

WCMC-Q honored with \$4.5m date palm research grant

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Dr. Karsten Suhre and Dr. Joel Malek with a date palm

Weill Cornell Medical College in Qatar won the first award in the Qatar National Research Fund (QNRF) Exceptional Proposal program with Dr. Karsten Suhre, Professor of Physiology and Director of the Bioinformatics Core, and Dr. Joel Malek, Director of the Genomics Core, awarded a five-year grant of \$US4.5 million for their project *Establishing World Leadership in Date Palm Research in Qatar*.

QNRF established the National Priorities Research Program - Exceptional Proposal (NPRP-EP) to provide funding for proposals of exceptional scientific merit that require funding and time in excess of that provided under the annual NPRP funding program.

WCMC-Q Associate Dean for Research, Dr. Khaled Machaca, congratulated Dr. Suhre and Dr. Malek on their enormous achievement and recognized QNRF's vision and goals in funding the project.

Dr. Machaca said: "Funding of this project will establish Qatar as a hub for date palm research building on the completion of the genome sequence by the Cornell team, with great potential for scientific productivity and commercialization in the future."

The proposal combines two innovative technologies that are well established at

WCMC-Q, genomics and metabolomics, in an interdisciplinary approach to date palm research, addressing major challenges of the field. WCMC-Q is collaborating with the Ministry of Environment's Biotechnology Center in Qatar, the Helmholtz Centre in Munich, the French National Institute for Agricultural Research, and the European Institute for Research and Development.

"We are very excited about the research opportunities that are offered to WCMC-Q by this project, and in particular the confidence that QNRF puts into our team by awarding us this grant," Dr. Suhre said.

"WCMC-Q has spearheaded date palm research in the past by determining its genome and identifying genetic markers for important physiological traits. Qatar is probably one of the rare places in the world where you can translate know-how between initially very distant fields and cross-pollinate ideas from human health research to plant genetics and back."

Dr. Malek said the goal of the project was to better understand date palm biology and link the genetics of the date palm to date palm characteristics such as fruit color, flavor and ability to resist disease or environmental stress.

He said it was an exciting time for researchers at WCMC-Q and the latest acquisition of funds would go a long way towards contributing to the development of new information.

"We are hoping to identify genes that control the most important traits in date palms for the purpose of developing date palm agriculture in Qatar," he added. "The group includes the Ministry of Environment's Biotechnology Center, led by Masoud Al-Mami, who will conduct testing on date palm tolerance to salt water among other environmental stresses. The international team will significantly advance current knowledge of the molecular biology of date palm that is critical to the Arabian Gulf. Ultimately the knowledge will improve the date palm industry in the Arabian Gulf."

Dr. Malek and the Genomics Core group led the original sequencing of the date palm genome and will continue their work on understanding date palm genetics. Dr. Suhre will continue his foundational work on understanding the link between genetics and metabolomics by extending these studies into date palms for the first time.