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**Regulation of TGF-alpha Release in Cancer**

We plan to study how a protein called transforming growth factor-alpha (TGF) contributes to cancer development. TGF is present in both normal and cancer cells, and can stimulate cell growth. However, cancer cells produce much more TGF than normal cells. The TGF produced by cancer cells stimulates the growth of cancers at their original sites, and also makes them to spread and thus to form metastatic tumors. In this study, we attempt to investigate how cancer cells release more TGF. Our work is important and significant not only because it will help us understand how cancer occurs and progresses, but may also help develop new treatments for cancer patients.