

1. Research and publications:

Based on annual report of 2018-2019

Papers published:

1. Olatunya O, **Adekile AD**. Evaluation of socio-demographic, clinical and laboratory markers of sickle leg ulcers among young Nigerians. *Nig J Clin Pract*. 2018 Jul;21(7):882-887. doi: 10.4103/njcp.njcp_4_18.
2. **Adekunle Adekile**, Meaad Hassan, Akram Asbeutah, Mohamed Al-Hinai, Omar Trad, Nayef Farhan. Transcranial Doppler in Peninsular Arab Patients with Sickle Cell Disease. *J Ultrasound in Med*. 2018 May 6. doi: 10.1002/jum.14680.
3. Olatunya OS, Albuquerque DM, **Adekile A**, Costa FF. Influence of alpha thalassemia on clinical and laboratory parameters among Nigerian children with sickle cell anemia. *J Clin Lab Anal*. 2018 Aug 20:e22656. doi: 10.10¹02/jcla.22656.
4. **Adekunle Adekile**, Renu Gupta, Abdullah Al-Khayat, Ahmed Mohammed, Said Atyani, Diana Thomas. Risk of avascular necrosis of the femoral Head in children with sickle cell disease on hydroxyurea: MRI evaluation. *Ped Blood Canc*. 2019 Feb;66(2):e27503. doi: 10.1002/pbc.27503.
5. Akram M. Asbeutah, Abdullah A. AlMajran, **Adekunle Adekile**. Pattern of cerebral blood flow and the interrelationship of vascular parameters of transcranial Doppler imaging in children with sickle cell disease. *J Clin Ultrasound*. 2019. 2019 Mar;47(3):128-132. doi: 10.1002/jcu.22663.
6. Nanda A, Al-Abboh H, Zahra A, Al-Sabah H, Gupta A, **Adekile A**. Neutrophilic Panniculitis in a Child with MYSM1 Deficiency. *Pediatric Dermatology*. 2019 Feb 12. doi: 10.1111/pde.13757.
7. **Adekunle D. Adekile**, Sondus Al-Sherida, Rajaa Marouf, Nada Mustafa and Diana Thomas. The Sub-Phenotypes of Sickle Cell Disease in Kuwait. *Hemoglobin*. 2019 <https://doi.org/10.1080/03630269.2019.1610427>.
8. **Haider MZ, Rasoul MA**, Al-Mahdi M, Al-Kandari H, **Dhaunsi GS** (2018). Association of protein tyrosine phosphatase non-receptor type 22 gene functional variant C1858T, HLA-DQ/DR genotypes and autoantibodies with type-1 diabetes mellitus in Kuwaiti Arabs. *PLOS ONE* 13(6):e0198652. <https://doi.org/10.1371/journal.pone.0198652>.
9. Al-Awadhi AM, **Haider MZ, Sukumaran J**, Balakrishnan S (2018). High prevalence of protein tyrosine phosphatase non-receptor N22 gene functional variant R620W in systemic lupus erythematosus patients from Kuwait: implications for disease susceptibility. *BMC Rheumatology* 2:7; <https://doi.org/10.1186/s41927-018-0015-x>.
10. Nakwan N, Jain S, Kumar K, Hosono S, **Hammoud M**, Yahia Elsayed Y, Ariff S, Hasan B, Khowaja W, Bing PW. An Asian multicenter retrospective study on persistent pulmonary hypertension of the newborn: incidence, etiology, diagnosis, treatment and

outcome.J Matern Fetal Neonatal Med. 2018 Oct 14:1-11. doi: 10.1080/14767058.2018.1536740. [Epub ahead of print]

11. **Al-Herz W**. A Systemic Review on the Prevalence of Atopic Diseases in Children in the Arabian Peninsula. *Med Princ Pract*. 27(5):436-442, 2018
12. Tirosch I, Yamazaki Y, Frugoni F, Ververs FA, Allenspach EJ, Zhang Y, Burns S, **Al-Herz W**, Noroski L, Walter JE, Gennery AR, van der Burg M, Notarangelo LD, Lee YN. Recombination activity of human recombination-activating gene 2 (RAG2) mutations and correlation with clinical phenotype. *J Allergy Clin Immunol*. 43(2):726-735, 2019.
13. Aydin SE, Freeman AF, **Al-Herz W**, Al-Mousa HA, Arnaout RK, Aydin RC, Barlogis V, Belohradsky BH, Bonfim C, Bredius RG, Chu JI, Ciocarlie OC, Doğu F, Gaspar HB, Geha RS, Gennery AR, Hauck F, Hawwari A, Hickstein DD, Hoenig M, Ikinçiogullari A, Klein C, Kumar A, Ifversen MRS, Matthes S, Metin A, Neven B, Pai SY, Parikh SH, Picard C, Renner ED, Sanal Ö, Schulz AS, Schuster F, Shah NN, Shereck EB, Slatter MA, Su HC, van Montfrans J, Woessmann W, Ziegler JB, Albert MH; Inborn Errors Working Party of the European Group for Blood and Marrow Transplantation and the European Society for Primary Immunodeficiencies. Hematopoietic Stem Cell Transplantation as Treatment for Patients with DOCK8 Deficiency. *J Allergy Clin Immunol Pract*. 7(3):848-855, 2019.
14. **Al-Herz W**, Chou J, Delmonte OM, Massaad MJ, Bainter W, Castagnoli R, Klein C, Bryceson YT, Geha RS, Notarangelo LD. Comprehensive Genetic Results for Primary Immunodeficiency Disorders in a Highly Consanguineous Population. *Front Immunol*. 2019 Jan 15;9:3146.
15. Farmer JR, Foldvari Z, Ujhazi B, De Ravin SS, Chen K, Bleesing JJH, Schuetz C, **Al-Herz W**, Abraham RS, Joshi AY, Costa-Carvalho BT, Buchbinder D, Booth C, Reiff A, Ferguson PJ, Aghamohammadi A, Abolhassani H, Puck JM, Adeli M, Cancrini C, Palma P, Bertaina A, Locatelli F, Di Matteo G, Geha RS, Kanariou MG, Lycopoulou E, Tzanoudaki M, Sleasman JW, Parikh S, Pinero G, Fischer BM, Dbaibo G, Unal E, Patiroglu T, Karakukcu M, Al-Saad KK, Dilley MA, Pai SY, Dutmer CM, Gelfand EW, Geier CB, Eibl MM, Wolf HM, Henderson LA, Hazen MM, Bonfim C, Wolska-Kuśnierz B, Butte MJ, Hernandez JD, Nicholas SK, Stepensky P, Chandrakasan S, Miano M, Westermann-Clark E, Goda V, Kriván G, Holland SM, Fadugba O, Henrickson SE, Ozen A, Karakoc-Aydiner E, Baris S, Kiykim A, Bredius R, Hoeger B, Boztug K, Pashchenko O, Neven B, Moshous D, Villartay JP, Bousfiha AA, Hill HR, Notarangelo LD, Walter JE. Outcomes and treatment strategies for autoimmunity and hyperinflammation in patients with RAG deficiency. *J Allergy Clin Immunol Pract*. 2019 Mar 12. pii: S2213-2198(19)30260-0.
16. **Rasoul MA, Haider MZ**, Al-Mahdi M, Al-Kandari H, **Dhaunsi GS** (2019) Relationship of four vitamin D receptor gene polymorphisms with type 1 diabetes mellitus susceptibility in Kuwaiti children. *BMC Pediatrics* 19:71 <https://doi.org/10.1186/s12887-019-1448-0>.

Funded projects:

1. **Adekile AD**, Marouf R, **Haider M**, Raghupathy R, Wali Y, AlKindi S, Sharma PN (Co-Investigator): Comparative study of sickle cell disease phenotypes in Kuwait and Oman: cytokine and bone morphogenic gene polymorphisms associated with osteonecrosis (2019-2022); Funded by Kuwait Foundation for the Advancement of Science (KFAS).
2. Maternal vitamin D level in relation to neonatal infections and child health outcomes.
Hammoud M: Co-Investigator
Funding institution: Kuwait University, Project # MC01/15
3. Role of Carnitine and Amino-Acids in the Etiopathogenesis of Type I Diabetes in the Experimental NOD Mouse Model
Hammoud M: Co-Investigator
Funding institution: Kuwait University, Project # RM02/15
4. In vitro effect of Galactose and/or Galactose-1- Phosphate on Insulin-like Growth Factor 1 (IGF-1) receptor and IGF-1 activity in neonate skin fibroblast cultures.
Gursev S. Dhaunsi: Principal Investigator
Funding institution: Kuwait University, Project # MK 01/16
5. Effect of glutamine on growth factor activity in bile acid-induced toxicity in hepatocyte cultures.
Wafa'a Al-Qabandi: Principal investigator:
Gursev Dhaunsi: Co-investigator
Funding institution: Kuwait University, Project # MK01/18
6. Kuwait National Primary Immunodeficiency Registry.
Waleed Al-Herz: Principle Investigator
Funding agency: Shire.
7. Reprogramming fibroblasts to pluripotency: modeling primary immunodeficiencies with induced pluripotent stem cells. PI: Prof. Luigi Notarangelo (Children's Hospital Boston/Harvard University).
Waleed Al-Herz: Co-Investigator
Funding agency: National Institute of Allergy and Infectious Diseases, NIH (USA)
8. Immune repertoire and function in typical and atypical SCID. PI: Prof. Luigi Notarangelo (Children's Hospital Boston/Harvard University).
Waleed Al-Herz: Co-Investigator
Funding agency: National Institute of Allergy and Infectious Diseases, NIH (USA)

Community services:

To work along the line of the Faculty of Medicine mission, the department of pediatrics is providing a number of community services beside the teaching and research activities. These services aim to improve child's health and public awareness of children's health and disease including, but not limited to the following:

- Teaching postgraduate residents under KIMS programs.
- Teaching MOH staff during various clinical service activities.
- Provide diagnostic and therapeutic care to patients evaluated at MOH facilities.
- Participation in committee activities related to MOH.
- Participation in various education activities like seminars, symposia, workshop and conferences.
- Public education through social media, newspapers and TV interviews.

Staff and Physical Facilities:

The teaching facilities available at the Faculty of Medicine and Health Sciences Centre are utilized by the members of the department for delivering lectures, seminars, PBLs, tutorials, etc. In addition, the following physical facilities are used in the Department for teaching, research, diagnostic services and staff offices, etc.