

Esma S. Yolcu, Ph.D.

Dr. Yolcu is Professor of Child Health, and Department of Molecular Microbiology and Immunology, University of Missouri, Columbia, MO. She earned a Master of Science degree from Department of Medical Biology and Genetics and a PhD from the University of Ankara in Ankara, Turkey. Dr Yolcu performed postdoctoral studies at the Institute for Cellular Therapeutics, University of Louisville, Louisville, Kentucky. She co-pioneered with Dr. Haval Shirwan the concept of transient and positional display of immunological ligands on biologic and non-biologic surfaces as a safe and practical approach to gene therapy for localized immunomodulation with applications to transplantation tolerance, autoimmunity, and cancer immunoprevention and immunotherapy. This concept was recently adapted, in collaboration with Bioengineers from Georgia Tech, the University of Michigan, and Cornell, into a biomaterial platform for localized immunomodulation that has demonstrated efficacy in various preclinical transplant models. Dr. Yolcu has continuously been funded by NIH, DoD, AHA, ADA, and JDRF and she is a co-inventor on several issued patents. Her research has been published in highly prestigious scientific journals, such as Immunity, Nature Materials, Blood, Circulation, and Stem Cells. She lectured at numerous national/international conferences, and served on grant review panels for various federal and non-profit funding agencies. Dr. Yolcu is the recipient of several awards and member of several national and international societies.