災害科学国際研究所
IRIDeS
International Research Institute of Disaster Science

Texas A&M University and Disaster City（2013/2/13-15）

Venues: Texas A&M University, Disaster City (College Station, TX)
Topics: Lessons from Great East Japan Earthquake, How to use robots in megadisasters

   On Feb 13-15, Prof. Shinichi Egawa visited Texas A&M University and met with Prof. Robin Murphy about the future collaboration on developing robots used in the disasters and attended the developing exercise in Disaster City.

   Prof. Murphy conducts the research on search and rescue using aerial, marine and ground robots with postgraduate students and performs search and rescue activities in real disasters including Hurricane Katrina, 9.11 and Oklahoma City Building Bombing. They developed Survivor Buddy that is attached on the ground robot to convey bidirectional message and video between victims and responders. It can obtain the vital conditions and reduce the anxiety of the victims. In the lab, human-robot interaction was psychologically measured according to the motion and velocity of the robot movements. Camera eyes recognizing the hand shape of the victim, big data processing and the development of control program was investigated with the latest technologies.

  Prof. Egawa made an instructive lecture about the lessons from Great East Japan Earthquake from medical view point. The lecture was recorded in a TV studio so that wider audience can review later. Texas A&M University has contracted with Tohoku University to develop mutual partnership in research collaboration. Texas A&M University is known as one of the oldest fire fighters and military educations and possesses real size search and rescue facility, Disaster City ®. Prof. Egawa attended the developing exercise with Prof. Murphy and members with Texas Task Force 1 to investigate how Survivor Buddy can act in the real field. Imitated victim by local volunteer confined in a space under wrecks were contacted through Survivor Buddy. Many volunteers are registered to cooperate this type of academic and actual search and rescue activities that can be a model of future disaster training in Japan.

Survivor Buddy

Must ware helmet and protective boots
Shinichi Egawa (Disaster Medical Science)