

Team Progress Updates

SU2C Meg Vosburg T-cell Lymphoma Dream Team: "Tailoring CAR-based Immunotherapy Strategies to T-cell Lymphoma"

Cancer immunotherapy—enabling the body's immune system to detect and destroy cancer cells has had a tremendous impact on a wide range of cancers, including B-cell lymphomas. However, it has not yet been effective in those lymphomas that originate primarily from T cells. The scientific challenge is in finding a therapy that can attack the cancerous T cells while leaving normal cells intact, since T cells are essential to the body's immune system.

The SU2C Meg Vosburg T-cell Lymphoma Dream Team is testing engineered cells that carry molecules known as chimeric antigen receptors, or CARs, which can lock onto proteins on the surface of cancerous T cells and destroy them. Finding the best combination of CARs and engineered cell types is a key goal of the Dream Team. In addition, the team is working to modify the CAR-carrying cells so that they are not hindered by immune cells. This will help reduce the cancer and prepare patients for potential stem cell transplants to contain or cure the cancer. CAR therapy is usually custom-built for each patient. The team is trying to find a way to develop CAR cells on an "off-the-shelf" basis so the therapy will be more available to patients and less expensive.

This team is named in honor of Mary Margaret (Meg) Moretti Vosburg, a lifelong learner, educator and humanitarian, who died on May 26, 2018, after a hard-fought battle with lymphoma at the age of 51.

This team started its work in January 2019 and progress notes will be posted after their first review.