medicine, Jinnah Medical College Hospital, Karachi, Pakistan

**EDUCATION**

- **Doctor of Philosophy (Ph.D.) (Medical Life Sciences)** (09/2016)  
Graduate School of Medicine and Pharmaceutical Sciences, University of Toyama, Japan
- **Bachelor of Medicine, Bachelor of Surgery, (M.B, B.S)** (09/2010)  
Jinnah Medical and Dental College, University of Karachi, Pakistan

**RESEARCH PROFILE**

<b>Research Interests</b>	Cell Biology and Epigenetics
<b>Research Stats</b>	Total number of publications: 55
	Total citations: 620
	h-index (Google Scholar): 12
	i10-index (Google Scholar): 14
	Total impact factor: ~85
<b>Google Scholar</b>	<a href="https://scholar.google.com/citations?user=IN0PEGwAAAAJ&amp;hl=en">https://scholar.google.com/citations?user=IN0PEGwAAAAJ&amp;hl=en</a>

**AWARDS AND SCHOLARSHIPS**

- **National Scholar Award (2<sup>nd</sup> time winner)** (10/2019)  
United European Gastroenterology (UEG) Scientific Committee, Austria
- **National Scholar Award (1<sup>st</sup> time winner)** (10/2017)  
United European Gastroenterology (UEG) Scientific Committee, Austria
- **Sasaki Award for Excellence in Research** (11/2016)  
Faculty of Medicine, University of Toyama, Toyama, Japan
- **Young Investigator's Award (YIA),** (28/06/2014)  
The Annual Meeting of the Japanese Society for Helicobacter Research, Tokyo, Japan
- **Rotary Yoneyama Memorial Doctoral Course Scholarship (YD),** (04/2015 to 09/2016)  
Sponsored by Rotary Yoneyama Memorial Foundation, Rotary International, Japan
- **Toyama Prefectural International Exchange Scholarship (TIES),** (06/2014 to 05/2015)  
Sponsored by Toyama International Center, Toyama Prefectural Government, Toyama, Japan

**MEMBERSHIP IN ACADEMIC SOCIETIES**

	<b>Society</b>	<b>Country</b>
1	Japanese Society for <i>Helicobacter</i> Research	Japan
2	The Epigenetics Society	Switzerland
3	Pakistan Medical and Dental Council	Pakistan

**LIST OF PUBLICATIONS**

1. Abi Zamer B, Abumustafa W, Hamad M, Magazachi AA, **Muhammad JS\***. Genetic Mutations and Non-Coding RNA-based Epigenetic Alterations Mediating the Warburg Effect in Colorectal Carcinogenesis. *Biology* 2021 Aug 24, 10. doi: 10.3390/biology1320456 (*Accepted: In press*) **[IF: 5.079]**
2. El-Huneidi W, Eladl MA, **Muhammad JS\***. Single nucleotide polymorphisms in microRNA binding sites on the HOX genes regulate carcinogenesis: An *in-silico* approach. *Biochem Biophys Rep.* 2021;27:101083.
3. Khoder G, Mina S, Mahmoud I, **Muhammad JS**, Harati R, Burucoa C. *Helicobacter pylori* Infection in Tripoli, North Lebanon: Assessment and Risk Factors. *Biology.* 2021; 10(7):599. doi: 10.3390/biology10070599 **[IF: 3.79]**
4. Cui ZG, Ahmed K, Zaidi SF, **Muhammad JS\***. Ins and outs of cadmium-induced carcinogenesis: Mechanism and prevention. *Cancer Treat Res Commun.* 2021 Apr 8; 27: 100372. doi: 10.1016/j.ctarc.2021.100372.
5. Al-Ani M, Elemam NM, Hachim IY, Raju TK, **Muhammad JS**, Hachim MY, Bendardaf R, Naor D, Maghazachi AA. Molecular Examination of Differentially Expressed Genes in the Brains of Experimental Autoimmune Encephalomyelitis Mice by Herceptin Treatment. *J Inflamm Res* 2021, 4, 2601. **[IF: 4.95]**
6. Wei Z, Sun L, Li Y, **Muhammad JS**, Wang Y, Feng Q, Zhang Y, Inadera H, Cui Z, Wu C, Wu C, et al: Low-calorie sweetener D-psicose promotes hydrogen peroxide-mediated apoptosis in C2C12 myogenic cells favoring skeletal muscle cell injury. *Mol Med Rep* 24: 536, 2021.
7. **Muhammad JS\***, Siddiqui R, Khan NA. COVID-19: Is There a Link between Alcohol Abuse and SARS-CoV-2-Induced Severe Neurological Manifestations? *ACS Pharmacol. Transl. Sci.* 2021;4(2):1024. doi: 10.1021/acspsci.1c00073.
8. Khan NA, **Muhammad JS**, Siddiqui R. Brain-eating amoebae: is killing the parasite our only option to prevent death? *Expert Rev Anti Infect Ther.* 2021 May 14:1-2. doi: 10.1080/14787210.2021.1927712.
9. Siddiqui R, **Muhammad JS**, Khan NA. Locust as an in Vivo Model. *ACS Chemical Neuroscience* 2021. doi: 10.1021/acscchemneuro.1c00190. [*Online first*].
10. Fatima SS, Rehman R, **Muhammad JS**, Martins RS, Mohammed N, Khan U. Association of Chemerin Gene Promoter Methylation in Maternal Blood and Breast milk during Gestational Diabetes. *J. Dev. Orig. Health Dis.* 2021; 1-7. doi: 10.1017/S2040174421000118.
11. **Muhammad JS\***, Siddiqui R, Khan NA. COVID-19: Does SARS-CoV-2 Modulate Acanthamoeba Epigenetics to Enhance Survival and Transmission in the Environment? *ACS Pharmacol. Transl. Sci.* 2021;4(2):1021. doi: 10.1021/acspsci.1c00059.
12. El-Huneidi W, Bajbouj K, **Muhammad JS**, Vinod A, Shafarin J, et al., Carnosic Acid Induces Apoptosis and Inhibits Akt/mTOR Signaling in Human Gastric Cancer Cell Lines. *Pharmaceuticals* 2021; 14 (3): 230. **[IF: 4.28]**
13. **Muhammad JS\***, Guimei M, Jayakumar MN, Shafarin J, Janeeh AS, AbuJabal R, Eladl MA, Ranade AV, Ali A, Hamad M\*. Estrogen-induced hypomethylation and overexpression of *YAPI* facilitate breast cancer cell growth and survival. *Neoplasia* 2021 Jan; 23(1): 68-79. **[IF: 5.17]**
14. **Muhammad JS\***, Sharif-Askari NS, Cui Z-G, Hamad M, Halwani R. SARS-CoV-2 infection-induced promoter hypomethylation as an epigenetic modulator of heat shock protein A1L (*HSPA1L*) gene. *Front. Genet.* 2021; 12, 622271. **[IF: 3.78]**
15. Ishaq M, Mukarram MS, **Muhammad JS**. Debate on the Effectiveness of Hydroxychloroquine for Treatment of Coronavirus Disease 2019 (COVID-19). *Biomedical Research and Clinical Reviews* 2020 Nov. 1(5); DOI:10.31579/2692-9406/028
16. Zahid R, Asif HM, Rasheed F, Rashid F, Kamran R, Ahmed K, Saeed SA, **Muhammad JS**, et al. *In vitro* and *in vivo* anti-*Helicobacter pylori* activity of selected medicinal plants employed for the management of gastrointestinal disorders. *Pak J Pharm Sci* 2020 Nov; 33(6): 2809-14.
17. Bajbouj K, Shafarin J, **Muhammad JS**, Ali A, Unnikannan H, Suleiman B, Al-Jabi N, Menon K, Hamad M. Estrogen signaling differentially alters iron metabolism in monocytes in an Interleukin 6-dependent manner. *Immunobiology* 2020 Sep; 225(5): 151995. **[IF: 3.18]**
18. **Muhammad JS**, Islam N, Mehboobali N, Iqbal K, Azam I, Iqbal MP. Lack of association of *HFE* gene polymorphism with high body iron status in Pakistani patients with type 2 diabetes mellitus. *J Pak Med Assoc* 2020; 1-16. doi.org/10.47391/JPMA.563.
19. Li M, Wu C, **Muhammad JS**, Yan D, Tsuneyama K, Hatta H, Cui Z, Inadera H. Melatonin sensitises shikonin-induced cancer cell death mediated by oxidative stress via inhibition of the SIRT3/SOD2-AKT pathway. *Redox Biology* 2020 Sep; 36: 101632. **[IF: 9.98]**

## Curriculum vitae

20. **Muhammad JS\***, Bajbouj K, Shafarin J, Hamad M\*. Estrogen-induced epigenetic silencing of *FTH1* and *TFRC* genes reduces liver cancer cell growth and survival. *Epigenetics*. 2020;1-17. doi: 10.1080/15592294.2020.1770917. **[IF: 4.91]**
21. Zakki SA, **Muhammad JS**, Li J-L, Sun L, Li M-L, Feng Q, Li Y-L, Cui Z-G, Inadera H. Melatonin triggers the anticancer potential of Phenylarsine Oxide via induction of apoptosis through ROS generation and JNK activation. *Metallomics*. 2020 Mar 1;12(3):396-407. **[IF: 3.79]**
22. Khan SM, **Muhammad JS**, Khan A, Khan MR, Ghias K. Genetic risk factors associated with gallbladder carcinoma. *Pak J Physiol*. 2019; 15(4): 66-70.
23. **Muhammad JS\***, Eladl MA, Khoder G. *Helicobacter pylori*-induced DNA Methylation as an Epigenetic Modulator of Gastric Cancer: Recent Outcomes and Future Direction. *Pathogens* 2019; 8(1): 23. **[IF: 3.4]**
24. **Muhammad JS\***, Ishaq M, Ahmed K. Genetics and Epigenetics Mechanism in the Pathogenesis of Behçet's Disease. *Curr Rheumatol Rev*. 2019;15(1):7-13.
25. **Muhammad JS**, Jayakumar MN, Elemam NM, Venkatachalam T, Raju TK, Hamoudi RA, Maghazachi AA. Gasdermin D Hypermethylation Inhibits Pyroptosis and LPS-Induced IL-1 $\beta$  Release from NK92 Cells. *Immunotargets Ther*. 2019 Oct 14; 8: 29-41.
26. Khoder G, **Muhammad JS\***, Mahmoud I, Soliman SSM, Burucoa C. Prevalence of *Helicobacter pylori* and Its Associated Factors among Healthy Asymptomatic Residents in the United Arab Emirates. *Pathogens*. 2019;8(2): 44. pii: E44. doi: 10.3390/pathogens8020044. **[IF: 3.4]**
27. Ishaq M, Razzaque S, Shohail F, Kumar A, **Muhammad JS\***. Onset of Hypertension in Leflunamide Treated Low Socioeconomic Rheumatoid Arthritis Patients: An unseen iceberg. *Curr Rheumatol Rev*. 2019;15(3):242.
28. **Muhammad JS\***, Ishaq M. Clinical patterns of seronegative spondyloarthropathies in a tertiary centre in Pakistan. *J Taibah Univ Med Sci*. 2018 Mar 13(3): 298-301.
29. **Muhammad JS**, Nanjo S, Ando T, Yamashita S, Maekita T, Ichinose M, Ushijima T, Tabuchi Y, Sugiyama T. Autophagy impairment by *Helicobacter pylori*-induced methylation silencing of *MAP1LC3Av1* causes gastric carcinogenesis. *Int J Cancer*. 2017 May 15;140(10):2272-2283. **[IF: 5.14]**
30. **Muhammad JS\***, Khan MR, Ghias K. DNA methylation as an epigenetic regulator of gallbladder cancer: An overview. *Int J Surg*. 2018 Mar 27;53:178-183. **[IF: 3.35]**
31. **Muhammad JS\***, Zaidi SF, Saeed SA, Ishaq M. Current status of *Helicobacter pylori* association with hematological and cardiovascular diseases: A mini review. *J Pak Med Assoc*. 2017 Jun;67(6):907-911.
32. Mihara H, Suzuki N, **Muhammad JS**, Nanjo S, Ando T, Fujinami H, Kajiura S, Hosokawa A, Sugiyama T. Transient receptor potential vanilloid 4 (TRPV4) silencing in *Helicobacter pylori*-infected human gastric epithelium. *Helicobacter*. 2016 Sep 30. doi: 10.1111/hel.12361 **[IF: 4.67]**
33. Mihara H, Suzuki N, Boudaka A, **Muhammad JS**, Tominaga M, Tabuchi Y, Sugiyama Y. TRPV4-dependent calcium influx and ATP release in mouse and rat gastric epithelia. *World J Gastroenterol*. 2016 Jun 28; 22(24):5512-9. **[IF: 3.36]**
34. **Muhammad JS**, Zaidi SF, Zhou Y, Sakurai H, Sugiyama T. Novel epidermal growth factor receptor pathway mediates release of human  $\beta$ -defensin 3 from *Helicobacter pylori*-infected gastric epithelial cells. *Pathog Dis*. 2016; 74(3). pii: ftv128.
35. **Muhammad JS\***. Host versus *Helicobacter pylori*: Insights into Novel Host-Immune Response Mechanism. *J Pioneer Med Sci*. 2016; 6(2): 46-47. [Editorial]
36. Zaidi SF, Refaat A, Zhou Y, **Muhammad JS**, Shin MS, Saiki I, Sakurai H, Sugiyama T. *Helicobacter pylori* Induces Serine Phosphorylation of EGFR via Novel TAK1-p38 Activation Pathway in an HB-EGF-Independent Manner. *Helicobacter*. 2015; 20(5):381-9. **[IF: 3.36]**
37. **Muhammad JS**, Zaidi SF, Shaharyar S, Refaat A, Usmanghani K, Saiki I, Sugiyama T. Anti-inflammatory Effect of Cinnamaldehyde in *Helicobacter pylori* Induced Gastric Inflammation. *Biol Pharm Bull*. 2015; 38(1):109-15.
38. **Muhammad JS**, Zaidi SF, Ishaq M. Ins and outs of *Helicobacter pylori* association with autoimmune rheumatic diseases. *World J Rheumatol* 2015; 5(2): 96-100.
39. Zaidi SF, Aziz M, **Muhammad JS**, Kadowaki M. Diverse pharmacological properties of *Cinnamomum cassia*: A review. *Pak J Pharm Sci*. 2015; 28(4): 1433-48.
40. Zaidi SF, **Muhammad JS**, Usmanghani K, Sugiyama T. Pharmacological ins and outs of medicinal plants against *Helicobacter pylori*: A review. *Pak J Pharm Sci*. 2015; 28(3) suppl: 1171-76.
41. **Muhammad JS**, Zaidi SF, Usmanghani K. Epidemiological and Pathophysiological Review of *Helicobacter pylori*. *J Pharmacy and Pharmaceutical Sci*. 2014; 2(2):45-55.
42. Ishaq M, **Muhammad JS\***, Hameed K. Risk of restless leg syndrome in low socioeconomic rheumatoid arthritis. *Mod Rheumatol*. 2013; 23(4):705-8.

## Curriculum vitae

43. **Muhammad JS**, Sugiyama T, Zaidi SF. Gastric Pathophysiological ins and outs of *Helicobacter pylori*: A review. *J Pak Med Assoc.* 2013; 63(12): 1528-33.
44. **Muhammad JS**, Zaidi SF, Sugiyama T. Epidemiological ins and outs of *Helicobacter pylori*: A review. *J Pak Med Assoc.* 2012; 62(9): 955-959.
45. Zaidi SF, **Muhammad JS**, Shaharyar S, Usmanghani K, Gilani AH, Jafri W, Sugiyama T. Anti-inflammatory and cytoprotective effects of selected Pakistani medicinal plants in *Helicobacter pylori*-infected gastric epithelial cells. *J Ethnopharmacol.* 2012; 141(1); 403-10.
46. Ishaq M, **Muhammad JS\***, Hameed K, Mirza AI. Leflunomide or methotrexate? Comparison of clinical efficacy and safety in low socio-economic rheumatoid arthritis patients. *Mod Rheumatol.* 2011; 21(4):375-380.
47. Ishaq M, **Muhammad JS\***, Mahmood K. Uveitis, not just an ophthalmologist concern: need a multidisciplinary approach. *J Pak Med Assoc.* 2012; 62(2): 92-97.
48. Naqvi SA, Ishaq M, Haider Q, **Mohammad JS\***. Tremors and Its Determinants: A 7-year study at secondary care hospital. *J Pak Med Assoc.* 2011; 61(9): 896-900.
49. Ishaq M, **Mohammad JS\***, Naqvi SA, Shaikh MI. Adult-Onset Still's Disease with Autoimmune Haemolytic Anaemia: Two rarities in combination. *J Pak Med Assoc.* 2011; 61(12): 1239-1241.
50. **Muhammad JS\***. Developing a new scoring system for the diagnosis of acute appendicitis. *J Pioneer Med Sci.* 2011; 1(2): 63-64. [Editorial]
51. Ishaq M, **Muhammad JS\***, Hammed K (2011). "Pulmonary Hypertension in Systemic Sclerosis". In: Pulmonary Hypertension – From Bench Research to Clinical Challenges. Sulica R & Preston I. Intech, Croatia. ISBN 978-953-307-835-9. [Book Chapter]
52. Brohi H, Kumar A, Ishaq M, Ali SS, **Mohammad JS\***. Knowledge Attitude and Practice of General Physician in Treatment of Headaches in Karachi. *Ann Abbasi Shaheed Hosp Karachi Med Dent Coll.* 2010; 15(2):117.
53. Khan Z, Kumar A, Ishaq M, **Mohammad JS\***. Diabetic Autonomic Neuropathy: Frequent Life Disabling Complication of Diabetes Mellitus in Low Socioeconomic Group. *Ann Abbasi Shaheed Hosp Karachi Med Dent Coll.* 2010; 15(1):46-53.
54. Naqvi SA, Ishaq M, Ilyas MS, Haider Q, Siddiqui A, Hasnain T, **Mohammad JS\***. Tremors; Myths and Misconceptions; A 7-year clinical survey 2002-2009. *Ann Abbasi Shaheed Hosp Karachi Med Dent Coll.* 2010; 15(1):63-69.
55. Sohani ZN, **Mohammad JS**. Psychological Stress in an Urban Squatter Settlement. *J Pak Med Assoc.* 2009; 59(2):126.

## **FEATURED INTERNATIONAL PRESENTATIONS**

1. **Muhammad JS**. "Estrogen-induced epigenetic modulation of Breast Carcinogenesis". '**Epigenetics - From Bench to Clinic' (Abcam DNA-dependent epigenetic events)**, Online Webinar. Nov 16<sup>th</sup>, 2020 [Invited Speaker, ORAL presentation]
2. **Muhammad JS**. "Epigenetic modulation of gasdermin-mediated pyroptosis inhibits LPS-induced inflammation in immune cells". **The 7<sup>th</sup> Emirati-German Conference**, UAE. Nov 4<sup>th</sup>, 2019. [ORAL]
3. **Muhammad JS**. "Estrogen-induced epigenetic silencing of iron metabolism-related genes reduces the growth potential of hepatocellular carcinoma cells". **United European Gastroenterology Week (UEGW)**, Barcelona, Spain. Oct 19<sup>th</sup> – 23<sup>rd</sup>, 2019. [POSTER OF EXCELLENCE]
4. **Muhammad JS**. "Epigenetic silencing of an autophagy gene by *Helicobacter pylori* facilitates carcinogenic transformation of gastric epithelial cells", **United European Gastroenterology Week (UEGW)**, Barcelona, Spain. Oct 28<sup>th</sup> – Nov 1<sup>st</sup>, 2017. [ORAL]
5. **Muhammad JS**. "Potent anti-*Helicobacter pylori* activity of medicinal plants from the Kingdom of Saudi Arabia", **The 22<sup>nd</sup> Annual Meeting of the Japanese Society for Helicobacter Research**, at Oita, Japan. Jun 24<sup>th</sup> – 26<sup>th</sup>, 2016. [POSTER]
6. **Muhammad JS**. "Novel EGFR pathway mediates release of human beta-defensin 3 from *Helicobacter pylori*-infected gastric epithelial cells", **The 21<sup>st</sup> Annual Meeting of the Japanese Society for Helicobacter Research**, at Kobe, Japan. Jun 26<sup>th</sup> – 27<sup>th</sup>, 2015. [ORAL]
7. **Muhammad JS**. "Release of Human  $\beta$ -Defensin 3 From Gastric Epithelial Cells Infected With *Helicobacter pylori* by Novel EGFR Phosphorylation via p38/ERK Activation", **Digestive Disease Week**, Chicago, USA. May 4<sup>th</sup> – 6<sup>th</sup>, 2014. Gastroenterology, Vol. 146, Issue 5, S-503. [POSTER]
8. **Muhammad JS**. "Inhibition of *H. pylori*-induced inflammation in gastric epithelial cells by herbs and spices", **The 19<sup>th</sup> Annual Meeting of the Japanese Society for Helicobacter Research**, at Nagasaki, Japan. Jun 28<sup>th</sup> – 29<sup>th</sup>, 2013. [ORAL]