

CANCER PREVENTION & RESEARCH INSTITUTE OF TEXAS

MEMORANDUM

| DATE: | IN FISCAL YEAR 2024 FEBRUARY 19, 2025 |
|----------|--------------------------------------------------------------------------------------------------------------|
| SUBJECT: | TEXAS HEALTH & SAFETY CODE SECTION 102.260(C) REPORT ON THE MERIT AND CONTINUED PROGRESS OF CPRIT'S PROGRAMS |
| FROM: | KRISTEN P. DOYLE, CHIEF EXECUTIVE OFFICER |
| TO: | OVERSIGHT COMMITTEE MEMBERS |

Summary

Texas Health and Safety Code § 102.260(c) requires the Chief Executive Officer to report to the Oversight Committee at least annually on the progress and continued merit of each research program. I am pleased to report that fiscal year 2024 marked another year of progress for CPRIT and its Academic Research, Prevention, and Product Development Research programs.

CPRIT approved 116 grants totaling \$271.09 million to 28 organizations throughout the state in fiscal year 2024. Key metrics continue to indicate that CPRIT is affecting Texas' national standing in both cancer research and the biomedical industry. CPRIT's investment is attracting, creating, and expanding the research capabilities of our institutions of higher education and the state's life science industry, expediting innovation, and increasing the likelihood of breakthroughs in cancer prevention and cures.

This report illustrates the progress made in advancing CPRIT's mission to create and expedite innovation in cancer research and cancer prevention. Aligning program activities with the program priorities adopted by the Oversight Committee is a good gauge of progress and merit; this report highlights each program's implementation of the fiscal year 2024 program priorities. CPRIT's *2024 Annual Report*, which is available at https://2024annualreport.cprit.texas.gov/, provides more information on CPRIT program priorities and awards.

Regarding progress made by individual grant projects within each of CPRIT's three programs, Texas Administrative Code § 703.21 requires all CPRIT grantees to submit progress reports at least annually. Outside experts evaluate these progress reports to ensure that the grantee has made appropriate progress and should continue to work under the grant. If an expert reviewer determines that a grant project is not making progress towards the project goals and objectives, CPRIT has several options, including contract termination.

Milestones Across Programs

The Texas Academy of Medicine, Engineering, Science and Technology (TAMEST) awarded CPRIT the Kay Bailey Hutchinson Distinguished Service Award on February 5, 2024. The award recognizes individuals and organizations who have demonstrated outstanding leadership in furthering TAMEST's mission to bring together the state's brightest minds in medicine, engineering, science, and technology to foster collaboration and to advance research, innovation, and business in the State.

In December, CPRIT released the updated 2024 Texas Cancer Plan, which is a statewide strategic plan to reduce the cancer burden across the state and improve the lives of Texans. The 2024 version is the third iteration of the Texas Cancer Plan published by CPRIT. The first and second versions were released in 2012 and 2018, respectively. The 2024 Texas Cancer Plan's new immersive online format allows a comprehensive, adaptable approach to improving cancer prevention, care, and survivorship.

Academic Research Program

CPRIT's Academic Research Program supports innovative and meritorious projects that are discovering new information about cancer that can lead to prevention, early detection, and cures; translating new and existing discoveries into practical advances in cancer diagnosis and treatment; and increasing the prominence and stature of Texas in the fight against cancer. In fiscal year 2024, CPRIT's Oversight Committee approved 92 Academic Research and Recruitment Awards totaling \$170.21 million.

Notably in 2024, the Academic Research Program launched the interactive Texas Core Facilities map, which is a comprehensive online resource that categorizes CPRIT-funded core facilities across the State. Core facilities offer their tools, technologies, and specialized competencies to researchers located throughout the State. The interactive map helps cancer researchers and companies more easily locate expertise, equipment, technologies, testing, and services applicable to their projects.

Academic Research Program Priorities

The Oversight Committee adopted the following fiscal year 2024 program priorities for the Academic Research Program:

- Recruitment of outstanding cancer researchers to Texas
- Investment in core facilities
- A broad range of innovative, investigator-initiated research projects
- Implementation research to accelerate adoption and deployment of evidence-based prevention, early detection, risk assessment and interventions
- Computational oncology and analytic methods
- Childhood and adolescent cancers

- Hepatocellular cancer
- Expand access to innovative clinical trials

The 2024 Annual Report highlights the work of Dr. Michael Taylor at Baylor College of Medicine in exemplifying program priorities in practice. Dr. Taylor arrived at Baylor College of Medicine with the support of a CPRIT Recruitment of Established Investigators grant award in 2022. He and his team research novel treatments for pediatric brain tumors, including Group 3 medulloblastoma. Dr. Taylor's research team identified embryonic cells responsible for the tumor and showed in preclinical models that removing these stem-like cells caused tumors to shrink. While scientists will need to conduct more research, this discovery provides hope for earlier treatment. From this research, Dr. Taylor hopes to create a biomarker test for newborns that will detect early signs of medulloblastoma.

Prevention Program

CPRIT's Prevention Program continues to support effective, evidence-based prevention programs available to underserved populations in the state. Prevention Program grants help Texans reduce the risk of cancer, identify cancers earlier, and assist people in finding cancer treatment. As of August 31, 2024, prevention grants had provided 9.89 million prevention services, including 3.8 million clinical services. Through CPRIT-funded screenings, 44,751 cancers and cancer precursors have been discovered. In fiscal year 2024, the Oversight Committee approved 12 prevention grants totaling \$25.9 million.

Prevention Program Priorities

The Oversight Committee adopted the following fiscal year 2024 Prevention Program priorities:

- Populations disproportionately affected by cancer incidence, mortality, or cancer risk prevalence
- Geographic areas of the state disproportionately affected by cancer incidence, mortality, or cancer risk prevalence
- Populations with obstacles to cancer prevention, detection, diagnostic testing, treatment, and survivorship services
- Program assessment to identify best practices, use as a quality improvement tool, and guide future program direction.

The Southwest Coalition for Colorectal Cancer Screening (SuCCCeS) program, led by Jennifer Molokwu at Texas Tech University Health Sciences Center El Paso and funded by CPRIT, is improving screening rates for colorectal cancer among uninsured and underinsured 45- to 75-year-olds. The incidence and mortality rates of colorectal cancer are higher in El Paso County than in the rest of the State. The SuCCCeS program focuses on sustainably engaging health care systems and community organizations to reduce colorectal cancer disparities through evidence-based educational intervention, navigation services, and no-cost screening and diagnostic testing. Serving a 27-county area, the program is available to 2.56 million medically underserved

Texans. To date, SuCCCeS has distributed over 31,000 fecal immunochemical test (FIT) kits, with a completion rate of 71%. Based on FIT test results, doctors scheduled almost 500 screening colonoscopies, with a 78% completion rate.

Product Development Research Program

CPRIT's Product Development Research Program funds innovative and scientifically meritorious product development projects with the potential of translating research discoveries into commercial products to benefit cancer patients. During fiscal year 2024, the Oversight Committee approved 12 Product Development Research awards totaling \$74.97 million. Through August 31, 2024, CPRIT has cumulatively approved 80 product development research awards to 67 companies totaling a commitment of \$714.2 million.

The Product Development Research program continues to be a vital component in building the life sciences infrastructure and community in Texas. Through August 31, 2024, CPRIT companies raised \$7.1 billion in additional investments after their CPRIT awards (a 10:1 funding ratio). These additional investments and activities testify to the quality of the CPRIT-funded projects and CPRIT's review process. CPRIT-funded companies continue to help not only the life sciences ecosystem, but also the Texas economy with a \$672.2 million increase in business activity in CPRIT programs and employment of 1,866 Texans at CPRIT-funded companies.

In fiscal year 2024, the Product Development program received a record number of grant applications. For preliminary review, companies submitted 142 applications, with 31 companies invited to submit full applications. Ultimately, CPRIT approved 12 of those 31 companies for grant awards. The high volume of companies applying for CPRIT funds is a testament to the growing life sciences industry in Texas and the role that CPRIT plays to help foster it.

Product Development Research Program Priorities

The Oversight Committee adopted the following 2023 Product Development Research Program Priorities:

- Funding novel projects that offer therapeutic or diagnostic benefits, i.e., disruptive technologies
- Funding projects addressing large or challenging unmet medical needs
- Investing in early-stage projects when private capital is least available
- Stimulating commercialization of technologies developed at Texas research entities
- Supporting new company formation in Texas or attracting promising companies to Texas that will recruit staff with life science expertise, especially C-level executives
- Providing appropriate return on Texas taxpayer investment

CPRIT grantee Prana Surgical (formerly Prana Thoracic) is developing a novel device to improve lung cancer detection and treatment. In 2022, Prana Surgical received a Seed Company Product Development Research grant to develop the Minimally-invasive Targeted Resection (MiTR-coreTM), a device that safely removes lung nodules through a minimally invasive procedure. With the support of the CPRIT grant, Prana was able to accelerate the development of the MiTR-coreTM through clinical and regulatory requirements. Due to the successfully broader application beyond lung tissue, MiTR-coreTM is now the "Prana System."

Conclusion

Fiscal Year 2024 was another successful year for CPRIT's three programs, all of which show merit and progress and should continue operations. The work conducted under the purview of CPRIT's programs is part of an iterative cycle, with observations emerging from the laboratory making their way to the public and back again to the laboratory. Essential players in this cycle are basic scientists, physician scientists, clinical researchers, product development entrepreneurs, public health professionals, health care providers, patients, community organizations, early-stage companies, and research institutions across Texas.

Through CPRIT's programs, the state is investing in intellectual and research support infrastructure that is attracting, creating, and expanding research capabilities of Texas institutions of higher education and the Texas life science industry; expediting innovation; and increasing the likelihood of breakthroughs in cancer prevention and cures.