



BTEC 591 & BTEC 691 Seminars *

“Three Decades of Exploration in Cancer Research”



Dr. Abdullah KARADAĞ

TÜBİTAK MAM

Tuesday, March 12, 2024

13:30

Biotechnology Institute Amphitheatre-1

*** These seminar series are offered conjointly with the GTU 110 course for the entire Gebze Technical University community.**

Abstract

In this lecture Dr. Abdullah Karadağ will walk participants through his scientific career in molecular oncology. Starting from his early career to establishing a cutting-edge research program in TÜBİTAK MAM, his research on cancer oncology will be revealed. His work primarily centers on molecular profiling to develop diagnostic/prognostic/monitoring systems and bio-network analysis for identifying target molecules in the creation of innovative vaccines and pharmaceuticals through integrative multiomics analysis. Expanding his repertoire, Dr. Karadağ spearheaded the development of a CD19-targeted 3rd generation CAR-T cell therapy system for acute

lymphoblastic leukemia and non-Hodgkin's lymphoma, and he is actively working on a BCMA-targeted CAR-T cell therapy for multiple myeloma.

Dr. Abdullah KARADAĞ

Professor Abdullah Karadag is at the helm of the Molecular Oncology Team, bringing with him a wealth of expertise and a diverse academic background. Graduating with an M.D. from Istanbul University Cerrahpasa Medical School, Dr. Karadag went on to earn a Ph.D. in Clinical Biochemistry from the University of Sheffield Medical School. His academic pursuits extended further with an M.Sc. in Computer Science, specializing in Bioinformatics, from the Johns Hopkins University Whiting School of Engineering. Dr. Karadag's professional journey began as a physician in Turkey, later undertaking Ph.D. studies in the UK in 1994, where he explored the intricate interactions between multiple myeloma cells and mesenchymal stem cells/osteoblasts. Subsequently, his postdoctoral training in the U.S. as a Research Fellow at the National Institutes of Health focused on the SIBLING protein family's role in osteotropic cancer progression. Returning to the University of Sheffield, he joined the Academic Urology Unit, focusing on mechanisms related to prostate cancer bone disease. In response to an invitation from the head of the center, Dr. Karadag joined TUBITAK MRC in 2012, establishing a cutting-edge research program in molecular oncology. His work primarily centers on molecular profiling to develop diagnostic/prognostic/monitoring systems and bio-network analysis for identifying target molecules in the creation of innovative vaccines and pharmaceuticals through integrative multiomics analysis. Expanding his repertoire, Dr. Karadag spearheaded the development of a CD19-targeted 3rd generation CAR-T cell therapy system for acute lymphoblastic leukemia and non-Hodgkin's lymphoma, and he is actively working on a BCMA-targeted CAR-T cell therapy for multiple myeloma. Dr. Karadag is affiliated with the Institute of Biotechnology at Gebze Technical University since 2023. At the core of his endeavors is a multidisciplinary team comprising surgeons, clinical and molecular oncologists, hematologists, biologists, biochemists, bioinformatics, and engineers. Dr. Karadag's lifelong dedication to cancer research, particularly in the realm of bone metastasis, is evident in his numerous high-impact publications and presentations at international events. Outside of his professional pursuits, Dr. Karadag is a devoted family man, married with two children.