

Al Jalila Foundation awards AED 5 million to boost medical research in the UAE

Summary of research projects and fellowships funded by Al Jalila Foundation:

Dr Farah Benyettou, from the New York University of Abu Dhabi, is studying the relation between breast cancer and medical nanotechnology; how medical nanotechnology allows to successfully treat patient with tumour cells. (Cancer)

Dr Shaheenah Dawood, from the Mediclinic City Hospital, is studying two questions: Is the molecular pathology of the ethnicities of the Middle Eastern/Asian patient with non metastatic breast cancer the same as that of Caucasians? What components of the major pathways are aberrant when integrating molecular changes at the DNA, methyl DNA and RNA levels, and can phosphoproteomic changes act as a summary of downstream molecular changes? (Cancer)

Dr Manal Awad, from the University of Sharjah, is studying the effects of oral hygiene on the quality of life / health among diabetic patients? (Diabetes)

Dr Ghaleb Hussein, from the American University of Sharjah, aims to prepare an ultrasound-triggered targeted drug delivery system for breast cancer treatment, the research will investigate the ability of the system to increase the effectiveness of chemotherapeutic agents on tumor cells and to decrease their side effects on healthy cells. (Cancer)

Dr Hadia Radwan, from the University of Sharjah, is studying the association between breastfeeding and cardiometabolic risk factors and how breastfeeding influences the mother's body weight and body composition as compared to non-lactating mothers. (Obesity)

Dr Dima Abdelmannan, from Dubai Health Authority, is studying the ability of a single Dexamethasone stress test to identify individuals at high future risk for type 2 diabetes while they are still normal glucose tolerant. (Diabetes)

Dr Fatheya Al-Awadi and Dr Mohamed Hassane, from Dubai Health Authority, are working to increase the safety of diabetes management during Ramadan, the month of fasting. (Diabetes)

Dr Naoufel Werghi, from Khalifa University of Science and Technology, is developing efficient techniques for computer-assisted detection of colorectal cancer precursors in endoscopic videos. (Cancer)

Dr Suryani Lukman, from Khalifa University of Science and Technology, is studying the unique structural features of Rab proteins and the novel druggable pockets on the structure of the Rab proteins that can be targeted using small molecules with minimal side effects. (Cancer)

Dr Mohammad Qasaimeh, from the New York University of Abu Dhabi, is developing a rapid and high-throughput device capable of isolating prostate circulating tumor cells (CTCs) from blood samples with high recovery and purity rates. The device is envisioned as a tool used in clinics to monitor prostate cancer progression. (Cancer)

Dr Ahmed Taher El-Serafi, from the University of Sharjah, is studying the best three dimensional model of normal human fat: What the effect of the lipolytic agents sodium deoxycholate and/or phosphatidylcholine is on the development of this fat model; the changes in the size and the structure of the mature model; and the molecular changes associated with the cell differentiation towards the adipogenic lineage. (Obesity)

Dr Starling David, from the United Arab Emirates University, is analysing the importance of the early developmental environment for normal development and growth of the organism and how changes in them alter the susceptibility of the organism to different metabolic diseases such as type 2 diabetes and obesity in later life. (Obesity)

Professor Riad Bayoumi, from the Mohamed Bin Rashid Medical University, is studying the gene variants that make women susceptible to diabetes during pregnancy and investigating common susceptibility gene variants for both diabetes in adults and diabetes in women during pregnancy. The study will investigate the effect of lifestyle on the genome of diabetic patients. (Diabetes)

Dr Nabeel Al Yateem, from the University of Sharjah, is studying the mental health literacy level of healthcare professionals working with children and adolescents with chronic illnesses. (Mental Health)

Dr Habiba Alsafar, from Khalifa University of Science and Technology, is studying the Improved HLA matching for Bone Marrow Transplantation using Next Generation Sequencing (NGS) Technology. (Cancer)

Dr Azhar Abu Ali, from the Dubai Health Authority, is exploring the psychological experience of Emirati mothers and fathers who are caring for a child with a chronic paediatric condition and its impact on familial functioning and adjustment. (Mental Health)

Dr Syed Ilyas Shehnaz, from Gulf Medical University Ajman, is studying the prevalence of responders and non-responders to metformin in Arab patients with Type 2 diabetes mellitus (T2DM) in UAE and investigating the association of genetic variations in OCT1 and MATE1 with the glycemic response to metformin among the study population. (Diabetes)

Dr Ammar Albanna, from Al Jalila Children's Speciality Hospital, is conducting a study of UAE children with autism spectrum disorder. (Mental Health)

Dr Taleb H. AlTel, from the University of Sharjah, aims to design and synthesize novel privileged structures as anticancer lead drug candidates. The discovery of new privileged small molecule probes for investigating their biological function against breast and prostate Cancers through multidisciplinary iterative efforts that combines medicinal chemistry and pharmacology. (Cancer)

Prof Tim McGloughlin, from Khalifa University of Science and Technology, aims to develop a new approach to the analysis of Computed Tomography (CT) images using combined 2D and 3D deformable shape models to identify and quantify the calcification content of the abdominal aortic aneurysmal tissue. (Cardiovascular)

Dr Ajlan Al Zaki undertook his Fellowship for Medical Students Research Elective training at University of Pennsylvania, USA. With the fellowship opportunity from Al Jalila Foundation during the last summer Dr Ajlan was able to pursue his research in the field of nanomedicine and targeted therapeutics. The group was successful in synthesizing new nanotherapeutics capable of serving as contrast agents for cancer imaging and cancer therapy. (Cancer)

Ms Hiba Al Balooshi is currently undertaking her Fellowship for Medical Students Research Elective training at the Institute of Genetic Medicine in Newcastle University, UK. The main objective of her research is to conduct a Genome Wide Association Study (GWAS) to identify genes that are associated with substance abuse disorder in UAE population. (Genomics)