Welcome

Dr. Anil Bhushan's laboratory research focuses on understanding the role of tissue secretory senescent cells in aging, autoimmunity and metabolic diseases. Our recent discovery shows that pancreatic beta cells acquire a secretome during T1D in mice and human and exhibit many non-cell autonomous properties. Senescent beta cells can remodel the islet environment in a paracrine manner by promoting bystander senescence and immune surveillance. We have identified key immune cells that can selectively eliminated senescent beta cells to halted progression of beta cell destruction prevent T1D in mouse models. We use a combination of mouse models of autoimmunity, humanized mouse models transplanted with senescent cells to investigate the underlying mechanism by which tissue senescent cells contribute to the development of the various diseases. We also now use utilize immune modulatory targets to identify new drugs that specifically eliminate tissue senescent human cells and develop an in vivo humanized mouse model to test efficacy of drugs to clear human senescent cells.

Contact Us
UCSF Main Site

© 2015 The Regents of the University of California

Source URL: https://bhushanlab.ucsf.edu/welcome