

The Foundation.

THE MONTHLY MAGAZINE OF QATAR FOUNDATION

ISSUE 24 DECEMBER 2010



The nation celebrates

*Qatar wins the right to host
the 2022 FIFA World Cup*

15th
ANNIVERSARY



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Qatar Foundation

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Unlocking human potential. إطلاق قدرات الإنسان.

Think.

Few things possess more Power than
a Thought.

Because a Thought has the potential
to become something significant.
To solve something meaningful.
And to inspire us to achieve great things.

What makes a Thought so powerful
is that it can be created by anybody.
At anytime.
From anywhere.

That's why thinking should be encouraged
and nurtured in all its forms.
No matter how small.
Or how impossibly grand.

Because wherever Thinking happens,
Big Ideas follow.
Minds become enlightened.
Knowledge grows.
And people discover new ways to unlock their
Potential.

So start Thinking.



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Unlocking human potential.



"What stuns me is the leadership here and where you are really trying to take Qatar. It's moving at an astonishing pace and it's magnificent. We are sitting here with some of the biggest universities surrounding us who are really building on the talent of those young Qataris coming through who will be the future scientists, the future physicians who will look after me and you."

LORD ARA DARZI

CONTENTS

ISSUE #24 DECEMBER 2010

03 NEWS

QF receives latest ISO certification;
QF in the news; F1 team delivers safety message; new software to track requests; VCUQatar expands; Bloomsbury blossoms at book fair; Dohaland shares plans in Saudi Arabia' Doha Debates wins award.

09 CALENDAR

10 UNSEEN TREASURES

A new book sheds light on some of the Islamic art world's finest treasures.

12 GROW YOUR OWN

The researcher using old techniques to tackle a new problem.



16 TAKING ARABIC ONLINE

How the Qatar Computing Research Institute is making Arabic-language computing a reality.

18 FORWARD THINKERS SERIES

Better healthcare through innovation
Lord Ara Darzi on his commitment to healthcare

20 DRIVING AMBITION

The Williams F1 team is working on innovations that could transform transport in Qatar.

24 QATAR WELCOMES INFORMATION STATION

How MEEZA is revolutionizing IT in the region.



Special report

28 THE NATION CELEBRATES

Qatar becomes the first Middle Eastern state to stage the biggest event in world football.

The Foundation.

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We bid! We won! We triumphed!

December 2nd 2010 was a sensational day in the history of Qatar. Jubilant, flag-waving football fans lined the streets and the celebrations went on well into the night.

FIFA announced that for the first time in history, the World Cup will be held in a Middle Eastern country. Proof that our country is capable of hosting the world's biggest sporting event. Global recognition that Qatar is the perfect place to "pull the entire world closer together through football".

As Her Highness said at the FIFA World Cup 2022 Bid, "When is the right time to bring the World Cup to the Middle East? The time is now".

Qatar is now the pride of the Middle East. Winning the bid was a moment when every citizen – "from Doha to Damascus" as Her Highness put it – could join together in celebration of the coming of one of the greatest spectacles on earth.

This is just the beginning. A decade may seem like a long time, but Qatar will build an environment where cheering fans of every nationality, color and creed can rub shoulders with the people of our entire region and enjoy our shared values – education, development and a culture of peace for all.

"A World Cup in Qatar will send an important message to this football obsessed region," Her Highness ended her speech. "A message that after 92 years of waiting, we are finally a recognized part of the global football family."

The FIFA Committee responded to this challenge. And the hope and excitement of a nation is already brimming. Let's put our hearts and minds together to realize this dream.



Haya Khalifa Al Nassr
Director of Communication Qatar Foundation



QF receives latest ISO certification

~ ISO 9001 – 2008 demonstrates that QF facilities including buildings, accommodation and offices meet the highest global standards.

After three years of steady progress, Qatar Foundation has been recertified with a prestigious ISO award.

Qatar Foundation earned the ISO 9001 – 2000 in 2007. The ISO certification is used to assess an organization's ability to meet customer and regulatory requirements, as well as providing a standardized assessment framework for internal performance.

Now the organization has been presented with its ISO 9001 – 2008 certification – the latest version.

The certification was presented to Rashid Al Naimi, Vice President for Administration, Qatar Foundation, by Maher Cheikhrouhou of Bureau Veritas, the international certification organization which undertook the re-

certification audit of Qatar Foundation to ensure it met necessary ISO standards for 9001-2008 certification.

"Qatar Foundation was delighted to receive the ISO 9001 – 2008 certification," said Rashid Al Naimi. "Three years after our certification, we can once again illustrate the increasing development and growth of Qatar Foundation, alongside our commitment to our customers."

The certificate covers the Foundation's buildings, offices, accommodation, recreation, transport, Information Technology and communication and educational testing to global standards.

In June 2010 Qatar Foundation became the first Arab organization to achieve ISO 10015+ certification.

IN THE NEWS

~ Qatar Foundation stories in the international press.

"If America's Got Talent, then the Arab World's Got Science," writes Discover magazine of Qatar Foundation's reality TV show Stars of Science.

"The competition includes weekly eliminations based on challenges involving the engineering, design, or business of the contestants' inventions; daily shows following the contestants as they work, educating the audience about the science behind their inventions. The students have just five weeks to engineer and design their preliminary idea into a workable prototype.

"For each competition, 16 inventors are picked from thousands of applicants from across the Middle East. The final winning project gets \$300,000. Last year's winner was Bassam Jalgha with his invention of 'Dozan,' an automated tuning device for stringed instruments. Some of this year's projects: An air-conditioned vest for working in the field, designed by Maha Al Amro; a motorized walker from contestant Ahmad Al Ghazi; and heart-rate measuring swimming goggles from Hind Hobeika."

In brief

GEORGETOWN OPENS WOMEN'S CENTER

Georgetown University – School of Foreign Service in Qatar has launched a women's center to coincide with the 20th anniversary of the center at its main campus in the United States.

"Education City, by its very nature, is an empowering environment for women," said Brendan Hill, Associate Dean of Student Affairs. "The Women's Center at Georgetown's Qatar campus is designed to help our female students take full advantage of this environment by encouraging them to think consciously about the role gender plays in all societies."

The center comes in response to requests from female students for a space to discuss common matters and support one another.

Laura Kovach, Director of the Women's Center on the main campus, believes extending the center's mission to the Qatar campus is an important step for the female community.

"We've spent the last 20 years serving the Georgetown community in Washington, DC," she said. "We are thrilled to have a Women's Center at SFS-Q to continue the work of supporting students, faculty and staff."

FIRST ARAB IN SPACE VISITS QF

His Royal Highness Prince Sultan bin Salman bin Abdul Aziz Al Saud, Secretary General of The Saudi Commission for Tourism & Antiquities and the first Arab and Muslim to travel in space, has visited Qatar Foundation.

He was welcomed by QF Vice Chairperson Dr Saif Al Hajiri and was given a presentation on the organization and a tour of Education City. His Highness praised Qatar Foundation, saying "everything I have seen today shows a commitment to human progress".

HIGH SCHOOL OUTREACH PROGRAM

Carnegie Mellon University in Qatar (CMUQ) hosted an outreach workshop for high school students on 27 November under the theme of the United Nation's 2010 Year of Biodiversity.

Ibtikar Qatar encourages high school students to design creative solutions to some of the important current challenges faced by society using information technology. A total of 91 students worked on designing iPhone applications to help promote the United Nations goals for the 2010 year of Biodiversity.

The first round will see students design posters to promote their projects, with short listed teams presenting their ideas before a panel of judges in January.



~ *Formula One team aims to encourage young people to be safe on the road.*

A top **Formula One** team with a base in Qatar Science & Technology Park (QSTP) has thrown its weight behind a campaign to promote safer driving.

Members of the Williams F1 set-up, which runs the Williams Technology Centre at QSTP, have been visiting Qatar Foundation schools and universities to talk about good practice on the roads as part of a youth education program.

Team manager Sir Frank Williams paid a special visit to Qatar Academy (QA) to talk to a group of Grade 12 students. The Williams F1 founder is in a wheelchair after being involved in a car accident more than two decades ago.

"I flew off the road trying to catch an aeroplane for which, as it turns out, I was much too early. I can assure you, looking back, it's just not worth it. You get used to [being in a wheelchair], but it carries many penalties when you think back on what you can and can't do because you've damaged yourself permanently," he said.

Williams' efforts are at the forefront of a drive to promote good motoring etiquette and cut down on dangerous practices including tailgating, speeding, talking on cell phones while behind the wheel and performing stunts that leave skid marks on roads.

After his talk at QA, Williams fielded questions from the audience about a variety of topics, including how Formula One drivers break into the sport.

"Formula One is populated by a lot of driven people who are very competent in what they do. Every single one of them has had a superb education," the racing chief explained, adding that although women do not usually become drivers, they are able to pursue careers in areas including engineering and marketing.

For more on the Williams Technology Centre please turn to page 20

Facilities Management launches online program

~ *New software provides a benchmark for organizations in Qatar.*

A new piece of software which allows Qatar Foundation staff to electronically track requests made to Facilities Management (FM) Directorate has entered a live testing phase.

The Computerized Aid Facilities Management (CAFM) system lets employees initiate work ranging from changing light bulbs to reorganizing offices from the comfort of their computers.

Users will be able to monitor the progress of their request through FM's internal stages, the assignment of the work to a contractor,

cost evaluation and even the acquisition of materials.

The software, called Archibus, is being introduced one campus at a time, and will allow FM to deal with the 200-250 work requests it receives each day with greater speed and transparency.

"CAFM will enhance the administrative procedures needed to handle a work request. It will also reduce the number of people needed for the job to be done and for the large volumes of work to be well-registered,"

explained Mohammed Al Malki, FM Executive Director.

The new system will also be good for the environment. FM currently has to deal with several hard copies of forms, whereas CAFM will store everything in a digital archive.

"We think this is a very important milestone for QF. We are looking forward to the system going live after working on this for the past three years. The software is very reliable and suitable to our FM requirements. We are making sure everyone is receiving proper training and hope the testing phase will go smoothly," added Al Malki.



VCUQatar expands

~ University unveils expansion which will enable large-scale research projects.

Virginia Commonwealth University in Qatar (VCUQatar) celebrated the official opening of its new North Wing extension on 21 November after two years of intensive construction work.

Designed by architect Hazem Abu Naba and completed in time for the start of the 2010 fall semester, the extension expands the university's floor space by over 125% to 20,488sqm.

The additional space will allow the university to significantly expand its research and artist in residence programs.

Among the new facilities are a stunning three-storey atrium, 12 new studios, three additional classrooms, a materials library, and an expansive exhibit and event area.

The North Wing is the first extension project to take place in Education City, and is particularly important following the recent introduction a Bachelor of Fine Arts degree in painting and printmaking, and a Master of Fine

Arts degree in design studies – resource-intensive programs that are unique to the Middle East.

VCUQatar is Education City's oldest resident, having been established in 1998.

"Through this building we're acknowledging the work, dreams and aspirations of the students who will go to make a difference and create a design future for this region," said Dean Allyson Vanstone.

The North Wing is likely to be instrumental in facilitating large-scale research projects, accommodating artists and designers in residence, and helping VCUQatar students take ideas from incubation through to business launch.

"In the past we've had no space to even contemplate these kind of possibilities," Vanstone explained.

The official dedication ceremony featured speeches by Vanstone, Interim Provost and Vice

President for Academic Affairs Dr Beverly Warren, and Vice President of Education and President of Education City University Dr Abdullah bin Ali Al Thani, before culminating with the unveiling of a painting by renowned Qatari artist and VCUQatar Joint Advisory Board member Yusef Ahmed Al Hommaid.

Guests, including VCU Richmond and the Qatar Foundation representatives, VIPs, sponsors, faculty members and staff, were then taken on a guided tour of the North Wing that took in project exhibitions created by VCUQatar students throughout the day.

"The notion of space, and what the space brings and all of the technical facilities we're developing, really shows the weight and importance of what the university is doing here," said Vanstone.

For more information please visit www.qatar.vcu.edu



Bloomsbury blossoms at book fair

~ *Publisher entertains 1,000 children at four-day event.*

Bloomsbury Qatar Foundation Publishing (BQFP) had a strong showing at this year's Doha International Book Fair, hosting the world's first festival exclusively dedicated to Arabic children's literature.

During the course of four action-packed days, eight leading Western and Arab authors and illustrators reached out to 1,000 children, 600 teachers and a clutch of aspiring local artists via a series of inspirational talks and workshops.

In addition, the International Children's Book Festival served as the official launch for two new BQFP books by acclaimed British author Sally Grindley, featuring the adventures of Fafa, a popular character on the Al Jazeera Children's Channel.

BQFP 2010's catalogue now comprises 17 children's titles in both Arabic and English.

Also unveiled at the event was *Qatar: My Second Home*, a collection of essays by expatriate children in Qatar edited by Grindley

and published in collaboration with the Ministry of Culture as part of Doha's ongoing stint as the incumbent Capital of Arab Culture.

"Our aim is to promote a love of reading from an early age, and create a vibrant literary culture for children and their teachers, as well as inspiring local authors and artists," said BQFP Reading and Writing Development Director Dr Mohanalakshmi Rajakumar.

"We had a fantastic turnout to this event, and it really shows that BQFP is reaching its aims and connecting with its intended audience in a very effective manner."

The eight authors and illustrators chosen to star at the event – half hailing from Arabic countries, half from the West – included household names such as Waleed Taher, the Egyptian author who recently received the Etisalat Prize for Arabic Children's Literature for his novel *Noqta Al Sawda* (*The Black Dot*), and Chris Riddell and Paul Stewart, the dynamic UK duo behind *The Edge Chronicles*.

The festival began behind closed doors on 29 November with the headlining authors and illustrators discussing the importance of children's books and how to bring them alive in the classroom.

For the following three days, children from grades 2 through 12 were treated to a series of insightful talks on aspects of the art and production of children's literature, while local writers and illustrators were given some top tips for success at workshops held by Bloomsbury Group Publishing Director Farah Odedina and Design Director Val Braithwaite.

"There is no single event on the calendar for the Arabic world that celebrates children's books in Arabic and English," said BQFP consultant publisher Andy Smart.

"Through festivals like this and other BQFP children's literature initiatives, our aim is to involve as many people as we can and make them feel like this is an exciting world that they can be a part of."

For further information, visit www.bqfp.com.qa



Dohaland shares regeneration plans

~ Musheireb project impresses audiences at Middle East symposium.

The ambitious plans to develop Qatar's capital city were shared with the rest of the world when Dohaland representatives attended an international conference.

Visionaries behind the group's Musheireb project shared their ambitions for the future shape of Doha during the Urban Development Symposium: Real Estate Development and Housing Sustainability event held in Saudi Arabia.

Delegates at the symposium were full of praise for the project, which plans to create the world's first sustainable downtown development that combines cutting-edge technology with culturally-sensitive architecture.

"Sustainable development is a long-term investment in our nation's future. We are already witnessing the transition to a greener built environment as it offers a solution to the

conservation of natural resources as well as reducing pollution," explained Eng Issa M Al Mohannadi, CEO of Dohaland.

"Sustainable buildings consume fewer resources, generate less waste, cost less to operate and provide healthier living and working environments for everyone – both indoors and out. We are delighted to share our approach with our peers across the region."

Dohaland also used the symposium to announce the launch of a knowledge-sharing programme between itself and universities in Saudi Arabia. The scheme will allow Saudi students to complete internships in Qatar.

Musheireb is a QR 20 billion, mixed-use development regenerating the historically-important center of downtown Doha. The signature project was created following a three-year study.

Dohaland is heavily involved in a number of different activities and recently organized a quiz featuring questions about Qatari culture and history, with all of the answers available at the group's Knowledge Enrichment Centre.

More than 3,500 visited the floating facility, which is moored off Doha Corniche, during the competition, which was run as part of Reach Out To Asia's Wheels N' Heels event. Prizes for the winners included Ferrari-branded bikes and Apple iPads.

The Knowledge Enrichment Centre is packed with information about Qatar's past and present as well as details about the innovative Musheireb project.

Its opening hours were recently extended and it is open to the public from 9am to 8.30pm from Monday to Thursday and from 3.30pm to 6.30pm on Saturdays.

For more information please visit www.dohaland.com



Doha Debates wins international award

~ *Jury praises television show for its outstanding contribution.*

Tackling the tough subject of the stand-off between Hamas and Fatah has earned The Doha Debates a top award.

The show came out on top in the Association for International Broadcasting's (AIB) Best Specialist category for its program, which brought leaders from the two factions together after months of deadlock.

A host of top television industry professionals singled out the episode, which was broadcast in March this year, for making

an "outstanding contribution" to TV in the Middle East and around the world.

The Doha Debates adopts the centuries-old Oxford Union debate format, with guests presenting for and against on topics ranging from Barack Obama's ability to make peace in the Middle East to whether France is right to ban the wearing of the veil.

Chairman Tim Sebastian, a former BBC Worldwide correspondent, praised the hard work and professionalism of The Doha

Debates' team for their work throughout the show's sixth series.

"[Series six] saw the Debates innovate and surprise our audiences in new ways," the host added.

The AIB's Best Specialist genre celebrates production that falls outside the traditional award categories.

For further information please visit www.dohadebates.com

Just for laughs

~ *QF-based student launches comedy career.*

An Education City student has embarked on an international comedy tour.

Mohammed Fahad Kamal, who is in the second year of a business management degree at Carnegie Mellon University Qatar (CMUQ), won the chance to travel with American comedian Ahmed Ahmed in a competition earlier this year.

The 21-year-old, who has now started a series of shows across the Middle East, told *The Foundation* that his comedy dreams would not have been realized if he had not enrolled on a course at Qatar Foundation.

"I first started by standing up at the front

of class when the lecturer was late and doing a routine, imitating the professor and so on. I have never had stage fright and I realized that stand-up comedy is something I wanted to do," he explained.

"I love studying here. You get a high-quality education because it's one of the top

business schools in the world, but it's right here in my country."

Kamal and Ahmed Ahmed have joined forces for a tour that will see the pair perform for audiences in Kuwait, Bahrain, Saudi Arabia, Jordan, Lebanon, Oman and Syria.

On top of developing his comedy skills, Kamal has also had to work hard to keep on top of his studies and recently missed a show due to examinations.

The comedian graduates next year and told *The Foundation* that he may try to make a career out of stand up once he graduates.

"Would I give it a shot? Why not," he laughed. "I'm going to have a go and see where it takes me and if I find that I can make a good living out of it then I would be happy to do so. It's my passion and I'm the kind of person who gets excited about getting up on stage."



CALENDAR 2010/2011

DECEMBER 2010

What Alwanouhom Qatariyah*Where* Waqif Art Center*When* 1-10 and 13-25 December, 2010

Ten Qatar artists, aided by Virginia Commonwealth University in Qatar students, will each produce two paintings to celebrate National Day. The artists will work in an open studio allowing them to interact with members of the public, and the finished art will be displayed from 13 December.

What Application Essays 101 for High School Students*Where* Room 3035, NU-Q, Education City, Doha*When* 6pm-8.30pm, 16 December, 2010

Northwestern University in Qatar's certified writing instructor will help prospective university students formulate their application essay. They will learn to write with greater complexity, confidence and interpretive savvy – all qualities admissions officers look for in application essays.

What Qatar National Day*Where* Across Qatar*When* 18 December, 2010

Qatar Foundation is organizing a wide range of events to mark this

Sonia Park



important occasion, with a week of forums and concerts celebrating the state's cultural history leading up to National Day itself on 18 December. Events include an art exhibition and pearl diving forum to a special performance by Qatar Philharmonic Orchestra. For more information please visit www.qf.org.qa

What Qatar Philharmonic Orchestra*Where* Opera House, Cultural Village, Doha*When* 19 December, 2010

Qatar Philharmonic Orchestra's pianist Sonja Park will be performing solo, playing the following pieces: A. Osman's Fusion, S. Rachmaninov's Piano concerto No 3, and R. Strauss's Don Juan and Till Eulenspiegel. Guest conductor: Thomas Kalb. For more information contact qpopr@qf.org.qa

JANUARY 2011

What Don Winters Lecture*Where* Lecture Hall 1202, CMU-Q, Education City, Doha*When* 12 January, 2011

As part of Carnegie Mellon University in Qatar's (CMU-Q's) Making the Connection Lecture Series, Don Winters, Vice President of Research and Technology for Boeing International Corporation, will be conducting a presentation about the company, his position within it, and possible opportunities for students. Students will also have a chance to network once the presentation is over. Lunch will be provided.

For more information please visit www.qatar.cmu.edu

What Northwestern Admissions Information Session*Where* Room 3035, NU-Q, Education City, Doha*When* 13 January, 2011

High school students will be able to learn more about Northwestern University in Qatar's (NU-Q's) programs in Journalism and Communication and the vast array of career opportunities that its graduates enjoy.

For more information please visit www.qatar.northwestern.edu

What World Religions Day*Where* Food court, CMU-Q, Education City, Doha*When* 16 January, 2011

Visitors to CMU-Q's food court will be able to view an interactive exhibit about world religions and interfaith movements, which will include information about the world's religions and leaders who have worked to make positive change through interfaith cooperation.

For more information please visit www.qatar.cmu.edu

What Yasser Tabbaa lecture*Where* VCUQatar Atrium, Education City, Doha*When* 19 January, 2011

Yasser Tabbaa, Visiting Professor of Art History, New York University Abu Dhabi presents a public lecture as part of the VCUQatar 'Lectures in the Arts and Architecture of the Islamic World'. Tabbaa is a specialist in Medieval Islamic architecture and will discuss the new and newly-renovated Shia shrines in Syria, which have become central to the pious practices of hundreds of thousands of visitors from around the world. He will describe how their design has been influenced by aspects of the faith.

For more information please visit www.qatar.vcu.edu

QF Radio 93.7 FM

~ QF Radio has unveiled its new program line-up with a wide variety of daily and weekly shows. Highlights include:

DAILY SHOWS

06:00 Far Corners

Current affairs and situational snapshots from around the world

07:00 QF News

Everything about QF

07:30 E-Vision

Interesting stories about 'Education, the academe, student life,' and a lot more, straight from the students, professors and more

08:45 "Alamouhm"**09:00 International News**

All the latest news from around the world presented in Arabic

10:00 Industry

The latest innovations, gadgets, technology and more

11:00 Sports Global

Sports news from within Qatar and the rest of the world

11:22 Dhor call to prayer**12:11 Science Alive**

Science matters and more

13:00 E-Vision**13:25 Qatar Symphony**

The best musical pieces performed by the Qatar Philharmonic Orchestra

14:23 Asr call to prayer**14:28 Taking You Further**

A human rights program, an in-depth look at important issues

facing all of us today

15:00 Science Alive**15:30 QF News****15:54 Piano****16:23 Maghreb call to prayer****16:50 Qatar Symphony****17:00 International News****17:12 Research Matters****17:41 Yohemlay song**

Produced By Qatar Foundation

18:00 Far Corners**18:14 Al Isha call to prayer****18:30 Design Edition****19:00 Campus Buzz****19:30 Cover to Cover**

Lively discussion about literature

and award winning/best selling English and Arabic titles, literary events and what's happening in publishing in Qatar

20:32 Nothing is Impossible

Fitness and Health, your on-line personal trainer

21:00 Sports Global**23:00 International News****00:00 QF News****01:00 E-Vision****02:30 Industry****03:07 Nothing is Impossible****04:20 Science Alive****04:40 Al Fajr call to prayer****05:26 QatarSymphony**

Unseen treasures

A collaboration between Bloomsbury Qatar Foundation Publishing and Doha's Museum of Islamic Art is presenting some of the rarest treasures in the Islamic art world to a new audience.





From a gorgeously gilded 14th-century Mamluk glass bucket that once belonged to the Rothschild household, to stunningly-illustrated Qurans and a seven-meter-long Hajj certificate, the latest exhibition at Doha's Museum of Islamic Art showcases some of the rarest pieces from the Islamic art world.

Each item in the Unseen Treasures exhibition tells its own unique story. And Bloomsbury Qatar Foundation Publishing (BQFP) has partnered with the museum to tell those stories in even more detail.

BQFP has released *Focus on 50: Unseen Treasures* from the Museum of Islamic Art in Qatar, featuring spectacular photography and information on more than 50 remarkable objects from the museum's collection of 4,500 pieces that have never been seen in Qatar before.

The book also includes a foreword by

“UNSEEN TREASURES IS A STUNNING REPRESENTATION OF THE RICHES OF THE ISLAMIC WORLD THAT DEMONSTRATES BQFP'S COMMITMENT TO PRODUCING BOOKS OF QUALITY IN ENGLISH AND ARABIC”

Sheikha Al Mayassa bint Hamad bin Khalifa Al Thani, Chairperson of the Qatar Museums Authority, as well as texts written by specialists from the museum.

“The whole concept behind Unseen Treasures is in seeing the details, because they tell in-depth stories about the history of the objects,” says Michelle Walton, Head of



Research at the Research & Curatorial Department of the Museum of Islamic Art.

“The book supplies some of those stories, creating a further curiosity about the people and places related to each object. Hopefully, we can inspire visitors to make new connections even beyond our presentations and ideas.”

Walton says that the museum approached BQFP after seeing the quality of one of its first children's books, *Victory Over Abu Derya*. “We knew if as much care was taken with a children's book, Bloomsbury would certainly be able to meet our quality requirements,” she says.

“Unseen Treasures is a stunning representation of the riches of the Islamic world that demonstrates BQFP's commitment to producing books of quality in English and Arabic,” adds Seif Salmawy, Managing Director of BQFP.

“This is an exceptional title that not only broadens the range of books we produce, but highlights our cooperation with leading cultural institutions in Qatar.”

For further information, visit www.bqfp.com.qa and www.mia.org.qa







GROW YOUR OWN

A researcher at Weill Cornell Medical College in Qatar believes he may have found a unique way to construct artificial organs: using a technology that has existed for thousands of years.

During the space race of the second half of the last century, scientists were faced with a serious problem: how to write in orbit. The traditional ball point pen relies on gravity to pull the ink down to the nib. In zero gravity it was useless.

The Americans, so the story goes, committed teams of researchers and spent millions of dollars on developing a pen that can work upside down. The Russians simply used a pencil.

The story is actually an urban myth, but it illustrates an important point that is often overlooked as we increasingly turn to high technology to solve our problems: sometimes the solution is simpler than we realize.

That point is not lost on Dr Albert Liberski, a Postdoctoral Fellow at Weill Cornell Medical College in Qatar.

"I try to find the gaps," he told *The Foundation*. "I try to take old tools from other areas and transfer them to new things."

A good example of his work is a recently published paper on controlling the growth of cells. While it's easy enough to encourage cells to grow in a laboratory, getting them to grow in a specific pattern – something that will be increasingly important in the rapidly-growing field of creating artificial body parts – is more challenging.

Dr Liberski discovered it requires nothing more complicated than a laser printer of the type found in any office.

He stumbled across the solution when trying to use plasma to burn cells into specific shapes. "I was going to use the toner as a mask for a plasma treatment," he said. "You etch the surface but you put something over it, like toner, for protection so that you etch only in specific places. We were trying to do this and we found that the toner itself is not friendly for cells. So why use the plasma when you can use this directly?"

Any pattern, from a straight line to complex shapes, can be designed on a computer. The image is then converted into a negative and printed on a piece of transparent plastic of the kind used on old-fashioned overhead projectors.

"The question now is how to transfer the toner from the transparent sheets of plastic you can put in the printer to the glass where you grow the cells. The solution is very easy. You put the plastic on the glass, add a little bit of heat, and you transfer the toner to the glass. It's extremely useful because the resolution is very good and it's much cheaper than any other method that's available."

But it's in the field of creating artificial organs that Dr Liberski believes he may have really discovered something.

Most medical experts agree that creating replacement body parts, ideally using a patient's own cells, is going to be a major part of medicine in the future. The problem is that it's extremely difficult. Using existing methods, even creating a relatively simple structure such as a blood vessel is labor intensive and can only be

done on a small scale. Larger blood vessels must be made from a number of individual sections that are joined together.

Creating more complex organs remains years, possibly even decades, in the future. Currently the best option for a patient needing a new organ is to receive a transplant from another person or animal, but this carries a high risk of failure and typically condemns the patient to a lifetime of taking immunosuppressant drugs to prevent rejection.

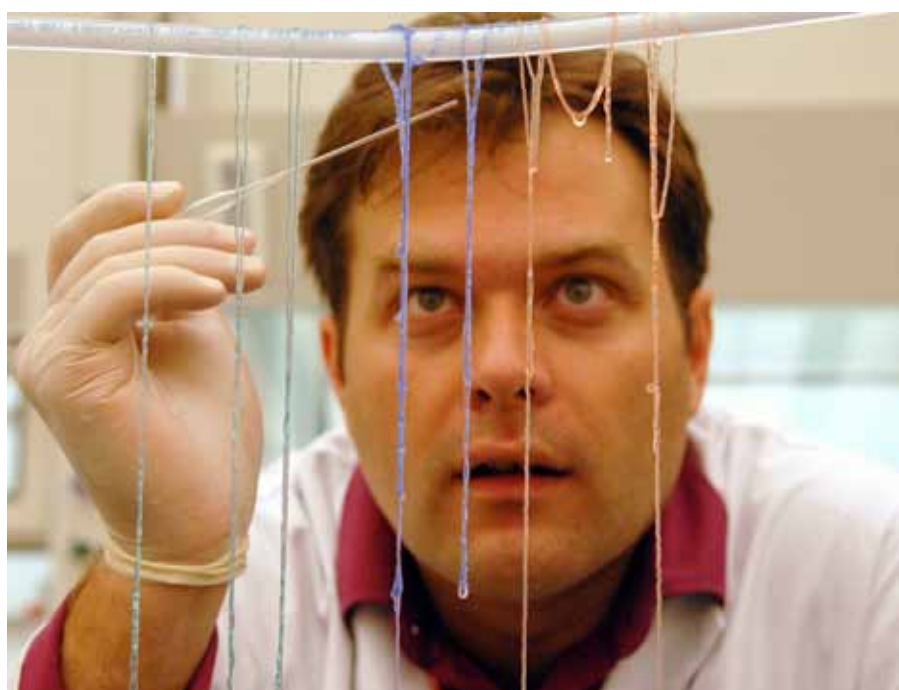
“There are three main challenges in creating new organs: connecting different types of tissue, so you have two bones or a bone and muscle and you need to join them; developing complex internal structures; and vascularisation, so if you develop some nice tissue at the moment it’s a waste of time because you need to get blood vessels inside to sustain life,” he said.

“Some people have been trying to do this by organ printing, but they’re generating very small structures and they have some problems with scalability.

“So I was thinking that printing is an existing technology, but it only produces quite simple things. I started thinking about existing technologies that can produce more complex structures.

“Look at weaving, at the structure of your clothes, and it’s a very complex three dimensional structure; the fibres connect in a very specific way. So I started thinking about how we can use this technique in medicine. The trick is to put living cells inside the fibre.”

Of course, cells cannot grow inside the cotton or nylon threads used to manufacture clothing: and in any case you can’t implant



materials like these into the human body. Dr Liberski began searching for a solution and eventually settled on alginate, which is derived from seaweed. It’s a simple matter to create long, relatively strong threads and, most importantly, living cells are able to both survive and reproduce inside it.

Currently Dr Liberski’s research is being conducted in his spare time, with many of the materials scavenged from leftovers, although he hopes to win funding from Qatar National Research Fund to further the project.

So far, four different types of cells have been tested, and all were found to multiply, although Dr Liberski is the first to admit that there are many issues to be overcome before the technique becomes medically useful.

One issue was the fact that, while relatively strong, the alginate threads were too weak to be woven by machine. The solution was to use biodegradable surgical thread to add strength by providing a temporary scaffolding that will eventually be absorbed into the body.



“IT’S NOT ONLY A MATTER OF MONEY AND LOGISTICS, BUT THE CALIBRE OF PEOPLE WORKING IN WEILL CORNELL MEDICAL COLLEGE IN QATAR, EDUCATION CITY AND QATAR. IF YOU’RE GOING FOR SOMETHING REALLY INNOVATIVE, THIS IS THE BEST PLACE IN THE WORLD TO DO IT.”

Dr Liberski

Using the reinforced alginate, Dr Liberski has been able to create three dimensional structures using a variety of cells, allowing them to multiply over a period of eight days. It’s important to note, though, that these are not yet functioning organs. It has yet to be tested if the cells are capable of expanding beyond the boundary of the individual alginate strands to create a continuous organ rather than a contiguous collection of threads.

Nevertheless, Dr Liberski is confident that the technology yields huge potential. “We believe we can build complex structures,” he said.

“First, what we like to go for is blood vessels, because we can get patents, we can bring money to our institution and it’s very useful: a lot of people need this around the world for things like bypasses. It’s an easy task and it’s achievable. That’s the first step, and nobody can say that it’s science fiction: it’s quite close to reality.”

The second step would be to create replacement organs. And the third – and this is likely something that is decades away – is to actually improve on the design of existing

organs. The heart, for example, is unnecessarily complex, hence the reason it so often fails. “Our task at some really far point in the future is to redesign this, and make a living pump that’s more efficient and less prone to failure than the human heart.”

But for now Dr Liberski’s aims are rather more humble. “Creating blood vessels is the first thing,” he says. “Even going from blood vessels to organs is a Nobel Prize-winning project. So you can imagine the distance to actually talking about redesigning organs.”

The great advantage of organ weaving, if it can be made to work, is that it’s a simple matter to use a patient’s own cells, dramatically reducing the risk of rejection. Other techniques being worked on either take cells and material from other people and animals, or rely on a patient’s stem cells being available.

Dr Liberski believes the technique can bring dramatic benefits not just to patients, but to Qatar.

“This will be something new, revolutionary, and Qatar can be at the forefront of this. All of

this can be patented, and that brings benefits to the owner. This cake is growing, and we have the chance to take a huge stake of this.

“This is really a good place to do this, because Weill Cornell is one of the best institutions of this kind in the world, and Qatar is providing the funding and the environment to really make things happen. And it’s not only a matter of money and logistics, but the calibre of people working in Weill Cornell Medical College in Qatar, Education City and Qatar. If you’re going for something really innovative, this is the best place in the world to do it.

“Whether it’s through organ weaving or something else, this market exists, it will grow, and it will be worth billions of dollars in the US alone. So this market will grow with me and with Qatar, or without us.”

Research at Qatar Foundation

Every month, *The Foundation* takes a closer look at some of the research projects supported by Qatar Foundation. In the process of constructing its own research institutes, Qatar Foundation is building partnerships with top international research institutes to accelerate its research programs. Qatar Foundation also coordinates and monitors the activities of its centers, such as Qatar Science & Technology Park, Sidra Medical and Research Center, and the six branch campuses in Education City.



TAKING ARABIC ONLINE

When it comes to computing technology, the statement “new today, old tomorrow” is only a very slight exaggeration. With rapid advancements and technology breakthroughs occurring on an almost daily basis, the field is both incredibly innovative and fiercely competitive.

Dr Ahmed Elmagarmid, Executive Director of Qatar Foundation’s new Qatar Computing Research Institute (QCRI), however, is not deterred. As a matter of fact, he looks rather thrilled at the task of heading what is envisioned as a world-class research institute that will conduct in-house programs driven by a local agenda.

One of several research institutes that have been launched over the past few months, QCRI aims to help Qatar Foundation build an indigenous research capacity and put Qatar on the research map globally.

“We want to do fundamental research that will change the way people are doing things,” Elmagarmid told *The Foundation*. “We are exploring things that could have a big pay-off, but which may be risky and may not pan out. If

The internet’s rules may have been recently changed to allow Arabic domain names, but much more remains to be done.

The recently-launched Qatar Computing Research Institute is conducting pioneering work into making truly Arabic-language computing a reality.

we pick the right problems [to tackle], we can become the leaders in research in those areas.

“QCRI’s core activities will be on developing Arabic-language technologies. No one is doing research in Arabic, and yet it is an area of interest to a very large amount of people. Some research is being done, but for the wrong reasons, such as to obtain intelligence about the Arab world. There is much more that could be done to help people.”

Continuing on that note, he said that QCRI specifically aims to improve search functions for Arabic users. The options could enhance existing services offered by search engines such as Yahoo! or Google: rather than competing with these giants, QCRI is interested in “being

part of their food chain”, as Elmagarmid put it.

“We want to improve the experience users will get in different ways. Using real-time search technology, we could, for instance, expand the domain of the search. With the methods currently available, your search is running against pages that have been indexed - they have been pre-scanned and pre-processed by the engine you are using.

“But let’s say you’re searching on something that is happening right now. You want info that is up to date. What do you turn to? Most real-time info is coming from social networks [rather than from pages found on search engines].

“So what we’d like to do is incorporate such



“QCRI AIMS TO HELP QATAR FOUNDATION BUILD AN INDIGENOUS RESEARCH CAPACITY AND PUT QATAR ON THE RESEARCH MAP GLOBALLY.

up-to-date info in a search that has an option to search against social networks. We could add something that tells us what is being discussed on Facebook and what users are Tweeting about,” he explained.

Another feature QCRI is developing is a search purely based on images. Once a user comes across a visual they want more information about, but perhaps lack the words to describe, they could take a photo of it and submit it in the search engine. The submission could then be used to find similar images or additional text information.

While such technology is already available, it is not widely popular as again the search only goes through an internal database that has been indexed, while much more information remains ‘out there’ on the web, yet to be found. QCRI, however, aims to broaden that search.

QCRI is also working on technology that can process voices. Current voice recognition technology is still in its infancy stage and typically requires the user to “train” the computer first and then speak very clearly, according to Elmagarmid.

Despite that, he points out that some programs are available that offer a more flexible experience. “Doctors often use software to

translate their dictated notes into text,” he said. “What they do is train the machine for a few days so it recognizes the voice - how the person rolls their r’s and such.”

Unfortunately, such programs are yet to be developed in the Arabic language. “In Arabic this is much more complicated because we have so many different dialects. So we are working with linguists that can analyze that.

“Even when performing a text search, based on the context and tashkeel [Arabic vowel marks] used, one word can mean many different things. Therefore we also want to figure out algorithmic ways to rank pages and content in Arabic in order to get better search accuracy, looking at your history and habits, using information about what you have done in the past.”

Envisioning what QCRI’s plans could do for the Arab world in the near future, Elmagarmid expressed his excitement, though he stressed that QCRI is “absolutely aiming at competing on an international level”.

“Some of these Arabic-language projects could be useful in any language,” he said. “As QCRI is about developing new ideas, I hope that some of our technologies will soon become a part of people’s daily lives.”

Other projects

QCRI’s main focus may be on Arabic-language technologies, but the institute is not limited to that. In addition, it is performing research in the following areas:

CORE COMPUTING

The team is researching performance issues of cloud computing, which connects users to the internet through a variety of different outlets such as laptops, car navigation tools, mobile phones, and video game players. It is specifically looks at increasing security and privacy and improving data storage.

Datamining could help users plough through databases, allowing them to find patterns and statistics. It could also allow people to share their databases without divulging private information by distorting selected bits of data.

SCIENTIFIC ENABLED DISCOVERIES

Looking at bio informatics technology, high performance computing, cyber infrastructure, and other things, this project could help optimize high-performance computing tools used by scientists and engineers.

BETTER HEALTHCARE THROUGH INNOVATION

Lord Ara Darzi is a pioneering keyhole surgeon, academic, former advisor to the British government and the Chairman of the International Surgery Panel at the Qatar Robotic Surgery Centre. As part of Qatar Foundation's Distinguished Lecture Series, he talked about health care reforms in November. Here, he tells QF Radio's John Bullock about his commitment to quality healthcare and his relationship with Qatar.



Lord Darzi at the UK pavilion
at the Expo 2010 Shanghai

John Bullock Throughout your career, you have been focused on easing the trauma endured by patients during and after surgery. Where did your interest stem from?

Lord Darzi I came from an era of training in surgery where maximal surgery was the best way to do an operation. Whenever I was stuck with an operation, the master used to come in and make the incision 10 times bigger. The bigger surgeon you were, the bigger your incisions were. Probably around that time and certainly during the time of my research, I thought 'what if we could do these procedures without the incision?' When I worked in the Imperial College Hospital in London, I was working at the best science and engineering college in Europe. That enthused me even more. I could then drive this mindset of how to reduce the physical and psychological trauma or surgery.

John Bullock What excited you about the partnership with the Qatar Robotic Surgery Centre?

Lord Darzi It all started with Her Highness Sheikhha Mozah Bint Nasser Al Missned. She came to see our laboratories in the UK in 2007 and very quickly she had a vision of setting something up in Qatar which really will drive innovations and surgery. That's how the Qatar Robotic Centre came about. It's a magnificent facility and much better designed than anything I have back in the UK. I am looking forward to doing some basic research in that Centre too. Recently, it's been strongly aligned with the Hamad Medical Corporation. The surgical leadership here is exploiting all the opportunities out of this Centre for education and training. We are looking forward to doing some basic research in that center too.

John Bullock How does basic research benefit the common man?

Lord Darzi In my whole life, I don't think I have ever done any research that has not had an impact. Qatar Foundation is funding research to have an impact. After basic research, the next phase will be translational research. Once the basic research is out there, you really need to do the clinical trials to prove the effectiveness of these new technologies. It doesn't end there either. Once you have the evidence base, the question is, how do you translate the evidence into practice? One of the frustrations I had is that we were doing the fantastic basic science, we were doing the translational research and coming up with the evidence base but that wasn't really changing the practice of many other clinicians around the country. Policy is the only way to make that change happen. That's really how I got into policy.

John Bullock When Gordon Brown was the UK Prime Minister, he personally invited you to be a minister of the Crown. How did you get involved in politics?

Lord Darzi I got involved in politics after doing some major review of London's healthcare system, which is quite complicated serving the population of seven million spending 10 billion pounds a year. It has some of the best health care providers and some of the best universities, but on the other hand it also has some of the poorest performers.

I did a piece of work in 2007 which was quite a radical reform strategy. Before I published it I was called in to see the Prime Minister, whom I had never met. I thought the reason I had been called in was so he

could say, 'thanks very much but we're not doing this'. To my surprise, after a 10-minute discussion, he asked me whether I would be a minister of the Crown. It was a bit of a shock to me when I heard that considering I had never been in politics or had any aspirations of doing any ministerial role. I eventually accepted it with great humility and anxiety, because doing that job has a completely

“What stuns me is the leadership here and where you are really trying to take Qatar. It's moving at an astonishing pace and it's magnificent. We are sitting here with some of the biggest universities surrounding us who are really building on the talent of those young Qataris coming through who will be the future scientists, the future physicians who will look after me and you.”

different meaning. What was important for me was not to stop my clinical practice and my research. To be fair to them, they broke all the rules and I was probably the only minister to have two jobs. I used to do my ministerial job for four days a week and clinical work two days a week. It was full drive for two years and it was important for me to do the two for all sorts of reasons.

John Bullock What was the biggest challenge when implementing that reform?

Lord Darzi Our waiting times and access to care were difficult. These dramatically improved but it seemed like the clinicians, who were part of that service, weren't part of that reform. Clinicians felt that things were done to them rather than with them. My contribution when I came in was instead of doing it top down, I had to do it bottom up. What was important in my review was really to re-focus what the end is. The end is high quality care for all. To do that, I had to really engage the clinicians and get them to take ownership of the reform because I always used to say as a minister, what I did in Whitehall from Monday to Wednesday had really very little impact to what I did in theater on Friday and Saturday. The challenge was how do I align those together? I asked

those who were doing the delivery of care, like me, to think what they need to do locally with their own local stakeholders, to make that change happen – and then to tell me when I go back on Monday in Whitehall what are the enabling policies I could do to make their dream become a reality. That's the recipe of what I did for two years.

John Bullock What lessons have you learnt that could be useful in assembling a new health system?

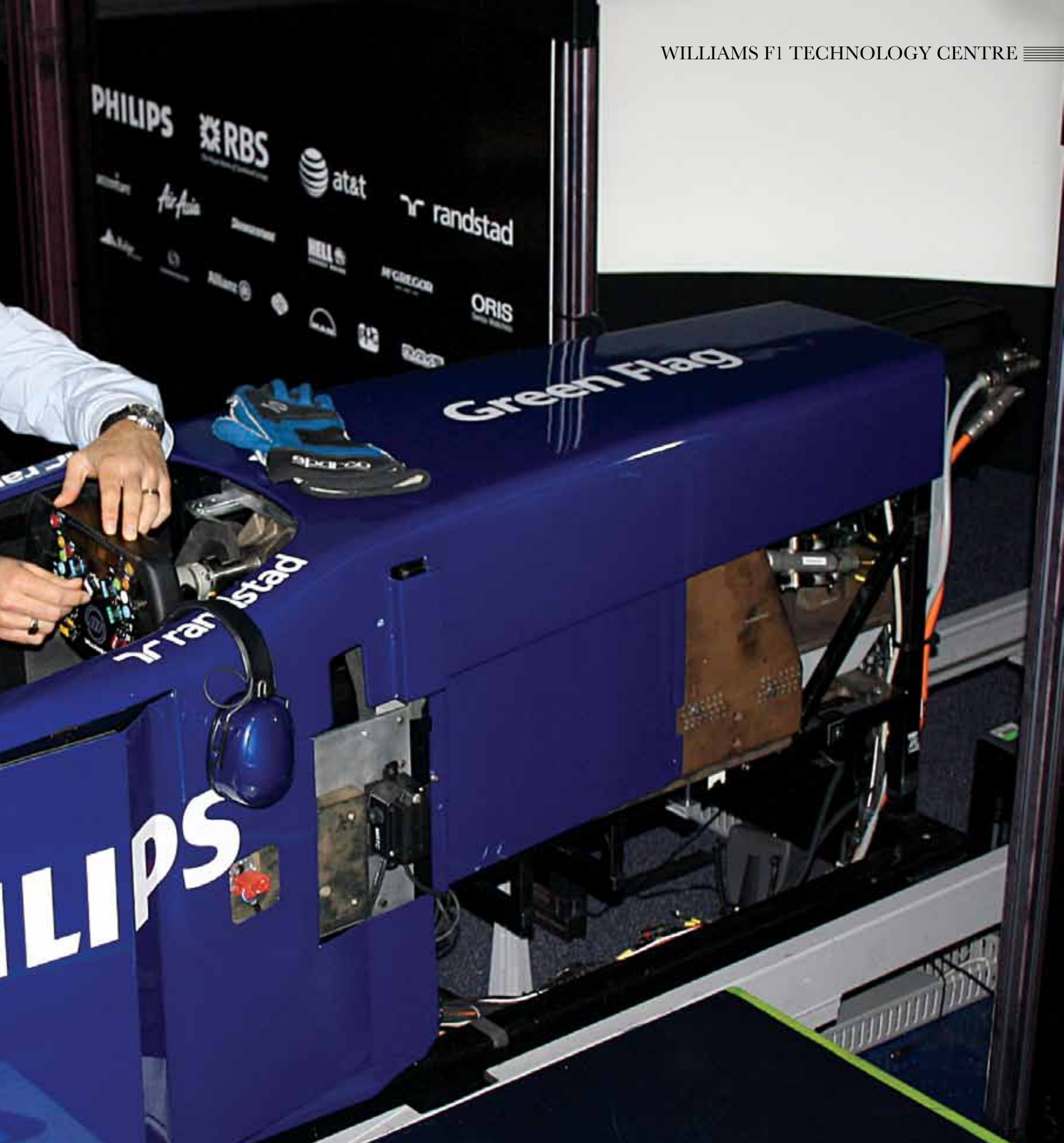
Lord Darzi If a hospital pursues quality, in actual fact, it's the one sector unlike any other sector where quality is cheaper in healthcare. If you do something right the first time it's always cheaper than doing it wrong the first time. In European and American systems, the challenges are similar; the aging population, increasing burden of long-term conditions. You have to remember that this is the impact of technology. Many diseases, even 10 years ago, that were lethal are now conditions that you live with for the rest of your life. The NHS [Britain's National Health Service] is not just a sickness service, it's a well-being service. Prevention and well-being is a very, very important part of that. Technology will help us in the future to be able to predict and preempt treatment before an illness even becomes apparent. Although it's a challenge on one hand it's also an opportunity in really managing these new challenges in a very different way.

John Bullock You enjoy a special relationship with Qatar. How do you feel when you visit?

Lord Darzi Firstly, every time I come here there is something new happening, which is fantastic. I started my relationship with Qatar three to four years ago, and I have got to know more and more people who have been exceptionally gracious, generous and friendly. I have enjoyed their company every time I have been here. What stuns me is the leadership here and where you are really trying to take Qatar. It's moving at an astonishing pace and it's magnificent. We are sitting here with some of the biggest universities surrounding us who are really building on the talent of those young Qataris coming through who will be the future scientists, the future physicians who will look after me and you. At the same time, Qatar is investing in education and training of clinicians. That is a tremendous achievement in a very short period of time. I know something about policy – you can write vision documents on paper anytime – but implementing it is much, much harder. You have done it here and well done to you.



Driving ambition



When the Williams Formula One team wanted to set up a center to commercialize some of its pioneering technology, Qatar Science & Technology Park proved the obvious choice. Now the company is developing innovations that could have a major impact on transportation in Qatar.



Formula One is intensely competitive not just on the track, but in the laboratory. Each season, teams spend millions of dollars on cutting-edge research, much of which eventually finds its way into the humble passenger car.

But many of these discoveries have much broader applications. And it was to commercialize these opportunities that Williams F1 set up the Williams Technology Centre at Qatar Science & Technology Park (QSTP).

Doubtless, dozens of countries around the world would be thrilled to welcome the presence of an F1 team, so at first glance Qatar might seem an odd choice. It doesn't host a Grand Prix and it's far removed from the sport's hub: the vast majority of teams are based in the UK.

But, says Damien Reilly, Head of Marketing for the team, in many ways that's exactly what made QSTP so attractive. "The advantage of doing it away from our headquarters is that if we were doing this type of work in Oxfordshire, what would happen is that the engineers and R&D people would get sucked into the race program. For the race program everybody wants the best technology, so by having it separate it keeps people focused on what their objective is."

The idea for a standalone center to commercialize some of Williams F1's intellectual property (IP) goes back several years to the time the F1 teams first began to seriously look at ways to harness some of the kinetic energy that is lost whenever a car brakes. While some teams decided to outsource the work, Williams F1 developed its solution in-house, resulting in a highly-efficient flywheel that can capture, store and rapidly release large amounts of energy.

"We recognized that there was a business opportunity to take this to an international market, but we'd never had any expertise at that," said Reilly.

"So we looked at different countries that wanted to set up high-tech hubs, and the things that QSTP and Qatar offered were very attractive to us, in terms of an economic free zone, co funding, etc. So as long as we were prepared to share the IP rights then it became an attractive proposition for us."

The flywheel that Williams F1 is developing at QSTP is particularly suitable for use in mass transit systems, making the region an attractive destination. "When it comes to infrastructure, renewable energy, mass transportation, it [the GCC] is really a clean sheet," said Damien Scott, General Manager of the Technology Centre.

"In Europe there's a retrofit business and

we'd be interested in exporting some of the technologies that are developed here. But there's something like \$160 billion going to be spent in the next 10 years in the GCC, so this is the right place to be."

A flywheel is a spinning disk that can be used to store energy. In the case of an F1 car for example, as the vehicle accelerates it gains energy. When the brakes are applied some of that energy is converted into heat and is lost: in order to speed up again, fuel must be converted into yet more energy. With a flywheel installed, some of the energy that would otherwise be lost in braking is transferred to the flywheel, making it spin faster. When the driver wishes to accelerate some of the energy stored in the flywheel can be used, increasing efficiency. In the case of F1 the energy is used to provide extra acceleration, but the same technology can be applied to road cars to improve fuel efficiency.

While flywheels are frequently used in some areas – storing electricity for scientific experiments that require so much energy that simply connecting them to the mains is out of the question, for example – their use in mass transit remains largely in the testing phase.

The Williams F1 flywheel would offer two possibilities: either to install it on the tram or train, or to have it by the side of the track.

“IN EUROPE THERE’S A RETROFIT BUSINESS AND WE’D BE INTERESTED IN EXPORTING SOME OF THE TECHNOLOGIES THAT ARE DEVELOPED HERE. BUT THERE’S SOMETHING LIKE \$160 BILLION GOING TO BE SPENT IN THE NEXT 10 YEARS IN THE GCC, SO THIS IS THE RIGHT PLACE TO BE.

Currently when electric trains brake they act as generators, sending power back onto the grid. If one train is arriving at the station as another one is leaving then their requirements more or less balance, but if that’s not the case then the extra energy has to go somewhere to avoid damaging the electricity grid. Currently that somewhere is what is effectively a large heater: “That valuable electricity is just being blasted off as heat,” said Scott.

“So the question is what can you do with that energy? You can store it in a flywheel and drip feed it into escalators, lighting in the station itself. It’s a very good tool, and it has broader applications. So if you have wind turbines then you’ve got changes in demand and, on the supply side, you can’t tell when the wind is going to blow. So having a very high power, long cycle life buffer allows you to balance that out, cutting some of the peaks and filling in some of the troughs.”

The second area where Williams believes its Formula One technology has broader applications is in driver training. For the past decade the team has been perfecting an extremely accurate simulator to allow its racing drivers to practice on different tracks and to test different car configurations.

Each track is laser scanned to provide results that are accurate to less than a millimeter, meaning that every bump and depression, no matter how tiny, is captured. Not only that, but the machine models the car’s suspension, meaning that the driver feels the simulator move exactly as he would were he in a racing car.

Many would no doubt love to have the opportunity to try out what may be the world’s most sophisticated video game and, if the Williams F1 team have their way, they may well get the opportunity.

Initially the ambition is to make the simulator available to other motor sports which lack similar technology. The second phase will be to offer it to ordinary drivers.



“We can develop a really high fidelity simulator that can become part of the licensing process,” said Scott. “So instead of doing a multiple choice questionnaire and then driving around the block with an instructor, which isn’t particularly taxing, you get thrown into a simulator with some pretty extreme scenarios: things like an 18-wheeler jumping a red light. What is your reaction time?”

Because the system is entirely electronic, variables such as reaction times can be measured exactly and compared to predetermined pass/fail grades, providing a far more accurate and dependable system than simply relying on the judgment of an examiner sitting in the car.

Simulators are well established in other fields, notably aviation, where the technology is so sophisticated that, in theory at least, a person trained on the simulator could pilot an aircraft having never set foot in a real plane before.

And the fact that it is only a simulator allows for some situations to be tested that would simply be too dangerous in real life: something of particular relevance to the training of emergency drivers, said Scott.

“They’re interacting with relatively untrained road users, some of whom are listening to the radio, or talking on their phone. They’re belting through at high speed,

so how do you replicate that on a testing track? You can’t, it’s just too dangerous.

“So we think that there’s a really strong rationale not only to save on training costs because you’re not sending a V10 fire engine round the track day in, day out to train these guys, but you can put scenarios in there that you can never replicate in reality, because you don’t know where the limits are until you reach them, and if you reach them in the real world then there’s all sorts of problems. We think both of those have enormous long-term potential.”

The two are hopeful that the projects will be up and running soon or, as Reilly puts it, “at Formula One speed”. The simulator should be operational in 2011 and prototype installations of the flywheel are scheduled for around 2012.

That means an increase in staff to a target of 20-25 in 2011, with the company hopeful that much of its manpower requirements, at least in the longer term, can be met with local graduates. Scott believes that the opportunity for them to spend time in the UK could bring real benefits to the local research and engineering industry. “We want them to bring some of that motor sport culture of rapid development here,” he said. “Part of what we’re trying to do with the center is get some of that racing DNA, because we do things so much faster and more efficiently, and apply that to what we do here.”



Qatar welcomes information station

MEEZA was launched to help Qatar make the most
of the extraordinary potential that IT provides.
And it is already making an impact.





Computers can have a profound impact on the way an organization operates. IT has the potential to speed up processes, to simplify many tasks and to cut costs.

But, as the systems employed become more powerful, they also become more complicated. Properly managing an IT network can be a full-time job: dauntingly expensive for a small company and not necessarily the most efficient solution for a larger one.

Increasingly companies around the world are outsourcing their IT requirements to third parties who, through economies of scale, can

offer better service at a lower price. It was to take advantage of this trend, and to extend its benefits to the Middle East and North Africa, that Qatar Foundation launched its joint venture, MEEZA.

“MEEZA is participating in achieving Qatar Foundation’s vision of making Qatar a knowledge-based society,” Rashid Al-Naimi, its Chairman, told *The Foundation*.

“MEEZA provides state-of-the-art IT services and solutions essential to the continued growth and success of Qatar and the Gulf region.”

The company offers a variety of services to

customers, from securely hosting data to providing applications over a network connection – known popularly as cloud computing. What that means is that customers can access powerful processing power and large amounts of storage by using a relatively basic computer with a network connection: most of the actual hardware and software is located at MEEZA.

The advantage, said Al-Naimi, is that it allows companies to enjoy reliable IT systems with minimal involvement and capital outlay, leaving them free to concentrate on their core business.



“THE COMPANY OFFERS A VARIETY OF SERVICES TO CUSTOMERS, FROM SECURELY HOSTING DATA TO PROVIDING APPLICATIONS OVER A NETWORK CONNECTION – KNOWN POPULARLY AS CLOUD COMPUTING. WHAT THAT MEANS IS THAT CUSTOMERS CAN ACCESS POWERFUL PROCESSING POWER AND LARGE AMOUNTS OF STORAGE BY USING A RELATIVELY BASIC COMPUTER WITH A NETWORK CONNECTION: MOST OF THE ACTUAL HARDWARE AND SOFTWARE IS LOCATED AT MEEZA.”

leverage world-class technology, processes and people with a customized look and feel.”

The benefits of what MEEZA is doing extend beyond the clients themselves: the company makes much of its wider goals. First, it is a for-profit joint venture with Qatar Foundation, which contributes towards the organization’s financial sustainability. Second, it works to enhance the IT skills of Qataris, providing them both with job opportunities within the company and the skills they need to succeed elsewhere. And third, MEEZA is helping to position Qatar as a key regional network hub.

MEEZA’s sister company, Gulf Bridge International, will be implementing its first undersea, redundant high-speed cable in 2011, which complements MEEZA’s two new highly secure data centers set to open in the same year.

MEEZA is also involved in the Qatar Research and Education Network, which will allow high speed collaboration with research institutions around the world.

“As Qatar expands its advanced networking capabilities, the country will be well positioned to offer an abundant set of services throughout the GCC region,” said Al-Naimi. “MEEZA’s innovation in the GCC is second to none. MEEZA was the first local cloud services provider in the GCC and has been offering such services for over a year.”

Partly as a result of MEEZA’s efforts, organizations in Qatar are moving beyond looking at IT as a means merely of sending emails to explore the ways in which it can help them work more efficiently, giving them a competitive advantage in the process.

“We are seeing a tremendous change in the adoption and application of IT within the marketplace,” said Al-Naimi.

“Organizations here are truly seeing IT as an enabler to business growth, being more efficient and effective and help give them a competitive edge. We spend a considerable amount of time with the market, prospects and clients through tradeshows, conferences and direct interaction. It is during this time that we work to help them understand emerging technologies, what

current technologies are applicable to their business challenge and how they best apply them to achieve the desired result.”

The industry certainly seems to be impressed: MEEZA won the Best New Cloud Services Middle East Award at the second Data Centre Strategies Forum in Abu Dhabi earlier this year.

“Our cloud services solidify MEEZA as a leader in our industry and a beacon for organizations to look into solving their business challenges,” said Al-Naimi. “Cloud services are very much disruptive in the marketplace, as the technology is new and very complex. This technology will help businesses communicate more efficiently and effectively and MEEZA is proud to be able to offer such service in Qatar, and to the region. Our goal is to bring new technologies like Cloud Services to the market in a format that is easy to understand and easy to adopt.”

Since its official launch a year ago MEEZA has continued to grow, attracting clients including Qatar Foundation, Vodafone, Silatech and Qatar Luxury Group. One of its most eye-catching projects was its work with QMDI to create a ‘green’ United Nations Environmental Protection Conference in Qatar.

MEEZA developed a paperless system which enabled the 700 delegates to contribute to documents virtually. As a result paper use was cut by 86%, saving 9,000km of paper.

According to Al-Naimi the event, which won the Qatar Today Green Award, was more than just a marketing exercise: it was a powerful illustration of the ways in which IT can bring real benefits.

“The obvious example is the reduction in paper with digitization resulting in massive amounts of trees being saved,” he said. “Real-time collaboration through the portal that was developed increased the productivity of the delegates and allowed them to focus on the pressing issues to protect our environment. Lastly, there was a tremendous cost savings to the UN as the platform can be re-used again and again passing on the financial, environmental and productivity benefits in future events.”

“MEEZA services enable clients to offload their day-to-day IT and business tasks to MEEZA to streamline their operations and optimize service to their customers,” he added.

“Utilizing MEEZA services removes the management overhead by ensuring all technical resources deliver maximum utilization, are performance managed, kept up-to-date on technical ability and accreditation and provide consistency of cover by delivering alternative resources during periods of planned staff absence. The MEEZA Service Centre enables our clients to

2022

THE NATION

Qatar's impressive plans mean it will become the first Middle Eastern



FIFA WORLD C

CELEBRATES

country in history to stage the biggest event in world football.



Qatar 2022's Bid Committee told us to "Expect Amazing". And that is exactly what happened in Zurich earlier this month. Since Qatar gained independence in 1971 it has enjoyed a dramatic rise to global prominence. That rise was given further impetus with the dramatic announcement that Qatar has earned the right to host the 2022 FIFA World Cup.

The win was the result of years of planning and lobbying by bid officials and ambassadors, including Her Highness Sheikha Moza bint Nasser and former World Footballer of the Year Zinedine Zidane.

After passionate speeches from the bid committee it was the mission of Her Highness to sum up Qatar's presentation to the FIFA Executive Committee members. She asked them directly: "When? When will it be the right time for the World Cup to come to the Middle East?" and, after laying out her arguments, answered her own question with the words: "The time has come. The time is now". The speech was described by London's Daily Telegraph as "passionate and articulate... Pure gold for Qatar." The judges certainly agreed, with Qatar coming first in each of the four rounds of voting.

"Morocco has applied to host the World Cup four times and lost, Egypt have also failed and Qatar asked when will the Middle East have this opportunity?" said Michel Platini, UEFA president and a FIFA Executive Committee member.

"Maybe, the members of the executive committee thought it was a good opportunity to go to that part of the world once and for all, a region that has never hosted the World Cup, so if we're talking about developing football worldwide, which is ultimately the goal of institutions such as FIFA or if we're talking about European football, which is the goal of UEFA, well it's something beautiful."

The 2022 event will be one of firsts. It will be the first time that the world's biggest sporting event, after the Olympics, has been held in the Middle East. It will be the first time it has been conducted in a socially responsible manner, with the stadiums being partially dismantled and sent to developing countries. And it will be the first time that World Cup stadiums are air conditioned – all provided through solar power.

Qatar faced competition from rival bidders Australia, Japan, South Korea and initial favorites the United States to host the month-long contest, but the country's ambitious plans caught the eye of the judges, with Qatar coming first in each of the four rounds of voting.

In order to host the 2022 World Cup Qatar will build 12 stadia, each with a capacity of at least 40,000. While essential for the success of



the tournament, in the long term Qatar simply does not need so much capacity. Rather than simply mothball the empty stadia, or even demolish them altogether, Qatar has arrived at a unique solution.

For the first time, World Cup stadia will be constructed in a modular fashion. When the competition is over some will be left intact, some will be scaled down, and some will be removed altogether. Those modules will then be used to construct 22 new stadia in the developing world, creating a lasting legacy that stretches far beyond Qatar.

It is not just other countries that will benefit, but the environment too. All the stadia will be carbon neutral, and will be cooled using electricity generated from solar panels. When the stadia are not in use this energy will be channelled into Qatar's grid, powering homes and businesses. This technology will be made available to other hot countries hosting sporting events: another example of the lasting legacy Qatar 2022 will create.

Qatar has also worked with more than 30 schools in Qatar, Lebanon, Nepal, Pakistan and Syria to develop football in underprivileged areas. A total of 16 football pitches have been rehabilitated, two have been built to FIFA

standards, and more than 1,000 children have been coached, and almost 100 coaches trained.

Qatar 2022 will also be the most compact World Cup in history. Thanks to the new rail and metro networks being constructed, most venues will be within 30 minutes of each other, with the longest journey taking an hour. That means fans have the opportunity to catch more than one game in a day while saving money on travel, while the teams can concentrate on playing beautiful football.

The stadia themselves have been designed to reflect Qatar's heritage, from the dhow-shaped Al-Shamal to the basket-like Al-Ghafara. Education City too will be host to a 45,350-seat stadium, designed to resemble a jagged diamond. After the event the top tier will be removed, leaving a 25,000-seat stadium for university sports.

Hassan Al-Thawadi, the Chief Executive of the bid, said that Qatar 2022 will make history. "We can allow history to be made while opening up the gates of communication between east and west. The Middle East will be put on a platform for everyone to see it as it truly is. And, more importantly, it allows the Middle East to interact with the rest of the world, so any



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misconceptions that people here have about the west can be taken away... We acknowledge there is a lot of work to do and we stand by our promise and we will honor the sacred trust given to us today.”

Sepp Blatter, President of FIFA, said that the decision to award the World cup to Qatar, and to Russia in 2018, provided the opportunity to build bridges. He said: “We go to new lands. Never has the World Cup been in Russia and Eastern Europe, and the Middle East and Arabic world have been waiting for a long time, so I’m a happy president when we talk about the development of football.”

Qatar has promised a World Cup that will truly benefit the world, providing a lasting legacy in terms of sporting infrastructure, technology and goodwill. As HE Sheikh Mohammed bin Hamad Al-Thani, Chairman of the 2022 Bid Committee, put it after the win was announced: “We will not let you down. You will be proud of us, you will be proud of the Middle East, and I promise you this.”

