

The future of medical research

As Chairperson of Biobank Qatar's Board of Trustees, Dr Hanan Al Kuwari is at the forefront of one of the most important medical research initiatives ever undertaken in the Middle East. Drawing on her expertise as Managing Director of Hamad Medical Corporation, Dr Al Kuwari and the board will oversee the collection of medical data from up to 100,000 volunteers in Qatar. Biobank Qatar, a

member of Qatar Foundation, will provide invaluable support for research to improve the prevention and treatment of life-threatening diseases, such as diabetes and cancer.

“**Biobank Qatar is a scientific and altruistic partnership between the research community and the people of Qatar to build a better, healthier future for generations to come**

Dr Hanan Al Kuwari, Chairperson of Biobank Qatar Board of Trustees

Q Biobank Qatar is a ground-breaking initiative for medical research. Considering it is the first very large population-based study involving the collection of biological samples in Qatar and the most ambitious of its kind in an Arab country, how will it benefit healthcare in the region?

A Biobank Qatar was created by Qatar Foundation and the Supreme Council of Health, working with Hamad Medical Corporation and supported by scientists from Imperial College London, to enable medical research on health issues that prevail in Qatar and the region.

As the most ambitious biobank in the region, Biobank Qatar will contribute to raising the Arab world's profile in the field of biomedical research, lead efforts for greater regional collaboration in the field, and create an invaluable resource for research to develop medical treatments by Arab people for Arab people.

At present, most medical treatments have been developed through the study of other populations, and there has been a lack of large-scale biomedical research based on populations in the Arab world. Biobank Qatar will make it possible for scientists to conduct this research to address some of the greatest health challenges facing Qatar and the region.

Disease-targeted research leading to personalized medicine is one of the most promising and potentially beneficial areas for collaboration in the region. One of the fundamental objectives of the initiative is to pioneer the establishment of a valuable resource for a network of scientists throughout the region.

Biobank Qatar promises to create opportunities for greater collaboration and knowledge transfer amongst the scientific research community across the Middle East. By helping the Arab world grow its own expertise to support medical research locally, Biobank Qatar will also help reduce the need to import expertise from abroad.

Through the development of this innovative resource, Qatar and the Arab world will become further known as a hub for regional scientists and researchers, developing its position on the map for biomedical science and research initiatives.

Q How will Biobank Qatar help improve the health of Qatar's future generations?

A As Qatar's communities contribute personal and biological information about their health and lifestyle, Biobank Qatar will become a valuable national resource for Qatari health. Researchers will be able to use the information and samples contributed by participants to help understand how lifestyle, environment and genes affect health locally. In turn, this knowledge will help develop medical treatment and disease prevention for the health of our children and grandchildren.

Q Will Biobank Qatar work with other biobanks around the world? If so, what possibilities does this present for the progress of medical research internationally?

A Biobank Qatar realizes the importance of developing effective partnerships with other research institutes, academic organizations and international biobanks. Nationwide or large scale biobanking efforts are relatively new and there is much

we can learn from others' experiences. Biobank Qatar is keen to connect with other national or large scale biobanks in countries such as Canada, Japan, Luxembourg, Singapore, South Korea, Sweden, United Kingdom and the USA. Biobank Qatar is contributing to international progress in medical research by virtue of the fact that it is the first initiative to collect biological information and samples from the Qatar population at this scale.

Q Rates of heart disease and diabetes in Qatar are among the highest in any country on earth. Will Biobank Qatar focus on helping to prevent these life-threatening diseases?

A Yes, Biobank Qatar will play a significant role in helping to prevent and improve treatment of diseases that affect our communities. Biobank Qatar will be a driving force in developing research into the risk-factors for obesity and related diseases, such as heart disease and diabetes, which are major health challenges for the Qatari population, where around 17 percent of our adult population suffers from type-2 diabetes. Biobank Qatar has the opportunity to add value to the many initiatives already taking place in Qatar to prevent these life-threatening diseases. For example, by working collaboratively with Qatar's Cardiovascular Research Center on its Doha Cardiac Epidemiological Study, with the Qatar Biomedical Institute and with WCMC-Q research programmes.

Q Given that biobanks store detailed information about donors in terms of their health status, as well as human blood and tissue samples, there are naturally concerns about how this information could be used. How is Biobank Qatar addressing these concerns in order to encourage people to participate in the project?

A Biobank Qatar doesn't want to just recruit the public to take part in biomedical research, we want to partner with our public and help them become "citizen scientists" who through their personal contributions play an active role in the process. We want our participants to understand, trust and support what we are doing. Protecting the confidentiality of our participants is a top priority for us. We have put rigorous processes in place so participants can be assured of complete confidentiality.

Q The process to recruit volunteers has now begun. What are the next steps from here?

A Biobank Qatar is currently completing its testing stage, which gave us the opportunity to get feedback from participants who tested the processes and technology we have developed to tell us how well they work and identify areas for improvement. The feedback we have received so far has been promising and we are now preparing to welcome the wider community to contribute to Biobank Qatar. We are currently focused on building knowledge of biomedical research and biobanking through information booths and lunchtime sessions which you will see happening around Qatar Foundation. People should look out for the announcements about these sessions and signs around QF and visit us to hear more, and to book an appointment to become a contributor towards a healthier future.