



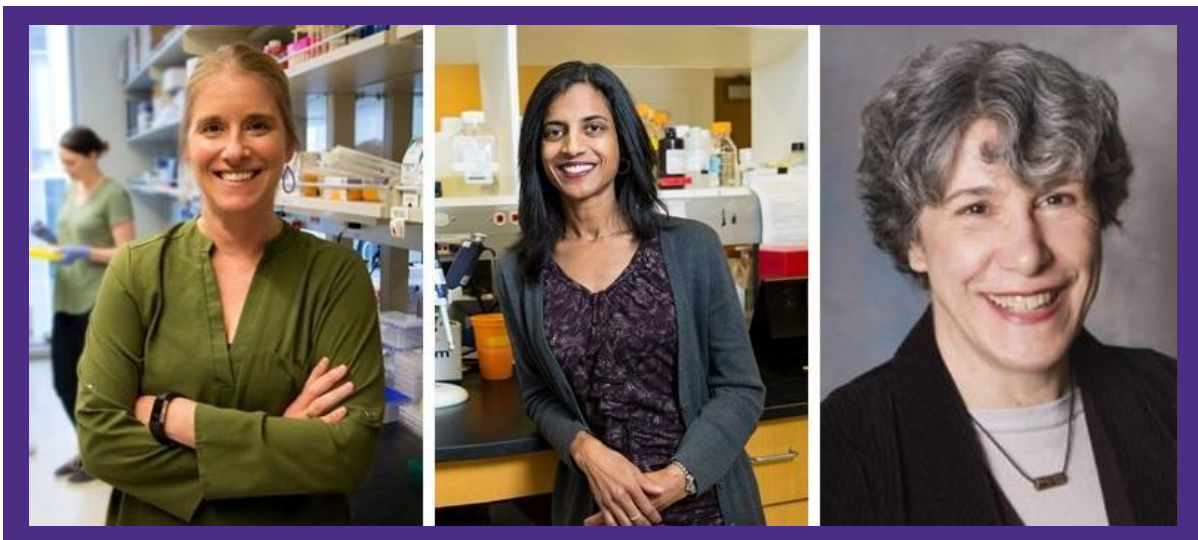
UW Medicine

Regenerate

Info and Resources for Faculty, Trainees, and Staff

October 1, 2021

ANNOUNCEMENTS



RO1 for Jessica Young, Sumie Jayadev, and Christine Disteche

ISCRM faculty members **Jessica Young**, **Sumie Jayadev**, and **Christine Disteche** have received a five-year, \$6 million R01 grant to study the mechanisms of sex differences in risk of developing Alzheimer's disease. The researchers will use unique hiPSC lines generated by the Disteche lab that have different numbers of sex chromosomes and generate matched APOE4 or APOE3 (a non-risk version of the gene) using CRISPR. Neural differentiation protocols generated in the Young lab will be used to derive neurons, glia, and brain organoids for single cell gene expression and functional analyses. The Jayadev lab will take the lead on performing single-nucleus RNA sequencing and immune cell phenotyping in male and female brains with APOE4 and APOE3 genotypes to define the molecular pathways that contribute to sex differences in AD. Co-investigators on the project include **C. Dirk Keene**, ISCRM affiliate and leader of the UW Neuropathology Core, and Joel Berletch, ISCRM investigator and Research Assistant Professor in Laboratory Medicine and Pathology.