



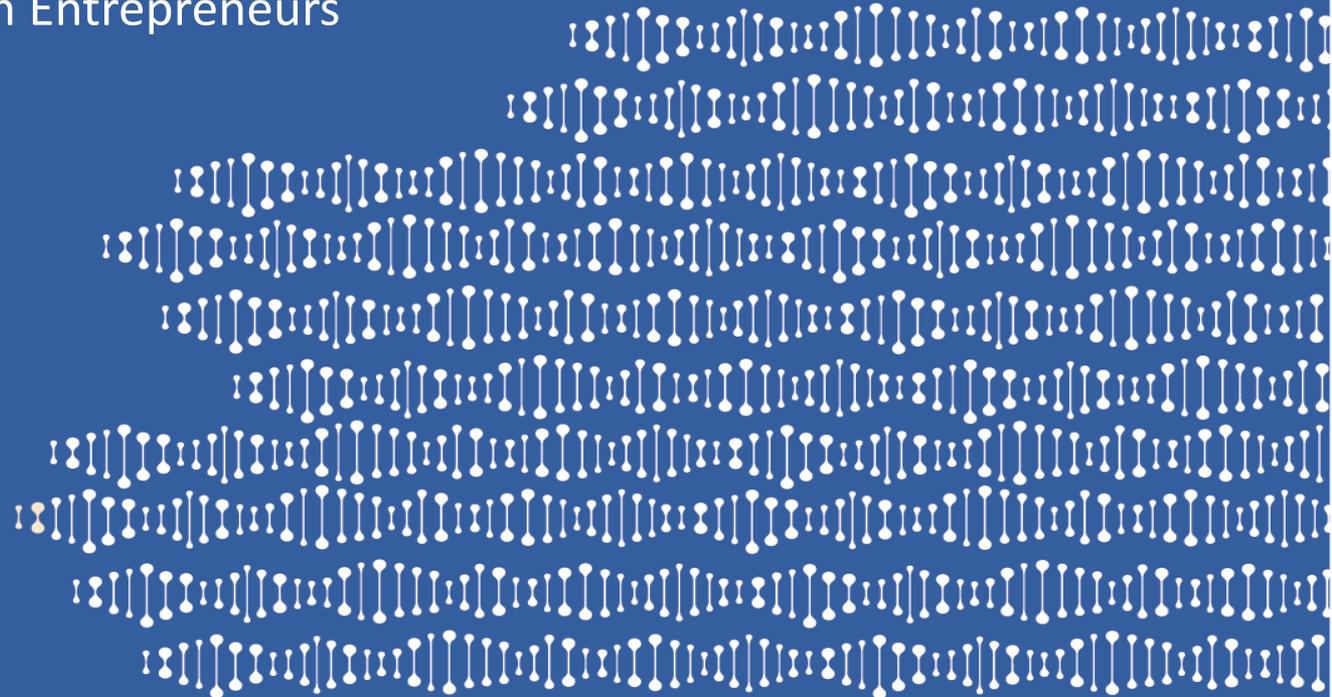
CANCER PREVENTION & RESEARCH
INSTITUTE OF TEXAS

CPRIT and the Physician Entrepreneur

September 10, 2014

Presented to

The Society of Physician Entrepreneurs



CPRIT Overview

1. Cancer's Impact in Texas

2. Mission and Perspective

3. CPRIT Organization and Methods

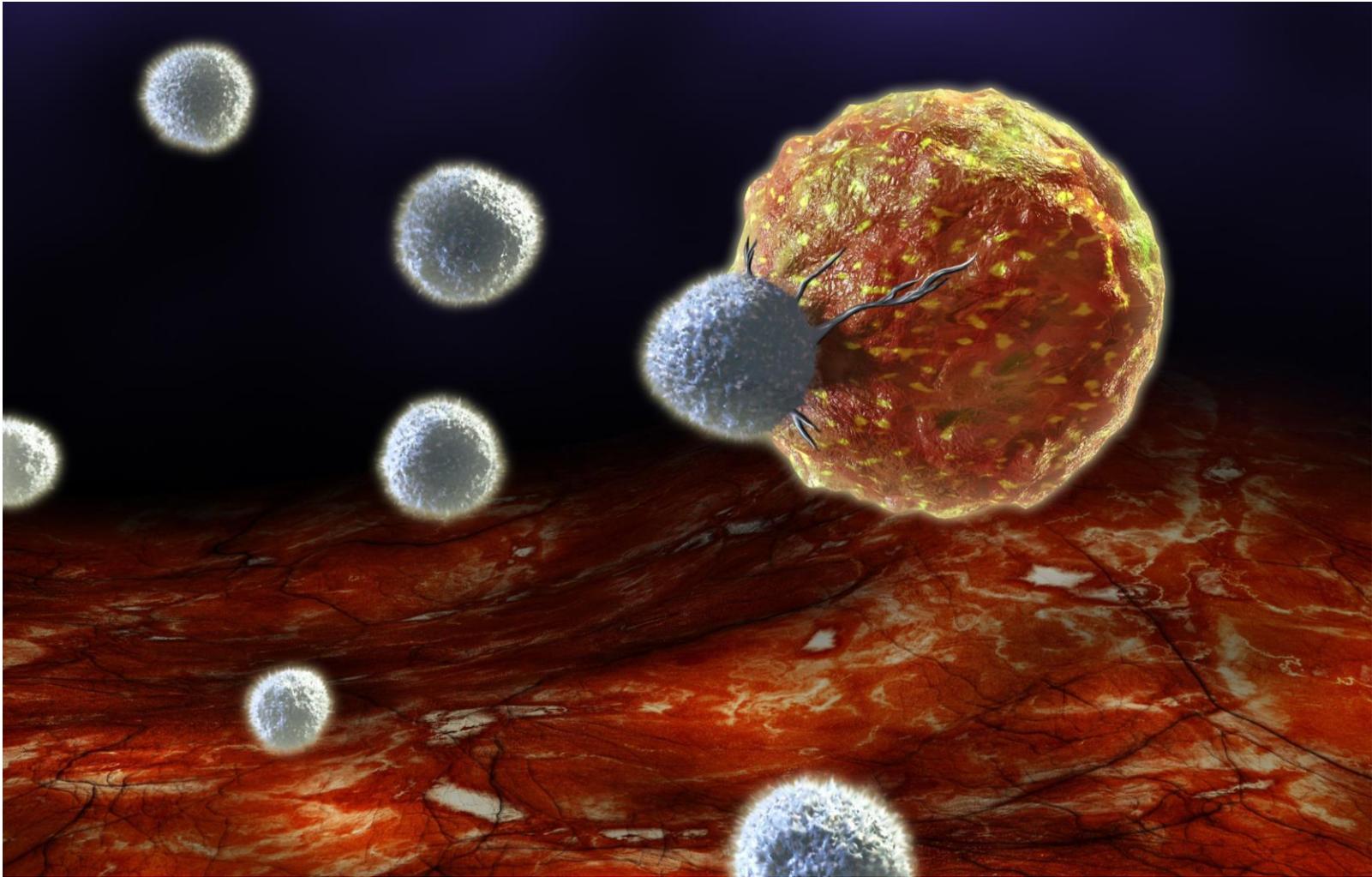
- Research
- Product Development
- Prevention

4. CPRIT's Activities Moving Forward

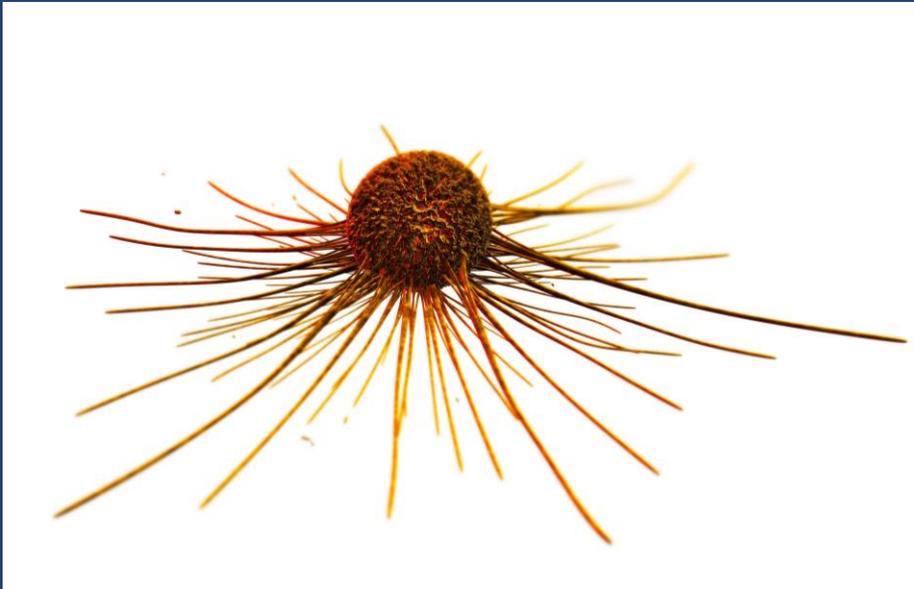
5. What makes for the *Perfect Application*



2014: Expect 119,000 Texans newly diagnosed; 44,150 die.



Cancer's enormous human & economic costs to Texas



- \$150.9 billion in reduced annual spending
- \$74.4 billion in output losses annually
- 747,850 lost jobs from cancer treatment, morbidity and mortality and the associated spillover effects



CPRIT's Unique Role in the Fight Against Cancer

Created by the Texas Legislature and citizens in 2007

Our Mission:

- Create and expedite innovation in the area of cancer research and in enhancing the potential for a medical or scientific breakthrough in the prevention of cancer and cures for cancer.
- Attract, create, or expand research capabilities at institutions of higher education and other public or private entities that will promote a substantial increase in cancer research and creation of high-quality new jobs in Texas.
- Develop and implement the Texas Cancer Plan.



Oversight Committee Members

William Rice, M.D.
Chair
Austin
Appointed by Governor Perry
Term: 9/26/13 - 1/31/17

Pete Geren
Vice-Chair
Fort Worth
Appointed by Speaker Straus
Term: 10/22/13 - 1/31/19

Amy Mitchell
Secretary
Austin
Appointed by Lt. Gov. Dewhurst
Term: 9/26/13 - 1/31/15

Gerald Geistweidt
Mason
Appointed by Governor Perry
Term: 9/26/13 - 1/31/15

Cynthia D. Mulrow, M.D., MSc., MACP
San Antonio
Appointed by Speaker Straus
Term: 10/22/13 - 1/31/15

Craig Rosenfeld, M.D.
Dallas
Appointed by Lt. Gov. Dewhurst
Term: 9/26/13 - 1/31/17

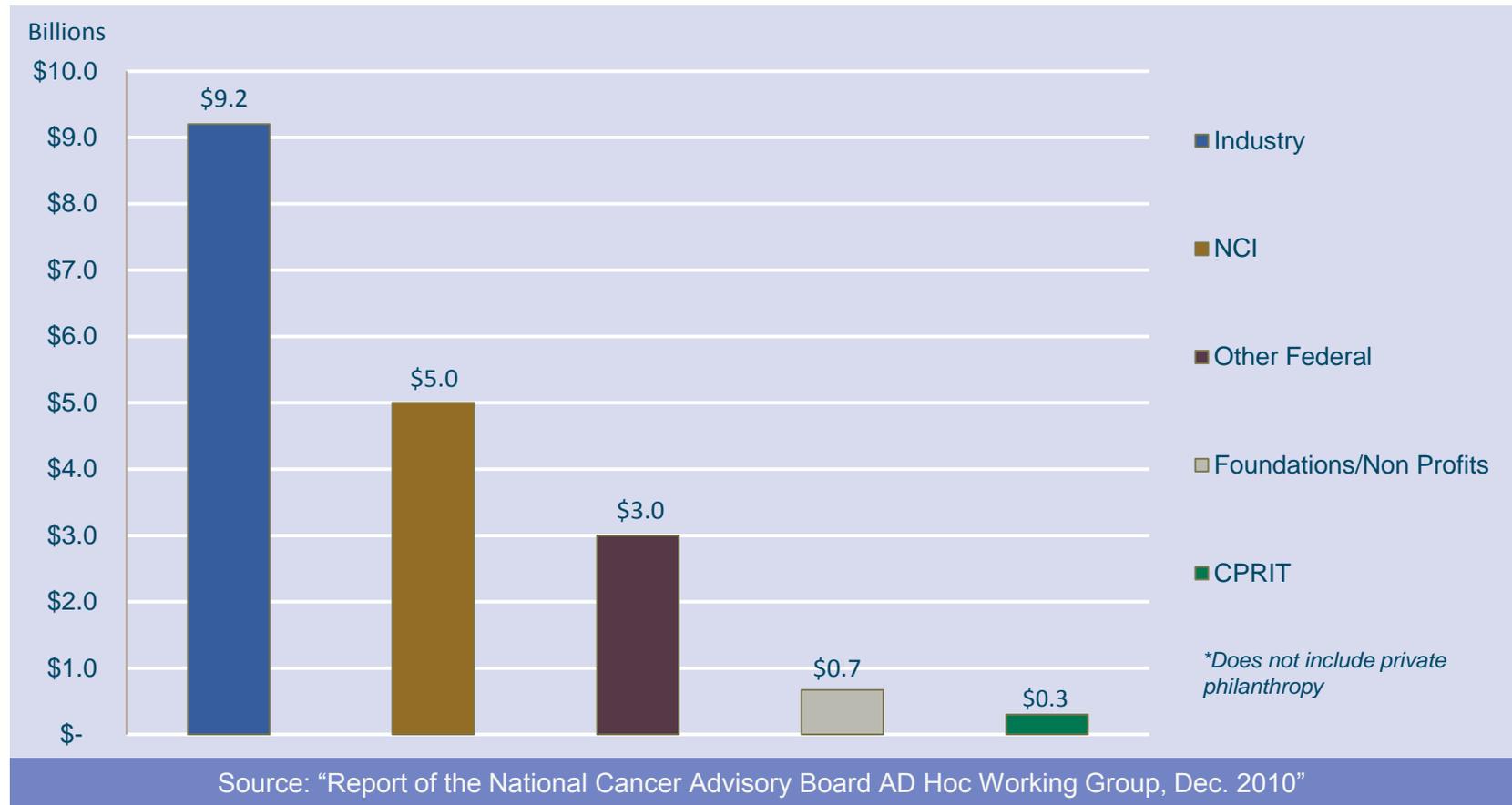
Angelos Angelou
Austin
Appointed by Governor Perry
Term: 9/26/13 - 1/31/19

Will Montgomery
Dallas
Appointed by Speaker Straus
Term: 11/20/13 - 1/31/17

Ned Holmes
Houston
Appointed by Lt. Gov. Dewhurst
Term: 9/26/13 - 1/31/19



CPRIT Funding in Perspective



CPRIT's Unique Role in the Fight Against Cancer

Mission

- Create and expedite innovation in cancer research into prevention and cures
- Attract, create, or expand research capabilities
- Create high-quality new jobs in Texas
- Develop and implement the Texas Cancer Plan

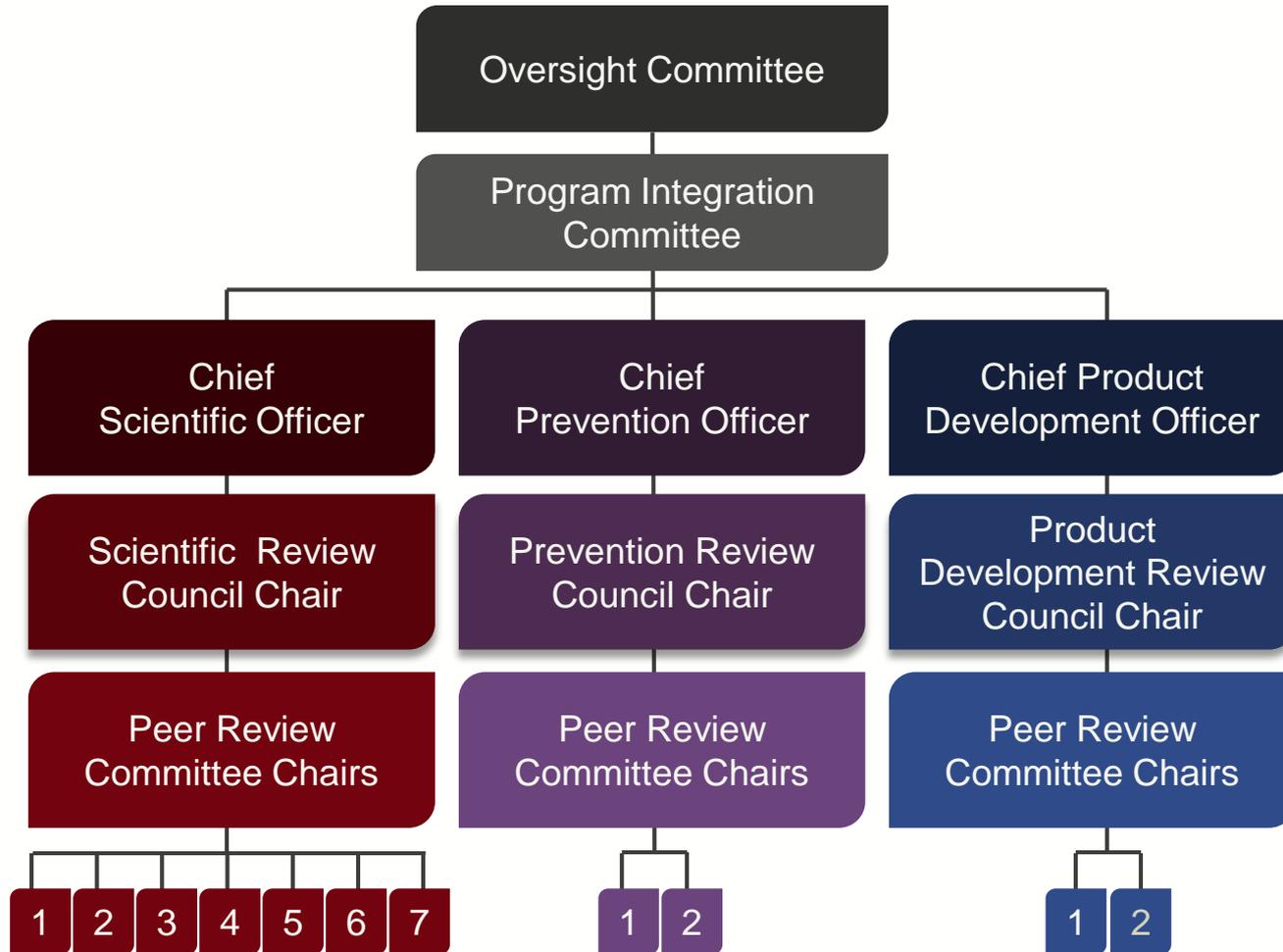


Action

Award merit-based, peer reviewed grants to Texas-based entities and institutions for cancer-related research, product development and the delivery of cancer prevention programs and services.



CPRIT's Peer Review



Scientific Research Program

Goals

- Discover new information about cancer that can lead to prevention, early detection and cures
- Translate new and existing discoveries into practical advances in cancer diagnosis and treatment
- Increase the prominence and stature of Texas in the fight against cancer



Grants

- **Research Grants**
 - **315 awarded**
 - **\$481,000,000 granted**
- **Researcher Recruitment**
 - **56 recruited**
 - **\$169,000,000 granted**

Research Portfolio

Scientific Research Program

Goals

- Discover new information about cancer that can lead to prevention, early detection and cures
- Translate new and existing discoveries into practical advances in cancer diagnosis and treatment
- Increase the prominence and stature of Texas in the fight against cancer



Grants

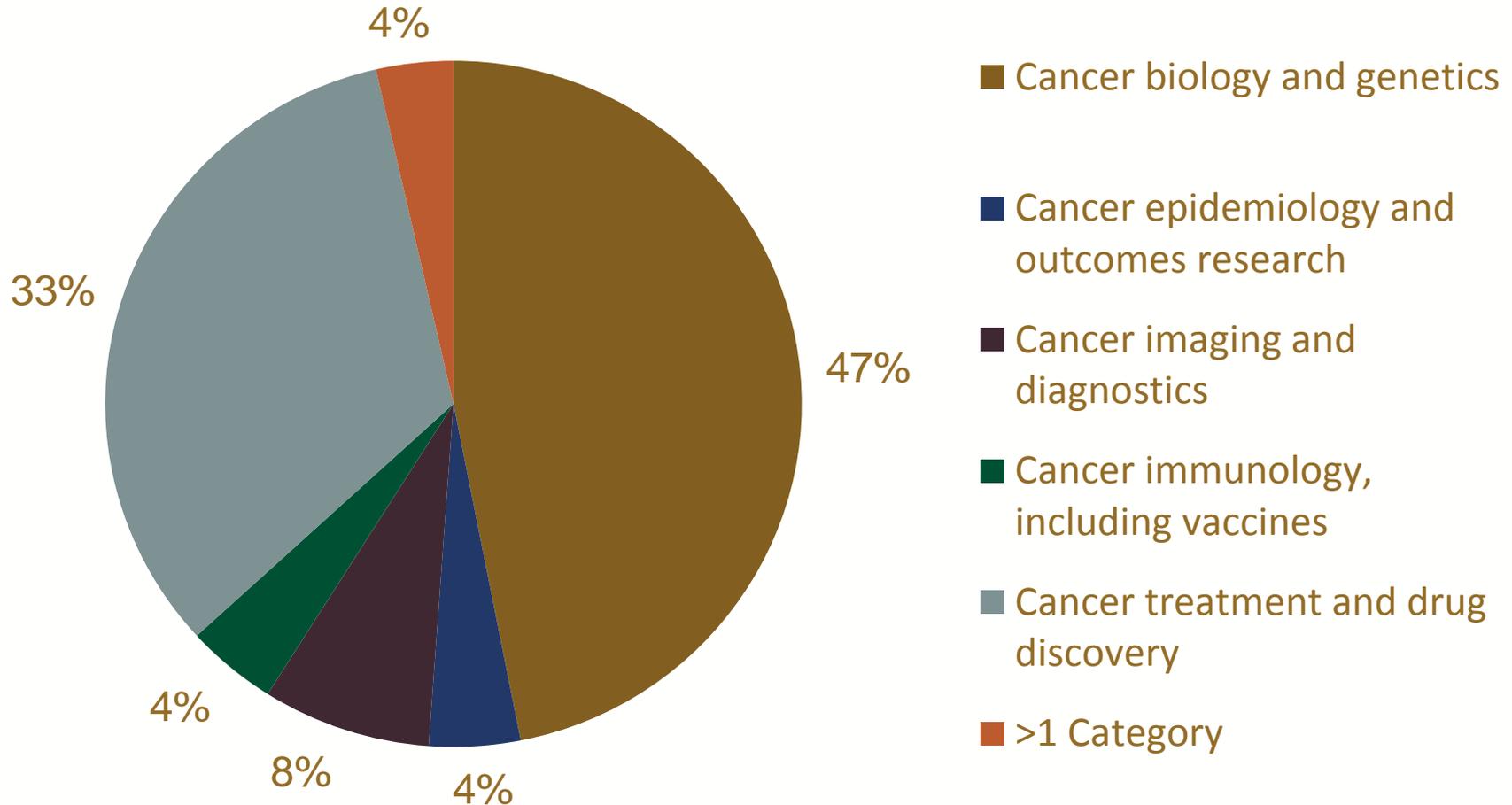
- Individual Investigator Research Awards (IIRA)
- High Impact-High Risk Research Awards (HIHR)
- Multi-Investigator Research Awards (MIRA)
- Core Facilities Support Awards (CFSA)
- Shared Instrumentation Awards (SIA)
- Research Training Awards (RTA)

- Recruitment of Established Investigators
- Recruitment of First-Time, Tenure-Track Faculty
- Recruitment of Rising Stars

Research Mechanisms

Scientific Research Program

Distribution of Funded Grants by Research Area



Scientific Research Program

CPRIT Scholar Recruitment Awards

| Award Mechanism | # of Recruits | Total Award Amounts |
|---|---------------|----------------------|
| Recruitment of Established Investigators | 14 | \$ 78,715,750 |
| Recruitment of First-Time, Tenure-Track Faculty | 33 | \$ 64,792,505 |
| Recruitment of Missing Links | 3 | \$ 5,881,402 |
| Recruitment of Rising Stars | 6 | \$ 19,731,000 |
| | 56 | \$169,120,657 |



Product Development Program

Goals

- To improve patient care through expedited innovation and product development
- To foster economic development in Texas' emerging life sciences industry and the creation of high-quality new jobs in this state
- To provide a direct return, through intellectual property and revenue sharing, on the investments made by Texans



Grants

Product Development Grants to date

- 21 awarded
- Over \$200 million granted
- Over \$350 million invested in R&D with matching funds
- ~170 direct jobs created by CPRIT-funded projects

Product Development Portfolio

Prevention Program

Goals

- Prevent or reduce the risk of cancer, detect it early, mitigate cancer effects thru delivery of evidence-based interventions
- Fund programs and services aimed to help those in most need
- Build capacity to deliver programs by promoting innovations and best practices across Texas



Focus

Deliver a program or service to Texans

- Reach underserved populations
- Reach as many people as possible in every region of the state

Evidence-Based

- Primary, secondary, tertiary prevention
- Not prevention research

Results oriented

- Measurable public health impact in ways that exceed current performance in a given service area

Prevention Program

Goals

- Prevent and reduce cancer risk, mitigate effects
- Serve populations in greatest need
- Build capacity by promoting innovations and best practices across Texas



Grants

Prevention Grants

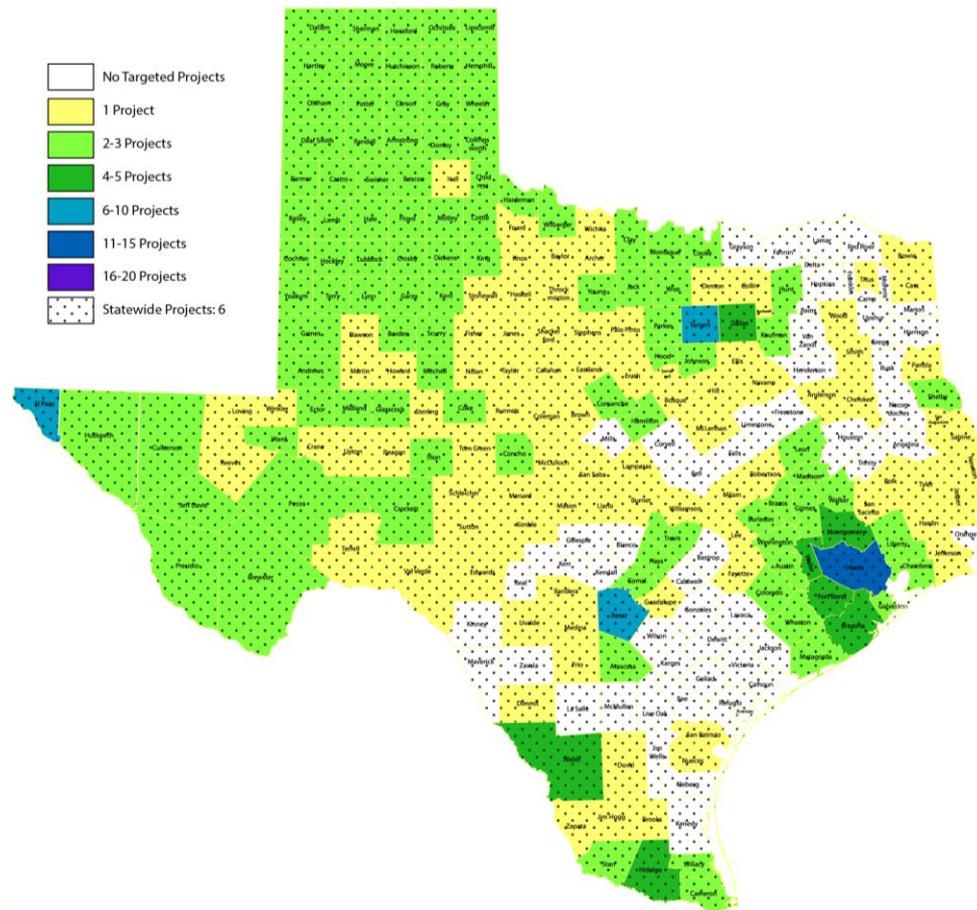
- **115 awarded**
- **\$96,000,000 granted**
- **1,365,000 Texans served**

Prevention Portfolio

Prevention Program

Geographic Coverage

Current Portfolio – 47 Projects



CPRIT's Mission Moving Forward . . .

Scientific Research

- Increased emphasis on
 - Prevention and early detection research
 - Rare cancers and cancers with poor prognosis
- Recruit the best cancer research talent to Texas

Product Development

- Emphasis on Texas talent and opportunities
- Importance on the early stages – where there is a funding “gap”
- A new RFP for company assistance

Prevention

- Facilitate dissemination across state
 - Networks or model programs
- Collective impact
 - Partnerships with other funding agencies



The Perfect Application

The Novelty and Importance of the Potential Product

- Novelty
- Importance – It helps to have a large market and be “hot”
- Product – Strong, fresh IP is essential

The Quality and Depth of the Team

- If possible, partner with people who’ve done it before
- Balance Medicine with Science with Business and Marketing
- Add a Regulatory Person - consultant
- Show that you are working together and are “coachable”

Some Preliminary Data, a Well Thought Out Plan, and a Great Presentation

- The data should be encouraging and presented critically
- A BP is a Science, Development, Regulatory, Marketing and Finance Plan
- Make it look great and have your “pitch” down cold
- Show rational enthusiasm and openness to ideas



THE **ART**
OF THE
START

**THE TIME-TESTED,
BATTLE-HARDENED GUIDE FOR
ANYONE STARTING ANYTHING**

Guy Kawasaki

PORTFOLIO



Introduction to the “Rules”

- Technology startups are diverse and there is no single “right way” to do one.
- Start-ups succeed for thousands of different and unique reasons.
- Most fail, however, for a small set of knowable and predictable reasons.
- There are rules (or lessons) for not failing.



TechVenture

New Rules on Value and Profit from Silicon Valley

**Mohan Sawhney
Ranjay Gulati
Anthony Paoni
The Kellogg TechVenture Team**



John Wiley & Sons, Inc.



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Lesson #1:

- The founding team must sustain its vision and passion for the company over the long term.
 - Lots of companies fail because the founders “run out of gas.” (lose interest or enthusiasm)



Lesson #2:

- Management needs to have actual management skills and experience appropriate to the company.
 - Focus should be on the creation of a balanced team that combines technical and non-technical skills.



Lesson #3:

- Management and the organization (all employees) must be strategically aligned.
 - This is so simple . . . and so hard.
 - Work at this and be a champion of it.
 - Get rid of people who don't "get it."



Lesson #4:

- The company's culture needs to embrace “speed to market,” and this has to be supported by management at every step.
 - Companies run out of money quickly and can exhaust the patience of their investors.
 - Markets too, move on



Lesson #5:

- Revenue models must be clear and adaptable.
 - Focus on the “4C’s”
 - ✓Company
 - ✓Customers
 - ✓Competitors
 - ✓Collaborators
 - The country is littered with dead start-ups that did not pay attention to these four points.



Lesson #6:

- Lack of focus can ruin everything.
 - Pay attention to your source of competitive advantage.
 - Don't chase "neat opportunities" unless they are core to your business.
 - One company, one vision.



Lesson #7:

- Being first is good . . .
 - if there is a market for your product or service,
 - if you can capitalize on that market or
 - if you can continually keep recreating that “first mover” advantage.



Lesson #8:

- “Zombies” should be put to rest!
 - When there’s nowhere that a company is going, then it may be time to be gone yourself.
 - Don’t be the “last one out.”



Lesson #9:

- “Smart money” is better than “stupid money.”
 - “Smart money” not only pays the bills, but it brings in:
 - ✓ Strategic partners
 - ✓ Top-notch talent
 - ✓ Experience
 - ✓ Other “smart money”



Lesson #10:

- Fulfillment and customer service are critical.
 - An idea is a great thing, but the customer who is paying the bill must be satisfied, and even thrilled.
 - Under promising and over delivering are always a good plan!



For visionaries:

- We have focused externally here, with the foregoing rules, on the start-up company and its activities.
- There's another focus we could have taken, and that is on the person who engages in the start-up. That's you!
 - The elements of vision are many, but they are knowable and learnable.
 - How do you figure them out?



What
Separates
Successful
Business
Visionaries
from
the
Rest
of
Us

Ten Steps Ahead

ERIK CALONIUS

PORTFOLIO / PENGUIN



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Some important attributes of visionaries:

- Awakening
- Vision
- Intuition
- Courage and conviction
- Scaling up the vision
- Luck
- Perseverance



Conclusions

- Start-ups succeed for thousands of different and unique reasons.
- Most fail, however, for a small set of knowable and predictable reasons.
- To succeed, you have to *not* fail.
- You have resources (books I've referenced here, and many others) to help you understand start-ups . . . and yourself.
- Use them.



Thank you for listening.

Good luck in your lives and your work!

