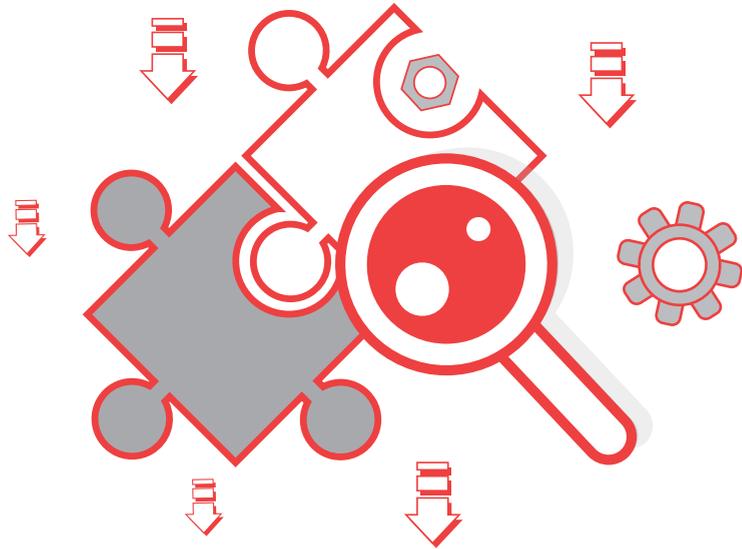


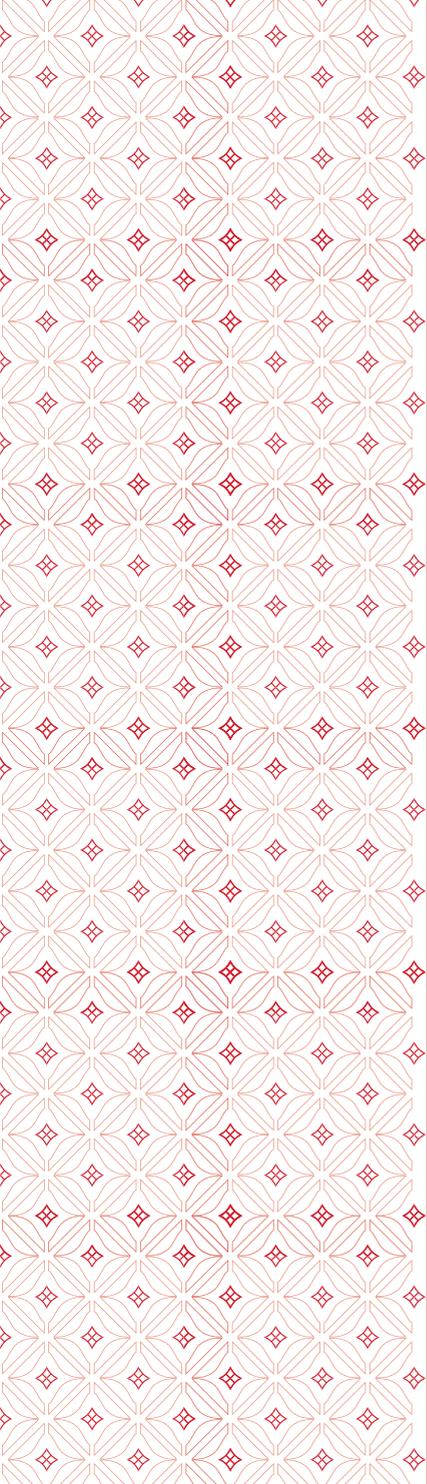


# PROFILES OF DOCTORATE DISSERTATIONS



2017-2018  
ACADEMIC YEAR

"جامعة المستقبل"  
"The University of the Future"



DOCTOR OF  
PHILOSOPHY(PHD)  
GRADUATES

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# PREFACE

The “Profiles of Doctorate Dissertations” publication is prepared annually by the College of Graduate Studies at the United Arab Emirates University (UAEU). The purpose of this publication is to highlight the research accomplishments of UAEU’s doctorate students who have successfully defended their dissertations and graduated.

This 2017-2018 issue features the fourth class of graduates of the Doctor of Philosophy (PhD) program and the second class of graduates of the Doctorate of Business Administration (DBA) program. It includes the profiles of 15 PhD students and 10 DBA students, which are ordered chronologically based on their dissertation defense dates. Each profile consists of a brief introductory information of the student, an abstract of the student’s dissertation, a brief statement on the research relevance and potential impact, a list of the main publications resulted from the research, and the student’s career aspirations. The information included in these profiles was provided by the students or their faculty advisors.

For inquiries, please contact the College of Graduate Studies at [cgs@uaeu.ac.ae](mailto:cgs@uaeu.ac.ae) or +971 (0) 3 713 4048.

# HEBA AHMED GHANIM ABOUKHOUSA

Department of Chemistry  
College of Science



DISSERTATION	
Title	Regioselective synthesis of biologically active pyrazolone nucleosides and their benzoyl analogues
Faculty Advisor	Dr. Ibrahim Abdou
Defense Date	04 May 2017
Abstract	<p>Increasing incidence of anticancer and antimicrobial resistance are the most common concerns in the medical field. Cancer is a serious disease that can affect almost every tissue lineage in the human body and poses great challenges to medicinal science. In addition, many antibiotics have a tendency to becoming resistant and are prone to severe adverse effects after long term use. Hence, there is an urgent need to discover and develop novel antitumor drug molecules which could effectively inhibit proliferative pathways with fewer side effects. Also, increasing demand to synthesize novel antimicrobial agents that are active against resistant strains.</p> <p>This research aimed to design, synthesis, physical studies and biochemical evaluated of some novel pyrazolones and their corresponding ribonucleoside, deoxyribonucleoside and benzoyl analogues for their in vitro antimicrobial and anticancer activities.</p> <p>Antimicrobial properties of the title compounds were investigated against Gram positive and Gram negative bacterial as well as fungal strains. Anticancer activity was performed against HL60 cell lines. Antimicrobial activity results revealed that 113c, 116a and 118c were found the most effective agents with better MIC values, compared to some existing antimicrobial drugs, such as Ceftriaxone and amphotericin B. On the other hand, the results of anticancer study indicated that the synthesized compounds 117a, 122a,b and 123 were found to be most potent anticancer agent against the cancerous HL60 cell line and compounds 117e,f, 122a, 124c,d,f, and 124g showed good affect against the A-549 cell line. Also, pyrazolones derivatives are more sensitive against the lung cancer. Binding affinity and selectivity of the synthesized compounds towards ct-DNA were studied at different conditions of pH and solvents; The results showed that compound 118c interact and stabilize the ct-DNA which can be anti-cancer agent.</p>

	Therefore, these compounds, open new avenues for the development of anti-bacterial and anti-cancer therapeutic agents for the treatment of infectious and cancer diseases. Also, these results give an insight into the structure-activity relationships, which are tremendously important for the design of further new antimicrobial and anticancer agents.
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### RESEARCH RELEVANCE AND POTENTIAL IMPACT

Since cancer is considered the third leading cause of death in the UAE, this study focused on the synthesis of newly synthesized pyrazolone nucleosides to be used in the treatment of cancer. Drug discovery programs focus on the development of novel chemotherapeutics to reduce cancer's risk, delay the spread of cancer, or in some cases destroy it completely. The chemotherapeutic agents are either naturally occurring compounds that have been isolated from plants or synthetic compounds. Nucleosides containing fluorine atoms have several medical applications such as antiviral, antifungal and antiinflammatory agents.

This research aimed to develop some novel pyrazoline nucleosides which may have potential activities against cancer cells. Pyrazoline derivatives are known to have antiproliferative effect against many types of cancer. For example, in the last decade, many Pyrazolone nucleosides were discovered and been used for treatment of cancer. The new designed pyrazolone nucleosides as well as the benzoyl ester expected to have new anticancer prosperities. The results of this project may lead to development of anticancer agents in the UAEU.

Furthermore, new and reemerging infectious diseases will continue to pose serious global health threats into the 21st century and according to the World Health Organization report, these are still the leading cause of death among humans worldwide. Among infectious diseases, tuberculosis claims approximately two million deaths per year worldwide. In addition, agents that reduce the duration and complexity of the current therapy and solve the problem of resistance to conventional antibiotics would have a major impact on the overall cure rate to combat bacterial infection. Subsequently, there is an urgent need for the development of new drug candidates with newer targets and alternative mechanism of action. The research is focused as well in using some of the novel pyrazolones derivatives against common pathogenic bacteria.

### RELEVANT PUBLICATIONS

- Heba A. K., Ibrahim M. A., (2014, February). 6th International Conference on Drug Discovery & Therapy, Dubai. Synthesis of Novel Pyrazolone Nucleosides as Antimicrobial Agents.
- Heba A. K., Alaa A. S. and Ibrahim M. A., (2014, February). The 6th annual International Workshop on Advanced Materials (IWAM 2014), , Ras Al Khaimah. Synthesis and antimicrobial evaluation of novel pyrazolone nucleosides.

### CAREER ASPIRATIONS

I am high Motivated and hard worker on individual level or team environment level. I'm seeking for new challenges that effectively utilizes the education, experiences and certifications that I have. Also I'm looking to join a progressive organization that offers opportunities for advancement.



## FATMA HUSSAIN SAJWANI

Department of Physiology  
College of Medicine and Health Sciences



DISSERTATION	
Title	The Effects of Frondoside A in Acute Leukemia
Faculty Advisor	Prof. Thomas E. Adrian
Defense Date	21 August 2017
Abstract	<p>Acute leukemia remains a major cause of mortality and new drugs are needed. Frondoside A is a triterpenoid glycoside from the sea cucumber, <i>Cucumaria frondosa</i> that has antitumor effects in solid cancers. We investigated the effects of frondoside A in acute leukemia in comparison with the conventional drugs.</p> <p>Acute leukemia cell lines were treated with frondoside A, vincristine, asparaginase and prednisolone alone and in combination with frondoside A. Cell viability was assessed. Induction of apoptosis was examined and expression of apoptosis-related genes and proteins was investigated.</p> <p>Frondoside A enhanced the anticancer effects of the conventional drugs with induction of apoptosis. Frondoside A treatment increased expression of genes of the intrinsic, extrinsic and the executioner apoptosis pathways. Frondoside A treatment increased expression of the cyclin-dependent kinase inhibitor, p21. Frondoside A also markedly increased expression of genes in the NF<math>\kappa</math>B pathway, indicating activation of this survival pathway.</p> <p>Frondoside A has marked anti-leukemia effects and potentiates the effects of other drugs currently used to treat acute leukemia. Frondoside A may be a valuable addition to the therapeutic options patients by sparing the side-effects of high-dose therapy. Interaction with the NF<math>\kappa</math>B pathway opens a new possible avenue for therapeutic intervention.</p>

### RESEARCH RELEVANCE AND POTENTIAL IMPACT

Data from the current project highlighted the potential use of frondoside A for the treatment of acute leukemia. Its use in high risk patients might prove beneficial since it markedly potentiates the effect of chemotherapeutics currently included in the treatment protocols.

### RELEVANT PUBLICATIONS

N/P

### CAREER ASPIRATIONS

Being a hematologist working in the field of leukemia diagnosis and treatment, I hope that the techniques I have learnt in my PhD project will help me to improve the diagnostic methods currently available in clinical practice.

Acute leukemia is a common type of cancer and a major cause of death. Finding new treatment modalities can improve the patients' outcome and for this; understanding the mechanism of action of different anti-cancer compounds and their interaction is mandatory.

## MAHMOUD FAHID GHARAIBEH

Department of Special Education  
College of Education



DISSERTATION	
Title	Testing the Double-Deficit Hypothesis in Arabic Language among Emirati Students in Grade-3
Faculty Advisor	Prof. AbdelAziz Mustafa Sartawi
Defense Date	16 October 2017
Abstract	<p>The purpose of this dissertation was to test the validity of the double-deficit hypothesis as applied to a sample of third-grade Arabic-speaking students in the United Arab Emirates. The double-deficit hypothesis postulates that individuals with a combination of Rapid Automatized Naming (RAN) and Phonological Awareness (PA) deficits will tend to have worse reading ability than individuals with either a RAN deficit, a PA deficit, or no deficit. Thus, the double-deficit hypothesis has been advanced as an explanation of dyslexia.</p> <p>Descriptive statistics were used to describe the essential feature of data in the study, and a correlational study design was applied to determine whether reading ability scores significantly lower for a double-deficit group than for a RAN deficit group, a PA deficit group, and a no-deficit group. The study's results confirmed that students who had a double deficit had significantly lower reading ability scores than other groups. The study contributed to the sparse body of empirical research on the double-deficit hypothesis among young Arabic students. The study also pinpointed differences in RAN and PA performance across groups, using an approach of post hoc analysis that has not been attempted in previous studies of this kind.</p> <p>The findings suggest that Arabic-language educators, specialists, and caregivers must make an added effort to address the special needs of students with double deficits, especially in light of special orthographic and other features of the Arabic language.</p>

### RESEARCH RELEVANCE AND POTENTIAL IMPACT

The purpose of this research was to test the Double Deficit Hypothesis as applied to a sample of third-grade Arabic-speaking students in the UAE. The study's findings confirmed that students who had a Double Deficit had significantly lower reading ability scores than other groups. The results also suggest that Arabic-language educators must make an added effort to address the special needs of students with Double Deficit in each subgroup, taking into consideration the special orthographic and other features of the Arabic language. Thus, teachers ought to be aware of Arabic orthography, phonology, and morphology in order to direct their remediation time on different aspects of reading.

### RELEVANT PUBLICATIONS

N/P

### CAREER ASPIRATIONS

Presently, I will commit myself to write and do more researches in the dyslexia field among Emirati Students.

## NEHA ARIECKAL JACOB

Department of Mechanical Engineering  
College of Engineering



DISSERTATION	
Title	Design of Telescopic Beams Based on Parametric Studies Using FEA and Statistical Optimization
Faculty Advisor	Dr. Sangarappillai Sivaloganathan
Defense Date	14 November 2017
Abstract	<p>This dissertation describes an investigation on the behavior of the overlap area in telescopic cantilevers under tip loads.</p> <p>The main aim of this research is to address the question of 'how the overlap region of a telescopic beam behaves under a tip load' and to develop a new generic approach to the design of telescopic beams based on parametric studies using FEA and statistical optimization.</p> <p>Experimental investigations and exploratory analyses were carried out to study the behavior of RHS (Rectangular Hollow Section) Rings and RHS pieces. Based on these observations, theoretical explanations were developed and a methodology for the design of the inner beam assembly based on FEA and design of experiments was recommended. The recommended methodology was also implemented on a case study. Results showed that the overlap area can be treated as an assembly of RHS Rings and a middle section or an assembly of RHS pieces and a middle section. Further, the region near the bottom wearpads of the overlap area of the inner beam is identified as most vulnerable. RHS Rings are treated as an assemblage of horizontal beams and vertical columns whereas RHS pieces are treated as an assemblage of vertical and horizontal plates. When compressed transversely between platens, the constituent beams, columns, and plates in both RHS Rings and pieces, are subjected to corner moments. Further, when compressed between wearpads, an additional corner moment is introduced which in effect reduces the maximum load carrying capacity further. Because of the nature of the assembly, the end conditions of the constituent members of the RHS Ring and pieces are unknown and hence complete theoretical solutions are not derived.</p>

	Therefore, FEA and experimental designs were used to establish a design methodology for telescopic beams. Significant contributions from this study involve the explanation of the behavior of RHS Rings and RHS pieces when compressed transversely and the development of a new generic approach to the design of telescopic beams based on parametric studies using FEA and statistical optimization.
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### RESEARCH RELEVANCE AND POTENTIAL IMPACT

The aerospace industries in the United Arab Emirates are becoming a secondary source of revenue that compliments the oil and gas industry. The results of this research proposal feed directly to both, the MRO as well as the manufacturing of aircraft components. The telescopic beams are fundamental machinery in aircraft inspection and repair as well as in major aircraft structure manufacturing. Its flexibility facilitates easy maneuvering around the bulky aircraft components. It is anticipated that the results of this research will be utilized by the aircraft manufacturers and MRO operators. It will also demonstrate local capabilities to any future partnerships with international institutions.

### RELEVANT PUBLICATIONS

N. A. Jacob and S. Sivaloganathan, "Rectangular Hollow Section (RHS) Rings under Lateral Compressive Loading between Platens and Wearpads," Current Journal of Applied Science and Technology.

### CAREER ASPIRATIONS

I have learned that long-term goals are best achieved when I break them into shorter goals. My short-term goal is to find a position that will put me in a forward-moving company with solid performance and future projections - preferably in the aerospace sector. My goal is to harness the skills I have learnt during through my Ph.D. and apply it to I would like to work in the field of Mechanical Engineering as a stress analyst or FE analyst.

## RAHAF AJAJ

Department of Aridland Agriculture  
College of Food and Agriculture



DISSERTATION	
<b>Title</b>	Determination of Primordial and Anthropogenic Radionuclides Concentrations in Agricultural Soil of the United Arab Emirates Using Gamma-ray Spectrometry
<b>Faculty Advisor</b>	Dr. Mohammed Abdul Mohsen Alyafei
<b>Defense Date</b>	15 November 2017
<b>Abstract</b>	<p>The United Arab Emirates (UAE) has initiated the first civilian nuclear power plant, and it will be operating four reactors between (2018- 2020). The establishment of Barakah Nuclear Power Plant, which will employ the nuclear power to generate clean energy, is a significant step forward minimizing the UAE carbon footprint. Before the construction of any regulated nuclear facility, it is essential to investigate the environmental background radiation level in the country. Such an investigation is critical for providing the background data for the environmental impact assessment of the nuclear facility. The present study represents the first research effort in the (UAE) to build a database of agricultural topsoil radioactivity concentrations established using standard sampling and analytical procedures. This study determines the primordial radionuclides concentrations obtained from 145 soil samples collected from multiple agriculture farms in the United Arab Emirates. Collected soil samples were analyzed to establish radioactivity concentration levels associated with <math>^{226}\text{Ra}</math>, <math>^{232}\text{Th}</math> and <math>^{40}\text{K}</math>. High-resolution gamma-ray spectrometry measured the activity concentrations. The results indicate that the mean specific activity concentrations (in <math>\text{BqKg}^{-1}</math>) were <math>15.34 \pm 2.8</math>, <math>4.18 \pm 1.40</math> and <math>310.74 \pm 63.90</math> for <math>^{226}\text{Ra}</math>, <math>^{232}\text{Th}</math>, and <math>^{40}\text{K}</math>, respectively. Besides, the study determines the anthropogenic radionuclides concentration. Cesium-137 was detected in a little number of samples with a specific activity of <math>0.75 \pm 0.01 \text{ BqKg}^{-1}</math>. All study collected sample activities and radiation parameters were found to be below maximal admissible values established in various international recommendations and standards. Also, the present study represents the first documented baseline concentration of the UAE soil minerals, trace, and heavy metals contents.</p>

The mean values (mg Kg<sup>-1</sup>) were: Al - 8,539.7, As - 2.17, B - 47.68, Ca - 86,264.5, Cd - 0.35, Co - 10.30, Cr - 111.20, Cu - 14.32, Fe - 9,839.80, K - 2,026.80, Mg - 26,688.30, Mn - 237.40, Mo - 0.02, Na - 470.40, Ni - 60.90, P - 450.60, Pb - 4.25, S - 2,393.50, Si - 795.68, Sr - 593.70, V - 20.90 and Zn - 24.90. Further, study results were compared against international recommended levels. Also, we provided recommendations to the UAE concerned entities regarding regulating the concentrations of these elements found in the agricultural soil. Future research recommendations include extending the study scope to cover all the agricultural farms in the UAE including organic farms. The study results supported radioactivity concentration and mineral mapping of the UAE soils using the Geographic Information System (GIS).

Keywords: Agriculture soil, Gamma spectrometry, United Arab Emirates, 238U, 226Ra, 226Ra, 232Th, 40K, and 137Cs, Nuclear, Radioactivity, GIS, ICP-OES, Minerals, Heavy Metals, Global Warming.

#### RESEARCH RELEVANCE AND POTENTIAL IMPACT

The Ph.D. project involves determination of the activity concentrations of primordial and anthropogenic radionuclides in agricultural soil samples collected across the United Arab Emirates (UAE). This is considered the first work performed in the UAE in the field of radioactivity baseline measurement and will include a drawing of radiological maps showing the baseline activity concentrations of 226Ra, 232Th, 40K, and 137Cs. It also involves calculation of the potential internal and external hazards and determination of the contribution of the investigated radionuclides to the annual effective dose of the UAE population. Besides, the present study represents the first documented baseline concentration of the UAE soil minerals, trace, and heavy metals contents.

#### RELEVANT PUBLICATIONS

For a future research career, I utterly consider a postdoctoral fellowship. I will begin the next phase of my research. Besides, I will work on publishing materials from my dissertation and begin to establish my academic identity. Hoping that one day to become the kind of teacher that changes the lives of students for the better educating them not only about Science but about the meaning of life.

## SAMAH GOMAA ABU MARZOUK

Department of Mass Communication  
College of Humanities and Social Sciences



DISSERTATION	
Title	Negotiating the Intersection of Arabic and Anglo-American Literary Journalism: Exploring Possibilities, Challenging Canons.
Faculty Advisor	Dr. Ali Noor Mohamed
Defense Date	22 November 2017
Abstract	<p>Literary journalism is an art form that combines storytelling techniques with the verifiability of standard journalism. Research in the field is recent and predominantly Western. Unlike Anglo-American literary journalism, there are no studies on Arabic literary journalism as a stand-alone art form in Arabic and only one in English, which examines the reasons for its scarcity. This study aims to prove otherwise. The objective of this research is to combine history and criticism in exploring Arabic literary journalism; examine its predecessors, characteristics, motives and how it relates to its Anglo-American counterpart; and determine whether the two are fundamentally different or show any parallels. This study will not only illuminate the Arabic side, thereby providing a fresh perspective on several texts, but will also help deepen the understanding and appreciation of literary journalism as a global phenomenon rather than a Western one. Theories and definitions by such Anglo-American scholars in the field as Norman Sims, Thomas Connery, John Hartsock, Ben Yagoda, Kevin Kerrane, Mark Kramer, Barbarah Lounsberry, and Tom Wolfe will be utilized as a backdrop to analyze the style and purpose of a sample consisting of pieces written by 24 established Arab journalists and/or literary figures across different eras. The research will also benefit from a small group of theories relating to humor studies, sociolinguistics, literature, and definitions of literary journalism as provided by certain Arab journalism scholars such as Mar'e Madkour and Mohammed Sayed Mohammed. This study will ultimately contribute to current debates about international literary journalism in addition to introducing a new field of study to the Arab region, one that provides a better interpretation for texts that possess both literary and journalistic qualities. Keywords: Arabic literary journalism, Anglo-American literary journalism, Literature, Journalism, History, Criticism.</p>

## RESEARCH RELEVANCE AND POTENTIAL IMPACT

As a field of study, literary journalism is quite new – even where scholarship is advanced as in the United States and Western Europe. The Arab World has a rich tradition of what fits the definition of literary journalism going back at least to the time of Prophet Muhammad, MPBUH. However, because of scant or non-existent scholarship in this field, literary journalism as an area of study has not yet taken root in this part of the world. Dr. Samah's dissertation is the first to draw comparisons with the more advanced scholarship in the West. As such, it represents groundbreaking work that will lay the foundations for the development of regional scholarship in the Arab World. Her work bridges the gap between Arabic and Anglo-American literary journalism and contributes to current debates regarding International literary journalism. Dr. Samah's work is relevant as well as groundbreaking in terms of approach. This study will hopefully generate interest among academic circles to further study this worldly phenomenon that is literary journalism and how it manifests itself in this region.

## RELEVANT PUBLICATIONS

Paper titled The Art of Protesting Between the Lines: How Arabic Satirical Literary Journalism Changed the Nature of Protest, A Critical Study from Al Jahiz to Bassem Yousef accepted at the 'Protest' conference, University of Glasgow, College of Arts 28-29 May 2014.

Paper titled Introduction to Arabic Literary Journalism: A Critical Study. Published in Volume15 of the International Journal of Arabic-English Studies (IJAES).2014

## CAREER ASPIRATIONS

My career aspirations include but are not limited to introducing a course titled Arabic Literary Journalism to Mass Communication departments across the country. As of today – only one course is offered to students as an elective in the American University of Sharjah, and that course teaches Anglo-American literary journalism in a general sense. I would like to bring it back home and illuminate compelling samples from our region. To teach and impart the knowledge I gained through the process of writing my own thesis to future generations of both English and Media students, is a dream I wish to realize one day.

## SHARIFA ALI ABDULRAHMAN AL BELOOSHI

Public Health Institute  
College of Medicine and Health Sciences



DISSERTATION	
Title	Vitamin D Deficiency in Early Pregnancy, Diet and Physical Activity and Development of Gestational Diabetes in Emirati Women
Faculty Advisor	Dr. Abderrahim Oulhaj
Defense Date	01 December 2017
Abstract	<p>Vitamin D deficiency and Gestational Diabetes Mellitus (GDM) are common health problems among pregnant women in the Middle East region including the United Arab Emirates.</p> <p>We conducted a prospective cohort study on Emirati pregnant women who visited eight primary healthcare clinics for antenatal care. A cohort of 563 women was selected that included women aged 18 - 45 years, <math>\leq 15</math> weeks pregnant and were free of GDM. The primary exposure was vitamin D deficiency (<math>25(\text{OH})\text{D} &lt; 12 \text{ ng/ml}</math>) and vitamin D insufficiency (<math>25(\text{OH})\text{D} = 12 - 20 \text{ ng/l}</math>) as per Institute of Medicine Criteria. Secondary exposure variables were levels of physical activity (low, moderate and high as per WHO recommendations) and dietary intake. The outcome variable was GDM that was diagnosed by using fasting and 75 g 2-hour postprandial Oral Glucose Tolerance Test (OGTT) in 24 - 28 weeks of gestation. The data on socio-demographic characteristics, personal and family medical history, physical activity, dietary intake, blood pressure and anthropometric indices were collected at baseline. In addition, fasting blood samples were taken to measure fasting blood glucose and <math>25(\text{OH})\text{D}</math> levels. The participants revisited antenatal clinics in their 24 - 28 weeks of gestation for the screening of GDM. The status of GDM was confirmed by reviewing medical records of mothers or by telephonic interview.</p> <p>Overall, 58% of pregnant women had vitamin D deficiency and 26% had insufficiency. The overall incidence of GDM was 15.2%. The incidence of GDM was 16% in vitamin D deficient women, 16.1% in vitamin D insufficient women and 10.7% in women with normal vitamin D. Adjusted logistic regression analysis showed that vitamin D concentration (Adjusted Odds Ratio [AOR]: 0.99, 95% Confidence Interval [CI]: 0.95 – 1.02, <math>p = 0.450</math>), vitamin D insufficiency (AOR: 2.11, 95% CI: 0.81 – 5.64, <math>p = 0.101</math>) and deficiency (AOR: 1.94, 95% CI: 0.88 – 5.32, <math>p = 0.118</math>) were not associated with GDM.</p>

Low (AOR: 1.09, 95% CI: 0.43 – 2.79, $p = 0.850$ ) and moderate (AOR: 0.78, 95% CI: 0.45 – 1.34, $p = 0.372$ ) physical activity levels were not significantly associated with increased odds of GDM. The Daily consumption of red meat (AOR: 6.16, 95% CI: 1.31 - 28.92, $p = 0.021$ ) and dates (AOR: 1.86, 95% CI: 1.03 - 6.49, $p = 0.043$ ), family history of diabetes (AOR: 1.93, 95% CI: 1.02 - 3.62, $p = 0.043$ ) and Body Mass index (BMI) before pregnancy (AOR: 1.07, 95% CI: 1.02 - 1.11, $p = 0.003$ ) were significantly associated with GDM.
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### RESEARCH RELEVANCE AND POTENTIAL IMPACT

The study addresses a very important component in public health and utilizes the most appropriate statistical methods to answer the research question. The study adds important new results to the subject. It could be used for raising awareness among pregnant women and healthcare providers, formulation and commissioning of public health policies, interventions and clinical pathways, and improving the health and wellbeing of pregnant women and their children.

### RELEVANT PUBLICATIONS

The findings of the study were presented in a leading conference.

Two papers are now ready for submission to peer-reviewed journals.

### CAREER ASPIRATIONS

I have always wanted to reach the zenith of whatever I'm doing as I will never be satisfied less than the highest I can attain.

The PhD was something that I'd harbored within myself, which is definitely what I want to do to reach "Number One" as h. h. Sheikh Mohammed Bin Rashid our Prime Minister said "we want to be Number One in everything".

A PhD is a basic entry level required into being a lecturer that was in the back of my mind to educate the nation's youth where I could still continue to serve and shape the future of my lovely country "UAE".

# AHMED SADDIQ MOHAMED NEDHAM MANSOORI

Department of Mass Communication  
College of Humanities and Social Sciences



DISSERTATION	
Title	Newsroom Convergence of Print and Online Media: A Study of the Gulf News and Alittihad in the UAE
Faculty Advisor	Dr. Muhammed Danladi Musa
Defense Date	05 December 2017
Abstract	<p>The media industry in the UAE, like elsewhere in the world, is experiencing significant changes due to the innovations brought by Information and Communication Technologies (ICTs). Newsrooms are especially center of such changes, forcing media owners and managers to recognize that convergence of print and online media is inevitable to sustain their newspapers.</p> <p>This research intends to develop an assessment method to determine how newspapers are performing in a convergent media environment. To investigate the three types of newsroom convergence levels (coordination, cross media, and full integration); the study develops an assessment model for the ten dimensions of newsroom convergence as provided by earlier scholars. The study employs newsroom ethnography and triangulation method in which the researcher conducted interviews, analyzed records, and observed different aspects of newsroom convergence processes. The results provided detailed assessment of each newspaper on the ten dimensions and the overall assessment of the convergence levels that each newspaper is operating on. The study reveals that convergence is more strategically planned in the privately owned newspaper but haphazard in government-owned newspaper. The study proved the validity of the assessment approach developed to determine convergence levels in the newsroom.</p> <p>This research can add to existing literature on newsroom convergence as well as provide a guide for media owners and managers who intend to plan for newsroom convergence projects, or to assess their current change projects.</p>

## RESEARCH RELEVANCE AND POTENTIAL IMPACT

Media practices and environment have changed hugely. These changes are largely informed by developments in technologies of production, dissemination and consumption of media content. Ahmed Mansoori's dissertation on convergences an attempt to capture these developments in the UAE and the challenges they bring for two leading media organizations, Alittihad and the Gulf News. His study is current and innovative and will contribute to knowledge and literature that are currently little or lacking in the country and region as a whole.

## RELEVANT PUBLICATIONS

Conference:

Mansoori, A. S. (2013). Social Media Consumption Habits in the UAE. A Survey on Trends and Practices of Twitter Users. Paper presented at the 32nd Intercultural Communication Conference. Social Media Across Cultures: Engaging Audiences, School of Communication, Texas Southern University. Texas, USA.

## CAREER ASPIRATIONS

My previous experience and expertise are in journalism as well as executive role in a newspaper. After acquiring a doctoral degree in Mass Communication, I'm looking forward to a role as director in a media organization where I can participate in implementing change management through the application of global best practices of newsroom convergence. The theoretical knowledge and research experience I acquired in the UAEU have equipped me with the confidence and competencies that I need to play an effective role in media management. As well as this, I have also developed both teaching and research skills that would position me to teach media courses in academic institutions a part time basis.

## LAYLA MOHAMED AL MARZOOQI

Public Health Institute  
College of Medicine and Health Sciences



DISSERTATION	
<b>Title</b>	Prevalence, Characteristics and Correlates of Prediabetes in Al Ain and Abu Dhabi, The UAE: Cross-Sectional Study
<b>Faculty Advisor</b>	Professor Syed M. Shah
<b>Defense Date</b>	23 January 2018
<b>Abstract</b>	<p>Prevalence, Correlates and Characteristics of Prediabetes in Al Ain, Abu Dhabi and Dubai United Arab Emirates: Cross-sectional Study</p> <p>Background: The United Arab Emirates (UAE) reports one of the highest prevalence rates of type 2 diabetes mellitus in the world. Prior to the onset of type 2 diabetes mellitus, a period of moderate hyperglycemia is often present, referred to as prediabetes. This is associated with significant loss of pancreatic beta cells, an increased risk of cardiovascular disease and other serious health consequences. There are gaps in the literature concerning the prevalence of prediabetes and associated correlates, as well as correlate of conversion from prediabetes to type 2 diabetes mellitus.</p> <p>Objectives: The primary objective was to determine prevalence of prediabetes in adult and its correlates. The secondary objective was to identify proportion (%) of prediabetes to type 2 diabetes mellitus conversion and its major correlates.</p> <p>Methods: This research was based on secondary data that was collected to intervene prediabetes in Al Ain and Dubai, two cities in the UAE. In Al Ain, a random sample (n=605) of parents participated in type 2 diabetes mellitus screening in a family-based study in Al Ain. In Dubai, 700 Emirati adults diagnosed with prediabetes in five primary health care centers were invited to participate in the intervention study. After ethics approval and informed consent obtained, sociodemographic, anthropometric, lifestyle, and clinical data were collected. Prediabetes and type 2 diabetes mellitus were defined according to the American Diabetes Association' guidelines,</p>

based on fasting plasma glucose (FPG  $\geq 126$  mg/dl ( $\geq 7$  mmol/l) for type 2 diabetes and 110-125 mg/dl (6.1-7 mmol/l for prediabetes) and HbA1c ( $\geq 6.5\%$  for type 2 diabetes and HbA1c 5.7-6.4% for prediabetes).

We used a multivariable multinomial logistic regression analysis to identify the independent correlates of prediabetes and type 2 diabetes mellitus in comparison to people with a normal glucose level in Al Ain. We used logistic regression analysis to identify the correlates of the transition from prediabetes to DM using the Dubai health center-based data.

Results: The overall prevalence of prediabetes and type 2 diabetes mellitus was 37.7% and 18.7%, respectively, among participants in Al Ain. Older age, overweight, and obesity were positive correlates of prediabetes. A secondary and higher level of education was negatively correlated with prediabetes. Older age, obesity, central obesity, lack of vigorous physical activity, and a family history of diabetes were positive and secondary and higher level of education were negative correlates of diabetes.

In Dubai, a significant proportion (23%) of participants with prediabetes converted to DM over a period of two years. Low HDL-cholesterol was significant ( $<0.05$ ) correlates of prediabetes to type 2 diabetes mellitus conversion. Participants reporting vigorous physical activity for at least once a week were less likely to convert to type 2 diabetes mellitus status.

Conclusion: Prediabetes is a significant public health problem in the UAE. Older age, overweight, obesity and education level were all found to be significant correlates of prediabetes. A high proportion of people with prediabetes converted to type 2 diabetes mellitus over a relatively brief period. This highlights the importance of screening for, and intervention of prediabetes. Our findings were consistent with previous studies carried out in other countries.

## RESEARCH RELEVANCE AND POTENTIAL IMPACT

The UAE's epidemic of obesity requires urgent and aggressive intervention. This is necessary to prevent chronic diseases from damaging the accomplishments of the UAE government over the last 40 years in improving the overall health of the UAE nationals. In order to achieve this, policies and laws must be formulated and efforts united. Lifestyle management plays a major role in combating obesity, prediabetes and DM at an individual level. Both policy makers and decision makers have another important role in this battle.

As prevalence of prediabetes is high in Emirati population, the role of educating people about prediabetes, its correlates and the measures required to convert the condition to normal status, is vital. It is also crucial to recognize prediabetes as a disease that leads to several complications, including DM. Moreover, early detection of prediabetes and implementing preventive measures to stop its progression to DM is essential. Other important recommendations include:

- Collective efforts are needed to reduce the prevalence of prediabetes and DM by empowering the public to take care of their own health. This can be done by educating them. This education should concentrate on the dangers of an unhealthy lifestyle and behaviors (PA and unhealthy diet) and can be delivered to them by using the media and social media channels. Furthermore, educational programs (which target the correlates for chronic disease like DM and hypertension) are required to target people in schools and the community. Increasing levels of health education among the public will encourage them to make healthier selections.
- It is essential to strengthen and activate the role of primary healthcare centers. This can be achieved by applying preventive strategies in the primary healthcare setting that will detect people who are at high risk of prediabetes and obesity. This will ensure the early detection of prediabetes and interventions that lead to a delay in the progression of prediabetes to DM. An individualized wellness program needs to be established, which must include diet counselling and exercise plans to address the correlates for chronic diseases, like obesity, as well as PA and unhealthy eating habits. These programs will increase people's attentiveness to these risks.
- Public health policies should be developed at a national and population level in the UAE. These policies have to focus on improving the health of the people by creating a healthy community that will replace the "obesogenic" environment and encourage healthy lifestyle behavior. This should concentrate on limiting the spread of fast food outlets, making healthy food both easily affordable and accessible, and imposing tax on tobacco, food high in fat and sweet drinks. It is also important to create an encouraging environment for exercise and physical activity for both genders and all ages.

### RELEVANT PUBLICATIONS

- I presented major findings of my dissertation in the Emirates diabetes conference
- Plan to publish my dissertation results in peer review journals

### CAREER ASPIRATIONS

This dissertation will have great impact on policy and decision makers. The prevalence of prediabetes and DM in the UAE is high and it is increasing. Unless major action is taken to fight prediabetes and DM the effort which was put in by the UAE government in the last 40 years in improving the health status of the UAE population will be replaced in non-communicable diseases and overall health of the UAE population will be affected.

## NESREEN KHALID AHMAD AL JEZAWI

Department of Pathology  
College of Medicine and Health Sciences



DISSERTATION	
<b>Title</b>	Genomic and Cellular Studies Establish the Pathogenesis and Cellular Mechanisms of Disease-Causing Mutations in Families with Autosomal Recessive Disorders
<b>Faculty Advisor</b>	Prof. Bassam R. Ali
<b>Defense Date</b>	13 February 2018
<b>Abstract</b>	<p>The majority of the reported genetic disorders in the UAE population are of the autosomal recessive type, which is mainly due to high rates of consanguinity within the UAE national population, and within a significant proportion of other UAE expatriate communities; such as Arabs and Pakistanis. It is estimated that more than 50% of all marriages among Emiratis occur between biologically related couples, with first cousin marriages being the highest. That could be attributed to sociocultural values in the region. Successful management of genetic diseases can be achieved by the implementation of effective preventative programs that could help reduce the number of new cases, and provide early diagnosis to potentially improve disease management. For these desired outcomes to be achieved, it is imperative to identify the molecular causes (i.e. disease-causing genes and mutations) of such disorders. Therefore, the aim of this study is to elucidate the molecular pathology and cellular mechanisms of a group of recessive disorders affecting Emirati and expatriate families in the UAE. Whole exome sequencing, together with homozygosity mapping and segregation analyses, were performed on the recruited families to elucidate the causative genes and mutations. Where necessary, bioinformatics in silico analyses coupled with cellular and other functional studies were performed to confirm pathogenicity and uncover the cellular mechanisms of the studied disease phenotypes. In this dissertation, I report the identification of two novel compound heterozygous mutations in Multiple PDZ domain (MPDZ) gene causing congenital hydrocephalus, and provide experimental evidence on their pathogenesis and mechanisms of action.</p>

In addition, I report the identification of a novel mutation in Xylosyltransferase I (XYLT1) gene responsible for Desbuquois dysplasia II (DBQDII), and provide evidence on the involvement of the endoplasmic reticulum (ER) quality control in the cellular mechanism of several DBQDII-causing mutations, including, the newly identified one. Furthermore, I provide preliminary data on candidate genes in two families affected by suspected monogenic intellectual disability syndromes. Overall, this dissertation provides evidence on the pathogenicity of several mutations and associated cellular mechanisms. The outcomes of this project will likely be valuable for implementing effective preventive strategies at least for the extended family members of the affected individuals.
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### RESEARCH RELEVANCE AND POTENTIAL IMPACT

The UAE as well as many Arab populations are suffering from high burden of birth defects including those caused by genetic conditions. This is especially true for the conditions that are inherited by an autosomal recessive manner. Therefore, concerted efforts are being undertaken within the UAE to reduce the risk of having more children with these conditions. Identifying the molecular causes is a prerequisite for developing accurate diagnostic tools and implementing effective prevention program and therefore the aim of Nesreen's PhD dissertation was to elucidate the molecular and cellular causes of a number of rare autosomal recessive conditions. The findings of her work improved our understanding of at least two conditions Desbuquois dysplasia II and congenital hydrocephalus and has been shared with clinicians and scientists worldwide through two articles published in international refereed journals.

### RELEVANT PUBLICATIONS

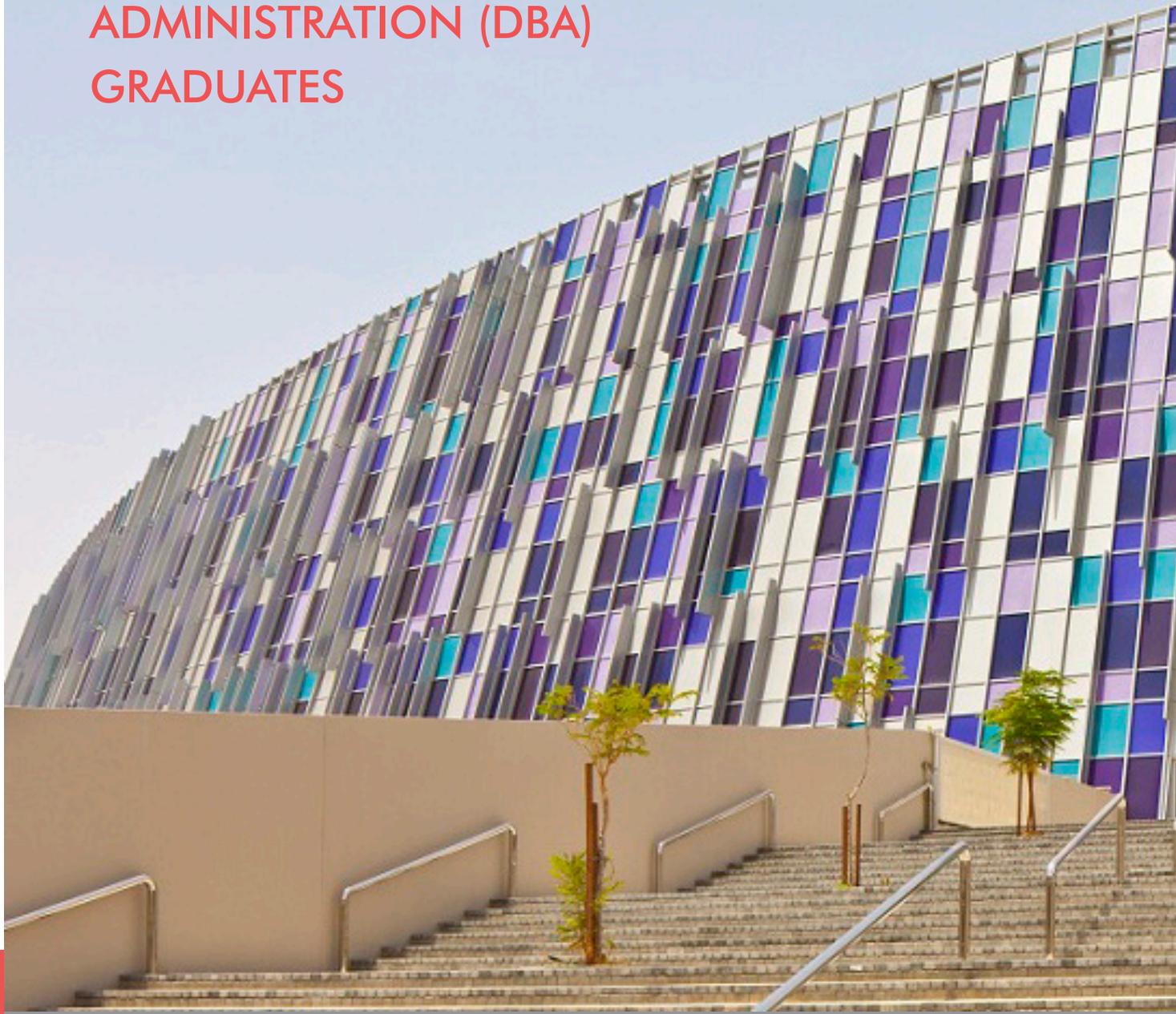
- Al-Jezawi, N., Ali, B.R., Al-Gazali, L. (2017). Endoplasmic reticulum retention of xylosyltransferase 1 (XYLT1) mutants underlying Desbuquois dysplasia type II. *American Journal of Medical Genetics Part A*, 173(7):1725-1995. doi:10.1002/ajmg.a.38244.
- Al-Jezawi, N., Al-Shamsi, A., Suleiman, J., Ben-Salem, S., John, A., Vijayan, R., Ali, B.R., Al-Gazali, L. (2018). Compound heterozygous variants in the multiple PDZ domain protein (MPDZ) cause a case of mild non-progressive communicating hydrocephalus. *BMC Medical Genetics*, 19(1):34.

## CAREER ASPIRATIONS

Change is the only constant. It is in everyday profession. It is hence natural that each one of us would constantly upgrade and enhance themselves. The knowledge and expertise which I have gained from my studies would let me grow as a professional in my future career. I look forward to getting a job with a certain level of satisfaction, I have to make sure that I will be completely satisfied with whatever job I will be doing. Experience adds to a person's richness in terms of thought and knowledge, that's why I look forward to accumulating experiences such as learning new skills in my domain, learning about the cultures of different countries, meeting new people and basically becoming familiarized with customs and traditions worldwide. This will only enable me to increase my tolerance levels and change perspectives. Once I get stable in an academic institute, I will then concentrate on growing as an individual and a professional, which will only add to the growth of my work place.

I hope that one day I will be an expert in my field, educate myself more and to better balance my home and work life.

DOCTORATE OF BUSINESS  
ADMINISTRATION (DBA)  
GRADUATES



## MOHAMED OMER MAHGOUB

Department of Anatomy  
College of Medicine and Health Sciences



DISSERTATION	
Title	Biochemical and Biological Effects of Irisin in a Model of Diabetes Mellitus
Faculty Advisor	Prof. Ernest Adeghate
Defense Date	08 April 2018
Abstract	<p>Diabetes mellitus (DM) is a highly prevalent health problem affecting more than 425 million people worldwide. It is associated with several detrimental complications such as neuropathy, nephropathy, retinopathy and cardiovascular diseases. Irisin is a novel hormone that plays a role in metabolism by stimulating the browning of white adipose tissue (WAT) into beige adipose tissue which acquires properties that are similar to those of brown adipose tissue (BAT). Several studies have attempted to characterize the roles of irisin in DM and obesity, however, contradictory results have been reported and physiological roles of irisin have been questioned by several researchers. In our study, we investigated the role of irisin in controlling glucose levels and insulin secretion in STZ-induced DM model and the mechanism by which irisin exerts its beneficial effects both in vivo and in vitro, using a variety of biochemical, morphological and cell biology techniques. We showed that irisin did not cause any significant reduction in weight or fasting blood glucose, however, it caused a significant glucose reduction 30 minutes after glucose challenge. Our data also showed that irisin co-localizes with insulin in pancreatic <math>\beta</math>-cells in both normal and diabetic animals while it co-localizes with glucagon only in diabetic animals. Moreover, irisin was also detected in skeletal muscle, visceral and subcutaneous adipose tissues. Irisin also reduced triglycerides and increased the level of high density lipoprotein (HDL) and total protein. We also provided evidence that irisin treatment can modulate the tissue level of different peptide hormones such as insulin, glucagon, incretins and leptin. In addition, irisin possesses a potent antioxidant activity and reversed oxidative stress induced by DM. Our in vitro investigations showed that irisin can stimulate the release of insulin from pancreatic <math>\beta</math>-cells. Irisin could be a potential therapeutic agent in the management of DM.</p>

## RESEARCH RELEVANCE AND POTENTIAL IMPACT

Adipose tissue and skeletal muscle play an important role in glucose metabolism. A variety of adipocytokines have been implicated in the etio-pathogenesis of diabetes mellitus (DM) and obesity is, indeed, a common feature in people with type 2 DM. Irisin, which is secreted by both adipocytes and muscle cells is an ideal molecule to test the link between adipose tissue, muscle and DM. The observations derived from this study will shed light on how a myokine/adipocytokine modulates the function of the endocrine pancreas, and affects signs and symptoms of DM. The reported roles of irisin presented in this study may help in the development of new management criteria for DM.

## RELEVANT PUBLICATIONS

Mahgoub, M. O., D>Souza, C., AlDarmaki, R., Baniyas, M., & Adeghate, E. (2018). An update on the role of irisin in the regulation of endocrine and metabolic functions. *Peptides* 104: 15-23. doi:10.1016/j.peptides.2018.03.018

## CAREER ASPIRATIONS

I would like to continue my research in the field of diabetes and to expand my knowledge about novel targets that can be utilized in treating the disease. Another objective is to combine my clinical and research experiences and share them with others in an academic institute and to get the chance to teach young researchers and healthcare professionals about diabetes and possible ways to combat its increasing prevalence.

## DEENA MOHAMED GALAL ELDIN AHMED

Department of Biochemistry and Molecular Biology  
College of Medicine and Health Sciences



DISSERTATION	
Title	ROLE OF THE SNF2 HOMOLOG, IRC20, IN YEAST GENOME MAINTENANCE
Faculty Advisor	Dr. Ahmed H Hassan Al-Marzouqi
Defense Date	15 April 2018
Abstract	<p>In eukaryotes, DNA is wrapped around histone proteins forming a highly compact structure, the chromatin. All DNA-based processes must occur within the complex organization of the chromatin, and this requires modulation of its structure when needed. This is accomplished by covalent histone modifications that alter histone-DNA contacts, as well as through the actions of ATP-dependent chromatin remodelers. These multi-subunit complexes play major roles in transcription regulation, replication and repairing DNA damage. This thesis aims to characterize a poorly studied member of the SWI/SNF family of ATPases/helicases, Irc20, from <i>Saccharomyces cerevisiae</i>. Previously, Irc20 has been shown to be involved in recombinational repair and to possess ubiquitin ligase (E3) activity. The human homolog of Irc20, SHPRH, has also been implicated in repair via the poly-ubiquitylation of PCNA, the sliding clamp of the DNA polymerase. Loss of heterozygosity in the region containing the SHPRH gene is seen in a wide variety of cancers. In this study, using purified Irc20, we showed that it possesses DNA and nucleosome binding activities, as well as an ATP-hydrolyzing activity. However, despite homology to Snf2 catalytic domain, Irc20 did not have the ability to alter chromatin structure. Using point mutations in different Irc20 domains, we identified that the increased recombination centers observed in <i>irc20</i> null mutants is dependent on both its ATPase and ubiquitin ligase activities. Consistent with this, we observed higher recruitment or retention of the recombination repair factor Rad52 at a single induced double strand break in <math>\Delta</math>irc20 mutant, suggesting a regulatory role for Irc20 in DNA repair. Furthermore, we observed a previously unidentified function for Irc20 in regulating the levels of the endogenous yeast 2-<math>\mu</math>m plasmid. In <i>irc20</i> null mutant, we observed a three to four-fold increase in 2-<math>\mu</math>m levels, forming high molecular weight forms in a manner dependent on homologous recombination.</p>

	<p>We suggest this is, at least partially, through regulating the levels of Flp1 recombinase since we observed higher levels of Flp1 in <math>\Delta</math>irc20 mutant after shutting off expression from a repressible promoter. Collectively, our results show a regulatory role for Irc20 in recombination underlying its role in stabilizing the genome and regulating the 2-<math>\mu</math>m plasmid levels.</p>
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### RESEARCH RELEVANCE AND POTENTIAL IMPACT

Cancer is a leading cause of death and a major problem in the UAE. Clearly, a better understanding of the biology of cancer in the region and improvement in early diagnosis are desperately needed. DNA double strand breaks constitute one of the most cytotoxic forms of DNA damage and pose a significant threat to cell viability, survival, and homeostasis. DSBs have the potential to promote gross chromosomal rearrangements and potentially deleterious mutations that promote tumorigenesis. To this end, understanding the role of Irc20 in regulating recombination and maintaining the genome stability is vital to gain insight into the underlying molecular processes that protect the cell from carcinogenesis.

### RELEVANT PUBLICATIONS

Deena Jalal, Jisha Chalissery, Ahmed H. Hassan; Genome maintenance in *Saccharomyces cerevisiae*: the role of SUMO and SUMO-targeted ubiquitin ligases. *Nucleic Acids Res* 2017; 45 (5): 2242-2261. doi: 10.1093/nar/gkw1369

Jisha Chalissery, Deena Jalal, Zeina Al-Natour, Ahmed H. Hassan; Repair of Oxidative DNA Damage in *Saccharomyces cerevisiae*. *DNA Repair* Volume 51, March 2017, Pages 2–13

### CAREER ASPIRATIONS

My biggest passion has always been to teach, so I would like to pursue a career in academia. I hope to find a position in an academic institution that would allow me to share my knowledge and pass it on to the next generation whilst continuing research and contribution to the scientific community.

## NASEEM MOHAMMED RAFEE ABDULLA

Public Health Institute  
College of Medicine & Health Sciences



DISSERTATION	
<b>Title</b>	Health Supplement Use and Related Adverse Events in Dubai, United Arab Emirates: A Cross-Sectional Study
<b>Faculty Advisor</b>	Dr. Abderrahim Oulhaj
<b>Defense Date</b>	15 April 2018
<b>Abstract</b>	<p>Health supplement products contain ingredients of more than thousand chemicals. Several of these chemicals may adversely affect human health. Previous studies have found that consumers are generally unaware regarding the risks of health supplements and their associated adverse events. In addition, they are unaware of the appropriate reporting process to relevant authorities should adverse events occur. Moreover, many healthcare professionals have inadequate knowledge, attitude and practice in health supplement consumption-related adverse events and their reporting. The purpose of this research was to measure the health supplement consumption in the population of Dubai, the adverse events thereof, and the level of knowledge, attitude, and practice among healthcare professionals about the issue. This research project comprised two cross-sectional studies. The first was a telephone survey using computer-assisted personal interviewing carried out among the general population. The second study was an on-line survey among healthcare professionals from various private and government healthcare settings in Dubai that sought to assess their knowledge, attitude, and practice (KAP) toward health supplements. Descriptive statistics were used to describe the demographic characteristics of the sample using frequencies and percentages as appropriate. Chi-square, or ANOVA, was used as appropriate to test for statistical differences. Analyses were conducted using STATA version 14.2. In the first survey, among 1,203 participants, 455 (37.8%) reported either current or previous use of health supplements. Of the 455 users, 389 (85.54%) were knowledgeable about health supplements and 442 (97.14%) had encountered no adverse events. Of the 13 (2.86%) who had encountered adverse events, the degree of severity was either moderate or mild. Most (10, 76.92%) did not know how to report the adverse event to healthcare professionals.</p>

Health supplement products contain ingredients of more than thousand chemicals. Several of these chemicals may adversely affect human health. Previous studies have found that consumers are generally un-aware regarding the risks of health supplements and their associated ad-verse events. In addition, they are unaware of the appropriate report-ing process to relevant authorities should adverse events occur. More-over, many healthcare professionals have inadequate knowledge, atti-tude and practice in health supplement consumption-related adverse events and their reporting. The purpose of this research was to meas-ure the health supplement consumption in the population of Dubai, the adverse events thereof, and the level of knowledge, attitude, and practice among healthcare professionals about the issue. This research project comprised two cross-sectional studies. The first was a telephone survey using computer-assisted personal interviewing carried out among the general population. The second study was an on-line survey among healthcare professionals from various private and government healthcare settings in Dubai that sought to assess their knowledge, atti-tude, and practice (KAP) toward health supplements. Descriptive statis-tics were used to describe the demographic characteristics of the sam-ple using frequencies and percentages as appropriate. Chi-square, or ANOVA, was used as appropriate to test for statistical differences. Anal-yses were conducted using STATA version 14.2. In the first survey, among 1,203 participants, 455 (37.8%) reported either current or pre-vious use of health supplements. Of the 455 users, 389 (85.54%) were knowledgeable about health supplements and 442 (97.14%) had en-counterred no adverse events. Of the 13 (2.86%) who had encountered adverse events, the degree of severity was either moderate or mild. Most (10, 76.92%) did not know how to report the adverse event to healthcare professionals. Only 3 (23.08%) had ever reported an event. In the second study, 427 healthcare professionals participated to the online survey. Of these, 78 (18.3%) had a good level of KAP towards health supplements, 166 (38.9%) had a fair level of KAP, while 183 (42.9%) had a poor level. Job experience of over 6 years resulted in a significant difference ( $P=0.017$ ) in mean KAP scores. No statistically sig-nificant differences in scores were found with gender or educational levels. Significant differences, however, ( $P=0.001$ ) were found with na-tionality where non-UAE national participants had a higher level of KAP than UAE nationals. There were also significant differences in mean KAP scores between occupational groups, physicians and pharmacists having higher scores than other healthcare providers. The findings of this re-search provide important new knowledge about health supplement use in Dubai. The findings may be used to develop policies and programs on health supplements that will help to minimise the risk of adverse events arising from their use. The results also point out that it is im-portant to institute educational initiatives to assess any risks related to the use of health supplements. Such initiatives will help to raise both awareness and knowledge in both the population and healthcare pro-fessionals regarding the use and adverse events of health supplements.

## RESEARCH RELEVANCE AND POTENTIAL IMPACT

The study was an important first step to understand the extent of supplement use in the emirate of Dubai, and the characteristics of those who use them. The study also characterized the knowledge, attitudes and practices of supplement users and healthcare providers serving that population. The findings are very useful for assisting in developing new policies and programs on health supplements in order to minimize the risk of adverse events arising from their use. The results also point out that it is important to carry out some educational initiatives to assess any risks related to the use of health supplements. Such initiatives will help to raise both awareness and knowledge in both the population and healthcare professionals regarding the use and adverse events of health supplements.

## RELEVANT PUBLICATIONS

Saba Saleh Al-Hemyari, Ammar Jairoun, Naseem Abdulla. Assessment of suboptimal health status and their associated risks in university students: A cross-sectional study, UAE. *Journal of Pharmacy Research*, Vol 11, Issue 8, 2017.

Naseem Abdulla, Faisal Aziz, Iain Blair, Michal Grivna, Balazs Adam, Tom Loney. Prevalence of, and Factors Associated with Health Supplement Use in Dubai, United Arab Emirates: A Cross-Sectional Population-Based Study, *BMC Complementary and Alternative Medicine*, -D-18-00321

## CAREER ASPIRATIONS

The career growth is rapid in this field, which gradually brings one to managerial positions with excellent specialized skills. It is expected that I will become a pharmacovigilance professional, which allows me in figuring out new information and facts about risks associated with such products, as well as protecting against harm to individual patients or consumers. This also provides the basic skills to conduct any related environmental health impact assessment in future.



# MOUZA RASHED MOHAMED AL RASHDI

Department of Geology  
College of Science



DISSERTATION	
<b>Title</b>	Geochemical and Radiological Baseline Studies and Environmental Impact of the Area Surrounding Barakah Nuclear Power Plant, UAE
<b>Faculty Advisor</b>	Dr. Sulaiman Ali Alaabed Alkaabi
<b>Defense Date</b>	18 April 2018
<b>Abstract</b>	<p>Geochemical, mineralogical and natural radiation analysis techniques were used for establishment of geochemical and radiological baseline around Barakah Nuclear Power Plant, UAE. The natural radioactivity concentrations of <math>^{238}\text{U}</math> (<math>^{226}\text{Ra}</math>), <math>^{232}\text{Th}</math> and <math>^{40}\text{K}</math> were measured for soil, shore and bottom sediment samples, using gamma spectrometry using HPGe detector. In addition, Alpha spectrometry was used to measure <math>^{234}\text{U}/^{238}\text{U}</math> ratio for some selected samples. Furthermore, inductively coupled plasma emission spectroscopy was used to measure the concentrations of heavy metals and REE. Results shows that the measured gamma activity concentrations in shore-sediment samples are much lower comparing to those concentrations in soil and bottom sediments and all are below the world average. The spatial distribution for heavy metals, REE and natural radionuclides was generally more compact in the south compared to the north, with less severe contaminations in the east and west and all are below the safe limit.</p>

### RESEARCH RELEVANCE AND POTENTIAL IMPACT

1. The study is an original new work that has not been done before in the UAE, establishing a reference data about the geo-environmental chemistry and radiation level of Baraka area.
2. It created an initial baseline radiometric map of the studied area prior to the running of Barakah Nuclear Power Plant (BNPP).
3. Recorded heavy metals distribution at the study area can be used as an indicator of any later contamination brought by water or wind after BNPP functioning.
4. The collected radiological data forms an initiative benchmark reference for the radiation hazardous assessment after BNPP starts operating.
5. The study has initiated a track for further work in Baraka progressive assessment the radiation protection.

### RELEVANT PUBLICATIONS

Mouza Al Rashdi, Sulaiman Alaabed, Mohamed El Tokhi and Alya A. Arabi (2017). Distribution of heavy metals around Barakah nuclear power plant in the United Arab Emirates. J. Environ. Science and Poll. Res. V.24, PP 19835-19851.

Mouza Al Rashdi, Walid El Mowafi, Sulaiman Alaabed and Mohamed El Tokhi (2017). Measurements of gamma-emitting radionuclides in soil around Barakah nuclear power plant (NPP) site for baseline data purposes, UAE. Fourth International Conference on Engineering Geophysics, UAEU, UAE.EG-82.

### CAREER ASPIRATIONS

I am looking for a way to transfer what I gained from the PhD program to my current job in Environment Agency –Abu Dhabi. My goal will be to continue in the scientific research while maintaining my job responsibilities in the Agency.

## MOUZA MOHAMMED EID ALYAHED ALZAABI

Public Health Institute  
College of Medicine and Health Sciences



DISSERTATION	
<b>Title</b>	Prevalence of and Factors Associated with Over Wight, Obesity and Metabolic Syndrome Among School Children and Adolescents in Ras Al Khaimah, United Arab Emirates - 2016 - 2017
<b>Faculty Advisor</b>	Dr. Mohamud Sheek-Hussein
<b>Defense Date</b>	10 May 2018
<b>Abstract</b>	<p>Introduction: The prevalence of childhood obesity is reported to be increasing rapidly in the United Arab Emirates (UAE). Excess adiposity is a key independent risk factor for the future development of cardio-metabolic disorders such as metabolic syndrome. Population-based studies using representative samples are required to provide accurate and valid estimates of obesity and metabolic syndrome. Currently, there is a dearth of pediatric obesity research conducted in the emirate of Ras Al Khamimah. Aims: The aim of this study was to estimate the prevalence and factors associated with obesity and metabolic syndrome among school children in Ras Al Khaimah, UAE. Method: Using a cross sectional study design, a random representative sample of children (N=1184; 43% males) aged 6-18 years was recruited from government and private schools in Ras Al Khaimah, during the academic year 2016-2017.</p> <p>Participants completed a questionnaire collecting socio-demographic and lifestyle behaviour data. Anthropometric (i.e. height, body mass and waist circumference) and blood pressure measurements were conducted using standard procedures. Body mass index-derived estimates of obesity were calculated using three international cut-offs: Center for Disease Control and Prevention (CDC), the International Obesity Task Force (IOTF), and the World Health Organization (WHO). Participants aged 10-18 year (N=413) provided a fasting venous blood sample to assess fasting blood glucose, lipid levels, and glycated haemoglobin. Metabolic syndrome was classified using the International Diabetes Federation criteria. Results: The overall prevalence of combined overweight/obesity was 37.2% (CDC), 37.7% (IOTF), and 40.1% (WHO).</p>

<p>The prevalence of metabolic syndrome was 6.6% (11.4% males, females 3.1%, <math>P=0.001</math>). Multivariate logistic regression identified that mother obesity was positively associated with childhood overweight and obesity (<math>p &lt; 0.05</math>). Father education, dark vegetables and full fat milk were negatively associated with overweight and obesity (<math>p &lt; 0.05</math>). Significant contributions: This study confirms a high prevalence of overweight and obesity among children and adolescents in Ras Al Khaimah. Mother obesity, Father education, full milk and dark vegetables were identified as correlates of childhood obesity. The prevalence of metabolic syndrome will continue to increase unless school-based obesity interventions are implemented across the UAE. Gap filled: this is the first study in RAK estimated the prevalence of overweight and obesity since 18 years using 3 international BMI definitions and investigated the associated factors of childhood obesity. Furthermore, it is the first study to estimate the prevalence of metabolic syndrome in the northern emirates.</p>
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#### RESEARCH RELEVANCE AND POTENTIAL IMPACT

Childhood obesity is a global public health challenge; In 2016 WHO reported the prevalence childhood obesity has increased at an alarming rate affecting an estimated over 41 million worldwide. This study finding support that UAE childhood obesity has similar trend therefore children who are obese are predicted more likely to be obese in adult's life; obese children frequently associated with an increased risk of serious metabolic syndrome such heart disease, and diabetes. In this research outcome will be very beneficial to the UAE children and its population as it will help implementing optimal prevention strategies and awareness among the UAE Population.

#### RELEVANT PUBLICATIONS

Zaabi, Mouza Al, et al. "Results from the United Arab Emirates' 2016 Report Card on Physical Activity for Children and Youth." *Journal of physical activity and health* 13.11 Suppl 2 (2016): S299-S306.

#### CAREER ASPIRATIONS

I would like to further improve my research skills and knowledge in order to be a competent researcher in my field. I am interested in obtaining a faculty position to work as an academic instructor and to expand my researches. I wish also to use my knowledge by working in children health promotion and prevention programs in the UAE on both planning and implementation stages.

## YOUSIF ABDULLA MAJID ALMARAGHI ALOBEIDL

Department of Business Administration  
College of Business and Economics



DISSERTATION	
Title	Attracting and Retaining Emirati Jobseekers in the UAE's Cultural Tourism Sector: A Case Study of the Tour Guide Profession
Faculty Advisor	Dr. Emilie Rutledge
Defense Date	12 November 2017
Abstract	<p>Recently the UAE has been promoting itself as a tourist destination with the "brand Dubai" and "Abu Dhabi, visitors welcome" campaigns. Underpinning this is the expansions of AUH, DBX, Etihad and Emirates and a surfeit of hotels, malls and entertainment infrastructure. Yet while tourism represents an alternative income stream to the longstanding default of oil-rent, it only becomes 'sustainable' if it attracts and retains UAE national labour. This study investigates the factors that influence recruitment and retention rates in the Tour Guide profession. Alongside a number of interviews with Tour Guides (n=34), two survey instruments were used. One incorporating the Career Decision-Making Profile for prospective employees (n=186) and one tailored to incumbent employees, which incorporated the Job Satisfaction Survey (n=63). For both, the nature of the job was considered attractive (<math>\beta</math> .311; <math>\beta</math> .195), yet pejorative societal sentiment towards 'non-conventional' public sector employment had a negative impact (<math>\beta</math> -.144; <math>\beta</math> -.650). A key resultant recommendation is to redefine the role—to make it more academic in nature with active guiding being only one element of the occupation. Another is for a greater utilisation of this study's dual-pronged approach: gauging two samples where the nexus is the academic subject being studied and a corresponding profession; such methods will better guide vocationally orientated interventions at Higher Education and, HRM recruitment/retention interventions within the UAE's nascent knowledge-based economic sectors.</p>

## RESEARCH RELEVANCE AND POTENTIAL IMPACT

This research presents substantial new primary evidence on the challenges to recruiting and retaining national tour guides in the UAE. It is unique in the sense that it is the first to survey and interview Emirati tour guides in the UAE (incumbents) and prospective tour guides (students of tourism studies) and therefore its findings are both significant and of contemporary policy relevance. The thesis itself is well written and comprehensive, presents viable policy recommendations for the UAE's tourism sector and develops a unique 'dual pronged' approach to addressing the research questions which may be applied to other vocations being targeted for future Emiratisation.

## RELEVANT PUBLICATIONS

It is expected that the student will publish the findings of his research in collaboration with his supervisor in scientific journals. The findings of this research are significant to the body of literature across several fields: that of the tour guide profession, cultural tourism, Emiratisation and economic diversification. As such it is the first research to survey and interview Emirati tour guides (both incumbent and prospective) in the UAE – where the nascent cultural tourism sector is being targeted as an important and sustainable sector for economic development. The research adds value to the related discourse on the job satisfaction of tour guides in general and presents new empirical data and policy recommendations on a key area of socioeconomic concern for the GCC – how to increase national employment in a key nascent service sector industry.

## CAREER ASPIRATIONS

I intend to explore opportunities in which my research findings may contribute to the existing body of knowledge and help support the UAE Government's efforts to emiratise the workforce, specifically in the field of cultural tourism.

I look forward to publishing articles in academic journals so that my research would be available to a wider audience, and to putting my research and its findings to good use in the tourism sector where, following the formulation of an action plan, their implementation could be put into practice.

Finally, I sincerely hope I will be able to contribute to the advancement of the tourism sector, both in the UAE and in the wider region.





## MAJIDA ABDOU SAEED AHMED ALAZAZI

Department of Business Administration  
College of Business and Economics



DISSERTATION	
<b>Title</b>	Role of Information Sharing in Supply Chain Management to Enhance the Capabilities a Deference Firm in the UAE: The Case of Tawazun Subsidiaries
<b>Faculty Advisor</b>	Dr. Younes Hamdouch
<b>Defense Date</b>	19 November 2017
<b>Abstract</b>	<p>The manufacturing firms and service delivery vendors in the UAE have recently realised the importance of supply chain management (SCM) applications, but they are still not entirely used for improving firms' performance, capability, and market competitiveness. This study highlights the capacity of information sharing in supply chain management to enhance the capabilities of Tawazun's subsidiaries as key players in the UAE defence industry. Personal interviews were conducted with (20) top and senior managers working in four of these subsidiaries. The qualitative analysis of their statements revealed that information sharing across different SCM departments is strategically important in enhancing firms' capability, together with the creation of effective Supply Chain Integration (SCI) using the available communication channels. However, the dominance of the viewpoints and perceptions of the top managers, whose background is military, seemed to have a heavy impact on the quantity and type of information to be shared. A questionnaire survey was also distributed to (115) junior staff from 3 Tawazun SCM departments; (86) completed the questionnaire to yield a return rate of 74.78%. The quantitative analysis of the collected survey data using the statistical package for the Social sciences (SPSS) and Excel revealed that the junior staff' involvement in information sharing is limited, which impacts on their ability to fulfil their departmental capabilities. The study findings provide a roadmap for establishing and employing a reliable SCM, particularly in a defence industry firm, where many departments are involved in supply chain activities. The implications are that to guarantee effective SCM practice, the policymakers in SCM should encourage internal integration and the smooth flow of information between the firm's employees.</p>

### RESEARCH RELEVANCE AND POTENTIAL IMPACT

This is the first study to address the importance of supply chain integration as an organic part of the supply chain management applications in the defence manufacturing industry. This research has tremendous practical implications for the senior managers and decision makers in the UAE military/defence industry. Implementing intra-organisational information sharing practices to enhance supply chain capabilities is critical, especially in the firms that are working to develop defence industries in UAE.

### RELEVANT PUBLICATIONS

N/P

### CAREER ASPIRATIONS

I decided to pursue a DBA program to develop my professional career and to be equipped with advanced knowledge and practices that would allow me to contribute significantly to my work in the defense industry. Gathering the content of this dissertation has progressively blended my work experience and expertise with the theoretical and research knowledge to solve potential supply chain management-related problems in practice. The findings of this study will, as it is hoped, allow me to continue developing advanced research capacity to conduct further scholarly studies on supply chain management in the UAE manufacturing context.

## MOHAMMED ABDALLAH SAIF AL MAQBALI

Department of Business Administration  
College of Business & Economics



DISSERTATION	
Title	The Determinants of Entrepreneurial Success in Oman: A Holistic Approach
Faculty Advisor	Dr. Mumin Dayan
Defense Date	19 November 2017
Abstract	<p>The literature on determinants of entrepreneurial success calls for additional research especially in GCC countries where studies in this field are limited. There is not yet clear consensus upon the right set of determinants for entrepreneurial success. Studies conclude that the set of determinants of entrepreneurship success can be vary from country to country depending on a country's economic or market conditions, business trends, culture, human capital, natural resources and demographics. This study investigates determinants of entrepreneurial success in Oman. It also looks at two moderators, alertness to opportunity and intrinsic motivation, with the purpose of finding their impact on the relationship between determinants and entrepreneurial success.</p> <p>Key findings include that education and experience of an entrepreneur do not have a fundamental role in entrepreneurial success. Results also reveal that social capital, as well as human capital, do not determine entrepreneurial success in Oman. The study proves that entrepreneurial success depends on creative self-efficacy and networking skills of an entrepreneur, i.e., entrepreneurs with higher creative self-efficacy are more likely to be successful in their business. Similarly, networking skills including coordination skills, relational skills, partner knowledge and internal communication could determine entrepreneurial success. Additionally, financial capital acts as an antecedent of entrepreneurial success. Furthermore, there is no impact of moderators on the relationship between determinants and entrepreneurial success.</p> <p>Results indicate that entrepreneurs should polish their networking skills, build financial capital and have a higher level of creative self-efficacy to be successful in Oman.</p> <p>Keywords: Entrepreneurship, entrepreneurial success, resource-based approach, capabilities approach, networking approach, determinants.</p>

### RESEARCH RELEVANCE AND POTENTIAL IMPACT

This research model is a better approximation of the reality and expect it to produce results that will enable us to have a better and more complete understanding of the phenomenon of entrepreneurial success in SMEs in the Omani context. This is a reasonable expectation because i) the success of entrepreneurial businesses in reality is a result of interwoven relationships between several factors that simultaneously exert their influences on the functioning of SMEs, and ii) this study recognizes these complex relationships. This study is also to increase our ability to understand if the insights from Western-based context studies are valid in non-Western contexts, especially in Oman. This should be an important insight because most of the studies on SMEs have been undertaken in Western (i.e., mostly in U.S.) contexts and we know very little about the applicability of these findings to the Oman context.

Research results will be found useful for SMEs in maintaining and strengthening their efforts on developing more sustainable products/services to achieve competitive advantages in today's highly competitive environments. Research findings along with recommendations and conclusions will be distributed to affected communities, government agencies and policy makers. Furthermore, by establishing better foundations for successful research partnerships and knowledge exchange, this study reinforces the value of research within society, thereby enhancing the prospect for continued top-quality research and education in Oman.

### RELEVANT PUBLICATIONS

N/P

### CAREER ASPIRATIONS

Improve my career. One of the plans is to start teaching at university level and start publication.

## ABDULLA RASHID ALI MOHAMED AL NEAIMI

Department of Business Administration  
College of Business & Economics



DISSERTATION	
Title	A Framework for the Evaluation of Cyber-Security Effectiveness of Abu Dhabi Government Entities
Faculty Advisor	James Thomas Kunnanatt PhD, Department of Business Administration
Defense Date	23 November 2017
Abstract	<p>Cyberspace has become one of the new frontiers for countries to demonstrate their power to survive in the new digitized world. It is also increasingly becoming a strategic area of concern for many countries due the threats launched against the security systems of countries. Cyber threats and attacks on government departments are increasing globally and studies reveal that most of the widespread attacks globally are by individuals or various hacking groups for personal gains. In the Middle East, the UAE government has become a major target for cyber conflicts recently due to the rapid increase in economic activity, tourism and technology, and the rise of oil and gas sector. The widespread use of internet in the region to the tune of 88% by the end of 2014 has exposed the critical infrastructure to all forms of cyber threats. However, empirical information to contain the problem is limited in the region.</p> <p>In this dissertation, we present a detailed study of the existing cyber security defences globally and in Abu Dhabi government departments and conduct a detailed investigation into the factors that influence effectiveness of cyber security defences in government departments. We discuss the role of cyber security education, training and awareness in enhancing effectiveness of cyber security and investigate the part played by senior management in providing strategic direction to govern-ment departments for managing cyber and information security vulnerabilities. Study results show that management has the responsibility of putting in place the strategies, frameworks and policies that respond appropriately to the prevention, detection and mitigation of cyber-attacks. The three cornerstones of information security identified in this research are Critical Infrastructure, Organization and Technology.</p>

	<p>The management needs to put all these in place with effective support and participation from senior management of all government departments. The study results also show that culture sensitive training and awareness programmes add to the quality and effectiveness of cyber security systems in government departments.</p> <p>The study further investigates the relationship between experience of employees in government departments and cyber security effectiveness and observes that qualified and experienced personnel in government departments show greater understanding of cyber and information security issues. Finally, based on insights derived from the literature review and the findings of the study, we propose a hybrid-type cyber security framework and provide a checklist, with checkpoints, for strategic management of cyber security systems within government departments. The areas for future research interventions are also identified.</p>
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#### RESEARCH RELEVANCE AND POTENTIAL IMPACT

The study inquiries into the factors that contribute to or influence the effectiveness of cyber security in the various entities of Abu Dhabi government. The investigation is of contemporary importance due to the growing threats posed against cyber security defenses of government establishments within the UAE. Results show that management has the responsibility for putting in place the strategies, frameworks and policies that will establish the critical infrastructure, organization and technology required for cyber defenses. The study observes that there exists a need for recognizing the role of cyber security education, training and awareness in enhancing effectiveness of cyber defenses. The study recommends that management should put all these in place with effective support and participation from senior management of all government departments. The findings suggest that culture sensitive training and awareness programs add to the quality and effectiveness of cyber security systems. The researchers have also developed a hybrid-type cyber security framework for strategic management of cyber security systems within government departments.

## RELEVANT PUBLICATIONS

- Abdulla Al Neaimi, Tago Ranginya, Philip Lutaaya, "A Critical Analysis of the Effectiveness of Cyber Security Defenses in UAE Government Departments", Proceedings of the International Conference on Information Security and Cyber Forensics, Kuala Terengganu, Malaysia, 2014, ISBN: 978-1-941968-01-7 ©2014 SDIWC
- Abdulla Al Neaimi, Tago Ranginya, Philip Lutaaya, " A Framework for Effectiveness of Cyber Security Defenses, a case of the United Arab Emirates (UAE)", International Journal of Cyber-Security and Digital Forensics (IJCSDF) 4(1): 290-301 290, the Society of Digital Information and Wireless Communications, 2014 (ISSN: 2305-0012).
- Abdulla Al Neaimi, Tago Ranginya, Philip Lutaaya, "A critical analysis of the Cyber security mechanisms for the GCC member states and other developing countries", Proc. of The 2nd World Congress on Computer Applications and Information Systems, 2015, Hammamet, Tunisia.
- Abdulla Al Neaimi, "The Role of Culture in the Design of Effective Cyber security Training and Awareness Programs in the UAE", National Cyber security Institute Journal, Washington DC, USA, 2015.

## CAREER ASPIRATIONS

Scholar is a well-known business leader in the Emirate of Abu Dhabi. He is currently the Founder and CEO of his own company. He aims to continue to contribute to the development of the Emirate as a business leader in his area of expertise.



## MARIAM HAREB HUMAID BELHAYMAH ALDHAHERI

Department of Business Administration  
College of Business and Economics



DISSERTATION	
Title	The Relative Risk Performance of the Islamic Sukuks over the Conventional Bonds: New Evidence from Value at Risk Approach
Faculty Advisor	Professor Aktham AlMaghaireh
Defense Date	26 November 2017
Abstract	<p>The aim of this study is to assess the impact of strategic planning and management practices (SPM practices) on the performance of banks in the United Arab Emirates and the challenges they face in developing and implementing their strategic plans. Although banks in the UAE were able to recover smoothly after the 2008 financial crisis, they still face challenges due to globalization, low oil prices, and political instability in the region. The situation calls for efficient strategic planning and management by the authorities of the banks. This study, therefore, aims to contribute to improving the effectiveness of SPM practices within the banking sector in the UAE.</p> <p>The study critically examines the UAE's banking industry in the context of strategic planning and management practices with a focus on five key dimensions: 1) institutionalizing the planning process, 2) establishing the strategic foundation, 3) conducting strategic situational diagnosis, 4) developing a strategic plan and 5) managing the strategic plan implementation. Further, based on a critical review of the available empirical evidence, a conceptual model is developed to consider the five key dimensions, six financial ratios and one non-financial factor (customer satisfaction) and test the existing relationships between SPM practices and performance levels of banks in the country. The research covered a population of 51 conventional and Islamic banks registered on the financial markets within the UAE. A sample of 17 banks provided information for the study and data were sourced from top, middle and lower level executives of these banks. The investigation used quantitative research methods and statistical techniques such as factor analysis, analysis of variance, among others, to process data and arrive at findings. The study findings reveal that Islamic banks performed better than conventional banks in terms of most areas of strategic planning and management practices.</p>

### RESEARCH RELEVANCE AND POTENTIAL IMPACT

This dissertation is dealing with important issue in Islamic Finance; the important of Islamic bond (Sukuk). Islamic bond market risk is relatively new topic and the available literature is very limited. This dissertation's findings have important policy implications for investors and Islamic bond issuers. Moreover, they are of particular importance to policy makers.

### RELEVANT PUBLICATIONS

N/P

### RELEVANT PUBLICATIONS

My future goal is to continue in academic field and explore opportunities to utilize my research findings to contribute to existing body knowledge through participating relevant conference and publishing articles in academic journals.

## ABDULLA MOHAMMED ALAWADHI

Department of Economics and Finance  
College of Business and Economics



DISSERTATION	
<b>Title</b>	On Identifying Successful Financial Strategies for the Listed Companies in the United Arab Emirates: An Empirical Approach
<b>Faculty Advisor</b>	Professor Abdunnasser Hatemi-J
<b>Defense Date</b>	12 April 2018
<b>Abstract</b>	<p>Financial profile mirrors the performance of a company regarding its competitive market abilities, sustainability and capacity. Thus, it is a crucial matter for a firm to seek appropriate financial strategies to furnish a positive influence on boosting the target outcomes of its entire business performance. This study investigates how the adopted financial strategies are associated with short/mid/long-term performance of the UAE Public Joint Stock Companies (PJSC). The quarterly based ten-year (2006-2015) Panel Data Set of the 92 PJSCs, working in different business and industrial sectors, has been used in measuring the performance of each PJSC. Consequently, the researcher extracted eleven variables from the refereed finance literature to be viewed in this study as financial strategy-related factors; four out of them could be tested for the first time. These variables went into two themes, these are: i) six variables as a proxy for capital structure, and ii) five variables as a proxy for cash flow management. These variables were subject to further investigation for determining which of them have a direct influence on the financial and market performance of the PJSCs. A combination of four financial performance measures, along with two market performance measures was chosen as influential variables to measure the success of companies regarding their financial performance. The panel data analysis model was performed to make sure that the desirable statistical assumptions are fulfilled correctly, whereas the estimations were determined by using the Generalized Method of Moments (GMM) as estimation technique by the econometric software package EViews. Both, the analysis of the dataset, and validity of the influential variables have defined a mix of appropriate dynamic financial strategies for the PJSCs to be stable in averting unfavourable different economic conditions.</p>

	<p>However, this study argues that establishment of a mutual relationship between the financial strategy of a PJSC and its performance would be leading it to be successful. The gained findings confirm the primary assumption of this dissertation "Different financial strategies under different economic conditions are leading to different results (performance)". From an academic standpoint, this study represents a reliable reference in the domain of financial management practices upon which further studies are eagerly deemed.</p>
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### RESEARCH RELEVANCE AND POTENTIAL IMPACT

N/P

### RELEVANT PUBLICATIONS

A conference paper based on the preliminary findings of this dissertation, entitled "FINANCIAL STRATEGIES AND FIRMS' PERFORMANCE: THE INTERRELATIONSHIP", Presented at The first HDR Colloquium, May 2017, the University of Wollongong in Dubai (UOWD). Further, another conference paper with extended findings entitled "FINANCIAL STRATEGY AND FIRM PERFORMANCE UNDER DIFFERENT ECONOMIC CONDITIONS" has been accepted to be presented at the fourth UAE Graduate Students Research Conference (UAEGRS2018), 21 April 2018, the American University of Sharjah (AUS), Sharjah, UAE.

### CAREER ASPIRATIONS

The main aspiration behind joining the DBA program was that finding a significant contributing to my community, country and government, helping the policy makers to path a scientific approach in developing mechanism that would improve the financial world and the national economy, in general. My ambition, from day one in the DBA program, was to reach an outstanding achievement that allows the business community understands an ambiguous relationship between the adopted financial strategies and the firms' performance, which, eventually, influences the national economy. Further, I have the willing to be Adjunct Faculty to share and spread knowledge in the Financial Management area, and to offer personal contribution in any government mission to reshape the financial and economic strategies.

## NADIA MUTRIFE AL JABRI

Department of business Administration  
College of Business and Economics



DISSERTATION	
<b>Title</b>	The Impact of Transformational and Transactional Leadership Styles on Organizational Learning in Health Care Context
<b>Faculty Advisor</b>	Dr. Abdul Karim Khan
<b>Defense Date</b>	16 April 2018
<b>Abstract</b>	<p>The aim of this research is to examine the impact of leadership styles on organizational learning in health care context at Abu Dhabi Health Services Company (SEHA) in Al Ain region. The study uses a quantitative methodology to answer the research questions. The findings suggest that both transactional and transformational leadership styles are associated with organizational learning. The transformational leadership is linked with organizational learning through learning goal orientation and trust in leaders whereas transactional leadership style is linked with organizational learning through performance goal orientation. The research findings can help senior executives to put strategic plans for their organizational learning development. Also, the research is expected to provide a baseline for health care policy makers on how they can initiate and create a context of organizational learning through enhancements of the leadership role.</p>

### RESEARCH RELEVANCE AND POTENTIAL IMPACT

This research is relevant for leaders in healthcare organizations. The findings shed light on how different leadership styles are related to organizational learning, an important element for organizational competitiveness. The findings suggest that leaders can build a culture around trust, dissent seeking, learning and performance goals to promote organizational learning.

### RELEVANT PUBLICATIONS

N/P

### RELEVANT PUBLICATIONS

The implications are beneficial for organizational leaders, decision makers, policy makers and HR professionals across the U.A.E. I look forward to further supporting the leadership in designing strategies that shape their community/individuals toward their organizational future visions.

## MOHAMED A. ALAHMED

Department of Business Administration  
College of Business and Economics



DISSERTATION	
Title	Identifying the Determinants of Government E-Service Quality in the UAE
Faculty Advisor	Dr. Ananth Chiravuri
Defense Date	26 April 2018
Abstract	<p>Globally, government entities are facilitating ever more over-the-internet transactional services. In the Middle Eastern context, the United Arab Emirates (UAE) is at the forefront. Although the Telecommunications Regulatory Authority of the UAE has adopted appropriate e-service quality (ESQ) assessment tools in-house, these tools are designed only for back-end developers, not for gauging end-user satisfaction levels. In light of this, we developed a conceptual framework for the holistic measuring of such citizen opinions. The study incorporated a survey instrument on a sample population (n = 2,197) for investigating the ESQ of the UAE Ministry of Interior transactional e-services. Key findings indicate that most ESQ content factors (excepting reliability) and all ESQ delivery factors, along with Trust in government positively impacted the ESQ user perceptions measured in terms of reuse intentions and overall satisfaction levels. However, familiarity with information and communication technology (ICT familiarity) was found to be insignificant. Responsiveness has the largest impact on ESQ perceptions. Interestingly, no differences between the genders were observed, but age, education and nationality all led to statistically significant differences. This research study adds an in-depth case to the relevant literature on public sector e-service provision in the Middle East and also to the one that considers ESQ assessment. The dissertation furnishes some suggestions about the wider and more systematic deployment of the analytical framework in future studies.</p>

## RESEARCH RELEVANCE AND POTENTIAL IMPACT

This study is very applied and addresses a practical issue relating to ESQ in UAE. One of the many contributions of this study is to develop a scale (using TRA guidelines) to measure ESQ from the consumer's perspective for the first time in the context of UAE and subsequently test it using a real world sample.

Findings from this study will impact end user ESQ testing at TRA and could lead to a uniform scale that could be used across all government entities in UAE.

It will also help better understand and address issues related to the low adoption and usage of transactional e-services within MOI in UAE which are currently below the targeted estimate.

In addition, results of this study (including the conceptual framework) can help inform current strategies and action plans, as well as help formulate new guidelines, strategies, and objectives for the development of the UAE's e-government infrastructure and become more user-centric.

## RELEVANT PUBLICATIONS

- Al Ahmed, M., and Chiravuri, A. What Determines the Quality of E-Government Services In The UAE? Presenting A Framework, Proceedings of Pacific Asia Conference on Information Systems (PACIS), Chiayi, Taiwan, June 27- July 1, 2016.
- Al Ahmed, M., and Chiravuri, A. A Framework on the Determinants of E-government Services Quality in UAE, Proceedings of UAEU Annual Research & Innovation Conference, Al Ain, UAE, November 24-25, 2015.
- Chiravuri, A., and Al Ahmed, M. A Framework on the Determinants of E-government Services Quality in UAE, Proceedings of the International Council for Small Business (ICSB), Dubai, UAE, June 6-9, 2015.
- Moreover, this research paper has been published on AIS Electronic Library.

## CAREER ASPIRATIONS

The main aspiration behind joining the DBA program was that finding a significant contributing to my career that serving my country and my government, helping the policy makers to path a scientific approach in developing mechanism that would improve the public e-services quality from both ICT back-end developer and front-end user. To be clear, the UAE's Telecommunications Regulatory Authority have criteria and benchmarks for government e-services design and deployment. There though are designed for back-end developers; they are not focused on end-user 'perception' of quality. To incorporate this is indeed a key motivation/objective of this DBA study. Thus, the motivation for this was to help public sector entities based in the UAE to improve their 'over the internet' services. The case study was the MOI's traffic fine payment e-service. But, this test could equally be applied to many, if not all, of this and other UAE government entity (e) and (m) services. Finally, from day one in the DBA program, the key ambition was to develop data-driven strategies that help me addressing practical problems which using the advance tools and research skills needed for making decisions in my work.

## FATMAH MOHAMED AL SUWAIDI

Department of Business Administration  
College of Business and Economics



DISSERTATION	
Title	The Impact of Strategic Management Practices on the Performance of UAE Banks
Faculty Advisor	Dr James Thomas
Defense Date	13 May 2018
Abstract	<p>The aim of this study is to assess the impact of strategic planning and management practices (SPM practices) on the performance of banks in the United Arab Emirates and the challenges they face in developing and implementing their strategic plans. Although banks in the UAE were able to recover smoothly after the 2008 financial crisis, they still face challenges due to globalization, low oil prices, and political instability in the region. The situation calls for efficient strategic planning and management by the authorities of the banks. This study, therefore, aims to contribute to improving the effectiveness of SPM practices within the banking sector in the UAE.</p> <p>The study critically examines the UAE's banking industry in the context of strategic planning and management practices with a focus on five key dimensions: 1) institutionalizing the planning process, 2) establishing the strategic foundation, 3) conducting strategic situational diagnosis, 4) developing a strategic plan and 5) managing the strategic plan implementation. Further, based on a critical review of the available empirical evidence, a conceptual model is developed to consider the five key dimensions, six financial ratios and one non-financial factor (customer satisfaction) and test the existing relationships between SPM practices and performance levels of banks in the country. The research covered a population of 51 conventional and Islamic banks registered on the financial markets within the UAE. A sample of 17 banks provided information for the study and data were sourced from top, middle and lower level executives of these banks. The investigation used quantitative research methods and statistical techniques such as factor analysis, analysis of variance, among others, to process data and arrive at findings. The study findings reveal that Islamic banks performed better than conventional banks in terms of most areas of strategic planning and management practices.</p>

	<p>Detailed analyses and findings indicate that specific pattern variations and relationship structures are observable in terms of the five SPM components and their impact on the performance levels of both Islamic and conventional banks. Most importantly, the quantitative findings and qualitative inferences from the study lead to the conclusion that management in the banking industry has the responsibility of putting in place the strategies, frameworks and policies that respond proactively to the prevention, detection and mitigation of shocks on banks, particularly from their external business environment. To accomplish this, the senior management authorities in each of the banks should frequently review all areas of their SPM practices (institutionalizing the planning process, establishing the strategic foundation, conducting strategic situational diagnosis, developing a strategic plan and managing strategic plan implementation) and implement adequate revisions in each component to manage their organizations more efficiently and effectively.</p> <p>Keywords: Strategic Planning Management (SPM), Conventional Banks, Islamic Banks, Strategic Situational Diagnosis.</p>
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#### RESEARCH RELEVANCE AND POTENTIAL IMPACT

The present research contributes to the literature by evaluating key components of SPM practices and identifying their impact on the performance of conventional and Islamic Banks in the UAE.

It investigated and assessed the relevance of strategic planning and management on the performance of the UAE's conventional and Islamic banks and examined any possible relationships between SPM and customer satisfaction. The outcomes of the present study reveal that strategic planning and management practices are prevalent in UAE banks and that these practices exert a significant impact on the financial performance of these banks. Non-financial performance in relation to customer satisfaction, however, was not impacted by SPM practices.

#### RELEVANT PUBLICATIONS

N/P

#### CAREER ASPIRATIONS

The main goal of joining the DBA program was to examine the strategic planning and management in UAE banking field. Therefore, the knowledge gained during this journey helped in evaluating how policy makers, strategists and managers in UAE respond to local and global economical challenges through their strategies. Moreover, it equipped me with the skills and experiences to pursue my future career in academic field.

## KHAMIS KHALFAN KHAMIS KHALFAN ALZAHMI

Department of Business Administration  
College of Business and Economics



DISSERTATION	
<b>Title</b>	Antecedents of Employee Engagement in a Multicultural Work Environment: The Case of the UAE
<b>Faculty Advisor</b>	Dr. Mohammed Al Waqfi
<b>Defense Date</b>	13 May 2018
<b>Abstract</b>	<p>This dissertation investigates the antecedents of employee engagement within a multicultural work environment in the United Arab Emirates (UAE). In 2017, the UAE launched the corporate happiness and positivity initiative across organizations where employee engagement was considered as one of the key drivers and enablers of this vision. Existing research indicates that employee engagement is a major factor leading to organizational success and competitiveness. Employee engagement is believed to lead to many benefits for both the organizations in question and their employees. These benefits can include better financial results and improved performance through increased productivity and performance, employee wellbeing, and the perceived career success of employees. Many research studies show that organizations where employees feel engaged have increased shareholder returns, greater profitability, higher productivity, and also higher levels of customer satisfaction. The purpose of this study is to examine the effect of individual characteristics and organizational factors on employee engagement. It aims to identify the main individual and organizational antecedents that determine the level of employee engagement in the public, private and mixed sectors in the UAE. This study applied a quantitative approach by using a large-scale sample survey questionnaire. Structural Equation Modelling (SEM) was used to analyse the data collected from 1,033 employees in a variety of organizations. This study empirically examined several individual-level antecedents of employee engagement. The results revealed that self-efficacy, person-job fit, and relationships with supervisor positively influenced employee engagement. Likewise, several organizational-level antecedents of employee engagement were examined and the empirical results revealed that organizational support and job security positively influenced employee engagement in the workplace in a UAE context.</p>

These findings contribute to the literature on this subject by expanding knowledge on the determinants of employee engagement, especially in a multicultural work environment such as in the case of the UAE. This was achieved by developing a theoretical model and testing it empirically. It was found to be a fit and suitable model for a variety of the UAE's workplace contexts. The findings can be of benefit to both practitioners and academics in order to develop effective strategies to increase employee engagement. This, in turn, can lead to higher organizational productivity, improved performance and greater success for the organization and individuals in today's highly competitive global business environment.

Due to a scarcity of studies on employee engagement in cross-cultural work contexts, such as we find in the UAE, we believe that this study is an important step towards building knowledge on the essential determinants and antecedents of employee engagement. Despite a general consensus on the importance of employee engagement and its concomitant benefits, there is no universal agreement as to what exactly leads an employee to become engaged with their various work contexts. This study developed an employee engagement model and empirically tested the model in order to have a better understanding of employee engagement in the UAE and other similar contexts. It is hoped that the results can help to develop effective strategies to increase the level of employee engagement across organizations in the country and help the UAE in its drive to become a leading country in terms of business practices and in line with the country's clearly stated vision.

### RESEARCH RELEVANCE AND POTENTIAL IMPACT:

This study that had examined the employee engagement antecedents in the UAE multicultural work environment and developed an engagement model for supporting organizations harnessing the numerous benefits of engaged diversified multicultural workforce.

It had identified the main individual and organizational antecedents that determine the level of employee engagement in a multicultural work environment in public, private or mixed sector organizations in the UAE. We hope that this study has yielded contributions from the theoretical and empirical research perspectives and that we have advanced positive implications and concomitant recommendations.

We believe that this research offers a new understanding of employee engagement in the context of the UAE, and similar contexts, which can lead to the development of effective strategies to increase the level of employee engagement in the country as the UAE seeks to realize the UAE 2021 Vision.

### RELEVANT PUBLICATIONS

N/P

### CAREER ASPIRATIONS

Research and teaching are very inspiring experience to me especially in the field of HR and employee engagement. So, I am extremely interested to become a highly competent researcher and instructor to contribute and share knowledge on the subject that has given me so much inspiration and pleasure. As well as, to publish a high quality research in reputed journals and participate at relevant conferences.

This research experience had really enhanced my professional skills in my job and my aim is to become an expert in this field which will give me the honor to serve and present our beloved country, the UAE, around the world and strive to achieve our visionary leadership targets.











