Dr. Clifford D. Folmes, Ph.D., Mayo Clinic Faculty

"The Folmes’ laboratory studies how mitochondria and energy metabolism regulate cell fate decisions and the mechanisms by which individual metabolic pathways support stage-specific stem cell function. The long-term goal of the program is to develop a comprehensive blueprint of how energy metabolism contributes to stem cell lineage specification. Application of this knowledge will enable targeted metabolic strategies to facilitate production and selection of defined progenitor populations for regenerative treatment of disease. Impaired cellular metabolism may also represent a mechanism whereby tissue-specific stem cell function is compromised in aging and disease, offering modulation of energy metabolism as an alternative strategy for restoration of stem cell function, tissue rejuvenation and treatment of disease."