



Weill Cornell Medicine-Qatar



ANNUAL REPORT
2019

WELCOME TO


WEILL CORNELL MEDICINE-QATAR

ANNUAL REPORT 2019



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Leadership Report

The last 12 months has seen our institution continue to reach the very highest standards across a wide range of competencies, with our faculty excelling in the spheres of education, patient care and research, our students achieving extraordinary results, and our alumni attaining prominent positions in elite healthcare organizations all over the world - all supported by our fantastically dedicated and professional staff.

In addition to the continued pursuit and achievement of excellence, the past year also saw a marked intensification and expansion of WCM-Q's engagement with external institutions at local, regional and international level. Indeed, when reviewing individual WCM-Q activities and events, one is struck by how many of them involve collaborations with multiple external institutions, oftentimes with WCM-Q playing

a leadership role and providing a forum for the sharing of expertise and knowledge, benefiting every party involved and frequently leading to the conception and launch of exciting new projects. This year, for example, WCM-Q led the way with events sharing expertise on subjects as diverse and wide-ranging as simulation-based learning, the law and ethics of genetic medicine, lifestyle medicine, continuing medical education and systematic review research. Other important events included a regional summit convened in Doha by WCM-Q to adapt international guidelines for the management of rheumatoid arthritis to the Eastern Mediterranean region, the annual WCM-Q Research Retreat that showcased the innovations emanating from our world-class laboratories, and the inaugural WCM-Q Medical Education Research Forum, to name but a few.



Dr. Javaid I. Sheikh, Dean.



In addition to the continued pursuit and achievement of excellence, the past year also saw a marked intensification and expansion of WCM-Q's engagement with external institutions.



This expanding influence as a regional and international leader in medical education and biomedical research is testament to the ever greater ambition and confidence we feel as an institution, and speaks volumes about the unstinting support and enlightened guidance we continue to receive from Qatar Foundation and the leadership of the State of Qatar, for which we remain extremely grateful.

Happily, this wonderful support also continued to bear fruit in the realm of research, with several ground-breaking studies by WCM-Q investigators appearing in leading journals in 2018-19. Successes included research into anti-cancer compounds found in plants, the effects of desert cyanobacteria on neurodegenerative diseases, hepatitis C prevalence in the MENA region, the effects of date fruits on human metabolism, the links between diabetes and breast cancer, and a great many others. In addition, our programs that provide research skills training to young Qatari nationals with a passion for science continued apace, underlining

our commitment to nurturing a strong homegrown pool of local research talent and engendering a forward-looking culture that embraces innovation.

In a similar vein, this year's graduating class – the Class of 2019 – contained a strong contingent of Qatari nationals and long-term residents, demonstrating WCM-Q's ongoing commitment to unlocking the human potential of local young people. Once again, our graduates matched at some of the world's most prestigious institutions in Qatar and the US, and we are confident that as they move on with their careers they will continue to thrive, thanks in no small part to the ethos of hard work, intellectual curiosity and humanitarianism instilled in them during their time at WCM-Q and Qatar Foundation. I am truly thankful to every member of the WCM-Q community for embodying and upholding these characteristics, which underpin everything we do here. I hope you will take great pleasure in reviewing within the pages of this Annual Report the achievements that these qualities have made possible.

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

H.E. Dr. Hanan Mohamed Al Kuwari
Co-Chair, WCM-Q Joint Advisory Board
Minister of Public Health

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Chief Medical Officer and Member of the Board,
Sidra Medicine
Pediatric Nephrologist, Sidra Medicine
Associate Professor of Clinical Pediatrics, WCM-Q.

**Richard O’Kennedy, BSc, PhD, CBiol, FRSB, FIBioll,
DipFS, DipCS, DipComputing, MRIA**
Vice-President for Research, Development and
Innovation, Qatar Foundation
Vice-President for Research, Hamad Bin Khalifa
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Senior Associate Vice-Provost and Founding
Executive Director of the Stanford Center for
Health Education



Foundation and Pre-Medical Education

Foundation and Pre-Medical Education

The Foundation Program



Foundation students study the basic sciences, English and certain pre-medical courses.

The Foundation Program at WCM-Q aims to enhance the knowledge and skills of academically talented Qatari students to build a strong basis for success in the six-year medical program. Since its inception in 2007, the Foundation Program has attended to students individually, helping them achieve their full potential as independent, lifelong learners. Foundation students earn college credit through courses in basic sciences and English as a second language (ESL), as well as pre-medical courses like global health and disease and

special studies in biology. Students who successfully complete their academic courses earn a certificate of completion and, upon meeting appropriate criteria, promotion to WCM-Q's six-year medical program.

Foundation Program students have been nationally recognized for exceptional academic achievement. In March 2019, four Foundation Program students were honored for their accomplishments in secondary school at the 12th Qatar Education Excellence Awards, sponsored by His Highness

the Emir Sheikh Tamim bin Hamad al-Thani. Latifa Mahmoud, Alya Ashkanani, and Ghalia Ashkanani were presented with the gold award while Asma Al-Kaabi received the platinum award. This honor places them among the best students in Qatar, demonstrating exceptional dedication to learning.

During the year, Foundation Program students attend the Medical Career Seminar, which hosts distinguished guest speakers and leaders in the healthcare community. The seminars offer early exposure to career pathways

in medicine and inspire students to pursue their academic and career interests. Speakers have come from a variety of medical specialties, with recent guests including the WCM-Q dean, Dr. Javaid Sheikh (psychiatry), Dr. Robert Crone (clinical pediatrics), Dr. Ravinder Mamtani (population health), Dr. Bakr Nour (surgery), Dr. Mohamud A. Verjee (family medicine), as well as WCM-Q alumni Dr. Ahmed Al-Qahtani, Dr. Sanabel Al-Akras, and Dr. Noor Alkhori (radiology).

Outside the classroom, Foundation Program students observe doctors and healthcare workers in action to experience the complexity of the medical profession first-hand. Students in the foundation English course shadowed doctors at Sidra Medicine to understand how they relate to their patients and colleagues from other healthcare professions. Students focused on one of five themes to guide their observations: teamwork, leadership, empathy, emotional intelligence, and professionalism.

They researched their theme in the literature and used their findings to interpret their observations and experiences. As a summative exercise, the students developed research posters that synthesized their literature review, observations, and inferences. This innovative project encouraged students to think critically about the elements of effective medical practice, especially those that often fall outside the formal curriculum.



Dr. Javaid Sheikh, dean of WCM-Q (center) delivered a careers seminar speech to the foundation students.

Foundation and Pre-Medical Education

The Pre-Medical Curriculum



Pre-medical students perform laboratory experiments and literature reviews in order to generate working hypotheses.

The pre-medical component of the six-year medical program prepares students for medical studies through a varied curriculum that emphasizes the physical and social sciences, and the humanities. Through their experiences, students develop the requisite knowledge and skills to succeed in the medical curriculum, and they advance according to criteria like academic performance, professionalism, and commitment to the medical profession. This year, the pre-medical curriculum gained new leadership with the appointment of Dr. James Roach as assistant dean for pre-medical education. Dr. Roach holds a PhD in physical chemistry from the University of Oklahoma, and his exceptional teaching career spans more than 20 years at universities in the United States and the Middle East, including Campbellsville University (Kentucky), Emporia State University (Kansas), and Alfaisal University in Riyadh, Saudi Arabia. Originally joining WCM-Q

in 2009, Dr. Roach was promoted to professor of chemistry in 2018 in recognition of his classroom success, dedication to students, and outstanding performance as an educational leader. As assistant dean for pre-medical education, Dr. Roach will be responsible for student advising, curriculum administration and development, and teaching laboratory administration and planning in the pre-medical curriculum.

Faculty in the pre-medical curriculum aim to create novel educational experiences that enhance students' abilities to synthesize and communicate complex information. For example, students in Dr. Kuei-Chiu Chen's biology class confront the intricacies of scientific research by performing literature reviews and lab experiments to determine the evidence base for anti-microbial effects traditionally ascribed to herbs, spices, and other natural substances. Students conduct

empirical lab experiments from beginning to end, including developing a research question and working hypothesis, manipulating lab equipment to conduct experiments, collecting and analyzing the data, and creating posters to communicate their findings. The final project involved presenting research posters to faculty and peers, and answering questions from them. Later, pre-medical students composed, directed, and performed a drama about responsible conduct in research for the WCM-Q community.

In the spring semester, pre-medical students in the Fundamentals of Physics course learned about radiation in medicine and the role of medical physicists from distinguished guests Dr. Huda Al-Naemi, executive director of occupational health at Hamad Medical Corporation and assistant professor of medical biophysics research in radiology at WCM-Q,

and Dr. Noora Al Hammadi, chair of the Department of Radiation Oncology and senior consultant radiation oncologist at Hamad Medical Corporation, and assistant professor of clinical radiation oncology at WCM-Q. In this lecture, students witnessed real-life examples demonstrating the relevance of physics to medicine.

In addition to their scientific work, students learning the pre-medical curriculum explore medicine through the humanities and social sciences. This year, the WCM-Q writing faculty edited the sixth edition of the anthology of best student writing, *Qira'at*. *Qira'at* collects the best medical and pre-medical student non-fiction essays on topics including literature, history, medical ethics, film, poetry, sociology, philosophy, and art. Many of the essays originate from class assignments in the first-year writing seminar, or medical school courses in ethics and physicianship. Through publication of their work, students reflect on humanistic approaches to medicine that can inform their later professional practice, and also learn the

professional publication process of submission, peer review, revision and proofreading. *Qira'at* is a peer-reviewed professional publication with seven editors and reviewers in Ithaca, New York, and Qatar, and has been recognized and praised both in Qatar and at Weill Cornell Medicine in New York. Students in the pre-medical curriculum acquire skills in both writing and critical analysis, as well as processes for discovering new knowledge and reflecting deeply on the human dimensions of medical care.

Additionally, the pre-medical faculty has pioneered research in medicine and the humanities in the Middle East. In December 2018, Dr. Alan Weber, professor of English at WCM-Q, and colleagues organized the inaugural Medical Humanities in the Middle East Conference, which examined how the medical humanities can improve understanding of health and disease. Scholars in the fields of medicine and the humanities came from Europe, the Middle East, Asia, and North America to present their research exploring medicine through the lens of

humanities fields like literature, history, politics, religion, art, and philosophy. Topics included the use of art therapy in medical settings, the role of storytelling in trauma therapy, and the challenges of integrating the humanities into medical curricula. Keynote addresses included Dr. Mohammed Ghaly's discussion on the Islamic bioethics of genomics, Dr. Ala Bashir's presentation on the bond between art and medicine, and Dr. Arthur W. Frank's autobiographical account of witnessing illness.

Finally, through the optional clinical observership program, 14 students from the Pre-medical and Foundation Programs completed two weeks in clinics at Hamad Medical Corporation and Sidra Medicine, observing the work of physicians and interacting with patients under supervision. In this way, the innovative teaching and research of faculty in the Foundation Program and Pre-Medical Program synergize with engaging experiential learning initiatives that enrich the educational experiences of students.



Dr. James Roach was promoted to professor of chemistry in recognition of his classroom success and dedication to students.

Medical Education





Class of 2019 graduate Dr. Moaz Abdelrehim delivered the student address.

Medical Education

WCM-Q Celebrates with the Class of 2019

Her Excellency Sheikha Hind bint Hamad Al Thani, vice chairperson and CEO of Qatar Foundation, attended the WCM-Q Class of 2019 graduation ceremony in May when 26 men and 23 women graduated with the Cornell University Doctor of Medicine degree, increasing the total number of WCM-Q alumni to 384.

The caliber of the 49 graduating students was truly outstanding with 13 graduating with academic distinction, four with honors in research, and two with honors in service. Many of these graduates also received individual accolades at the Convocation Ceremony which honored graduates for academic excellence and recognized individuals for specific professional and personal attributes that form the essential qualities of a good physician. Faculty members were also honored at this ceremony for excellence in teaching and as role models for aspiring physicians.

The Class of 2019 student address was delivered by Dr. Moaz Abdelrehim who gave an inspiring speech commending his fellow graduates on their compassion and commitment, and their willingness to self-sacrifice by taking on the

personal responsibility of caring for others as their chosen profession.

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, Dean Choi highlighted the importance of life-long learning and the need to maintain their network of friends and colleagues to help sustain the graduates during their career pathways.

Dr. Aisha Yousuf delivered the keynote speech recounting her own journey as a student at WCM-Q, aspiring to achieve professional and personal goals and continuing to strive to go far beyond what is expected. Since graduating in the WCM-Q inaugural Class of 2008, Dr. Yousuf has established herself as a regional leader in the field of robotic and minimally invasive surgery and is the medical director of reproductive surgery at Sidra Medicine, a state-of-the-art hospital providing women and children in Qatar with world-class tertiary healthcare services.

Medical Education

Class of 2019 Celebrates Graduation



Dr. Hanof Ahmed receives her Cornell MD degree from Dr. Thurayya Arayssi, WCM-Q's senior associate dean for medical education and continuing professional development.



HE Sheikha Hind bint Hamad Al-Thani, vice-chairperson and CEO of Qatar Foundation with Dean Augustine Choi, Dean Javaid Sheikh and the Class of 2019.



Medical Education

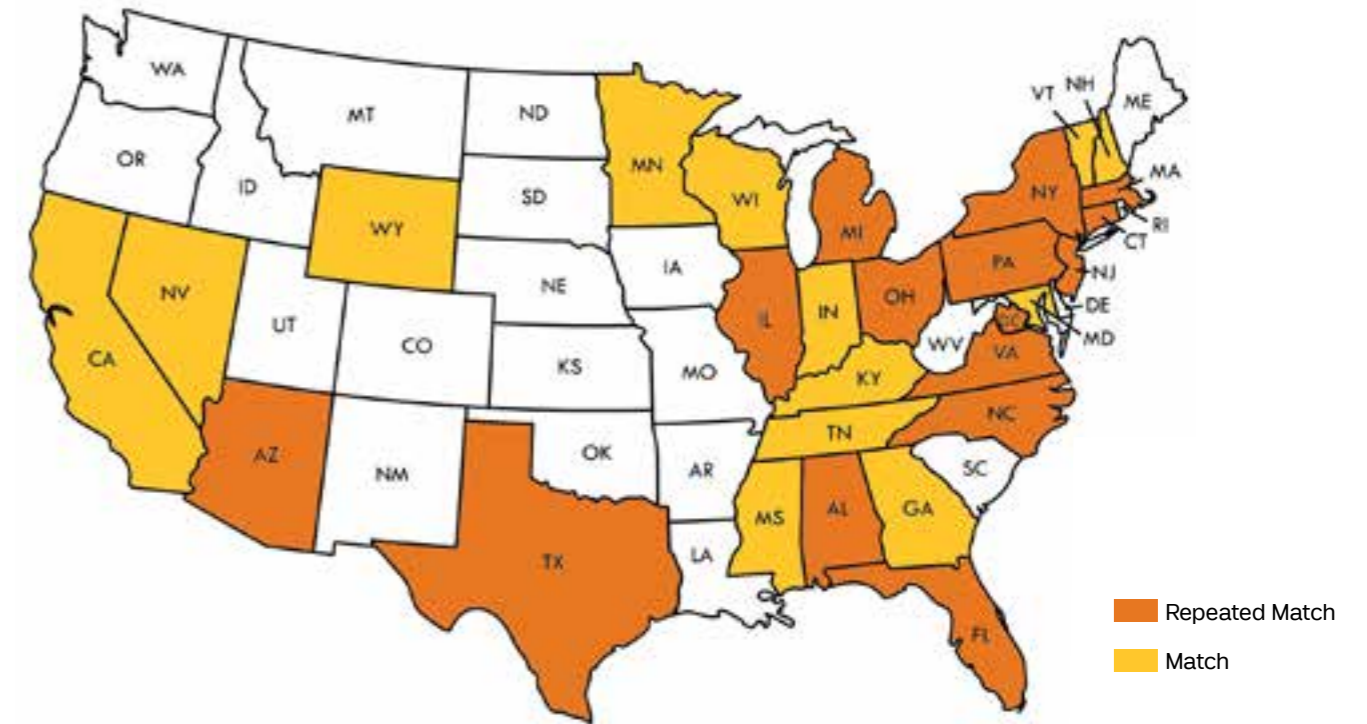
Match Day Success

At the match day event in March, 43 students in the Class of 2019 celebrated matching at prestigious post-graduate training institutions in numerous specialties, including anesthesiology, dermatology, diagnostic radiology, emergency medicine, internal medicine, neurology, pathology, pediatrics, psychiatry, obstetrics and gynecology, and surgery.

Ten students matched at Hamad Medical Corporation in Qatar, and 33 in programs in the USA, including repeat matches at

prestigious institutions such as Case Western/University Hospitals Cleveland, Johns Hopkins Medicine, NewYork-Presbyterian/ Weill Cornell Medical Center, and Virginia Commonwealth University. First time matches were celebrated at Duke University Medical Center, Children's National Health System in Washington DC, Indiana University School of Medicine, Hospital of the University of Pennsylvania, Atlantic Health Systems in New Jersey, and University of Pittsburg Medical System.

This was one of the highest match rates for the college and this success is a testament to the WCM-Q brand in producing high-caliber graduates who are dedicated to and passionate about the profession of medicine and determined to contribute to the advancement of medicine across the globe.



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





Dr. Stella Major teaches students how to examine a child's ear on the Cornell Stars program.

Medical Education

Medical Curriculum Students

In the Fall of 2018, the students in the Class of 2022 took another step closer to achieving their aspirations to become the next generation of doctors. Of the 49 students, 16 are Qatari and of the total number, there are 24 women and 25 men which is very similar to the gender ratio reflected across the medical education program. Donning their white coats and receiving their first stethoscopes at the White Coat Ceremony is a traditional rite of passage for a medical student and this marked the start of the four-year medical curriculum for the Class of 2022.

The students of the Class of 2021 were the latest to examine babies, toddlers and children up to the age of seven at the annual Cornell Stars event. This was one of the highlights of the week-long orientation to prepare students for their exposure to the clinical clerkship rotations starting in early May. Dr. Amal Khidir, associate professor of pediatrics, is the brainchild behind the Cornell Stars and oversees this annual college community event as faculty and staff members bring in their own

children to be examined by the students under the close guidance of experienced physicians from WCM-Q, Hamad Medical Corporation and Sidra Medicine. The exposure that the WCM-Q medical students will have at the clinical affiliated hospital sites has expanded following the signing of a new affiliation agreement which will enable students to undertake an elective experience at the Heart Center of Al Ahli Hospital.

The students in the Class of 2020 have almost completed the clinical phase of the new curriculum and starting in September 2019, they will begin Phase III by immersing themselves in a six-month period of focused scholarly work to complete a capstone project in their chosen Areas of Concentration (AOC). Under the leadership of the AOC program director and professor of healthcare policy and research, Dr. Laith Abu-Raddad, students can choose from 47 projects which are classified under four research pathways: population science; clinical science; laboratory science or medical education.

Medical Education

Curricular Innovation and Student Support



The Clinical Skills and Simulation Lab allows students to practice real-life scenarios in a safe and controlled environment.

In keeping pace with the new generation of learners, the WCM-Q faculty are developing new modalities for curricular delivery and one example is introducing game-based teaching in the learning environment. Dr. Douglas Bovell, professor of physiology and biophysics, and assistant dean for foundational sciences, delivered an accredited course in April for health professionals with the aim of incorporating gaming pedagogy in the classroom setting.

Simulation-based learning is increasingly used in medical schools to give students the chance to gain a variety of essential skills by practicing them in recreated real-world scenarios. Instructors utilize a variety of

techniques and tools to create these scenarios, ranging from low-tech methods like role-play with standardized patients (actors trained to play patients) to state-of-the-art medical manikins that can be programmed to exhibit a wide variety of symptoms. The Clinical Skills and Simulation Lab (CSSL) has been leading the way in creating an optimal simulation-based learning environment. In continued efforts to incorporate more simulation-based teaching in the curriculum, Dr. Stella Major, associate professor of family medicine in clinical medicine and director of CSSL, invited two leading experts in the field of simulation to deliver a three-day accredited training course in May on the latest methodologies and

techniques utilized in simulation-based learning.

Welcoming Dr. Sahar

Dr. Sahar Mohamed holds a PhD in neuro-gastroenterology from Queen Mary University of London and is an experienced gastrointestinal clinical scientist. Dr. Mohamed joined WCM-Q in February as the teaching specialist for physiology, pathology and pharmacology. Working together with Dr. Simeon Andrews who specializes in cellular and molecular biology, both teaching specialists provide dedicated support to the medical students during the foundational sciences phase of the medical curriculum.

Medical Education Research Initiatives



WCM-Q students took part in a panel discussion at the inaugural Medical Education Research Forum.

Under the leadership of Dr. Thurayya Arayssi, professor of clinical medicine and senior associate dean for medical education and continuing professional development, and Dr. Ameer Raouf, associate professor of anatomy in radiology, the inaugural WCM-Q Medical Education Research Forum was launched in April to highlight the growing research taking place across the medical education continuum. By bringing together those involved in health professions education, the forum created an environment for the transfer of knowledge and collaboration with those at the forefront of teaching the next generation of health professionals in Qatar and the region.

The two keynote speakers at the forum were Dr. George Thibault,

Federman professor emeritus, and former president of the Josiah Macy Jr. Foundation in New York, and Dr. Julie Youm, director of educational technology and assistant dean of education compliance and quality at University of California School of Medicine. Both speakers discussed emerging trends in medical education, including interprofessional education and the use of technology to enhance the clinical learning environment. The forum closed with an awards ceremony for the five winners of the poster presentation session:

1st Prize - Narjis Mumtaz from Hamad Medical Corporation. 'Retrospective analysis of anesthesia residents OSCE assessment results 2016-2018 - Does OSCE measure what it promises?'

Joint 2nd Prize - Alla El-Awaisi from Qatar University: 'Exploring healthcare facilitators' perceptions in delivering interprofessional activities in Qatar: A qualitative study.'

Joint 2nd Prize - Ruben Peralta from Hamad Medical Corporation. 'Introduction of a novel trauma & critical care fellowship program for clinical staff: Lessons in regional medico-cultural differences.'

Joint 2nd Prize - Adam Larson from WCM-Q. 'The impact of learning process and curricular innovation on medical students' choice of specialty: A mixed methods study from Qatar.'

3rd Prize - Deema Al-Sheikhly from WCM-Q. 'Strategies for building a CPD program in an undergraduate medical school: Lessons learned.'



Outreach activities allow faculty to highlight the strengths of the WCM-Q medical program.

Medical Education Outreach Initiatives

In continued efforts to promote WCM-Q as a center of excellence for graduating physicians, and to create more opportunities for WCM-Q graduates to match into post-graduate training programs, two medical education faculty members represented WCM-Q at their specialty meetings in the US. Dr. Moune Jabre who holds an affiliated appointment as an assistant professor of clinical

obstetrics and gynecology at WCM-Q hosted a promotional booth at the Council on Resident Education in Obstetrics and Gynecology and Association of Professors of Gynecology and Obstetrics Annual Meeting held in New Orleans, Louisiana. Dr. Mai Mahmoud, assistant professor of medicine and director of the Academic Advising Program at WCM-Q, also hosted a booth at

the annual meeting of the Alliance for Academic Internal Medicine in Philadelphia, Pennsylvania. These outreach activities play an important part in highlighting the strengths of the medical education program and the knowledge, experience, clinical skills and qualities of the students who graduate from WCM-Q.

Professional Development



Dr. Amal Khidir asks a question at the monthly Medical Education Journal Club.

The monthly Medical Education Journal Club hosted by the Office of Educational Development was well attended by faculty members and staff from across the college. This forum encourages collaboration and discussion on current trends in medical education. Topics covered over the past year included the impact of technology on learning in medical education, the ethics of curriculum reform and telemedicine.

The Clinical Skills and Simulation Lab hosted the 2nd Annual Simulation Symposium in September with the theme of 'Optimizing Health Professions Education with Simulation-Based Learning'. This accredited activity attracted more than 100 participants from the health professions in Qatar and the region. The keynote speaker was Dr. Ralf Krage, an anesthesiologist at VU University Medical Center in

Amsterdam, Netherlands, director of the ADAM Simulation Center, and vice president of the Dutch Society for Simulation in Healthcare, who gave a presentation on the challenges and opportunities presented by life-long learning.

Medical Education

Honoring Faculty and Recognizing Teaching Excellence

Another medical school time-honored tradition is recognizing the teachers who excel as role models in their field, imparting knowledge by sparking intellectual curiosity and inspiring critical thinking. The 2019 Excellence in Teaching Awards ceremony had a very personal

touch as pre-recorded video clips of students relaying messages to all of the faculty and teaching specialists at WCM-Q for their skills, dedication and mentorship were played onscreen during the event which was held in April.

The Excellence in Teaching Awards honors the dedication of WCM-Q's faculty and staff.



Award List

2019 WCM-Q Excellence in Teaching Awards

Pre-Medical Education

Award Category	Awardee
Foundation Year (2 Awards)	Dr. Clare McVeigh, Senior Lecturer in Biology
	Dr. Majda Sebah, Lecturer in Chemistry
1st Year Science (2 Awards)	Dr. James Roach, Assistant Dean for Premedical Education & Professor of Chemistry
	Dr. Mohammad Yousef, Associate Professor of Physics
English Writing	Dr. Rodney Sharkey, Associate Professor of English
2nd Year Science (2 Awards)	Dr. Sean Holroyd, Associate Professor of Teaching in Physiology and Biophysics
	Dr. Moncef Ladjimi, Professor of Biochemistry
Teaching Specialist (2 Awards)	Ms. Padmakumari Sarada, Teaching Specialist - Math
	Dr. Dalia Zakaria, Teaching Specialist - Biological Sciences

*Honorable mention as Teaching Specialists - Ms. Christine Gaskell and Ms. Sarah Roach



Dr. Clare McVeigh with two students in a biology class.

Medical Education

Medical Education	
Award Category	Awardee
Excellence in Teaching in the Foundational Sciences Curriculum (2 Awards)	Dr. Salman Al-Jerdi, Assistant Professor of Neurology
	Dr. Avelin Malyango, Assistant Professor of Anatomy In Radiology
Excellence in Teaching in the Clinical Curriculum (2 Awards)	Dr. Salman Al-Jerdi, Assistant Professor of Neurology
	Dr. Mohamed Elshayly, Assistant Professor of Medicine
Excellence in Leadership in the Foundational Sciences Curriculum	Dr. Liam Fernyhough, Assistant Professor of Medicine
Excellence in Leadership in the Clinical Curriculum	Dr. Grigory Ostrovskiy, Assistant Professor of Emergency Medicine
Visiting Faculty Excellence In Teaching - Foundational Sciences Curriculum	Dr. Amir Soumekh, Assistant Professor of Medicine
Visiting Faculty Excellence in Teaching - Clinical Curriculum	Dr. Mark Pecker, Professor of Clinical Medicine
Excellence In Educational Innovation	Dr. Laith Abu-Raddad, Assistant Dean for Extramural Research Funding/Professor of Healthcare Policy and Research/Director of the Biostatistics, Epidemiology & Biomathematics Research Core

The Teaching Faculty Appreciation Evening, which took place in September 2018, 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.

Faculty Achievements

- Dr. Laith Abu-Raddad, professor of healthcare policy and research, was appointed as the executive member of the International Union against Sexually Transmitted Infections. He was also invited to be an editorial board member for the *PLOS One* journal, the *International Journal of Environmental Research and Public Health*, and the *Scientific Reports* journal.
- Dr. Hassen Al-Amin, associate professor of psychiatry, served as a member of the Scientific Committee of the 7th Qatar International Mental Health Conference in Doha, December 2018.
- Dr. Thurayya Arayssi, professor of clinical medicine and senior associate dean for medical education and continuing professional development, completed the Executive Leadership in Academic Medicine (ELAM) program in 2019. ELAM is a one year part-time administrative fellowship program developed specifically for the advancement of senior female faculty members in academia. During the fellowship, Dr. Arayssi's research project focused on mentorship of expatriate faculty members. Dr. Arayssi was invited to be an editorial board member for the *Scientific Reports* journal and also invited to be a member of the Innovation Grants Committee at the Alliance for Academic Internal Medicine.
- Dr. Mohamed Elshazly, assistant professor of medicine presented on a company he co-founded, Ember Medical (www.embermed.com), at the spotlight section of the World Innovation Summit for Health conference in Qatar in November 2018.
- Dr. Amal Khidir, associate professor of pediatrics, was appointed as chair of the Research and Scholarship Collaborative Task Force for the Council on Medical Education in Pediatrics.
- Dr. Ziad Kronfol, professor of psychiatry, was appointed as the associate editor of the *Frontiers Journal for Health Psychology*.
- Dr. Stella Major, associate professor of family medicine in clinical medicine was invited as guest de-briefer and judge for the Sim University finals competition at the 2019 meeting of the Society in Europe for Simulation Applied to Medicine.
- Dr. Grigory Ostrovskiy, assistant professor of emergency medicine, was appointed as a member of the research committee for the Society of Academic Emergency Medicine.
- Dr. Ameer Raoof, associate professor of anatomy in radiology was appointed as a member of the Technology Enhanced Learning Committee for the Association for Medical Education in Europe.
- Dr. Sandra Sapia, assistant professor of pathology and laboratory medicine was appointed as a member of the European Society for Clinical Cell Analysis.
- Dr. Mohamud Verjee, associate professor of family medicine in clinical medicine, was elected as a member of The Royal Society of Medicine, London in October 2018.

Medical Education

Alumni Achievements

Dr. Abdulrahman Al-Abdulmalek received the gold award at the 12th Qatar Education Excellence Awards, patronized by His Highness the Emir Sheikh Tamim bin Hamad Al-Thani. The award was in recognition of Dr. Al-Abdulmalek's performance during his final year in the WCM-Q medical program before graduating in 2018. Dr. Al-Abdulmalek is now an internal medicine resident physician at Hamad Medical Corporation.

Dr. Awab Ali Ibrahim completed his pediatric residency training at the University of South Alabama College of Medicine in Mobile, Alabama, and was named as the recipient of the Student Teacher Award but was also appointed as chief resident. He will stay on another year to lead a group of doctors on the pediatric residency program, overseeing their progress, serving as their mentor and advocate, and ensuring that the program's high standards are met. After completing his medical degree at WCM-Q in 2012, Dr. Ibrahim joined the lab of WCM-Q's associate director of research, Dr. Khaled Machaca, where he worked on a project investigating microvilli and published a paper with Dr. Raphael Courjaret, WCM-Q's assistant professor of research in physiology and biophysics. Dr. Ibrahim then moved to the Harvard laboratory of Dr. Alessio Fasano, one of the world's leading experts on celiac disease research, developing an abiding interest in gastroenterology, the microbiome and the impact of diet on health.

Dr. Nigel Pereira acknowledged the supportive and inspiring mentors at WCM-Q as he was named as one of New York's Rising Stars for 2019 by the Super Doctors organization. The Super Doctors organization follows a rigorous selection process to identify top doctors in more than 40 medical specialties who have achieved an extremely high degree of peer recognition and professional achievement. Only around five percent of all the doctors working in each respective state or region make it onto the Super Doctors list. Dr. Pereira now works at the Ronald O. Perelman and Claudia Cohen Center for

Reproductive Medicine, Weill Cornell Medical College/NewYork-Presbyterian Hospital. During his residency training, Dr. Pereira was the recipient of numerous excellence awards for his skills as a clinician and teacher. He is also a prolific clinical researcher, having published more than 90 research papers in leading scientific journals such as the *New England Journal of Medicine*, *PLOS One*, *Human Reproduction*, *Fertility and Sterility*, *Obstetrics & Gynecology*, and the *Journal of Minimally Invasive Gynecology*. He has also authored more than 70 research abstracts and seven book chapters.



Dr. Nigel Pereira was named as a 'Rising Star' by the Super Doctors organization.



Dr. Abdulrahman Al-Abdulmalek is congratulated by Dr. Javaid Sheikh after winning a gold award at the Qatar Education Excellence Awards.



Continuing Professional Development

Continuing Professional Development

The Division of Continuing Professional Development (CPD) has continued to adhere to its slogan of 'Embracing Lifelong Learning', ensuring creativity and innovation in the delivery of its mission to provide high-quality professional development opportunities for physicians and other healthcare professionals. These development opportunities continue to be based on identified needs and the latest scientific and medical developments and are designed to increase competence, enhance performance in practice and lead to improved healthcare for patients.

This approach accords with the goals of the Qatar National Health Strategy (2018-2022), one of the key priorities of which is to ensure the State of Qatar has an efficient, capable and sustainable healthcare workforce. With this guiding principle in mind, 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."

This year, through the division of CPD, WCM-Q was awarded the Accreditation Council for Continuing Medical Education (ACCME's) highest level of accreditation – Accreditation with Commendation. This achievement extends WCM-Q's accreditation period for six years, until November 2024, and represents another milestone on the division's journey of success (see fig.1 'Milestones').

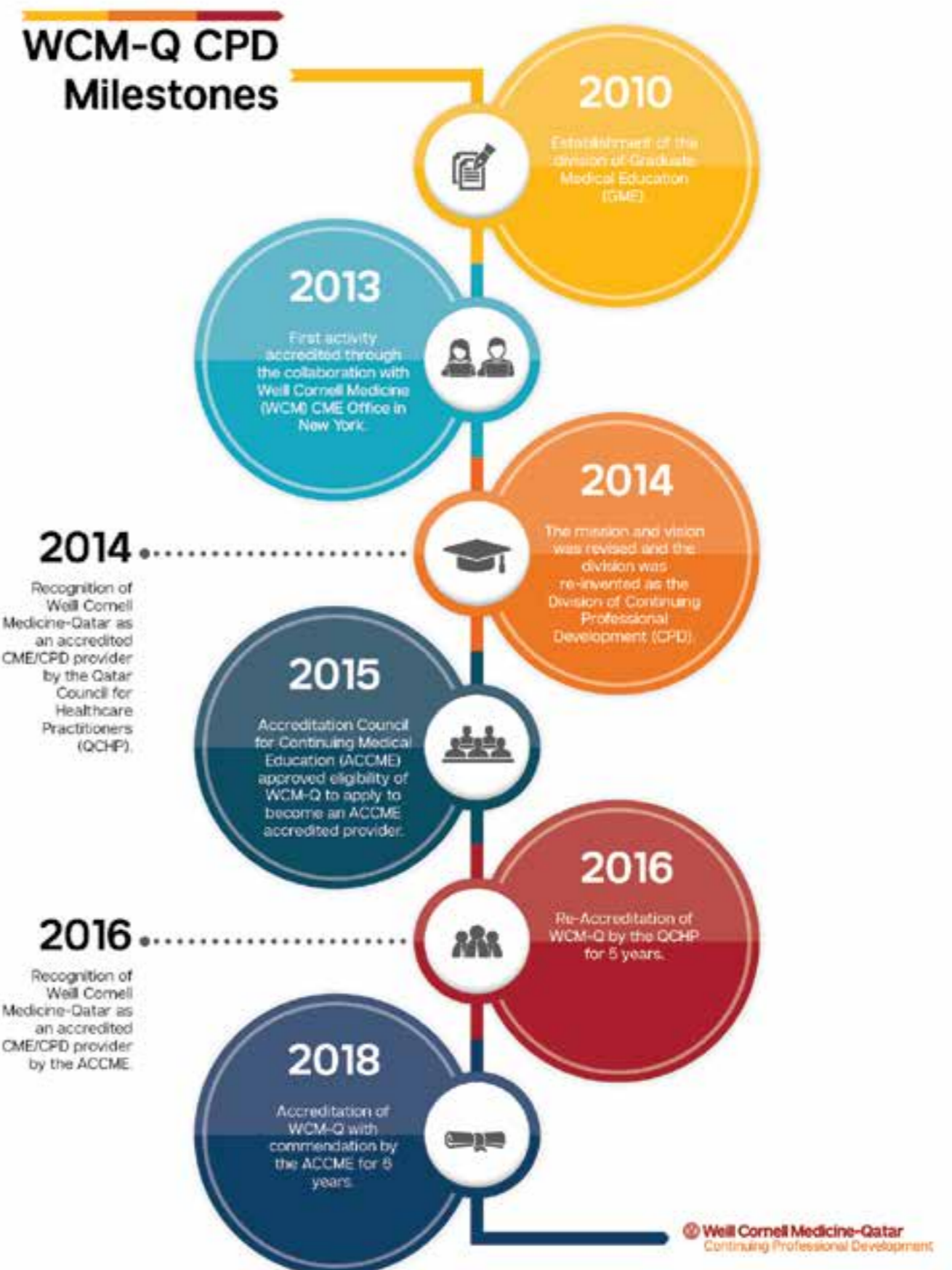
The international recognition by the ACCME is further evidence of the quality and depth of the CME/CPD activities developed at WCM-Q, which are carefully designed to meet the needs of the healthcare workforce in Qatar and beyond. This is achieved

by advancing interprofessional collaborative practice, addressing public health priorities, creating behavioral change, showing leadership, leveraging educational technology, and demonstrating the impact of education on healthcare professionals and patients. Additionally, WCM-Q is recognized locally as an accredited provider by the Qatar Council for Healthcare Practitioners (QCHP).

The division is led by Dr. Thurayya Arayssi, professor of medicine and senior associate dean for medical education and continuing professional development, who is supported by Ms. Deema Al-Sheikhly, director, and Ms. Laudy Mattar, division manager. The remainder of the team comprises Ms. Zara Lamri, manager for marketing and evaluation, CPD coordinators Ms. Ameena Abdul Rahim and Ms. Safia Rabia, and administrative assistant Ms. Elaine Dela Rosa.



Through the Division of CPD, WCM-Q was awarded the Accreditation Council for Continuing Medical Education (ACCME's) highest level of accreditation – Accreditation with Commendation.



Activities accredited by the CPD Division in 2018/2019



Clinical Sciences

WCM-Q Grand Rounds
 Human Dimensions of Medicine
 The Vagus nerve as a key mediator in the Microbiota-Gut-Brain axis: from Research to Clinical Implications
 Breaking Bad News
 Psychiatry for the Non-Psychiatrist
 Ways of Being: The Value of Theatre in Medical Practice
 Intersection of Law and Medicine Series:
 Complementary and Alternative Medicine: A Regulatory Perspective Genetically Enhanced Humans

Clinical Skills and Simulation Laboratory

Optimizing Health Professions Education with Simulation-Based Learning
 EuSim Level 1 Course

Clinical and Faculty Affairs

Achieving Promotion through Clinical Expertise

Institute for Population Health

Mastering Emotional Intelligence Level
 Certificate in Clinical Nutrition
 Systematic Review: An Introductory Workshop
 Lifestyle Medicine: An Emerging Healthcare Trend that Inspires. An Institute for Population Health Symposium
 Bridging the Gap Medical Interpreters Training
 Cultural Competence in Healthcare workshop

Medical Education

Medical Education Journal Clubs
 Workshop on Item Writing and Assessment in Medical Education
 Medical Education Research Forum
 Musculoskeletal Anatomy for Physicians

Distributed E-library

Expanding Your Toolkit: Building Games into Your Teaching
 Create Your First Online Lesson



Research Education for Clinicians



Medical Education

Mission Accomplishments

The Division of Continuing Professional Development aims to promote educational endeavors, which extend beyond the undergraduate program and align with the mission of WCM-Q. To this end, the mission is to:



Provide high-quality professional development opportunities for physicians and other healthcare professionals based on identified needs and the latest scientific and medical developments that will lead to the improved health care of patients



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

Continuing Professional Development

Target Audience

WCM-Q's 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 2018 to June 2019, up to 2,103 healthcare practitioners and educators (34% physicians, 28% nurses) participated in activities that were QCHP and ACCME accredited (figure 1) with the majority of the participants coming from the private sector.

% Attendees by Profession

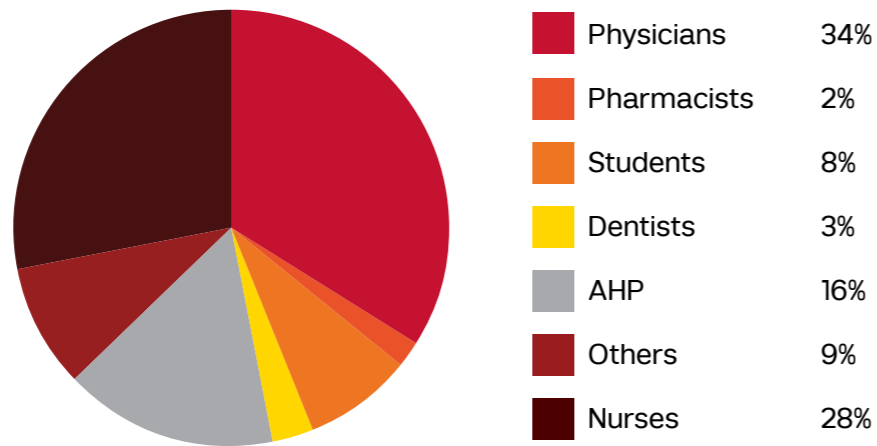


Figure 1: Breakdown of attendees at WCM-Q CME/CPD accredited activities by profession.

Content

WCM-Q's activities are varied in context. The monthly multi-disciplinary WCM-Q Grand Rounds 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 or are geared for an inter-professional audience. By providing different activity types, WCM-Q fulfills its mission to offer a variety of educational activities.



Dr. Thurayya Arayssi leads the Division for Continuing Professional Development.

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 below are from participants indicating that they "agreed" or "strongly agreed" that they obtained new knowledge as well as skills, abilities and/or strategies that could affect patient outcomes and that the activity will impact their competence and/or their performance (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. 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 (>90%), scientifically sound, evidence-based, objective and balanced (>94.12%).

How well WCM-Q Designed Activities around Core Competencies

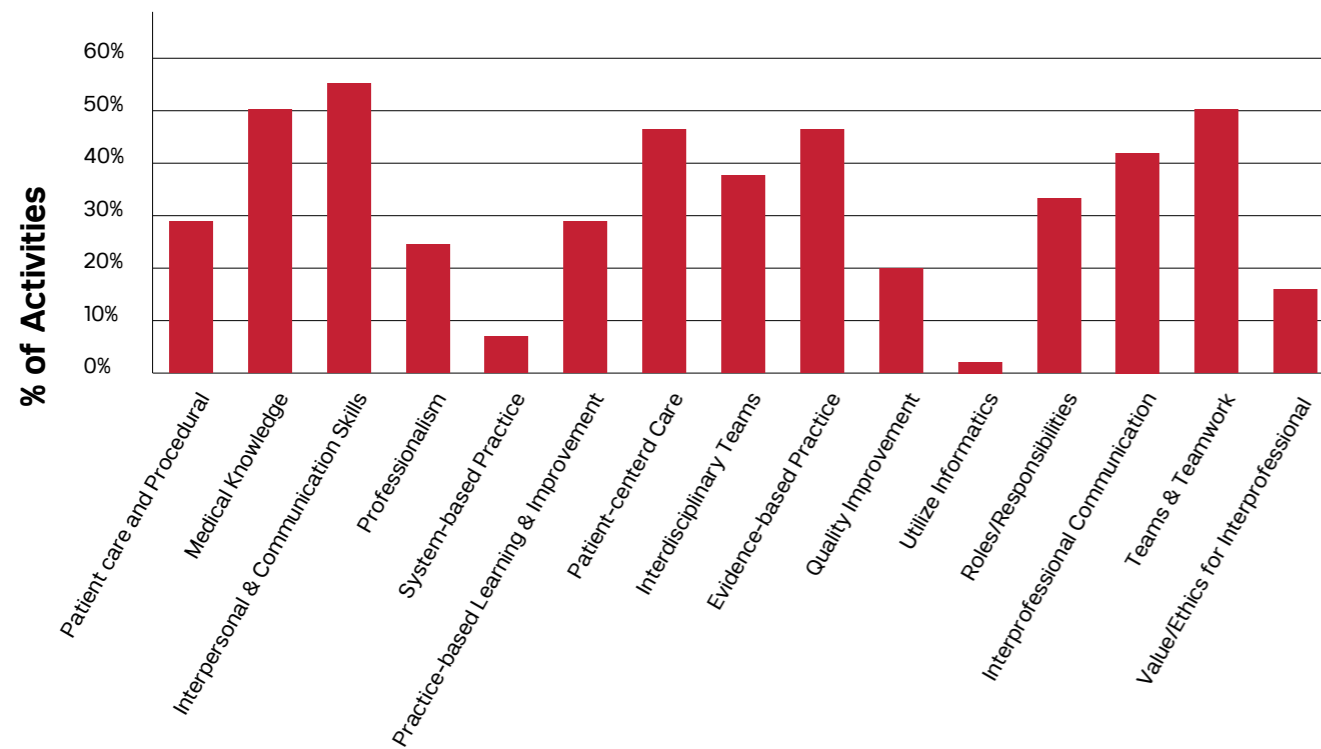


Figure 3: Showing the variety of core competencies around which activities are designed.

CME Oversight Committee Members

The CME Oversight Committee plays 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

CME Committee Members

Thurayya Arayssi, MD
Professor of Medicine
WCM-Q

Liam Fernyhough, MD
Assistant Professor of Medicine
WCM-Q

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

Alicia Tartalo, PhD
Assistant Professor of Education in Medicine
WCM-Q

Paul Dijkstra, MD
Assistant Professor of Medicine
Aspetar

Mohamed ElShazly, MD
Assistant Professor of Medicine
WCM-Q

Barbara Blackie, MD
Associate Professor of Pediatrics
Sidra Medicine

Sohaila Cheema, MD
Assistant Professor of Healthcare Policy and Research
WCM-Q

Sumeja Zahirovic, MD
Assistant Professor of Medicine
WCM-Q

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

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

Continuing Professional Development

Meeting The Needs Of Our Healthcare Practitioners

WCM-Q CME/CPD Activities 2018-2019

The overall number of accredited activities for CME/CPD credits increased by 14% compared to 2017-2018



Accredited activities

63 CME/CPD accredited activities were provided offered by WCM-Q



Credit hours

8,515 QCHP hours awarded

9,284 AMA PRA Category 1 Credits™ awarded



Participants

2,103 Participants attended activities at WCM-Q

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. The series is developed by an interdisciplinary committee of experts in various areas of healthcare and research. The members are 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.

WCM-Q Grand Rounds Committee Members:

Stephen Atkin, MD
Professor of Medicine, WCM-Q

Thurayya Arayssi, MD
Professor of Medicine, WCM-Q

Sheila Qureshi, PhD
Senior Lecturer, Chemistry, WCM-Q

Sohaila Cheema, MD
Assistant Professor of Healthcare Policy and Research WCM-Q

Mary Parrott, MA
Coordinator, CPD, CNA-Q

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

Christopher Triggle, PhD
Professor of Pharmacology, WCM-Q

Aicha Hind Rifai, MD
Assistant Professor of Clinical Psychiatry, WCM-Q

Laudy Matter, MMI
Manager, CPD, WCM-Q

Dominique Laatz, DDS
Oral Surgeon Team, German Dental Center

Ameena Abdul Rahim, MSc
Coordinator, CPD, WCM-Q

Safia Rabia, MSc
Coordinator, CPD, WCM-Q

Maria Paiva, PharmD
Manager - Business Operations, Cardiac Program, PICU, & Infectious Disease, SIDRA

Therese Lanigan, RN
Clinical Nurse Specialist, SIDRA

The series welcomed up to 1,300 healthcare practitioners from both the public and private sector (Figure 4) who attended 25 presentations delivered by 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.

% Grand Rounds Attendees

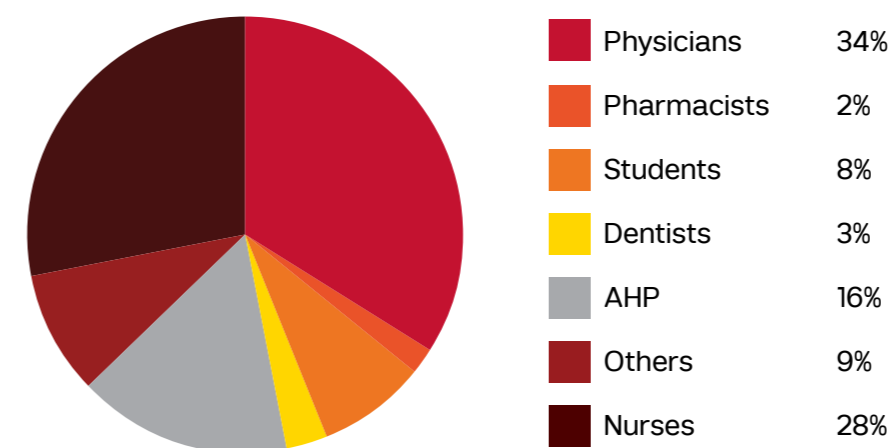


Figure 4: Grand Rounds breakdown of attendees at WCM-Q CME/CPD accredited activities

Continuing Professional Development

Grand Rounds 2018-2019



Dr. Todd Simon

*Teaching in Medicine:
Adding Struts to the Goo*



Dr. Dewesh Agarwal

*Abdominal Surgical
Emergencies in Children*



Dr. Waseem Kotoub

*Music Therapy: History,
Methods, and Application
in Clinical Practice*



Dr. Ghizlane Bendriss

*The Gut Microbiota in
Health and Diseases:
A New Therapeutic Target?*



Dr. Roger L. Berkow

*Pediatric Oncology a
30-year Perspective*



Dr. Craig Tanner

*Plantar Heel Pain in
Qatar - Management and
Challenges from a Podiatry
Perspective*



Dr. Muhamud Verjee

*Food Poisoning - A Moving
Experience*



Dr. Jatin M. Vyas,

*We All Contribute to the
Learning Environment*



Dr. Shane Pawluk

*Abuse of Over-The-Counter
Medications: A Growing
Concern for the Health
Care Community*



Dr. Alexandra Butler

*Diabetes, The Ticking Time
Bomb*



Dr. Aisha Ahmad Yousef

*Enhanced Recovery After
Surgery (ERAS) in
Gynecology*



Dr. Sanjiv Kaul

*Lifestyle and
Cardiovascular Risk*



Dr. Liam Fernyhough

*A New Era of
Anticoagulation*



Dr. John F. Mahoney

*Why do Generational
Differences Pose a
Challenge to Educators?*



Dr. Sumeja Zahirovic

Diagnosis of Low Back Pain



Dr. Shahrads Taheri

*The Pathophysiology and
Management of Obesity*



Dr. Dominique Laatz

*Oral Cancer: Basic Facts
and Early Detection*



Dr. Mai Mahmoud

*The Older Patient: Updates
and Challenges*



Dr. Dora Stadler

*Medical Professionalism in
the Age of Social Media*



Dr. Mohamed B. Elshazly

*The Emerging Role of Smart
Wearable Devices
in Cardiovascular Disease
Prevention and Management*



Dr. Felice Watt

*Key Issues in Women's
Mental Health*

Continuing Professional Development

LIVE ACTIVITIES (Conferences, Symposiums, Workshops)

Musculoskeletal Anatomy for Physicians

The musculoskeletal anatomy workshop was developed in collaboration with Aspetar Orthopaedic and Sports Medicine hospital to enhance their physicians' essential anatomical, radiological and clinical knowledge of the musculoskeletal system. The workshop was co-directed by Dr. Ameer Raoof, associate professor at WCM-Q and Dr. Louis Holtzhausen, sports medicine physician at Aspetar. Additional

speakers/facilitators included Dr. Targett and Dr. Maryam Al-Naimi from Aspetar and Dr. Avelin Malyango, and Dr. Mange Manyama from WCM-Q. It was comprised of live instructional sessions conducted in the anatomy lab at WCM-Q for demonstrations and discussions on pro-sected specimens as well as online instructional modules. The resources were intended to provide a thorough review and feedback of anatomy knowledge to physicians that would effectively save time and enrich their clinical skills.

Intersection of Law and Medicine Series

The Intersection of Law and Medicine series comprises interactive seminars aimed at providing healthcare practitioners with greater awareness of legal and ethical issues that impact their practice in the State of Qatar.

Dr. Ameer Raoof (far left) co-directed the musculoskeletal anatomy workshop.



Complementary and Alternative Medicine: A Regulatory Perspective

The regulation of complementary and alternative medicine (CAM) in Qatar was an exciting topic to be discussed as part of the Intersection of Law & Medicine series. The symposium brought together local and International legal and healthcare professionals to discuss the current laws regulating the practice, practitioners and the products of complementary and alternative medicine (CAM) in Qatar, integrating CAM into conventional healthcare systems, and the opportunities and challenges presented by CAM, among other related topics. The symposium featured a series of presentations and a panel discussion.

Amongst the speakers was Dr. Jayarajan Kodikannath, academy director of the Kerala Ayurveda Academy in India and San Francisco, who spoke about the practice of Ayurveda and the regulatory and licensing efforts underway to its integration in conventional healthcare systems in USA and India. Other topics included evidence-based approaches to integrating complimentary medicine within conventional healthcare delivery, as well as the framework of CAM regulations set out by the World Health Organization and the European Union, and potential challenges in regulating CAM through licensing CAM practitioners and products. A number of practitioners of complementary medicine also presented their own perspectives of their practice and the licensure efforts underway of their professions.

Genetically Enhanced Humans

In collaboration with Hamad Bin Khalifa University (HBKU), the activity heard lectures from practicing physicians, lawyers, legal academics, researchers and ethicists who convened to discuss the legal and ethical implications of new gene editing technologies that allow for the creation of 'genetically enhanced humans'. The lectures and panel discussions featured pressing issues prompted by the recent development of technologies such as CRISPR, a powerful gene editing tool that a scientist in China claims to have already used to produce twin baby girls with modified genes that make them resistant to HIV.

Presenters included Dr. Barry Solaiman, assistant professor at HBKU College of Law and Public Policy, and co-director of the activity, who explained the existing legal framework governing genetics research in Qatar and discussed the challenges involved in developing regulations to take account of developments in gene editing technologies. Dr. Sunanda Holmes, general counsel and chief compliance officer at the American University in Cairo, spoke about the global legal frameworks governing gene editing. Dr. Jeremie Arash Rafii Tabrizi, professor of genetic medicine in obstetrics and gynecology, spoke about the possible uses for genetic technologies. Dr. Jeffrey Skopek, lecturer in medical law, ethics and policy at the University of Cambridge, and Dr. Mohammed Ghaly, professor of Islam and biomedical ethics at the HBKU Research Center for Islamic Legislation & Ethics, addressed ethical perspectives on human gene editing.



Dr. Jayarajan Kodikannath spoke at a Law & Medicine symposium on the topic of alternative medicine.

Continuing Professional Development

Lives in Medicine Series

Ways of Being: The Value of Theatre in Medical Practice

As part of the Lives in Medicine series, the impact of drama on medicine, healthcare and patient wellbeing, including theatrical interventions, was explored. The activity was designed to improve healthcare practitioners' interpersonal and audio-visual communication abilities by demonstrating how theatrical knowledge can enhance their skill set. Utilizing a series of short, shared dramatic readings, and engaging in interesting performative exercises, attendees gained a full understanding of the degree to which drama can help a medical practitioner achieve beneficial knowledge of a patient's hopes and fears. Furthermore, through an introduction to the benefits of composing self-reflective dramatic writing that explores daily medical practice, attendees were able to develop greater personal understanding of the dynamics of the clinical setting opening up the possibility of attendees undertaking lifelong self-development through exploring the world's dramatic literature.

Presenters included Dr. Rodney Sharkey, associate professor of English, Dr. Kristina Golkowska, professor of English, and Dr. Aicha Hind Rifai, assistant professor of clinical psychiatry who presented on the history of drama and performance, a close analysis of theatrical scenes, scripts, roles and performance in everyday life and medical practice and delivered a physical theatre workshop. Additionally, the students Nada Mobayed and Isa Almannai supported the faculty by staging dramatic performances of medical incidents which were followed by engaging group discussions.



Dr. Aicha Hind Rifai was one of the presenters of the Lives in Medicine activity.

Medical Education

The inaugural Medical Education Research Forum was launched to provide an opportunity for those involved in teaching the next generation of doctors, nurses and healthcare workers to hear about the latest techniques and innovations to come from the study of medical education. It also allowed delegates to discuss local medical education challenges and to identify current trends in the field.

Two world-renowned speakers, Dr. George Thibault, Federman professor, emeritus and former president of the Josiah Macy Jr. Foundation and Dr. Julie Youm, assistant dean, education compliance and quality, University of California, Irvine gave the keynote presentations in the area of interprofessional education and technology in medical

education. This was followed by a local presentation, a student panel discussion on the current and future challenges faced by millennial learners. The conference ended with a research poster session featuring studies conducted by medical education professionals in Qatar. The poster winners were:

- 1 **Narjis Mumtaz (HMC):** Retrospective analysis of anesthesia residents OSCE assessment results 2016-2018 – Does OSCE measure what it promises?
- 2 **Alla El-Awaisi (QU):** Exploring healthcare facilitators' perceptions in delivering interprofessional activities in Qatar: A qualitative study.

Ruben Peralta (HMC): Introduction of a novel trauma & critical care fellowship program for clinical staff: Lessons in regional medico-cultural differences.

Adam Larson (WCM-Q): The impact of learning process and curricular innovation on medical students' choice of specialty: A mixed methods study from Qatar.

- 3 **Deema Al-Sheikhly (WCM-Q):** Strategies for building a CPD program in an undergraduate medical school: Lessons learned.

Breaking Bad News

The breaking bad news workshop was developed in collaboration with the Qatar Cancer Society, targeting physicians from the Primary Health Care Corporation (PHCC) to support patient communication in a sensitive and constructive manner. The full day program included the latest best practice on communicating difficult diagnoses to patients through training exercises, role play sessions, and discussions.

The workshop featured presentations by Dr. Liam Fernyhough, assistant professor of medicine, Dr. Stella Major, associate professor of family medicine in clinical medicine, Dr. Alan Weber, visiting professor of English, Dr. Mohamud Verjee, associate professor of family medicine in clinical medicine, and Dr. Amal Khidir, associate professor of pediatrics. They addressed a variety of topics including

the positive effects of good patient-doctor communication and the evidence behind good communication outcomes and introduced participants to SPIKES protocol, designed to help doctors deliver bad news both sensitively and accurately.

Continuing Professional Development

UNESCO - Beirut

The regional teacher training course on the subject of ethics was developed in collaboration with the UNESCO Office for the Gulf States and Yemen, UNESCO Beirut and the Qatar National Commission for UNESCO.

Twenty-five participants from Qatar and the wider region convened at WCM-Q for the four-day Regional Ethics Teacher Training Course, which was designed to advance pedagogical capacity for ethics teaching and

improve the quality of ethics education around the world. The course forms part of a multifaceted capacity-building strategy designed to help UNESCO member states address ethical issues arising from rapid progress in medical and life sciences.

The program was opened by Dr. Ibrahim Bin Saleh Al-Nuaimi, undersecretary of the Ministry of Education and Higher Education, Dr. Khaled Machaca, WCM-Q associate dean for research, and

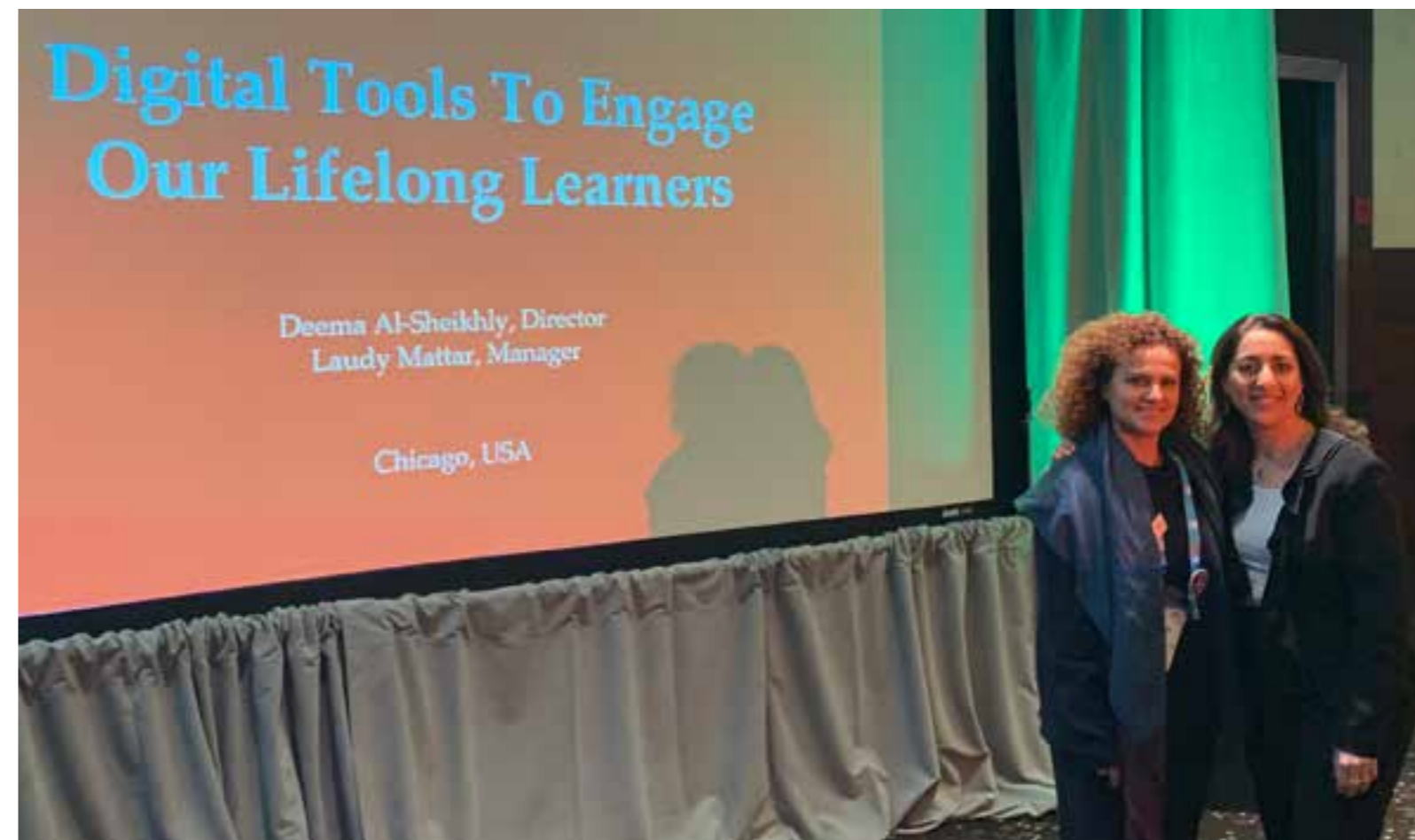
Dr. Anna Paolini, director of the UNESCO Doha office. Speakers at the event included Dr. Paolini, Dr. Mohammed Ghaly, professor of Islam and biomedical ethics at the Research Center for Islamic Legislation & Ethics, and UNESCO program specialist for social and human sciences Dr. Seiko Sugita. Three UNESCO training specialists delivered the course content: Dr. Ben Ammar, Dr. Marie Pinsart and Mr. Alan Leroux.



UNESCO's Regional Ethics Teacher Training Course attracted people from throughout the region.

Publications and Presentations

- Al-Sheikhly D and Mattar, L (2019) Digital Tools to Engage Our Lifelong Learners. ACCME 2019 Meeting: Spring Forward, Chicago, USA.
- Al-Sheikhly D (2019) Innovative Programs to Meet the Needs of an Evolving Healthcare System. ACCME 2019 Meeting: Spring Forward, Chicago, USA.
- Al-Sheikhly D, Stadler D, Mattar, L, and Arayssi T (2019) Strategies for Building a CPD Program in an Undergraduate Medical School: Lessons Learned. Medical Education Research Forum, Doha, Qatar.
- Major S, Brisseau G, Vogensen J, Sawan L, and Al-Sheikhly D (2019). Caught 'Tween Appendix and Fallopian, Why Not Just Dilate the Designer Anus? Medical Education Research Forum, Doha, Qatar.
- Mattar, L, Al-Sheikhly D, Aboulsoud, S, Gordon, J, Campbell, C and Arayssi T (2019). Continuing Professional Development Practice Gaps of Primary Care Physicians: A Perceived Needs Assessment. Medical Education Research Forum, Doha, Qatar.



Laudy Mattar and Deema Al-Sheikhly delivered a presentation in Chicago on engaging lifelong learners.

Clinical and Faculty Affairs



Clinical and Faculty Affairs

The Office of Clinical and Faculty Affairs supports the appointment and promotion processes for all WCM-Q academic staff, which includes resident faculty, research associates, and postdoctoral associates, and affiliated faculty. The office also supports the implementation of policies, oversees the annual performance review process, maintains academic staff records, is the repository for academic staff data, and facilitates and monitors the credentialing of our clinical resident faculty.

FULL-TIME FACULTY	APPOINTED
Medical Education Faculty	43
Pre-medical Education Faculty	18
Research Faculty	18
Total	79
VOLUNTARY FACULTY	APPOINTED
Hamad Medical Corporation	435
Aspetar	17
Primary Health Care Corporation	27
Sidra Medicine	198
Other Institutions	9
Total	686



The Office of Clinical and Faculty Affairs holds orientation events for affiliated faculty members.

Appointments and Promotions

WCM-Q Resident Faculty

During the AY 2018-2019, WCM-Q welcomed five new full-time faculty members and celebrated the promotion of four of our colleagues.

New appointments

Dr. Reshma Bholah was appointed assistant professor of pediatrics in August 2018. She graduated from WCM-Q in the Class of 2011 and completed her residency in pediatrics at Virginia Commonwealth University in Richmond, Virginia, followed by sub-specialty training in pediatric nephrology at the same institution. Her research interests include chronic kidney disease, dialysis, kidney transplantation, and vasculitis. She is passionate about teaching and patient care, especially for medically complex adolescents who require significant time and attention.



Dr. Ali Chaari was appointed lecturer in biochemistry in October 2018. He holds a PhD in biochemistry and cellular biology (2012) from the University of Versailles, France, which was followed by three years of postdoctoral training at WCM-Q. Prior to joining the faculty, Dr. Chaari was a teaching assistant in WCM-Q's Pre-medical Education Division for three years.



Clinical and Faculty Affairs



Dr. Anna Halama was appointed assistant professor of research in physiology and biophysics in April 2019. After obtaining her PhD in metabolomics in 2013 from the Technical University of Munich, Germany, she completed two years of postdoctoral training at WCM-Q. Prior to joining the faculty, she was a research associate in physiology and biophysics in WCM-Q's Research Division for over two years. Dr. Halama conducts research in metabolomics, focusing on an improved understanding of complex diseases.

Dr. Thurayya Arayssi was promoted to professor of clinical medicine in October 2018 in recognition of her international reputation as an academic leader, clinician, and clinical researcher. Dr. Arayssi joined WCM-Q in 2008 from the American University of Beirut. At WCM-Q she has held several leadership positions and is currently serving as senior associate dean for medical education and continuing professional development. In addition, Dr. Arayssi maintains an active clinical practice at Aspetar. Her current research interests focus on rheumatoid arthritis and Behçet disease. Over the years, she has presented her scientific findings at many international conferences and has authored more than 100 peer-reviewed articles, abstracts, and book chapters. Dr. Arayssi received her MD from the American University of Beirut, Lebanon and completed her residency at the University of Rochester, New York, followed by fellowships in geriatric medicine at the University of Rochester and in rheumatology at the National Institutes of Health in Bethesda, Maryland. She is a fellow of the American College of Physicians and American College of Rheumatology.

Dr. Majda Sebah was appointed as lecturer in chemistry in October 2018. She holds a PhD in chemistry (2007) from Queen Mary University of London and served one year as postdoctoral fellow at the same institution. She also holds a Postgraduate Certificate in Education (2015) from Imperial University London. Prior to becoming a faculty member, she served as teaching specialist in chemistry in WCM-Q's Pre-medical Education Program for three years.



Promotions

Dr. Charbel Abi Khalil was promoted to associate professor of genetic medicine and associate professor of medicine (investigation) in January 2019 in recognition of his sustained regional reputation as a cardiovascular researcher. He holds an MD from the University of Latvia and a doctorate in genetics from the University of Paris VII, France and joined WCM-Q in 2013. His research interests focus on cardiovascular epidemiology, epigenetics in cardiovascular disease, cardiovascular complications of diabetes, and cardiovascular genetics. He also serves as a consultant in cardiology at HMC's Heart Hospital.



Dr. Sheila Qureshi was promoted to associate professor of chemistry in December 2018 in recognition of her success in the classroom, contributions to curriculum development, and research in teaching and learning. Dr. Qureshi has been an active member of WCM-Q's pre-medical faculty for over 11 years. In addition to teaching, she is involved in curriculum development and has served on numerous committees. Her research interests focus on teaching and learning. She holds a PhD in synthetic organic chemistry from the University of Wales Institute of Science and Technology

(now University of Cardiff) and conducted her postdoctoral training at the University of Zurich. Prior to joining WCM-Q in 2007, she served as senior lecturer in chemistry at People's College, affiliated with Nottingham Trent University, UK and at Oaklands College, affiliated with the University of Hertfordshire, UK. She also held the position of lecturer in organic chemistry at the University of Greenwich, London.

Dr. James Roach was promoted to professor of chemistry in July 2018 in recognition of his success in the classroom, his dedication to the students, and his outstanding performance as an educational leader. Dr. Roach joined WCM-Q in 2009. He holds a PhD in physical chemistry from the University of Oklahoma. His outstanding teaching career spans more than 20 years at universities in the United States and in the Middle East, including Campbellsville University in Kentucky, Emporia State University in Kansas, and Alfaisal University in Riyadh, Saudi Arabia. His research interests focus specifically on the uses of

colloidal systems in wastewater remediation, in enhanced oil recovery, in seawater desalination, and on chemical education. Since October 2018, he has also served as assistant dean for pre-medical education.

Affiliated 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 2018-2019, 115 colleagues from Hamad Medical Corporation (HMC), the Primary Health Care Corporation (PHCC), Aspetar, Sidra Medicine, and the Heart Center at Al Ahli Hospital received academic appointments at Weill Cornell Medical College (WCMC), five of them at senior level ranks. Among the new faculty, we welcomed four of our alumni: Dr. Noor Al-Khori (Sidra), Dr. Muneera Al-Muhannadi (PHCC), Dr. Tania Jaber (HMC) and Dr. Noor Suleiman (HMC), who joined the affiliated faculty after completing their training as physicians.

In addition, during this academic year, seven faculty members achieved promotion:

- Khalid Mohd A. Al-Ansari (Sidra), promoted to professor of clinical pediatrics
- Amin Ahmad A. Jayyusi (HMC), promoted to associate professor of clinical medicine
- Mohammad Ahmad Yousef Albanna (HMC), promoted to assistant professor of clinical psychiatry
- Mostafa Ahmed Ibrahim Elbaba (HMC), promoted to assistant professor of clinical pediatrics
- Celeste Geertsema (Aspetar), promoted to assistant professor of clinical medicine
- Ahmed Saied Abdelaziz Sabry (HMC), promoted to assistant professor of clinical radiology
- Ahmed Mohamed Mohamed Suliman (HMC), promoted to assistant professor of clinical surgery

Clinical and Faculty Affairs

Activities and Events

Faculty Orientation

In September 2018, WCM-Q hosted its annual faculty orientation for affiliated faculty. The event attracted more than 62 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.



A lunch was held to honor faculty members who had been promoted during the past academic year.

Luncheon to Honor Promoted Faculty

In September 2018, Dean Javaid Sheikh and Dr. Robert Crone, vice dean for clinical and faculty affairs, hosted a recognition luncheon for 17 faculty members from WCM-Q, Sidra, Aspetar, and HMC who had been promoted during the previous academic year. The event was a new initiative to recognize the achievements of faculty as well as facilitate communication and collaboration between resident faculty and affiliated faculty.

Faculty Promotion Workshops

In October 2018, 33 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 the 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 February 2019. 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, vice dean for clinical and faculty affairs, and Dr. Alicia Tártalo, assistant dean for clinical and faculty affairs, hosted the traditional appreciation luncheon, which was attended by Dr. Jane E. Salmon, WCM associate dean for faculty affairs and 42 other NY colleagues.



Dr. Adeel Butt (center), delivered a lecture in the Deans' Lectureship Program.

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

Two of our senior affiliated faculty were invited to give lectures at Weill Cornell Medicine in New York as part of the Deans' Lectureship program, established in 2017 by Dr. Javaid Sheikh, dean of WCM-Q and Dr. Augustine Choi, dean of Weill Cornell Medicine.

Dr. Adeel Butt, professor of medicine and professor of healthcare policy and research at WCM-Q and WCM NY, and vice chair of the department of

medicine, vice chair for faculty affairs and director of the clinical epidemiology research unit at HMC, delivered a lecture entitled 'The other big data in healthcare: creating a narrative one story at a time', in December 2018.

Dr. Ibrahim Janahi, professor of clinical pediatrics at Weill Cornell Medicine, and director of research and division chief of pediatric pulmonology at Sidra Medicine, delivered a lecture entitled 'How clinicians contribute to personalized medicine: Qatari CF population as an example', in February 2019.



Research

Research

The mission of the Biomedical Research Program (BMRP) at Weill Cornell Medicine Qatar is to perform basic, translational and clinical research to advance the health needs of the people of Qatar, with a primary focus on precision medicine. Through conducting cutting-edge research targeting the most pressing health needs of the nation, we aim to discover new therapies and advance a better understanding of disease pathophysiology that will improve human health in Qatar. We also aim to help create a knowledge-based economy by training and supporting local scientists who will add to Qatar's human, technical and research capacity. Finally, and in line with Qatar National Vision 2030, there is a focus upon monetizing the results of WCM-Q's research to

help diversify the economy away from hydrocarbons and cement Qatar's reputation as a regional hub for biomedical research. This will be accomplished through licensing discoveries, partnerships with industry and biotech startups in Qatar.

The research effort at WCMQ has continued to enjoy significant success this year, with prominent findings in the fields of diabetes, cardiovascular disorders and the human metabolome. The program also has a focus upon continuously improving our understanding of basic science - that is science which underpins the way in which life and the universe operate. Studies conducted into basic science include the molecular mechanisms of disease and translational and clinical research

findings aimed at improving health and healthcare throughout the region.

An institution is judged upon the quality of the research it conducts and the studies which it publishes. WCM-Q faculty have continued to excel in their scholarly productivity with more than 1,070 papers published since 2010, which have received more than 32,000 citations resulting in a WCM-Q institutional h-index of 67. Significantly, WCM-Q enjoys one of the highest field-weighted citation indices regionally, demonstrating that the research being conducted is having a strong impact internationally and is highly regarded by world-leading publications.



Research by Dr. Grigory Ostrovskiy, student Rana Abualsaud and Dr. Ziyad Mahfoud examined heat-related hospital admissions.

ADMIN

BMRP: The WCM-Q research effort has been remarkably successful by focusing on basic, clinical and translational studies targeted at building Qatar's infrastructure and in the process making WCM-Q an international center of excellence for biomedical research. The BMRP now comprises 25 active laboratories investigating areas ranging from basic molecular and cellular pathways to translational and clinical projects, including research into some of the most pressing health issues facing Qatar and the wider region, such as diabetes, obesity and neurogenetic abnormalities. Nine central core laboratories support the research effort, providing a range of cutting-edge expertise and platforms, including deep phenotyping of clinical cohorts. The cores comprise: Genomics; Imaging; Basic; Proteomics; Bioinformatics & Metabolomics; miRNA; Biostatistics; Clinical Research Support; and a Vivarium.

FY19 is closing with more than 138 employees – including 20 non-faculty (postdoctoral and research associates). The majority are hired locally and trained in our labs. A total of 215 research specialists and clinical research coordinators have been trained since 2009.

Research Division currently has 34 active volunteers and visiting researchers. Since 2008, a total of 339 volunteers and visiting researchers have been trained with the objective of gaining experience in an actual research lab environment.

Dr. Rayaz Malek received the prestigious Camillo Golgi Prize for his work on diabetes mellitus

FUNDING

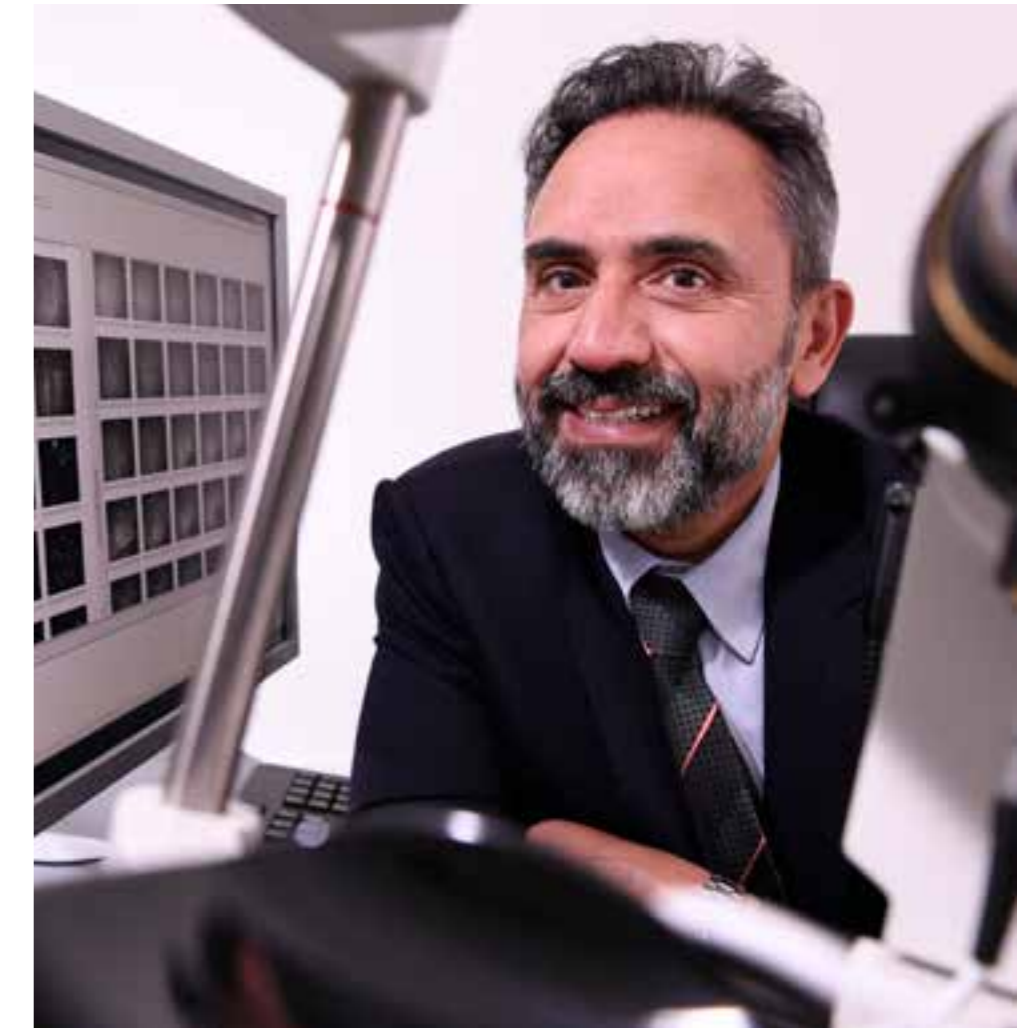
\$118.3M awarded in competitively-funded extramural programs through QNRF and others over the past 11 years.

COLLABORATIONS:

We continue to collaborate with local institutions and have active research programs with HMC, Sidra, QBB, ADLQ, QU and HBKU, with adjunct faculty appointments for WCM-Q faculty, and we host QU and HBKU students in WCM-Q labs to pursue their research activities.

RECOGNITION/AWARDS:

Professor of medicine Dr. Rayaz Malik was awarded the prestigious Camillo Golgi Prize for outstanding contributions in the field of the histopathology, pathogenesis, prevention and treatment of the complications of diabetes mellitus. The prize, which is awarded by the European Association for the Study of Diabetes (EASD), recognizes investigators who have published research papers in internationally recognized scientific journals over the last five years which demonstrate continuing activity, originality and excellence in the field. Dr. Malik is the first recipient in the history of the Camillo Golgi Prize to be based outside Europe.



Research

Publications

WCM-Q research reveals secrets of the cell

<http://qatar-weill.cornell.edu/media-and-news/news/story/wcm-q-research-reveals-secrets-of-the-cell>

WCM-Q researchers, led by Dr. Nancy Nader, have discovered that a protein known to play a key role in cholesterol uptake and brain development is also crucial to the process of reproduction.

Discovered in 1922, the Very Low-Density Lipoprotein Receptor protein, has long been known to facilitate the migration of neurons in the developing brain and to play a role in cholesterol uptake. Until now its role as a chaperone protein for membrane receptor trafficking was unknown.

The study was supported by the Qatar National Research Fund grant NPRP 7-709-3-195 and the Biomedical Research Program of Weill Cornell Medicine-Qatar, a program supported by Qatar Foundation.

WCM-Q research underpins international effort to create genetic map of human proteins

<http://qatar-weill.cornell.edu/media-and-news/news/story/wcm-q-research-underpins-international-effort-to-create-genetic-map-of-human-proteins>

A groundbreaking study first conducted by researchers at WCM-Q has been expanded upon by an international team of scientists, leading to a detailed genetic map of human proteins.

The work, led by scientists at the University of Cambridge and MSD, characterized the genetic

underpinnings of the human plasma 'proteome', identifying nearly 2,000 genetic associations with almost 1,500 proteins. Previously, only a small fraction of these associations were known, mainly because researchers could measure only a few blood proteins simultaneously in a robust manner.

Herpes type 1 virus is emerging as a main cause of genital disease in Asia

<http://qatar-weill.cornell.edu/media-and-news/news/story/herpes-type-1-virus-is-emerging-as-a-main-cause-of-genital-disease-in-asia>

Researchers at WCM-Q found that transmission patterns of herpes simplex virus type 1 (HSV-1) are changing in Asia in a striking way, and that this virus is emerging as a key sexually transmitted infection. According to findings published in the *Journal of Clinical Infectious Diseases*, 20 percent of genital herpes cases and six percent of genital ulcer cases are now caused by HSV-1.

HSV-1 is one of the most widespread infections globally. It is normally transmitted orally leading to blisters and lesions around the mouth known as oral herpes. Recent data from the United States and Western Europe, however, showed that HSV-1 can also be transmitted sexually leading to genital herpes and genital ulcer disease. The data also indicated that the rate of genital infection is increasing in Western countries. Nonetheless, it was unknown whether this newly emerging trend is happening in other parts of the world.

However, the study, conducted by the Infectious Disease

Epidemiology Group (IDEG) at WCM-Q, demonstrated that this is also the case in Asia.

The study, entitled 'The epidemiology of herpes simplex virus type 1 in Asia: systematic review, meta-analyses, and meta-regressions', was conducted with funding from the Qatar National Research Fund through the National Priorities Research Program (NPRP 9-040-3-008).

WCM-Q research probes link between diabetes and breast cancer

<http://qatar-weill.cornell.edu/media-and-news/news/story/wcm-q-research-probes-link-between-diabetes-and-breast-cancer>

Researchers at WCM-Q have explored the links between type 2 diabetes and breast cancer in a new paper published in *Cancer Treatment Reviews*, a leading scientific journal.

The researchers, led by Dr. Dietrich Büsselberg, carried out a comprehensive review of a range of more than 200 existing diabetes and breast cancer studies, concluding that women with diabetes not only appear to have an increased risk of developing breast cancer, but also that diabetes supports breast cancer progression and can negatively impact the effectiveness of anti-cancer therapies.

The paper, entitled 'Challenges and perspectives in the treatment of diabetes associated breast cancer', also inferred that managing diabetes and treating cancer using a combination of anti-diabetic and anti-cancer drugs is likely to be more effective in the

treatment of diabetes-associated cancers.

The study was also worked on by senior research specialist Elizabeth Varghese and research specialist Sharon Varghese, both of WCM-Q. The work was supported by a Bridge Funding Grant (Nov 2017-current) awarded to Dr. Büsselberg by the BMRP program at Weill Cornell Medicine-Qatar, a program funded by Qatar Foundation.

WCM-Q research probes effects of date fruits on human metabolism

<http://qatar-weill.cornell.edu/media-and-news/news/story/wcm-q-research-probes-effects-of-date-fruits-on-human-metabolism>

A study revealed for the first time the specific effects of two popular varieties of dates on human metabolism.

The WCM-Q researchers analyzed a wide range of small molecules, called metabolites, which enter the bloodstream and remain in circulation for up to two hours after eating khalas and deglet nour dates.

Blood samples were collected from 21 healthy volunteers at five time-points following the ingestion of a glucose drink (used as a control), khalas dates, and deglet nour dates. Each volunteer was tested after ingesting each of the three products, with intervals of at least one week between each product.

Overall, the researchers found that 36 metabolites significantly increased in the bloodstream, of which some were specific to date fruit consumption. Several were metabolites of known polyphenols, such as caffeic acid, which can be

beneficial for those with complex chronic diseases, given its anti-oxidative and anti-inflammatory properties. The researchers also found that serotonin present in deglet nour dates quickly broke down into its metabolite (5-hydroxyindolacetate) following ingestion. This implies that these dates are not useful as a serotonin supplement in healthy individuals for mood, appetite and sleep regulation. Compared to khalas dates and the glucose drink, deglet nour also led to a sharp increase in blood sucrose levels.

This research was supported by a National Priorities Research Program – Exceptional Program grant (NPRPX-014-4-001) from the Qatar National Research Fund, a member of Qatar Foundation. The research team and Weill Cornell Medicine-Qatar are grateful for the support from the QNRF that made this translational research with implications for human health possible.

WCM-Q doctor takes part in innovative cancer surgery

<http://qatar-weill.cornell.edu/media-and-news/news/story/wcm-q-doctor-takes-part-in-innovative-cancer-surgery>

A doctor at WCM-Q wants to bring an innovative form of surgery for ovarian cancer to Qatar in the hope of improving survival rates among women.

Dr. Arash Rafii Tabrizi, professor of genetic medicine in obstetrics and gynecology at WCM-Q, recently took part in a new surgical protocol in France. Doctors believe that it may improve the survival rate of patients with ovarian cancer.

Currently, the standard treatment

is surgery to remove all tumors, followed by intravenous chemotherapy, but recurrence of the disease is common and Dr. Rafii Tabrizi believes this is because microscopic cancer cells are able to hide in the peritoneum.

An alternative is the concept of HIPEC - hyperthermic intraperitoneal chemotherapy – in advanced ovarian cancer. This involves heating the chemotherapy drugs and then applying them directly to the abdominal cavity rather than giving them intravenously. The heat provides a shock to the cancer cells which leads to cell death, and applying the chemotherapy directly to the abdomen allows it to be delivered in a higher concentration than delivering it intravenously.

WCM-Q professor named UK's 2nd most influential diabetes complications researcher

<http://qatar-weill.cornell.edu/media-and-news/news/story/wcm-q-professor-rayaz-malik-second-most-influential-diabetes-researcher-uk>

Dr. Rayaz Malik of WCM-Q was named the UK's second most influential clinical researcher in a list of 'Leaders in Diabetes Complications' compiled by Expertscape, the world's leading index of academic achievement and expertise in healthcare.

Dr. Malik, professor of medicine at WCM-Q, left the UK to join WCM-Q in 2014, but still holds an honorary professorship at his previous institution, the University of Manchester. Dr. Malik's success and the strong links with internationally renowned research institutions underlines WCM-Q's

Research

now well-established capacity and reputation for conducting world-class research.

Dr. Malik has pioneered the technique of 'corneal confocal microscopy' (CCM) over the last 15 years. CCM enables real time imaging of the corneal nerve fibers and identifies nerve damage in a growing list of peripheral and central neurodegenerative conditions including diabetic neuropathy, hereditary neuropathies, Parkinson's disease, multiple sclerosis, dementia and autism.

Transition of herpes simplex virus type-1 infection patterns in the US

<http://qatar-weill.cornell.edu/media-and-news/news/story/remarkable-transition-of-herpes-simplex-virus-type-1-infection-patterns-in-the-united-states>

Researchers at Qatar University (QU) and WCM-Q have described an evolution of the herpes simplex virus type-1 (HSV-1) epidemic in the United States, with less infection in childhood but more in adulthood, and less oral infection but more genital infection.

HSV-1 is a highly contagious virus and one of the most widespread infections globally. It is normally transmitted orally during childhood, leading to blisters and lesions around the mouth known as oral herpes. Recent data from several countries, however, showed that HSV-1 can also be transmitted sexually, through various sexual practices, leading to genital herpes and genital ulcer disease.

The QU and WCM-Q study, published in the prestigious journal BMC Medicine, developed a sophisticated mathematical model to quantitatively characterize the level and trend of the HSV-1 epidemic in the US. The study indicated that HSV-1 infection

is undergoing a more subtle transition than previously thought, with this infection propagating through four different modes of transmission in the population, and affecting different age cohorts in different ways. Oral-genital contact, in particular, was found to be playing an important role in infection transmission for young adults, with 25% of infections among them being genital and leading to genital herpes.

The study estimated that there are 3 million new HSV-1 infections every year, a level that will persist for several decades. Of this total, close to 500,000 will be genital infections, mainly through oral-genital contact. HSV-1 will persist as a major cause of first-episode genital herpes among youth in the US for decades to come, surpassing the contribution of that of HSV-2, a related infection transmitted mainly through sexual intercourse. HSV-2 has been historically the main cause of genital herpes until present times.

The study, 'Characterizing the Transitioning Epidemiology of Herpes Simplex Virus Type 1 in the United States: Model-Based Predictions', was conducted through a collaboration between QU and WCM-Q with funding from the Qatar National Research Fund through the National Priorities Research Program (NPRP 9-040-3-008).

WCM-Q researcher studying desert toxins could help find a cure for Alzheimer's

<http://qatar-weill.cornell.edu/media-and-news/news/story/wcm-q-researcher-studying-desert-toxins-could-help-find-a-cure-for-alzheimer-s>

A story from the deserts of the Middle East during the first Gulf War could potentially end with a cure for Alzheimer's disease.

Dr. Aspa D. Chatziefthimiou, a microbial ecologist and research scientist at WCM-Q, is part of an international consortium of more than 50 scientists researching neurodegenerative diseases like Alzheimer's, Parkinson's and ALS (also known as motor neuron disease or Lou Gehrig's disease). She is examining the role of desert cyanobacteria – previously called blue-green algae – and how the neurotoxins they produce may be at least partly responsible for the onset of a variety of neurodegenerative diseases.

Dr. Chatziefthimiou's research is supported by a National Research Priorities Project grant: 4-775-1-116: 'Toxin Production by Desert Cyanobacteria' from the Qatar National Research Fund, which was awarded to Dr. Renee Richer, who is currently an assistant professor at the University of Wisconsin in the US.

WCM-Q gains certification to use new research tool

<http://qatar-weill.cornell.edu/media-and-news/news/story/wcm-q-gains-certification-to-use-powerful-new-research-tool>

WCM-Q has joined an elite group of research centers around the world that are certified to use a powerful new research tool for investigating the complex roles of proteins in human disease.

The study of all identifiable proteins as a whole – also known as proteomics – is regarded as one of the most promising fields of biomedical research for the development of new treatments for an almost limitless range of diseases, including diabetes, cardiovascular disease and various forms of cancer. Including the new proteomics platform now established at WCM-Q, there are just 12 certified Olink service

providers in the world, three of which are in the US and eight in Europe.

The Olink platform gives researchers the ability to conduct 'multiplexed' protein analyses, meaning they can simultaneously observe multiple proteins involved in complex relationships with one another, giving greater insight into how these interactions give rise to disease.

The Olink technology enhances WCM-Q's capacity to drive research forward and improve understanding of many debilitating diseases. This augments pre-existing core facilities at WCM-Q that provide technical and instrumental support in several areas, including genomics, biostatistics, bioinformatics, metabolomics (study of the metabolism), and cellular imaging.

The technology also means WCM-Q will be able to conduct cross-disciplinary research by comparing data from proteomics studies with those of genomics and metabolomics.

Research

TRAINING and OUTREACH:

The Biomedical Research Training Program for Nationals continued to successfully train Qatari graduates for the ninth year. To date, 37 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. This year, three HMC dentists joined the interns for some of the modules to gain a better understanding of research.

For current high school and college students, the Research Internship for National High School Students and Research Internships for National College Students aim to increase research capacity and help fulfill the goals of QNV2030. These programs also provide a unique opportunity for students to work with WCM-Q's faculty and experience the life of a biomedical researcher at WCM-Q. During the summer of 2019, 17 interns completed the high school program and two interns completed the college program.

The Student Research Mentorship Program launched in 2018,

offering pre-medical students an opportunity to become involved in research at WCM-Q. The program provides students with a stipend and expenses to fund a yearlong research project and also aims to give students experience of writing research grants and securing their own research opportunities. This year, the program is supporting a total of seven students working on two different projects.

WCM-Q continues to provide opportunities for WCM-Q students to become involved in research before they graduate. Thirty-eight Med 1 students received funding through the Medical Students Research Award (MSRA). The students this year will be spending their summer working at a variety of institutions including Weill Cornell Medicine, Massachusetts General Hospital, Eastern Virginia Medical School, the University of Tokyo, Columbia University, and Gustave Roussy.

The Research Division also funds students to publish and present the results of their research in professional journals and meetings through the Presentation Award.

Over the past year, the award allowed students to present at conferences in the United States and Norway. Four students also published their work in *Genome Journal* this year.

The Student Research Association has also been working hard to ensure that their fellow students are able to utilize 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 sponsored program designed to give undergraduate students hands-on research experience. WCM-Q has been awarded 117 UREP grants since the UREP program was first launched. During the past year the UREP program enabled WCM-Q to provide research training to 12 students across four projects.



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

Research

Events

To date, WCM-Q has hosted more than 200 departmental seminars, 11 international conferences and multiple local conferences and workshops focusing on diverse areas. The special research seminar delivered eight presentations in FY '18-'19 (see Table 1).



**Table 1:
Special Research Seminars**

DATE	SPEAKER	TOPIC
March 27, 2018	Dr. Jamil Azzi Associate Physician, Brigham and Women's Hospital and Assistant Professor of Medicine, Harvard Medical School	Why Allografts Reject?
May 10, 2018	Dr. Patrycja Wizinska-Socha CEO Nestmedic	Pregnabit - telemedical CTG System for Fetal Health Monitoring
September 5, 2018	Dr. Hani Jneid Director, Interventional Cardiology Research at Baylor College of Medicine and Director, Interventional Cardiology at The Michael E. DeBakey VA Medical Center in Houston, Texas	AMI Performance & Quality Measures: From Guidelines to Implementation
October 9, 2018	Dr. Steven W. L'Hernault Professor and Chair, Department of Biology, Emory University	Humans, Nematodes and a Billion Years of Evolution: Teasing out Conserved Functions during the Rapidly Evolving Process of Spermatogenesis
October 15, 2018	Dr. Andrea Ballagi Olink VP for Sales and Marketing	Mining the treasures of the plasma proteome with Olink's protein biomarker discovery platform
December 11, 2018	Ms. Chiara Reggio Executive Manager at 10X Genomics USA	Single Cell RNA Sequencing and its Applications
February 24, 2019	Prof. Andrew L. Miller Division of Life Science & State Key Laboratory of Molecular Neuroscience / Hong Kong University of Science and Technology Clear Water Bay, Hong Kong, PRC	TPC2-mediated Ca ²⁺ Release is Required for the Development of Slow Skeletal Muscle Cells and the Establishment of Early Spinal Cord Circuitry in Zebrafish Embryos.
April 8, 2019	Douglas Antczak, VMD, PhD, Cornell University, Ithaca New York, USA	Fetal-Maternal Signaling in Pregnancy

Notable Research Events For FY19:

- **1st International Conference on the Medical Humanities in the Middle East, Nov 17-18, 2018**

The conference brought together researchers, educators, and practitioners to help define and share best practices in the medical humanities in the Middle East and North Africa region.

- **9th Annual Research Retreat, March 23, 2019**

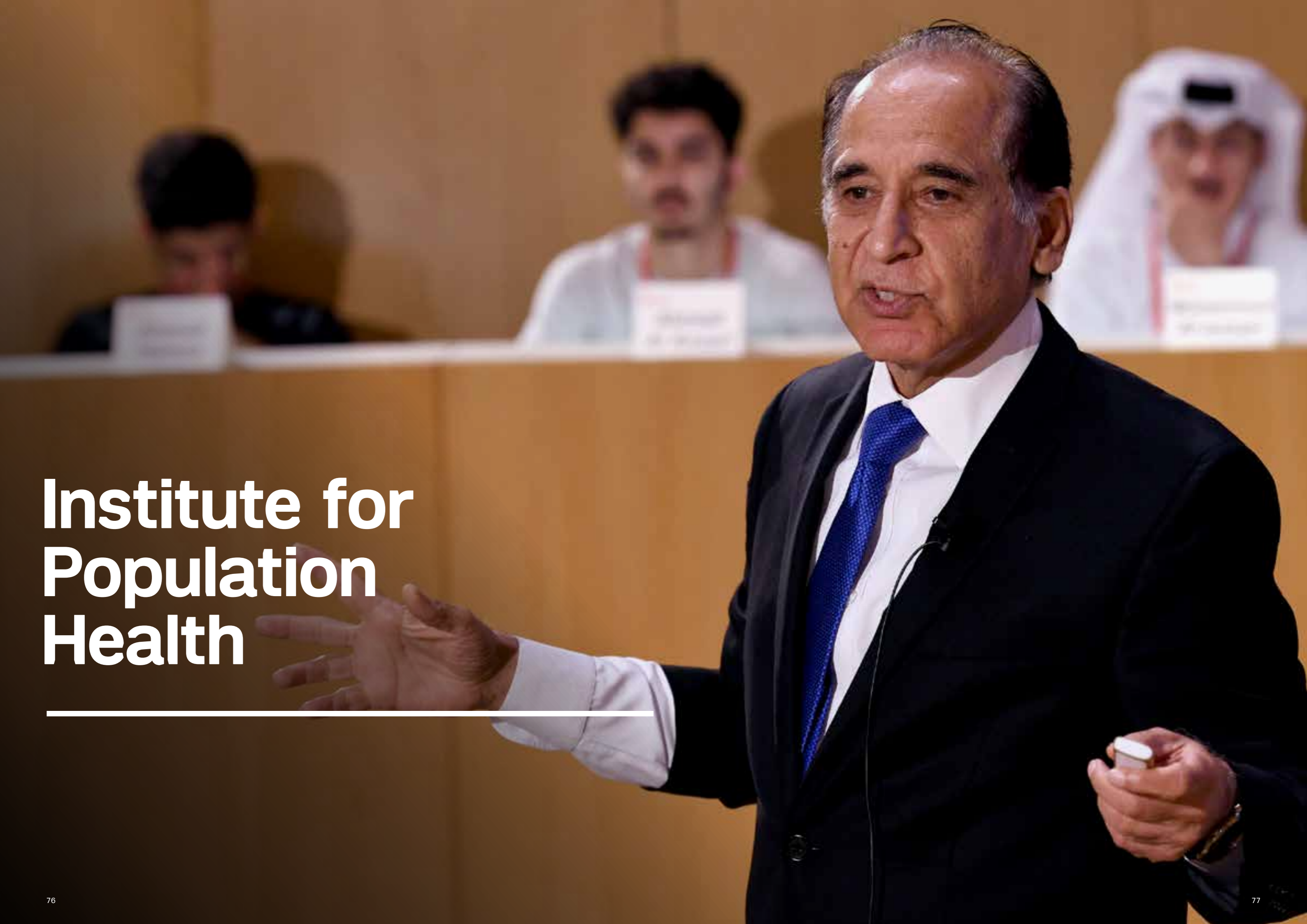
Researchers from leading institutions across Qatar convened at WCM-Q's ninth annual research retreat to discuss the latest developments in biomedical science.

More than 200 leading scientists and students from WCM-Q and other national stakeholders attended to share their projects, discuss trends in biomedical research, hear lectures from fellow investigators and take part in a research poster competition. Diverse areas of research were covered, including diabetes, obesity, neurological disorders, genomics, breast cancer, the ecology of Qatar, epilepsy and cardiovascular disease, among many others.

This year's event had a special focus on the translation of discoveries and innovations into commercially successful enterprises.

Dr. Khaled Machaca, senior associate dean for research, innovations, and commercialization, delivers a lecture during the Research Retreat.





Institute for Population Health

Institute for Population Health

The Institute for Population Health (IPH) has continued to support the development and implementation of programs and activities to reduce premature mortality, prevent chronic diseases, promote health and improve the quality of life in the population of Qatar and the region. As in previous years, IPH's guiding principles are aligned with Qatar National Vision 2030 and the National Development Strategies. The division collaborates with local and global partners, engages in population health research, supports student and healthcare professionals' education in public health and lifestyle medicine, and offers global health educational opportunities for medical students. Additionally, the division empowers the community by fostering the development and implementation of programs aimed at population-based health promotion, research, and disease prevention. Underpinning everything IPH does is a strong conviction that there is more to health outcomes than just medical treatment and surgical procedures.



Schematic representation of IPH areas of interest

IPH Team Members

Ravinder Mamtani, MD	Vice Dean for Student Affairs-Admissions, Population Health and Lifestyle Medicine
Sohaila Cheema, MBBS, MPH	Director, IPH and Assistant Professor of Healthcare Policy and Research
Karima Chaabna, PhD	Population Health and Communication Specialist
Amit Abraham, MD, MPH (WCM-Q Alumnus, Class of 2011) & Sonia Chaabane	Project Specialists
Yasmeen Kalverts & Samaah Chalil	Administrative Coordinators
Raji Anand	Administration Manager
Maha El Nashar & Huda Abdelrahim	Manager and Senior Specialist, Center for Cultural Competence in Health Care, IPH

Educational Programs and Activities

IPH's educational programs are aimed at healthcare professionals and students. This year the division continued to provide a wide range of programmatic offerings for professionals, including symposia, workshops and courses. Offerings for students include teaching activities like courses, global health opportunities and electives for senior medical students.



Healthcare Professionals

IPH offers needs-based educational programs for healthcare professionals in Qatar. Activities are learner-centric (didactic and interactive discussions) utilizing synchronous, asynchronous and hybrid approaches to address the needs of all learners. IPH continued to innovate and to respond to the needs of healthcare practitioners in the past year, offering two new courses: Systematic Review: An Introductory Workshop, and Mastering Emotional Intelligence – Level 1. Since 2014-15, 1,538 healthcare practitioners have attended IPH CME activities (See figure 1).

In 2018-2019, IPH offered 13 CPD/ CME activities. A total of 492 healthcare professionals benefitted from the activities (See figure 2), which were accredited by the Qatar Council for Healthcare Practitioners and the Accreditation Council for Continuing Medical Education. Participant feedback indicates that the activities were successful in addressing gaps in knowledge, competence and skills, with a vast majority reporting that the activities significantly enhanced their medical knowledge, professionalism and effectiveness in interacting with patients and care teams.

The IPH team delivers educational programs for both healthcare professionals and members of the public.



IPH CMME ACTIVITIES (2014 - 2019)

Number of Healthcare Practitioners

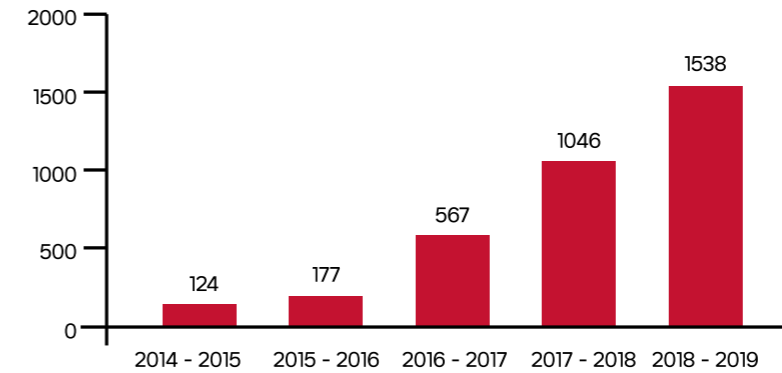


Figure 1.

IPH CME Activities 2018-2019 492 attendees

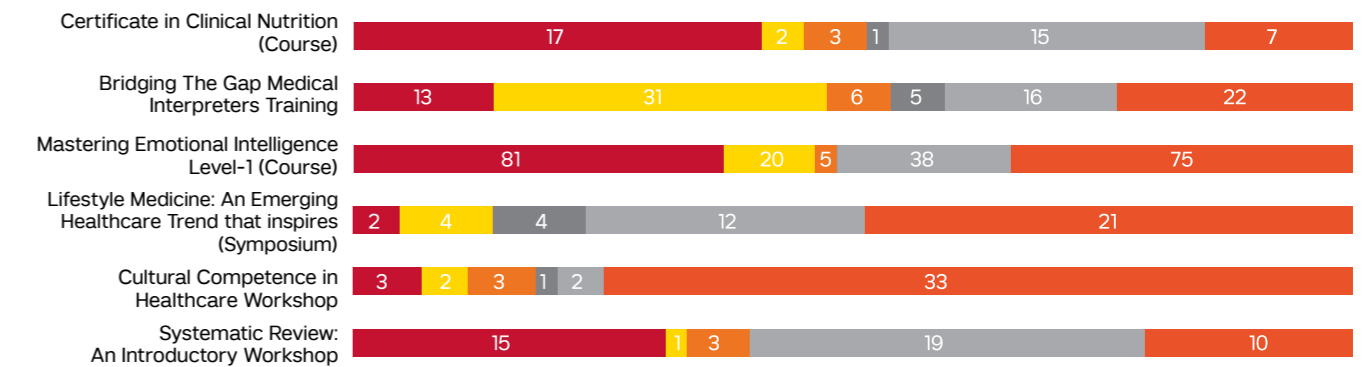


Figure 2.

	Systematic Review: An Introductory Workshop	Cultural Competence in Healthcare Workshop	Lifestyle Medicine: An Emerging Healthcare Trend That Inspires (Symposium)	Mastering Emotional Intelligence Level-1 (Course)	Bridging The Gap Medical Interpreters Training	Certificate in Clinical Nutrition (Course)
Physicians	17	13	81	2	3	15
Nurses	2	31	20	4	2	1
Pharmacists	3	6	5	0	3	3
Dentists	1	5	0	4	1	0
Allied Health Professionals	15	16	38	12	2	19
Others	7	22	75	21	33	10

Figure 3.

Institute for Population Health

Lifestyle Medicine: An Emerging Healthcare Trend That Inspires (Symposium)

This two-day symposium provided a platform for education and training, allowing healthcare practitioners to explore opportunities related to implementing lifestyle medicine in healthcare to reduce chronic disease morbidity and the suffering associated with it.

<http://qatar-weill.cornell.edu/event/lifestyle-medicine-symposium>

Systematic Review: An Introductory Workshop

It is well established that systematic reviews provide invaluable guidance on evidence-based healthcare and medical practice and inform best practices in public health, research and education. This new workshop introduced participants to the process of conducting a rigorous systematic review based on scientific principles, systematic methodology and standardized guidelines. The workshop was fully subscribed and well appreciated by participants. A special workshop was also conducted for Primary Health Care Corporation community medicine residents on the same topic.

<https://qatar-weill.cornell.edu/event/srw/>

Dr. Amit Abraham, instructor of healthcare policy and research.

Certificate in Clinical Nutrition

The fourth offering of this 50-hour certificate course provided healthcare practitioners with an understanding of how nutrition affects physiological and biochemical systems in the human body and relevant clinical information and skills. The onsite unit (33 hours) comprised lectures and interactive discussions by WCM-Q faculty and other international experts from the field. The self-study online unit (17 hours) consisted of modules complementary to the onsite lectures. To date, 193 healthcare professionals have completed the course.

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



Dr. Ravinder Mamtani, vice dean for student affairs-admissions, population health and lifestyle medicine.



Lifestyle Medicine Interest Group - Qatar (LMIG-Q)

A vast majority of chronic diseases can be prevented, treated and oftentimes reversed with lifestyle measures such as healthy food, good nutrition practices, physical activity, stress management, good sleep hygiene, social connectedness and cessation of smoking and other risky substances; these are the core pillars of lifestyle medicine, an emerging discipline in healthcare. The mission of the Lifestyle Medicine Interest Group - Qatar (LMIG-Q), co-founded by Dr. Ravinder Mamtani and Dr. Sohaila Cheema, is to support and cultivate a community of dedicated professionals who strive to promote healthy behaviors and lifestyles to reduce the burden of disease and improve the health of future generations. To date, more than 400 professionals have joined the group.

<http://qatar-weill.cornell.edu/institute-for-population-health/lifestyle-medicine-interest-group-qatar>

Talk for Indian Medical Association - Qatar

Dr. Ravinder Mamtani and Dr. Sohaila Cheema presented a talk entitled 'The Promise of Lifestyle Medicine: An Emerging Discipline in Healthcare' to Indian Medical Association members. They engaged with the audience on the core pillars of lifestyle medicine and explained that many chronic diseases can be prevented, treated and oftentimes reversed with lifestyle measures such as healthy food, good nutrition practices, physical activity, stress management, adequate sleep, social connectedness and cessation of smoking and other risky substances.



The Institute for Population Health team.

Institute for Population Health

Students

Health and Disease: A Global Perspective

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

An Evidence-Based Approach to Lifestyle Medicine

This four-week clinical elective course is supported and guided by the American College of Lifestyle Medicine and is available to senior WCM-Q medical students. The elective provides knowledge and skills required in the prevention and treatment of lifestyle-related chronic disease.

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.

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

WCM-Q is a partner school of the GEMx program, a worldwide medical education exchange partnership that connects medical schools, students and faculty worldwide. The IPH is an active

and enthusiastic participant in GEMx, which is administered by the Educational Commission for Foreign Medical Graduates (ECFMG), USA. 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.

<http://qatar-weill.cornell.edu/institute-for-population-health/education/detail/gemx>

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, New York and the Weill Bugando School of Medicine, Mwanza, Tanzania. The program provides an enriching experiential learning opportunity for WCM-Q first-year medical students who, upon being selected, spend eight weeks during the summer in Mwanza, Tanzania. The GHERP program has three main pillars, comprising clinical, research and community-related work. The program allows students to gain valuable experience in healthcare delivery, public health, research and introductory aspects of clinical medicine and healthcare in a low-income setting.

<http://qatar-weill.cornell.edu/institute-for-population-health/education/detail/global-health-education-and-research-program>

Global Health Service Learning Program

IPH sent 10 first-year WCM-Q pre-medical students for an enriching two-week experiential learning opportunity at a medical setting in Ho Chi Minh City, Vietnam where they learned about the healthcare system in a lower middle-income country and how culture affects healthcare delivery.

<https://qatar-weill.cornell.edu/institute-for-population-health/education/detail/global-health-service-learning-program>



Dr. Sohaila Cheema leads an IPH program.



The GHERP provides an experiential learning opportunity in Tanzania.

IPH Contribution to Educational Engagements

25th Cochrane Colloquium, September 2018, Edinburgh, Scotland

Poster Presentation: Global production of systematic reviews on population health issues in the Middle East and North Africa: preliminary results of a systematic overview and bibliometric analysis.

Authors: Dr. Karima Chaabna, Dr. Sohaila Cheema, Dr. Amit Abraham, Dr. Hekmat Alrouh, Dr. Ravinder Mamtani

Cultural Competence in Healthcare, Sep, Oct, Nov, Dec 2018, Weill Cornell Medicine-Qatar

Workshop presenters: Maha Elnashar & Huda Abdelrahim

Hamad Medical Corporation Comskill Training, Oct 2018 – Mar 2019 (13 sessions), Doha, Qatar

Session title: Cultural Sensitivity and Communicating Via an Untrained Medical Interpreter.

Presenters: Maha Elnashar & Huda Abdelrahim

Bridging the Gap Medical Interpreters Training, Nov 2018 & Mar 2019, Weill Cornell Medicine-Qatar

Course presenters: Maha Elnashar & Huda Abdelrahim

Certificate in Clinical Nutrition, Dec 2018, Weill Cornell Medicine-Qatar

Session title: Introduction to Clinical Nutrition in Health and Disease; Overview of Micronutrients and Clinical Correlations; What is a Healthy Diet; DASH Diet; Elimination Diet;

Special Diets; Discussion: Clinical Nutrition I; Discussion: Clinical Nutrition II

Presenter: Dr. Ravinder Mamtani

Session title: Fasting and Nutrition; Practical Tips in Nutrition.
Presenter: Dr. Sohaila Cheema

4th International Infectiology Conference of Oran, Jan 2019, Oran, Algeria

Invited oral presentation: Systematic review and epidemiological data synthesis on hepatitis C in the general population, blood donors, and vulnerable populations in the Middle East and North Africa.

Authors: Dr. Karima Chaabna, Dr. Sohaila Cheema, Dr. Amit Abraham, Dr. Hekmat Alrouh, Dr. Ravinder Mamtani

Poster presentation: Evidence gap mapping of epidemiological data on hepatitis C in the Middle East and North Africa.

Authors: Dr. Karima Chaabna, Dr. Sohaila Cheema, Dr. Amit Abraham, Dr. Hekmat Alrouh, Dr. Ravinder Mamtani

Poster presentation: Systematic review and epidemiological data synthesis on hepatitis C in clinical populations in the Middle East and North Africa

Authors: Dr. Karima Chaabna, Dr. Sohaila Cheema, Dr. Amit Abraham, Dr. Hekmat Alrouh, Dr. Ravinder Mamtani

12th International Epidemiological Association - Eastern Mediterranean Region Scientific Meeting 2019, Feb 2019, Beirut, Lebanon

Oral presentation: Adult mortality trends in Qatar, 1989-2015: National population versus migrant

Authors: Dr. Karima Chaabna, Dr. Sohaila Cheema, Dr. Amit Abraham, Dr. Hekmat Alrouh, Dr. Ravinder Mamtani

Medical Education Journal Club, May 2019, Weill Cornell Medicine-Qatar

Session title: Telemedicine - An emerging trend in medical education

Presenter: Dr. Sohaila Cheema

Medical Education Research Forum April 2019, Weill Cornell Medicine-Qatar, Doha, Qatar

Poster presentation: Assessing effectiveness of an introductory workshop on systematic review among healthcare professionals.

Authors: Dr. Sohaila Cheema, Dr. Karima Chaabna, Dr. Ravinder Mamtani

Poster presentation: Moving forward together: Building capacity among healthcare professionals in Qatar

Authors: Dr. Sohaila Cheema, Raji Anand, Dr. Ravinder Mamtani

Poster presentation: Implementing emotional intelligence training in healthcare: perspectives of Qatar healthcare professionals

Authors: Maha Elnashar, Huda Abdelrahim

Karnataka Medical College, Mangalore, India, July 2018

Session title: Lifestyle medicine and clinical nutrition

Presenter: Dr. Ravinder Mamtani
Optimizing Health Professions Education with Simulation-Based Learning, September 2018, Weill Cornell Medicine-Qatar

Workshop title: Five steps to integrate simulation into a curriculum.

Presenters: Ms. Danaïet Teame, Dr. Grigory Ostrovskiy, Dr. Sohaila Cheema

Mastering Emotional Intelligence – Level 1, Sep 2018 & Mar 2019, Weill Cornell Medicine-Qatar

Course presenters: Maha Elnashar & Huda Abdelrahim

Preventive Medicine Residency Seminars, Jan 2019, Weill Cornell Medicine New York

Session title: Challenges and emerging face of healthcare/public health; Legal aspects of medicine (in US); Lifestyle medicine and its promise; Occupational and environmental health; Public health aspects of infectious diseases

Presenter: Dr. Ravinder Mamtani

World Innovation Summit for Health (WISH), Nov 2018, Qatar Foundation

Session title: Paving the Way for Population Health

Presenter: Dr. Sohaila Cheema

Systematic Review: An Introductory Workshop, Jan 2019, Weill Cornell Medicine-Qatar

Workshop presenters: Dr. Sohaila Cheema, Dr. Karima Chaabna, Dr. Amit Abraham

Workshop, Jan 2019, College of Pharmacy, Qatar University

Session title: Cultural competence and healthcare

Presenters: Maha Elnashar & Huda Abdelrahim

9th Annual Research Retreat, Weill Cornell Medicine-Qatar, Mar 2019, Doha, Qatar

Poster presentation: Risk factors for diabetic microvascular complications in a high-risk Middle East population. Authors: Amit Abraham, Sohaila Cheema, Patrick Maisonneuve, Mahmoud Zirie, Amin Jayyousi, Hekmat Alrouh, Amit Abraham, Sura Al-Samraye, Ziad Mahfoud, Ibrahim Mohammed Al-Janahi, Buthaina Ibrahim, Albert B Lowenfels, Ravinder Mamtani

Poster presentation: Physical activity and sedentary behavior in the Middle East and North Africa: A systematic overview and meta-analysis. Authors: Sonia Chaabane, Karima Chaabna, Amit Abraham, Ravinder Mamtani, Sohaila Cheema

Poster presentation: Dietary habits of college students in Education City, Qatar. Authors: Wajihah Yousuf, Karima Chaabna, Tasnim Mushannen, Hania Ibrahim, Abdallah Tom, Amit Abraham, Ravinder Mamtani, Sohaila Cheema

Poster presentation: Physical activity among college students in Education City, Qatar. Authors: Tasnim Mushannen, Karima Chaabna, Wajihah Yousuf, Abdallah Tom, Hania Ibrahim, Amit Abraham, Ravinder Mamtani, Sohaila Cheema

Poster presentation: Adult Mortality trends in Qatar, 1989-2015: National population versus migrants Authors: Dr. Karima Chaabna, Dr. Sohaila Cheema, Dr. Amit Abraham, Dr. Hekmat Alrouh, Dr. Ravinder Mamtani

Poster presentation: Hepatitis C infection in the Middle East and North Africa: Systematic overview, quality assessment, and evidence gap mapping

Authors: Dr. Karima Chaabna, Dr. Sohaila Cheema, Dr. Amit Abraham, Dr. Ravinder Mamtani

Poster presentation: Triptolide decreases cell proliferation and induces cell death in triple negative MDA-MB-231 breast cancer cells. Authors: Elizabeth Varghese, Samson Mathews Samuel, Sharon Varghese, Dr. Sohaila Cheema, Dr. Ravinder Mamtani, Dr. Dietrich Büsselberg

Poster presentation: The “Yin and Yang” of natural compounds in anticancer therapy of triple negative breast cancers - a review. Authors: Elizabeth Varghese, Dr. Samson Mathews Samuel, Mariam Abotaleb, Dr. Sohaila Cheema, Dr. Ravinder Mamtani, Dr. Dietrich Büsselberg

Global and Local Community Initiatives

IPH continues its community awareness programs, which in recent years have benefitted 5,710 attendees comprising students, corporate representatives and the wider Qatar community.

IPH Community Outreach

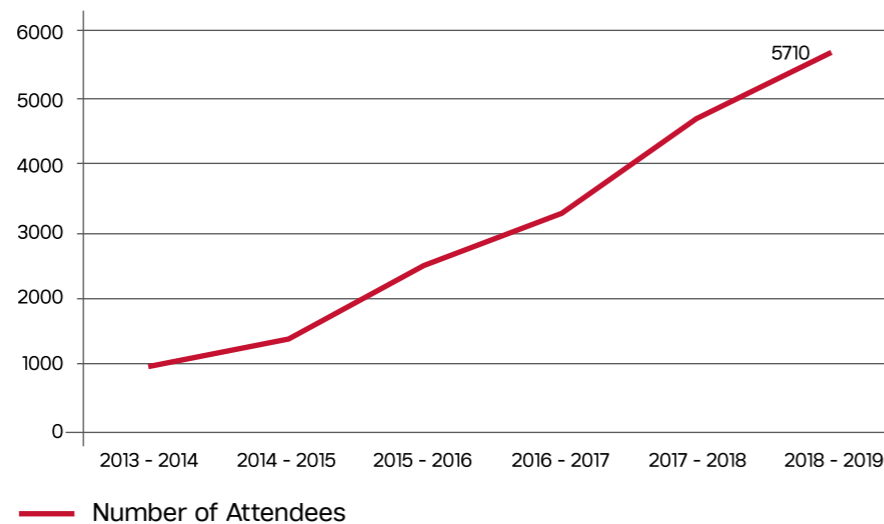


Figure 4.

In 2018-2019, IPH community outreach programs benefitted 997 attendees. Events included the inaugural Lifestyle Medicine week for the Education City faculty, staff, students and their families.

IPH Community Outreach Events (977 attendees)

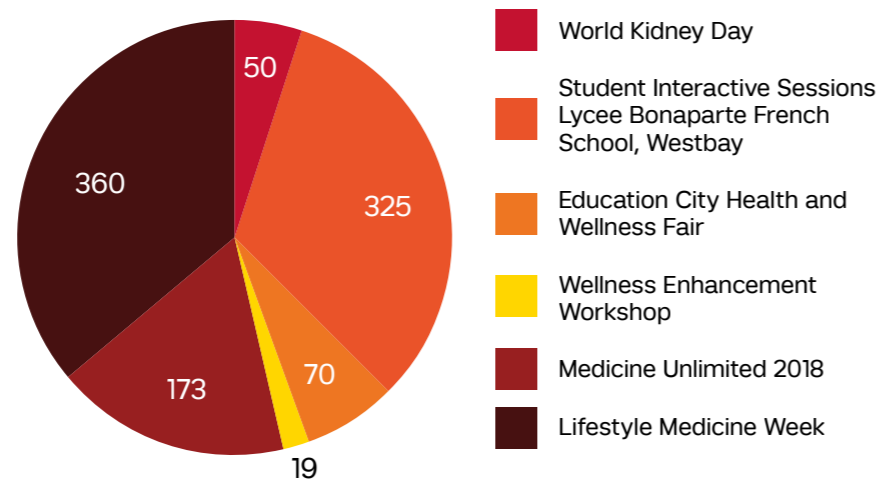


Figure 5: Breakdown of attendees at WCM-Q CME/CPD accredited activities by profession.

Student Interactive Sessions at Lycée Bonaparte French School, West Bay

Dr. Karima Chaabna conducted seven sessions at the French community school Lycée Bonaparte to increase awareness of healthy eating and nutrition among students aged three- to five-years-old.

Education City Health and Wellness Fair

The IPH team engaged with EC faculty, staff and students to increase awareness about the importance of reading food nutrition labels and recognizing that large quantities of sugar are added to many foods and beverages, including juice, donuts and muffins.

Wellness Enhancement Workshop

IPH hosted a six-day, two-part immersion Wellness Enhancement Learning Course (TheWEL) facilitated by a health and wellness organization based in Glasgow, Scotland to enhance self-care, personal health and wellness. The participants explored how to manage stress, nurture happiness and wellbeing, and practice self-compassion. The course also empowered individuals to make healthy lifestyle choices in terms of food, exercise and sleep, manage their social relationships and find peace of mind through meditation and mindfulness practices.

Medicine Unlimited 2018

IPH interacted with 200 high school students and their families to enable them to learn about healthy food choices, food portions, healthy snacking and how to read food labels.

Lifestyle Medicine Week

IPH organized the inaugural Lifestyle Medicine week in October 2018 for Education City students, faculty, staff and their families to raise awareness about the importance of lifestyle factors on health. The week-long event consisted of a walk in Oxygen Park at Education City to promote physical activity, cooking demonstration by a local chef at WCM-Q to learn how healthy cooking can be easy and quick, mindfulness sessions to reduce stress, interactive sessions on the impact of social connectedness and healthy relationships on our well-being and health, and an awareness of smoking session in collaboration with the Tobacco Control Center of Hamad Medical Corporation, a World Health Organization Collaborating Center.

World Kidney Day

IPH collaborated with Hamad Medical Corporation (HMC) to organize an awareness session on the occasion of World Kidney Day in March 2019. WCM-Q alumnus Dr. Essa Abuhelaiqa, now a nephrology consultant at HMC, along with his team, spoke with WCM-Q students, staff and faculty about kidney disease, its risk factors and prevention.

IPH Representation On Local, National and International Committees

1. Public Health Committee, Ministry of Public Health, Qatar: Dr. Ravinder Mamtani (member)
2. Public Health Implementation Group (PHIG), Ministry of Public Health, Qatar: Dr. Ravinder Mamtani (member) and Dr. Sohaila Cheema (designee)
3. Healthcare Practitioners Committee, Qatar: Dr. Ravinder Mamtani (member)
4. Education City Health Advisory Board, Qatar: Dr. Ravinder Mamtani (member)
5. Advisory Board of the International Board of Lifestyle Medicine: Dr. Ravinder Mamtani (member)
6. Consortium of Universities for Global Health, Global Health Competency Subcommittee: Dr. Sohaila Cheema (member)
7. Consortium of Universities for Global Health, Global Health Competency Subcommittee, Research and Analytic Taskforce: Dr. Sohaila Cheema (co-chair)
8. Sustaining Technical and Analytical Resources (STAR), a five-year project of the Public Health Institute, supported by the United States Agency for International Development (USAID): Dr. Sohaila Cheema (member)

Institute for Population Health

Research

IPH's population health research projects pursue the overall objectives of capacity building, health promotion and disease prevention for the population in the State of Qatar and the region. IPH researchers utilize a variety of study designs, including

cross-sectional, ecological, and systematic reviews, to characterize population health-related outcomes in the State of Qatar and the region. Some recently published research articles are highlighted below:

Capacity building in health care professions within the Gulf Cooperation Council countries: Paving the way forward

A debate article was led by the dean of WCM-Q, Dr. Javaid Sheikh, along with other senior doctors and scientists from IPH and the New York Medical College, against the backdrop of a worldwide shortage of healthcare workers. The situation is of concern in the nations of the Gulf Cooperation Council (GCC) because of a lack of nationally-trained professionals leading to a reliance on expatriate healthcare workers and consequently a high turn-over of employees. The study concluded that a locally trained healthcare workforce is vitally important for the GCC nations. In addition, capacity building efforts would help the nations to focus on major healthcare challenges and also aid in further improving the overall quality of healthcare.

Adult mortality trends in Qatar, 1989-2015: National population versus migrants

IPH's ecological study analyzed publicly available data from Qatar's Ministry of Development Planning and Statistics (MDPS). The study demonstrates that premature death in young adult males and females in Qatar is predominantly due to injuries and neoplasms, respectively. These identified causes of death are for a large part preventable and should be addressed appropriately to lower premature mortality among young adults in Qatar.

Center for Cultural Competence in Healthcare

The Center for Cultural Competence in Health Care (CCCHC), an integral component of IPH, continues to promote the practice and concept of culturally and linguistically appropriate healthcare in Qatar, led by Ms. Maha Elnashar and supported by Ms. Huda Abdelrahim.



Huda Abdelrahim takes a CCCHC class.

Education

CCCHC continues to provide cultural competence training to WCM-Q students via didactic lectures, group discussions, interactive exercises, and videos. 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 to work with a trained or untrained medical interpreter and to communicate effectively when language discordance occurs during clinical clerkships. CCCHC conducted one four-hour session in Cultural Competence Training for the College of Pharmacy at Qatar University. The training is designed to enhance pharmacy students' knowledge and skills relating to cultural competencies in healthcare. The topics include medical interpretation and the impact of cultural and social determinates in the practice of pharmacy.

Intercultural Communication and Collaboration Forum (ICCF)

CCCHC is a core member of this collaborative initiative between Education City campuses, which is now in its fifth year. ICCF's primary 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 2019 program included topics such as: using collaboration to achieve an understanding of cultural values; women in leadership across cultures; effective communication; neuro-linguistic programming and intercultural connections; personal leadership; unconscious bias to emotional intelligence; building trust; intercultural body language and coaching managers. More than 190 professionals from Education City campuses, Hamad Medical Corporation, Qatar University and Sidra Medicine attended ICCF 2019.



Maha Elnashar leads the Center for Cultural Competence in Healthcare.



CCCHC is an integral member of the International Communication and Collaboration Forum.



To date, the Bridging the Gap course has trained 318 medical interpreters, who speak more than 20 different languages.

Cultural Competence in Healthcare Workshop

This four-hour workshop for healthcare professionals in Qatar aims to eliminate health disparities and increase access to quality healthcare services to people of different cultural backgrounds, origins, ethnicities, races, religions, nationalities, genders or any other identifiers. The workshop has been offered five times this year to a total of 90 attendees. Since its initiation, 257 participants have attended the workshop.

Bridging the Gap Medical Interpreters Training

CCCHC has offered this 40-hour course to train bilingual/multilingual professionals to overcome language and cultural barriers in healthcare services to the diverse community of Qatar on a biannual basis since 2012. To date, the course has been offered 16 times and has trained 308 medical interpreters representing more than 20 different languages.

Mastering Emotional Intelligence - Level One

This new course is designed to enhance healthcare professionals' skills to manage the source of their emotions and behaviors, to learn how to handle emotional triggers, to reflect on their personal social awareness for the benefit of managing efficient clinical care, and to optimize patient satisfaction. The course has been very popular and has now been offered three times and successfully completed by 65 attendees. The center is planning to offer Level 2 in the near future.



Arabic (215), Amharic (3), Bengali (2), Bosnian (1), French (12), Farsi (2), German (2), Hindi (22), Indonesian (3), Japanese (1), Nepalese (2), Malay (1), Malayalam (18), Korean (4), Mandarin (3), Punjabi (2), Romanian (1), Russian (1), Sinhalese (1), Somali (1), Tagalog (10), Tamil (6), Tigrinya (1) and Urdu (8).



Student Outreach and Educational Development

Student Outreach and Educational Development

The Office of Student Recruitment and Outreach has been working to reach out to the community and provide support to future students, helping them in identifying their interests, developing their skills, and engaging them in enrichment programs and activities that strengthen their college readiness. During the last few years, the office's strategic direction evolved to encompass programs specially crafted to prepare and develop prospective students - both academically and emotionally - to college life in general and medicine in particular. The office has also been collaborating closely with the Ministry of Education and Higher Education and Qatar Foundation's innovative STEM

initiatives to support, not only the academic growth of prospective students, but also the professional development of school teachers and counselors.

In order to better reflect this evolving mission to the wider community and align the name of the office with its mission and goals, Dr. Javaid Sheikh, dean of WCM-Q, approved a new name for the office to become the Office of Student Outreach and Educational Development (OED).

This year the office worked locally on enhancing local capacity as well as reaching out regionally to fulfill its mission of attracting the best qualified students.

The Office of Student Outreach and Educational Development works to attract the best qualified students from both Qatar and the wider region to WCM-Q.



Enhancing Local Capacity

Ministry of Education and Higher Education Backstopping

The Ministry of Education and Higher Education and the Qatar School for Science and Technology (QSST) have approached the Office of Student Outreach and Educational Development at WCM-Q to help build the biomedical co-curricular program within the newly established STEM school. The request involves the design and implementation of a project-based learning program for students in Grades 10 and 11.

The aims of the program would be to motivate students to pursue a career in medicine or allied professions; provide students with more exposure to hands-on lab experience and enhance academic support in biological and physical sciences; integrate clinical aspects of medical education to reinforce motivation; and keep the students current with global health issues that have a sociological impact.

The program is currently in the design phase and work is underway involving the pre-medical and medical faculty who will participate in the program, which will be launched in the 2019/2020 academic year.

Debate Society Workshops

This is the first year that the office co-funded a number of WCM-Q current students to participate in the World Universities Debating Championship. In appreciation of this funding, the WCM-Q Debate Society designed and implemented a program to educate prospective students about debating. This presented a good opportunity for future students to explore WCM-Q and its community outside of academia and medicine. This helped showcase the well roundedness of the community and the many extracurricular activities that WCM-Q students take part in, one of which is debate. Under this pilot version of the program, four Saturday workshops were conducted and three students received a completion certificate. The program was spearheaded by two of our medical students, namely Shahrayar Rana and Dana Al Ali, in addition to a number of other students who delivered the workshops.

Qatar Aspiring Doctors Program (QADP)

This was another successful year for QADP. A yearlong program that runs in parallel with the high school academic year, the program continued to offer academic and career support to a selected number of Qatari students. Through online modules developed and taught by our faculty members and teaching 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 62 students were invited to take part in the program, 59 of whom are Qatari. Thirty-nine students successfully completed the program, nine of whom completed with honorable mentions. A total of 24 students of those eligible to apply in this admissions cycle subsequently applied for entry to the college, 11 of whom were offered admission into our Foundation and Six-Year Medical Programs. An additional student from a previous QADP class was also admitted this year. This brings the total offers of admissions to QADP students to 12.

The 59 students who participated in the program this year represent 21 different private, government and international schools.

Student Outreach and Educational Development

High School Research Competition

In preparation for the second instalment of the High School Medical Conference that took place in November 2019, the High School Research Competition was held on April 13 of last year. Schools across Qatar were given the chance to participate in a student research contest based on the UN's Sustainable Development Goals. Twenty-seven teams from government, private and international schools entered the competition. Each team chose a topic under one of four following 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.

The poster presentation competition was then held at HBKU Student Center. All 27 teams qualified for the second round

of the competition that was in November 2019 at the Qatar National Convention Center.

All teams were provided guidance throughout their research compilation phase, involving 10 of our pre-medical teaching specialists and one of our faculty members. The winning team received a fully-funded, one-week trip to Cornell University in Ithaca, NY.

Medicine Unlimited Community Outreach Event

Middle and high school students from all over Qatar and the wider region attended Medicine Unlimited, the flagship student outreach event of WCM-Q on November 10, 2018. 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 medical program - would be suitable for them. Faculty also took part in the event by providing talks and hands-on experiences, including, Dr. Ameer Raouf, associate professor of anatomy in radiology, who demonstrated the use of the anatomage table; Dr. Kuei-Chiu Chen, associate professor of biology, who showed the loading of agarose gel to students; and, Dr. James Roach, associate professor of chemistry and assistant dean of pre-medical education, who explained chemical reactions with a series of demonstrations.

This year's event included more than 20 different activities including guided tours of the eLibrary, the writing center and the research laboratories.



The High School Research Competition was designed to encourage students to consider a career in medicine and the sciences.



Winners of the Healing Hands Essay Competition get the chance to work in research laboratories at WCM in New York.

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 at Weill Cornell Medicine in New York City. To apply for these scholarships, students need to enter the Healing Hands Essay Competition. A total of 32 students participated in the 2019 competition, which is only open to Qatari students based in Qatar.

Four Qatari high school students from four schools, Al-Ieman Independent School for Girls, Qatar Academy, Academic

Bridge Program and Newton International Academy Barwa City, were announced as winners of the competition, and received WCM-Q's Doctor of the Future Scholarships as their prizes. Eleven more participants in the essay competition received the judging committee's honorable mentions and seven received a certificate of participation.

Between July 6–21, 2018, three of the 2018 winners visited prominent research laboratories and spent that time with distinguished Weill Cornell researchers in major New York hospitals. They worked in the laboratory of Dr. Randi Silver,

Weill Cornell Medicine associate dean and professor of physiology and biophysics, whose work focuses on receptor mediated regulation of plasma membrane transporters; and Dr. Stefan Worgall, distinguished professor of pediatric pulmonology, whose research includes studies on adenovirus-based vaccines, and macrophages and dendritic cells in cystic fibrosis.

The Healing Hands scholarship program has proven to be a real inspiration for Qatari students, encouraging them to study medicine to help fulfill the goals of Qatar National Vision 2030.

Student Outreach and Educational Development

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 2018. A total of 38 students participated in the Pre-college Enrichment Program, and 44 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 Jordan and Canada.

Organized during the period of July 1-12, 2018, 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 medical program, the Summer Enrichment Programs have been a great source for identifying talented young men and women who later on enrolled into our foundation medical programs. The yield of this year's programs is about 70 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 February 3-7, 2019. This one-week program was conducted with a total of 36 students, 15 of whom are Qatari. Students spent one week learning what it is like to train to become a medical doctor at WCM-Q. Pre-medical and medical faculty members, teaching specialists, current students, graduates and staff of WCM-Q, delivered the winter session of the QMEP.

Adopt a School Program

The Adopt a School Program is based on a yearlong relationship cultivation program with high schools in Qatar. The program provides school support, teacher and counselor training, and workshops targeted at academic counselors and schoolteachers.

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 Qatar Foundation.

Counselors' Workshops, Open Days and School Fairs

In collaboration with Education City branch campuses and Qatar Foundation, Doha Counselors Day took place on October 3, 2018. About 120 Counselors from many schools across Doha were invited over to HBKU Student Center to discuss the latest requirements and updates of all nine institutions. The event was in the form of presentations to begin with then workshops were formed to deliver more detailed information.



The Winter Enrichment Program allows potential students to learn what life is like as a trainee doctor.

School Visits, Open Days and Fairs

The Office of Student Outreach and Educational Development (OED) organized 62 different visits to 53 local schools in Qatar for recruitment purposes. The visits were in the form of presentations and fairs to explain admissions requirements, application timelines, and curriculum and financial aid opportunities to prospective students. OED also worked on raising public awareness for outreach programs such as the Healing Hands Essay Competition, Qatar Aspiring Doctors Program, the Summer & Winter Programs, Medicine Unlimited and the newly introduced High School Research Competition and Medical Conference.

Discover Education City Fair

Discover Education City took place in October 16 & 17, 2018 at HBKU Student Center ballroom. The event was an opportunity to meet prospective students, parents and school administrators. Schools across Qatar and their parents visited WCM-Q's booth to inquire about requirements and application deadlines.

Open Houses

The OED office organized a series of open houses every Thursday from September to December and every other week from January to June. The open houses attracted high school students and their parents and provided information related to the application requirements, timelines and other relevant admissions information. This year, our team held 18 open houses for more than 300 students who were given admissions presentations and tours of the facilities.

Qatar Universities Career Expo

Organized under the auspices of the Ministry of Education and Higher Education in November 2018 at Qatar National Convention Center (QNCC), this was a very well attended fair. With more than 300 visitors, the two-day event attracted a targeted niche audience who flocked to the WCM-Q booth, where they were provided with admissions information and printed materials.

Reaching out Regionally

Regional School Visits

The Office of Student Outreach and Educational Development continues to participate in the Discover Education City Regional Roadshow jointly organized with Education City branch campuses. During the fall of 2018, the team visited 40 of the most prominent schools in several cities across the region and beyond, including Kuwait, Muscat, Amman, Beirut, Casablanca, Rabat, Marrakesh and Athens, and was successful in recruiting a number of highly qualified regional candidates.

Education City Regional Counselors Program

On January 12 and 13, 2019, Education City branch campuses collaborated to organize a two-day fly-in counselors program. This initiative attracted 19 counselors from regional and international high schools located in nine different countries. The counselors visited from as far as China, India, Jordan, Kenya, Kuwait, Lebanon, Morocco, Palestine, and Turkey. The program included admissions presentations, students' panels, a tour of the residence hall, and a visit to Qatar Foundation's headquarters.



WCM-Q took part in the Education City Regional Counselors Program alongside the other campuses.



Admissions

Admissions

Office of Admissions

The success of WCM-Q leads to strong competition from applicants for a place at the institution. The Office of Admissions report for the year 2018-2019 summarizes the admissions process, number of expected incoming students and their demographics for Fall 2019 entry, admission workshops, staff updates, and the student information system utilized by the Office of Admissions.

Farhan Aziz, director of admissions at WCM-Q.



Background

The six-year medical program integrates the two-year pre-medical curriculum and the four-year medical curriculum. The successful completion of this program leads to the award of the Cornell University Doctor of Medicine degree.

The fifth class of the six-year medical program will join WCM-Q in August 2019. 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.

The WCM-Q Foundation Program, a one-year program available to academically talented Qatari students, allows the students to study the relevant subjects, in addition to helping them further develop their study skills and critical thinking abilities. After successfully completing the program students are promoted to the six-year medical program. The program has been very successful and continues to yield positive results.

The Office of Admissions hosts various workshops that give prospective students more information about applications.



Students who apply to study at WCM-Q are expected to have the highest academic and personal standards.

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 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 in selecting a diverse and academically well-prepared entering class.

Incoming Students

During the 2018-2019 academic year, 473 applications (for the six-year medical program) were submitted for Fall 2019 admission. Of the 473 applications, the Committee on Admissions accepted 41 candidates directly into the program. A further 17 students were promoted from the Foundation Program into the six-year medical program.

In August 2019, 46 students entered the six-year medical program. In this class of 46 students, 17 nationalities are represented with approximately 75 per cent making their home in Qatar. Of the 46 students, 15 (32 percent) are citizens of Qatar. On the Foundation Program, 24 students were enrolled in August 2019 and all 24 are Qatari citizens.

Direct admission to the four-year medical curriculum was very competitive for Fall 2019. Forty-one candidates submitted applications for admission to this component of the Medical Program. Of these, three were accepted and they enrolled in September 2019. The three students are graduates of Carleton University, Dartmouth College, and Northwestern University.

Admissions

As can be seen from the table below, of the 78 new students who are expected to join WCM-Q's Foundation, six-year and four-year medical programs, 37 (47 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 2019		
	Total	Qatari Citizens
Foundation Program	24	24
Six-Year Medical Program	46	15
Four-Year Medical Curriculum	3	N/A
Total Number	73	39

Admissions Workshops

During the 2018-2019 Academic Year, the Office of Admissions hosted five workshops for applicants applying for Fall 2019 to provide additional guidance in the admissions process to the six-year medical program.

The workshop, 'First Step Towards a Complete Application' was held on October 30, 2018, November 21, 2018, and December 11, 2018 which covered the online application process. The total attendance for all the three workshops was 68 applicants, of which 15 were citizens of Qatar.

The workshop, 'Next Steps Towards a Complete Application' was conducted on January 15, 2019 and February 4, 2019. 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 was 108 applicants, of which 20 applicants were citizens of Qatar.

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

New Appointments/Staff Updates

During the 2018-2019 Academic Year, Anieth Mathai was hired for the position of Admissions Coordinator.



Assistant director of admissions Claudia Mihaescu.



The Jenzabar computer system stores students' information from when they apply to WCM-Q to when they graduate.



Admissions officer Buran Zu'bi.

Student Information System

The application software, Jenzabar-EX, in strong collaboration with the educational computing team, continues to be utilized very effectively. The system allows WCM-Q to capture student information from the point at which applicants make an initial enquiry all the way through to when they become graduates 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.



Student Affairs

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/special events, student academic counseling, personal and career counseling; registration and academic record-keeping in addition to 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.

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); international travel for sub-internships and electives; preparing for residency interviews by providing guidance and organizing mock interviews; and providing guidance in preparing personal statements and resumes. They also conduct structured academic advising committee meetings and refer students to other service providers as necessary.

Registrar's Office

The Office of the Registrar delivers high-quality business practices and provides accurate data management of academic records that support the student cycle from enrolment to post graduation.

The office is responsible for keeping and maintaining student and alumni records including grades, immunizations, dean's letters, course registration, diplomas and personal information. It provides registration support to the pre-medical curriculum and medical curriculum programs including program scheduling, preparing grade reports, managing student policy database, and reporting statistical data. The office oversees student certification and document preparation for the ERAS (residency application).

Health and Wellness

The health and wellness team aims to create an exceptional experience for every student by providing effective interventions and services: Educational and preventive programs; assessment services to students that promote self-awareness; effective thinking and reasoning skills; and activities that promote emotional intelligence, interpersonal effectiveness, multicultural competence, psychological wellbeing and resilience. The team provides a collaborative alliance between the student and the therapist. It utilizes a variety of client-centered and group approaches that support our students and engender self-empowerment. All services rendered are private and confidential. No information is disclosed without student consent.

professional health and wellbeing of students at WCM-Q by providing student assessment, treatment and intervention, as well as developing, implementing, and evaluating student programs to promote student development, learning, and wellness.

The team has introduced programs and initiatives that promote health and wellness among the student body including mindfulness coloring, production and distribution of wellness material and bookmarks, yoga sessions, and a flu campaign.

Over the course of the academic year the team cooperated with students on several events such as the Club Fest, the fundraising event for breast cancer, the anti-bullying event with Best Buddies, the self-care event and Women's Heart Health with the Medical Student Executive Council in Qatar, and the Children's Health Fair with the Pediatrics Interest Group.



Sword dancing during WCM-Q's Qatar National Day celebrations.

The health and wellness team promotes personal and



The Division of Student Affairs supports students' academic and personal wellbeing.



The annual student vs faculty and staff football match.

Student Affairs

Student Life

Orientation Programs

In August 2018, the Division of Student Affairs successfully executed the three-day medical student orientation program in cooperation with the pre-medical and medical divisions. The orientation program is filled with activities and lectures to welcome the incoming foundation, medical and pre-medical students to the campus, the administration, faculty, and staff, and introduce them to each other. With the collaborative efforts of the student orientation leaders and Medical Student Executive Council in Qatar (MSEC-Q), the participants engage in interactive sessions to develop pride in their new WCM-Q community as well as understand their academic requirements. The foundation

and pre-medical students also participate in a service activity to heighten awareness of the larger community. As an annual orientation practice, students collect, sort, and pack donations from the college for donation to Qatar Charity. Afterward, they celebrate the hard work of the custodial staff and security guards by hosting a meal in their honor.

The orientation program was concluded with the Opening Exercises - a celebration to welcome the new students to the college. More than 500 guests attended the event and celebrated with the new students in both programs. Dr. Ibrahim Janahi, the chairman of medical education at Hamad Medical Corporation delivered the keynote speech.

Student Clubs and Activities

Away from their heavy schedules and demanding curriculum, our students are very active in campus and student life. They organize events and activities, form clubs and organizations and they represent the college in local and international workshops and conferences. The students run an annual election campaign to select members from each class to form the student governing body entitled the Medical Student Executive Council (MSEC-Q). Comprising four representatives from each of the seven classes, from the foundation to the fourth year of the medical program, they are vital for supporting and advocating for student interests. MSEC-Q works closely with the management of student affairs,

medical education, pre-medical education and other divisions to discuss issues of concern and implement ideas students have regarding curriculum, services, food and space.

At the social level, MSEC-Q hosts a variety of annual events that celebrate the culture and diversity of the WCM-Q community such as International Night, town hall meetings, Club Fest, Basant and the Med Gala.

International Night is the most popular event at WCM-Q. The event is organized in collaboration with the Division of Student Affairs and attended by more than 500 students, faculty and staff. Students, faculty and staff participate in the event to reflect the different cultures, backgrounds, food and costumes of the diverse WCM-Q community. The program included performances such as dancing, singing, music, wedding parties and fashion shows.

The WCM-Q dean and senior management meet with the students once a year during the town hall meeting that MSEC-Q organizes in cooperation with SA. The meeting is considered as a platform for the management to share major achievements, decisions and future plans with the students and for the student

body to discuss issues and concerns that it might have with the management. The meeting was held in March 2019 and attended by students, staff and faculty.

According to their interests, students form groups to establish and lead different specialized clubs and organization that focus on sport, charity, medical specialties, drama, music, photography, etc. Currently, WCM-Q has 33 officially recognized clubs and organizations.

WCM-Q clubs and organizations are becoming more active every year and below are examples of their major achievements for this year.

Big Red Fitness Club

- The club increased the numbers of fans attending the annual sports competitions and games.
- In cooperation with Reach Out to Asia (ROTA), they organized the 6th ROTA Sports Day for workers and staff.
- Along with the Qatari Club, they won the Club of Year at the Med Gala 2019.

Debate Club

- Participated in many events and competitions held in the college, EC and in Doha.

Hematology and Oncology Interest Group

- The group organized the WCM-Q Breast Cancer Awareness Fundraiser on October 28, 2018.

The Qatari Student Association

- The association was very active this year as they held Karak Thursdays twice every month.
- In cooperation with Student Affairs, QSA organized the Qatar National Day Celebration.

Reach Out to Asia Club

- The club members support the contracted employees at WCM-Q by teaching them English and computer skills.
- The club held several events to honor the contracted staff to mark occasions including Qatar National Sports Day, US Thanksgiving and WCM-Q's International Night.

Recognition of Academic Achievement

In cooperation with the Dean's Office and the Division of Pre-medical Education, SA holds an annual celebration in honor of the pre-medical students whose names are recorded on the Dean's Honor List through the academic year.



The Division of Student Affairs team.

Student Affairs

Community Engagement

International Service Learning and Community Service

In August of 2018, 10 pre-medical students along with two faculty members travelled to Tanzania to take part in a summer service-learning trip. During the trip, the group visited Arusha and Moshi in the northeast of the country, and spent time interacting with local people in their homes, businesses, a local hospital, schools and an orphanage. Students participated in medical camps that provided free health checks for local people. During their stay, they also visited three national parks: Tarangire National Park, Lake Manyara National Park and the Ngorongoro Conservation Area, home of the famed Ngorongoro Crater. Through their visits to these areas they witnessed the spectacular scenery and a wealth of exotic animals including lions, cheetahs, hippos, rhinos, crocodiles and elephants.

Club Fest

To recruit for WCM-Q student clubs and organizations, Student Affairs and MSEC-Q held the annual Club Fest on September 20, 2018. Representatives from 26 student clubs and organizations manned tables and exhibitions to reflect their vision, goals and accomplishments. The representatives promoted their clubs through games, activities, competitions, media and posters. The event is very popular and was attended by many staff, faculty and students.



Ten students visited Tanzania during August 2018.



The WCM-Q group visits a local school, hospitals and an orphanage during their time in Tanzania.

International Student Exchange Program

In October 2018, the Student Affairs team hosted eight medical colleges from the region to participate in the International Students Exchange Program, with the guests spending one week at WCM-Q. The program brought two students and one faculty from each of the participating colleges. This year's participating colleges were An-Najah National University of Nablus, Palestine; Dow International Medical College of Karachi, Pakistan; Kasturba Medical College of Mangalore, India; the College of Medicine and Health Studies at Sultan Qaboos

University, Oman; the College of Medicine of Kuwait University; Al-Zahra Medical College of Basrah University, Iraq; the University of Jordan's School of Medicine; and Weill Cornell Bugando, WCM-Q's affiliate college in Tanzania.

During their time in Qatar the international students were shown the college's state-of-the-art facilities, saw presentations about WCM-Q's innovative six-year medical program, took classes, and met with WCM-Q students, staff and senior faculty. They visited the Clinical Skills and Simulation Lab (CSSL), and had the chance to work with hi-tech learning aids such as electronic medical

mannequins and an anatomage table – a human-sized touchscreen display for visualizing the human anatomy. Visits were also arranged to a number of healthcare facilities in Qatar, such as Hamad General Hospital, Sidra Medicine, Al Gharafa Medical Center and Rawdat Al Khail Wellness Center.

In January 2019, a delegation of eight WCM-Q medical students and three staff members spent a week at the University of Jordan's School of Medicine. During the visit the team met with the dean, faculty and students of the college and learnt about their curriculum and programs.



Incoming students hold a charity drive to collect items for the less fortunate.



Community Development

Community Development

Office of Communications

The Office of Communications has continued to expand 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.



Sahtak Awalan continues to encourage people to lead healthy lives through its Khayr Qatarna initiative.

Khayr Qatarna – Harvest Day

Khayr Qatarna, which evolved from the highly successful Project Greenhouse, has continued to capture the imaginations of students and the public across Qatar.

The program is based upon the cultivation of a variety of fruits and vegetables in large-scale greenhouses based at secondary schools across Doha. The resulting produce is then sold to the general public with all profits being reinvested in the scheme. The aim is to encourage greater consumption of fruit and vegetables, but also

to improve sustainability and food security while educating schoolchildren about subjects like agriculture and economics.

Khayr Qatarna was launched in 2018 and in February 2019 held its first Harvest Day as a celebration of the produce that had been grown.

Dignitaries from Qatar Foundation (QF), the Ministry of Education and Higher Education, the Ministry of Municipality and Environment, ExxonMobil Qatar, and Occidental Petroleum of Qatar Ltd. were at the Harvest Day event at Amna

bint Wahab Preparatory School for Girls to see students bringing in a bumper crop of tomatoes. Harvests at nine other schools participating in Khayr Qatarna yielded plentiful crops of fruit and vegetables including strawberries, cucumbers, tomatoes, cherry tomatoes, colored peppers, red cabbage and green beans. All the crops have been granted the status of 'Premium Products' - an indication of their freshness and quality - by the Ministry of Municipality and Environment.

All produce grown at the schools has been designated a 'Premium Product' by the Ministry of Municipality and Environment.



Community Development

WCM-Q uses technology to boost workers' health

State-of-the-art health monitoring technologies have been deployed to track and support the wellbeing of workers on Qatar 2022 construction projects in the next phase of a program delivered by the Supreme Committee for Delivery & Legacy (SC) in partnership with WCM-Q.

A team of experts from the college is using evidence-based monitoring technology solutions to undertake a three-year field assessment for construction workers on SC sites.

Hi-tech devices will be used to monitor key health indicators such as heart rate and rhythm, blood sugar levels, blood pressure, body temperature and hydration, in

order to identify individuals at risk and ensure preventive measures and care systems are put in place.

Individuals will have health indicators like blood pressure and heart rate measured so anyone at risk of illness can be identified.

The first phase of the initiative, carried out in 2018, involved SC and WCM-Q partnering to conduct health checks for construction workers, providing health awareness and training campaigns, and working with caterers to optimise the nutritional value of workers' meals. This work also set the standards for existing health screening and medical care delivery for workers.

Health indicators such as body weight, smoking status, muscle strength, sleep duration and mental health will also be screened. The modern technology and remote monitoring devices will allow the screening program to be scaled to cover larger number of workers in the future and construction workers will receive health advice from professionals delivered in their own language.

Additionally, the SC and WCM-Q will provide training to contractors, catering staff and Workers' Welfare Officers on key health issues affecting workers, Qatar's dietary guidelines, and health and nutritional best practices relevant to the construction industry.



WCM-Q's work with the Supreme Committee for Delivery and Legacy will help safeguard the welfare of World Cup workers.

The Color Run breaks records again



More than 10,000 people took part in the run.

Doha was covered in color as The Color Run presented by Sahtak Awalan: Your Health First returned to the Qatar National Convention Centre.

A record-breaking turnout of more than 10,000 Color Runners completed the Happiest 5K on the Planet as they walked, ran, skipped, and, most importantly, laughed their way to the finish line on Saturday in their most colorful attire.

One of the biggest events that Doha has ever seen, this edition of the Color Run was part of The Hero Tour, featuring an all-new Super Zone and Foam Zone as part of the 5k course.

The Foam Zone was a popular new addition to the course.

People of all fitness levels gathered for the warm up, before the first wave jetted off on the 5k course in clean white shirts, capes, tutus, socks and sunglasses before getting doused from head to toe in color.

At the finish line, runners were bursting with colors, energy, and pride as they collected their medals, before heading to the Finish Festival to celebrate with their friends, families and colleagues, enjoying the live music and games.

Community Development

YHF celebrates Qatar National Day

Sahtak Awalan – Your Health First once again helped people celebrate Qatar National Day, providing an interactive installation that proves exercise can be fun.

The flagship health campaign of WCM-Q, Your Health First was invited to participate in the Darb Al Saai celebrations inside the Qatar Foundation tent for the fourth time, having attracted tens of thousands of people to in previous years.

For 2018, Sahtak Awalan showcased its new virtual reality sports machines, that both entertained visitors

and encouraged them to take more exercise.

A virtual reality rowing machine allowed visitors to experience rowing on a river and lake, while the cycling machine offered them the chance to cycle along mountain roads or at a velodrome. Cross trainers gave them the chance to go up against previous participants to beat times or reps, and a giant snakes and ladders game gave the younger members of the family a chance to get involved.

The virtual reality exercise machines proved particularly popular with children.

Your Health First is supported by its strategic partners: Qatar Foundation, the Ministry of Public Health, the Ministry of Education and Higher Education, the Ministry of Municipality and Environment and ExxonMobil.

Launched in 2012, WCM-Q's Sahtak Awalan – Your Health First campaign is an educational outreach program that works to encourage and empower all members of the community in Qatar to live healthy, sustainable lifestyles, with a particular focus on young people.

The exercise machines proved to be particularly popular with children.



Praise for Khayr Qatarna at local and regional exhibitions

Sahtak Awalan – Your Health First was praised both locally and regionally for the huge success of its Khayr Qatarna initiative, having been showcased at three high-profile exhibitions.

The latest was at The Education Conference 2019: Education Makes a Difference, held under the patronage of H.E Sheikh Abdullah Bin Nasser bin Khalifa Al Thani, Prime Minister of Qatar and Minister of Interior, at Qatar National Convention Centre.

The Khayr Qatarna exhibit was visited by H.E the Minister for Education and Higher Education, Dr. Mohammed Abdul Al-Hammadi, along with Ms. Fawzia

Abdulaziz Al-Khater, Assistant Undersecretary for Educational Affairs at the Ministry of Education and Higher Education. Both were very impressed by the scale and success of the Khayr Qatarna initiative, especially the fact that it has a strong educational facet that integrates into schools' curriculums, and that so much high-quality produce had been grown in greenhouses sited at local high schools.

Khayr Qatarna was also showcased at the Agro-Food Oman expo, attended by thousands of people and senior figures in commerce and government, including H.H Mohamed bin Salim Al Said,

Chief of Protocol at the Ministry of Foreign Affairs in Oman, and H.E Ambassador Ali Bin Fahad Falah Al Hajri Shahwani, Qatar's Ambassador to Oman, both of whom showed great interest in the program.

Finally, Khayr Qatarna was represented at AgriteQ, the region's leading agricultural innovations exhibition. H.E Abdulla bin Abdulaziz bin Turki Al Subaie, Minister of Municipality and Environment, heard about the valuable work the program is doing in schools teaching students about sustainability and healthy lifestyles, while contributing to Qatar's food security.



His Excellency Mr. Abdulla bin Abdulaziz bin Turki Al Subaie, Minister of Municipality and Environment, with Nesreen Al-Refai, chief communications officer at WCM-Q, at Khayr Qatarna's AgriteQ exhibit.

Community Development

Prestigious award for Sahtak Awalan

An international environmental organization has presented Weill Cornell Medicine – Qatar’s 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 is 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.

Initiatives launched by Sahtak Awalan include The Color Run, Yalla Natural and Project: Greenhouse, which has built 130 greenhouses in local elementary schools to teach children how to grow fruit and vegetables, and the importance

of including them in their diet. This has been taken to the next level by the new phase of Project: Greenhouse, Khayr Qatarna, which was launched in February. This has seen large-scale greenhouses erected in local schools and fruits and vegetables grown on a commercial scale. The produce is then sold under the Khayr Qatarna brand at local supermarkets with all proceeds being reinvested in the scheme so that it can be expanded to include more schools.

The mission and vision is to support Qatar’s drive for food security, but also to improve sustainability by reducing food miles. The scheme also teaches students about agriculture and economics.

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.



Winners of Sahtak Awalan’s Project Greenhouse announced

Green-fingered students received awards for their schools after growing bumper crops of fruit and vegetables.

The students all participated in Sahtak Awalan’s Project Greenhouse competition, which challenges schools and pupils to grow the biggest and best crops and teaches them about

sustainability, and healthy lifestyles at the same time.

This year the Sahtak Awalan panel of judges awarded first place to Jawaan Bin Jassim Primary School for Boys, with Al Khor Preparatory School for Girls coming second, and Dukhan Primary Preparatory School for Girls in third place. Khalifa Al-Derham, director of

school affairs at the Ministry of Education and Higher Education, and Hassan Al-Mohamedi, director of public relations and communications at the Ministry, presented the award for first place to Mrs. Fawziya Abdullah Al-Kuwari, the principal of Jawaan Bin Jassim Primary School for Boys. The other schools to win awards were Al-Khor Preparatory School for Girls, Dukhan Primary

Preparatory Secondary School for Girls, Alkharsaa Primary School for Boys, Abdullah bin Turkey Primary School For Boys, Audio Education Complex for Boys, Ahmed Mansour Primary School for Boys, Qatar Leadership Academy, Al Markheya Primary School for Girls, and Zaynab Bint Jehesh Primary School for Girls.

Project Greenhouse has provided more than 130 schools across Qatar with greenhouses, plant pots, soil and seeds. The crops grown by Jawaan Bin Jassim Primary School for Boys include tomatoes, cucumbers, onions, eggplants and parsley. The children prepared the pots, planted the seeds, and watered and

nurtured them as the plants grew. Project Greenhouse has allowed students to work independently and in small groups and has taught them a whole range of skills. Along with learning about healthy eating, sustainability and horticulture, the project feeds directly into classes about science and the environment.

Your Health First praised by sports stars

The partnership between Sahtak Awalan – Your Health First and the Supreme Committee of Delivery and Legacy’s Generation Amazing initiative was praised by a World Cup winning Brazilian footballer and a renowned Qatari sports commentator.

Gilberto Silva and Mohammed Saadon Al Kuwari visited Your Health First and Generation Amazing’s installation at Katara, which is in place as part of WISH’s Doha Healthcare Week.

Your Health First brought the Yalla Natural roadshow to the event, teaching children about the importance of healthy eating and exercise to their lives, while Generation Amazing installed a pop-up football pitch on which visiting children were able to play a game.

A lucky ten children also had the chance to play a game with Gilberto and Mohammed, with both men praising the work that Your Health First and

Generation Amazing are doing in instilling a culture of health and exercise among young people.

Hundreds of schoolchildren were invited to visit the installation at Katara, with the young students able to team up and play football and learn new skills on Generation Amazing’s football pitch.



Mohammed Saadon Al Kuwari (left, back) and Gilberto Silva (3rd from left, back) with their young team mates and members of Generation Amazing.

Community Development

Honor for Khayr Qatarna initiative



Nesreen Al-Refai, chief communications officer at WCM-Q, receives the Responsible Leadership Award from Dr. Hassan Rashid Al-Derham, president of Qatar University.

Sahtak Awalan's Khayr Qatarna initiative received the award for Responsible Leadership at the annual QatarCSR exhibition.

QatarCSR is held at Qatar University under the auspices of HE Sheikh Abdullah bin Nasser bin Khalifa Al-Thani, the Prime Minister and Interior Minister of Qatar, and the Responsible Leadership award

recognizes the role that Sahtak Awalan and Khayr Qatarna have played in taking responsibility for promoting sustainability and healthy lifestyles among our young people and the wider community.

Khayr Qatarna was launched in February 2018 and is the latest initiative from WCM-Q's Sahtak Awalan – Your Health First

campaign. Through Khayr Qatarna, large-scale, climate-controlled greenhouses have been erected at ten schools across Qatar, with the produce grown in them sold to the community with all profits being reinvested in the scheme. The aim is to promote healthy diets and to teach students about sustainability and food security.

Your Health First supports Back to School campaign

WCM-Q's Your Health First campaign worked with the Ministry for Education and Higher Education for the second year running to ensure children returned to school with an understanding about the importance of health.

As part of the Ministry's Back to School program, Your Health First distributed school bags, lunchboxes, water bottles, and activity books to children preparing for their first day back at school after the long summer holiday vacation.

The activity books explained the health benefits of a variety of different foods, helping parents and children plan meals to ensure they are nutritionally beneficial, while the water bottles remind children to stay sufficiently hydrated.

All of the gifts distributed had the Sahtak Awalan – Your Health First branding, which has become synonymous with high-impact health initiatives like Khayr Qatarna, the Color Run, Project Greenhouse and Yalla Natural. The campaign is run by Weill Cornell Medicine – Qatar with support from its strategic partners; Qatar Foundation, the Ministry of Public Health, the Ministry of Education and Higher Education, the Ministry of Environment and Municipality and ExxonMobil.



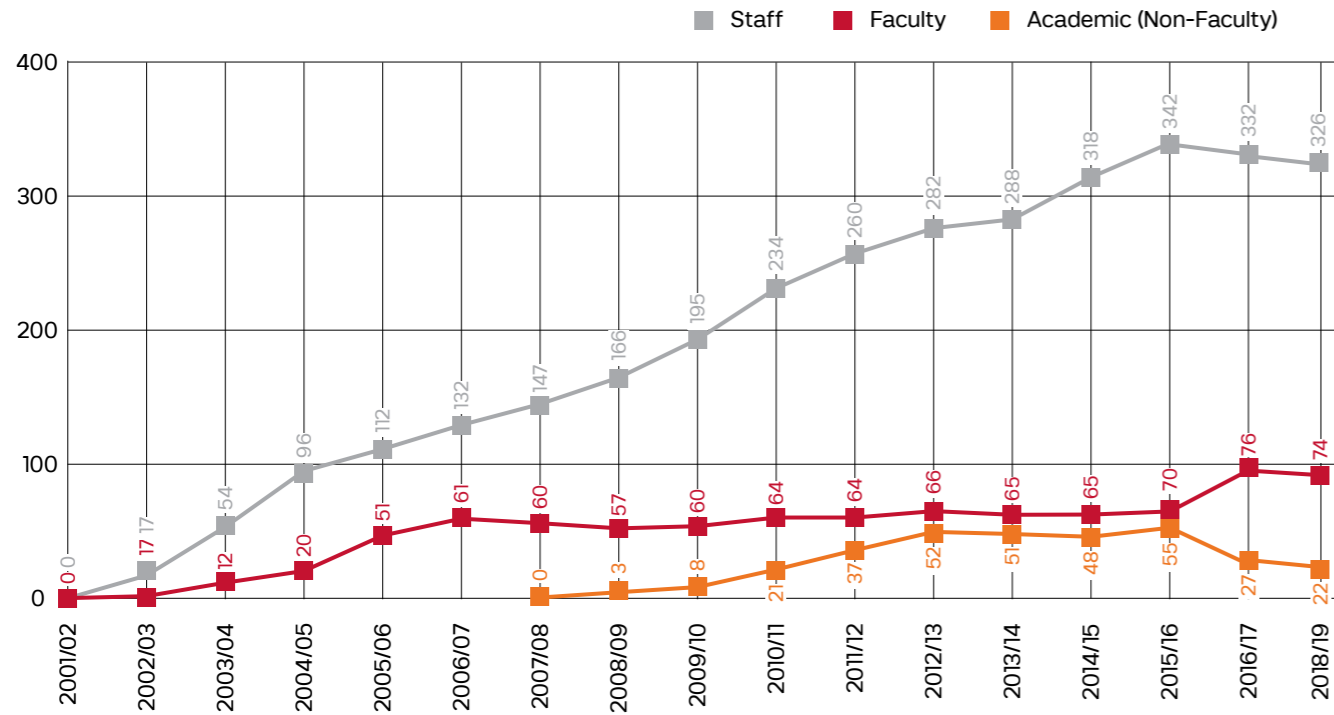
The Sahtak Awalan packs encourage children to eat healthily and stay hydrated.

Statistics

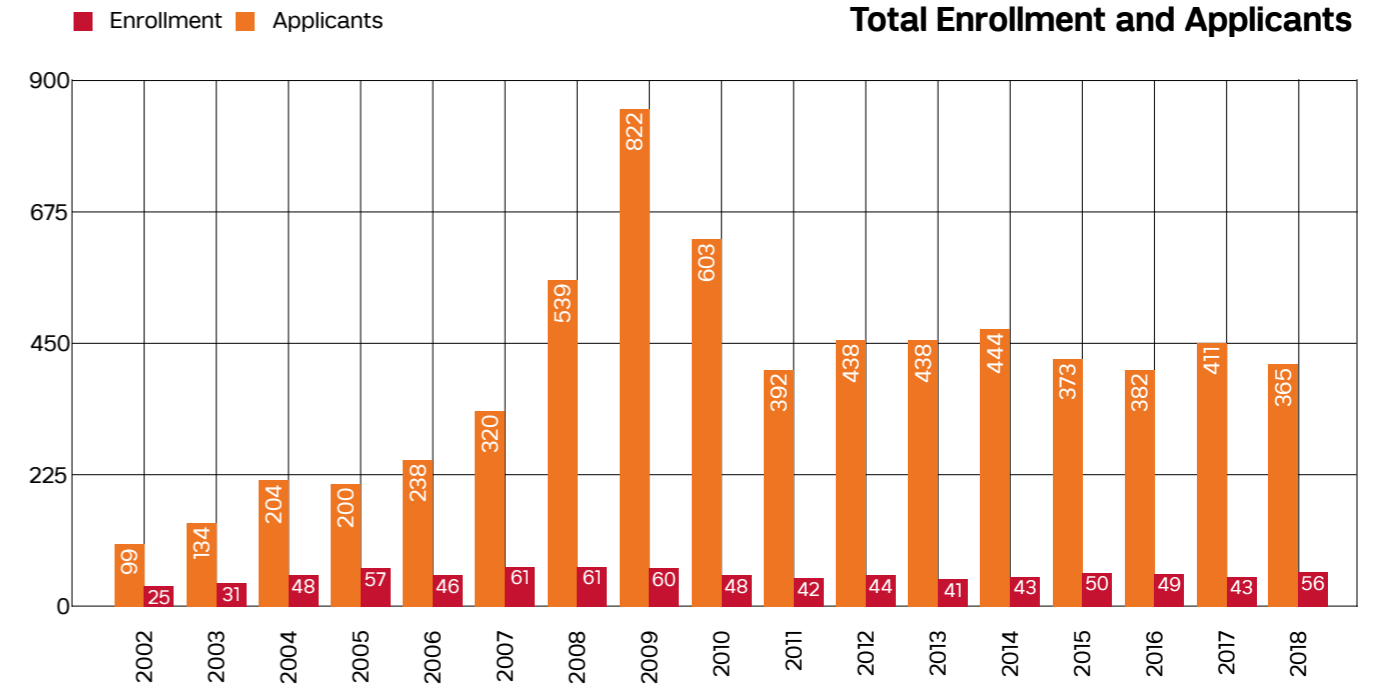
Statistics

Faculty & staff numbers, 2001-2018

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, 2018 and include those residing in New York. Academic non-faculty includes postdoctoral positions in the research program.

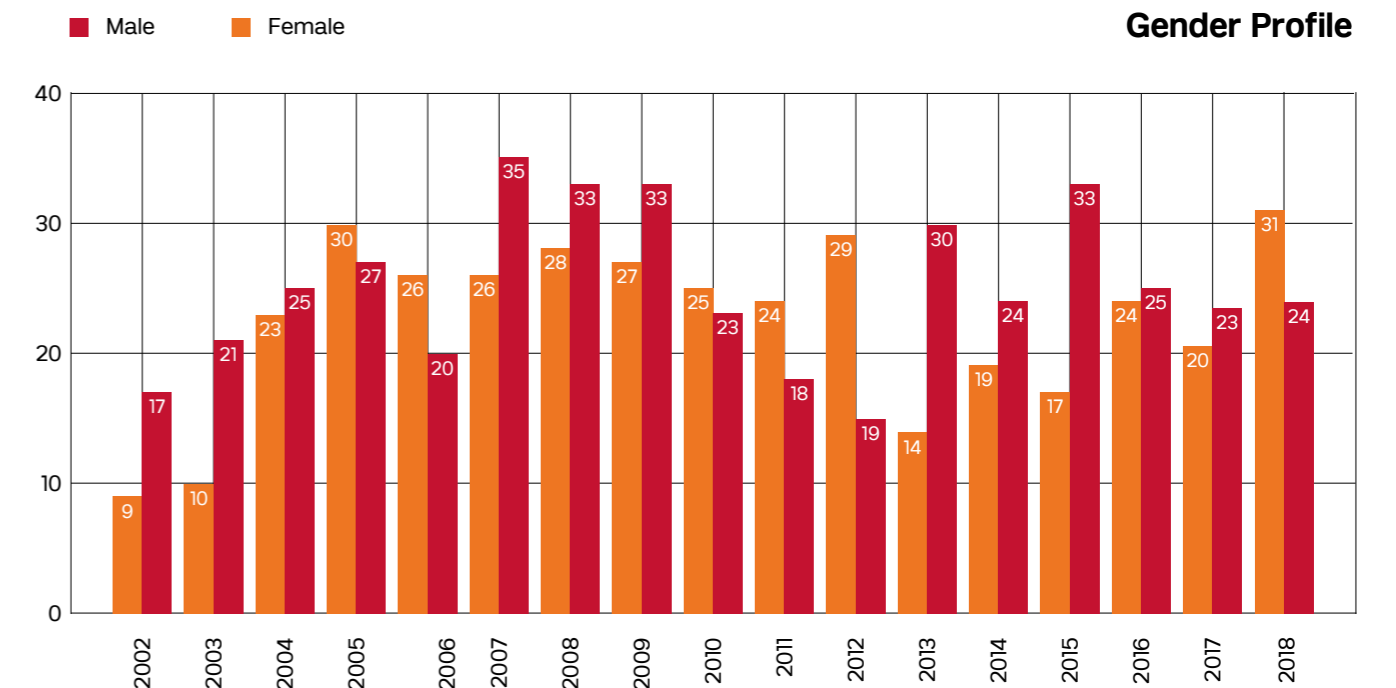
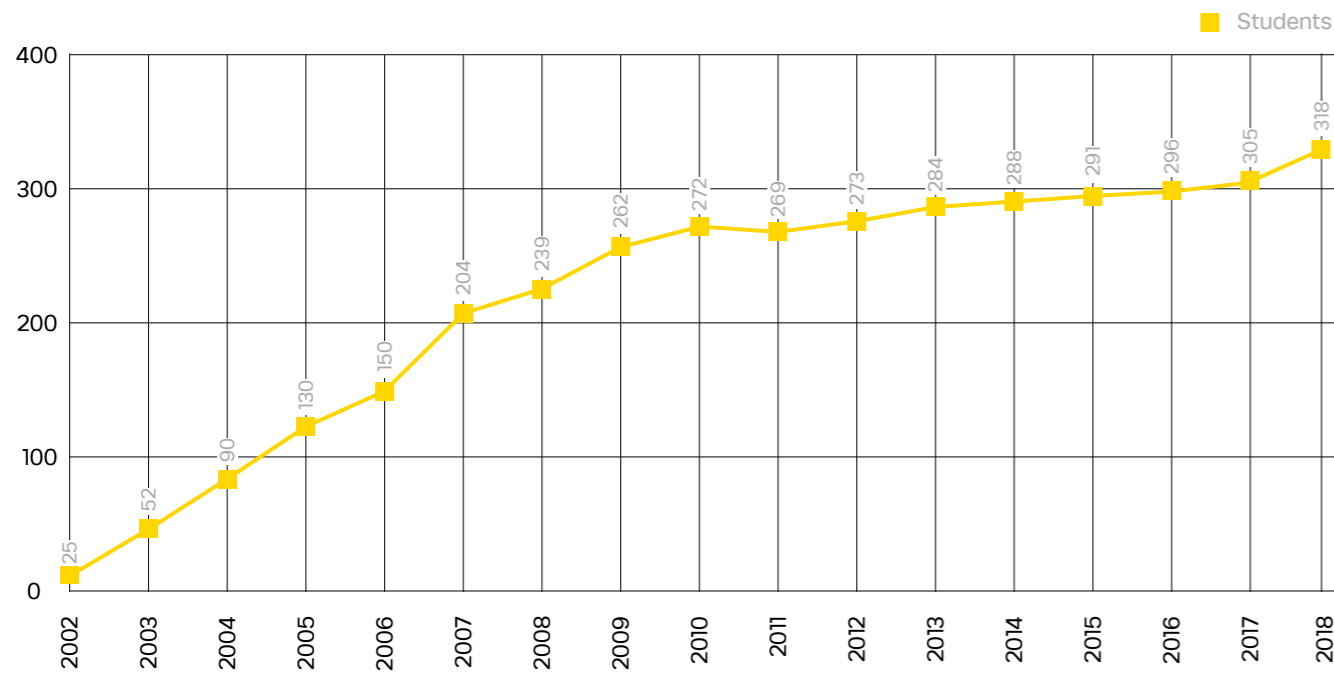


Profile of classes entering the Pre-Medical Program, 2002-2018



Total number of students, 2002-2018

Figures are as of September 2018, and reflect any attrition from incoming classes in subsequent years.



Citizenship of student body 2018



Students of WCM-Q come from across the world.





Leadership Structure

Cornell University

Robert S. Harrison
Chairman, Board of Trustees

Martha E. Pollack, PhD
President

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

Ravinder Mamtani, MBBS, MD, MSc
Vice Dean for Student Affairs-Admissions, Population Health, and Lifestyle Medicine

Shahzad Jafri
Senior Executive Director of Administration

Marco Ameduri, PhD
Senior Associate Dean for Pre-medical Education and Education City Collaborative Curricular Affairs

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

Khaled Machaca, PhD
Senior Associate Dean for Research, Innovations and Commercialization

Bakr Nour, MD
Senior Advisor to the Dean

Andrew Adair
Director Facilities, Health, Safety and Security

Nesreen Al-Rifai
Chief Communications Officer

Omar Baki
Director, Human Resources

Jamie Marie Gray
Director, Distributed eLibrary

Sameer Kalash
Director, Finance and Business Services

Badar Khan
Director, IT Operations



WCM-Q Publications

WCM-Q Faculty Publications July 2018 – June 2019

(As of June 30, 2019. 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" etc.)

Abdel-Aleem, Alice

Mohammed EEA, El-Zawahry M, Farrag ARH, Aziz NNA, Sharaf-EIDin W, Abu-Shahba N, Mahmoud M, Gaber K, Ismail T, Mossaad MM, Abdel-Aleem A. Osteogenic differentiation potential of human bone marrow and amniotic fluid-derived mesenchymal stem cells in vitro & in vivo. *Open access Macedonian journal of medical sciences* [Internet]. 2019 Feb 14 [cited 2019 Jun 11];7(4):507-15. Available from: <https://doi.org/10.3889/oamjms.2019.124>

Abi Khalil, Charbel

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