

## CANCER PREVENTION & RESEARCH INSTITUTE OF TEXAS

#### **MEMORANDUM**

**TO:** OVERSIGHT COMMITTEE MEMBERS

**FROM:** KRISTEN DOYLE, CHIEF EXECUTIVE OFFICER

**SUBJECT:** PROGRAM PRIORITIES FOR FY 2026

**DATE:** NOVEMBER 5, 2024

## **Summary and Recommendation**

I recommend that the Oversight Committee approve the program priorities for fiscal year 2026 as presented behind this memo.

Texas Health and Safety Code § 102.107 requires the Oversight Committee to set priorities for the grant programs annually. Each program officer will discuss the priorities proposed for fiscal year 2026 with their respective subcommittee. With two exceptions, the fiscal year 2026 program priorities are the same as the priorities adopted by the Oversight Committee last November for fiscal year 2025.

This memo also provides a report on the cumulative metrics for the adopted program priorities as well as several examples of cross-program priorities.

## **Background**

Legislation adopted in 2013 requires the Oversight Committee to establish program priorities on an annual basis. CPRIT uses the priorities to provide transparency in how it directs the orientation of the agency's funding portfolio between and within its three programs. The program priorities also guide CPRIT staff and the peer review panels on the development and issuance of program-specific Requests for Applications (RFAs) and the evaluation of applications submitted in response to those RFAs.

The Oversight Committee reviews its priorities annually and adjusts as circumstances change to incorporate the latest information concerning cancer-related advances in prevention, academic research, and product development research. In January 2018, the Oversight Committee decided to approve program priorities at the November quarterly meetings to provide CPRIT staff with more lead time for preparing and releasing RFAs for the next fiscal year. Adopting the 2026 program priorities at the November 20, 2024, Oversight Committee meeting allows the priorities to guide the fiscal year 2026 RFA process.

It is important to note that these priorities serve as strategic areas of emphasis and do not exclude funding in areas outside of the identified priorities.

#### **Priorities for FY 2026**

The Chief Officers for the Prevention, Product Development Research, and Academic Research programs recommend proposed fiscal year 2026 priorities for their respective programs. With the two exceptions noted below for the Academic Research and Prevention programs, the fiscal year 2026 program priorities are unchanged from the adopted priorities for fiscal year 2025.

 The Academic Research program proposes adopting a new program priority related to cancer survivorship research that will enhance the health and well-being of cancer survivors and caregivers.

Reason for the Change: Advances in cancer treatments have led to a 33% reduction in the cancer death rate in the past three decades. In 2024, there are over 18 million individuals – or about 5% of the population – living with a history of cancer in the United States. Although the improved survival for cancer patients is welcome, it brings with it an associated need to improve long-term health and welfare as well as follow-up medical care for cancer patients.

Cancer survivors experience increased physical, psychosocial, and economic adversities caused by the cancer diagnosis and long-term effects of cancer treatments. Cancer survivors are also at risk for late effects or secondary health problems due to their cancer treatments and, therefore, require long-term follow-up care, which includes secondary cancer prevention counseling and assessment for short-term and late effects, including the increased risk of comorbidities, recurrence, and development of secondary cancers.

Cancer survivorship research holds promise for reducing the morbidity and mortality associated with cancer and its' treatment. Examples include clinical trials examining deescalation of cancer therapy to reduce toxicity, the identification of risk factors and biomarkers for long-term toxicity and second malignant neoplasms, and prevention and implementation research to improve cancer screening and early detection of subsequent cancers.

• The Prevention program proposes eliminating the program priority related to a program assessment that identifies best practices, serves as a program tool, and guides future program direction.

Reason for the Change: The program priority is no longer necessary because the grantee has completed the assessment for FY 2010-2020 prevention awards. The Oversight Committee can reinstate this priority when it is meaningful to conduct another assessment.

### Assessing the Impact of Program Priorities and Reporting on Outcomes

The Oversight Committee approved its inaugural set of priorities at the November 19 quarterly meeting. CPRIT began quantifying the impact of its program priorities using measures introduced with the awards approved by the Oversight Committee at its August 17, 2016, quarterly meeting. CPRIT reports on the outcomes of program priorities through various avenues, including in CPRIT's annual report, through special sections on our website, and in metrics reported to legislators and CPRIT stakeholders.

CPRIT calculates the impact of the Oversight Committee's program priorities primarily through two metrics: the total number of approved awards that are associated with each program priority and the total amount of approved funding associated with each program priority. CPRIT program officers report these two metrics for each program priority to the Oversight Committee in the presentation and written materials that accompany each proposed slate of awards.

I have attached tables for the Academic Research, Product Development Research, and Prevention programs that reflect the metrics for each program priority. The tables include information for both active priorities and for priorities that the programs no longer report. Many of the approved awards fulfill more than one program priority. CPRIT attributes the full amount of the award to each program priority that the project meets.

In addition to the metrics, CPRIT publicly reports through several avenues the outcomes resulting from the decade-long implementation of these program priorities. CPRIT dedicates one section of our annual report to CPRIT's program priorities, which includes examples of a "priority in practice" for each of the three programs. Long-term projects, such as the recently released "CPRIT-Funded Core Facilities Interactive Map" (<a href="https://cprit.texas.gov/our-programs/academic-research/core-facilities">https://cprit.texas.gov/our-programs/academic-research/core-facilities</a>), the CPRIT Scholar landing page (<a href="https://cprit.texas.gov/grants-funded/cprit-scholars">https://cprit.texas.gov/grants-funded/cprit-scholars</a>), the prevention projects maps (<a href="https://cprit.texas.gov/our-programs/prevention/portfolio-maps">https://cprit.texas.gov/our-programs/prevention/portfolio-maps</a>), the Texas Resource Guide (<a href="https://cprit.texas.gov/our-programs/prevention/portfolio-maps">https://cprit.texas.gov/our-programs/prevention/portfolio-maps</a>), and the Childhood and Adolescent Cancer one-pager (<a href="https://cprit.texas.gov/media/3521/cc\_one-pager\_august\_2024.pdf">https://cprit.texas.gov/media/3521/cc\_one-pager\_august\_2024.pdf</a>) are available through CPRIT's website. CPRIT also invites grantees to present their projects at Oversight Committee meetings and features grantee projects fulfilling CPRIT program priorities in the monthly activities report.

### **Priorities Across CPRIT's Three Programs**

In addition to the priorities specific to each grant program, the proposed fiscal year 2026 program priorities also reflect priorities across CPRIT's three programs. These overarching priorities, which remain the same as those adopted for fiscal year 2025, inform the Program Integration Committee on balancing the portfolio across the Academic Research, Product Development Research, and Prevention programs.

Program staff does not report the total number of approved awards and funding amounts associated with these cross-program priorities. Provided below are examples of how each program addresses these overarching priorities.

## **Prevention and Early Detection Initiatives**

<u>Academic Research Program Implementation</u> - Create the evidence base for novel approaches to risk assessment, prevention, early detection, and interventions that could translate into implementation prevention research.

• RP190022 and RP220011 - A Randomized, Controlled Trial Comparing the Immunogenicity of 2 Doses vs. 3 Doses of the 9-valent HPV Vaccine in Males and Females 15–26 Years of Age

Based on her experience gained from two CPRIT-funded prevention projects (PP150004, PP190004) to expand a successful HPV vaccination program, Abbey Berenson, M.D., Ph.D., The University of Texas Medical Branch at Galveston, determined that only 34% of adolescents 13-17 years-old have completed the series of three doses of the 9-valent HPV vaccine. Researchers have concluded that the current requirement of completing a three-dose series is a deterrent to full vaccination.

With CPRIT funding to UTMB and Dr. Berenson, she designed and conducted a randomized, clinical trial of a two-dose schedule of the HPV vaccine in patients 15-26 years of age. Results, published in January 2024 in the *New England Journal of Medicine Evidence*, show that two doses of the HPV vaccine offer similar protection as three doses for males aged 15-26. The researchers observed comparable results for females. Although the Advisory Committee on Immunization Practices currently recommends that individuals continue to receive three doses, Dr. Berenson's findings are adding to the growing body of evidence regarding appropriate doses of HPV vaccination, which is the safest and most effective way to prevent a number of HPV-related cancers.

• RP240143 - Leveraging "Passport for Care" in a Telehealth Framework to Improve Equitable Access to Survivorship Services

Survivorship care plans (SCPs) facilitate the transition from cancer treatment to cancer survivorship, by summarizing the cancer treatment received, the risk for late effects, and related recommendations for late effects surveillance. SCPs serve as a roadmap for long-term follow-up care. Leveraging a partnership with the Children's Oncology Group (COG) Long-Term Follow-Up Guidelines, Maria Gramatges, M.D., Ph.D., Baylor College of Medicine, continued to develop the CPRIT-funded "Passport for Care" as a clinical decision support system for healthcare professionals. It generates a personally tailored SCP from clinician user-entered diagnosis and treatment information. Numerous COG members, both in the United States and international partners, use the Passport for Care as a web-based tool.

Dr. Gramatges' work is an extension of the original Passport for Care projects undertaken by Dr. David Poplack, Dr. Gramatges, and colleagues at Baylor College of Medicine through CPRIT Prevention Program funding mechanisms (PP130070, PP170036, PP220017). She and her team are converting the Passport for Care into a telehealth-compatible format to reach health care providers and children and adolescent survivors of childhood cancer in medically underserved areas of Texas and the nation.

<u>Prevention Program Implementation</u> - Implement programs that place innovative, evidence-based approaches into practice and continue to fund effective approaches.

• PP100039, PP120229, PP150061, PP200009, and PP240019 - *The C-SPAN Coalition: Colorectal Screening and Patient Navigation* 

The C-SPAN project, directed by Keith Argenbright, M.D., The University of Texas Southwestern Medical Center, delivers mailed invitations to complete a home fecal immunochemical test (FIT) screening to all eligible patients, with centralized processes to promote screening completion and evidence based follow up. The reach of the program began with one county, grew to 22 and then 57 counties, and now serves 67 counties in Northeast Texas.

The program coordinates community education and outreach efforts to offer screenings to individuals, established community partnerships to provide clinical services across a broad geography, and navigation tools to ensure successful linkage to care and access to treatment. This same framework serves as the model for six other CPRIT-funded breast, cervical, and lung cancer screening projects.

 PP180086 and PP220022 - Liver Cancer Prevention among those with Experiences of Homelessness

This project, directed by Vanessa Schick Tsai, Ph.D., The University of Texas Health Science Center at Houston's School of Public Health, San Antonio, reduces the risk of hepatocellular carcinoma in homeless and at-risk populations by providing education for viral hepatitis, screening for the Hepatitis B virus (HBV) and Hepatitis C virus (HCV), immunizing those who are HBV naïve, and treating those who are HCV positive.

The in-house program increases engagement and adherence by "meeting people where they are" and eliminating often insurmountable barriers to care for HBV and HCV. Vaccination against HBV and achieving sustained HCV viral suppression improves the health of homeless adults and improves population health by reducing transmission of viral hepatitis to others.

<u>Product Development Research Program Implementation</u> - Fund new technologies and methods for early cancer detection and prevention.

• DP220054 - Clinical Validation of the MiTR-core (Minimally Invasive Targeted Resection) Technology for Early Lung Cancer Intervention

Prana Thoracic (previously Nucore Inc.) is a Houston-based medical device company developing novel technologies for early interception, diagnosis, and treatment of lung cancer. Prana's Minimally invasive Targeted Resection (MiTR-core) is the first medical device designed to safely remove lung nodules in a simple, quick, and minimally invasive procedure. The MiTR-core procedure enables clinicians to remove suspicious nodules upon initial detection, and provide a definitive diagnosis of the nodule, while sparing healthy lung tissue. In the event of cancer, MiTR provides direct access to the nodule site for further targeted therapy.

• DP220063 - RadOnc-AI: An Artificial Intelligence Guided Dose-Prediction Platform for Radiation Oncology

Radiation therapy is a critical part of combinatorial cancer care. The dose must be sufficient to kill the targeted tumor, while also not causing collateral damage to nearby healthy tissues and organs. Each person's unique medical history and needs factor into developing precise and individualized treatment plans. Oncology teams create radiation plans, called directives, but estimating the dose is tedious, iterative, time-consuming, and imprecise. A doctor can spend 10+ hours creating a single patient's directive, and the clinical team may take 24-48 hours to finalize the plan.

InformAI, Inc. is building RadOnc-AI, software that uses a form of artificial intelligence (AI) called deep learning to fully automate this directive planning. The AI evaluates the person's medical data and tumor images to predict the optimal radiation dose.

Cancer patients treated at larger hospitals with specialized doctors tend to have better outcomes than those treated at small clinics, who have a reduced survival rate of 20%. InformAI will ensure that patients across Texas receive equitable access to quality treatment plans.

# **Early Translational Research**

<u>Academic Research Program Implementation</u> - Fund the continuum of cancer research - population, basic, translational, and clinical research - that could develop new discoveries into practical advances.

RP220150 – Enhancing Antitumor Immunity In Metastatic Cancers
RP180343 – Developing Therapeutics for HPV-associated Cancers
RP120094 and RP140140 – Creating Imaging Technologies for Precise Surgical Removal of Head and Neck Cancers

Researchers from The University of Texas Southwestern Medical Center founded OncoNano Medicine, a Dallas-based company, in 2014. OncoNano's approach to cancer therapy uses technologies developed by UT Southwestern's Jinming Gao, Ph.D., with the support of five pivotal CPRIT academic research awards. OncoNano, which has received multiple CPRIT Product Development awards, embodies CPRIT's cross-program objectives by advancing the continuum from academic research to clinical healthcare innovations in oncology.

Through 11 inventions that resulted in five issued U.S. patents, CPRIT's academic research and product development research awards have facilitated OncoNano's journey from lab-based research to its status as a clinical-stage biopharmaceutical company. Key milestones, such as the progression of Pegsitacianine, which received FDA Breakthrough Therapy Designation for peritoneal carcinomatosis, have marked OncoNano's transition to clinical and commercial development. The company has initiated a Phase 3 clinical trial and received authorization from the U.S. Food and Drug Administration for the investigational new drug application of ONM-501, a STING agonist, which helps activate the innate immune system and the body's response against cancer cells.

 RP170427- Ambient Mass Spectrometry for Preoperative Molecular Diagnosis of Thyroid Fine Needle Aspirate Biopsies
DP240245 - Development of the Ultimate Surgical Sensing System for Intraoperative Tissue Sensing and Surgical Guidance

MS Pen Technologies, supported by CPRIT funding, is advancing groundbreaking solutions for intraoperative cancer detection and precision surgery. Building on foundational research funded through an academic research grant (RP170427) for the MasSpec Pen's use in preoperative molecular diagnosis, MS Pen Technologies has since received a CPRIT Product Development Research Award (DP240245) to develop the Ultimate Surgical Sensing System (Ultiss MD). This innovative platform combines the MasSpec Pen with mass spectrometry and artificial intelligence/machine learning analytics to enable real-time, label-free tissue identification, addressing the critical issue of incomplete cancer resection. By focusing initially on lung cancer—where effective intraoperative decision-making is vital—MS Pen Technologies' work exemplifies CPRIT's commitment to fostering research across the cancer care continuum, from foundational studies to clinical application, transforming scientific discoveries into tangible advances in patient care.

<u>Prevention Program Implementation</u> - Harness emerging technologies that expedite the development of early cancer detection, risk assessment, and interception to implement novel prevention services.

• Collaborative Action Center (CAC) Hepatocellular cancer

• PP240017 - Expanding Access to Cervical Cancer Screening through Primary HR-HPV Testing and Self-Sampling.

Along with vaccination against the human papillomavirus (HPV), cervical cancer screening, early detection, and treatment of cervical precancers are effective interventions for preventing cervical cancer. Screening is the most effective strategy for preventing cervical cancer in the current generation.

A second-generation screening method, screening with primary testing for high-risk HPV (HR-HPV), improves screening outcomes and reaches people for whom cytology-based screening is inaccessible. Compared to first-generation screening that requires provider performed cytology testing, minimally trained lay persons can conduct the primary HR-HPV testing through self-sampling. Numerous countries have implemented primary HR-HPV testing. Compared to provider-performed screening, primary HR-HPV testing is associated with more than a two-fold increase in screening participation among under screened women.

This CPRIT-funded project conducted by Jane Montealegre, Ph.D. and Kathleen Schmeler, M.D., at The University of Texas MD Anderson Cancer Center, increases access to cervical cancer screening, early detection, and linkage to treatment in underserved populations that receive care in safety net health systems. Program pillars include: 1) health system changes guided by the American Cancer Society National Roundtable for Cervical Cancer Screening Implementation Roadmap; 2) provider training and practice facilitation; 3) patient education; 4) patient navigation; and 5) capacity building using Project ECHO® (Extension for Community Healthcare Outcomes) and the existing ECHO Network.

The project leads are developing an effective and sustainable model for the integration of primary HR-HPV testing with self-sampling in clinical practice to serve as blueprint for implementation throughout health systems in Texas and the U.S.

<u>Product Development Research Program Implementation</u> - Fund early-stage companies that are bridging the gap between basic research and product development.

• DP240117 - A Novel High Throughput Platform for Drug Screening Against Dormant and Migrating High-Grade Glioma Cells

Doctors diagnose nearly 12,000 adults with glioblastoma (GBM) in the U.S. each year. Despite more than three decades of efforts, the median survival rate is unchanged at 14-18 months, with the five-year survival rate at 6%. Emerging evidence identifies two cell populations, migrating and dormant cells, which promote tumor recurrence and mortality in GBM. However, researchers lack methods for identifying, retrieving, and analyzing dormant and migrating cancer cells. Current methods of drug discovery focus on rapid cell growth and most drugs developed for GBM do not target dormant and migrating

cells. Without a platform to help researchers retrieve and analyze dormant and migrating cells, there is no way to target these critical cell populations in drug development.

CPRIT-funded SingleCell Biotechnology has developed tests for identifying, isolating, and testing dormant and migrating cells and has completed preliminary work on the core components of the tumor drug discovery platform. The company received a \$2.5 million Seed Company Product Development Research Award in 2023 to optimize and validate a single integrated platform that identifies dormant and migrating cells, which researchers can then use, for the first time, to screen drug libraries and identify druggable targets for effectively killing dormant and migrating high grade glioma cells. The company plans for validated tests to assist successful drug development against GBM tumors.

## **Enhance Texas' Research Capacity and Life Science Structure**

<u>Academic Research Program Implementation</u> - Increase the cancer research infrastructure across Texas by investing in researcher recruitment, training grants and core facilities.

• Several CPRIT-funded core facilities support drug discovery or cryogenic Electron Microscopy (cryo-EM). Together with the recruitment of numerous CPRIT Scholar structural biologists, chemical biologists, and cryo-EM experts involved in structure-based drug design, Texas has established a drug discovery and development powerhouse.

CPRIT Scholar Cassian Yee, (R1301) participated in the CPRIT-funded TMCi Accelerator for Cancer Therapeutics (ACT) 2023 cohort. Through the ACT program Dr. Yee created an endogenous T-cell therapy platform that overcomes critical challenges in creating and utilizing cell-based therapies. This led to a Product Development Research grant (DP240075) awarded in 2024 to Dr. Yee's company, Mongoose Bio.

The University of Texas Southwestern Medical Center (RP240521), MD Anderson Cancer Center (RP180819), Baylor College of Medicine (RP220646) and UTHealth San Antonio (RP220599) have pediatric CPRIT-funded core facilities developing pediatric patient-derived xenograft models, technology for screening for drug sensitivity using these models and primary cancer cells, and integrated clinical and research data commons – unique national resources that have facilitated the analysis of pediatric cancers and the development of novel therapeutic approaches.

 RP210042 - Collaborative Training of a New Cadre of Innovative Cancer Prevention Researchers (The University of Texas Health Science Center at Houston)
RP210043 - Cancer Therapeutics Training Program (Texas A&M University System Health Science Center)
RP210037 - Systems Epidemiology for Cancer Training Program (Baylor College of Medicine) CPRIT has awarded 31 Training Grant awards to support training the next generation of cancer researchers, including a number of awards focused on training in cancer prevention and, more recently, an innovative advanced program in systems epidemiology.

 RP210153 - The University of Texas El Paso/The University of Texas MD Anderson Cancer Center Partnership for Hispanic Cancer Disparities Research RP2300499 – The University of Texas Rio Grande Valley South Texas Center of Excellence in Cancer Research (ST-CECR)

CPRIT established the Texas Regional Excellence in Cancer (TREC) program awards to strengthen cancer research at institutions located in regions of Texas that have historically received low levels of peer-reviewed cancer research funding. The TREC multicomponent award supports the development of a cancer research center with a cohesive theme relevant to the cancer burden of the region, including the recruitment of new cancer research faculty, support for investigator-initiated research projects of existing faculty, and for the development of Core services providing state-of-the art technologies.

UTEP received a \$5.9 million TREC award in 2021 to establish a unique multidisciplinary Center for the Study of Hispanic Cancer Disparities as a sustainable framework that cultivates cutting-edge research focused on the role of mediators of cancer screening, detection, development, and progression among Hispanic individuals. UTEP subsequently received a TREC: Institutional Postdoctoral Training award in 2023 to recruit outstanding postdoctoral fellows, especially those from underrepresented racial and ethnic groups, individuals with disabilities, and individuals from disadvantaged backgrounds, and train them as the next generation leaders in cancer research to address cancer disparities.

UTRGV received a \$6 million TREC award in 2023 to establish the ST-CECR, the first research center of its kind in the Rio Grande Valley. The ST-CECR takes a comprehensive approach to reduce cancer health disparities in this region by defining novel etiological, lifestyle, and environmental factors influencing cancer development and outcomes, and developing a cancer health disparity research workforce in the Rio Grande Valley.

<u>Prevention Program Implementation</u> - Implementing systems change, developing partnerships and collaborations, training community and healthcare providers, and creating new jobs.

• PP230060 - Coordinating Center for Colorectal Cancer across Texas (CONNECT)

Colorectal cancer is the second leading cause of cancer-related deaths in Texas and ranks 48th among states for colorectal cancer screening completion. Available data suggests that population-based programs can be particularly effective and that critical components for increasing screening rates include high level champions, stakeholder involvement, a convening entity, data driven approaches, defined goals, understanding assets and

resources, creating synergies across systems, and collaborations across public health, community organizations and health care organizations.

The University of Texas at Austin and Dr. Navkiran Shokar received a \$3 million Prevention grant to create the Colorectal Cancer Screening Coordinating Center. The Center serves as a convening entity and central hub of resources, tools, and content expertise accessible by stakeholders across the state. It consists of an advisory steering committee; a statewide stakeholder network and five cores – Administrative; Community-based, Implementation, Engagement, Education and Health Communication; Clinical Implementation, Modeling, Mapping, Cost effectiveness and Data; and Advocacy. The work of the center will culminate in creating the infrastructure, capacity, and resources to propel Texas' CRC screening efforts forward.

PP110241 - EPICO: Education to Promote Improved Cancer Outcomes
PP160048 - Training CHWs for More Effective Cancer Education and Navigation
PP200055 - Advancing the Access to Cancer Training, Information, Outreach, and Navigation (ACTION) Project for CHW Dissemination of Resources to At-Risk Texas Regions

CPRIT has awarded Texas A&M University System Health Science Center and Dr. Jane Bolin more than \$1.1 million to develop a project the develops a replicable, sustainable tailored training program for community health workers (CHW) on prevention, detection, treatment, survivorship, and navigation for breast, cervical, colorectal, liver and lung cancers.

The program integrates cancer expertise and community knowledge to develop culturally appropriate education materials, trains promotores in tailoring techniques to adapt their education to characteristics of residents they serve, and it builds infrastructure to make the trainings publicly available to ensure replication and sustainability. The project's online component aids in disseminating the training and materials for utilization by organizations and CHWs in Texas and beyond.

The program is one of the choices for required continuing education units for both CHWs and CHW Instructors as part of the Texas Community Health Worker Training and Certification program.

<u>Product Development Research Program Implementation</u> - Grow the life sciences industry and infrastructure in Texas while creating new employment opportunities.

• CP120038 - Formation of The Texas Cancer Therapeutics Process Development Lab

Kalon Biotherapeutics received a \$7.9 million Product Development Research grant in 2012 to create a cancer therapeutics process development lab at the Texas A&M University System's National Center for Therapeutics Manufacturing. FujiFilm Diosynth Biotechnologies acquired Kalon in late 2014 and is now a contract development and

management organization (CDMO) that provides cell culture, microbial fermentation, cell therapy, gene therapy and vaccine services for companies across Texas and the United States. The company boasts over 3,000 employees in eight sites, including College Station.

• DP230079 - Building Differentiated Cell Therapy Manufacturing Technologies to Attract Value- Added Biotech Partnerships

Cell therapies offer the potential for single-dose cures of cancer. CTMC brings together the leading complex biologics manufacturing technology organization and the leading clinical cancer center to enable innovation from academia and biotech to accelerate Cell Therapy's impact on cancer patients.

Though there has been progress on allogenic or "off-the-shelf" cellular therapies, most early phase therapies are autologous processes, with a dedicated manufacturing run for each patient. These personalized immunotherapies start with the collection of the patient's own cells or tumor samples, which scientists modify or re-engineer depending on the therapeutic modality and indication, then stimulate for growth to expand the cell number, and infuse back into the patient.

Cell therapy is particularly challenging to develop and manufacture since every donor is unique, necessitating a robust process that can support modification and expansion for each patient and cells requiring additional support for growth and expansion ex-vivo. Additionally, viral vectors utilized in the modification/engineering of the cells are critical raw materials that require their own manufacturing process. Resilience Texas dba CTMC received a \$9.1 million Product Development Research grant (DP230079) in 2023 to build platforms and bolster expertise at the CTMC site in Houston that reduces manufacturing time, variability, and cost to reach patients, who often have no other options, faster and more efficiently.

# **Recommendation and Next Steps**

CPRIT staff recommend approval of the FY 2026 program priorities as proposed. We will use the newly adopted program priorities to develop RFAs for the fiscal year 2026 CPRIT grant review cycles.