Prof. Eiges is the head of the stem cell research laboratory at the Medical Genetics Institute in Shaare Zedek Medical Center in Jerusalem. The aim of her research is to discover the timing, mechanism(s), role and reversibility of epimutations that are secondary to heritable DNA mutations using mutant human embryonic stem cells as a model system. More specifically, her lab studies the epigenetic aspects of unstable noncoding repeat pathologies, namely fragile X syndrome (FXS, CGG expansion in FMR1), Myotonic Dystrophy type 1 (DM1, CTG expansion in DMPK), C9-related ALS-FTD (c9-ALS/FTD, GGGGCC expansion in C9orf72) and Facioscapulohumeral muscular dystrophy (FSHD, D4Z4 contraction). In addition, the lab is charged with establishing diseased human embryonic stem cell (hESC) lines from genetically affected IVF embryos and providing them as a universally available resource. Thus far, we established more than 80 different hESC lines carrying mutations for a wide range of inherited conditions.