

FACULTY RESEARCH INNOVATION FELLOWSHIPS (FRIFs)



Elfar Adalsteinsson



Karl Berggren



Antonio Torralba

Three professors in the Department of Electrical Engineering and Computer Science (EECS) have been awarded 2016–2017 Frank Quick Faculty Research Innovation Fellowships (FRIFs).

The FRIFs were created to recognize midcareer faculty for outstanding research contributions and international leadership in their fields. FRIFs provide faculty members with resources to pursue new research and development paths and to make potentially important discoveries through early-stage research.

Elfar Adalsteinsson is a professor in EECS and the Institute for Medical Engineering and Science (IMES). His group applies interdisciplinary skills to medical imaging at the intersection of engineering, computation, physics, science, and medicine. From 2010 to 2016, he served as associate director of the Madrid-MIT M+Visión Consortium. This partnership of leaders in science, medicine, engineering, business, and the public sector was dedicated to catalyzing change in Madrid's health-care innovation ecosystem by accelerating translational research and encouraging entrepreneurship.

Karl Berggren is a professor of electrical engineering, a principal investigator in the Research Laboratory of Electronics (RLE), and a core member of the Microsystems Technology Laboratory (MTL). His research focuses on methods of nanofabrication, especially applied to superconductive sensors and circuits, photodetectors, electronics and computing, and energy systems. More specifically, current nanofabrication efforts emphasize developing improved charged-particle-based lithography to direct self-assembly by using block copolymers (materials systems that self-assemble to form integrated-circuit-like patterns on the 10-nm length scale). His efforts in the area of superconductivity are currently focused on understanding fundamental mechanisms of photodetection in superconducting nanowires, and on applying superconducting nanowires to classical electronic computing.

Antonio Torralba is a professor in the computer vision group in the Computer Science and Artificial Intelligence Laboratory (CSAIL). His work focuses on novel approaches for image and video understanding. His goal is to build integrated vision systems that recognize objects, reason about contextual relationships between objects and places, and understand people and their actions. With his collaborators, he created the LabelMe annotation tool and a number of other curated databases that are widely used by the computer vision community. 