



# Weill Cornell Medicine-Qatar



ANNUAL REPORT  
**2018**

WELCOME TO

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**WEILL CORNELL MEDICINE-QATAR**

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**ANNUAL REPORT 2018**



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# Leadership Report

The past year has been one characterized by many remarkable achievements, but perhaps the most pleasing of all was the graduation in May of 13 Qatari citizens, the highest number of nationals WCM-Q has ever had in a single graduating class. Constituting more than a third of the Class of 2018, which numbers 34 in total, these highly accomplished young men and women have now joined the ranks of the rapidly growing new generation of extremely well-educated Qataris who will go on to help build and shape the country's future. This success also speaks volumes of our efforts to reach out to high schools across Qatar to identify gifted and ambitious students with a passion for science, nurture their enthusiasm and set them on the path to realize their potential and become practicing physician-scientists. I offer my most sincere thanks to everyone at WCM-Q for their hard work and commitment that has made this success possible, and to Qatar Foundation and the leadership of Qatar for their crucial, unstinting support for this most important endeavor.

In addition to producing new doctors, many of whom will go on to work in Qatar, the past year has given us the opportunity to expand our number of affiliated faculty to almost 600. Combined with our robust and rigorous continuing professional development work, these measures mean WCM-Q's capacity to drive excellence in patient care in Qatar has continued to grow.



**Dr. Javid I. Sheikh, Dean.**

We have also seen some truly encouraging success in the realm of research in 2017-18, with WCM-Q scientists making important new discoveries across a variety of fields, often in collaboration with other elite institutions in Qatar and the wider world. For example, WCM-Q researchers collaborated with fellow scientists at Weill Cornell Medicine in New York and Sidra Medicine to analyze the genetic material of more than 1,000 Qataris and identify links between genetic variations and metabolism; this could eventually help physicians personalize care to make treatments more effective for people in Qatar and the wider region. Additionally, the year brought important new discoveries in areas such as polycystic ovary syndrome, which has a high incidence in the region, diabetes, cardiovascular disease, metabolomics and cell signaling, among many others.

Building on this success in the laboratory, in February WCM-Q welcomed representatives of some of the world's foremost healthcare companies to Doha for the second annual Industry Academia Alliances event, which provides a link between researchers and investors to facilitate the commercialization of scientific discoveries, and in so doing support the diversification of Qatar's economy. Initiatives such as these underline our intent to not only consolidate and expand upon Qatar's emergent status as a regional hub for world-class biomedical research, but also to ensure that discoveries made here benefit the local economy and community.



I offer my most sincere thanks to everyone at WCM-Q for their hard work and commitment that has made this success possible



Our aim to be a force for good in the community was similarly expressed in the continued expansion and achievement of Sahtak Awalan – Your Health First, WCM-Q's flagship public health campaign, which in February launched Khayr Qatarna. This ambitious initiative has installed large-scale greenhouses at selected schools to produce fruit and vegetables in large quantities for the local market, with all proceeds from sales reinvested to fund further expansion. This imaginative scheme not only teaches young people about healthy eating, but also gives them an understanding of agricultural science, commerce and marketing, as well as making a contribution to Qatar's food security and sustainability agenda.

I hope that you will enjoy learning about all of these achievements in this Annual Report and I offer my warmest thanks to all those who have made such inspiring contributions to our shared success in 2017-18.

# WCM-Q Joint Advisory Board Members

The Joint Advisory Board provides advice and assistance to the dean and the governing parties of WCM-Q.

## Qatar Foundation Representatives

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**H.E. Ghalia Bint Mohammed Al-Thani, MD**  
Co-Chair, WCMC-Q Joint Advisory Board  
Member, Board of Governors, Ministry of Public Health  
Chair, Sidra Clinical Steering Planning Committee  
Chair, Qatar Foundation for Child & Woman Protection  
Consultant in Pediatrics, Hamad Medical Corporation

**Jassim Al Suwaidi, MB ChB BAO, LRCP & SI (Honors)**  
Consultant Cardiologist  
Hamad Medical Corporation

**Omar M.A. El-Agnaf, PhD**  
Acting Executive Director  
Qatar Biomedical Research Institute

## Ex-Officio Members

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**Javid I. Sheikh, MD**  
Dean  
Weill Cornell Medicine - Qatar

**Ms. Jessica Bibliowicz**  
Chairman, Board of Overseers  
Weill Cornell Medicine

**Ahmed M. Hasnah, PhD**  
President  
Hamad Bin Khalifa University

**Abdulla Ali Al-Ansari, MB BCh**  
Deputy Chief of Medical, Academic & Research Affairs  
for Surgical Services  
Hamad General Hospital, HMC

## Cornell University Representatives

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**Dr. Augustine M.K. Choi, MD**  
Co-Chair, WCMC-Q Joint Advisory Board  
Stephen and Suzanne Weiss Dean, Weill Cornell  
Medicine Member, Board of Overseers, Weill  
Cornell Medicine Provost for Medical Affairs,  
Cornell University

**Mr. Tarek Abdel-Meguid**  
Member, Board of Overseers  
Weill Cornell Medicine

## Independent Representatives

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**Sir Graeme Catto, MD (Hons)**  
Member, Qatar Council for Healthcare  
Practitioners Trustee, the International Medical  
Education Trust



# Foundation and Pre-Medical Education

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## Foundation and Pre-Medical Education

# A Strong Foundation, Ten Years in the Making

The Foundation Program at WCM-Q is a demanding one-year curriculum that precedes the college's unique six-year medical education program. This year 22 foundation students underwent training in physics, biology, chemistry, mathematics, and English in preparation for Cornell's rigorous pre-medical and medical tracks.

The 2017-2018 academic year marked the Foundation Program's tenth anniversary, which was commemorated at a special event held at Hamad Bin Khalifa University's Student Center. The celebration recognized the Foundation Program's continued success in acting as a bridge for academically gifted students transitioning from high school to university.



## Foundation and Pre-Medical Education

# Career Seminars and Curricular Innovation



Dr. Ibrahim Janahi, division chief of pulmonology and chair of medical education at Sidra Medicine, delivers a career seminar.

Over the course of the fall and spring semesters, students participated in the Medical Career Seminar Series. This series serves to acquaint foundation students with varied medical career paths through the personal experiences garnered by each guest speaker. Organized by Dr. Rachid Bendriss, assistant dean for student recruitment, outreach, and foundation programs, the Career Seminar Series is a weekly activity for foundation students facilitated by guest speakers who include WCM-Q professionals, alumni, former Foundation Program students, and community partners from Hamad Medical

Corporation (HMC) and Sidra. This year the program hosted such varied speakers as Dr. Noor Al Khorri (pediatric radiology), Dr. Sara Al-Khawaga (biomedical research), and Dr. Javaid Sheikh (psychiatry).

Innovations in the service-learning curriculum for the Foundation Program allowed foundation students to visit the world-class Qatar Rehabilitation Institute (QRI), a state-of-the-art rehabilitation center that opened its doors in 2017. The class visit to the institute was followed by service learning hours over four weeks during the spring semester in the stroke, traumatic brain injury, and

spinal cord injury wards. During these service-learning hours, the program promoted an appreciation for healthcare professions and highlighted essential medical knowledge, skills, and abilities.

At the end of the academic year, students participated in a Post-Foundation Summer Program at Cornell University's main campus in Ithaca, New York. Supervised by Dr. Krystyna Golkowska, professor of English, the program allowed students to enroll in courses over the summer session and enjoy new cultural experiences in upstate New York.

# Clinical Observership Program

Foundation and pre-medical students also had the opportunity to participate in a clinical observership over four days at HMC and Sidra. During the observership, which took place between the fall and spring semesters, each student shadowed a practicing physician in the fields of emergency medicine, pediatrics, general surgery, internal medicine, or

psychiatry. Students accompanied doctors during patient rounds, morning conferences, medical consultations, and surgeries in the operating theater. Foundation and pre-medical students gained exposure to the healthcare system in Qatar, learned about the daily routines of medical professionals, and gained familiarity with the various medical specialties offered at HMC and Sidra. This

experience gave students insight into the challenges and benefits of practicing medicine. During the spring semester, students submitted a reflection paper detailing their experience. In one such reflection a student wrote: "It was a great, fruitful experience that reminded me why I really want to pursue a career in medicine," thus underscoring the success and value of the program to students.



Sumaya AlMaraghi discusses her experiences on the Clinical Observership Program.



## Foundation and Pre-Medical Education

# Preparing Physicians for the 21<sup>st</sup> Century: The Pre-Medical Curriculum



Students receive strong support from faculty during their two years on the pre-medical program.

WCM-Q's groundbreaking six-year integrated medical education program offers students a truly world-class experience that prepares them for future success as residents and physicians. Cornell students begin their journey into medicine with the pre-medical curriculum, an innovative two-year program of study specifically tailored to the requirements of

the medical curriculum and later clinical training. Pre-medical students immerse themselves in the humanities, social sciences, mathematics, and physical sciences, and explore the relationships and intersections between these varied fields in medicine. Pre-medical faculty members develop innovative learning environments, foster

critical thinking, and cultivate the skills and dispositions needed to succeed in today's medical workplace. Students work closely with faculty, who offer personalized support on their journey to becoming physicians.

## Engaging in Experiential Learning

Pre-medical students at Weill Cornell Medicine-Qatar learn both inside and outside the classroom. The pre-medical division collaborates with other departments, such as the Division of Medical Education, Office of Student Recruitment and Outreach, and Division of Student Affairs, to provide a well-rounded, holistic approach to college student development. These rich experiential and service-learning opportunities equip students with skills in problem-solving and interpersonal communication, as well as developing practical "know how" that serves them well when they begin clinical training.

During the 2017-2018 academic year, pre-medical students in Dr. Pablo Rodriguez del Pozo's Foundation of Ethics course participated in a novel simulation exercise. In Foundation of Ethics, students explore the moral dimension of medicine and learn important ethical theories, but the simulation exercise allowed students to see how theoretical principles play out in the real world. The exercise involved a role-play scenario designed by WCM-Q's Clinical Skills and Simulation

Lab in which students work with standardized patients to negotiate a family disagreement about a mother's impending knee surgery. Through simulated consultation, pre-medical students gain deeper insight into the dynamics and moral implications of family decision-making for sick relatives. Activities like these teach students about the complicated nature of the physician-patient-family relationship and give them the tools they need to negotiate similar clinical encounters in the medical curriculum.

Pre-medical students participated in service-learning experiences as well. In the summer of 2017, eight pre-medical students visited Mwanza, Tanzania to experience first-hand how doctors serve patients in developing countries. Organized by the Division of Student Affairs, the ten-day trip had students providing free health checks in several communities, meeting local medical students, and learning about the disease burden and healthcare challenges facing Tanzania. Students also experienced Tanzanian culture, and appreciated its stunning vistas and extraordinary natural environment.

## Foundation and Pre-Medical Education

### Participating in the Community

Pre-medical students and faculty actively contributed to student life and college events. This year the WCM-Q Debate Society, coached by Dr. Rodney Sharkey, assistant professor of English, commemorated its ten-year anniversary with a debate involving current president Amina Kunnummal and seven former Debate Society presidents. The presidents debated the motion, "This house believes that regarding the opioid crisis in the USA, the market decides." Reflecting on the event, Dr. Sharkey highlighted the tremendous impact of one of WCM-Q's most influential clubs: "The Debate Society has been an integral part of the extra-curricular life at WCM-Q for a decade, as debate is vitally important for a healthy society to thrive and prosper."

Pre-medical students operate clubs that support community activism and service to others. This year the Reach Out to Asia (ROTA) club hosted its annual Thanksgiving dinner and bingo event for subcontractor support staff at WCM-Q, and later a National Sports Day event as well. It also organized a visit to the Qatar National Library for support staff to learn about their borrowing privileges. The ROTA club organized its annual spring charity week to raise money for refugees. Club members attended a screening of the documentary film *Fire at Sea*, discussing the refugee crisis with film director Gianfranco Rosi,

and later held the annual student-faculty charity football match, which saw the faculty side put five goals past the students.

Besides extra-curricular life, pre-medical students and faculty also support WCM-Q's numerous community outreach events, including Medicine Unlimited, Qatar Medical Explorers Program, and Precollege Enrichment Program. At Medicine Unlimited, an event that gives middle and high-school students first-hand encounters with science and medicine, pre-medical students and faculty staffed the tables and orchestrated interactive activities. The event drew more than 400 young people and their families, who had an opportunity to tour WCM-Q's state-of-the-art facilities and meet students, faculty, researchers, and staff.

Pre-medical students showcased their writing talents in the fifth volume of *Qira'at*, released during the 2017-2018 academic year. *Qira'at*, organized and edited by the pre-medical writing faculty, accentuates WCM-Q's leadership role in the medical humanities and narrative medicine in the MENA region. In his introduction to the volume, Dr. Alan Weber, professor of English, emphasized how the essays in *Qira'at* present, "young doctors-in-training grappling with a wide range of humanistic topics ranging from philosophy, literature, medical ethics, drama and poetry, to the history and sociology of

medicine, film studies, and art criticism." The volume builds on studies that have demonstrated the importance of humanistic training in medical education, which makes better doctors "who are more attuned to both diagnostic clues and the socio-economic needs of patients which can impact their therapies and follow up care."



Dr. Rodney Sharkey, assistant professor of English, coaches the WCM-Q Debate Society.

### Pre-Medical Faculty Contributions to Continuing Education and Research

The pre-medical faculty made unique contributions to continuing education and research in science and medicine in the MENA region. This year Dr. Krystyna Golkowska, professor of English, coordinated the Writing and Communication for Biomedical Researchers course, which introduces Qatari biomedical graduates to essential skills in workplace and scientific writing. Dr. Golkowska also designed and delivered a weeklong research experience program for Qatar Doctor of the Future participants at Cornell University's main campus in Ithaca. Through this innovative program, participants learned about qualitative and quantitative research, explored laboratories and museums on Cornell's campus, and gained new cross-cultural insights.

During the 2017-2018 academic year, pre-medical faculty also spearheaded novel medical education initiatives. Dr. Alan Weber, professor of English, and Dr. Aicha Hind Rifai, assistant professor of clinical psychiatry, organized a symposium exploring

the impact of visual arts on medicine, healthcare, and wellbeing. At the symposium, Drs. Weber and Rifai described how visual art affects healthcare, including the effects of hospital décor on patient wellbeing and using comic books as a teaching tool to help medical students better understand patients. Moreover, visual art enhances the ability to assess complex visual information, which is critical when interpreting physical symptoms or medical images like x-rays or MRI scans. The symposium was open to all healthcare professionals in Qatar and was accredited by the Qatar Council for Healthcare Practitioners-Accreditation Department and the Accreditation Council for Continuing Medical Education.

Pre-medical faculty contributed cutting-edge educational and scientific research. As a case in point, Dr. Alan Weber, professor of English, co-edited the first handbook on e-learning in the Middle East and North Africa (MENA) published by Springer

Nature. The volume, *E-Learning in the Middle East and North Africa*, examines the history, development, and current and future use of learning facilitated by computers, the Internet and mobile technologies in 20 MENA countries. To further the pre-medical division's scientific output, Dr. Ghizlane Bendriss, visiting lecturer in biology, designed a study to explore the role of bacteria in the human gut in the development of autism spectrum disorder and inflammatory bowel disease. The pilot study was awarded a grant from the Qatar National Research Fund's Undergraduate Research Experience Program. Through this grant, Dr. Bendriss will involve pre-medical students in collecting and analyzing data, and working to raise awareness about the role of healthy lifestyles in gut composition and emergence of diseases. Eventually, she will assess the feasibility of running clinical trials in Qatar, which would be the first of their kind to take place in the region.



# Medical Education

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The Class of 2018's Dr. Fatima Al-Maadid gave the graduation speech.

## Medical Education

# Class of 2018 Celebrate Graduation

The highlight of the WCM-Q academic year took place on May 2, 2018 when 34 students of the Class of 2018 graduated and were presented with the Cornell University Doctor of Medicine degree, bringing the total number of WCM-Q graduates to 335.

With 13 Qatari citizens, the Class of 2018 contains the greatest number of nationals of any graduating class in WCM-Q's history. These 13 new doctors, who represent 38 percent of the class, further increase the number of homegrown graduates of WCM-Q who aspire to realize the vision of Qatar's leadership to create a knowledge-based society to lead the human, social and economic development of Qatar.

Of the 34 new doctors, 10 graduated with academic distinction, two with honors in research, and two with honors in service. Earlier in the week, many of these graduates received individual awards for excellence in the foundational sciences and clinical courses and clerkships. One such high-achieving graduate was Fatima Al-Maadid who delivered the graduation speech, imploring her classmates to be the voice

of the vulnerable, and to use the privilege of the education that they have received to enhance the health and wellbeing of future generations.

Cornell University president Dr. Martha E. Pollack presided over the graduation ceremony along with Dr. Javaid Sheikh, dean of WCM-Q, and Dr. Augustine Choi, dean of Weill Cornell Medicine in New York, and provost for medical affairs at Cornell University. In his address to the graduates, Dr. Choi stressed the importance of the life-long learning process that takes discipline and perseverance, reminding them that their goal is to have the greatest and most positive impact on the health and wellbeing of others.

The keynote speaker at the graduation ceremony was Dr. Mashael Al-Khelaifa, a graduate of the inaugural WCM-Q Class of 2008. Dr. Al-Khelaifa is a testament to the success of WCM-Q and Qatar Foundation, both of which supported her to achieve her dream to become a pediatric anesthesiologist and return to practice in Qatar at Hamad Medical Corporation.

## Medical Education

# Class of 2018 Celebrate Graduation

Drs. Khalid Al-Marri and Alaa Al-Naama married soon after graduating.



Dr. Fatima Al-Khori receives her MD from Dr. Thurayya Arayssi.



Dr. Mohammed Haji receives his MD from Dr. Thurayya Arayssi.

Drs. Hadya Elshakh, Imen Becetti and Shaikha Alqahtani.

# Weill Cornell Medicine-Qatar

GRADUATION CEREMONY  
CLASS OF 2018



Dr. Javaid Sheikh, Dr. Martha Pollack, Dr. Augustine Choi, and Dr. Antonio Gotto with the Class of 2018.

## Medical Education

### Match Day Success

Another of the highlights in the college calendar is the annual Match Day event at which students celebrate matching to a post-graduate training program with their families, friends, WCM-Q faculty and staff. On March 16, 2018, the Class of 2018 continued to raise the bar with an outstanding match rate to residency programs in the US (92 percent) and Qatar. A total

of 32 students matched in their chosen specialties which included anesthesiology, neurology, family medicine, general surgery, obstetrics and gynecology, and pediatrics.

Ten students matched at Hamad Medical Corporation in Qatar, and 22 in programs in the USA, including competitive specialty matches in internal medicine

and pediatric neurology at the prestigious Massachusetts General Hospital in Boston. Other notable institutions where students matched included Case Western/University Hospitals Cleveland, NewYork-Presbyterian/Weill Cornell Medical Center, and Virginia Commonwealth University.

Match Day is the event at which the students learn where they will be spending the next stage of their careers.



Dr. Augustine Choi, dean of Weill Cornell Medicine in New York, and provost for medical affairs at Cornell University.





## Medical Education

# New Curriculum Students and Clinical Training Sites

The Class of 2020, who were the first cohort to begin their foundational sciences courses in the fall of 2016, successfully completed Phase I of the new medical curriculum and were promoted to Phase II to begin their clinical experiences in early May 2018. Over the 12 months following that date, these students will be applying their clinical knowledge and honing their critical thinking, patient care and physicianship skills to care for patients as part of a healthcare team in a primary care or hospital setting. The students will be on rotations for specialty specific clerkships for varying lengths of time: eight weeks for medicine and surgery; six weeks for obstetrics and gynecology, pediatrics, primary care, and psychiatry; four weeks for neurology; and three weeks for anesthesia and critical care.

As well as training on campus in the newly refurbished and expanded Clinical Skills and Simulation Lab, WCM-Q students are privileged to train at a number of clinical affiliates, such as Hamad Medical Corporation, a full-service, Joint Commission International-accredited institution that has in excess of 2,500 beds across multiple facilities and several community hospitals, which include general, women's, children's, psychiatric and rehabilitation

hospitals. In parallel, the Primary Health Care Corporation of Qatar incorporates a network of 23 primary health care centers. WCM-Q students also benefit from opportunities to complete rotations at our affiliate Aspetar, Qatar's specialized Orthopedic and Sports Medicine Hospital, a state-of-the-art facility that provides some of the best medical treatment for sports-related injuries available anywhere in the world. Another affiliated training site for our students is Qatar Foundation's Sidra Medicine, an innovative, ultramodern facility designed to provide comprehensive patient-focused medical services for women and children in Qatar and throughout the region.

The relationship between WCM-Q and HMC continues to grow stronger and to recognize the additional efforts made by individuals to support the educational mission of WCM-Q, HMC site directors have been appointed for a number of clerkships. The HMC site directors work in collaboration with WCM-Q clerkship directors to facilitate the student activities in the various clinical settings to ensure that learning objectives for the clerkships are met and that each student has an optimal clinical experience.

## Medical Education

# Innovations in Curricular Delivery and Support



The implementation of the new curriculum has helped to drive innovation in curricular delivery. An example is the introduction of new teaching methodologies by the anatomy faculty, including use of the anatomage table, a technologically advanced visualization system that enhances

the students' gross anatomy learning experience.

In addition, the introduction of new online assessment tools for the foundational sciences courses has streamlined the exam administration process and enhanced reporting. This has been

a collaborative initiative thanks to the efforts of staff in the Office of Curriculum Support, the Office of Educational Development, and the Information Technology Services Division.

# Learning Enrichment and Academic Advising



As part of efforts to support students on their journey through a rigorous medical curriculum, a number of new initiatives have been developed. This includes the establishment of the Learning Enrichment Office (LEO) to provide academic enrichment to students across all four years of the medical curriculum by facilitating interaction with their peers and seniors throughout their training. The LEO connects students with near-peer tutors, teaching specialists or faculty, providing a platform for the initiation, discussion and development of a variety of projects and collaborations. The LEO is led

by Dr. Douglas Bovell, assistant dean for foundational sciences and professor of physiology, Dr. Gerardo Guiter, assistant professor of pathology and laboratory medicine, and Dr. Moune Jabre, assistant professor of clinical obstetrics and gynecology.

The Longitudinal Academic Advising Program is another component of the infrastructure put in place to support each and every student to succeed. In her capacity as the director for medical student advising, Dr. Mai Mahmoud, assistant professor of medicine, leads the program, which supports students to develop their

professional identities and reach the highest level of competency possible. The program also provides students with mentorship to support them in making informed career decisions. Faculty at Weill Cornell Medicine in New York are also engaged in mentoring WCM-Q students with regard to their choice of career specialty.





## Medical Education

# Visiting Professorship Program

As part of continued efforts to enhance WCM-Q's profile as a center of excellence for producing graduates of the highest caliber, the college hosted 12 visiting professors from nine US institutions in April 2018 under the banner of the Visiting

Professorship Program (VPP). The specialties represented included internal medicine, surgery, neurology, obstetrics and gynecology and primary care. The VPP provides exposure for visiting professors to the WCM-Q curriculum, students, faculty and

facilities, including those at the affiliated hospitals in Qatar. This opens the door for increasing the number of opportunities for the WCM-Q students as they apply for postgraduate training.

# Scholarly Activities and Outreach Initiatives

The newly revamped Clinical Skills and Simulation Lab held WCM-Q's first Simulation Symposium in September 2017 with the theme "Optimizing Health Professions Education with Simulation-Based Learning". This was an accredited activity that attracted 87 participants from across the region. The guest speaker was Dr. Janice Palaganas, director of educational innovation and development, Center for Medical Simulation in Boston, USA.

The Office of Educational Development has introduced a monthly Medical Education Journal Club for faculty members and staff from the academic units to come together and discuss the latest trends in leading medical education journals. This initiative is accredited by the Accreditation Council for

Continuing Medical Education (ACCME) and the Qatar Council for Healthcare Practitioners (QCHP).

WCM-Q was awarded a highly coveted designation as a "VSLO® Host Institution". Visiting Student Learning Opportunities, sponsored by the Association of American Medical Colleges (AAMC), is an electronic application platform that facilitates clinical, global health, and research elective rotations internationally for final year medical students. The VSLO® application service fosters collaboration between US and international medical schools to facilitate student mobility and engender a global outlook among future physicians. To date, WCM-Q has hosted two international medical students for electives in emergency medicine.

In collaboration with the American Board of Medical Specialties International (ABMS-I), a three-day Item Writing Workshop was held at WCM-Q in November 2017. The focus of the workshop was to support medical education faculty to develop their assessment skills in test design and item development. The program for the workshop was tailored to focus on writing test questions and understanding and interpreting assessment data. The workshop was facilitated by senior members of the ABMS-I including Dr. David Swanson, vice-president, academic programs and services, Kathy Holtzman, vice-president, international programs, and Krista Allbee, director, assessment and international operations.

## Medical Education

# Medical Education Research Grant Program

The Medical Education Research Grant Program was launched in 2017 and is funded through the Division of Medical Education. The aim of this program is to encourage and support scholarship, with the ultimate objective of promoting collaborative efforts and the dissemination of outstanding

research in medical education. Applicants can submit proposals focusing on research themes that are relevant to WCM-Q, such as innovations in teaching, assessment, and curriculum development across the entire continuum of medical education, from undergraduate medical education to continuing

professional development. All applications are externally peer-reviewed.

Listed below are the names of the principal investigators and the project titles for the five awards that have been granted to date:

1. Dr. Ameer Raouf, associate professor of anatomy in radiology

Research Study: Introducing an Array of New Teaching Measures to Enhance Medical Students' Anatomy Comprehension and Performance

4. Dr. Grigory Ostrovskiy, assistant professor of emergency medicine in medicine

Research Study: Use of 3-Dimensional Printing Technology in Medical Education

2. Dr. Amal Khidir, associate professor of pediatrics

Research Study: Impact of perceived generational differences on learning project: A multi-center, multiphase collaborative study (Phase I)

5. Dr. Sheila Qureshi, senior lecturer, chemistry

Research Study: Impact of Learning Process and Curricular Innovation on Medical Students' Choice of Specialty: A Mixed Methods Study from Qatar

3. Dr. Aicha Hind Rifai, assistant professor of clinical psychiatry, and Dr. Mai Mahmoud, assistant professor of medicine

Research Study: Efficacy of a faculty-facilitated support group for medical students in the clerkship year in preventing emotional distress and burnout



Dr. Ameer Raouf

# Honoring Faculty and Recognizing Teaching Excellence

Since 2006, WCM-Q has continued with the time-honored tradition of celebrating the teaching faculty who are imparting their knowledge and skills to educate future generations of physicians. At the 2018 WCM-Q Excellence in Teaching Awards ceremony held in May, there were a number of pre-medical and medical education faculty who received accolades. For the Division of Medical Education, specific awards

were presented in categories for teaching, educational leadership and innovation. Visiting faculty from Weill Cornell Medicine in New York were also recognized for their contributions to teaching WCM-Q students. Former directors of courses and clerkships that have been phased out with the old medical curriculum also received recognition awards. The awards were as follows: (see overleaf)

The Excellence in Teaching Awards Ceremony recognizes the dedication and skills of WCM-Q's faculty.



## Medical Education

Award Category	Awardee
Excellence in Teaching in the Foundational Sciences Curriculum	Dr. Ameer Raouf
Excellence in Teaching in the Clinical Curriculum	Co-awarded to Dr. Bakr Nour and Dr. Amine Rakab
Excellence in Leadership in the Foundational Sciences Curriculum	Dr. Avelin Malyango
Excellence in Leadership in the Clinical Curriculum	Co-awarded to Dr. Amal Khidir and Dr. Grigory Ostrovskiy
Visiting Faculty Excellence in Teaching - Foundational Sciences Curriculum	Dr. Amir Soumekh
Visiting Faculty Excellence in Teaching - Clinical Curriculum	Co-awarded to Dr. Anthony Ogedegbe and Dr. Joseph Safideh
Course/Clerkship Directors	Awardee
Brain and Mind Course Director	Dr. Naim Haddad
Basis of Disease Course Director	Dr. Gerardo Guiter
Medicine, Patients and Society II Course Director	Dr. Stella Major
Introductory Clerkship Director	Dr. Mai Mahmoud

The Teaching Faculty Appreciation Evening, which took place in September 2017, was staged specifically to honor the local physicians who hold affiliated faculty appointments with WCM-Q and who teach our students. Affiliated faculty have been participating in teaching WCM-Q students since the inaugural class of 2008 enrolled in the medical

program in the fall of 2004. The number of local physicians who hold affiliated appointments with WCM-Q now stands at 597, many of whom work at Hamad Medical Corporation, while others are from the Primary Health Care Corporation, Aspetar, Sidra Medicine, the Feto Maternal Medical Center or the Ministry of Public Health.

The student speaker at the appreciation event was medical student Merna Hussein who spoke on behalf of her student colleagues to thank the affiliated teaching faculty for their "gift of time, expertise and encouragement," as well as pledging to carry on their legacy to teach future generations.

## WCM-Q Alumni Return to their Alma Mater



Dr. Sumeja Zahirovic is one of several WCM-Q alumni to have recently returned to teach at the college.

In alignment with the Qatar National Vision 2030 to support the aim to build a modern world-class educational system that provides students with a first-rate education, we are delighted to welcome two more of our alumni to join the faculty ranks at WCM-Q. Dr. Mohamed Elshazly, assistant professor of medicine and Dr. Salman Al-Jerdi, assistant professor of neurology, join two other alumni colleagues – Dr. Grigory Ostrovskiy, assistant professor of emergency medicine in medicine, and Dr. Sumeja Zahirovic, assistant professor of medicine - who have already returned to their alma mater to enrich the process of knowledge transfer to the next generation of physicians. As graduates, the alumni on the faculty have a unique perspective of the WCM-Q medical program and their experience and knowledge can further enhance the educational experience for our learners.

## Medical Education

# Faculty Achievements

The medical faculty continue to distinguish themselves by engaging in a number of academic pursuits including conducting research, publishing in high impact peer-reviewed journals, reviewing manuscripts, and sitting on editorial boards and scientific committees.

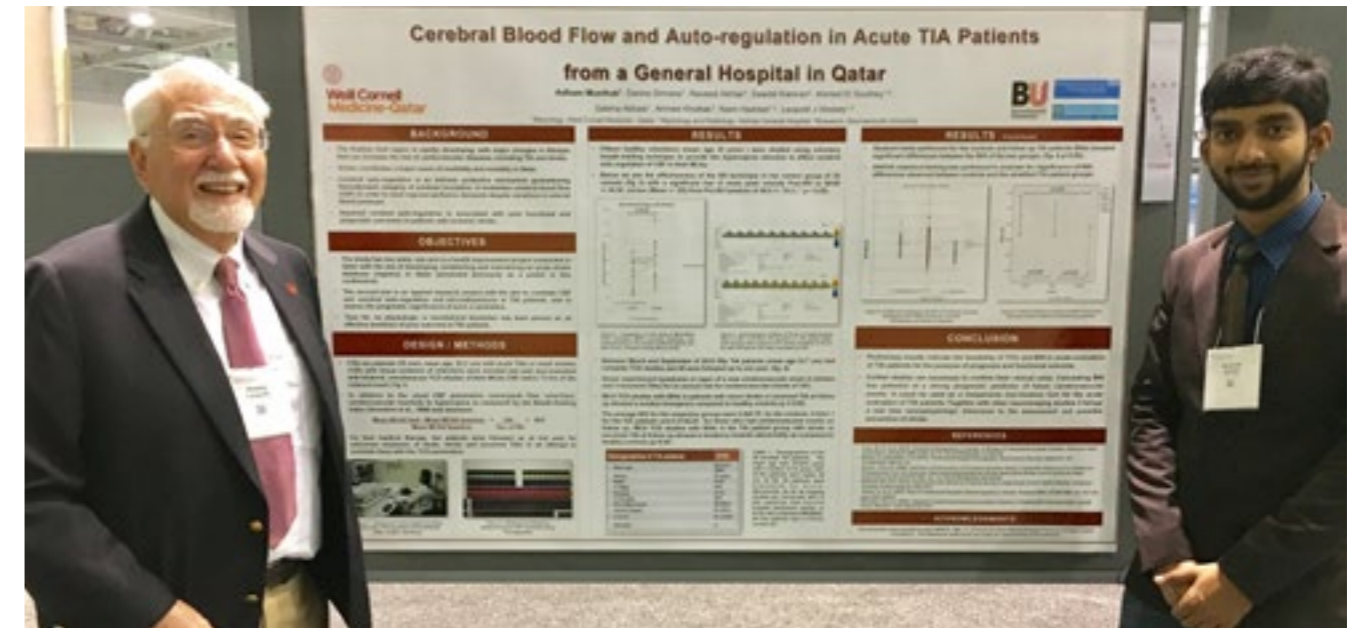
Notable faculty achievements over the past year include:

- Dr. Ravinder Mamtani, professor of healthcare policy and research, and senior associate dean for population health, capacity building and student affairs, is among the first medical professionals to be certified by the American Board of Lifestyle Medicine (ABLM)/the American College of Lifestyle Medicine (ACLM) and the International Board of Lifestyle Medicine. Dr. Mamtani has a passion for improving health on a global scale and through his leadership of the Institute for Public Health, he has brought many health issues and the associated burden of disease to the fore.
- Dr. Mohamed Elshazly, assistant professor of medicine, was made a fellow of the American College of Cardiology.
- Dr. Amal Khidir, associate professor of pediatrics, was appointed as a co-leader to the Research and Scholarship Task Force for the Council on Medical Education in Pediatrics (COMSEP). This is the leading organization in North America for pediatric medical student education.
- Dr. Ameer Raof, associate professor of anatomy in radiology, was appointed as a member of the editorial board of the *International Society for Plastination Journal*. He was also reappointed to the editorial board of the *International Journal of Anatomical Variations*.
- Dr. Thurayya Arayssi, associate professor of medicine, and senior associate dean for medical education and continuing professional development, served on the Jury Panel for the L'Oréal-UNESCO For Women in Science Awards.
- Dr. Laith Abu-Raddad, professor of healthcare policy and research, was appointed deputy editor of the *Journal of the International AIDS Society* in December 2017.
- Dr. Naim Haddad, professor of clinical neurology, received the A. B. Baker Teacher Recognition Award from the American Academy of Neurology at the 70th Annual Meeting in Los Angeles, California.

Dr. Amal Khidir was appointed as a co-leader to the Research and Scholarship Task Force for the Council of Medical Education in Pediatrics



# Student Achievements



Dr. Leopold Streletz with Adham Mushtak at the annual meeting of the American Academy of Neurology.

Our students also continue to excel outside the classroom and a notable example is Class of 2019 student Syeda Razia Haider, whose letter to the author on the topic of 'transitions in training' was selected from a competitive international submission pool to be published in *Academic Medicine*, a high impact peer-reviewed journal of the American Association of Medical Colleges.

Another Class of 2019 student, Adham Mushtak, was invited by the American Academy of Neurology (AAN) to present his work at the annual AAN meeting. The research focused on 'Cerebral blood flow and auto-regulation in acute TIA patients from a general hospital in Qatar'. Adham worked on this project with the principal investigator Dr. Leopold Streletz, clinical associate professor of neurology. The research focused on assessing the likelihood of a patient suffering a stroke, and how severe that stroke is likely to be. As a first-year medical curriculum

student, Aya Tabbalat from the Class of 2020 had her research on the fertility of women in the Arabian Peninsula published in a leading scientific journal. After completing her first year, Aya conducted her research over the summer at Weill Cornell Medicine in New York under the mentorship of Dr. Nigel Pereira, who graduated from WCM-Q in 2010 with academic distinction. Aya was the first author on the paper titled 'Arabian Peninsula ethnicity is associated with lower ovarian reserve and ovarian response in women undergoing fresh ICSI Cycles'. This paper was published in the *Journal of Assisted Reproduction and Genetics* which is the official publication of the American Society of Reproductive Medicine.

Rana Abualsaud from the Class of 2019 presented her research on heart-related illness at the Western Regional Meeting of the Society for Academic Emergency Medicine (SAEM), a leading professional

body for academic emergency physicians. Rana worked on the research with Dr. Grigory Ostrovskiy, assistant professor of emergency medicine, and Dr. Ziyad Mahfoud, associate professor of healthcare policy and research. The research project focused on the varying susceptibility to heat-related illness of different population groups in California.

Fatima Al-Maadid and Sahar Mahadik from the Class of 2018 were instrumental in recruiting 21 WCM-Q medical students to participate with students from other health sciences institutions in the Patient Safety Academy held in October 2017 in Qatar. Faculty from the Academy for Emerging Leaders in Patient Safety in the US led this inter-professional education (IPE) initiative, which was organized by the World Innovation Summit for Health (WISH) in collaboration with WCM-Q, which was responsible for accrediting this activity for participating faculty members.



# Continuing Professional Development

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# Continuing Professional Development

The Division of Continuing Professional Development (CPD) continually strives to meet its mission of providing high quality professional development opportunities for physicians and other healthcare professionals based on identified needs and the latest scientific and medical developments that will increase competence, enhance performance in practice and lead to improved health care for patients. The division values collaborations with both internal and external stakeholders to oversee the development and implementation of a variety of continuing medical education (CME)/continuing professional development activities, ensuring their alignment with the standards and requirements of the Qatar Council for Healthcare Practitioners (QCHP) at local level

and internationally of the Accreditation Council for Continuing Medical Education (ACCME). In doing so, the division continues to work in pursuit of its strategic objective, "To enhance the knowledge and practice of the Qatari and regional physician workforce through graduate and continuing medical education."

The division is led by Dr. Thurayya Arayssi, associate professor of medicine and senior associate dean of medical education and continuing professional development, who is supported by Deema Al-Sheikhly, director and Laudy Mattar, manager of the division. The remainder of the team includes the CPD coordinators Ameena Abdul Rahim and Safia Rabia and the administrative assistant Dinnah Betonio.

## Supporting Our Healthcare Community Through Accreditation

The accreditation of Weill Cornell Medicine-Qatar internationally by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians has ensured that physicians are able to maintain their international licensure by attaining AMA PRA Category 1 Credits™ (American Medical Association Physician's Recognition Award) through participation in WCM-Q accredited activities. Furthermore WCM-Q, via the CPD division, was re-accredited as a CME/CPD provider by the Qatar Council of Healthcare Practitioners-Accreditation Department (QCHP-AD) for a cycle of five years until 2021. Several WCM-Q activities have been accredited by the abovementioned systems and fall under three areas of concentration: (see opposite page)



CPD Team (from left to right): Ameena Abdul Rahim, Deema Al-Sheikhly, Thurayya Arayssi, MD, Laudy Mattar, Dinnah Betonio and Safia Rabia.

## List of activities accredited by the CPD Division in 2017/2018

### Clinical Sciences



### Research Education for Clinicians



### Medical Education



WCM-Q Grand Round series

Intersection of Law and Medicine series:

- Legal and Ethical Issues in End-of Life Care
- The Role of Data and Safety Monitoring Boards in Human Subjects Research
- The Intersection of Islam and Biomedical Ethics: A Guide for Healthcare Practitioners

Educators Across the Healthcare Spectrum series:

- Digital Education and Strategies for Implementing the Flipped Classroom

Lives in Medicine series:

- The Visual Arts and Patient Care
- Music Therapy and Healing

Medical Education Journal Club

Optimizing Health Professions Education with Simulation-Based Learning

Psychiatry for the Non-Psychiatrist

Perioperative Bleeding Management: Patient Blood Management

The Power of Change Agents: Teaching Caregivers Effective Communication Skills to Overcome the Multiple Barriers to Patient Safety

Clinical Containment Strategies for Emerging Infectious Diseases

Institute for Population Health:

- Certificate in Clinical Nutrition
- Occupational Health is Everyone's Business symposium
- Cultural Competence in Healthcare workshop
- Bridging the Gap Medical Interpreter Training
- Student Wellness: Perspectives, Challenges and Innovations

Achieving Promotion through the Clinical Expertise and Innovation Area of Excellence

# Continuing Professional Development

## Mission Accomplishments

The Division of CPD aims to promote educational endeavors, which extend beyond the undergraduate program and align with the mission of Weill Cornell Medicine-Qatar. To this end, the mission is to:

- Provide high-quality professional development opportunities for physicians and other healthcare professionals based on identified needs
- Offer physicians and other healthcare professionals the opportunity to attain credits toward medical licensing requirements locally and internationally
- Develop and disseminate best evidence-based practice and health education research
- Create opportunities for physicians and other healthcare professionals to develop a community of practice to interact with one another personally and professionally

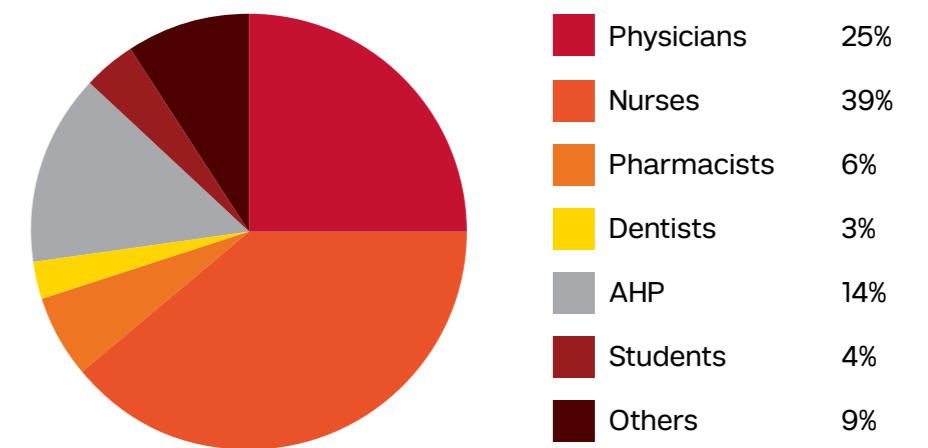
To ensure our CME/CPD program meets the quality of standards represented in our mission statement, data is collected regarding:



## Target Audience

WCM-Q's target audience is broad in nature as we consider our needs along with those of our clinical care partners and their mission to improve quality of care throughout the region. Therefore, the target audience includes faculty, staff and alumni of WCM-Q, and physicians and other healthcare professionals in the State of Qatar and the region. From July 2017 to June 2018, up to 3,500 physicians, other healthcare practitioners and educators participated in activities that were accredited through QCHP and ACCME. Twenty-five percent of the participants of these activities were physicians, while the remaining 75 percent were other healthcare practitioners (Figure 1). This is in alignment with our mission.

**% Attendees by Profession**



**% Attendees by Institutions**

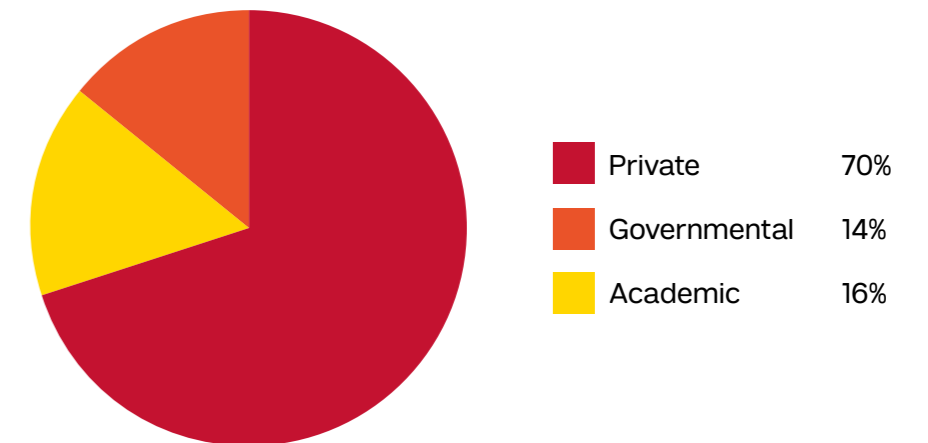


Figure 1: Breakdown of attendees at WCM-Q CME/CPD accredited activities by profession.

# Continuing Professional Development

## Content



Dr. Waseem Kotoub delivered a lecture entitled 'Music Therapy and Healing' in the Lives in Medicine series.

WCM-Q's activities are varied in context. The monthly multi-disciplinary WCM-Q Grand Rounds, a regularly scheduled series (RSS), aims to enhance physicians' and other healthcare professionals' skills and knowledge of the latest medical developments, technology, and good practices. The remaining live activities may be discipline specific, such as the Perioperative Bleeding Management: Patient Blood Management activity, for example, or are geared for

an inter-professional audience. Examples include the Educators Across the Healthcare Spectrum series (Digital Education and Strategies for Implementing the Flipped Classroom), the Intersection of Law and Medicine series, the Lives in Medicine series and the Certificate in Clinical Nutrition program. By providing different activity types, WCM-Q fulfills its mission to offer a variety of educational activities.

## Expected Outcomes

The expected result is that the learner will be able to do one or more of the following:

- Demonstrate their ability to apply the knowledge they have gained
- Make a commitment to change their practice as a result of the educational intervention(s)
- Change their practice as a result of the educational intervention(s), as applicable

Immediate change in both learner knowledge, competence and performance is assessed. Percentages listed to the right are from participants indicating it was "somewhat likely" and "to a significant extent likely" that the activity would enhance their competence in a specific area (Figure 2). The data displays the range of percentages from activities across the past year. Additionally, changes in performance are measured via a follow-up survey sent to participants up to nine months after an activity. The analysis indicates a positive change in learners' performance.

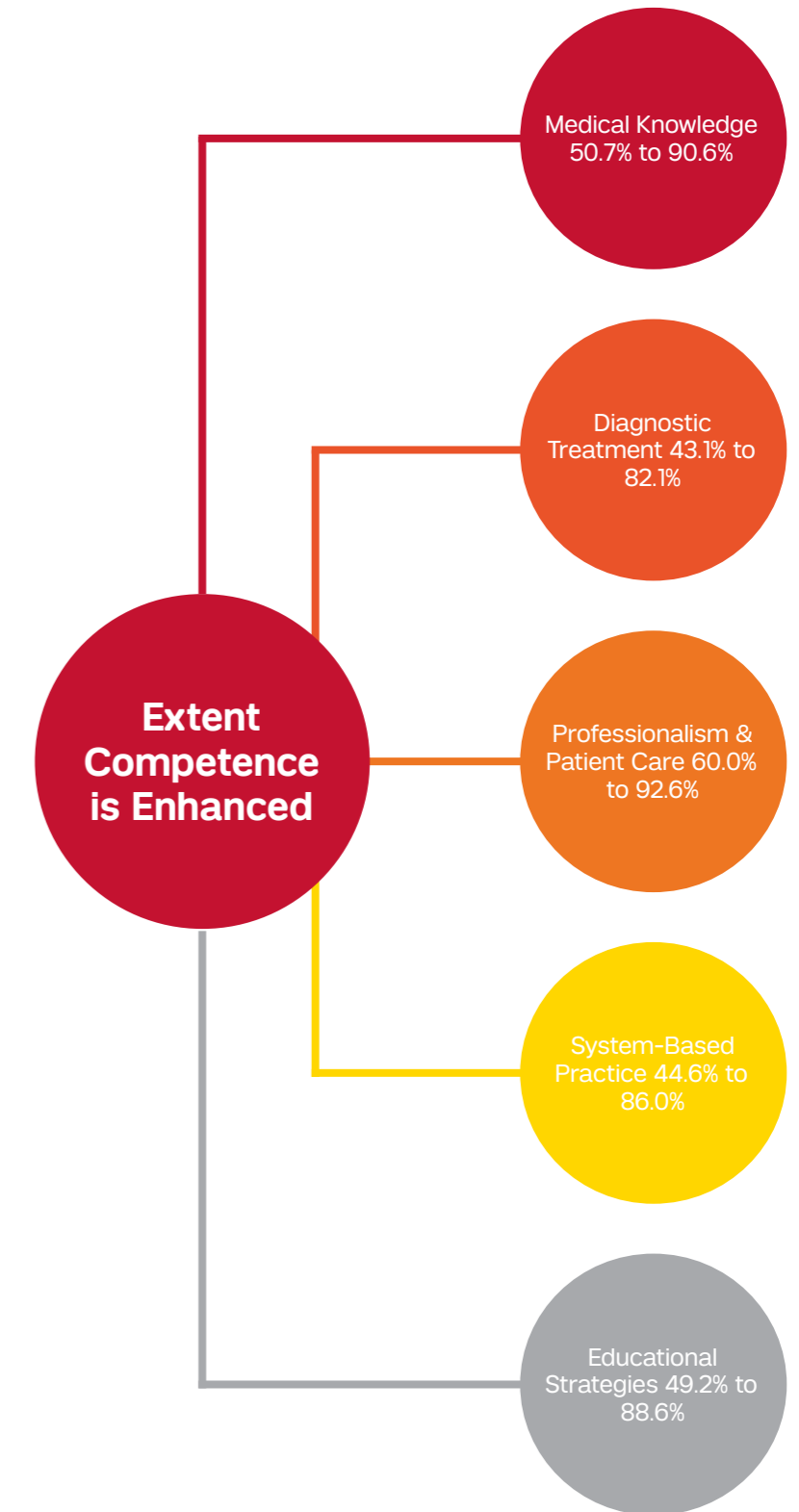


Figure 2: Percentage of participants who perceived that the activities enhanced their competence in specific areas.



# Continuing Professional Development

CME/CPD activities are developed in the context of desirable physician/healthcare practitioner attributes that focus on elements of the Institute of Medicine (IOM), the Accreditation Council for Graduate Medical Education (ACGME), the American Board of Medical Specialties (ABMS) and/or the Inter-Professional Education Collaborative competencies (Figure 3).

All CME/CPD presentations must be based on evidence that is accepted within the profession of medicine, be scientifically sound and free of commercial bias. Our accredited CME/CPD activities were found to be free of commercial bias (96.1%), scientifically sound, evidence-based, objective and balanced (98.9%).

## How well WCM-Q Designed Activities around Core Competencies

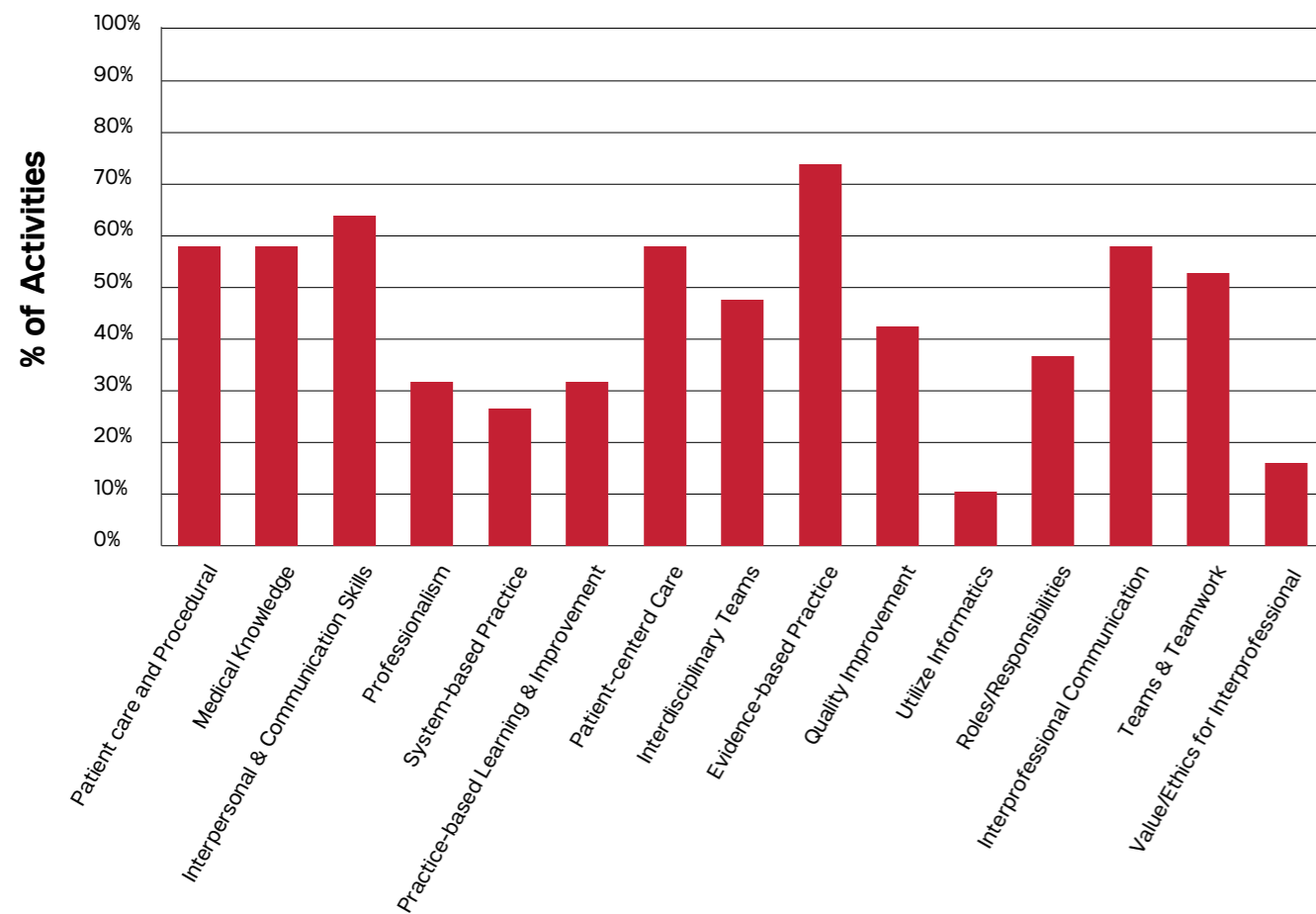
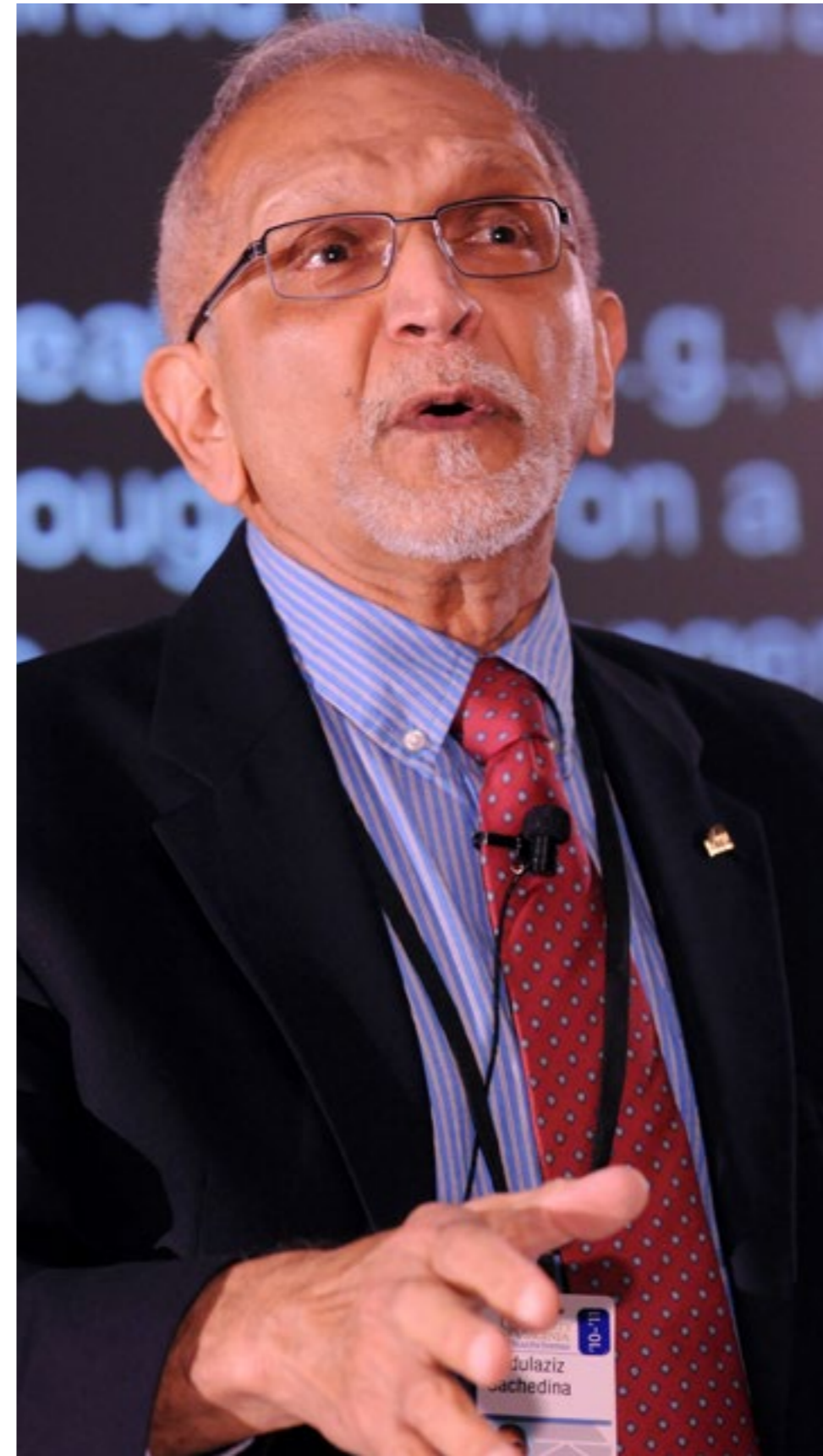


Figure 3: Showing the variety of core competencies around which activities are designed.

# Program Improvements



Ongoing improvements are necessary to ensure quality CME/CPD activities are offered to meet the needs of the healthcare community. The main accomplishments include:

### Planning

- Expansion of the membership of the Stakeholder Advisory Board to include representatives from the private sector as well as student and patient representation.
- Expansion of the membership of the WCM-Q Grand Rounds planning committee to include members from other institutions and to have representation from nursing, pharmacy and allied health practitioners.

### Infrastructure

- Acquisition of a single CME/CPD software system to streamline processes, improve credit tracking, eliminate data redundancies and increase efficiency.
- Expansion of the CPD team by hiring two CPD coordinators.

### Methods/Resources/Teachers

- Amendments of the policies, forms and procedures to ensure WCM-Q is aligned with the standards and requirements of both the QCHP and the ACCME.
- Development of new guidelines to support WCM-Q faculty and administrators.
- Implementation of a CPD boot camp to enhance the knowledge and competence of CPD coordinators and CME activity administrators in the area of CME and CPD.
- Implementation of an Audience Response System for a pre-/post-assessment to engage participants.

## Continuing Professional Development

# CPD Staff and CME Oversight Committee Members

The CPD division staff, along with the members of the CME Oversight Committee, play a critical role in ensuring that the mission and vision are met and that accredited activities are developed in alignment with both the QCHP and ACCME standards and requirements.

### CPD Staff

Deema Al-Sheikhly, MRes,  
MEHP – Director of CPD

Laudy Mattar,  
MMI – Manager of CPD

Ameena Abdul Rahim – CPD  
Coordinator

Safia Rabia – CPD Coordinator

Dinnah Betonio – CPD  
Administrative Assistant

### CME Committee Members

**Thurayya Arayssi, MD**  
Associate Professor of Medicine  
WCM-Q

**Paul Dijkstra, MD**  
Assistant Professor of Medicine  
Aspetar

**Sumeja Zahirovic, MD**  
Assistant Professor of Medicine  
WCM-Q

**Liam Fernyhough, MD**  
Assistant Professor of Medicine  
WCM-Q

**Mohamed ElShazly, MD**  
Assistant Professor of Medicine  
WCM-Q

**Deema Al-Sheikhly, MEHP**  
Director, CPD WCM-Q

**Sandra Sapia, MD**  
Assistant Professor of Pathology  
and Laboratory Medicine,  
WCM-Q

**Barbara Blackie, MD**  
Associate Professor of Pediatrics  
Sidra Medicine

**Ming-Jung Ho**  
Professor of Medicine  
WCM-Q

# Expanding Our Activities and Offering More to Our Target Audience

In the 2017/2018 academic year the CPD division accredited 55 activities and welcomed up to 3,500 participants, including practitioners from hospitals, educational institutions, private clinics, government, and industry (Figure 4).

WCM-Q is leading the way in offering a diversity of learning opportunities and providing practitioners with opportunities to network and promote collaboration in multidisciplinary teams.

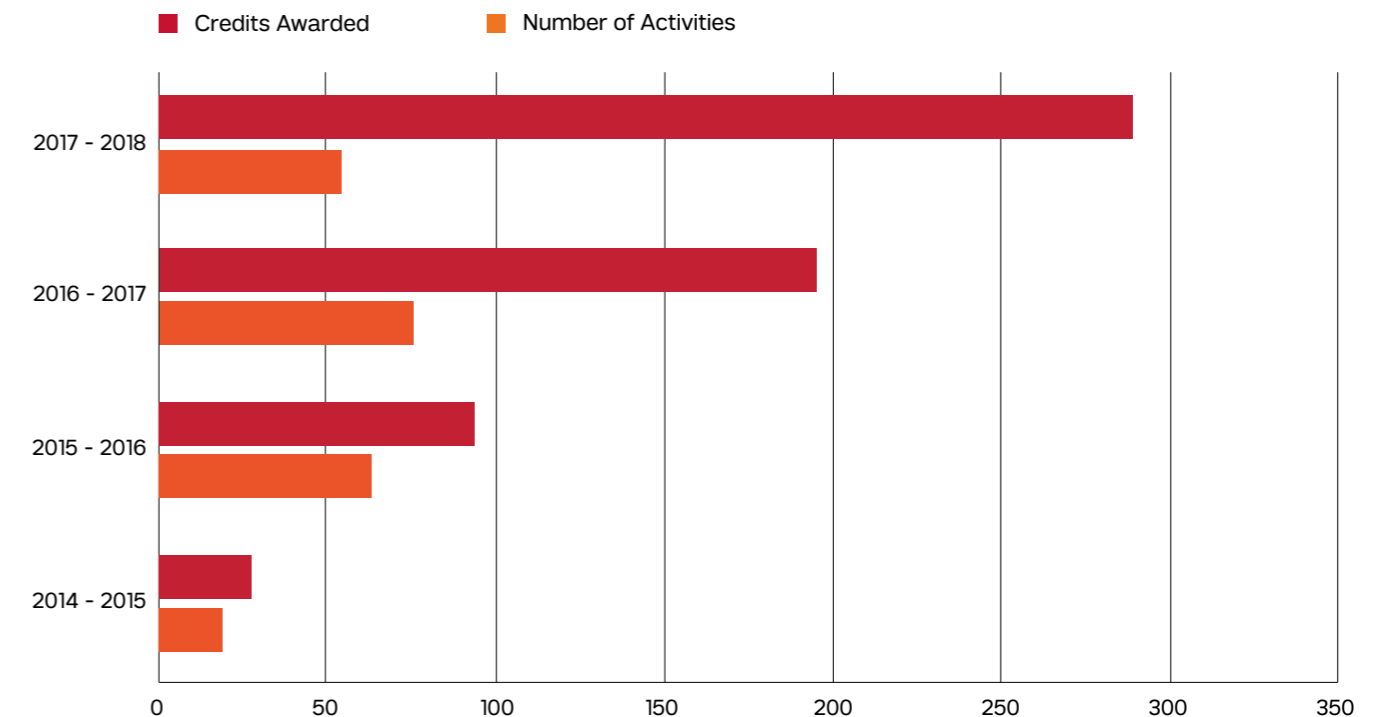


Figure 4: Showing the number of accredited activities offered and the number of credits awarded from 2014 to 2018.

## Continuing Professional Development

# Clinical Sciences

### WCM-Q Grand Rounds

The WCM-Q Grand Rounds, a regularly scheduled series, plays an integral role in providing formal opportunities for the professional development of the WCM-Q community and local healthcare practitioners on current issues related to healthcare. This activity was developed by an interdisciplinary committee of experts in various areas of healthcare and research. The committee consisted of members drawn from multiple divisions within WCM-Q as well as from our affiliates, thereby enabling us to identify and meet the practice gap of our diverse target audience.

The series welcomed up to 1,500 physicians, nurses, dentists, pharmacists and allied healthcare practitioners from both the public and private sector (Figure 5). It ran on a monthly basis, delivering 18 lectures overall in the 2017-2018 academic year (Figure 6, page 54). Each activity was accredited locally by the Qatar Council for Healthcare Practitioners-Accreditation Department (QCHP-AD) and internationally by the Accreditation Council for Continuing Medical Education (ACCME). The presenters included WCM-Q faculty and alumni, WCM faculty and renowned local and international experts on diverse topics relevant to the practice of the healthcare community of Qatar.

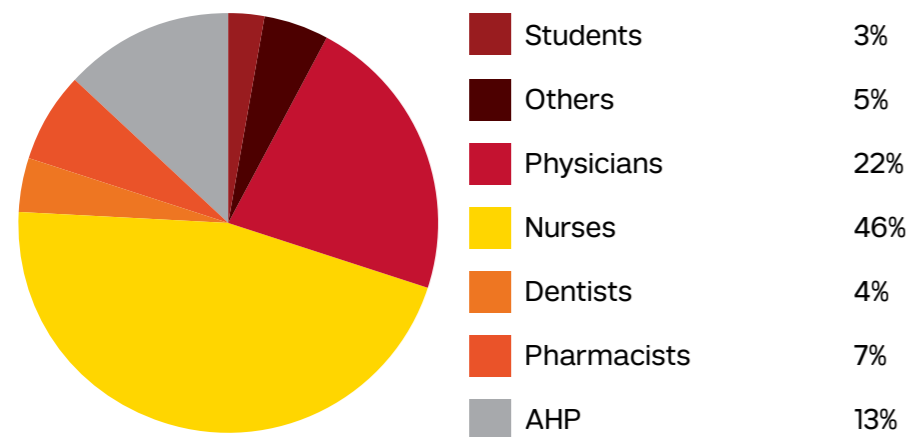


Figure 5: Breakdown of attendees at the WCM-Q Grand Rounds Series (2017-2018) expressed as a percentage of each discipline.



Dr. Mathew Fink delivered a Grand Rounds lecture about the treatment of strokes.

# Continuing Professional Development

## WCM-Q Grand Rounds 2017-2018

WCM-Q Grand Rounds is a lecture series with the aim of providing physicians and other healthcare practitioners updates on current issues related to healthcare. The series offers an array of multidisciplinary topics. Participants benefit from the opportunity to discuss topics that can help in the improvement of patient care.



**Dr. Samuel Stafrace**  
What Really Leads to Patient Satisfaction?  
A Deep Dive Focused on the GCC



**Dr. Mohammed AlSaey**  
Management of Oral Trauma in Sports



**Dr. Thozhukat Sathyapalan**  
The Role of Endocrine Disruptors in Health and Disease



**Dr. Tania Jaber**  
Radioactive Iodine in Thyroid Cancer: Past, Present and Future Directions



**Dr. Abdulaziz Sachedina**  
Patient Care and Islamic Ethics Units: Present & Future



**Dr. Mathew Fink**  
Mobile Stroke Treatment Units: Present & Future Pediatrics



**Dr. Martin Steinhoff**  
Translational Treatment of Atopic Dermatitis



**Mr. Peter Bohan**  
Occupational Health and Wellbeing in Healthcare



**Dr. Khalid Hussain**  
Diabetes in Children: Causes, Classification & Management



**Dr. Rana Biary**  
Management of the Agitated Patient



**Dr. Mark Pecker**  
Treatment of Hypertension after Sprint & the New Guidelines



**Dr. Giuseppe Lauria**  
Big Pain, Small Fibers: Personalizing Medicine in Painful Neuropathies



**Dr. Ali Sultan**  
Antimicrobial Resistance and Stewardship: Trends & Future



**Dr. Dora Stadler**  
Medical Professionalism in the Age of Social Media



**Dr. Jeremie Tabrizi**  
Personalized Medicine in Women's Cancer



**Dr. Thomas Krummel**  
It's No Longer Blood and Guts, It's Bits and Bytes



**Dr. Omar Mahmood**  
Frontal Lobe Functioning In The Adolescent Brain: Risk-taking, Adventures & Decision-making



**Dr. Deborah White**  
Leading Local & Health System Transformation: Forming Teams From The Bedside, C-suite & The Community

Figure 6: The presenters and topics of the 18 Grand Rounds delivered at WCM-Q during the 2017-2018 academic year.

# Continuing Professional Development

## Psychiatry for the Non-Psychiatrist

A large percentage of patients visiting non-psychiatric practices suffer from psychiatric conditions alone or have complicating medical, surgical and neurological illness. The appropriate diagnosis and management of these patients is critical for a good overall patient outcome and to decrease the risk of chronicity and complications. Hence, a review and update of the latest advice for healthcare professionals working in non-psychiatric practices who encounter patients with psychiatric conditions was designed to impart practical knowledge about the presentations of psychiatric disorders and their impact on the overall health of the patients. Approaches to diagnosis and management were discussed especially in the area of depression, anxiety, substance abuse and somatic illness disorders.

The activity was directed and delivered by three WCM-Q psychiatry professors, with each

session designed to impart a different set of practical skills. Dr. Aicha Hind Rifai, assistant professor of clinical psychiatry explained the significance of attending to patients' mental health needs in non-psychiatric settings in order to maximize patient wellbeing and prevent unfavorable health outcomes. Dr. Ziad Kronfol, professor of psychiatry explained how to recognize the extent and complexities of the association between comorbidity of medical and psychiatric conditions, and recommended strategies for managing patients with comorbidities. Dr. Hassen Al-Amin, associate professor of psychiatry outlined methods for assessing substance abuse in the non-psychiatric session.

The activity, which was accredited locally by QCHP-AD for a maximum of 3.0 hours and internationally by the ACCME for a maximum of 3.0 AMA PRA Category 1 Credit(s) was well-attended by 39 physicians, nurses, dentists, pharmacists and allied health professionals.



From left: Dr. Ziad Kronfol, Dr. Aicha Hind Rifai, and Dr. Hassen Al-Amin.

# Medical Education

## Digital Education and Strategies for Implementing the Flipped Classroom

The power of the 'flipped classroom' teaching model for maximizing learning outcomes among medical students and healthcare practitioners was discussed by two visiting experts at a two-day workshop. The flipped classroom model reverses traditional teaching approaches by using interactive learning tools, particularly digital resources like online videos, to empower learners to acquire foundational knowledge in their own time rather than in the classroom. Thereby allowing instructors to utilize that knowledge as a basis for a variety

of enriched learning activities such as collaborative discussions, practical exercises and simulated learning sessions.

More than 60 educators working in the health professions field attended the conference, which was delivered by Dr. Traci Wolbrink and Dr. Dennis Daniel, both of Boston Children's Hospital and Harvard Medical School, and was facilitated by faculty, staff and students of WCM-Q. Dr. Robert Crone, vice dean for clinical & faculty affairs at WCM-Q, and Dr. Wolbrink co-directed the activity.

The attendees took part in 12 interactive learning sessions over the two days, covering topics such as the evolution of

medical education in the digital context, characteristics of millennial learners, adult learning theory, definitions of the flipped classroom, audience response systems and practical advice on how to create effective and compelling video and audio recordings for learners. The event was accredited locally by the Qatar Council for Healthcare Practitioners-Accreditation Department (QCHP-AD) for a maximum of 7.5 hours and internationally by the Accreditation Council for Continuing Medical Education (ACCME) for a maximum of 7.5 AMA PRA Category 1 Credit(s)™.



From left: Sarah Khan, Dr. Amal Khidir, Nora Al-Fakhri, Dr. Sumeja Zahirovic, Safa Mahgoub, Dr. Dennis Daniels, Dr. Robert Crone, Dr. Traci Wolbrink, Dr. Liam Fernyhough, Deema Al-Sheikhly, Imen Becetti, and Eman Mosleh.

## Continuing Professional Development

# Intersection of Law and Medicine Series

The series, conceived by Dr. Sunanda Holmes, the then deputy chief administrative officer & associate university counsel/ assistant professor of healthcare policy and research at WCM-Q, comprises interactive seminars aimed at providing physicians with greater awareness of law and legal issues which impact on medical practitioners in the State of Qatar. In the 2017/18 academic year three activities accredited locally by the QCHP-AD and internationally by the ACCME were delivered.

Dr. Randi Diamond participates in a panel discussion at the Intersection of Law and Medicine series.



### i. Legal and Ethical Issues in End-of-Life Care

More than 200 physicians, nurses and other healthcare professionals convened at WCM-Q to hear expert speakers from around the globe explain and explore key themes in end-of-life care. Themes included maximizing quality of life for patients in their final days, palliative care in the global context, strategies for ensuring effective communication among healthcare professionals, patients and their families, and the legal and ethical issues inherent in providing palliative care in a multi-national, -cultural, and -religious community, among others.

The speakers included Dr. Randi Diamond, assistant professor of

medicine at Weill Cornell Medicine in New York, Dr. Mohammed Ghaly, professor of Islam and biomedical ethics at the Center for Islamic Legislation and Ethics at Hamad Bin Khalifa University, Andrea Tithecott, partner at corporate law firm Al Tamimi & Co., Dr. Stefan Rohrig, senior consultant anesthesia & SICU-HGH at Hamad General Hospital, Ms. Hiba Salem, psychologist from SANAD Home Hospice Organization of Lebanon, Dr. Abdulaziz Sachedina, professor and Endowed International Institute for Islamic Thought Chair in Islamic Studies at George Mason University and Dr. Hiba Abdulaziz Eltahir, consultant, supportive & palliative care at the National Center for Cancer Care & Research.

### ii. The Intersection of Islam and Biomedical Ethics: A Guide for Healthcare Practitioners

There is much interest in the area of Islam and biomedical ethics as the codified laws around it are limited in Qatar and the GCC countries as a whole. Healthcare institutions are trying to grapple with any potential gaps between the Islamic directives/fatwas and secular bioethics that they may have come across as practitioners from other jurisdictions around the world. The challenge also exists whether to treat patients differently from the "normal" or standard practice depending on the religion of the patient and/or the healthcare provider. Therefore, healthcare practitioners need first-hand knowledge of how to assess their religious beliefs and convictions impacting their clinical and research decision-making and how they should be addressed.

This two-day program was co-directed by Dr. Holmes and Dr. Mohammed Ghaly, professor of Islam and biomedical ethics research at the Center for Islamic Legislation and Ethics. More than 150 physicians and other healthcare practitioners heard expert speakers from around the globe discuss the variety of bioethical positions within the Islamic tradition and how Islamic and bioethical perspectives may be applied in the context of clinical practice.

Dr. Mohammed Ghaly speaks about the intersection of Islam and biomedical ethics.



From left : Dr. Jeremy Sugarman, Dr. Daniela Radu, Dr. Sunanda Holmes, Dr. Mohammed Ghaly, Dr. Walid Qoronfleh.

# Continuing Professional Development

## Lives in Medicine Seminar Series

Following the successful launch of the Lives in Medicine Series last year, the division developed and ran two activities:

### i. The Visual Arts and Medicine

The impact of the visual arts on medicine, healthcare and patient wellbeing, including art therapy interventions, was explored at the one-day symposium, which took place at WCM-Q. Sara Powell and Andrew Wright, two licensed art therapy specialists, gave a joint presentation summarizing the theory of art therapy and its

applications in patient care, and presented a sample case study demonstrating the effectiveness of art therapy in practice. Dr. Aicha Hind Rifai, assistant professor of clinical psychiatry, WCM-Q, explained the use of art therapy along with medications to address the symptoms of apathy and social withdrawal in patients with schizophrenia as well as the benefits of using art therapy in the treatment of patients with Alzheimer's disease. Her colleague Dr. Alan Weber, visiting professor of English, discussed the history of art therapy and its use in medical education.

Around 50 healthcare practitioners attended the symposium where they spent a part of it applying what they learnt and utilizing some of the art therapy tools to better understand how to utilize it in practice. The hands-on part of the workshop was facilitated by the presenters as well as their colleagues, Dr. Krystyna Golkowska and Sarah Roach.



From left: Deema Al-Sheikhly, Sarah Powell, Sarah Roach, Dr. Aicha Hind Rifai, Dr. Alan Weber and Andrew Wright.

### ii. Music Therapy and Healing

Healthcare providers often lack an understanding of the theory, role and application of music therapy in the treatment of medical conditions. Therefore, up to 40 attendees took part in an interactive workshop to learn how music therapy can be an effective treatment intervention to help clients deal with trauma and chronic illness, and how playing music or musical instruments can provide psychological relief and an inner resource for people to positively confront their ongoing illness. The activity featured lectures by expert speakers who gave a brief history of music therapy, discussed the effect of

music on the brain, and described the application of music therapy interventions in clinical practice.

Expert speakers at the activity included Dr. Aicha Hind Rifai, assistant professor of clinical psychiatry, who discussed music therapy in clinical practice. It also featured Dr. Waseem Kotoub, a professional concert pianist, composer and medical doctor who has used music therapy with autistic children to aid the development of communication skills. He also established what is believed to be the first music therapy center in the MENA region. Dr. Kotoub gave a joint presentation about the history of music therapy alongside Dr. Alan Weber, WCM-Q's visiting professor of English.



Center: Dr. Waseem Kotoub, Dr. Aicha Hind Rifai, and Dr. Alan Weber, with the participants of the activity.

## Continuing Professional Development

# WCM-Q Course Directors who developed Accredited CME/CPD Activities 2017-2018

Huda Abdulrahim

Hassen Al-Amin, MD

Thurayya Arayssi, MD

Stephen Atkin, MD

Rachid Bendriss, PhD

Sohaila Cheema, MD

Robert Crone, MD

Thomas Doyle

Maha Elnashar, MA

Ming-Jung Ho, MD

Sunanda Holmes, JD

Ziad Kronfol, MD

Stella Major, MD

Rayaz Malik, MD

Ravinder Mamtani, MD

Amine Rakab, MD

Ameed Raouf, MD

Aicha Hind Rifai, MD

Shahrad Taheri, MD

Alicia Tartalo, PhD

Mohamud Verjee, MD

Alan Weber, PhD



## Engagement and Collaboration with Stakeholders

We recognize the importance of engaging our stakeholders in program and activity development to ensure high-quality programming that meets the needs of healthcare practitioners in Qatar and the region. Therefore, our Stakeholder Advisory Board is made up of representatives from diverse stakeholder groups in Qatar with vast knowledge and understanding of the continuing professional development needs of the healthcare practitioners in their organization. The purpose is to:

- Provide insight into stakeholders' educational needs.
- Discuss the existing WCM-Q program as it relates to accessibility and relevance to stakeholders.
- Promote opportunities for collaborative activities.
- Identify educational gaps in the marketplace best addressed by WCM-Q.

### Stakeholder Advisory Board Members

**Thurayya Arayssi, MD**  
Associate Professor of Medicine  
WCM-Q

**Paul Dijkstra, MD**  
Assistant Professor of Medicine  
Aspetar

**Alex Bialasiewicz, MD**  
Head, Dept Ophthalmology  
Al-Ahli Hospital

**Stephen Atkin, MD**  
Professor of Medicine  
WCM-Q

**Mohamad Al-Abiad, MD**  
Head of Medical Supervision  
Qatar Red Crescent

**Deema Al-Sheikhly, MEHP**  
Director, CPD  
WCM-Q

**Ming-Jung Ho, MD**  
Professor of Medicine  
WCM-Q

**Deborah White, RN**  
Dean  
University of Calgary-Qatar

**Laudy Mattar, MMI**  
Manager, CPD  
WCM-Q

**Hadi Abu Rasheed, MD**  
Supervisor of Health Education  
Qatar Cancer Society

**Sharda Udassi, MD**  
Assoc. Prof. Clinical Pediatrics  
Sidra Medicine

**Mary Parrott, RRT**  
CPD Coordinator  
College of North Atlantic-Q

**Rabindranath Sivam, BDS**  
Senior Consultant Orthodontist  
Future Dental Center

**Irene O'Brien, RN**  
Dean  
College of North Atlantic-Q

**Ross Graham, MD**  
Chief Medical Physician  
US Base

**Ahmad Al-Hammadi, MD**  
Assistant Professor of Clinical  
Pediatrics  
Sidra Medicine

**Noora Al-Mutawa, MD**  
Senior Consultant, Family Medicine  
PHCC

**Ahmed Awaisu, PhD**  
Assoc. Prof. Pharmacy Practice  
Qatar University

**Heather Bovell**  
Patient Representative

**Nasser Binmarzook**  
Student Representative  
WCM-Q



# Continuing Professional Development

Additionally, partnering with our stakeholders resulted in the development of a variety of activities that were based on the identified practice gaps and needs of the healthcare community in Qatar. Some of these activities included:

## **The Power of Change Agents: Teaching Caregivers Effective Communication Skills to Overcome the Multiple Barriers to Patient Safety**

The crucial role of effective communication and teamwork in ensuring patient safety was discussed at an immersion program coordinated jointly by Weill Cornell Medicine-Qatar, Hamad Bin Khalifa University and the World Innovation Summit for Health. A team of experts from the US-based Academy for Emerging Leaders in Patient Safety was brought to Doha to deliver their world-renowned patient safety program. The program was attended by healthcare leaders, educators, and medical students wishing to broaden their knowledge of patient safety and risk reduction.



Top: Dr. David Mayer, vice president of quality and safety for MedStar Health along with other presenters and participants.



## **Perioperative Bleeding Management: Patient Blood Management**

The activity was a collaboration between WCM-Q, Hamad Medical Corporation (HMC) and Danube University Krems, Austria, and addressed topics included blood management in trauma and critical care patients, as well as in patients undergoing cardiac, liver or orthopedic surgery. Effective blood management is a crucial element of perioperative care, which covers the three phases of surgery: preoperative, intraoperative and postoperative. As such, medical practitioners are working to develop new and enhanced blood management processes to maximize healthcare outcomes. More than 40 of the world's

leading physicians and healthcare professionals in their fields, which included anesthesiology, intensive care, internal medicine, surgery, transfusion medicine and blood banking attended. Instrumental in the coordination of the collaborative event were the Division of Continuing Professional Development, Dr. Marcus Lancé, senior consultant in the department of anesthesiology, ICU & perioperative management at HMC, Dr. Robert Crone, vice dean for clinical & faculty affairs, professor of clinical pediatrics and professor of clinical anesthesiology at WCM-Q, and Prof. Marco Marcus, chairman of the Department of Anesthesiology, ICU and Perioperative Medicine at HMC and adjunct professor of clinical anesthesiology at WCM-Q.



Dr. Marcus Lancé, (left) senior consultant in the department of anesthesiology, ICU & perioperative management at HMC along with local and international delegates of the activity (above).

# Continuing Professional Development

## The Basics of Immunization

This event was the first of an ongoing series of continuing professional development opportunities that the University of Calgary in Qatar, in partnership with WCM-Q, has launched at the invitation of the Primary Health Care Corporation.

Topics presented and discussed at the symposium included the importance of vaccines in preventing illness and disease from spreading, how vaccines activate an immune response, how vaccines are developed and rigorously tested for safety, and the safe storage and handling of vaccines.

## Presentations and Publications

Strategies for building a CPD program in an undergraduate medical school: successes and challenges. Al-Sheikhly, D, Stadler, D, Mattar, L, and Arayssi, T. Ottawa-ICME, March 11-14, 2018; Abu Dhabi, UAE.

Identifying continuing professional development practice gaps of primary care physicians in the State of Qatar: A perceived needs assessment. Mattar, L; Al-Sheikhly; Abloulsoud, S, Gordon, J, Campbell, C, and Arayssi, T. AMEE 2017; Helsinki, Finland.

Book Chapter: Arayssi T, Rakab A, Al-Sheikhly D. (2018) Managing an Internationally Accredited Program. *The Residency Coordinator's Handbook (pp 211-217), Fourth Edition*. United States of America: HCPPro.





# Clinical and Faculty Affairs

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## Clinical And Faculty Affairs

The Office of Clinical and Faculty Affairs supports and manages the recruitment, appointment and promotion process for all WCM-Q academic staff, including resident faculty, research associates and postdoctoral associates, and faculty at our affiliated institutions. The office is also responsible for overseeing the annual performance review process, maintaining academic staff records, and supporting the implementation of policies and procedures. In addition, the office

is the repository for academic staff data, and facilitates and monitors the credentialing of our clinical resident faculty.

All faculty members at WCM-Q and its clinical affiliates share a commitment to the continued pursuit of excellence in teaching, research, patient care, the advancement of the art and science of medicine, and to developing the next generation of leaders in healthcare for Qatar and the region.

FULL-TIME FACULTY	APPOINTED
Medical Education Faculty	44
Pre-medical Education Faculty	16
Research Faculty	17
<b>Total</b>	<b>77</b>

VOLUNTARY FACULTY	APPOINTED
Hamad Medical Corporation	390
Aspetar	14
Primary Health Care Corporation	23
Sidra Medicine	152
Other Institutions	8
<b>Total</b>	<b>587</b>

Dr. Amine Rakab is one of 44 full-time medical education faculty at WCM-Q.



## Appointments and Promotions

### Faculty at Affiliated Hospitals and Other Institutions

#### Newly appointed and promoted faculty

Faculty at affiliated institutions play a valued role in supporting the college's mission in Qatar by overseeing the clinical education of WCM-Q students and contributing to our research programs. During the academic year 2017-2018, 104 colleagues from Hamad Medical Corporation (HMC), the Primary Health Care Corporation (PHCC), Aspetar, Sidra Medicine, and Qatar Foundation received academic appointments at Weill Cornell Medical College (WCMC), three of them at the rank of professor. In addition, 12 faculty members from affiliated institutions achieved promotion to a higher faculty rank:

#### To Assistant Professor:

**Osama Hisham Mohammad Nidam Sinan (HMC),**  
Assistant professor of clinical medicine

**Husham Mohamed Ahmed Abdelrahman (HMC),**  
Assistant professor of clinical surgery

**Tayseer Suleiman Fareed AlSaad (HMC),**  
Assistant professor of clinical pediatrics

**Yahia Zakaria Bashier Imam (HMC),**  
Assistant professor of clinical neurology

**Ahmad Subhy Humady Alsheikhly (HMC),**  
Assistant professor of emergency medicine in clinical medicine

**Muftah Abdulnasser Othman Abdallah (HMC),**  
Assistant professor of clinical medicine

**Hassan Osman Abdelgalil Abu Zaid (HMC),**  
Assistant professor of clinical medicine

**Moataz Mahmoud Mohamed Bashah (HMC),**  
Assistant professor of clinical surgery

**Ahmad Salih Abdulhadi (HMC),**  
Assistant professor of emergency medicine in clinical medicine

**Ahmad Sami Al-Obaidi (HMC),**  
Assistant professor of clinical orthopedic surgery

#### To Associate Professor:

**Sittana Shamseld Eishafie (Aspetar),**  
Associate professor of clinical pathology and laboratory medicine

#### To Professor:

**Jassim Al Suwaidi, (HMC),**  
Professor of clinical medicine

Dr. Robert Crone, vice dean of clinical and faculty affairs, center, with some of WCM-Q's affiliated faculty members.



## Clinical And Faculty Affairs

# WCM-Q Appointments and Promotions



**Dr. Raphaël Courjaret** was appointed assistant professor of research in physiology and biophysics in July 2017. Dr. Courjaret received his PhD in neuroscience from the University of Angers, France, where he studied the intracellular regulation of nicotinic receptors in neurons. Subsequently, he conducted postdoctoral research training in France in the laboratory of Dr. Bernard Poulain (CNRS UPR2356, Strasbourg, France) and with Professor Joachim Deitmer in the Laboratory of Zoology (Kaiserslautern, Germany).

Dr. Courjaret joined Dr. Khaled Machaca's lab at WCM-Q in 2010 as a postdoctoral associate in physiology and biophysics to work on the intracellular signaling processes involved in the

development of *Xenopus* oocytes. Since 2013, as a research associate in physiology and biophysics, his research has focused on intracellular calcium signaling in *Xenopus* oocytes and mammalian cells. He is particularly interested in understanding how cells can deliver precisely intracellular Ca<sup>2+</sup> ions to specific targets using electrophysiology and various imaging techniques such as live confocal and TIRF.

Dr. Courjaret has also participated in teaching our medical students as a facilitator for journal club for Brain and Mind (BAM) and in small-group discussions for Essential Principles of Medicine (EPOM).



**Dr. Sandra Sapia** joined the Division of Medical Education as assistant professor of pathology and laboratory medicine in September 2017. Dr. Sapia joins WCM-Q from Örebro University Hospital in Sweden where she served as an assistant professor and consultant pathologist. Dr. Sapia holds an MD from the College of Medicine of the Universidad de Buenos Aires and is trained in histopathology, cytopathology, and hematopathology. Throughout her

career, she has made important contributions to research and teaching, including teaching medical students, residents, pathologists in training, and practicing pathologists. She has published 23 articles, three book chapters, and several abstracts. Dr. Sapia is a founding member and past president of the River Plate Flow Cytometry Society and a member of the Argentinian, Swedish, and Spanish societies of pathology.



**Dr. Mohamed Elshazly** joined the Division of Medical Education in December 2017 as an assistant professor of medicine. Dr. Elshazly is the third of our alumni joining WCM-Q as a faculty member. After completing his MD. in Qatar in 2010, Dr. Elshazly moved to the US to conduct residency training in internal medicine at Johns Hopkins Hospital, followed by a Cardiovascular Medicine Fellowship at the Cleveland Clinic. He also pursued a Cardiac Electrophysiology Fellowship at the Cleveland Clinic. He is American Board certified in internal medicine (2013) and in cardiovascular diseases (2016) and is a member of the American College of Cardiology, the American Heart Association, the Heart Rhythm Society, and the American Medical Association.

Dr. Elshazly was appointed as a clinical instructor in medicine at the Cleveland Clinic during his cardiology training and received

several teaching awards. He pursued his interest in medical education and participated in structuring problem-based learning modules for the Cleveland Clinic Lerner College of Medicine in addition to teaching part of the cardiovascular disease module. His research involvement started early in medical school and continued during residency and fellowship. He has worked on multiple projects in the area of dyslipidemia and has done some work using intravascular ultrasound imaging of coronary plaques, exploring the role of cardiopulmonary stress testing in atrial fibrillation.

Dr. Elshazly is interested in pursuing an academic career in cardiology that combines excellence in education, research, and patient care. In addition to supporting our medical education program, he will be actively involved in clinical practice at our affiliated hospitals.



**Dr. Mohammad Yousef** joined WCM-Q in December 2017 as a visiting associate professor of physics in the Pre-medical Program

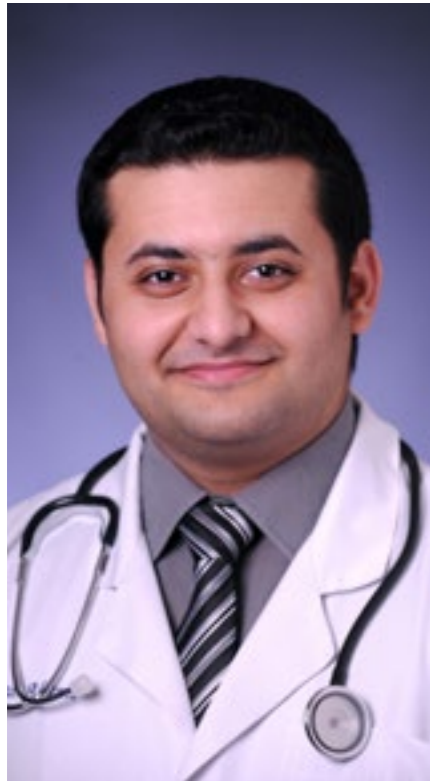
Dr. Yousef holds a PhD in molecular biophysics from Florida State University and comes to us from Southern Illinois University Edwards, an institution he joined in 2011 and where he was an associate professor of physics.

He is an experienced educator, having taught introductory physics courses tailored to the needs of pre-professional health science programs in a variety of subject areas, such as medicine,

pharmacology, dentistry, veterinary science, exercise science and kinesiology. He has also developed two upper-level undergraduate biomedical physics courses and built a very successful online conceptual physics course.

Dr. Yousef's areas of research are molecular and structural biophysics. More specifically, he elucidates and analyzes the 3D structure of proteins and protein/DNA. In his research, he uses x-ray crystallography, molecular biology, biochemistry, and computational methods. His main scholarship goal is to build an externally funded, rigorous research program involving students.

## Clinical And Faculty Affairs



**Dr. Salman Al Jerdi** joined WCM-Q in January 2018 as an assistant professor of neurology. He is one more of our alumni to join our Medical Education Division. In addition to supporting our medical education program, he will be actively involved in clinical practice at our affiliated hospitals.

Dr. Al Jerdi received his MD from WCM-Q in 2012 followed by residency training in neurology at the University of Vermont Medical Center and a fellowship in vascular neurology at the University of Iowa Hospitals and Clinics. Training at these institutions has exposed Dr. Al Jerdi to different cultures of care and clinical practice and provided him with the opportunity to train under leaders in the field of neurology. He is also very interested in medical education; while at the

University of Vermont, he held an appointment as instructor of neurology and attended several faculty development courses on medical student education, which helped him develop his skills in clinical teaching.

His research interests include primary stroke prevention and stroke rehabilitation as well as exploring novel methods of increasing patient involvement in medical care and clinical research through the utilization of mobile technology. Additionally, he is interested in studying the impact of cultural differences on a patient's understanding of illness, approach to medical decision-making, and attitudes towards clinical research. He has published five articles in peer-reviewed journals and has two more manuscripts in preparation

T2D and Obesity. She has co-authored 15 original research articles, 13 of them since joining WCM-Q, and presented her work at several conferences. In addition, she has been active as a research mentor to our medical students and has mentored a PhD student from the Anti-Doping Lab.

Dr. Yousri holds a PhD in Computer and System Engineering from Alexandria University, Egypt, where she also holds a faculty appointment as associate professor (on sabbatical leave).



**Dr. Noha Yousri** was appointed adjunct assistant professor of genetic medicine in March 2018. Dr. Yousri joined WCM-Q in 2012 as a postdoctoral associate in physiology and biophysics in Dr. Karsten Suhre's Lab and was appointed a research associate in genetic medicine in Dr. Steven Hunt's Lab in March 2017.

Dr. Yousri is experienced in bioinformatics, data analysis, and phenotype association studies. Last year, she was awarded a grant from Qatar National Research Fund (QNRF) under the Path to Personalized Medicine Cycle 2 to lead a project on epigenetics of

**Dr. Kuei-Chiu Chen** was promoted to visiting associate professor of biology in September 2017. Dr. Chen joined WCM-Q in 2012 as senior lecturer in biology in the Pre-medical Education Division to teach the Introductory Biology course for our pre-medical I students. She is noted for her creative teaching methods. Through focusing on skill building for research competency, she directs the cross-semester student project that culminates in student poster presentations and a research ethics role-playing drama.

In addition to developing the curriculum, Dr. Chen has played a key role in engaging our pre-medical students in research and has been successful in attracting external funds to support the students' research. Her research interests focus on the study of population genetics, phylogeography, and the evolution of vertebrates using molecular markers. She has publications on teaching research and is an author of and reviewer for case study teaching publications.

Dr. Chen holds a Master of Science in Marine Biology from the National Sun Yat-Sen University, Taiwan; a Master of Arts in Zoology from the University of Texas, Austin, Texas; and a PhD in Biology from New

York University, New York. Prior to coming to WCM-Q, she served as director of the Investigative Biology Laboratory at Cornell University. In that role, she developed and implemented modern laboratory topics focusing on scientific investigations and communication in science, lectured, trained and supervised lab instructors, and directed the day-to-day operation of the lab courses for more than 600 students. Additionally, she served as an academic advisor for many biology students.

**Dr. Krystyna Golkowska** was promoted to visiting professor of English in March 2018 in recognition of her dedication as a teacher and mentor and her important contributions to research and scholarship. Through her own classroom practice and designing, coordinating and implementing high quality programs, she has enthusiastically contributed to the mission of WCM-Q of educating future physicians and leaders in medicine.

In addition to overseeing the implementation of existing curricula and the development of new courses for the Pre-medical Program and creating professional development opportunities for educators, Dr. Golkoswa is heavily

involved in mentoring students, interns, and junior faculty. She serves or served on several key institutional committees supporting student admissions, faculty recruitment, and curriculum development and has contributed to developing academic literacy and research culture in Qatar through numerous workshops, invited talks, and presentations.

Dr. Golkowska's research interests include language acquisition, sociolinguistics, composition studies, and cognitive literary studies. In recent years, she has been writing and presenting primarily on topics related to pedagogy, gender, English literature, and intercultural competence. Dr. Golkowska has published 60 articles, book chapters, and books, and has been invited to present her research numerous times.

Dr. Golkowska holds a PhD in English Literature (1978) from Jagiellonian University (Poland). She started her academic career in Poland and spent almost 20 years at Cornell University in Ithaca before joining WCM-Q in 2007.

## Clinical And Faculty Affairs

**Dr. Alan S. Weber** was promoted to visiting professor of English in March 2018 in recognition of his important contributions to education and research.

Dr. Weber has made many important contributions to WCM-Q's educational programs, including developing numerous courses for our Pre-medical Program, areas of the curriculum for our Biomedical Research Training Program for Nationals, and ACCME-accredited CME/CPD workshops on the medical humanities. In 2017, he co-developed the first cross-disciplinary Art and Medicine course in the region, which culminated in a major national art exhibition of student collaborative art works. He shared in the 2017 U.S. National Council of English Teacher's Outstanding Book Award, the highest of its kind.

As a recognized authority on education in the GCC region, Dr. Weber's interviews have appeared in *BBC News / Public Radio International*, *The New Republic*, *Global Finance Magazine*, *B'here*, *Al Fanar Media*, *The Peninsula*, and *The Gulf Times*. Trained in literature and the history of science and



### **Dr. Amal Robay, Director of Research Compliance**

Dr. Robay joined WCM-Q in 2012 as a research associate in genetic medicine. In 2013, she was promoted to assistant professor of research in genetic medicine and director of clinical research in the laboratory of Dr. Ronald Crystal, chairman of the Department of Genetic Medicine at Weill Cornell Medicine in New York. Under Dr. Crystal's mentorship, she managed clinical research programs in the fields of genetics and personalized medicine. The program includes projects in various fields, such as diabetes, genetics of Mendelian diseases in Qatar, skeletal dysplasia

medicine, Dr. Weber maintains innovative research programs in the areas of education, literature, e-learning, philosophy, medical humanities, and ethics. His research has included numerous base-line and first-of-its-kind studies published in leading international journals. In total, he has published nearly 120 articles, book chapters, and books, 102 of them since joining WCM-Q.

Dr. Weber holds a PhD in English (1996) from Binghamton University, New York. He started his academic career at The Pennsylvania State University. In 1999, he joined Cornell University where he held several academic positions before joining WCM-Q in 2006.

**Dr. Jeremie Arash Rafii Tabrizi** was promoted to professor of genetic medicine and professor of genetic medicine in obstetrics and gynecology on the pathway titled Recognizing Academic Achievement and Scholarship (Investigation) in May 2018. This promotion is in recognition of his sustained international reputation as one of the top researchers in the field of stem cell biology and cancer biology in addition to his very important contributions in the

clinical setting.

Dr. Rafii Tabrizi joined WCM-Q in 2008 as an assistant professor in our Research Division to establish a laboratory focused on two main areas of research: stem cell biology and cancer biology, concentrating on the role of the microenvironment. In January 2013, he was promoted to associate professor.

Since joining WCM-Q, Dr. Rafii Tabrizi has been successful in obtaining 12 grants from QNRF as Lead PI or Co-Lead PI, has established strong collaborations with international and national researchers, and has been able to compete internationally in terms of publications (more than 100 papers) and contributions in his field.

Dr. Rafii Tabrizi holds a master's degree in molecular toxicology (2002), an MD (2005) from the Université Paris V René Descartes, France and a PhD in molecular oncology (2007) from the Université Paris XI, France. In addition to his faculty appointments at WCMC, he serves as a consultant in obstetrics and gynecology at HMC and, since 2011, he has been an adjunct professor in obstetrics and gynecology at McGill University, Montreal, Canada.

and bone diseases in families in Qatar, genetics of male infertility, lung diseases (asthma, chronic obstructive pulmonary disease, cystic fibrosis, tuberculosis), effect of shisha smoking, and use of endothelial microparticles as a biomarker for diagnosis and prognosis in early sepsis.

Dr. Robay holds a PhD in pharmacology and physiology from the National Institute of Health and Medical Research (INSERM), Nantes University, France, and is a certified clinical research professional (CCRP) from the Society of Clinical Research Associates (SOCRA).



**Dr. Naim I. Haddad** was promoted to professor of clinical neurology in June 2018. This promotion is in recognition of his sustained international reputation as a clinician and as an educator, particularly in the area of neurophysiology and epilepsy.

Dr. Haddad joined WCM-Q in September 2011 as an associate professor of neurology in our Medical Education Division and currently serves as unit leader for the Brain and Behavior course. He is also a consultant in neurology at Hamad Medical Corporation.

Among his most recent notable contributions are the establishment of the first specialized epilepsy clinic and the first epilepsy-monitoring unit in Qatar. His clinic serves the most refractory cases of epilepsy, whereas in the past patients in such cases had to be referred to hospitals outside Qatar for treatment.

In addition to his busy practice, Dr. Haddad is heavily involved in teaching and is the recipient of numerous teaching awards.

His research interests focus on neurophysiology and epilepsy. He has been involved in studies exploring the use of magnetoencephalography (MEG) for fetal and neonatal recordings and recently authored (with WCM-Q students) the most comprehensive reference on epilepsy in Qatar.

Dr. Haddad is a member of a number of key national organizations. He holds an MD from Saint Joseph University, Faculty of Medicine in Beirut, Lebanon and trained in neurology at SUNY Health Science Center at Brooklyn and in Epilepsy-EEG at Albert Einstein College of Medicine and New York Hospital-Cornell University. He is American Board certified in psychiatry and neurology and clinical neurophysiology.



### **Dr Nayef Mazloum, Assistant Dean for Student Research**

Dr. Mazloum joined WCM-Q as an assistant professor of microbiology and immunology in 2011 and has been serving as director of student research since 2016.

Dr. Mazloum holds a PhD in biochemistry and molecular biology from New York Medical College and undertook postdoctoral training at Weill Cornell in New York, where he also started his academic career serving as an instructor in microbiology and immunology. His research focus involves molecular mechanisms of DNA repair pathways and maintenance of genomic integrity, critical factors in preventing

## Clinical And Faculty Affairs

# Activities and Events

The Office of Clinical and Faculty Affairs has been actively engaged in efforts to enhance the value of being a WCM-Q faculty member by providing educational and informational programs that are relevant to our clinician educators. The office organized several activities during this academic year to enhance engagement with its clinical affiliates, other local educational institutions, and the wider Cornell community in both Qatar and the US. These included:

### Faculty Orientation

In October 2017, WCM-Q hosted its annual faculty orientation for affiliated faculty. The event attracted more than 20 physicians with recent WCMC faculty appointments. The goal of this orientation is to help new faculty feel more connected with the college and promote faculty success. The program introduced new faculty to the many resources the college provides. Attendees had the opportunity to meet key senior leaders as well as other newly appointed colleagues and explore teaching and research opportunities.



Alicia Tartalo, director for clinical and faculty affairs, discusses the opportunities available for affiliated faculty members.

### Faculty Promotion Workshops

In November 2017, 26 faculty members attended the workshop "Achieving Promotion through the Clinical Expertise and Innovation Area of Excellence". This is a live face-to-face interactive workshop designed to prepare clinical faculty for promotion as clinician educators. The seminar discussed the promotion criteria and how to identify opportunities to fulfill the criteria. It also explained and provided examples of how to prepare a strong evidence-based dossier. The workshop was accredited by the Qatar Council for Health Practitioners and carried 2.75 Continuing Medical Education credits.

### WCM-NY and WCM-Q Faculty Affairs Annual Meeting

The annual meeting in New York took place in March 2018. In addition to meeting with several department chairs and administrations to discuss the operations and procedures, promotions, and strategies to improve appointment and promotions processes, Dr. Robert Crone, associate dean for clinical and faculty affairs, and Dr. Alicia Tártalo, director of clinical and faculty affairs, hosted the traditional closing luncheon, which was attended by Dr. Jane E. Salmon, WCM associate dean for faculty affairs, Dr. Mark Albano, WCM assistant dean for faculty affairs, and 43 WCM New York colleagues.



Dr. Javaid Sheikh was a co-founder of the joint lectureship series.

### Weill Cornell Medicine NYC Qatar Dean's Lectureship: Sharing in Academic Excellence

The two inaugural lectures of Weill Cornell Medicine NYC Qatar Dean's Lectureship: Sharing in Academic Excellence program, established in April 2017 by Dr. Javaid Sheikh, dean of WCM-Q, and Dr. Augustine Choi, dean of WCMC, took place in this academic year.

In October 2017, Dr. Rusung Tan, chair of pathology at Sidra Medicine, who holds an appointment as professor of pathology and laboratory medicine at Weill Cornell Medical College (WCMC), participated in a two-day visit to the Department of Pathology and Laboratory Medicine at WCMC-New York as part of an inaugural lectureship series sponsored by Dr. Javaid Sheikh, dean of WCM-Q, and hosted

by Dr. Daniel Knowles, chair of pathology and laboratory medicine at WCMC-NY. The visit included an academic lecture, occurring during WCM-Q Grand Rounds, as well as face-to-face meetings with faculty and trainees, laboratory tours and business meals. The goal of the initiative was to provide face-to-face introduction between Qatar-based faculty academic leaders and their NY-based colleagues, to strengthen rapport between respective departments and to develop plans for future collaboration. This lecture series is a worthwhile addition to the academic and outreach portfolio of WCM-Q and has already resulted in the formation of stronger links between the Departments of Pathology and Laboratory Medicine at Sidra Medicine and WCMC-NY.

In December 2017, Dr. William McKenna, CEO and medical

director of the Heart Hospital, who has an appointment as professor of medicine at WCMC, and is associate dean for research at HMC for WCM-Q, delivered the second Weill Cornell NYC-Qatar Dean's Lectureship: Sharing in Academic Excellence. The series included a one-hour presentation on 'Prevention of Sudden Death in the Young' at the weekly Cardiology Conference, discussion of cases at the weekly Fellow's Conference, and individual meetings with members of the clinical, academic and administration faculty. The aim of the lectureship is to strengthen the Weill Cornell – HMC relationship at all levels (i.e. teaching/training, clinical, research, and administration). The visit was facilitated by the superb hosting of Dean Augustine Choi and Dr. Bruce Lerman, division chief, cardiology.





# Research

## Research

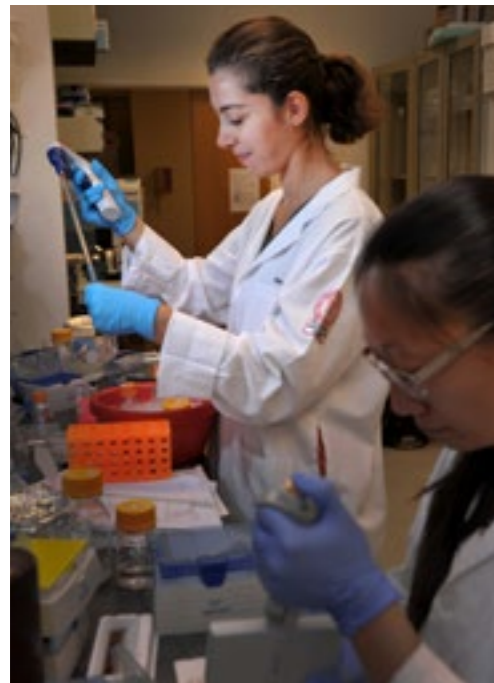
The mission of the Biomedical Research Program (BMRP) at WCM-Q is to pursue cutting-edge biomedical research focused on the health needs of Qatar, and to augment Qatar's technical and human capacity to conduct and sustain biomedical research in support of a knowledge-based economy. In addition, in line with the goals set out in Qatar National Vision 2030, the past year was characterized by a special focus on efforts to facilitate the commercialization of research findings, with several early milestones achieved in this regard.

The BMRP at WCM-Q has established itself as one of the premier biomedical research programs in Qatar and the region, staffed by exceptionally talented, internationally recognized faculty. The program has state-of-the-art

core labs and rigorous training programs that have recruited and trained local and international scientists. As in previous years, the division has made a strong commitment to providing high-quality, comprehensive training programs to Qatari nationals and long-term residents, an investment in local talent that will cement Qatar's position as a regional research hub in years to come. In the here and now, the BMRP also enjoyed significant success this year, with the program continuing to make significant discoveries in areas of research that are important for Qatar and the region, including diabetes, metabolic syndrome, and cardiovascular disorders, in addition to continuously improving our scientific knowledge with basic findings. These studies span basic molecular understanding of

mechanisms underlying disease to translational and clinical research findings aimed at improving health and healthcare throughout the region.

Scholarly activity continues to reach and pass important milestones, with more than 900 papers published to date since 2010, garnering over 22,000 citations and leading to an institutional h-index of 60. Importantly, the field-weighted citation index for WCM-Q is the highest among several regional peers, showing the high caliber of publications and the international impact they are making. WCM-Q research efforts continue to attract high levels of support from competitively-funded extramural programs through Qatar National Research Fund and others.



WCM-Q's Biomedical Research Program focuses on the health needs of Qatar and aims to bolster scientific human capacity.

## Administration in support of scholarship

- BMRP: Much of the great success of WCM-Q's research effort to date is predicated upon a firm commitment to enhancing the research infrastructure in Qatar, creating an environment in which talented scientists have direct access to the world-class physical and administrative resources they require. Research projects and individual labs can draw upon the capabilities of nine central core laboratories that provide state-of-the-art equipment and specialist expertise and platforms, including deep phenotyping of clinical cohorts. These include: genomics; imaging; basic; proteomics; bioinformatics & metabolomics; miRNA; biostatistics; clinical research support; and a vivarium. As such, the research cores constitute a skills cluster that serves as a hub around which new studies can quickly and simply be initiated, conducted and completed.

Thanks to this approach, the BMRP now comprises 25 active laboratories investigating areas that range from basic molecular and cellular pathways to translational and clinical projects. While allowing a great deal of freedom to researchers to conceive and pursue novel research pathways, the BMRP has simultaneously continued to have a strong focus on health issues with the most relevance to Qatar.

- FY18 is closing with more than 170 employees, including 22 non-faculty (postdoctoral and research associates). The majority are hired locally and trained in WCM-Q labs.
- Research currently has 51 active volunteers and visiting researchers. Since 2008, a total of 306 volunteers and visiting researchers have been trained, gaining practical and hands-on experience in an actual research lab environment.

## Research

# Commercialization: Working to help diversify the economy of Qatar

There is significant interest within Qatar Foundation and at national level to translate research findings over the past decade into commercially viable local companies that contribute to the knowledge-based economy. The Research Division fully supports this goal and is pleased to report the first startup company to have emerged from WCM-Q. The goal of the company - called Valdia for 'value added to diagnostics' - is to provide clinically actionable reports based on deep-omics phenotyping of individuals to support the practice of personalized

medicine in Qatar, thereby helping to improve patient outcomes and healthcare generally in the country.

Concurrently and to support commercialization knowhow nationally, WCM-Q hosted the 2nd Industry-Academia conference this year. The conference hosted international experts from biotech, pharma and academia who debated approaches that would be beneficial to Qatar to commercialize its research findings in the biomedical space based on models established in other countries.



# Collaborations: A leading member of a thriving research community



**Given that modern scientific research thrives on positive collaboration, WCM-Q has always been enthusiastic about engaging with external institutions and organizations where beneficial to all parties. To this end, WCM-Q has entered into a variety of collaborative arrangements in the past decade. One recent example includes:**

### **Metabolon platform at Anti-Doping Lab Qatar (ADLQ)**

This is a multi-party collaborative effort between WCM-Q, ADLQ, Qatar Biomedical Research Institute, Hamad Medical Corporation and Metabolon, a global leader in phenotyping technology for advancing biomarker discovery, diagnostic testing and precision medicine. The collaboration enabled Metabolon to establish a metabolic

platform in Qatar to service national and regional scientists working on metabolomic studies. Samples can now be analyzed locally without needing to be sent overseas. This not only allows researchers to conduct more research, more quickly, but has also established Qatar as a regional hub extending as far as South East Asia for cutting-edge metabolomic analyses.



## Research

# Publications

As in previous years, research by WCM-Q scientists gained publication in a wide range of leading international journals. Since 2010, WCM-Q researchers have published in excess of 900 papers, leading to more than 22,000 citations in the same period. Important findings made in WCM-Q's labs in 2017 covered a broad variety of research areas and topics, including polycystic ovary syndrome, the impact of sleep on childhood obesity, diabetic neuropathy, analysis of the Qatari genome, and heart disease, among many others.

### **WCM-Q research offers hope for women with polycystic ovary syndrome**

Research by Dr. Stephen Atkin, professor of medicine at WCM-Q, found a strong correlation between PCOS and pre-diabetes, which is characterized by raised blood sugar levels and makes the onset of type-2 diabetes likely. This close association strengthens the belief that healthy lifestyle habits such as eating a balanced diet and taking regular exercise reduce an individual's risk of developing PCOS, as such behaviors also minimize the risk of developing pre-diabetes.

To conduct the research, Dr. Atkin was given access to Qatar Biobank and so was able to view the biometric data of 750 anonymous Qatari women between the ages of 18 and 40.

The study, entitled 'The prevalence and metabolic characteristics of polycystic ovary syndrome in the Qatari population' has been published by the peer-reviewed open access journal *PLOS ONE*.

### **Scientists create blood in the laboratory**

Researchers at WCM-Q made a breakthrough which could lead to personalized blood and heart tissue being created in a laboratory.

Pr. Rafii's Ansary stem cell laboratory at Weill Cornell Medicine in New York, in collaboration with Dr. Arash Rafii Tabrizi's lab in Doha, postulated that endothelial cells – the cells that line the walls of blood vessels – are responsible for organ development.

To test the theory, Dr. Tabrizi and his team isolated endothelial cells and forced the expression of transcription factors using DNA vectors.

Dr. Tabrizi, who is associate professor of genetic medicine in obstetrics and gynecology at WCM-Q, said that the next step would be to translate the research to a human model, to test whether the findings can be translated to tackle different human diseases

The research was only possible thanks to support from Qatar National Research Fund with grants NPRP8-1898-3-392 and NPRP 6-1131-3-268.

### **Botox injections in stomach ineffective against obesity, say WCM-Q and HMC researchers**

Using botox injections to the stomach to treat obesity does not lead to long-term weight loss, a study by researchers at WCM-Q and HMC found.

The theory behind botox injections to the stomach is that by paralyzing the muscles involved in

moving food the stomach will feel fuller, helping the patient feel less hungry, eat less and lose weight.

However, after a comprehensive review of all published papers on the subject, the WCM-Q and HMC researchers found no evidence that stomach botox injections in obese patients leads to effective long-term weight loss. Furthermore, botox injections to the stomach can also cause harmful side-effects, such as pain and swelling in the area of the injection, nausea and indigestion. The paper, entitled *The Role of Endoscopic Intra-Gastric Botulinum Toxin-A for Obesity Treatment*, was published in *Obesity Surgery*, one of the world's foremost obesity journals.

Dr. Shahrads Taheri, professor of medicine and assistant dean for clinical investigations at WCM-Q, and lead consultant physician in obesity at the National Obesity Treatment Centre at HMC, contributed to the study. He said: "Most of the clinical trials we reviewed showed that while some obese patients who had endoscopic intra-gastric BTX-A treatment reported early satiety and delayed gastric emptying, that did not translate into significant or sustained total body weight loss."

### **Keeping a steady beat**

A professor at WCM-Q had his work into heart palpitations published by one of the world's most respected and prestigious medical journals.

Dr. Charbel Abi Khalil, assistant professor of medicine and genetic medicine at WCM-Q, and consultant cardiologist at the Heart Hospital – Hamad Medical Corporation, wrote a paper entitled 'Investigating palpitations, the role of Holter monitoring and loop recorders.' The work was published by the *British Medical Journal*.

Heart palpitations make an individual feel that their heart is racing, missing a beat, or has an irregular rhythm, and although they usually have a benign cause, like stress, they can be indicative of a more serious, underlying heart condition. Holter monitoring involves having a battery-operated monitor attached to a patient's clothing which monitors electrocardiogram (ECG) readings through electrodes attached to the skin. The Holter monitor can be worn for as little as 24 hours or up to two weeks to gain a fuller picture. Loop recorders operate in a similar manner, but are implanted beneath the skin, detecting the heart's electrical activity over time in order to diagnose an irregular pulse.

Dr. Abi Khalil wrote about the best approach for doctors faced with a patient who suffers from palpitations, detailing the steps they should take in order to make the most accurate diagnosis and prognosis.

The paper was supported by Qatar National Research Fund through the grant NPRP 9-169-3-024.

### **WCM-Q researcher: Beware nerve damage misdiagnosis risk in diabetes patients**

A leading researcher at WCM-Q published a paper highlighting the risk of misdiagnosing diabetic neuropathy, a common diabetes-related complication.

Dr. Rayaz Malik, professor of medicine, explained that diabetic neuropathy - nerve damage - presents with very similar symptoms to other diseases of the nervous system, particularly chronic inflammatory demyelinating neuropathy, known as CIDP.

Telling the two apart is crucially important because diabetic neuropathy cannot be reversed but CIDP can often be treated extremely effectively, preventing the progression of debilitating symptoms like sensory loss, pain and weakness with impaired movement.

The findings were reported in a review paper entitled 'CIDP and other inflammatory neuropathies in diabetes – diagnosis and management', published in the renowned journal *Nature Reviews Neurology*.

Dr. Malik also published groundbreaking research into the genetic basis of another type of neuropathy: familial neuropathic chronic itch, which was shown to be associated with COL6A5, a gene, which encodes a protein from which the connective tissue collagen is made. The study, 'COL6A5 variants in familial neuropathic chronic itch' was published in *Brain: a Journal of Neurology*, published by Oxford University Press.

### **International recognition for WCM-Q and HMC cardiovascular research**

Researchers at WCM-Q and Hamad Medical Corporation received a top international award for their work on cardiovascular metabolism.

Dr. Charbel Abi Khalil, assistant professor of genetic medicine at WCM-Q, Dr. Nidal Assad, chairman of HMC's Heart Hospital, and Dr. Jassim Al Suwaidi, senior consultant cardiologist at HMC and the head of research at the heart hospital, were presented with the Paul Dudley White International Award at the 2017 annual meeting of the American Heart Association for two joint cardio-metabolic research projects.

The first project assessed red cell distribution width, a unique cardiovascular biomarker measured in the blood of patients with type 2 diabetes. They reported that a higher width – red blood cells usually measure between six and 8 micrometers across – is associated with an increased chance of mortality. The second research project focused on the prognosis of patients with diabetes and severe heart failure.

The research projects - DNA Methylation and Gene Expression in Qataris with Type 2 Diabetes, and Modeling Vascular Complications of Type 2 Diabetes using In Vitro Derived Endothelial-Cardiomyocytes – were made possible by the Qatar National Research Fund through NPRP grants 7-701-3-192 and 9-169-3-024 respectively.

# Research

## **WCM-Q study: At least one in four Qataris will have diabetes by 2050**

Researchers at WCM-Q predicted that type 2 diabetes prevalence in Qatar will soar from 17 percent in 2012 to at least 24 percent by 2050.

Qatar is already one of the countries most affected by type 2 diabetes worldwide and, according to findings published in *Diabetes Research and Clinical Practice*, this epidemic is set to worsen in the next three decades, driven by the ageing of the population and high levels of obesity.

The WCM-Q study, 'Forecasting the Burden of Type 2 Diabetes Mellitus in Qatar to 2050: A Novel Modeling Approach', was conducted with funding from the Qatar National Research Fund through the National Priorities Research Program.

The study used mathematical modeling techniques to forecast diabetes burden in the Qatari population up to 2050. One of the main findings of the study is that most cases of diabetes are due to obesity. The fraction of Qataris who are obese stands currently at 41 percent, but was projected by the study to increase to 51 percent by 2050. The study also forecasts that, by 2050, 66 percent of diabetes cases will be caused by obesity.

Professor Laith Abu-Raddad, professor of healthcare policy and research at WCM-Q, was principal investigator of the study. Susanne Awad, senior mathematical epidemiologist in the Infectious Disease Epidemiology Group at WCM-Q, was first author. The research was made possible thanks to support from Qatar National Research Fund through grant NPRP 7-627-3-167.

## **WCM-Q study provides insights into disease**

WCM-Q researchers used comprehensive molecular measurement techniques to better understand how our cells respond to disease.

Dr. Karsten Suhre, professor of physiology and biophysics and director of the WCM-Q Bioinformatics Core, led a team of researchers from institutions across the globe who studied how individual differences in lifestyles and health leave an imprint on a person's epigenome – a series of chemical modifications to a person's genome that have the ability to switch genes 'on' or 'off'.

They researched how disorders like diabetes, cancer and cardiovascular disease, in conjunction with exposure to environmental factors like smoking and lack of exercise, affect the biochemical make-up of small molecules and proteins as they circulate within the human body.

Their study was entitled 'Deep molecular phenotypes link complex disorders and physiological insult to CpG methylation' and is the first study that analyzes such a broad spectrum of molecular measurements, including metabolomics, lipidomics, proteomics and glycomics to measure all possible kinds of small molecules that can be found in blood, urine and saliva.

The study was published in the prestigious international journal *Human Molecular Genetics* and can be accessed at the following URL: <https://doi.org/10.1093/hmg/ddy006>.

## **The impact of sleep on childhood obesity**

Researchers at WCM-Q found that lack of sleep is likely to be a contributing factor in childhood obesity in Qatar.

The relationship between obesity and insufficient sleep has been demonstrated before, but the majority of studies have relied on subjective estimates of sleep, and only one indicator of obesity.

By contrast, the team from WCM-Q used five indicators of obesity to ensure the condition was accurately defined. They also issued each subject with a wrist actigraphy device which records movement and allows researchers to accurately and objectively estimate sleep parameters.

The study was conducted on 335 elementary schoolchildren in Qatar aged between seven and 12 and found that the average time at which the children went to sleep during the week was 9.22pm, and the average time at which they woke was 6.26am.

Of the sample, 42.1 per cent were classified as either overweight or obese according to the definitions from the World Health Organization. Of those children, weekday sleep duration was significantly shorter at 7 hours 36 minutes, as opposed to 7 hours 54 minutes for those who were a healthy weight.

Dr. Shahrad Taheri, director of the clinical research core and assistant dean for clinical investigations said that the body of evidence pointed to a lack of sleep having an effect on a person's weight.

## **WCM-Q researchers probing role of bacteria in autism**

Researchers at WCM-Q are investigating the role of bacteria in the human gut in the development of autism spectrum disorder and inflammatory bowel disease.

In the first ever study of its type to be conducted in Qatar, researchers are collaborating with the Child Development Center to attempt to establish whether microorganisms living in the gut – collectively known as 'gut microbiota' – could be linked to autism spectrum disorder (ASD) and inflammatory bowel diseases such as Crohn's disease, ulcerative colitis, celiac disease and irritable bowel syndrome.

WCM-Q's Dr. Ghizlane Bendriss, visiting lecturer in biology, is leading the study. Dr. Noha Yousri, adjunct assistant professor of genetic medicine, and Dr. Dalia Zakaria, biological sciences teaching specialist, are responsible for the bio-statistical and microbiological analyses of the project, respectively.

WCM-Q second-year pre-medical students have gained research experience by taking part in the project. Students Mohamed Salameh and Zain Burney visited the Children's Development Center to meet with children with autism and their parents while recruiting volunteers for the research study.

The research is part of a project, 'Role of human gut microbiota in autism spectrum disorder and inflammatory bowel disease', which is sponsored by the Undergraduate Research Experience Program (UREP) of the Qatar National Research Fund (QNRF) under grant number UREP 21-059-1-011.

## **WCM-Q and Sidra Medicine research boosts understanding of personalized medicine among Qataris**

Weill Cornell Medicine-Qatar researchers, working alongside peers from Sidra Medicine and Weill Cornell Medicine in New York, have made important new discoveries about genetic variations that affect human metabolism, which could eventually help make diagnoses and treatments more effective.

The researchers analyzed the genetic material and the metabolisms of 1,000 Qatari subjects to identify links between genetic variations and metabolism. While similar research has previously been carried out in European populations, this is the first time that such a large study of this kind has focused on an Arab population.

The study, which was published in the leading scientific journal *Nature Communications*, sheds light on the role of genetic differences between people and their ability to metabolize certain molecules from food. Some of these genetic differences may explain why people have different risks of developing metabolic disorders, such as diabetes and cardiovascular disease.

The research established a high-quality data resource that will aid diagnosis of inherited diseases in Qatari and other Arab populations, as well as helping physicians identify targets for personalized treatments tailored to the individual genetic and metabolic profiles of patients.

The paper, titled 'Whole-exome sequencing identifies common and rare variant metabolic QTLs in a Middle Eastern population' has two joint first authors: Dr. Noha Yousri, adjunct assistant professor of genetic medicine at WCM-Q, and Dr. Khalid Fakhro, director of human genetics at Sidra Medicine and assistant professor of genetic medicine at WCM-Q.

Other key contributors to the study were Dr. Karsten Suhre, professor of physiology and biophysics & director of the Bioinformatics Core at WCM-Q, and Dr. Ronald Crystal, professor and chairman of the Department of Genetic Medicine at Weill Cornell Medicine in New York.

The study was supported by the Biomedical Research Program at WCM-Q, with funding from Qatar Foundation. It was also supported by Qatar National Research Fund grants 09-740-3-192, and 09-741-3-793 and in part by 7-272-1-041.

## Research

# Training, outreach and engagement: Building the foundation for future success

- The Biomedical Research Training Program for Nationals continued to successfully train young, talented Qatari graduates for the eighth year. As of June 30, 33 interns have completed the program, of which more than 85 percent continue working in biomedical research at WCM-Q or other local institutions, or have pursued graduate studies. Interns in this program are trained in wet lab and clinical research. The interns have also taken modules which cover the various areas of biomedical research and its administration. Eight HMC dentists joined the interns in 2018 for a selection of modules to gain a better understanding of research.

- Research Internship for National High School Students and Research Internships for National College Students: These two programs provide current high school and college students with opportunities to gain hands-on experience in a research environment, with the ultimate goal of increasing research capacity to help fulfill the goals of Qatar National Vision 2030. In addition to building human research capacity, these programs provide a unique opportunity for future scientists to work with WCM-Q's faculty and experience the life of a biomedical researcher at WCM-Q. During the summer of 2017, nine interns completed the high school program and three completed the college program.

- Newly launched in 2018, the Student Research Mentorship Program (SRMP) offers pre-medical students an opportunity to become involved in research at WCM-Q. The program offers students a stipend and consumables expenses to fund a yearlong research project. In addition to giving pre-medical students an opportunity to conduct research, the SRMP aims to provide students with experience in writing research grants and securing their own research opportunities. This year, the SRMP is supporting a total of 14 students working on five different projects.

- WCM-Q continues to provide opportunities for WCM-Q students to become involved in research before they graduate. To this end, 39 students in the first year of the medical curriculum received funding through the Medical Students Research Award (MSRA). The students spent their summer working at a variety of elite-level institutions, including Weill Cornell Medicine, Massachusetts General Hospital, New York University, Imperial College London, the University of Tokyo, Columbia University, and the Hospital for Special Surgery in New York.

- The Research Division also provides support for students to publish and present the results of their research in professional journals and meetings through the Presentation Award. Over the last 18 months, students who received the Presentation Award presented at conferences in Greece, the United States, and Sweden.

- Members of the Student Research Association have also been working hard to ensure that their fellow students are able to utilize the special research opportunities at WCM-Q by hosting journal clubs and organizing competitions for presenting research journals that the students have reviewed.

- The Undergraduate Research Experience Program (UREP) is an extramural Qatar National Research Fund (QNRF) sponsored program designed to give undergraduate students hands-on research experience. WCM-Q has been awarded 112 UREP grants since the UREP program was first launched. During the past year the UREP program has enabled WCM-Q to provide hands-on research training to 24 students across four UREP projects.



## The Year In Events

- The 8th annual WCM-Q Research Retreat took place on February 17, 2018 and highlighted over 100 posters by students, research specialists, postdoctoral fellows and research associates. In addition, faculty from WCM-Q and collaborating local stakeholders presented their research. The retreat was attended by around 250 people.

- To date, WCM-Q has hosted more than 200 departmental seminars, 10 international conferences and multiple local conferences and workshops focusing on diverse areas. The special research seminar delivered 10 presentations in FY '17-'18 (see Table 1, next page).

The annual Research Retreat is a highlight of WCM-Q's academic calendar.

# Research

**Table 1:**  
**Special Research Seminars**

DATE	SPEAKER	TOPIC
January 31, 2017	<b>Dr. Xufeng Wu</b> Staff Scientist, Deputy Director of Light Microscopy and Digital Imaging Facility, NHLBI, NIH, Bethesda, Maryland	Applications of live-cell Super Resolution Imaging in Cell Biology
February 13, 2017	<b>Dr. Robert R. Ruffolo</b> Retired President, Research & Development, Wyeth Pharmaceuticals and Senior Vice President, Wyeth Corporation.	
April 9, 2017	<b>Dr. Colin W. Taylor</b> Professor in Cellular Pharmacology & Wellcome Trust Senior Investigator, Department of Pharmacology, University of Cambridge, UK	Signaling to and from IP3 Receptors
May 25, 2017	<b>Dr. Navid Madani</b> Research Associate in Microbiology & Immunobiology, and Department of Global Health & Social Medicine Affiliate at Harvard Medical School	Thirty-Five Years of HIV/AIDS: What the Pandemic has Taught us about Biology and Humanity
January 10, 2018	<b>Professor Michel Marre</b> Professor of Endocrinology, Diabetes and Metabolic Diseases University of Denis Diderot-Paris 7 Paris, France	Renal Hemodynamics in Diabetes
March 4, 2018	<b>Dr. Markus Paulmichl</b> Austrian Institute of Technology & Founder of PharmGenetix	Pharmacogenomics - Implementation into Clinical Routine
March 4, 2018	<b>Dr. Charity Nofziger</b> PharmGenetix	Pharmacogenomics - Technical Aspects
March 5, 2018	<b>Dr. Lorenzo Monserrat</b> CEO, Health in Code; Researcher, Galician Health Service and Coordinator, National Reference Unit for Inherited Cardiovascular Diseases, A Coruña University Hospital, A Coruña, Spain	Genetic Testing and Next Generation Sequencing in Inherited Cardiovascular Diseases
March 6, 2018	<b>Dr. Volker Straub</b> Professor of Neuromuscular Genetics, Harold Macmillan Professor of Medicine; Director, John Walton Muscular Dystrophy Research Centre, MRC Centre for Neuromuscular Diseases, Institute of Genetic Medicine, Newcastle University, Newcastle upon Tyne, UK	Translational Research Efforts in Neuromuscular Diseases
March 27, 2018	<b>Dr. Jamil Azzi</b> Associate Physician, Brigham and Women's Hospital and Assistant Professor of Medicine, Harvard Medical School	Why Allografts Reject?

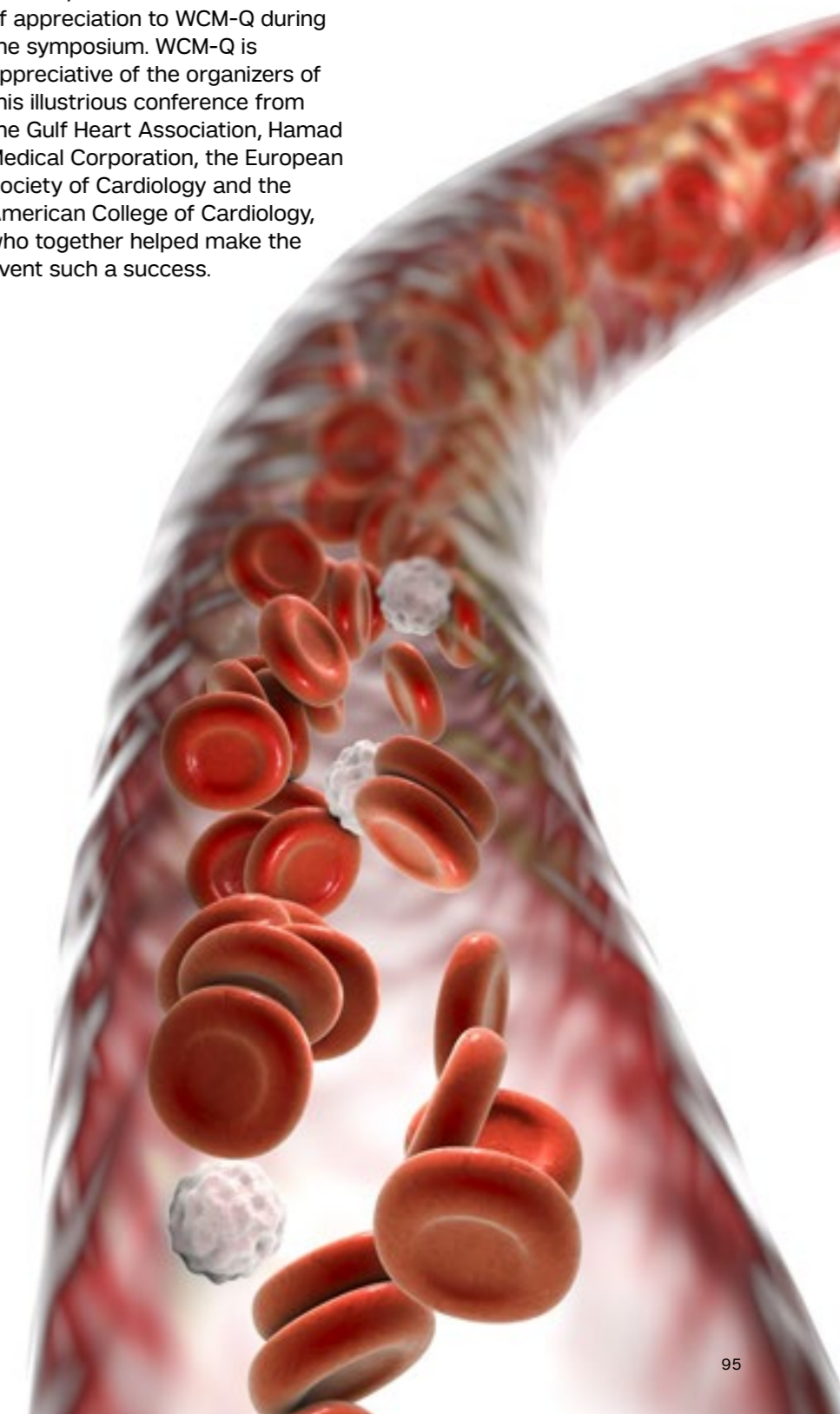
**14th Gulf Heart Association Conference - Cornell Cardio Metabolic Symposium, January 11-13, 2018**

WCM-Q participated in an international heart conference, hosting a symposium about cardiology and diabetes. The 14th Gulf Heart Association Conference and 11th Gulf Vascular Society Symposium were held with WCM-Q supporting the event as a platinum sponsor and providing speakers and moderators.

Dr. Charbel Abi Khalil, assistant professor of genetic medicine and assistant professor of medicine at WCM-Q, delivered a lecture entitled 'Epigenetic basis of cardiovascular complications of diabetes'. Dr. Abi Khalil explained how diabetes triggers epigenetic changes on the DNA and predisposes people to certain cardiovascular complications.

Dr. Khaled Machaca, associate dean for research at WCM-Q, gave an introductory speech outlining the scope of WCM-Q's Biomedical Research Program.

Dr. Machaca and Dr. Abi Khalil both gave thanks to conference chairman HE Dr. Hajar Ahmed Hajar Al Binali, who awarded a certificate of appreciation to WCM-Q during the symposium. WCM-Q is appreciative of the organizers of this illustrious conference from the Gulf Heart Association, Hamad Medical Corporation, the European Society of Cardiology and the American College of Cardiology, who together helped make the event such a success.





# Research

## 8th Annual Research Retreat, February 17, 2018

Hundreds of scientists from across the country and around the world visited WCM-Q to attend its Annual Research Retreat.

The yearly event is an opportunity to review the college's biomedical research in collaboration with local stakeholders over the previous 12 months, hear about upcoming studies and discuss new developments in the realm of biomedical research.

The audience also heard from keynote speaker Dr. Robert Ruffolo, retired president of research and development for Wyeth Pharmaceuticals in the US, whose speech was entitled 'An overview of research and development in the pharmaceutical industry: A most unique industry'.

The Annual Research Retreat was also an opportunity for WCM-Q's scientists to showcase their work to the scientific community, and eight of the senior researchers gave short presentations of their studies. The highlight of the event was the poster presentation session, when 120 researchers presented their work in poster form. These were judged by a team of experts from WCM-Q and partner institutions, and the winners announced at the end of the day.

## Industry Academia Alliances, February 18-19, 2018

Strategies for bringing innovations in biomedical research to market to help diversify Qatar's economy were discussed at the second Industry Academia Alliances



Dr. Khaled Machaca, associate dean for research, said the aim of the Industry Academia Alliances conference was to bring new technology to the marketplace.

conference, an event coordinated by WCM-Q.

The conference brought together leading biomedical research academics, local biomedical stakeholders in Qatar, and senior executives from both small and large biotech firms for two days of presentations, discussions and networking.

The aim of the conference, now in its second iteration, is to stimulate collaborative alliances between industry and academia in order to facilitate the journey of new technologies from the laboratory to the marketplace, explained Dr. Khaled Machaca, associate dean for research at WCM-Q.

The event featured presentations from leading figures in the international biotech industry,

including Dr. Robert R. Ruffolo Jr., the retired president of research and development for Wyeth Pharmaceuticals and corporate senior vice president of Wyeth (now Pfizer). In that role, Dr. Ruffolo managed an R&D organization of 9,000 scientists with a budget of \$4billion.

Other speakers included Dr. Thomas Caskey, professor of molecular and human genetics at Baylor College of Medicine in Houston, Texas; Dr. Ronald Crystal, chairman of the Department of Genetic Medicine at Weill Cornell Medicine in New York; and Dr. Javid Sheikh, dean of WCM-Q.

The conference was coordinated by WCM-Q in collaboration with Qatar Foundation, Hamad Medical Corporation, Hamad Bin Khalifa University, Qatar Biobank, Qatar Genome, Sidra Medicine and Qatar Science and Technology Park (QSTP). QSTP, a Qatar Foundation member, encourages growth and investment in Qatar's hi-tech sector through its Free Zone, which allows for 100 percent foreign ownership, tariff-free imports and other tax incentives.

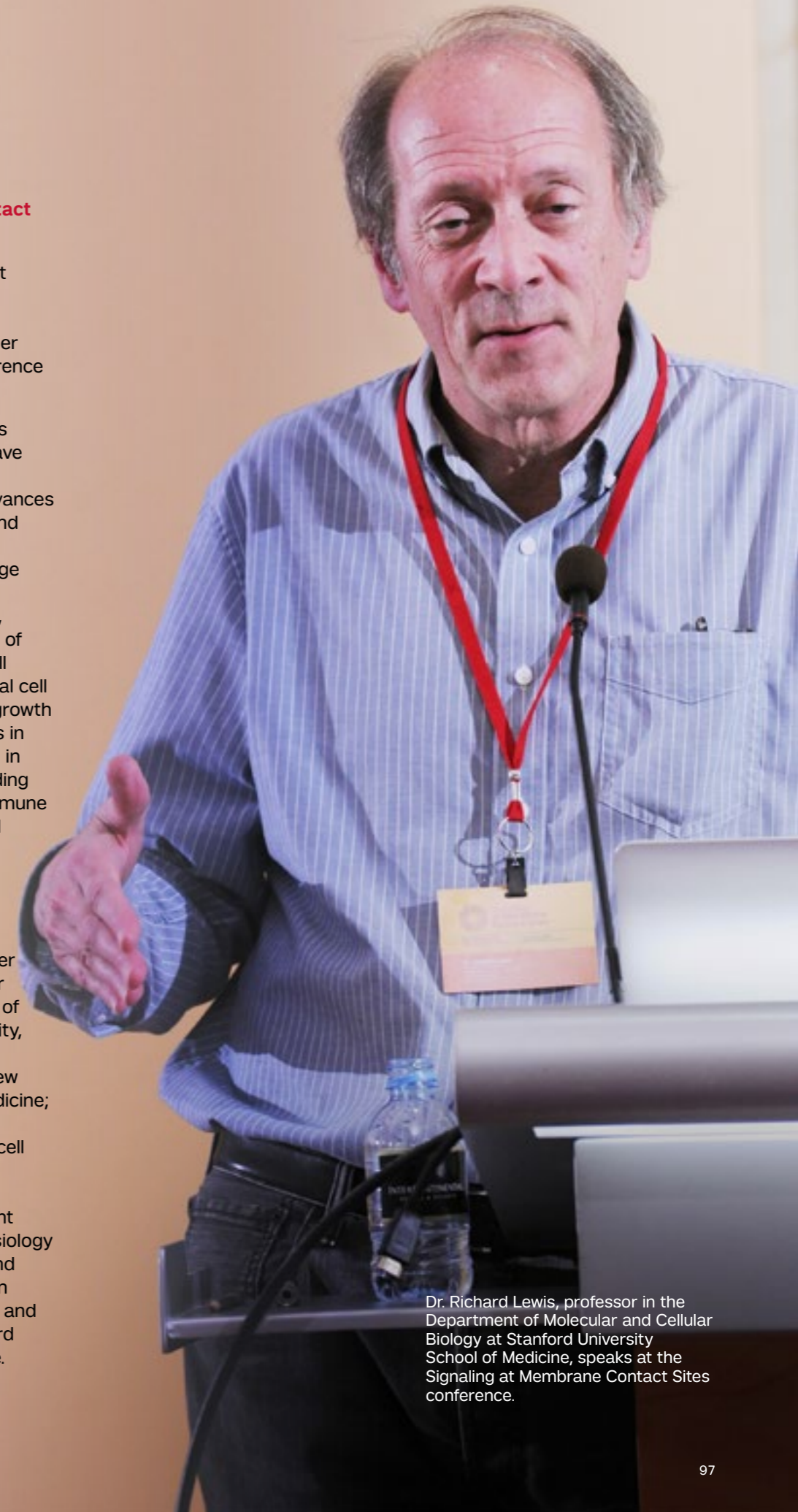
Also speaking at the event were leading figures from local research and healthcare institutions, including Dr. Hadi Abderrahim, lead strategy for healthcare and biomedical at Qatar Foundation R&D; Dr. Maher Hakim, executive director of QSTP; Dr. Marco A. E. Marcus, chairman of anesthesiology at Hamad Medical Corporation; and Dr. Richard O' Kennedy, vice-president for research at Hamad Bin Khalifa University, among others.

## Signaling at Membrane Contact Sites, April 28-29, 2018

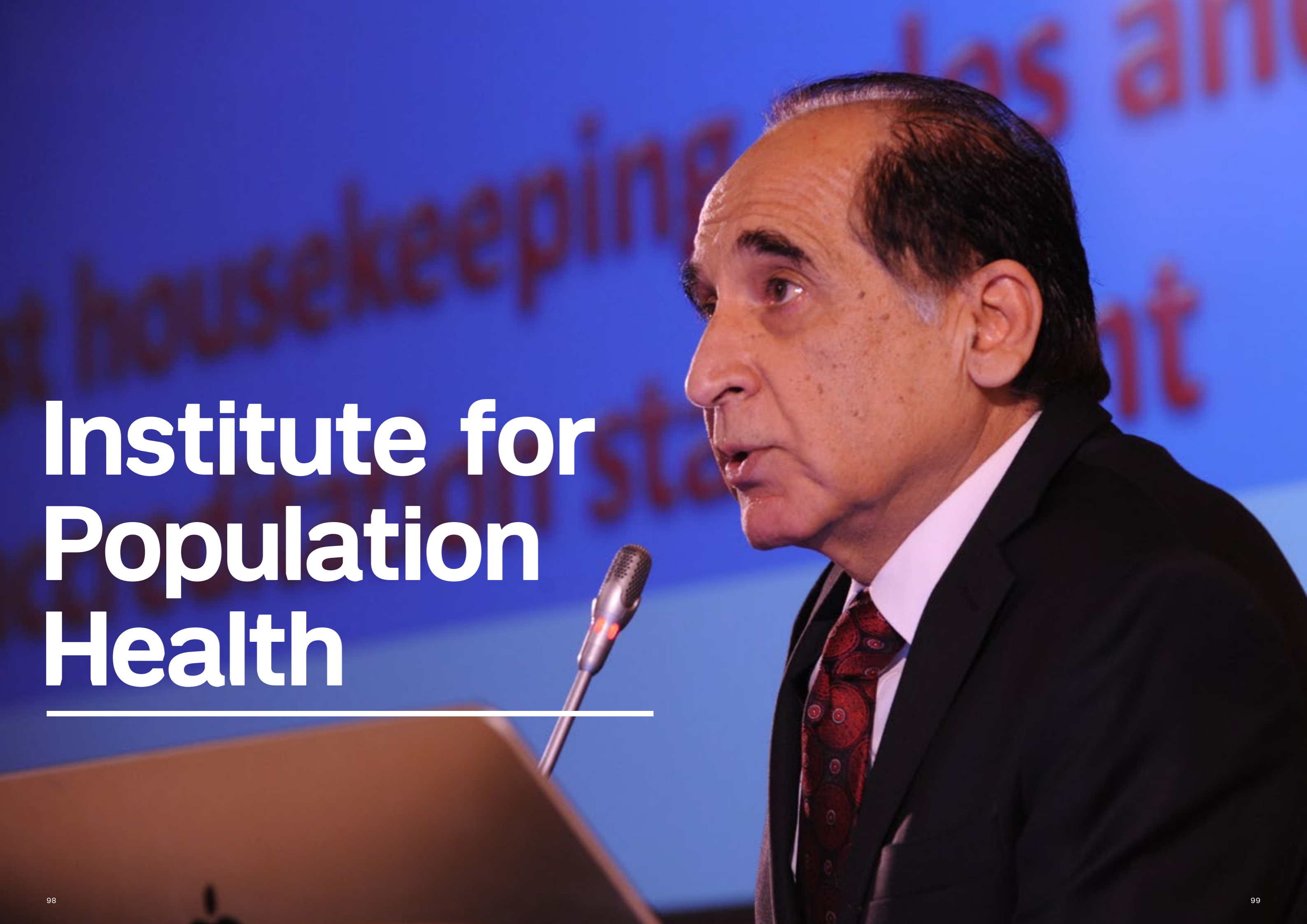
Some of the world's foremost researchers investigating the mechanisms by which cells communicate with one another convened in Doha at a conference hosted by WCM-Q.

Eighteen international experts in the field of cell signaling gave presentations at the event, explaining the very latest advances in what is a highly dynamic and complex research area. Cell signaling refers to a wide range of communication processes occurring at the cellular level, which govern many activities of cells, making life possible. Cell signaling coordinates essential cell processes like tissue repair, growth and immune response; errors in these processes are involved in many serious illnesses, including diabetes, cancer, and autoimmune diseases such as rheumatoid arthritis.

The two-day Signaling at Membrane Contact Sites conference brought expert speakers to Doha from all over the world, including Professor Ole Petersen, CBE, professor of physiology at Cardiff University, Wales, UK; Dr. Stefan Feske, associate professor at the New York University School of Medicine; Dr. Andreas Guse, director of biochemistry and molecular cell biology at University Medical Center, Hamburg-Eppendorf; Dr. Raphael Coujaret, assistant professor of research in physiology and biophysics at WCM-Q; and Dr. Richard Lewis, professor in the Department of Molecular and Cellular Physiology at Stanford University School of Medicine.



Dr. Richard Lewis, professor in the Department of Molecular and Cellular Biology at Stanford University School of Medicine, speaks at the Signaling at Membrane Contact Sites conference.



# Institute for Population Health

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# Institute for Population Health

The Institute for Population Health (IPH) at WCM-Q continues to develop and implement initiatives in the broad areas of education, research, community health and patient-related care with the ultimate aim of improving population health. IPH programmatic activities integrate knowledge, skills and evidence-based best practices to optimize population-based health outcomes. The institute offers capacity building programs for healthcare professionals, global health service learning and educational opportunities for medical students and supports community outreach by fostering the development and implementation of programs aimed at population-based health promotion, research and disease prevention initiatives. IPH research activities have a multidisciplinary focus to enhance and augment the evidence base related to epidemiological data pertaining to population health issues of relevance for the State of Qatar and the region. Furthermore, our research addresses challenges and provides recommendations to inform policy makers on pertinent healthcare issues.

The IPH team members are: Dr. Sohaila Cheema, director of IPH and assistant professor of healthcare policy and research; Raji Anand, administration

manager; Dr. Karima Chaabna, population health and communication specialist; Dr. Amit Abraham (WCM-Q alumnus, Class of 2011); Sonia Chaabane, Project Specialists; Yasmeen Kalverts, administrative assistant; and Ms. Aida Nasir, project coordinator. The Center for Cultural Competence in Health Care is an integral component of IPH led by Maha El Nashar and supported by Huda Abdelrahim. Dr. Ravinder Mamtani, senior associate dean for population health, capacity building and student affairs, and professor of healthcare policy and research is the senior member of the team.

In alignment with Qatar National Vision 2030, IPH continues to work in partnership with local, regional, and global partners in the development and implementation of best evidence-based population health initiatives and programs

with a view to promoting the overall wellbeing of the people in the State of Qatar, the Middle East region and beyond. In 2017, the book *Critical Issues in Healthcare Policy and Politics in the Gulf Cooperation Council States*, edited by Dr. Ravinder Mamtani and Dr. Albert B. Lowenfels (New York Medical College, USA), was published by the Center for International and Regional Studies (CIRS), Georgetown University in Qatar's premier research institute, under the guidance of CIRS director Dr. Mehran Kamrava. This is the first book (ISBN-10: 1626165017) to examine challenges in the healthcare sector in the six Gulf Cooperation Council countries: Saudi Arabia, Oman, the United Arab Emirates, Qatar, Kuwait, and Bahrain.

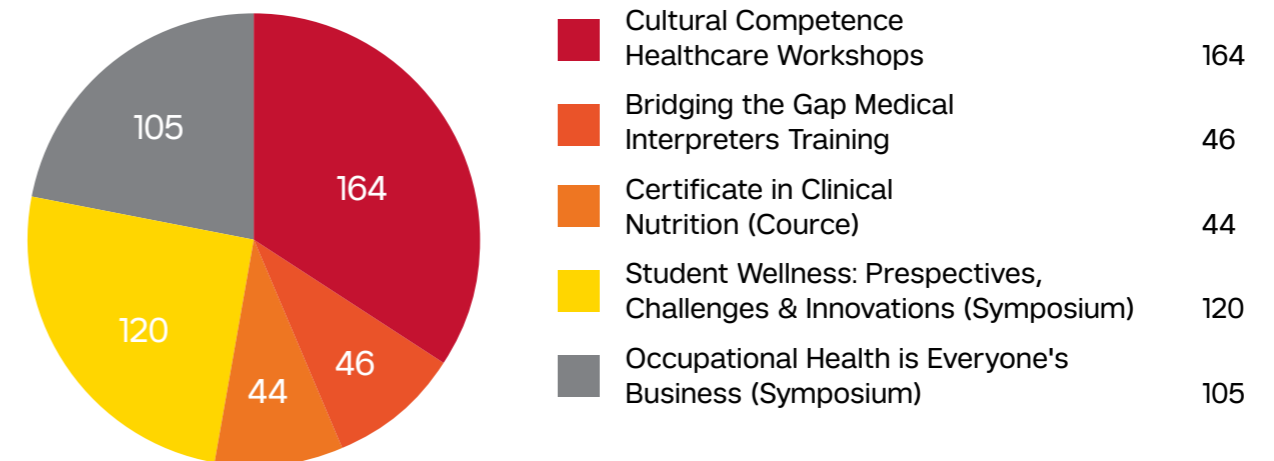


# Educational Programs and Activities

IPH is actively involved in developing and implementing educational activities to support capacity building for healthcare students and professionals within the State of Qatar and the region. Some areas of focus are: population health, preventive medicine, occupational health, integrative health and lifestyle medicine. IPH offered 14 continuing medical education (CME)/continuous professional

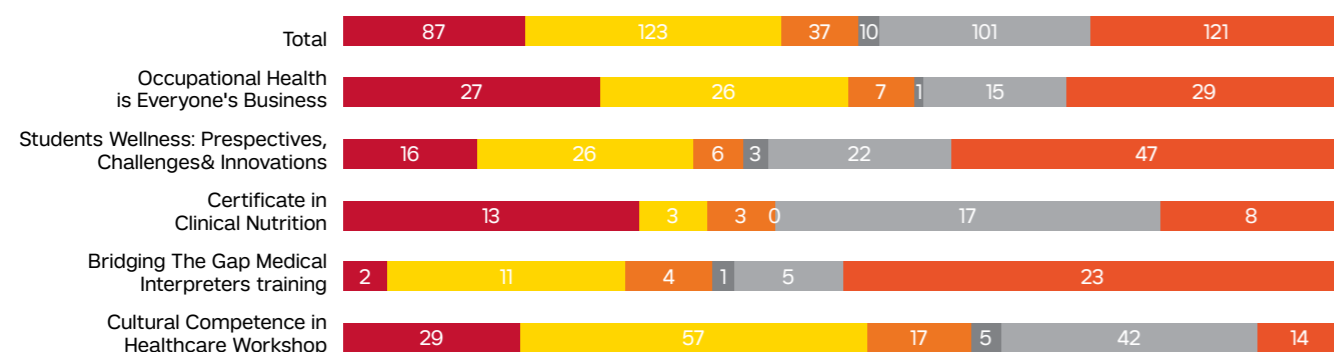
development (CPD) educational opportunities for healthcare professionals in the year 2017-18. These activities were locally accredited by the Qatar Council for Healthcare Practitioners (QCHP) and/or internationally accredited by the Accreditation Council for Continuing Medical Education (ACCME). The total number of attendees at the events was 479, which is a notable 30 percent increase from the previous year.

**IPH CME Activities 2017-2018 (479 attendees)**



# Institute for Population Health

## IPH CME Activities 2017-2018 Participant Profile (479 attendees)



	Cultural Competence in Healthcare Workshop	Bridging The Gap Medical Interpreters training	Certificate in Clinical Nutrition	Students Wellness: Perspectives, Challenges & Innovations	Occupational Health is Everyone's Business	Total
Physicians	29	2	13	16	27	87
Nurses	57	11	3	26	26	123
Pharmacists	17	4	3	6	7	37
Dentists	5	1	0	3	1	10
Allied Health Professionals	42	5	17	22	15	101
Others	14	23	8	47	29	121

## Student Wellness: Perspectives, Challenges & Innovations Symposium

A two-day collaborative symposium was offered by the IPH and the Division of Student Affairs in February 2018 to doctors, nurses, dentists, pharmacists, allied healthcare professionals, students, educators, counselors and administrators. This symposium provided attendees with information on strategies that enhance and facilitate college student development and well-being. Attendees examined and discussed student wellness and its challenges and developed an understanding of how counseling, self-care, and addressing lifestyle-related risk factors are crucial to overall student wellness.

The first day comprised pre-symposium workshops, which focused on the spiritual, environmental, intellectual, social and emotional dimensions of wellness. Workshops comprised the following topics: Building Bridges: Cultivating Mental Wellness for Physical Resilience, hosted by WCM-Q's Jamie Gray and Dr. Sunanda Holmes; Breathing Breaks: Working with Breath to Help Minimize Student Stress hosted by Virginia Commonwealth University - Qatar's Dr. Valerie Jeremijenko; Student Wellness and Mental Health: Perspectives of Education City Branch Campuses hosted by Education City branch campuses; Stress Management Program at Qatar University: The Wellbeing Peer Helpers Program hosted by Qatar University's Ms. Taysier El Ghali; Food Shopping, Cooking and Healthy Diets: Getting

it Right! by WCM-Q's Dr. Ravinder Mamtani and Dr. Sohaila Cheema; If Not Now, When? A Workshop on Time Management hosted by WCM-Q's Ms. Raji Anand; and Physical Activity and Improved Health. Does it Work? hosted by WCM-Q's Dr. Mohamud Verjee.

The second day comprised of plenary sessions, which included the following topics: Student Health Challenges, by WCM-Q's Dr. Ravinder Mamtani; Lifestyle Medicine: Differences that Matter, by Dr. Wayne Dysinger from the American College of Lifestyle Medicine; Media Literacy: A 21st Century Approach to Wellness, by Julie Smith, professor, School of Communication, Webster University, USA; Achieving your Goal Requires Well-being, by Dr. Arthur Hengerer, past chair of the Federation of State Medical Boards; and Mythbusters: Debunking the Most Common Nutritional Myths, by Stephan Herzog, from the American College of Lifestyle Medicine. The symposium ended with a panel discussion and a question & answer session moderated by Dr. Sohaila Cheema.

Overall, the symposium was a huge success. Participants reported an increased understanding related to overall wellness and on topics such as lifestyle medicine, nutrition and healthy lifestyle choices, physical activity, media literacy, stress, resilience and coping skills, and burnout management.

<http://qatar-weill.cornell.edu/event/student-wellness>



Dr. Sohaila Cheema, director of IPH, leads a workshop.

# Institute for Population Health

## Occupational Health is Everybody's Business Symposium

Occupational diseases and injuries cause significant pain and disability and continue to challenge employers worldwide. The widespread prevalence of preventable, occupation-related health problems take a heavy toll on the economy. This occupational health symposium provided a collaborative platform for attendees to learn and discuss strategies for enhancing capacity in occupational health and for developing and implementing effective occupational health programs in a cost-effective manner. The symposium, hosted on April 11, 2018 at WCM-Q included presentations by Dr. Mamtani on critical issues in occupational health; Dr. Taher Giaedi, chief operating officer of Qatar Red Crescent's Medical Affairs Division, on the challenges surrounding migrant health; and Thomas Doyle, WCM-Q's director of environmental health, safety & security on ways to define, identify and mitigate health hazards and risks in the workplace. Dr. Penny Stern, director of preventive medicine at Northwell Health in New York, inspired attendees with a presentation on occupational health opportunities and challenges in the construction industry; and Dr. John Roberts, Qatar Airways' group medical director, discussed occupational health in aviation. His presentation explored the physiological challenges facing employees in

the aviation industry, discussed how some medical conditions can be adversely affected while traveling as an airline passenger, and explained what information can help airlines decide whether passengers are fit to fly. The symposium concluded with a panel discussion on the issues raised in the presentations, which was chaired by Dr. Sohaila Cheema and featured as panelists all of the speakers plus additional experts Dr. Ahmad Latif, lead medical officer at Qatar Petroleum, and Dr. Osama Ibrahim, chief medical officer and SHE coordinator at Qatar Gas.

Participants reported positive feedback for the symposium in the post-activity evaluation. Attendees got an opportunity to examine and discuss various aspects of occupational medicine and deliberate on challenges and opportunities to address and augment the overall health and well-being of employees. Participants reiterated the need for such educational opportunities for both the community and healthcare professionals since it provides a collaborative platform for congregation of wisdom along with the provision of realistic solutions.

<http://qatar-weill.cornell.edu/event/ohs>

***"Occupational health truly is everyone's business! Whether you are a senior manager, an employee or a member of the public, your health must be proactively protected and the way to do this is through effective occupational health strategies. Intelligently designed occupational health strategies actually boost productivity and overall economic activity."***

**Dr. Ravinder Mamtani,  
Senior Associate Dean,  
WCM-Q**



Dr. John Roberts discussed occupational health in aviation.

## Certificate in Clinical Nutrition

Since its successful inauguration in April 2016, the Certificate in Clinical Nutrition course continues to be popular among healthcare professionals. The third offering of the course was hosted in December 2017 with 44 participants in attendance. To date, 152 healthcare practitioners have completed the certificate course.

The 50-hour Certificate in Clinical Nutrition course, designed and developed by IPH provides healthcare practitioners with an understanding of how nutrition affects physiological and biochemical systems in the human body and provides relevant clinical information and skills to the participants. The onsite unit (32 hours) comprises lectures and interactive discussions by WCM-Q faculty and other international experts from the field. The self-study online unit (18 hours) consists of modules complementary to the onsite lectures.

The course is accredited by the Qatar Council of Healthcare Practitioners (QCHP) & the Accreditation Council for Continuing Medical Education (ACCME) for 32 credit hours. The onsite unit comprises lectures and interactive discussions led by WCM-Q faculty including Dr. Ravinder Mamtani, Dr. Sohaila Cheema, Dr. Amal Khidir, Dr. Badredeen Ahmed, Dr. Mohamud Verjee, Dr. Moncef Ladjimi, and Dr. Shahrhad Taheri. From Hamad Medical Corporation there is AInoud Al Fehaidi and Shakeel Khan and from overseas there is Dr. Benjamin Kligler, the national director at the Integrative Health Coordinating Center for the Veterans Health Administration in New York; Dr. David Reilly, former consultant physician for the NHS at the Centre for Integrative Care in Glasgow, and Dr. Albert Lowenfels, of New York Medical College in the US.

Feedback from the course participants continues to be positive highlighting the quality of the course and addressing a huge need with regard to evolving nutrition guidelines and published research. Post activity, participants reported enhanced medical knowledge on topics such as: healthy diet, herbal and nutritional supplements and micronutrient use in various diseases, their interaction with medications and the evidence base for alternative and integrative medicine. Examples of diagnostic or treatment strategies and overall patient care/management strategies, which participants were likely to implement in practice, include effective history-taking inclusive of nutritional history, nutritional assessment, patient education, diet counseling and motivational interviewing along with increased awareness and promotion of healthy nutritious meals, advising patients about lifestyle modifications and weight management.



# Institute for Population Health

## Health and Disease: A Global Perspective

This 2-credit pre-medical course provides WCM-Q's foundation and pre-medical students with basic knowledge and information necessary to understand key concepts related to health and disease in the global and public health context. The course builds upon concepts in natural

science courses taught during high school education and personal experiences of the students. Additionally, students are exposed to basic principles of writing a report, memo or opinion editorial on topics of public health relevance.

## An Evidence-Based Approach To Lifestyle Medicine

An evidence-based approach to lifestyle medicine can effectively prevent, treat or even reverse many chronic diseases such as hypertension, heart diseases, diabetes, obesity, depression/ anxiety and cancer. A newly approved four-week clinical elective course supported and guided by the American College of Lifestyle Medicine and the American Board of Lifestyle Medicine, available to WCM-Q senior medical students, will provide the knowledge and skills required in the prevention and treatment of lifestyle-related chronic diseases. The course incorporates competencies related to leadership, knowledge, assessment skills, management skills and use of community support. Dr. Ravinder Mamtani and Dr. Sohaila Cheema serve as sponsoring faculty for the elective. Dr. Ravinder Mamtani, is among a group of only 204 physicians worldwide who have become the very first medical professionals to be certified by the American Board of Lifestyle Medicine (ABLM)/the American College of Lifestyle Medicine (ACLM) and the International Board of Lifestyle Medicine.

## Population Health and Primary Care Perspectives Elective

Senior medical students from WCM-Q and around the world are eligible to apply for this four-week elective. During the elective, students are introduced to various global health topics with a special focus on population health and primary healthcare. Dr. Ravinder Mamtani and Dr. Sohaila Cheema serve as sponsoring faculty for the elective.

## Global Health Education and Research Program

The Global Health Education and Research Program (GHERP) is a collaborative program between WCM-Q, the Global Health Office at Weill Cornell Medicine in New York and the Weill Bugando School of Medicine, Mwanza, Tanzania (WBSOM). The program provides an enriching experiential learning opportunity for WCM-Q first year medical students. Selected students spend eight weeks during the summer in Mwanza, Tanzania. The GHERP program has three main pillars – clinical, research and community-related work. Furthermore, students gain valuable experience in healthcare delivery, public health, research and introductory aspects of clinical medicine and healthcare in a low-income setting.



A new four-week elective on lifestyle medicine has been established.



# Institute for Population Health

## Global and Public Health Internship

This innovative internship program is open to undergraduate students from around the world. Talented high school students who have exhibited a strong interest in healthcare are also considered. The program introduces students to the basic core concepts of global and public health with a view to optimizing their awareness and knowledge in these areas. Dr. Ravinder Mamtani and Dr. Sohaila Cheema serve as co-directors for the course.

## Educational Engagements

IPH actively participates in various teaching activities throughout the year to promote healthcare and public health education. IPH faculty and staff actively participate in the Precollege Enrichment Program and Qatar Medical Explorer Program aimed at providing prospective high school students with an opportunity to explore their intellectual curiosity in a college setting. The Division of Student Recruitment and Outreach hosts these programs.

Additionally, IPH actively contributed to educational symposia and conferences as outlined to the right:

- Occupational Health is Everyone's Business Symposium in Doha, Qatar. April 2018 (plenary session by Dr. Ravinder Mamtani). Critical issues in occupational health.
- Student Wellness: Perspectives, Challenges, and Innovation Symposium in Doha, Qatar. February 2018
  - o Pre-symposium workshop by Dr. Ravinder Mamtani and Dr. Sohaila Cheema: Food shopping, cooking, and healthy diets: getting it right!
  - o Pre-symposium workshop by Ms. Raji Anand: If not now, when? A workshop on time management.
  - o Plenary session by Dr. Ravinder Mamtani: Setting the stage: student health challenges.
- World Cancer Congress in Kolkata, India. September 2017. Plenary presentation by Dr. Ravinder Mamtani: An evidence-based approach to integrative medicine in cancer management.

# Global and Local Community Initiatives

IPH continues to contribute towards building a healthier population in Qatar and participates in educational and community outreach programs aimed at health promotion and disease, and injury prevention for the people of Qatar. Community related activities are highlighted below (approximately 1,400 attendees benefitted from these events):

### Promoting how to be safe road users

Dr. Sohaila Cheema and Ms. Raji Anand promoted road safety at Newton British Academy on November 26, 2017. Two interactive sessions focusing on safe road behaviors for students aged 7-9 (400 students) and aged 10-11 (250 students) were conducted.

### Empowering parents about road safety

Dr. Sohaila Cheema promoted road safety to 15 parents of students at Perfection International Pre-school with a focus on compliance with seat belt and car restraint use and how to avoid aggressive behavior on the roads.

### Deconstructing nutrition myths & misconceptions

Members of the IPH team (Dr. Karima Chaabna, population health and communication specialist, Ms. Raji Anand, administration manager, and Ms. Yasmeen Kalverts, administrative assistant) participated in the Education City (EC) Health and Wellness Fair hosted at the Hamad Bin Khalifa University Student Center on September 27, 2017. The team engaged with participants on how to read food labels and ingredient lists and helped deconstruct common nutrition myths and misconceptions. The team interacted with approximately 100 Education City staff, faculty, students and their family members.

### Empowering the young with healthy nutrition information

IPH's Dr. Karima Chaabna, population health and communication specialist, promoted healthy eating behaviors at Lycee Bonaparte on November 5, 12, and 19, 2017. Six interactive sessions were conducted in French with a focus on identifying healthy and junk food for students aged 3-4 (100 students), 4-5 (100 students) and 5-6 (96 students).

### Medicine Unlimited 2017

Members of the IPH team participated in the Medicine Unlimited program at WCM-Q on November 11, 2017. The team interacted with 400 high school students and their families to educate them on healthy food choices, portion size, healthy snacks and how to read food labels.



Dr. Mohamud Verjee delivers a presentation at the Student Wellness symposium.

## Institute for Population Health



Ten students spent time at an orthopedic and rehabilitation hospital in Ho Chi Minh City.

### Global Health Service Learning Program 2018

After the successful inaugural launch of the program in May 2017, 10 WCM-Q first year pre-medical students were selected for the 2018 program. This IPH and Pre- medical Education Division collaborative program, under the overall supervision of Dr. Rachid Bendriss, assistant dean for student recruitment, outreach and foundation programs and Dr. Sohaila Cheema, director of IPH, is paving the way for international service learning opportunities for WCM-Q students.

Students spent two-weeks (May 2018) at an orthopedic and rehabilitation hospital in Ho Chi Minh City, Vietnam. Students also had the opportunity to work with special needs children with genetic and neurological disorders. While observing healthcare professionals, the program enabled students to examine the healthcare system in a lower to middle income country,

gain medical knowledge, identify challenges associated in working with special needs children, learn about the Vietnamese culture and engage with the host community. Furthermore, the program allowed the students to develop empathy, self-reflect and enhance their social and teamwork skills, discern the meaning of volunteerism and understand the essence of global service learning.

Group leaders this year, Dr. Mange Manyama, assistant professor of anatomy in radiology and Ms. Raji Anand, administration manager, IPH felt that the program is a rewarding and enriching experiential learning opportunity for students. The students gain insight into non-traditional evidence-based treatment modalities commonly used in Vietnam, as well as valuable skills such as critical thinking, cultural humility and how to mitigate cultural and language barriers.

### Global Educational Exchange in Medicine and the Health Professions (GEMx)

Global Educational Exchange in Medicine and the Health Professions (GEMx) is a worldwide partnership of exchange in medical education that connects medical schools, students and faculty worldwide, administered by the Educational Commission for Foreign Medical Graduates (ECFMG), USA. WCM-Q is a partner school with GEMx. Dr. Ravinder Mamtani is the past chair of the GEMx Advisory Committee, while Dr. Sohaila Cheema serves as the manager for the GEMx program at WCM-Q.

Via GEMx, WCM-Q students Lakshmi Menon and Dayaan Adoor (Class of 2019) had the opportunity to partake in a pediatric surgery elective at Malankara Orthodox Syrian Church

Medical College, Kochi, India, and in a gastroenterology elective at Kasturba Medical College, Mangalore, India, respectively.

Dayaan said: "It was an experience that made me realize what I really want out of the career that I have chosen to pursue. Apart from clinical reasoning and knowledge, of which I learnt a lot, I have discovered a desire to help those with who life has not provided the means to attain proper healthcare. The physicians there truly inspired me. They epitomized the idea of a doctor with passion, desire and willingness to treat patients and to provide the next generation with the tools to succeed in providing better healthcare."

After completion of her elective,

Lakshmi said: "I always wanted to see how healthcare is practiced in other countries. I was able to see how medical professionals deal with situations where there are cash-strapped patients in a limited resource setting. As this was a government hospital, many patients couldn't afford basic diagnostic testing. I learnt a lot from the way the doctor would talk to the patient, anticipate all their concerns and put the patient very much at ease. This is a great skill that I want to replicate as a physician in training."



### Participation in Committees of Public Health Importance

IPH represents WCM-Q on the following local and national committees:

1. Public Health Committee, Ministry of Public Health: Dr. Ravinder Mamtani (member).
2. Health Advisory Board, Education City: Dr. Ravinder Mamtani (member).
3. Public Health Strategy Implementation Group, Ministry of Public Health: Dr. Ravinder Mamtani (member) and Dr. Sohaila Cheema (designee).

Students on the Global Health Service Learning Program were able to perform basic procedures like measuring blood pressure.



## Research

IPH continues to pursue population health research projects with the overall objectives of capacity building, health promotion and disease prevention for the population in the State of Qatar and the region. A variety of study designs, e.g. cross-sectional, observational, ecological, and systematic reviews are utilized by IPH researchers to characterize

population health- related outcomes in the State of Qatar and the region. Current collaborating institutions on these research projects include Hamad Medical Corporation, Qatar Computing Research Institute and Qatar Diabetes Association. Some recently published research articles are highlighted below:

### Knowledge and perceptions about Zika virus in a Middle East country

A cross-sectional survey was conducted by IPH and researchers from Qatar Computing Research Institute in Education City and on Qatar-based websites to assess the knowledge and awareness about Zika virus among Education City's students, faculty, and staff and in the general population within the State of Qatar. The study findings indicate a need for a broader educational and outreach program targeting Qatar's general population and healthcare workers so that they are more aware about new and re-emerging threats to health such as Zika virus. Our study findings are relevant keeping in mind the 2022 FIFA World Cup during which a substantial number of individuals will visit Qatar from all over the world.

### Migrants, healthy worker effect, and mortality trends in the Gulf Cooperation Council countries

IPH's ecological study analyzed publicly available data from the United Nations and the Global Burden of Disease 2015 Study. The study results demonstrate that a decline in mortality observed in the GCC countries can be partly attributed to the increase in population (predominantly of young male healthy migrants) suggesting a healthy migrant effect that influences mortality rates. Researchers and policymakers should be cautious not to exclusively attribute decline in mortality within the GCC countries to be the result of positive effects of health interventions or healthcare improvement.

IPH's faculty and staff participated in local and international conferences with the following poster presentations:

- ISVHLD Global Hepatitis Conference in Toronto, Canada. June 2018, (poster presentation). Hepatitis C infection in the Middle East and North Africa: Systematic overview, quality assessment, and evidence gap mapping. Authors (WCM-Q): Karima Chaabna, Sohaila Cheema, Amit Abraham, Hekmat Alrouh and Ravinder Mamtani.

- Qatar Foundation Annual Research Conference in Doha, Qatar. March 2018 (poster presentation).

- Knowledge and perceptions about Zika virus in Qatar. Authors: Sohaila Cheema, Patrick Maisonneuve (European Institute of Oncology - EIO, Italy), Ingmar Weber (Qatar Computing Research Institute – QCRI), Luis Fernandez-Luque (QCRI), Amit Abraham, Hekmat Alrouh, Javaid Sheikh (dean, WCM-Q), Albert B. Lowenfels (New York Medical College, USA) and Ravinder Mamtani.

- Interpreting mortality trends in the GCC countries: The healthy migrant effect. Authors (WCM-Q): Karima Chaabna, Sohaila Cheema, Ravinder Mamtani.

- Tracking diabetes awareness in the countries of the Gulf Cooperation Council through Facebook advertising audiences. Authors: Yelena Mejova (QCRI), Karima Chaabna, Sohaila Cheema and Ingmar Weber (QCRI).

- WCM-Q's 8th Research Retreat in Doha, Qatar. February 2018 (poster presentation).

- Knowledge and perceptions about Zika virus in Qatar. Authors: Amit Abraham, Sohaila Cheema, Patrick Maisonneuve (European Institute of Oncology - EIO, Italy), Ingmar Weber (Qatar Computing Research Institute – QCRI), Luis Fernandez-Luque (QCRI), Hekmat Alrouh, Javaid Sheikh (dean, WCM-Q), Albert B. Lowenfels (New York Medical College, USA) and Ravinder Mamtani.

- Migrants, Health Worker Effect and Mortality Trends in Qatar and the Gulf Nations. Authors (WCM-Q): Karima Chaabna, Sohaila Cheema, Ravinder Mamtani.

- Natural compounds as Chemotherapeutic Agents for the Treatment of Triple Negative Breast Cancer: A Review. Authors (WCM-Q): Elizabeth Varghese, Mariam Abotaleb, Sohaila Cheema, Ravinder Mamtani, Dietrich Busselberg.

- International Association for Medical Education Conference in Europe (AMEE) Conference in Helsinki, Finland. August 2017.

- Classroom Strategies to Enhance Student Engagement and Learning: Examples from a Global Health Course: Authors (WCM-Q): Sohaila Cheema, Rachid Bendriss and Ravinder Mamtani.
- Globalizing International Postgraduate Electives: Challenges and Solutions. Authors: Anna Iacone (ECFMG-GEMx, USA), Sohaila Cheema (WCM-Q), Jose Carvajal and Klaus Puschel (Catolica Pontificia de Chile).



Karima Chaabna was one of the authors of a paper examining mortality trends among migrant workers

# Institute for Population Health

## Center for Cultural Competence in Healthcare

The Center for Cultural Competence in Health Care (CCCHC) at the Institute for Population Health continues to promote the practice and concept of culturally and linguistically appropriate healthcare in Qatar. The center is an integral part of IPH and is led by Maha El Nashar, director, and supported by Huda Abdelrahim, senior specialist.

### Education

CCCHC continues to provide QCHP and/or ACCME-accredited CPD programs for healthcare professionals. CCCHC delivers cultural competence training to WCM-Q students. Through didactic lectures, group discussions, interactive exercises and videos, students learn about culture and its impact on healthcare. Some of the topics explored include diversity and its impact on healthcare, bias and stereotyping, knowing your community, patient's perspective, medical interpretation and health disparities and evidence-based traditional healing practices. Students are also trained on how to work with a trained or untrained medical interpreter and to prepare them to communicate effectively when language discordance occurs during clerkships. CCCHC also contributes to WCM-Q new employee orientation sessions to enable new employees to learn about the importance of diversity in the workplace.

CCCHC is a core member of the Qatar Institute for Intercultural Communication (QIIC), a collaborative initiative between Education City campuses and the Intercultural Communication

Institute (ICI) from Portland, Oregon, US, now in its fourth year. QIIC's main goal is to provide seminars and workshops to enhance the knowledge, skills and attitude of faculty and staff who work in multicultural and global environments. The 2018 program included topics such as Women in Leadership Across Cultures; Low Budget High Impact: Diversity & Intercultural Training; Psychological Capital in the Global Environment; Cross-Cultural Transition for Professionals; Intercultural Classrooms and Becoming Global Souls: Teaching About Curiosity. More than 180 professionals attending Education City campuses and their affiliates (Hamad Medical Corporation, Qatar University, Sidra Medicine, Nafer) benefitted from QIIC. CCCHC's role includes and is not limited to participating in developing, organizing and evaluating the QIIC programs in collaboration with the Education City campuses.

CCCHC continues to participate in the 'Comskil training' module prepared by Memorial Sloan-Kettering Cancer Center in New York. This is a communication-training program that focuses on End of Life communication skills and targets HMC residents and specialists. CCCHC contributed to the development and modification of the program to customize it for Qatar's healthcare settings and environment. CCCHC conducted two sessions this year (total six hours) in Cultural Competence Training for the College of Pharmacy, Qatar University. The training is designed to enhance pharmacy students' knowledge, skills and attitude in cultural competencies in healthcare.

The topics include medical interpretation, the impact of cultural and social determinates on the practice of pharmacy.

CCCHC provides a four-hour Cultural Competence in Healthcare workshop to healthcare professionals in Qatar. This workshop is accredited by QCHP & ACCME for 3.25 credit units and to-date has completed nine offerings with 164 attendees.

Since 2012, CCCHC has offered biannual Bridging the Gap medical interpreters training to the diverse community of Qatar, and continues to do so.

CCCHC has launched a new training program for healthcare professionals, entitled, Mastering Emotional Intelligence. This training is designed to enhance healthcare professionals' skills to manage the source of their emotions and behaviors, to learn how to handle the triggers of their emotions and to reflect on their social awareness for the benefit of managing efficient clinical care and optimize patient satisfaction.



Maha El Nashar, director, of the CCCHC.



# Student Recruitment and Outreach

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# Student Recruitment and Outreach

The Student Recruitment and Outreach Office continues to play an active role in advancing young nationals' capacity by preparing and developing prospective students, both academically and emotionally, for college life in general and medicine in particular. Programs such as the Healing Hands, the Qatar Aspiring Doctors Program and the Summer Enrichment Programs continue to generate a high yield of quality applicants.

Additionally, this year, our inaugural High School Medical Conference - the first of its kind in the region - held on November 10, 2017 at Qatar National Convention Center, was attended by in excess of 400 participants and more than 25 schools. Attracting a highly professional crowd of educators as well as prospective students, the conference provided professional development workshops for schoolteachers, an opportunity for high school students to present their research, and a platform for WCM-Q and the participating schools to be showcased to the public.

Alongside these new initiatives, the office worked this year on expanding into new regional and international markets, by reaching out to schools in Lebanon, Morocco and Greece in addition to our traditional visits to Kuwait, Oman and Jordan. This aims to create an additional pipeline of qualified and diverse prospective students and applicants.

## Local Recruitment and Outreach

### Qatar Aspiring Doctors Program (QADP)

The QADP is a yearlong program that runs in parallel with the high school academic year, and offers academic and career support to a selected number of Qatari students with strong potential. Nominated through their schools, students have to be highly performing in the sciences and math and to have an interest to explore medicine as a career.

Through online modules developed and taught by our faculty members and staff, as well as face-to-face interactions, students are provided with support to complete modules in biology, physical sciences, English for academic purposes and research skills.

A total of 51 students were invited to take part in this program, 46 of whom are Qatari. Thirty-three students have successfully

completed the program, six of whom completed with honorable mentions. A total of 13 students of those eligible to apply in this admissions cycle applied for entry to the college, six of whom were offered admissions into our Foundation and Six-Year Medical Program.

The 16 schools the students came from were: Michael E. Debakey High School, Al Wakra Secondary School for Girls, Ali Bin Jassim Mohammed Al Thani Independent School, The Gulf English School, Al Maha Academy for Girls, Qatar Academy, Al Bayan Secondary School for Girls, Amna Bint Wahab Secondary School for Girls, AlKawther Secondary Girls School, Omar bin Al Khattab Independent School, International School of London-Qatar, Tariq Bin Ziyad Independent School for Boys, The Cambridge School, Aljazeera Academy, Qatar International School and American School of Doha.

### High School Medical Conference and High School Research Competition

Qatar's first High School Medical Conference (HSMC) was held, inspiring students to forge a career in medicine or the sciences. The conference was held at Qatar National Convention Center on November 10, 2017 and comprised lectures and talks, workshops for teachers, a school exhibition, and student research presentations.

A highlight of the conference were the research presentations. Schools across Qatar were given the chance to participate in a student research contest based on the UN's Sustainable Development Goals. Twenty-five teams from both independent and private schools entered and chose a topic under one of four themes: Ensuring healthy lives and promoting well-being for all at all ages; ensuring access to water and sanitation for all; making cities inclusive, safe, resilient and sustainable; and ensuring sustainable consumption and production patterns.

They then took part in a poster presentation competition in April 2018. Fourteen teams made it through to the finals at the High School Medical Conference with the top three then selected by a panel of WCM-Q research experts.

The winning team from Qatar International School received a fully-funded, one-week trip to Cornell University in Ithaca in the

United States, while the runners-up - 2nd placed Bright Future International School - received iPads and invitations to attend a research symposium at Sidra Medicine, and 3rd placed Musab Bin Omair Secondary School received gift vouchers and were also invited to the Sidra Medicine event. The flights were partially paid for by Sahtak Awalan - Your Health First, WCM-Q's health campaign.

In addition to the presentations, the student delegates also heard from Fawziya Al-Khater, assistant undersecretary for educational affairs at the Ministry of Education and Higher Education, Dr. Marco Ameduri, associate dean for pre-medical education at WCM-Q, and three WCM-Q alumni: Dr. Aisha Al-Yousuf, Dr. Khalid Al-Khelaifi, and Dr. Karima Becetti.

It is intended that the conference will become an annual event, bringing together highly motivated students aspiring to become the next generation of medical leaders. Although the main focus of the conference is raising awareness about the careers that medicine has to offer, science, technology, engineering and math (STEM) will remain a fundamental core that will enhance and support the national economy. The conference also presents a great platform to engage educators across these various disciplines to achieve an integrated approach for students and prepare them for the future.

### Medicine Unlimited Community Outreach Event

Middle and high school students from all over Qatar and the wider region attended Medicine Unlimited, the flagship student recruitment and outreach event of WCM-Q on November 11, 2017. More than 350 students and family members visited WCM-Q to tour the college's state-of-the-art facilities, meet current students, faculty, researchers and staff, and engage with hands-on simulations of the workings of genes, molecules and the human body.

Medicine Unlimited is designed to give middle and high school students a glimpse of the world of science and medicine, as well as the chance to explore whether a career as a healthcare professional, and training on WCM-Q's world-class six-year Medical Program, would be a good fit for them. Faculty also took part in the event by providing talks and hands-on experiences, including Dr. Amine Rakab, assistant professor of medicine and assistant dean for clinical learning, who explained the details of the medical curriculum to students, and Dr. Ameer Raouf, associate professor of anatomy in radiology, who demonstrated the use of anatomage tables. Dr. James Roach, associate professor of chemistry, explained chemical reactions with a series of visually appealing demonstrations.

The 2017 event included more than 20 different student activities including the eLibrary, the writing center and guided tours of the research laboratories.

## Student Recruitment and Outreach

### Doctors of the Future Scholarships: Healing Hands Essay Competition

The Qatar Doctor of the Future Scholarships are fully funded, two-week experiences of a lifetime to Weill Cornell Medicine in New York City. To apply for these scholarships, students need to enter the Healing Hands Essay Competition.

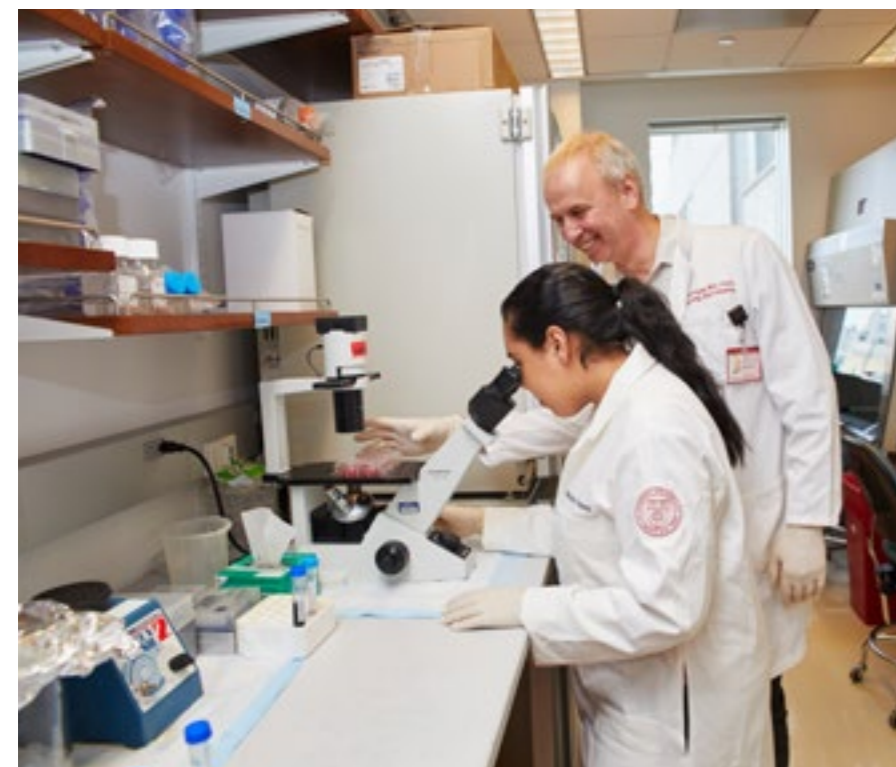
Four Qatari high school students from three schools – Michael E. Debakey School for Health Sciences, Qatar Academy and the American School of Doha who won the Healing Hands essay writing competition, received WCM-Q’s Doctor of the Future Scholarships as their prizes.

During the period July 9 – 20, 2018, the winners visited prominent research laboratories and spent that time with distinguished Weill Cornell researchers in major New

York hospitals. They also spent a week at Cornell University in Ithaca where they learned about reading scientific articles and writing and recording research results. The scholarships cover the cost of travel for the winners along with one of their escorting parents.

The Healing Hands scholarship program has proven to be a real inspiration for Qatari students, encouraging them to study medicine and help fulfill the goals of Qatar National Vision 2030. This year the three winners who were eligible for admission to WCM-Q have all been accepted into either the college’s Foundation or six-year Medical Program.

Thirteen more participants in the essay competition received the judging committee’s honorable mentions and seven received a certificate of participation.



The Healing Hands scholarship program helps inspire Qatari students to study medicine.

## Enrichment Programs

### Summer Enrichment Programs (SEP)

Two programs, the Qatar Medical Explorer and the Pre-college Enrichment Programs, were offered to high school students during the summer of 2017. A total of 35 students participated in the Pre-college Enrichment Program, and 34 in the Qatar Medical Explorer Program. Participants in the SEPs this year were predominantly Qatari and long-term residents of Qatar, in addition to a number of regional and international students coming from as far as Kuwait, Jordan, Canada and the USA.

Organized during the period July 9-20, 2017 both programs continue

to offer students the opportunity to attend pre-medical and medical class simulations, tour Hamad General Hospital, get hands-on experience in laboratories, participate in students’ research projects, and prepare for college admissions.

Due to a rigorous application process, mimicking that of the six-year Medical Program, the Summer Enrichment Programs have been a great source for identifying talented young men and women who later on enroll into our Foundation and Medical Program. The yield of this year’s programs is about 65 percent applications from those eligible to apply.

### Winter Enrichment Program (Winter-QMEP)

Following nominations from their independent schools, the Winter Enrichment Program invited students to join the Qatar Medical Explorer Program (QMEP), during the schools’ winter break from 21 January – 1 February 2018. This two-week program was conducted with a total of 33 students, 24 of whom were Qatari. Students spent two weeks learning what it is like to train to become a medical doctor at WCM-Q. Pre-medical and medical faculty members, teaching assistants, current students, graduates and staff of WCM-Q delivered the winter session of the QMEP.



The summer and winter enrichment programs allow high school students to experience life as a medical student.

# Student Recruitment and Outreach

## Adopt a School Program

The Adopt a School Program offers a yearlong relationship with high schools in Qatar, providing curriculum support, teacher and counselor training, and workshops targeted at academic counselors and schoolteachers. A series of meetings with key personnel of major feeder schools was conducted to cement the college's relationship with these schools. Dr. Rachid Bendriss, assistant dean for student recruitment, outreach and foundation programs, continues to serve on the advisory board of the Debakey High School for Health Professions.

This year the Adopt a School Program concluded a very successful school visitation program, attending open days and fairs in Qatar as well as participating in joint activities organized by HBKU.

## Counselors' Workshops, Parents' Nights and School Fairs

In collaboration with Education City branch campuses and HBKU, Doha Counselors Day took place on October 2, 2017. About 110 counselors from schools across Doha were invited to the HBKU Student Center at Education City to discuss the latest requirements and updates of all nine universities. The event was in the form of presentations to begin with, then workshops were formed to more accurately deliver the information.

## School Visits, Open Days and Fairs

The Office of Student Recruitment & Outreach (SRO) organized 53 different visits to 40 local schools in Qatar for recruitment purposes. The visits were in the form of presentations and fairs to explain admissions requirements, application timelines, the curriculum, and financial aid opportunities to prospective students. The SRO also worked on raising public awareness for their outreach programs such as the Healing Hands Essay Competition, Qatar Aspiring Doctors Program, summer & winter programs, Medicine Unlimited and the newly introduced High School Research Competition and Medical Conference.

WCM-Q faculty and staff with graduates of the Qatar Aspiring Doctors Program.



## Discover Education City Fair

Discover Education City event took place on October 10 and 11, 2017 in the HBKU Student Center ballroom. The event is an opportunity to meet prospective students, parents and school administrators. Schools across Qatar and their parents visited to inquire about requirements and application deadlines.



## Open Houses

The Office of Student Recruitment & Outreach organized a series of open houses offered every Thursday from September to May, to high school students and their parents to provide information related to application requirements. Our team provided tours of the campus and answered all questions as well as providing the possibility to meet with faculty and current students. The SRO team also attended to more than 1,000 walk-ins and 3,000 e-mail inquiries throughout the year.

## Regional Recruitment

The Office of Student Recruitment and Outreach continues to participate in the Discover Education City Regional Roadshow jointly organized with Education City branch campuses. During the fall of 2017, the team visited 44 schools in several locations across the region including Kuwait, Muscat, and Amman, and was successful in recruiting a number of highly qualified regional candidates.

This year the regional recruitment calendar encompassed new cities, reaching out to three new locations for the first time: Lebanon, Morocco and Greece. The visits generated a lot of interest and promised to provide strong potential for recruiting highly qualified students.

This year, a Qatar Foundation initiative was undertaken to further cement our relations with Kuwait. The office joined QF and other EC representatives to attend a special edition of the Education City fair during the period February 12-14 in Kuwait City. The fair presented a good opportunity to explain our academic programs. Additionally, representatives from the Ministry of Higher Education explained the scholarship program offered to Kuwaiti students wishing to attend EC universities.



# Admissions

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## Admissions

# Office of Admissions

The success of WCM-Q continues to grow, leading to strong competition from applicants for a place at the institution. The Office of Admissions report for the year 2017-2018 summarizes the Six-Year Medical Program, admissions process, expected incoming students and their demographics, admissions workshops, staff updates, and the student information system utilized by the Office of Admissions.



### Six-Year Medical Program

The Six-Year Medical Program integrates the two year pre-medical curriculum and the four-year medical curriculum. Dr. Javid Sheikh, dean of WCM-Q, announced the new cohesive Six-Year Medical Program in November 2014. The successful completion of this program leads to the award of the Cornell University Doctor of Medicine degree.

The fourth class to begin the Six-Year Medical Program will join WCM-Q in August 2018. These students will not have to take part in a separate admissions process upon satisfactory completion of the pre-medical curriculum. Rather, the students will progress through the Six-

Year Medical Program according to advancement criteria, which include academic performance, professionalism, and commitment to the profession of medicine.

The four-year medical curriculum component of the Medical Program continues to remain available to external applicants who have completed a baccalaureate program at other colleges or universities from around the world.

### Admissions Process

WCM-Q seeks applicants who uphold the highest academic and personal standards. The Committee on Admissions at WCM-Q is tasked to identify the best-qualified applicants from diverse academic and personal

backgrounds. Appointed by the dean of WCM-Q, the Committee on Admissions is composed of members of the faculty. The dean also appoints to the committee student representatives and ex-officio members, as appropriate. The Committee on Admissions makes final decisions on the suitability of applicants for the respective programs. The Office of Admissions continues to support the Committee on Admissions in their holistic and balanced approach to select a diverse and academically well-prepared entering class.

### Incoming Students

During the 2017-2018 academic year, 365 applications (for the Six-Year Medical Program) were submitted for the Fall 2018 admission. Of the 365 applications, the Committee on Admissions accepted 49 candidates directly into the program. A further 17 students were promoted from the Foundation Program into the Six-Year Medical Program.

At the beginning of the 2018/19 academic year, 56 students entered the Six-Year Medical Program. In this class of 56 students, approximately 70 percent make their home in Qatar.

Admission was offered to 21 candidates for the Foundation Program for Fall 2018 entry and 21 enrolled on the program. Of

these students, 17 students are Qatari. The WCM-Q Foundation Program is a one-year program that prepares students for entry to the Six-Year Medical Program. It allows students to study the relevant subjects, in addition to helping them further develop their study skills and critical thinking abilities. The program has been very successful and continues to yield positive results.

Admission on to the four-year medical curriculum by candidates who completed a baccalaureate program at other college or universities from around the world was very competitive for Fall 2018. There were 34 submitted applications for admission to this component of the Medical Program. Of these, four were offered admission onto the four-year program. In addition, a candidate who deferred admission

from Fall 2017 to Fall 2018 enrolled in Fall 2018. In total, four students enrolled in August 2018 representing three nationalities. The four students are graduates of American University of Cairo, Davidson College, McGill University, and University of Michigan Ann-Arbor.



# Admissions

As can be seen from the table to the right, of the 81 new students who joined WCM-Q's Foundation, Six-Year and Four-Year Medical Programs, 36 (44 percent) are citizens of Qatar. The remaining students with diverse cultural and ethnic backgrounds come from other nations. This data indicates a strong interest among citizens of Qatar to pursue a medical education at WCM-Q.

Total number of students who joined WCM-Q programs in 2018		
	Total	Qatari Citizens
Foundation Program	21	17
Six-Year Medical Program	56	19
Four-Year Medical Curriculum	4	-
Total Number	81	36

## Admissions Workshops

During the 2017-2018 academic year, the Office of Admissions hosted five workshops for applicants applying for fall 2018 to provide further additional guidance in the admissions process to the Six-Year Medical Program.

The workshop, First Step Towards a Complete Application, was held on October 24, November 14, and December 5, 2017 which covered the online application process. The total attendance for all three of these workshops combined was 68 applicants, of which 16 were citizens of Qatar.

The workshop, Next Steps Towards a Complete Application was conducted on January 22 and February 6, 2018. Topics

discussed in the workshops included required documents for a complete admission file, tips about interviewing, and other relevant areas of common interest. The total attendance for these two workshops combined was 77 applicants, of whom 14 were citizens of Qatar.

The Office of Admissions will continue to enhance the scope and quality of these workshops in the upcoming admissions cycles to provide a better understanding about the overall admissions process at WCM-Q.

## New Appointments/Staff Updates

During the 2017-2018 academic year, Ms. Claudia Mihaescu was promoted to the position of assistant director of admissions.



Claudia Mihaescu co-presenting one of the Admissions workshops.



Farhan Aziz, director of admissions at WCM-Q, outlines the admissions process.



Farhan Aziz answering questions from applicants after an admissions workshop.

## Student Information System

The application software, Jenzabar-EX, which was launched in September 2013 in strong collaboration with the Educational Computing Team, continued to be utilized very effectively. The system allows WCM-Q to capture student information from when an applicant makes their initial inquiry all the way through to when they become a graduate of the college.

The Office of Admissions continues to utilize the system to improve its efforts in providing appropriate guidance and timely processing of all applications. This in turn allows and facilitates timely and careful review of applications by the Committee on Admissions.



Buran Zu'bi providing guidance for applicants at one of the five workshops that the division held.



# Student Affairs

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## Student Affairs

# Division of Student Affairs

The Division of Student Affairs (SA) supports the academic, personal and professional growth and development of all WCM-Q students.

The core services provided by the division are coordinating and implementing orientation programs and special events, student academic counselling, and personal and career counselling; registration and academic record-keeping through the Office of the Registrar; and administrative support to all pre-medical and medical student organizations. In partnership with Qatar Foundation, the division also provides support to students seeking to secure residency permits, housing, local health insurance, international visas and exit permits.



## Student Life

### Orientation Programs

In August 2017 and for the first time, the Division of Student Affairs in collaboration with the Foundation, Pre-medical and Medical Programs, hosted a joint orientation for all the incoming students. The orientation welcomed the new students to the campus and introduced them to the education programs, administration, faculty and staff of WCM-Q. The orientation lasted for three days and was attended by students from the three programs. Students attended joint sessions that focused on campus rules, regulations and policies in addition to other separate sessions that were program customized.

With the collaborative efforts of the student orientation leaders, student ambassadors and members of the Medical Student Executive Council in Qatar, the students engaged in interactive sessions to develop pride in their new WCM-Q community as well as understand their academic requirements. Students also participated in different social activities and icebreakers that focused on teamwork, cooperation, cultural awareness and communication skills.

To raise awareness and involve students in community service activities, the orientation program included a variety of activities for the students. The foundation and pre-medical students hosted the custodial staff and security guards

for lunch. They also collected, sorted, and packed donations from the college to be donated to Qatar charities. Medical students visited the Qatar Diabetes Society, meeting the staff and doctors and learning about the society's programs and the services it provides to diabetic patients in Qatar. The visit helped students begin to connect with their chosen profession and develop a deeper understanding of their role in treating patients, and not just their diseases.

The orientation program was concluded with the Opening Exercises - a celebration to welcome the new students to the college. During the event, the students starting their pre-medical curriculum received the Ibn Sina pin while the students starting the medical curriculum received their first stethoscopes and white coats. More than 500 guests attended the event and celebrated with the new students in both programs. Dr. Abdul Badi Abou-Samra, the chairman of the Department of Internal Medicine at Hamad Medical Corporation delivered the keynote speech.



## Student Affairs



### Student Clubs and Activities

In addition to their busy academic life, students are very active in extracurricular activities through organizing events and activities, forming clubs and organizations and representing their colleagues as members of the Medical Student Executive Council (MSEC-Q). MSEC-Q is the student governing body of the college. Comprising four representatives from each of the seven classes, from the Foundation to the final year of the Medical Program, they are vital for supporting and advocating for student interests. MSEC-Q works closely with student affairs staff and other divisions

to implement ideas students have regarding services, food, space and curriculum.

MSEC-Q also hosts a number of annual events to celebrate the culture and diversity of the WCM-Q community such as International Night, Club Fest, Basant and the Med Gala.

WCM-Q and CMU-Q pooled their resources and talent this year and organized a joint International Night. More than 600 students, faculty and staff attended the event. The event showcased the students, faculty and staff from different nationalities and cultures represented by food and costumes. The program included

performances that represented the different cultures through dances, songs, music and wedding parties, in addition to a fashion show.

Another popular event that students look forward to is the town hall meeting with Dr. Javaid Sheikh, dean of WCM-Q. During the meeting students voice their concerns, ask questions, and learn more about the college's strategic long-term plans. The meeting was held in March 2018 and attended by students, staff and faculty.

MSEC-Q also introduced new events such as the Student-Faculty Majlis, Big Red Social and the Wellness Week.

In addition MSEC-Q introduced the following new initiatives and changes:

- Restructuring the MSEC-Q elections which allows the president and vice president to run on one ticket. They also moved the time of the elections to March/April, 2018.
- Establishing an MSEC-Q newsletter.
- Establishing an MSEC-Q external website, and;
- Creating the MSEC-Q office.

According to their interests, students form groups to establish and lead different specialized clubs and organizations that focus on sports, charity, medical specialties, drama, music, photography, etc. Currently, WCM-Q has 37 officially recognized clubs and organizations.

WCM-Q clubs and organizations are becoming more active every year and below is the list of their major achievements for this year:

**Indian Subcontinent Heritage Association (ISHA):** On 19 October 2017 ISHA hosted, for the first time at WCM-Q, the celebration of the Indian festival of Diwali with food, games, music and cultural activities.

**Muslim Student Association (MSA):** The Muslim Student Association hosted Charity Week (22 October to 26 October 2017) in collaboration with the other schools in Education City. They organized different events

including: a bake sale, creative stations, Iftar, escape room, and a charity debate event. They raised QAR13,400 which was donated to the Education Above All charity.

**Hematology & Oncology Interest Group (HOIG):** HOIG hosted the Breast Cancer Awareness and Fundraiser, in October 2017 in the HBKU Student Center. The campaign helped educate the public about breast cancer - the most common cancer in women - in collaboration with Qatar Cancer Society (QCS), Qatar Biomedical Research Institute and Al-Ahli Hospital. More than 250 people attended the event, and raised QAR127,000 for QCS.

**Women's Basketball Team:** The team came second in the Qatar 2017 Universities Basketball Cup League (Women's Division).

**Big Red Fitness:** Seven students competed in the HBKU Powerlifting Competition in November 2017. Zain Ali Burney achieved third place in the under-75kg class. Basem Ali came third in the over-75kg class, with second place going to Ali Abdelati.

**Qatari Student Association:** In November 2017, QSA participated in the organization of the Qatar National Day celebrations in collaboration with Education City branch campuses and Qatar Foundation. The QSA organized the children's arts and crafts section.

**Pediatrics Interest Group:** In March 2018, the Pediatrics Interest Group hosted the Children's Health and Science Fair, with booths and

activities organized by various clubs at WCM-Q. The event was held in collaboration with QF and Qatar Petrochemical Company.

**The Family Medicine Interest Group:** The FMIG held multiple student and community events in 2017, interacting with students at WCM-Q and the community outside. They included a successful blood donation drive, a total of 40 students volunteering at two medical camps, to provide healthcare consultations to expatriate manual workers, an experiential day at a health center for juniors, and a phlebotomy workshop in CSSL.

**WCM-Q Debate Club:** Club members claimed first place in the Qatar Universities Debate League in March 2018. They also won the Best Novice Speaker award, presented to Shehroz Rana.

**ROTA:** In April 2018, ROTA organized a bazaar for the WCM-Q support staff. ROTA collected donations from the staff and students before this event, and also organized a lunch for the workers.

In addition, Student Affairs inaugurated its first student-led musical ensemble called Unplugged. Nine musicians featuring students from across the different year groups, entertained the gathering at the WCM-Q Faculty Awards Dinner in May 2017. Keen interest continues in music and the aspiration is to have students perform at events more frequently.

## Student Affairs

### Recognition of Academic Achievement

Pre-medical students who achieved academic excellence in the fall 2016 and spring 2017 terms were inducted onto the Dean's Honor List at a ceremony held at the Intercontinental Hotel. In the fall of 2016 semester, a total of 38 pre-medical students made it to the list, 11 from pre-medical year one and 27 from pre-medical year two.

In the spring of 2017 semester, a total of 34 students made it to the list, 12 from pre-medical year one and 22 from pre-medical year two.

The ceremony also recognized the achievements of two Foundation Program students who were honored for academic excellence over the past year. Several pre-medical students celebrated a double success as they qualified for the honor list in both terms. The event was attended by students' families and friends, WCM-Q staff and faculty. Dr. Tania Jaber, an alumna from the Class of 2011, delivered the keynote speech and provided the students with words of wisdom and advice.

### Counseling and Academic Advising

Committed to creating a nurturing environment to optimize student learning, the Academic Counseling Team offers student academic, personal and career support. They provide vital workshops, seminars, and individual counseling with students to foster the development of study skills and effective time-management. The counselors also assist students with registration for standardized exams (MCAT and USMLE); preparing for residency interviews by providing guidance and organizing mock interviews; and provide guidance in preparing personal statements and resumes. They also conduct structured academic advising committee meetings and coordinate psychological, psychiatric, and other referrals as needed.

The student academic counselors have made strides this year in student outreach, conducting wellness activities and improving relationships with students. They have also signed up more than 70 students for the Association of American Medical Colleges' Careers in Medicine program, which has helped many students make informed choices about which specialties and residencies to pursue.



### The Office of the Registrar

The Office of the Registrar is responsible for the following functions/areas:

Student Registrations: This includes:

- collecting and providing information on courses offered for both the pre-medical curriculum and the medical curriculum departments according to the different academic calendars,
- registering students on different courses in the SIS (Student Information System) according to the class level of the student,
- coordinating elective scheduling at HMC and NYC for third and fourth year students,
- ensuring correspondence with the New York academic affairs office and other affiliated sites in regards to fourth year medical students' electives,
- implementing the college's eligibility policy and procedure for students. The office also prepares transcript and grade reports as requested by students and others.

Cross Registration: The registrars at different branch campuses meet monthly to discuss the academic calendars and cross registration

to align the dates for all campuses to start and end together. The registrar at each host campus manages the cross registration of students, ensuring access to both campus and course materials on the system. Following the latest agreement between Carnegie Mellon University in Qatar (CMU-Q) and WCM-Q, our campus manages the course registration of CMU-Q's biomedical science students in the courses they require to graduate.

Student Immunization: The Office of the Registrar ensures that students are compliant with WCM-Q and WCM-NY student health and immunization requirements and procedures, as well as immunization requirements for international college trips. Additionally, the office is responsible for suspending the registration of students who are not compliant with the college's immunization policies.

The office has also worked with ITS to design and implement a tracking system to monitor requirements and notify students whose immunizations may be out-of-date. The office maintains the confidentiality of all student health records.

Financial Aid and Scholarship: The office administers/supports/maintains sponsored students' information and sponsors' requests. The Office of the Registrar is responsible for supporting new students' scholarship applications each year and updating the GPAs for sponsored students each term.

Institutional Research, Statistics and Reporting: The Office of the Registrar is the focal point for reports on numbers, and student statistics.

Promotion and Graduation and Graduation Audit: The office organizes student assessment, promotion and graduation committee meetings and prepares and distributes confidential grade reports for the committee's discussion, maintains minutes of committee deliberation, and performs graduation audits for each student expected to graduate.

ERAS Application and post-Match Support: Administers the students' ERAS applications on the ECFMG site and supports the matched students with their J1 visa process.

## Student Affairs

### Financial Aid and Scholarship

WCM-Q selects students on merit only, and the Committee on Admissions screens, evaluates, and accepts students without knowledge of their ability to pay. Students who require financial assistance apply directly to HBKU's financial aid program. Depending upon their citizenship, several avenues of financial assistance are available to WCM-Q students. Qatari students may be sponsored by Sidra, or by the Qatari government through the Higher Education Institute (currently Ministry of Education and Higher Education). Sponsored students are usually provided with tuition assistance as well as a stipend to cover their books, supplies, and other costs. Hamad Medical Corporation, the Ministry of Administrative Development, Labor and Social Affairs have also recently developed a sponsorship program specifically for Qatari nationals who are studying at WCM-Q. Non-Qatari students can also apply for Sidra sponsorship, but most are self-funded or apply to Qatar Foundation (QF) for financial assistance through an interest-free loan program established by QF. In addition, QF may offer a number of merit scholarships per year for students after spending one year in the Medical Program.

### Graduation & Convocation

The annual senior honors convocation recognizes the academic achievements of graduating students. Awards were given based on outstanding performance in courses and clerkships as well as in research and community service. At the graduation ceremony on May 2, 2018, 34 students took the Hippocratic Oath and received their diplomas.

Many of the class members will pursue their residency training in the United States, while others will stay in Doha to finalize their training in Hamad Medical Corporation. The remainder chose to pursue research and graduate studies in Doha or the United States. Seventeen graduates of the Class of 2018 graduated side by side with their peers from WCM in New York in Carnegie Hall on 31 May. Later that night, an Iftar/ dinner was held at the Almayass Restaurant to honor the graduates and their families.



## Community Engagement

### Eid Charity Drive

Student Affairs ran its annual charity drive for donations for those in need in July 2017. New students were engaged in wrapping and packing up the items received. Such items included clothes, shoes, electrical, and household articles.



### International Service Learning and Community Service

In August of 2017, eight pre-medical students along with two faculty members traveled to Mwanza in Tanzania to take part in a summer service learning trip. Participants partnered with a local organization, Reach and Support All (RASA), to screen the Mwanza community for hypertension and diabetes. Over three days, stationed in different places, the participants screened the local population. Additionally, the team visited local dispensaries and the Weill Bugando Hospital and had the opportunity to explore the different departments which gave a clear image of what healthcare in a developing country looks like. During the trip's activities, the participants met with students and faculty from the Bugando campus and exchanged information about the different education and clinical systems in both countries. The team also enjoyed the Serengeti and Ngorongoro crater, as well as the beautiful wildlife and nature of Tanzania.

### Club Fest

In collaboration with Student Affairs, MSEC-Q held the annual Club Fest event in September 2017. The festival aims to encourage new and current students to engage in extracurricular activities. Representatives from 24 student organizations set their exhibitions to reflect their vision, goals and accomplishments. The clubs' representatives interacted with the participants through games, activities, competitions, posters and media. External organizations who expressed their interest in recruiting students for their activities, such as Qatar Debate and Doha Film Institute, hosted tables during the event. The event was very successful; more than 150 participants attended the event.

## Student Affairs

### International Student Exchange Program

The Office of Student Affairs supports and offers a wide range of global community learning opportunities to the pre-medical and medical students.

In its most recent effort, the Office of Student Affairs has expanded the Weill-Bugando, Tanzania program to invite additional regional schools to participate in the program. This initiative, the International Student Exchange Program, aims to help participants learn about various medical curricula offered by regional medical schools, observe clinical encounters with students during clinical rotations, examine various educational methods including problem-based learning, and experience various aspects of country/region specific population health programs and cultural activities. The program also provides the opportunity for the participants to meet and interact with faculty, staff, and students.

In December 2017, five medical colleges from the region participated in the program and spent one week at Weill Cornell Medicine-Qatar. The program brought two students and one faculty member from each of the participating colleges. The participating colleges were An-Najah National University of Nablus, Palestine; Dow International Medical College of Karachi, Pakistan; Kasturba Medical College of Mangalore, India; the American University of Beirut, Lebanon; and the College of Medicine and Health Studies at Sultan Qaboos University, Oman.

During the eight-day trip, the participating team visited WCM-Q's Clinical Skills and Simulation Lab where they saw hi-tech learning aids such as electronic medical mannequins and an anatomage table – a human-sized touchscreen display for visualizing the human anatomy.

The team also toured Education City and healthcare institutions around Doha, including Hamad Medical Corporation, Al Gharaffa Health Center, Rumaillah Psychiatric Hospital and Rawdat Al Khaill Wellness Center.

The trip was very successful and highly commended by participants.

In January 2018 a return delegation of four WCM-Q medical students and three staff members visited the College of Medicine and Health Studies at Sultan Qaboos University in Oman for a week. During the visit the team met with the dean, faculty and students of the college, learning about their curriculum and programs. During their visit, WCM-Q students visited the Sultan Qaboos University Hospital, clinical skills center and the simulation labs. The team participated in a health promotion and chronic disease campaign. To learn more about Oman and Omani culture, the students visited Old Muscat, Souq Mutrah, Wadi Shab, the Muscat Opera House, and Qurum Beach. They were joined on many of their activities by students from Sultan Qaboos University.

The program feedback and evaluations will guide the further development of the program.





# Community Development



His Excellency Dr. Mohammed Bin Abdul Wahid Al-Hammadi, the minister of education and higher education, Dr. Javaid Sheikh, dean of WCM-Q, representatives of Sahtak Awalan's strategic partners and children who have participated in Project Greenhouse.



## Community Development

# Office of Communications

The Office of Communications has continued to build upon the success of its Sahtak Awalan – Your Health First campaign, launching new initiatives, expanding others, and winning awards. The campaign remains committed – with the support of our strategic partners – to improving the health of people throughout Qatar and educating them about the importance of a healthy lifestyle.



### Khayr Qatarna

Sahtak Awalan is Qatar's premier health campaign, introducing hundreds of thousands of people to the concept that good health does not have to mean restrictions to personal enjoyment; exercise can be fun and healthy diets can be delicious.

Numerous initiatives have been launched but perhaps its biggest success has been Project Greenhouse which, since its launch, has provided more than 130 schools across Qatar with greenhouses, soil, plant pots and fruit and vegetable seeds. This has allowed children to learn about the environment and sustainability, taught them how to grow plants and where their food comes from, and most importantly shown them the benefits of healthy eating.

Project Greenhouse has now taken the scheme to the next level and introduced the Khayr Qatarna program, which has seen three large-scale greenhouses installed at selected schools, with more greenhouses to follow. These greenhouses are being used to grow fruit and vegetables that the Ministry of Environment and Municipality is distributing through local Al Meera supermarkets. Students continue to be involved and are able to visit the greenhouses, learning more about food production, logistics and economics.

Khayr Qatarna was launched at an event attended by more than 1,500 children who have been directly involved with Project Greenhouse, along with senior representatives of Sahtak Awalan's strategic partners; the Ministry of Public Health, Qatar Foundation, the Ministry of Education and Higher Education, the Ministry of Environment and Municipality, ExxonMobil, Occidental Petroleum and the Supreme Committee for Delivery and Legacy. Without the support of these partners Sahtak Awalan, and the many associated initiatives would not be able to operate as successfully as they have.

All the fruit and vegetables for Khayr Qatarna are grown by professional gardeners and include a range of produce; tomatoes, cucumbers, bell peppers and eggplants have all been harvested with more varieties planned for the future. The crops are then made available for sale under the Khayr Qatarna brand, with all proceeds being reinvested in the project.

Importantly for Weill Cornell Medicine – Qatar, the initiative has both educational and socio-economic aims. Khayr Qatarna is helping to teaching students about the importance of sustainable food production while learning about the environment, economics and the health benefits of fruits and vegetables. In addition, Sahtak Awalan is very much a

community project and we want to give back to the community and to Qatar. Hence, by growing large volumes of fruit and vegetables we are able to contribute to Qatar's food security and reduce its reliance on imports.

The latter is of particular importance due to the current political situation in the Gulf. The concept of food sustainability and food security is vital for Qatar, hence the country now has a dairy herd and there has been a significant expansion of agriculture, leading to far more food in supermarkets that has been grown locally. Khayr Qatarna wants to complement this, providing the community with fresh, locally-grown food sold under the Khayr Qatarna brand, and also allowing our children to take a role in the nation's food security.

Producing more food locally also reduces the environmental impact of importing fruit, vegetables and meat by air, and offers shoppers the chance to purchase fresher food at the supermarkets. Reducing transportation miles also helps to reduce costs and it is a matter of pride for Sahtak Awalan and Khayr Qatarna that all of its crops are grown in Qatar and that they have all been granted the status of 'Premium Products' – an indication of their freshness and quality – by the Ministry of Municipality and Environment.



Khayr Qatarna grows fruit and vegetables on a large scale, (above) before being sold under the Khayr Qatarna brand (top photograph) at local supermarkets.

# Community Development

## The Color Run

Sahtak Awalan: Your Health First brought The Color Run to Qatar for the fourth time in the biggest and most colorful staging of the event yet.

Held at Qatar National Convention Centre, more than 9,000 runners completed the 'Happiest 5K on the planet' and got coated from head-to-toe in a tropical array of colors each kilometer of the course until the finish line.

Participants included the young and old, veterans and first-time Color Runners, who walked, jogged or ran the five-kilometer course. Runners were then treated to the Finish Festival, featuring music and massive color throws.

The aim was to demonstrate that everyone can exercise, no matter what their current physical fitness, and that exercise can be fun.



The Color Run is one of Qatar's most popular public events.



Yalla Natural provides fun and entertainment while teaching children and young people about healthy lifestyles.

## Yalla Natural Celebrates National Day

Sahtak Awalan - Your Health First, the flagship public health campaign of WCM-Q, shared inspirational health messages, advice and activities at Darb Al Saai as thousands of people gathered to celebrate Qatar National Day.

As the celebrations got underway with a flag-raising ceremony, the Your Health First Yalla Natural trailer was in place inside the Qatar Foundation tent at Darb Al Saai to dispense free health tips and seed pots, offer health-related art sessions and give visitors the chance to make healthy fruit smoothies using only pedal power on the ever-popular blender bikes.

The Yalla Natural trailer was in situ at Darb Al Saai for the entire ten days of celebrations, helping to spread a message of health, wellness and togetherness that supports the inspiring Qatar National Day vision of community solidarity.

Schoolchildren flocked to the Your Health First trailer, enjoying the opportunity to create health-themed artworks, receive free healthy recipe cards, plant seed pots to grow their own fruit and vegetables at home, pedal on the blender bikes and sample tasty fruit smoothies.

# Community Development

## Generation Amazing

Schoolchildren and families from across Qatar learned about health and had the chance to learn new skills from professional football coaches thanks to Sahtak Awalan and the Supreme Committee for Delivery and Legacy.

Sahtak Awalan – Your Health First partnered with the Supreme Committee’s Generation Amazing initiative to provide a range of fun, exciting and healthy activities at the 2017 World Innovation Summit for Education (WISE) Festival at Katara Cultural Village.

Sahtak Awalan’s Yalla Natural Trailer was there to provide advice

about fresh, organic sustainable food and recipes, the planting tables allowed children to plant seeds and take them home to grow, and the blender bikes proved to be another hit, letting children make their own delicious and healthy smoothies using only pedal-power.

The main draw for the crowds, though, was the football pitch, allowing children to play games and learn new skills from professional coaches.

As well as attracting thousands of guests throughout the week, schools from across Qatar were invited to visit the activities each morning.

Professional footballer Abdulla Afifa plays a game with some of the visiting schoolchildren.



## International Award for Sahtak Awalan

An international environmental organization presented the Sahtak Awalan – Your Health First campaign with a prestigious award for sustainability.

The Energy Globe Foundation, which is based in Austria, announced that Sahtak Awalan was the 2018 winner of the Energy Globe Award for the State of Qatar. The prize honors projects across the globe that raise awareness about the sustainable use of resources and which make a real difference to the future of our planet. It was an endorsement of the campaign’s initiatives and the support given by Sahtak Awalan’s strategic partners: Qatar Foundation, the Ministry of Public Health, the Ministry of Education and Higher Education, the Ministry of Environment and Municipality, Occidental Petroleum, ExxonMobil, and the Supreme Committee for Delivery and Legacy for their belief in the campaign.

This year, more than 182 countries participated in the Energy Globe Awards and there were over 2,000 entries. With such strong engagement, the award is considered to be the most prestigious environmental and sustainability prize worldwide. Having been selected as the national winner of the Energy Globe Award, Sahtak Awalan will now be considered for the international prize.

The Back to School campaign helps children take care of their own health.

## Back to School

Children across the country returned to school from the long summer holidays with a passion for health, thanks to a partnership between Sahtak Awalan – Your Health First and the Ministry for Education and Higher Education.

Students received schoolbags containing information to help children learn more about health. As part of the Ministry of Education’s Back to School program, Your Health First distributed thousands of school bags, lunchboxes, water bottles, pencil cases and food information cards to young students at the

Mall of Qatar over the Eid Al Adha period. The gifts were branded with the Sahtak Awalan – Your Health First campaign.

The partnership between the Back to School campaign and Sahtak Awalan will help children and young people take care of their own health. Along with the nutrition cards, the water bottles will help ensure that the students returning to school stay well-hydrated throughout the day, and a magnetic food guide for the refrigerator will serve as a reminder at home about the importance of diet in staying fit and healthy.





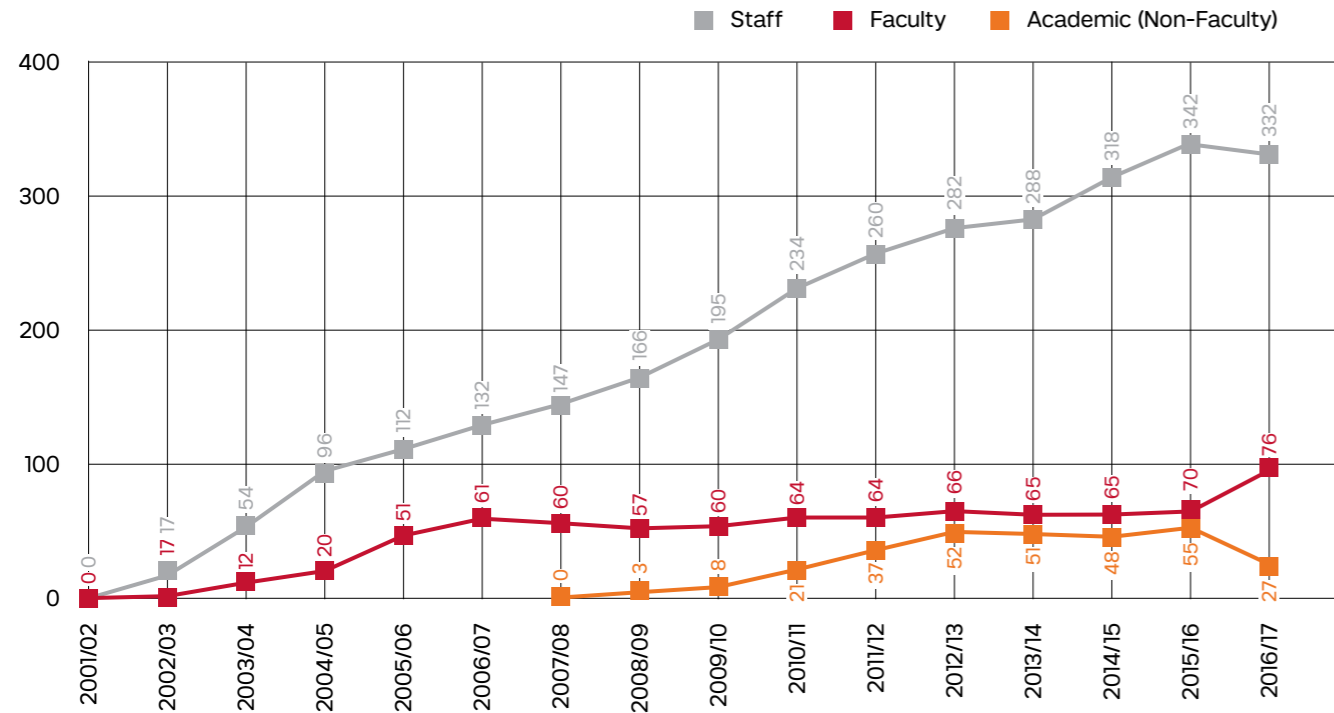
# Statistics

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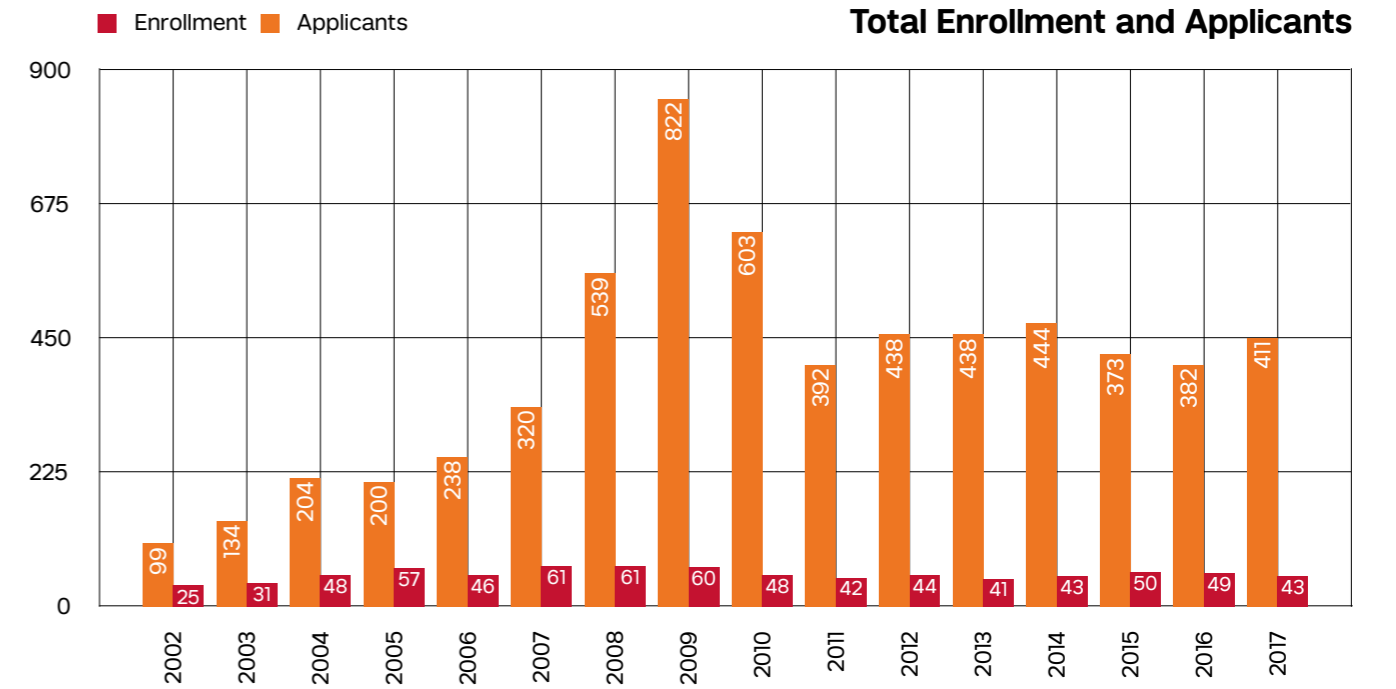
## Statistics

### Faculty & staff numbers, 2001-2017

Figures for faculty include all those on the WCM-Q payroll considered active within the academic year. Figures for staff are as of July 1, 2017 and include those residing in New York. Academic non-faculty includes postdoctoral positions in the research program.

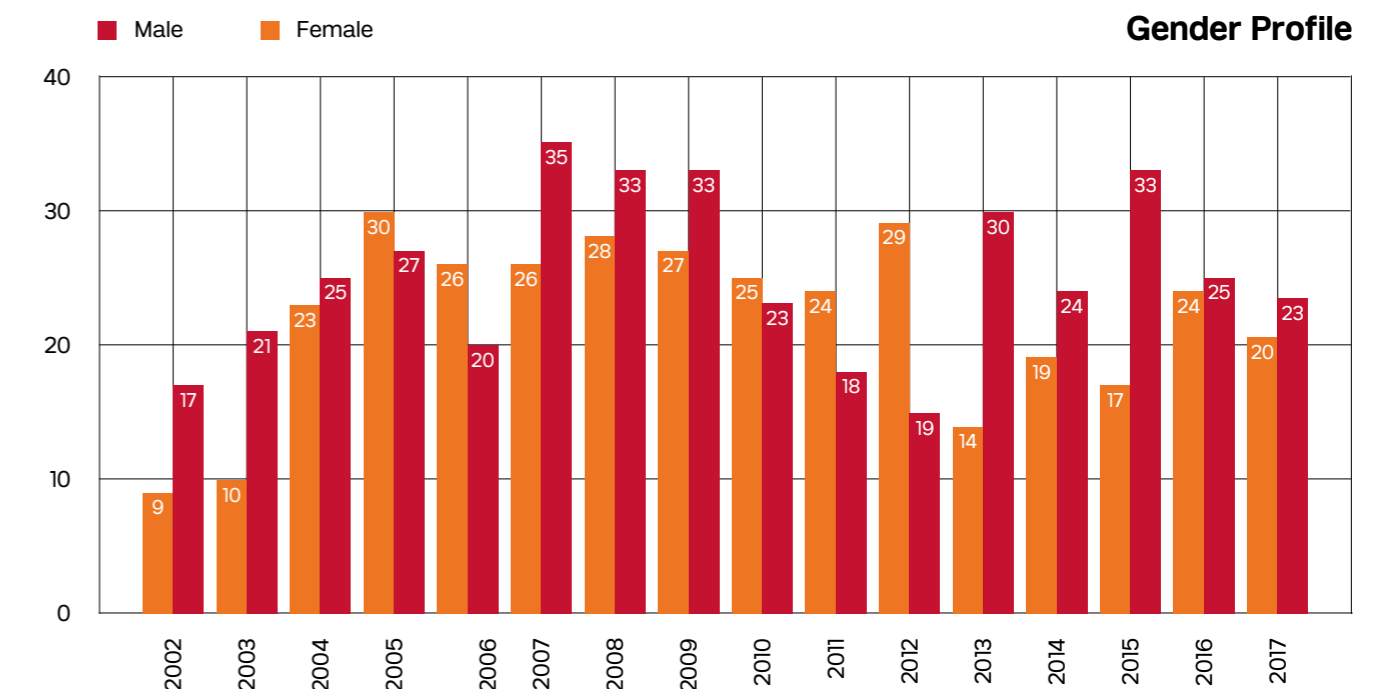
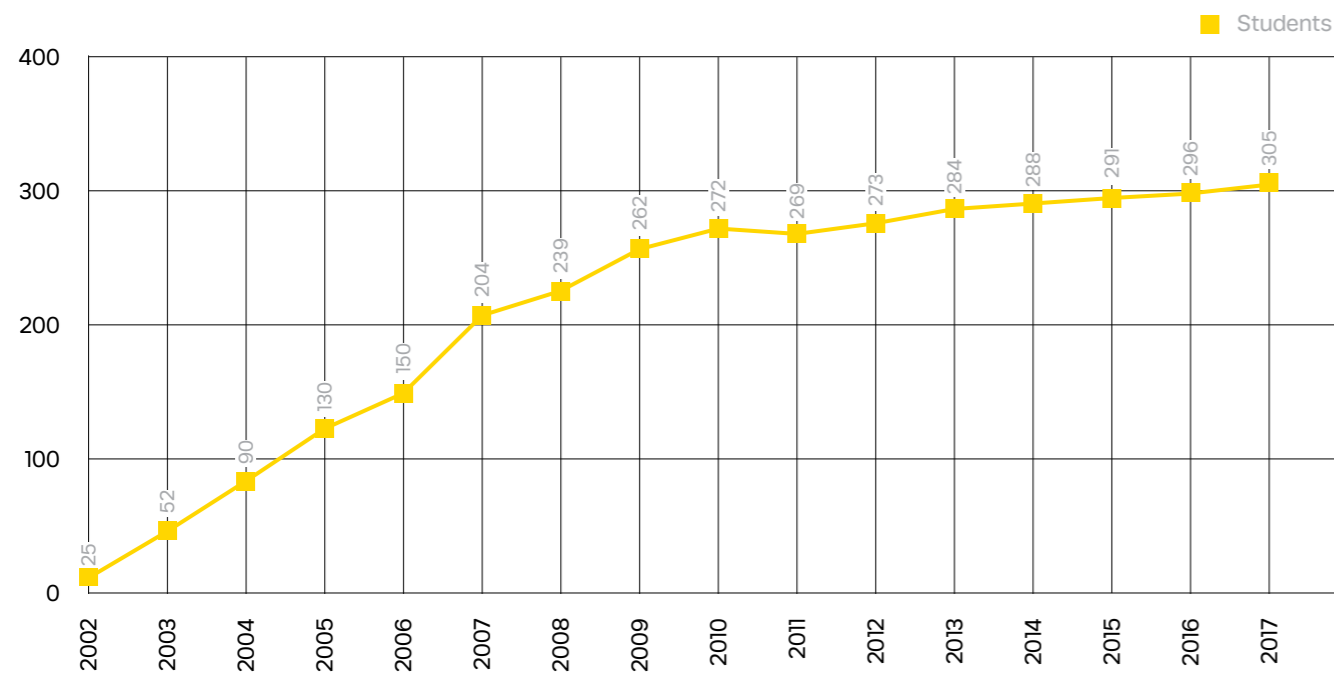


### Profile of classes entering the Pre-Medical Program, 2002-2017



### Total number of students, 2002-2017

Figures are as of September 2017, and reflect any attrition from incoming classes in subsequent years.

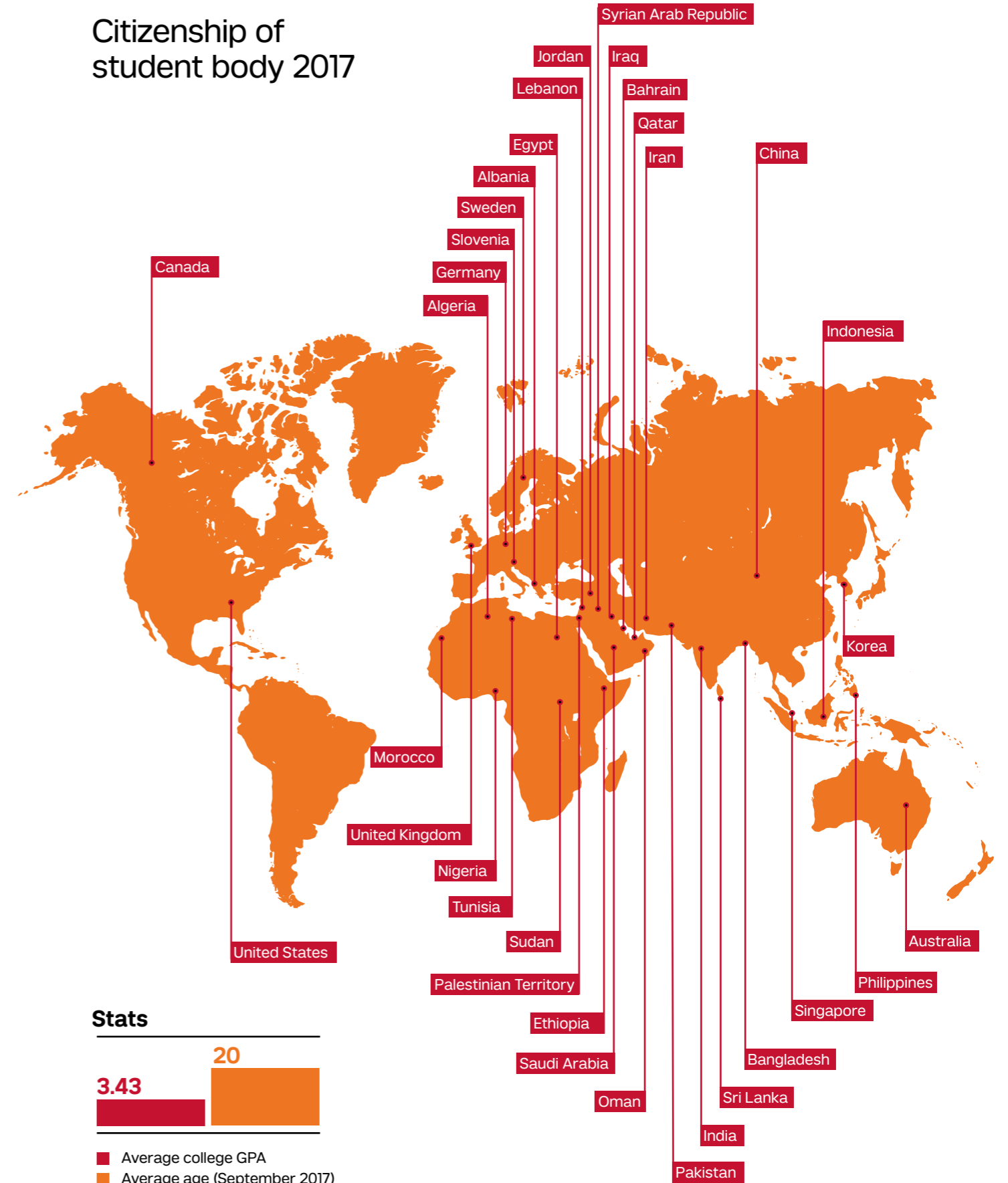




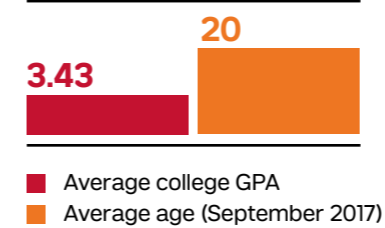
Students of WCM-Q come from across the world.

## Profile of entering medical students, September 2017

Citizenship of student body 2017



### Stats





# Leadership Structure

## Cornell University

**Robert S. Harrison,**  
Chairman, Board of Trustees

**Martha E. Pollack, PhD**  
President

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## Weill Cornell Medicine

**Jessica Bibliowicz**  
Chair, Board of Overseers

**Robert Appel**  
Vice Chair

**Robert A. Belfer**  
Vice Chair

**Jeffrey Feil**  
Vice Chair

**Barbara B. Friedman**  
Vice Chair

**Sanford I. Weill**  
Chair Emeritus

**Augustine M.K. Choi, MD**  
Dean, Weill Cornell Medicine  
Provost for Medical Affairs, Cornell University

## Weill Cornell Medicine - Qatar

**Javaid I. Sheikh, MD**  
Dean, Weill Cornell Medicine - Qatar

**Robert Crone, MD**  
Vice Dean for Clinical & Faculty Affairs

**Ramin Sedehi**  
Chief Administrative Officer

**Marco Ameduri, PhD**  
Associate Dean for Pre-medical Education

**Thurayya Arayssi, MD**  
Senior Associate Dean for Medical Education and Continuing Professional Development

**Khaled Machaca, PhD**  
Associate Dean for Research

**Ravinder Mamtani, MD, MSc**  
Senior Associate Dean for Population Health, Capacity Building and Student Affairs

**Bakr Nour, MD**  
Senior Advisor to the Dean

**Nesreen Al-Rifai**  
Chief Communications Officer

**Omar Baki**  
Director, Human Resources

**Jamie Marie Gray**  
Director, Distributed eLibrary

**Shahzad Jafri**  
Chief Information Officer

**Sameer Kalash**  
Director, Finance and Business Services



# WCM-Q Publications

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# WCM-Q Faculty Publications July 2017 – June 2018

(As of June 30, 2018. The list also includes some items published too late to appear in the previous year's list. It does not include items listed as "in press" or "ahead of print".)

### Abdel Aleem, Alice

Abdel Aleem A. Hereditary spastic paraplegias. Clinical spectrum and growing list of genes. Neurodegenerative diseases [Internet]. Dover, DE: smgebooks.com; 2017 Mar 11. [32 p.]. Available from: <http://smgebooks.com/Neurodegenerative-Diseases/chapters/ND-17-02.pdf>

Elsaid MF, Chalhoub N, Ben-Omran T, Kamel H, Al Mureikhi M, Ibrahim K, Ross ME, Abdel Aleem A. Homozygous nonsense mutation in SCHIP1/IQCJ-SCHIP1 causes a neurodevelopmental brain malformation syndrome. Clinical genetics. 2018 Feb;93(2):387-91. doi: 10.1111/cge.13122

Fateen EM, Fathy HM, Maaty DMA, Kamel NM, Abdel Aleem A. Mutational analysis of a cohort of Egyptian patients with Gaucher disease. Middle East journal of medical genetics [Internet]. 2017 Jul [cited 2018 Jun 25];6(2):61-9. Available from: <https://doi.org/10.1097/01.MXE.0000520527.54080.ab>

### Abi Khalil, Charbel

Abi Khalil C, Haddad F, Al Suwaidi J. Investigating palpitations: the role of Holter monitoring and loop recorders. BMJ (Clinical research ed.) [Internet]. 2017 Jul 27 [cited 2018 Jun 6];358:j3123 [6 p.]. Available from: <https://doi.org/10.1136/bmj.j3123>

Abi Khalil C, Sulaiman K, Mahfoud ZR, Singh R, Asaad N, AlHabib KF, Alsheikh-Ali A, Al-Jarallah M, Bulbanat B, AlMahmeed W, Ridha M, Bazargani N, Amin H, Al-Motarreb A, Al Faleh H, Elasar A, Panduranga P,

Al Suwaidi J. Non-withdrawal of beta blockers in acute decompensated chronic and de novo heart failure with reduced ejection fraction in a prospective multicentre study of patients with acute heart failure in the Middle East. BMJ open [Internet]. 2017 Jul 9 [cited 2018 Jun 6];7(7):e014915 [9 p.]. Available from: <https://doi.org/10.1136/bmjopen-2016-014915>

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Abi Khalil C, Al Suwaidi J, Refaat M, Mohammedi K. Cardiac complications of diabetes [editorial]. Biomed research international [Internet]. 2018 Apr 3 [cited 2018 Jun 6];2018:8578394 [2 p.]. Available from: <https://doi.org/10.1155/2018/8578394>

Abi Khalil C, Zubaid M, Asaad N, Rashed WA, Hamad AK, Singh R, Al Suwaidi J. -blockers on discharge from acute atrial fibrillation are associated with decreased mortality and lower cerebrovascular accidents in patients with heart failure and reduced ejection fraction. Angiology. 2018 Apr;69(4):316-22. doi: 10.1177/0003319717722283

Al-Kindi SG, Refaat M, Jayyousi A, Asaad N, Al Suwaidi J, Abi Khalil C. Red cell distribution width is associated with all-cause and cardiovascular mortality in patients

with diabetes. Biomed research international [Internet]. 2017 Nov 21 [cited 2018 Jun 7];2017:5843702 [7 p.]. Available from: <https://doi.org/10.1155/2017/5843702>

Gautier JF, Fetita LS, Riveline JP, Ibrahim F, Porcher R, Abi Khalil C, Velho G, Choukem SP, Hadjadj S, Larger E, Roussel R, Boudou P, Marre M, Ravussin E, Mauvais-Jarvis F. Sex difference in the effect of fetal exposure to maternal diabetes on insulin secretion. Journal of the Endocrine Society [Internet]. 2018 May 1 [cited 2018 Jun 26];2(5):391-7. Available from: <https://doi.org/10.1210/js.2017-00482>

Huang D, Refaat M, Mohammedi K, Jayyousi A, Al Suwaidi J, Abi Khalil C. Macrovascular complications in patients with diabetes and prediabetes. Biomed research international [Internet]. 2017 Nov 7 [cited 2018 Jun 5];2017:7839101 [10 p.]. Available from: <https://doi.org/10.1155/2017/7839101>

Nasrallah MP, Abi Khalil C, Refaat MM. The landscape of glucose-lowering therapy and cardiovascular outcomes: from barren land to metropolis. Biomed research international [Internet]. 2017 Nov 14 [cited 2018 Jun 7];2017:9257930 [15 p.]. Available from: <https://doi.org/10.1155/2017/9257930>

Pasquier J, Thomas B, Hoarau-Vechot J, Odeh T, Robay A, Chidiac O, Dargham SR, Turjoman R, Halama A, Fakhro K, Menzies R, Jayyousi A, Zirie M, Al Suwaidi J, Rafii A, Malik RA, Talal T, Abi Khalil C. Circulating microparticles in acute diabetic Charcot foot exhibit a high content of inflammatory cytokines, and support monocyte-to-osteoclast cell induction. Scientific reports [Internet]. 2017 Nov 27 [cited 2018 Jun 5];7(1):16450 [13 p.]. Available from: <https://doi.org/10.1038/s41598-017-16365-7>

Salman OF, El-Rayess HM, Abi Khalil C, Nemer G, Refaat MM. Inherited cardiomyopathies and the role of mutations in non-coding regions of the genome [Review]. Frontiers in cardiovascular medicine [Internet]. 2018 Jun 28 [cited 2018 Jun 28];5:77 [12 p.]. Available from: <https://doi.org/10.3389/fcvm.2018.00077>

### Abu-Raddad, Laith J.

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Al-Rifai RH, Pearson F, Critchley JA, Abu-Raddad LJ. Association between diabetes mellitus and active tuberculosis: a systematic review and meta-analysis. PLoS one [Internet]. 2017 Nov 21 [cited 2018 Jun 5];12(11):e0187967 [26 p.]. Available from: <https://doi.org/10.1371/journal.pone.0187967>

Aldisi RS, Elsidqi MS, Dargham SR, Sahara AS, Al-Absi ES, Nofal MY, Mohammed LI, Abu-Raddad LJ, Nasrallah GK. Performance evaluation of four type-specific commercial assays for detection of herpes simplex virus type 1 antibodies in a Middle East and North Africa population. Journal of clinical virology [Internet]. 2018 Jun [cited 2018 Jun 27];103:1-7. Available from: <https://doi.org/10.1016/j.jcv.2018.03.011>

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Chaabna K, Abu-Raddad LJ. Hepatitis C infection epidemiology in Mongolia: protocol of a systematic review and meta-analysis. Systematic reviews [Internet]. 2017 Aug 8 [cited 2018 Jun 6];6(1):160 [5 p.]. Available from: <https://doi.org/10.1186/s13643-017-0558-8>

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GBD 2015 Eastern Mediterranean Region Lower Respiratory Infections Collaborators [incl. Abu-Raddad LJ]. Burden of lower respiratory infections in the Eastern Mediterranean Region between 1990 and 2015: findings from the Global Burden of Disease 2015 study. International journal of public health [Internet]. 2018 May [cited 2018 Jun 21];63(Suppl 1):97-108. Available from: <https://doi.org/10.1007/s00038-017-1007-0>

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- GBD 2015 Eastern Mediterranean Region Mental Health Collaborators [incl. Abu-Raddad LJ]. The burden of mental disorders in the Eastern Mediterranean region, 1990-2015: findings from the Global Burden of Disease 2015 Study. *International journal of public health* [Internet]. 2018 May [cited 2018 Jun 21];63(Suppl 1):25-37. Available from: <https://doi.org/10.1007/s00038-017-1006-1>
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- GBD 2016 Healthcare Access and Quality Collaborators [incl. Abu-Raddad LJ]. Measuring performance on the Healthcare Access and Quality Index for 195 countries and territories and selected subnational locations: a systematic analysis from the Global Burden of Disease Study 2016. *Lancet* (London, England) [Internet]. 2018 Jun 2 [cited 2018 Jun 21];391(10136):2236-71. Available from: [https://doi.org/10.1016/s0140-6736\(18\)30994-2](https://doi.org/10.1016/s0140-6736(18)30994-2)
- GBD 2016 Mortality Collaborators [incl. Abu-Raddad LJ]. Global, regional, and national under-5 mortality, adult mortality, age-specific mortality, and life expectancy, 1970-2016: a systematic analysis for the Global Burden of Disease Study 2016. *Lancet* [Internet]. 2017 Sep 16 [cited 2018 Jun 6];390(10100):1084-150. Available from: [https://doi.org/10.1016/S0140-6736\(17\)31833-0](https://doi.org/10.1016/S0140-6736(17)31833-0)
- GBD 2016 Risk Factors Collaborators [incl. Abu-Raddad LJ]. Global, regional, and national comparative risk assessment of 84 behavioural, environmental and occupational, and metabolic risks or clusters of risks, 1990-2016: a systematic analysis for the Global Burden of Disease Study 2016. *Lancet* [Internet]. 2017 Sep 16 [cited 2018 Jun 6];390(10100):1345-422. Available from: [https://doi.org/10.1016/S0140-6736\(17\)32366-8](https://doi.org/10.1016/S0140-6736(17)32366-8)
- GBD 2016 SDG Collaborators [incl. Abu-Raddad LJ]. Measuring progress and projecting attainment on the basis of past trends of the health-related Sustainable Development Goals in 188 countries: an analysis from the Global Burden of Disease Study 2016. *Lancet* [Internet]. 2017 Sep 16 [cited 2018 Jun 6];390(10100):1423-59. Available from: [https://doi.org/10.1016/S0140-6736\(17\)32336-X](https://doi.org/10.1016/S0140-6736(17)32336-X)
- Harfouche M, Chemaitelly H, Mahmud S, Chaabna K, Kouyoumjian SP, Al Kanaani Z, Abu-Raddad LJ. Epidemiology of hepatitis C virus among hemodialysis patients in the Middle East and North Africa: systematic syntheses, meta-analyses, and meta-regressions. *Epidemiology and infection* [Internet]. 2017 Nov [cited 2018 Jun 6];145(15):3243-63. Available from: <https://doi.org/10.1017/S0950268817002242>
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- Yehya A, Ghuloum S, Mahfoud ZR, Opler M, Khan A, Hammoudeh S, Hani Y, Al-Amin H. Validation of the five-factor model of the Arabic version of the Positive and Negative Syndrome Scale in Schizophrenia. *Psychopathology*. 2017 Jul;50(3):211-8. doi: 10.1159/000472154
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