2020s

Entering the digital age of cancer medicine, advanced computer technologies, such as machine learning, are making sense of the billions of data points generated in modern cancer research and medicine to predict the best treatment options for each patient, understand disparities and close gaps, improve cancer detection, and reveal novel ways to combat cancer.

**2020**
Proton Therapy Center opens

Most comprehensive molecular database of head and neck cancers created

**2021**
Chemo/immunotherapy combo used to treat mesothelioma

Vaccine for FLC, a rare liver cancer developed

**2022**
Commonwealth Foundation for Cancer Research continues to provide transformational philanthropy to support Center for Personalized Cancer Medicine

Surveillance detects pancreatic cancers early

Hepatic infusion pump treats metastases to liver

**2023**
Half-century of work in bone marrow transplant, started by Drs. George Santos and Albert Owens and continued by the scores of researchers who followed, now recognized as standard of care

Subset of tumor mutations found to persist in cancers, making them likely to respond to immunotherapy

SpaceX launches the first all-civilian spaceflight

KRAS-targeted cancer vaccine developed

DNA shed into blood guides chemo for stage II colon cancer

Multispecialty Liver Cancer Clinic opens

Cancer Center converts lab to COVID-19 test kit facility

Cancer Center sets national standards for treating cancer patients during pandemic

Spacer gel protects vital organs during radiation therapy

Astropath platform predicts response to immunotherapy

**The Sidney Kimmel Comprehensive Cancer Center at Johns Hopkins**