

MBRU360

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Mohammed bin Rashid Establishes Dubai Academic Health Corporation

His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE, and Ruler of Dubai, issued Law No. (13) of 2021 establishing the Dubai Academic Health Corporation.

According to Law No. (13), the Dubai Academic Health Corporation aims to advance health services in Dubai through a new academic system that integrates healthcare, medical education and scientific research. The Corporation aims to improve the efficiency, quality and accessibility of Dubai's healthcare services in accordance with the highest standards and best practices. It will also seek to strengthen Dubai's leadership in academic education and scientific research in

the fields of medicine and health sciences, as part of the broader strategy to strengthen the knowledge economy.

According to the Law, the following entities will integrate and form the new Corporation once the Law is issued and published in the Official Gazette: DHA's Dubai Healthcare Corporation, including the hospitals and organizational units under it; the Mohammed Bin Rashid University of Medicine and Health Sciences; Dubai Dental Hospital; Al Jalila Foundation; Al Jalila Children's Specialty Hospital, and any other entities mandated to be part of the Corporation as per legislations issued by the Ruler of Dubai.



MBRU Turns Five

His Highness Sheikh Mohammed Bin Rashid Al Maktoum, Vice-President and Prime Minister of the UAE, and Ruler of Dubai once said:

"Human beings, their ideas, innovations, dreams, and connections, are the capital of the future. Because where great minds go today, great things will follow tomorrow."

This committed approach to innovation and, by extension, the pursuit of knowledge and learning, is an ethos we at Mohammed Bin Rashid University of Medicine and Health Sciences (MBRU) have strived to encapsulate in our first five years.

On June 9th 2016, His Highness Sheikh Mohammed Bin Rashid Al Maktoum signed the establishment decree of MBRU. In such a short time, we are proud to have achieved so much, bringing together talented minds in research and education, and setting the foundations for an integrated academic health system in the UAE.

Yet we don't stop there. While it is important to pause at this juncture in our journey to reflect on the story so far, it is also pragmatic and

MBRU's community response to COVID-19

There are many commendations I could give to our committed MBRU family during the COVID-19 pandemic. I must acknowledge the perseverance of our students in these challenging times. In an educational environment that requires so much hands-on learning, your ability to adapt to new learning platforms has been nothing short of incredible.

This agility and adaptability have been embodied right across our campus, by all members of the MBRU family. With so much uncertainty, your ability to rise above the challenges presented by the pandemic has been truly inspirational.

You have all relentlessly pursued a continuation of our core goals and beliefs. With your support, we have been able to channel adversity into opportunities to continue our evolution and I would like to thank you all for your efforts.

Five years of achievements

From more than 600 peer-reviewed publications to the launch of the College of Nursing and Midwifery, a global summer scholar program, and our very own Master of Science in Biomedical Sciences and PhD program, there are many milestones that we fondly look back on.

Some of our biggest achievements transcend the fields of education and research and we can rightly say we have made a difference to society. The launch of MBRU's organ transplant program – which oversaw the first kidney transplant in Dubai, as well as our 'Your Donation Saves Lives Campaign', which has raised over AED 22 million to support patients with kidney failure, have both been momentous triumphs for the medical community in the emirate. Additionally, the appointment of our very own Dr. Hanan Al Suwaidi as flight surgeon

imperative in our quest to realize the vision of His Highness, to look ahead and visualize how we can further the nation's goals in our areas of expertise.

for UAE Mission 1 – which marked the UAE's first astronaut in space – cemented our role as a key contributor to the nation's growth and development.

In more recent history, we have played a significant role in supporting UAE's efforts in tackling the pandemic. MBRU has played a leading role in Dubai's COVID-19 Command and Control Center, collaborated in UAE's first whole-genome sequencing of the virus, and achieved great success with the MBRU Community Immunity Program, designed to raise awareness on the virus during the pandemic, crossing 1 million ambassadors worldwide. Our 'Wellness on Wheels Vaccination Drive', in partnership with Dubai Health Authority, has also helped deliver more than 50,000 vaccine doses to the public.

MBRU's drive towards the future of healthcare

What we have built over the past five years is an incredible community of driven, like-minded professionals and the pathway to an integrated academic health system that will continue to elevate the UAE's healthcare sector.

Our dedication to driving the sector towards the next 50 years is unwavering. As we enter our second half-decade, my message to all is that we must keep moving, keep innovating and keep learning to realize the MBRU Integrated Academic Health System by 2026.

MBRU is what it is today because of you. Thank you for everything that you do.

Sincerely,

Amer Sharif
Vice Chancellor

Five years ago, **His Highness Sheikh Mohammed bin Rashid Al Maktoum** signed the decree establishing MBRU. Members of the MBRU family look back and remember their fondest memories at the University. Watch [here](#).



What does MBRU mean to you?



“

I have been a pioneer in MBRU. I have seen it form and grow. I have spent the past 9 years of my life in and for MBRU. MBRU is my home and family.

Mohamed Rafeeq

”



“

New opportunities, innovation, always striving to be the best and provide the best for the community.

Reem Jan

”



“

Life. Growth. Fulfillment.

Tom Loney

”



“

MBRU is an answer to a prayer and a realization of a dream in service to humanity.

Rosario Clemente

”

What does MBRU mean to you?

“

My extended family where I spend more time than my 1st family.

Shakeel Tegginmani

”



“

MBRU to me is my place that builds me professionally, every day. It helps me be a better version of myself, and that in turn reflects on the quality of service that I provide at MBRU.

Sharon Mascarenhas

”



“

I lived the progress of the University for over 7 years day by day. MBRU for me means to be completely for students and for its objectives.

Amar Omer

”



“

MBRU is an institution I'm proud to belong to. I feel fortunate to be employed at a young growing institution with faculty from such diverse backgrounds. The friendly and supportive environment adds huge value and makes MBRU a unique place to work in.

Shroque Zaher

”



What does MBRU mean to you?



“

When I joined MBRU, I was convinced immediately that this place is different from my past workplaces. We are appreciated not only by our line managers but even the leadership, they do not miss the opportunity to say thank you. Working here I have always felt that I belong here.

Roma Dubey

”



“

Being part of MBRU is a real privilege for me. It is a unique chance for communication with international faculty and students and it is an honor to be part of MBRU Clinical Training. Everyone here is highly motivated and inspiring. MBRU gives everyone great working and teaching experience in a very friendly supportive atmosphere. It has been a privilege and a pleasure to contribute to this outstanding medical school and to be part of MBRU's growing Family.

Nour AbuMahfouz

”



“

MBRU is home to me. It's where I meet my family - which include my friends, staff, and faculty members. Studying Medicine at MBRU is a dream come true, as I get to study alongside several people from all around the world. The facilities provided at MBRU, especially the AMML library truly help me in my studies. Moreover, one of the reasons why studying medicine at MBRU is enjoyable is the fact that even when I was a first-year student I can get an insight into how medicine is practiced, how it varies in different parts of the world, how we can enhance our clinical skills using the Simulation lab, and most importantly, how MBRU became a place where my talents had a platform for it to be showcased. I truly am blessed and honored to be part of this institution, and I wish many more years of prosperity and success for all that they do. Now as a 3rd year medical student looking back at my journey at MBRU, I can safely say that I am who I am thanks to MBRU, and I wouldn't change it for the world.

”

Varshini Tamil Selvan (Student)

MBRU Launches First Doctorate Program in Dubai to Drive Support of Biomedical Sciences in UAE

MBRU has taken another giant stride towards realizing its vision to become a global hub for innovative and integrated healthcare education and research at the service of humanity, with the launch of a fully sponsored PhD in Biomedical Sciences – the first doctorate program at MBRU.

The program has been designed to capitalize on the core strengths of MBRU, with a focus on broader themes of medical and biomedical sciences. It is available to anyone with a master's degree in a related subject, such as life or health sciences.

The program, first-of-its-kind in Dubai, was developed in alignment with the priorities of the National Advanced Sciences Agenda 2031 which focuses on national capacity building and addressing health challenges in the UAE through a national scientific system.

PhD graduate students will get the opportunity to work closely with a diverse and talented research faculty and the program aims to match a student's research interest with an appropriate faculty member from day one. Research work will take place in MBRU's newly equipped, state-of-the-art laboratories as well as MBRU Biomedical Research Center supported by Al Jalila Foundation. Research will focus on areas of the genetics

of developmental diseases, reproduction, cancer biology, diabetes, cardiovascular, respiratory, and infectious diseases, pharmacology, lncRNA, stem cell biology, and tissue engineering.

Professor Zaid Baqain, Provost stated, "One of our core goals at MBRU is to train and nurture scientists and support research in the medical and biomedical sciences in the UAE. We believe that to be a great scientist, one needs to master a diverse set of competencies and this program will give graduate students access to that diversity, with access to a talented research faculty spanning multiple areas of medical and biomedical sciences."



"Research drives our vision to be a global hub for innovative and integrated healthcare education. The PhD program provides a research-intensive environment that will provide prospective graduate students with a strong foundation in the frontiers of biomedical sciences, through a variety of course work, as well as intense laboratory research training and conducting of an independent research project." said **Professor Stefan Du Plessis**, Dean of Research and Graduate Studies, MBRU.

To attract top local talent, MBRU has offered full scholarships for students from all nationalities accepted in the PhD program. For more information about the program, please click [here](#).

MBRU Announces Scholarships for Nursing Frontliners

MBRU has announced a 50% scholarship for postgraduate students of all nationalities applying for its College of Nursing and Midwifery for the academic year 2021-2022, as a show of support to frontline workers.

The College of Nursing and Midwifery programs are accredited by the UAE Ministry of Education and will provide registered nurses with a wide range of skills and competencies across specialist areas of nursing and in specific clinical settings. Last year, the programs drew a strong response from nursing professionals in the UAE, with more than 70% of the first cohort of students for the College being Emirati females.

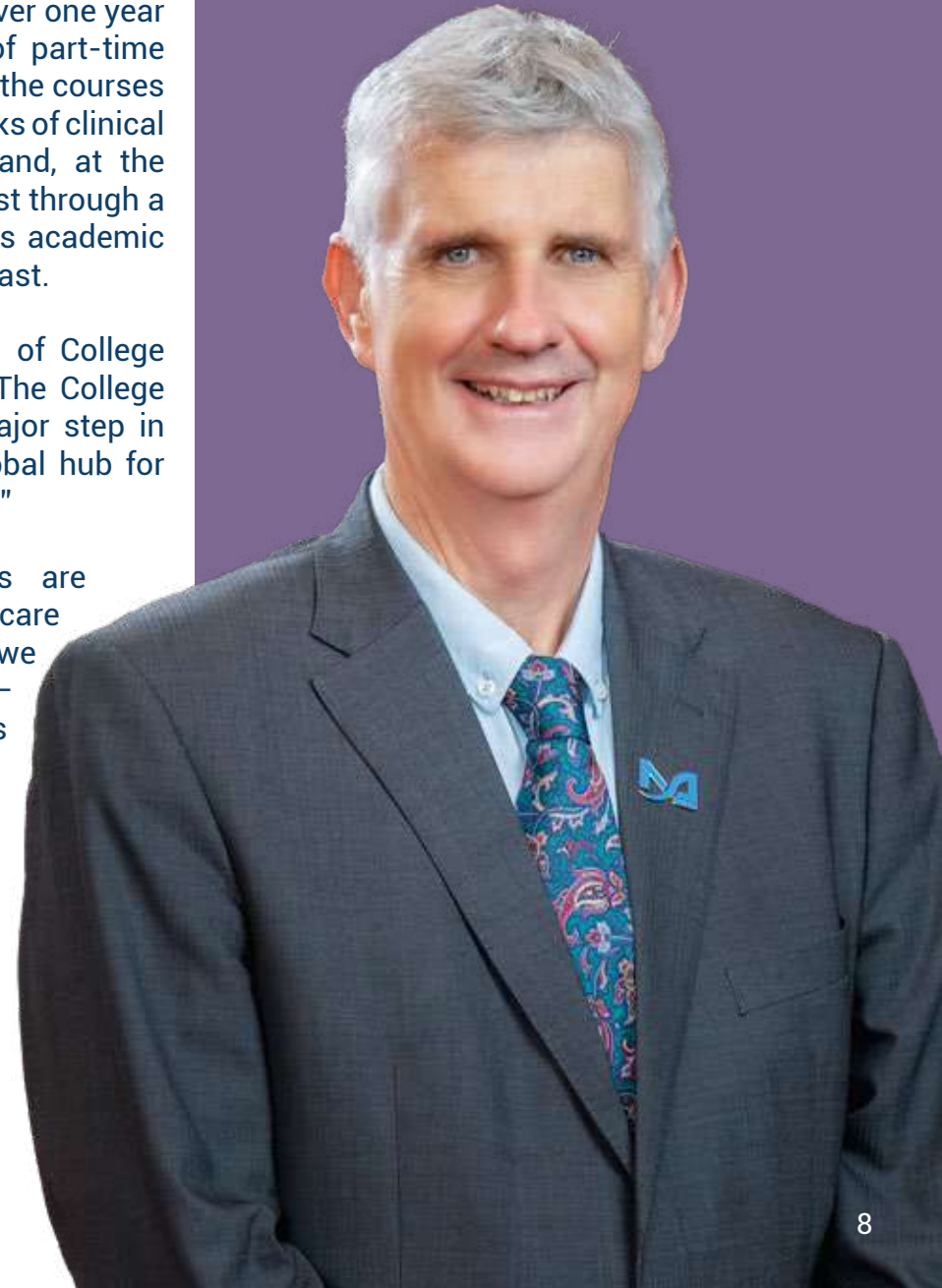


The programs can be completed over one year of full-time study or two years of part-time study, and a clinical component of the courses will see students undertake 12 weeks of clinical nursing practice in Northern Ireland, at the Belfast Health and Social Care Trust through a partnership between MBRU and its academic partner Queen's University of Belfast.

Professor Kevin J Gormley, Dean of College of Nursing and Midwifery, said: "The College of Nursing and Midwifery is a major step in MBRU's mission to become a global hub for integrated healthcare education."

"Highly skilled, qualified nurses are essential to the future of healthcare in the UAE and the region, and we are confident that our courses – and our partnership with Queen's University Belfast – will deliver exceptional students and model professionals."

For more information, please click [here](#).



UAE Advances Study of Genetic Diseases with the Launch of First-of-its-kind Center for Genomic Discovery

The UAE has taken another stride towards becoming a global hub for healthcare research excellence with the launch of a first-of-its-kind Center for Genomic Discovery, which will help diagnose and treat patients with genetic disorders, enhance local genomic research, and train the country's next generation of scientists.

The Center has been made possible through the creation of a new and innovative scientific and clinical interdisciplinary ecosystem by MBRU and Al Jalila Children's Specialty Hospital through its Al Jalila Genomics Center.

The Center was launched during the University's participation at Arab Health 2021, under the "Research and Innovation" theme, designed to enhance Dubai's position at the forefront of advanced sciences.

Aligned with the leadership's new vision for the future of the health sector, the launch coincides with the formation of the Board of Emirati Genome Program, headed by **His Highness Sheikh Khalid bin Mohamed bin Zayed Al Nahyan**, Member of the Abu Dhabi Executive Council and Chairman of the Abu Dhabi Executive Office, to oversee and guide the implementation of the Emirati Genome Program in the country's healthcare system.

Dr. Amer Sharif, Vice Chancellor of MBRU and member of the Board of Emirati Genome Program, said: "The support of the UAE's leadership has enabled us to record this latest major milestone. These are life-changing outcomes that underline the power of research and the role of MBRU and our academic health system partners as research-intensive institutes."

"The establishment of the Center of Genomic Discovery through an integrated academic health system will allow us to innovate in genomics application and gene discovery. This will also enable us to realize our vision of advancing health through cutting-edge academic research and nurturing future scientists serving individuals and communities in the UAE and the region." Dr. Sharif added.

"This is a major development for Dubai and the UAE," explained **Dr. Ahmad Abou Tayoun**, Director, Al Jalila Children's Genomics Center and Associate Professor of Genetics at MBRU. "The new Center leverages the clinical, genomics, and functional research infrastructure and human resources at Al Jalila Children's and MBRU to propel interdisciplinary activities. Our clinicians and researchers are experts in their respective fields who can help resolve undiagnosed patients with highly suspected inherited disorders. Furthermore, the Center will create

a training and research site for masters and Ph.D. students, as well as post-doctoral fellows at MBRU."

The Center will seek to engage undiagnosed pediatric patients with suspected hereditary disorders whose clinical genomic testing at Al Jalila Children's – such as whole-exome sequencing and chromosomal microarrays – failed to identify any definitive genetic causes. Researchers will then analyze the patients' negative genetic data for any possible novel findings.

"Ultimately, the Center's main goal is to make novel genetic discoveries in the pediatric patient population in the UAE and the region and leverage these discoveries to develop new diagnostic tools and uncover personalized pathways to restore 'normal' phenotypes in affected patients." added **Dr. Abou Tayoun**.





Dr. Fahad Ali, Assistant Professor of Molecular Biology, MBRU, added: “The necessary interdisciplinary activities – including patient recruitment, genomic data analysis, and functional characterization – cannot be undertaken without the Center, its founding institutions and the interdisciplinary ecosystem they have created. At the Center, functional experiments will be designed to characterize any novel candidate genes or mutations, to establish new gene-disease associations, and to explore potential therapeutic targets.”

The Center for Genetic Discovery has already begun investigations into the cause of a genetic disease in one family within the UAE with promising progress, revealed **Professor Stefan Du Plessis**, Founding Dean of Research and Graduate Studies, MBRU and a member of the Center's Steering Committee.

The Center for Genomic Discovery



“At least one novel gene has been identified by whole-exome sequencing – a complex genomic test which surveys all 20,000+ human genes in search for tiny changes which might be disease causing,” explained Professor Du Plessis.

“Functional analysis is still ongoing but preliminary data strongly suggests a role in disease. We have also identified patients outside the UAE, in the Gulf region, with the same clinical conditions, mutations and gene. We are now establishing collaborations with researchers from those sites to characterize this gene. The fact that patients from different backgrounds with similar clinical features have mutations in the same gene further establishes a potential new gene-disease discovery.”

The initiative is also aligned with MBRU's core goals of training and nurturing scientists and supporting research in the medical and biomedical sciences in the UAE and enhance the appeal of the newly established Ph.D. in Biomedical Sciences – the first doctoral program at MBRU.

Research carried out at the Center will be published in high profile journals. It will also raise the profile of Dubai, MBRU and Al Jalila Children's as leading research centers at the heart of advanced medical science.

To learn more about the Center, please click [here](#).

MBRU Concludes its Participation at the 25th UAE International Dental Conference & Arab Dental Exhibition (AEEDC 2021)

MBRU has leveraged its participation at the 25th UAE International Dental Conference & Arab Dental Exhibition (AEEDC Dubai) to showcase its growing education opportunities for postgraduates pursuing a career in dentistry.

The University promoted five postgraduate programs at Hamdan Bin Mohammed College of Dental Medicine (HBMCDM) and Dubai Dental Hospital (DDH), the first and largest dental hospital in Dubai: Master of Science in Endodontics; Master of Science in Orthodontics; Master of Science in Pediatric Dentistry; Master of Science in Periodontology; Master of Science in Prosthodontics. Admissions for the academic year 2022-2023 will begin in October.

"AEEDC Dubai is a great platform to meet with our peers, share knowledge and showcase our



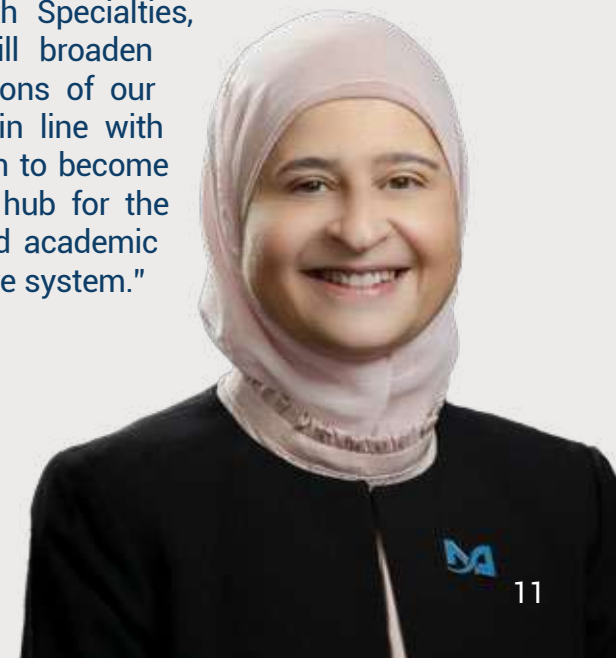
range of programs designed to further the learning journey of tomorrow's dental care professionals and enhance Dubai's status at the forefront of healthcare excellence," said **Dr. Khawla Belhoul**, Senior Director, Dubai Dental Hospital.

"We also took this opportunity to mark the first anniversary of our Dental Internship Program, which gives fresh graduates experience in comprehensive patient-centered dental care, including supervised practice as a general dentist and rotations in endodontic, periodontology, prosthodontics, pediatric dentistry, orthodontics, and oral surgery." She added.

MBRU also marked the launch of the Endodontic Residency program offered at HBMCDM and DDH. The program has received accreditation from the Saudi Commission for Health Specialties (SCFHS) and will commence in October 2021.

Members of the MBRU family welcomed **H.E. Turki Al Dakhil**, Ambassador of Saudi Arabia to the UAE at the stand. His Excellency was briefed on the latest programs offered at Hamdan Bin Mohammed College of Dental Medicine and the new services at Dubai Dental Hospital.

Dr. Manal Al Halabi, Dean of HBMCDM said: "We are honored to receive accreditation from our esteemed colleagues at the Saudi Commission for Health Specialties, which will broaden the horizons of our dentists in line with our vision to become a global hub for the integrated academic healthcare system."



Smart Dubai and Mohammed Bin Rashid University of Medicine and Health Sciences Develop a Novel COVID-19 Epidemiological Model

Smart Dubai and MBRU developed a novel epidemiological model to predict the spread of COVID-19. The newly developed model is a specialized compartmental version of the SEIR (Susceptible-Exposed-Infected-Removed) model, widely used in epidemiology to mathematically model the spread of infectious diseases with incubation periods.

The SEIR model prototype is generally considered generic and unable to capture the unique nature of a novel viral pandemic, such as COVID-19. With that in mind, researchers at Smart Dubai and MBRU developed and tested a specialized version of the SEIR model, called SEAHIR (Susceptible-Exposed-Asymptomatic-Hospitalized-Isolated-Removed) model, which was better able to capture the unique dynamics of the COVID-19 outbreak. The work was recently published in the International Journal of Environmental Research and Public Health in a special issue called Infectious Disease Modeling in the Era of Complex Data on March 2021.

The newly developed model can forecast healthcare requirements through a very detailed framework. It also takes into consideration the impact of non-pharmaceutical interventions, such as physical distancing, and different testing strategies on the number of confirmed cases.

Smart Dubai had first used the model in its Smart Control Dashboard COVID-19, developed in partnership with Dubai's COVID-19 Command and Control Center to monitor and predict the spread of the novel coronavirus.



دبي الذكاء
SMART DUBAI

"This paper is a significant accomplishment as it outlines our data-driven approach to addressing the COVID-19 pandemic, with a special focus on the UAE and Dubai," said **His Excellency Younus Al Nasser**, Assistant Director General of Smart Dubai, and CEO of the Dubai Data Establishment.

"We are honored to see our work with our partners at the Mohammed Bin Rashid University of Medicine and Health Sciences published in the renowned International Journal of Environmental Research and Public Health."

"We, at Smart Dubai, have always believed data to be an exceptionally effective instrument for calculated decision-making," H.E. added. "Our approach to handling the pandemic and its repercussions echoed our tactics to drive



Dubai's digital transformation and sustainable development, where we consistently rely on accurate data when planning Dubai's transformation into the happiest smart city of the future."

H.E. Al Nasser was one of six authors who developed the paper, alongside Dr. Alexandros Leontitsis and Dr. Aamena Alshamsi from Smart Dubai and Professor Alawi Alsheikh-Ali, Professor Abiola Senok, and Dr. Tom Loney from the College of Medicine at the Mohammed bin Rashid University of Medicine and Health Sciences.

Dr. Amer Sharif, Vice Chancellor, MBRU, and Head of the Dubai COVID-19 Command and Control Center said MBRU was honored to collaborate on the development of a customized epidemiological model and working on this research paper emphasized the university's ethos of giving back to the community and its role as a hub of impactful research activity in the UAE.

"Collaboration and sharing of knowledge, is key to ending the global pandemic. MBRU is committed to leading the way and it is a matter of immense pride that our university has made a notable contribution in shaping Dubai's response to the pandemic, one that is governed by science and driven by data," he said.

"I would like to congratulate the teams at Smart Dubai and MBRU and encourage continued

deployment of expertise and knowledge to serve our communities."

The team used a publicly available dataset from the UAE as a case study to optimize the main parameters of the model and benchmark it against the historical number of cases. The SEAHIR model was used by Dubai's COVID-19 Command and Control Center to make timely measures on developing testing strategies, increasing healthcare capacity, and implementing interventions to contain the spread of the virus.

The novel six-compartment SEAHIR model could be utilized and extended by decision makers and researchers in other countries for current or future pandemics. [Click here to read the study.](#)



Student Corner

We are proud of our Year-1 medical students who created the innovative storybook *Ahmed's Big Adventure* at MBRU's Design Lab, supported by Wasl. This storybook educates and raises awareness about organ donation among young children in a fun and engaging manner. All proceeds from the sale of the book will go to our Kidney Transplant Program fund. **Scan the QR code** on the bottom of the page to get a copy of Ahmed's Big Adventure.



Scan here



Student Corner

Our medical student, **Faisal Nawaz** and his co-authors utilized Twitter polls as a tool to understand the public's perception on the safety and acceptance of COVID-19 vaccines in real-time in this timely publication published in the Journal of Medical Internet Research. Read [here](#).



Faisal Nawaz also published a paper *Low Birth Weight Prevalence in Children Diagnosed with Neurodevelopmental Disorders in Dubai*, along with Assistant Professor Meshal Sultan at the College of Medicine. Check it out [here](#).

Postgraduate students from the inaugural cohort at the College of Nursing and Midwifery began their clinical training at Belfast Health & Social Care Trust. Thanks to Queen's University Belfast's President and Vice-Chancellor, **Professor Ian Greer**, and colleagues for welcoming our students as they start this exciting new chapter of their training.



Our medical student **Sarah Alkabbani**, and faculty from MBRU and Mediclinic City Hospital published the first analytical, cross-sectional study to be conducted in Dubai on the prevalence of dry eye disease in the Emirate. Read the study [here](#).



MBRU Student Participation in the Fourth Annual Mediclinic Middle East Research Conference 2021

MBRU medical students participated at the Fourth Annual Mediclinic Middle East Research Conference 2021 that took place in Abu Dhabi on the 27th to the 28th of May. On Day 1, Year-5 medical student **Aya Akhras** delivered a podium presentation on the utility of COVID-19 rounds for enhancing undergraduate medical students' knowledge on emerging data during the pandemic. This was followed up with another

podium presentation from Year-5 medical student **Farah Ennab** discussing her study on the clinical characteristic of children with COVID-19 which was a multi-center study in Dubai. On Day 2, there were further podium presentations from Year-3 medical student **Muhammed Tayob** on his student research project exploring neck pain related to smartphone and laptop use amongst patients attending an orthopedic clinic in Dubai.



Nada Mansour, Year-4 medical student also presented her student research project investigating the effectiveness of different thyrogen injections in thyroid cancer patients in Dubai. Under the supervision of **Professor Samuel Ho**, Chair of Clinical Sciences at MBRU's College of Medicine, Year-5 medical student **Ghadah Al-Sharif** and a team of four medical students presented a poster on patients' perception of telemedicine consultations during COVID. Year-5 medical students **Saad Syed** and **Mohammed Nagdi** presented a poster on a systematic review comparing diagnostic modalities for knee meniscal re-tears. Finally, **Mariam ElSaban** Year-5 presented a poster on a study conducted under the supervision of **Professor Hassan El-Tamimi**, Professor of Cardiovascular Medicine at MBRU's College of Medicine, on Echocardiographic Patterns Among Critically Ill Patients with Coronavirus Disease COVID-19; Impact of Cardiac Injury and Coagulation Biomarkers. The project won first prize for the poster presentations.

ECHOCARDIOGRAPHIC PATTERNS AMONG CRITICALLY ILL PATIENTS WITH CORONAVIRUS DISEASE COVID-19; IMPACT OF CARDIAC INJURY AND COAGULATION BIOMARKERS

Hassan El-Tamimi¹, Mariam ElSaban¹, Aya Akhras¹, Ben Yarghese², Hedayet Allah Ghannem¹, Maha Qutami¹, Amer Hasan¹, Kalpana Reddy¹, Gerasimos Capatos¹, Ameneh Bagherzadeh¹, Gunjan Awatramani¹, Reem Alqutami¹, Marjan Lindbro¹, Shaikha Almarzooqi¹, Vairshier Selvan¹, Yusuf Hallak¹, Reem Hatim¹, Sarah Alkabbani¹, Sarsah Fakhani¹, Anas Zahid¹, Nada Mansour¹, Rousy Almalak¹, Maimouna Zahid¹, Kenan Basha¹, Alawi Alsheikh¹, Ad¹

Mediclinic Parkview Hospital, P.O. Box 51122, Dubai, United Arab Emirates; Mohammed Bin Rashid University of Medicine and Health Sciences, MBRU, Dubai, United Arab Emirates

BACKGROUND

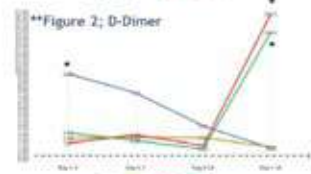
The current data correlating echocardiographic findings among patients with COVID-19 with consecutive laboratory parameters is scarce. We performed a complete echocardiographic evaluation and measured troponin, D-dimer and BNP at the time of admission and throughout hospitalization in critically ill patients with COVID-19.

PURPOSE

The purpose of this study is to report on the dynamic interplay between echocardiographic and laboratory findings and provide insights into the mechanism of myocardial injury.

METHODS

28 critically ill patients, with confirmed COVID-19, were retrospectively assessed. Four echocardiographic patterns (normal, left ventricular diastolic dysfunction, left ventricular systolic dysfunction and right ventricular dysfunction) were identified and correlated to serial measurements of biomarkers of myocardial injury (troponin), coagulation (D-dimer), and cardiac dysfunction (BNP).



RESULTS

Median age = 52 years (31-71). Female patients = 5 (17.9%). Patients were divided into 4 groups based on echocardiographic findings (see below). Laboratory markers revealed the following trends (Figure 1, 2, & 3).

Gender Distribution



Echocardiographic Groups



Troponin I and BNP were significantly high at all time points throughout hospitalization in patients with LV systolic dysfunction. D-dimer was significantly higher than upper reference limit of normal in all patients.

*Figure 1, 2 & 3. Proportions of patients with elevated troponin, D-Dimer, BNP values respectively in each echocardiographic group during their stay in the ICU. Star indicates at least $p < 0.05$.

CONCLUSION

Early and persistent elevation of troponin and BNP correlate and predict left ventricular systolic dysfunction. Right ventricular dysfunction is a late manifestation of COVID-19 and correlates with a significant and late increase in D-dimer, troponin and BNP.

Congratulations

A photograph of the Dubai Chambers building, a modern white structure with a prominent triangular roofline. The building is set against a clear blue sky. In the foreground, the fronds of palm trees are visible on the left side. The text 'دُجرب دُجرب' and 'DUBAI CHAMBERS' is visible on the building's facade.

دُجرب دُجرب
DUBAI CHAMBERS

On behalf of the MBRU family,
we extend our heartfelt congratulations to our
Vice Chairperson of the Board of Trustees

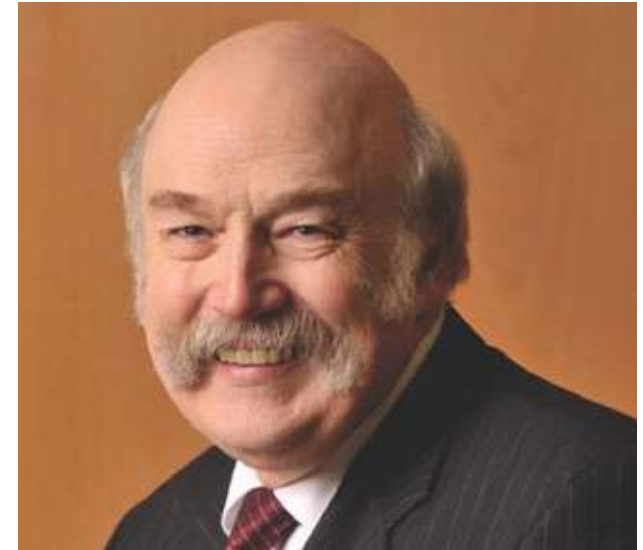
H.E. Dr. Raja Al Gurg

for being appointed as a member of the new
Board of Directors of Dubai Chamber.



Congratulations

Congratulations to our friend and Clinical Lead from Queen's University Belfast, **Professor Roy Spence OBE**, on his CBE for services to healthcare in Northern Ireland. A well-deserved honor for a great clinician and academic who generously continues to support our work at MBRU.



Congratulations to our Vice Chancellor, **Dr. Amer Sharif** on being selected as a member of the newly formed UAE Genomics Council. The UAE Genomics Council will oversee the execution of the government genomics program and propose legislations to govern the field in coordination with health regulators across the country.



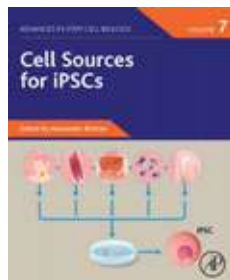
Faculty Corner

Congratulations to our Professor of Biostatistics, **Jeyaseelan Lakshmanan**, on being selected by the International Vaccine Institute as a member of their Data Safety Monitoring Board for the Oral Cholera Vaccine Reformulation study.



Does Dubai's weather effect the outcomes on COVID-19 patients? Check out this study by our own **Dr. Mahmood Al Mashhadani** and fellow researchers published in *Frontiers in Public Health*. Read [here](#).

Congratulations to **Dr. Mohammed Jamal**, Assistant Professor of Endodontics, and co-authors on the publication of his book chapter titled 'Oral tissues as sources for induced pluripotent stem cell derivation and their applications for neural, craniofacial, and dental tissue regeneration' in *Cell Sources for iPSCs*, Volume 7 of *Advances in Stem Cell Biology*.



Congratulations to **Rania Nassar**, Senior Laboratory Technologist, who received the 2021 IADR Colgate Research in Prevention Travel Award in recognition for her research *Antimicrobial Activity of Phytic Acid: A Potential Endodontic Irrigant*. Rania is one of only six recipients of this year's award.



Faculty Corner



Congratulations to our faculty, **Professor Abiola Senok** and **Tom Loney** on being appointed as core members of the Abu Dhabi Public Health Centre COVID-19 Research Committee of Abu Dhabi, chaired by Dr. Farida Al Hosani.

Professor Stefan Du Plessis, Dean of Research and Graduate Studies, and colleagues from the College of Medicine, Strategy and Institutional Excellence, and Institute for Excellence in Health Professions Education, published the study *Taking a Leap of Faith: A Study of Abruptly Transitioning an Undergraduate Medical Education Program to Distance-Learning Owing to the COVID-19 Pandemic* in a JMIR Medical Education. Read [here](#).



Congratulations to **Meghana Sudhir**, our Simulation Educator, on receiving the 2021 ASPE Outstanding SP Educator Award, making her the first educator from MBRU to receive this award. Congratulations on this well-deserved recognition.

Professor Leonard Lipovich, Professor of Basic Sciences along with a colleague from Hamad Bin Khalifa University, published a study that identifies the human miRNAs that may interact with the virus' genome. The study, published in the Non-Coding RNA Journal, will pave the way for the possible development of targeted drugs in the treatment of COVID19 and other viral diseases. Read more [here](#).



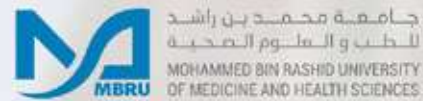
Alumni Corner

Congratulations to our alumna, **Dr. Wafa Jaber Alrahma**, who was appointed as Director of the Standards and Guidelines Department at Ministry of Health and Prevention (MOHAP).



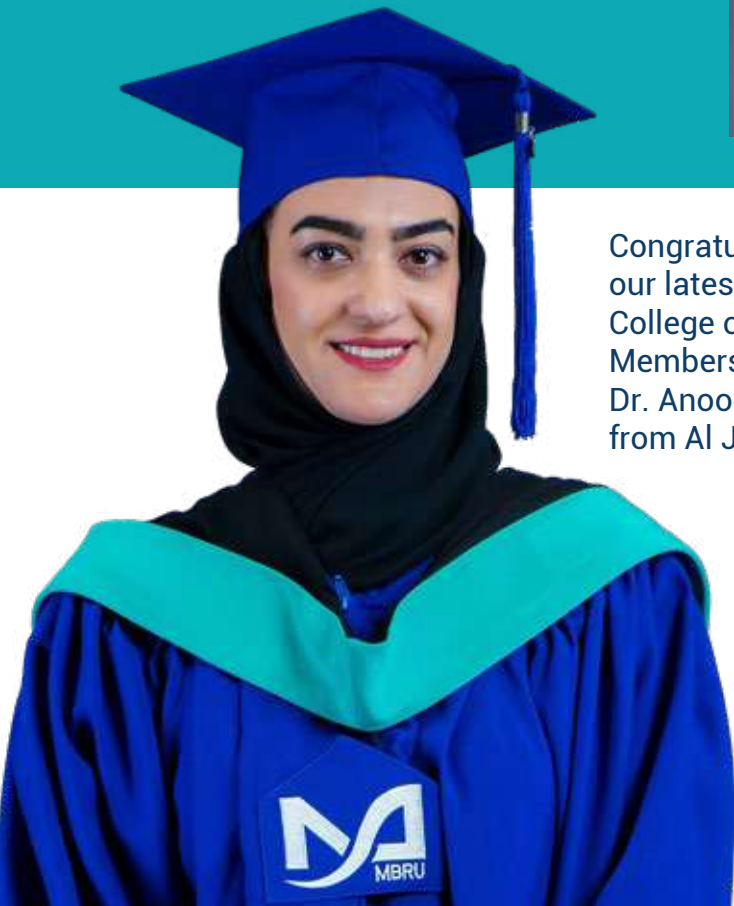
وزارة الصحة ووقاية المجتمع
MINISTRY OF HEALTH & PREVENTION

Proud to celebrate the graduation of the first locally trained Child and Adolescent Psychiatry fellows. Congratulations to **Dr. Salwa Al Hosani** and **Dr. Lana Arab**, who graduated from the Child and Adolescent Psychiatry Fellowship at Al Jalila Children's Specialty Hospital in academic partnership with MBRU. The first program of its kind in the UAE and the first and only center in the UAE to receive the Saudi Commission for Health Specialties (SCFHS) accreditation.



Alumni Corner

Congratulations to our alumni, **Dr. Budoor Bin Bahar**, **Dr. Dalia Emara**, and **Dr. Shatha Al Khalidy**, who passed the Royal College of Surgeons of Edinburgh's Membership of Orthodontics (MOrth), a bi-collegiate (RCS and RFPSC) specialist membership diploma, with a 100% first attempt pass rate. Dr. Budoor, a scholarship recipient from Al Jalila Foundation, and Dr. Dalia, a scholarship recipient from Dubai Health Authority, are our first Emirati alumni from the MSc. in Orthodontics program to pass MOrth.



Congratulations to **Dr. Anood AlShehhi**, our latest alumni to pass the Royal College of Surgeons of Edinburgh's Membership of Pediatric Dentistry. Dr. Anood is a scholarship recipient from Al Jalila Foundation.



Dr. Moza Al Khayyal, alumna, MSc. in Pediatrics program, along with our faculty of Pediatric Dentistry, published their cross-sectional study on *How do schoolchildren view other children who have discolored teeth?* in the Journal of International Society of Preventive and Community Dentistry. Read [here](#).

What we've been up to?

Your Donation Saves Lives, a Ramadan campaign launched by MBRU, Emarat Al Youm, and Islamic Affairs & Charitable Activities Department to support patients living with kidney failure in Dubai, managed to achieve its goal by collecting

22 million and

670 thousand

Dirhams to cover transplant surgery costs for

38 patients.



تبرعكم حياة
Your Donation Saves Lives



What we've been up to?

We were honored **Engineer Yahya Lootah**, Vice Chairman of Board of Trustees of Dubai Medical College for a tour of our facilities and to discuss areas of mutual interest and collaboration.



We were honored to welcome **H.E. Simon Penney**, Her Majesty's Consul General to Dubai, to explore areas of collaboration & present the University's role in Dubai's COVID-19 response as well as efforts of the Dubai COVID-19 Command and Control Center.



Our GDP lecture series hosted a lecture titled *Diagnostic Protocols in Aesthetic Dentistry* by our own **Dr. Haitham Elbishari**, Assistant Professor of Prosthodontics at Hamdan Bin Mohammed College of Dental Medicine, on June 7th.

What we've been up to?

The College of Nursing and Midwifery held an exciting webinar titled *Optimizing Child and Adolescent Health and Wellbeing: Addressing Determinants Through the Life Course* by **Professor Mark Tomlinson**. The session explained the longitudinal perspective, which impacts the health & wellbeing of next-generation and the interlinked & interdependent components amongst various sectors to ensure that children & adolescents can flourish in their environment.



Lunchtime Seminars
Optimizing Child and Adolescent Health and Wellbeing: Addressing Determinants Through the Life Course

May 27, 2021 | 1:00 pm - 2:00 pm | Microsoft Teams



We are proud to have earned 3 ISO Certificates in Facility Management, Occupational Health & Safety and Environmental Management achieved by the collective efforts of our MBRU family members towards a pleasant, safe & healthy campus.

Recap of our participation at AEEDC Dubai 2021. [Watch here.](#)



Highlights of our participation at Arab Health 2021. [Watch here.](#)



In June we held our Strategy Week where students and employees came together to set the framework for the **2nd MBRU Strategy**. Our discussions and reflections were inspired by the wise words of His Highness Sheikh Mohammed bin Rashid Al Maktoum when He said: "A new world awaits us that requires different tools and new priorities... Preparing for the post-COVID-19 phase is preparing for a new future that no one expected a few months ago." Watch our highlights [here](#).



MBRU in International Media

In French; **Dr. Thomas Boillat**, Assistant Professor of Healthcare Innovation and Technologies, was featured in a special report by Swiss National TV on telemedicine and the future of healthcare. **Watch at minute 20:59**

Click **here** to watch.



SWISS
NATIONAL
TELEVISION



New Faces @ MBRU



Ayesha Ali Ahmed Mohammad
Senior Officer - Talent Management,
Human Resources



Nandu Goswami
Professor – Physiology
College of Medicine



Sanaa Obaid Atiq Enkeleya
Senior Executive - Scheduling & Registration,
Student Services and Registration



Maryam Fuad Mohammad Bukhash
Senior Executive - Dean Office,
College of Medicine

Upcoming Events



Design4Health Bootcamp

Date: **August 8 - 19, 2021**

Orientation Days:

College of Medicine

Date: **August 22 - 23, 2021**

College of Nursing and Midwifery

Date: **August 30 - 31, 2021**

Hamdan Bin Mohammed College of Dental Medicine

Date: **August 30 - 31, 2021**

International Education Show

Date: **October 19 - 21, 2021**

Najah Abu Dhabi

Date: **October 27 - 29, 2021**

In-person | Abu Dhabi National
Exhibition Centre (ADNEC)

Najah Dubai

Date: **October 31 - November 1, 2021**

In-person | Expo Dubai Exhibition Centre
(Expo 2020)

Expo 2020

Date: **Oct 1, 2021 - Mar 31, 2022**



360
team

THE CREATIVES



THE WORD
WIZARDS

Razan Abusabha • Safia Benbrahim



James Cruz • Mark Mones • Glen Potato

A special thank you to everyone who has contributed and made our newsletter possible.

We are happy to hear from you,
please send us your suggestions,
or story submissions at MBRUcommunications@mbru.ac.ae