

**JAKE GITTLEN LABORATORIES FOR CANCER RESEARCH**

Penn State College of Medicine Voice: (717) 531-6183

The Milton S. Hershey Medical Center Fax: (717) 531-5634

Jake Gittlen Laboratories for Cancer Research, H059

500 University Drive

Hershey, PA 17033-2390

December 4, 2023

Edward Gunther, MD

Professor of Medicine

Member, Jake Gittlen Cancer

Research Foundation

Div. of Hematology-Oncology

Penn State College of Medicine

Keith Cheng, MD-PhD

Distinguished Professor of Pathology

Member, Jake Gittlen Cancer Research Foundation

Penn State College of Medicine

Re: Support Letter for F30 applicant Andrew Sugarman

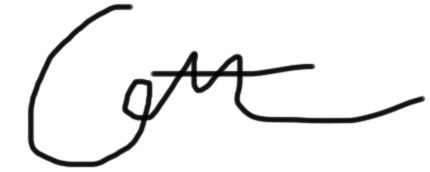
Dear Andrew and Keith,

This letter confirms my full support for Andrew Sugarman’s F30 grant application entitled “High-Resolution Wide-Field 3D Histopathology for the Morphological Characterization of Prostate Cancer.” Andrew’s research focusing on the advancement of micro-CT technology and topological data analysis seeks to make a crucial advance in cancer diagnostics. By rendering histomorphology in a digital, 3D format, your approach has far-reaching implications, which include charting a path toward AI-directed pathologic assessment of clinical specimens. While the goals are ambitious, your preliminary data show remarkable progress in a short period of time. I applaud your efforts, and I’m more than happy to share my expertise in breast cancer modeling.

As a physician-scientist and Professor in the Division of Hematology-Oncology at the Penn State Cancer Institute, my expertise is in breast cancer modeling in rodent models. Like prostate cancer, breast cancer is a common and deadly hormone-driven cancer for which treatment options critically depend on histopathologic assessments. As you know, our ongoing collaboration aims to leverage your 3D imaging methods to investigate the phenotypic heterogeneity within the mammary tumors we study. Already, Andrew has generated compelling preliminary 3D images of tumor samples provided by my lab as part of his thesis work. In support of Andrew’s current proposal, my group will continue to provide mammary biopsies, tissue blocks, and corresponding histology slides from mouse tumors generated in my lab. This will not only support Aim 1 of his proposal, but will provide data for future manuscripts and grant applications that we anticipate will result from our collaboration. Beyond providing samples, I will continue to mentor Andrew in his cancer research training to help him toward his long-term goal of becoming a physician-scientist in hematology-oncology.

I look forward to reviewing experimental results with Andrew and working closely with the Cheng Lab team to analyze these novel 3D images. To our knowledge, no group has generated 3D images of whole tumor samples at the resolution found in Andrew’s proposal, and I believe this represents a significant contribution to experimental pathology and cancer research.

Sincerely,



Edward Gunther, MD