Researchers from the University of South Florida (USF) and the University of Vermont (UVM) have received a half-million dollar award from the National Science Foundation (NSF) to explore new methods for fabricating and testing antennas targeted to devices that will make up the Internet of Things. The Internet of Things (IoT) is foreseen to be modern society’s third great revolution following the Industrial Revolution and the Communications Revolution. A great proportion of the communications performed in the IoT will be between devices, in so-called machine-to-machine (M2M) systems, and in an increasingly automated manner. The environments in which IoT devices will operate will often be more complex, cluttered and challenging for wireless communications than either today’s ubiquitous mobile communications or wireless data networks. This collaboration will address a critical component of the wireless communications link, namely the antenna systems for small, inexpensive IoT devices. New antenna designs are needed, along with new methods for low-cost digital manufacturing and for testing the devices under realistic operating conditions. The research findings of this project have potential to positively impact the robustness of not only M2M systems but also systems utilized in dynamic environments such as vehicle-to-vehicle, first-responder and military field operations. Furthermore, the underlying knowledge could influence the future designs of medical devices, on-body sensor systems, robotic systems, un-manned ground and air vehicles and similar applications where customization, form factor, production volume or other considerations make direct digital manufacturing (DDM) an attractive option. The collaboration will involve undergraduate and graduate students from both institutions along with industrial partners Harris Corporation and LORD MicroStrain. For more information please contact Dr. Tom Weller (USF, weller@usf.edu) or Dr. Jeff Frolik (UVM, jfrolik@uvm.edu).