
TRANSFORM
FOR
SUCCESS
BRIDGE
TO A CURE
foundation

CHILDHOOD CANCER CURES
TRANSFORMING FOR SUCCESS

As a childhood cancer foundation leader, you may have personal experiences that forged your understanding of the profound impact pediatric brain tumor diagnosis has on families. The mission to find effective, non-toxic cures for these devastating diseases is profoundly personal and incredibly important, but the journey is often frustrating for smaller organizations, partly because there are major differences in how we approach pediatric cancers vs adult cancers.

- Children typically develop different types of cancers than adults, with higher prevalence of leukemias, brain tumors, and cancers in developing tissues.
- Pediatric cancers often require more intense treatment regimens due to the tumor's faster growth rate, but with careful consideration of potential long-term side effects on developing organs.
- Chemotherapy and radiation therapies are toxic, and have much longer term effects for children.
- Pediatric cancer treatment makes minimizing long-term complications like impaired growth, cognitive difficulties, and fertility issues a priority, which may not be as significant a concern for adult treatments.
- Studying pediatric cancers is often more difficult due to the smaller patient population, making it harder to gather sufficient data for clinical trials.
- Pediatric cancers may be more responsive to targeted therapies due to often having fewer genetic mutations compared to adult cancers.
- The average age for adult cancer diagnosis is 66, while for children, it is just 7 years. While fewer children are diagnosed with cancer than adults, a child's life span is much more significantly altered by the diagnosis.

THE CHALLENGING LANDSCAPE

- Childhood cancer remains the leading cause of disease-related death in children.
- Survival rates for many childhood cancers have plateaued for decades.
- Current treatments often have severe, life-altering side effects.
- Many treatments haven't significantly evolved in decades.
- Data silos, underfunding, and ineffective clinical trials hinder progress.
- Children endure unbearable pain, emotional distress, and life-long health consequences.
- The journey devastates families, leaving lasting emotional and financial scars.
- A typical childhood cancer foundation's approach, funding, and resources are likely inadequate to move the needle toward meaningful progress.

STARK STATS

There has been **no change to the survival rate** for children with brain and other nervous system cancers for **the past 20 years.**

Since 1980, only **4 drugs** have been **developed** specifically for use in children with cancer.

Every day, 42 families in the U.S. learn their child has cancer. **Every week, 38** children **lose the fight.**

Since 1971, incidences of childhood cancer **diagnoses have risen** slightly **each year.**

The **average cost** of hospitalizations for childhood cancer is nearly **5x** that of hospitalizations for other pediatric conditions.

Brain cancer remains the **number one cause of death** by disease among children.

Until recently, **Government spending** on childhood forms of the disease were **only 4% of total cancer research** investment.

A Better Approach

Bridge To A Cure Foundation proposes a radical shift in how we tackle cancer in kids.
Foundations must adopt a new, collaborative model to accelerate breakthroughs for childhood cancer, much like the model major pediatric cancer research organizations have begun to implement to reduce the long path toward cures.

This new approach leverages three pillars:

01.
Collaborative

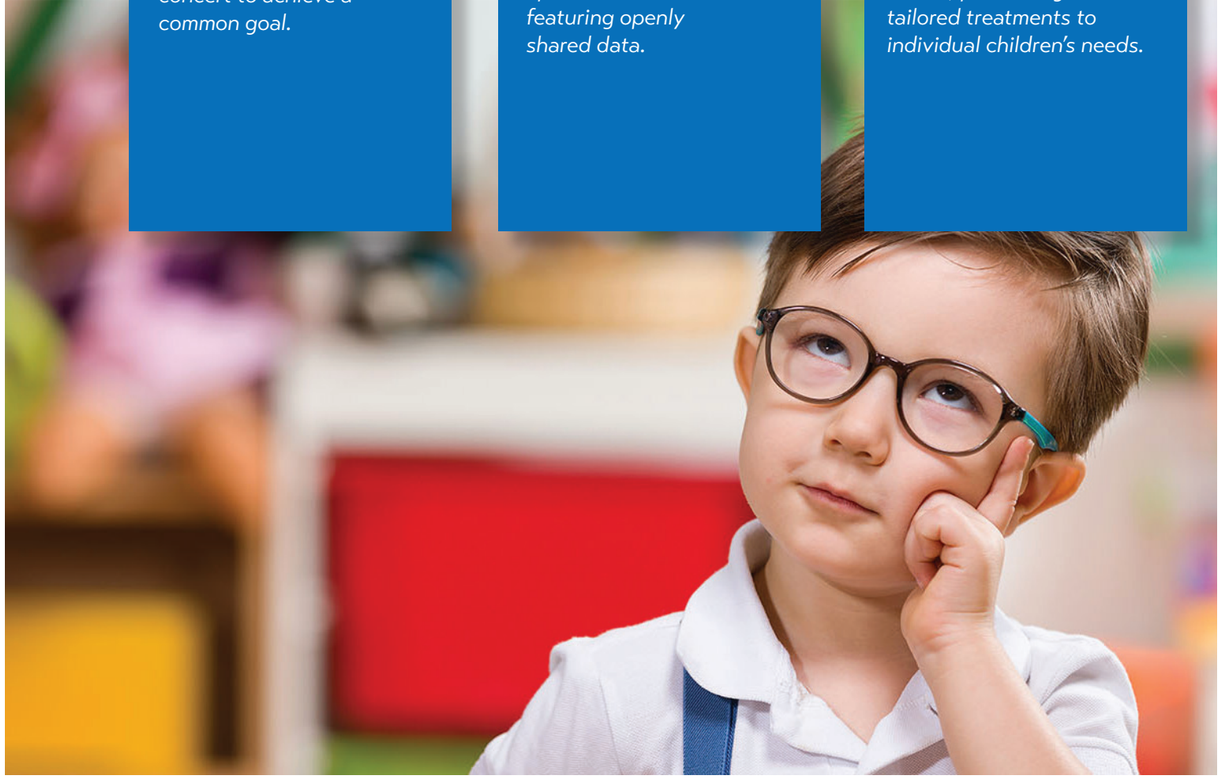
Unite all sectors – research, nonprofits, government, and industry to work in concert to achieve a common goal.

02.
Data-Driven

Leverage and prioritize Artificial Intelligence (AI) and build a global, open-access database featuring openly shared data.

03.
Immune-Focused

Develop non-toxic treatments that harness the body's defenses to fight cancer, prioritizing custom tailored treatments to individual children's needs.



Despite a 40-year-plus effort, billions of dollars invested, and some of the brightest scientific minds working to understand this disease, discovery has fallen short of expectations. Continuing worn-out practices will only lead to a repeat of past disappointments. **That's why this new approach is needed: one where the research, nonprofit, public, and private sectors rally around the same mission:**

TO UNITE AND TRANSFORM THE CHILDHOOD CANCER COMMUNITY'S APPROACH TO RESEARCH WITH THE GOAL OF CUTTING CHILDHOOD CANCER DEATH RATE 50% BY 2030.

This model can be applied to almost all diseases challenging healthcare today. A pilot of this approach will be applied to develop desperately needed cures for the horrific pain and suffering brought on by childhood brain tumors.

IMPERATIVES

- Fuel a robust, multiomic brain tumor data ecosystem shared freely among all researchers globally.
- Employ generative AI (artificial intelligence) throughout the research process.
- Develop nontoxic treatments that target pediatric brain tumor cancer cells that take advantage of the body's defense systems.

Achieving these three strategic imperatives requires a cultural change across the childhood cancer community, driven by two attributes:

- **Collaboration:** share research initiatives, resources, data, and funding.
- **Focus**: harness more resources behind fewer initiatives.

The plan that follows provides a framework for moving forward. It is meant to catalyze the development of a broadly accepted, detailed plan to achieve the mission. This will require centralized leadership and strong strategic and planning expertise:

LEADERSHIP

An organization within the pediatric cancer community that meets the following criteria:

- Maintain vital financial and human resources
- Respected and influential within the pediatric cancer community

OUTSIDE STRATEGY AND PLANNING EXPERTISE

- Experience among all sectors of the pediatric cancer community
- Experience forging collaborative multisector initiatives around a common cause

What we are proposing is transformational; the magnitude and complexity enormous; the end benefit - sensational:

The promise made to our children over 40 years ago fulfilled

A proven approach that serves as a model for curing other pediatric diseases and disorders.

Why Bridge To A Cure Foundation?

Bridge To A Cure Foundation is uniquely positioned to partner with Stand Up To Cancer in revolutionizing pediatric cancer research.

HERE'S WHY

- **DATA:** Drove efforts to fuel a robust, cloud-based data ecosystem shared freely among all researchers globally without limitations of ownership and usage (examples: Children's Brain Tumor Network, Brain Tumor Atlas, CAVATICA, Gabriella Miller Data Resource Center, etc)

- **AI:** Funded the development of a healthcare data pipeline to ensure seamless integration into the AI software no matter what hospital system contributes the data.

- **NONTOXIC TREATMENTS:** Funding key research projects at Dana Farber Cancer Institute, Duke University, University of California Santa Cruz and other nontoxic and promising approaches to new treatments.

By joining forces with Bridge To A Cure, Stand Up To Cancer can leverage our expertise, network, and resources to accelerate development of innovative therapies for children with cancer. This collaboration allows Stand Up To Cancer to tap into this powerful movement of shared ideas and strategies to accelerate progress in pediatric cancer research.

THE PLAN

To execute will demand strong visionary leadership and the management of two overlapping programs:

- **Imperatives:** Pilot a research initiative to cure pediatric brain tumor cancer.
- **Culture:** Launch a community wide initiative that leverages the community's resources.

PROPOSED PROGRAM SCOPE

01.

PILOT PROGRAM

AIM Pilot a pediatric research initiative designed to cure one form of deadly brain tumor cancer by 2030.

Criteria

- Embraces the three imperatives
- Collaborative multi-institutional, multi-disciplined team
- Funding: $5 million/year for 5 years.
- Funding Source: network of CBTN and PNOC nonprofit foundations with support from Stand Up To Cancer, if required
- Managed by the Stand Up To Cancer

Next Steps

- Stand Up To Cancer program management agreement
- Enlist CBTN and PNOC as program co-sponsors
- Commitments from small nonprofits
- Enlist support for funding gaps
- Assess if High-Grade Glioma proposal meets criteria (attached)

02.

CULTURE TRANSFORMATION

AIM Launch a culture transformation initiative that makes collaboration and focus the standard-of-care approach for how the pediatric brain tumor cancer community works together.

Criteria

- Collaboration and Data Sharing
- AI technology applied throughout the pediatric research process
- The "Imperative Approach" is the new pediatric cancer treatment standard of care
- Equitable resource allocation
- Development of pediatric clinical trial protocol
- Policy Advocacy

Next Steps:

- Recruit most influential pediatric cancer sectors:
- **Research:** Five research institutions account for the most research spending: St. Jude, Dana-Farber Cancer Center, Children's Hospital of Philadelphia, Texas Children's Hospital, and Seattle Children's Hospital.
- **Nonprofit:** ~50% of pediatric cancer research funding comes from nonprofits. The 10 largest nonprofits that account for 80% of pediatric cancer research funding
- **Public:** National Institutes of Health
- **Commercial:** Pharmaceutical and technology companies
- Develop action plan

Let's forge a bold alliance to tackle a simple challenge:

to shatter 40 years of relative stagnation and achieve a more significant impact than any organization alone—or any generation before. Your partnership can make a significant difference in placing childhood cancer in the scrap heap of history.

Together, we can build bridges to a future where we all stand up to cancer and save lives.

Robert Martin
Founder & President

ADDENDUM

OVERVIEW
The transformational SU2C/BTAC model for curing pediatric brain cancer engages and aligns all sectors of the pediatric cancer community. The model's pillars are data, AI, and the body's multiple defense systems. Success will require collaboration and focus by all.

State of Pediatric Cancer Treatments
- **The current landscape** of childhood cancer research is failing to deliver the life-saving breakthroughs our children deserve.
- **A Staggering Toll:** Cancer remains the leading cause of death by disease in children.
- **Decades of Stagnation:** Survival rates for children with brain and other nervous system cancers have remained stagnant for the past 20 years.
- **A Drastic Lack of Progress:** Only three new drugs have been developed for childhood cancers in the past 40 years.
- **A Toxic Legacy:** Current treatments often have severe side effects, and new research frequently follows this harmful path.
- **Outdated Approaches:** For many childhood cancers, the treatments used today are virtually unchanged from the 1970s.
- **A Low Bar for Success:** The current definition of "survival" – 5 years – is inadequate and fails to account for children's long-term health consequences after treatment.

This unacceptable situation demands a radical shift in our approach to pediatric cancer research.

BACKGROUND
The words "Your child has cancer" shatter a family's world. The initial fear is quickly eclipsed by the reality of an unacceptably horrific journey:

Intense Suffering: Children endure
- **Unbearable pain:** Severe, chronic, and often poorly managed.
- **Excruciating emotional distress:** Anxiety, fear, and trauma deeply impact their mental health.
- **Financial and Occupational Strain:** The burden of medical expenses and lost income can devastate families.
- **Long-Term Consequences:** Even survivors face significant challenges:
- **Life-long health issues:** 95% of survivors experience serious health problems later in life.
- **Lingering emotional scars:** Trauma and anxiety often persist long after treatment.
- **Financial and occupational struggles:** Recovery can be prolonged and challenging.

This journey leaves deep, enduring scars on families, often shattering their lives and leaving them broken.

RESEARCH SECTOR

The Challenge:

Data Silos:
- Critical childhood cancer data remains fragmented and inaccessible, hindering comprehensive analysis and collaboration. This data scarcity limits the potential of powerful tools like machine learning and stalling discoveries. Seamless data sharing is crucial to unlocking breakthroughs in this complex disease.

Funding Imbalance:
- The National Cancer Institute significantly underfunds pediatric cancer research.
- Billions of dollars remain untapped in research institutions, while pharmaceutical companies often avoid this area due to the limited market size.
- A substantial portion of healthcare spending is inefficient, with a significant amount directed towards end-of-life care, highlighting a wasted opportunity for earlier intervention and better outcomes.

Outdated Clinical Trial Protocols:
- Current protocols, designed for adults, neglect the unique needs of children.
- This leads to low trial participation and hinders the development of effective treatments.
- Existing protocols often fail to adequately consider the immense physical and emotional impact on children and their families.

Call to Action:
- **Break down data silos:** Invest in robust national databases and foster collaborative research networks to leverage the power of data-driven discoveries.
- **Prioritize pediatric cancer research:** Increase funding for research and development focused on childhood cancers.
- **Reform clinical trial protocols:** Develop age-appropriate protocols that prioritize children's well-being and unique needs while accelerating the path to effective treatments.

Overcoming these challenges requires a multi-pronged approach: increased funding, improved data sharing, and the development of more child-centric clinical trial protocols. By addressing these roadblocks, we can significantly improve outcomes for children with cancer and ensure a future where every child can thrive.

NONPROFIT SECTOR

The journey for founders of pediatric cancer nonprofits begins in the depths of unimaginable grief. It's a path no one should ever walk – a harrowing blend of anguish, perseverance, and unwavering love. Each nonprofit emerges as a beacon of hope, born from the desperate desire to ensure no other family endures this suffering. Their mission is profoundly personal and fiercely ambitious: to not only find a cure for childhood cancer but to demand a non-toxic cure. A cure that heals without harming, allowing children and their families to thrive beyond survival.

However, these organizations face significant hurdles:
- Severe underfunding
- Critical skill gaps
- Lack of robust impact measurement
- Inexperienced leadership teams
- Insufficient staff training
- Inflexibility in adapting to evolving needs
- Over-reliance on passionate volunteers without proper support and structure

These challenges threaten to derail their vital work.

PUBLIC SECTOR

At the National Cancer Institute (NCI), researchers strive to improve the lives of people with cancer. However, pediatric cancer research faces significant obstacles.

Funding:
- **Inadequate Allocation:** NCI allocates a disproportionately small portion of its budget to pediatric cancer research compared to adult cancers, despite the unique challenges and needs of children.
- **Internal Focus:** Nearly 25% of the NCI budget is consumed by internal research, potentially limiting external funding opportunities.
- **Private Sector Limitations:** The private sector prioritizes return on investment, neglecting many childhood cancers with limited market potential. NCI fails to address this gap adequately.

Data Limitations:
Insufficient Data: The scarcity of pediatric cancer patients hinders data collection, impeding research progress and the development of effective treatment strategies.
Granting Inefficiencies:
- **Outdated Approach:** The current grant system, reliant on individual/institutional projects, hinders collaborative, cross-disciplinary research.
- **Lack of AI and Analysis:** The grant process lacks AI integration and post-analysis, preventing the learning and improvement crucial after 40 years of research.
- **Neglect of Rare Cancers:** Rare and aggressive cancers like DIPG receive minimal research attention due to their complexity and small patient populations.

Unique Challenges:
- **Distinct Genetic Profiles:** Pediatric cancers often exhibit unique genetic characteristics, requiring specialized treatment approaches that are not always adequately investigated.
- **Long-Term Side Effects:** The long-term impact of treatments on children's developing bodies is often overlooked, necessitating further research on managing these side effects.

Clinical Trial Deficiencies:
- **Outdated and Ineffective:** Current clinical trial processes are antiquated and often ineffective for children.

- This critical analysis highlights the urgent need for a more strategic and comprehensive approach to pediatric cancer research.

Key improvements:

- **Increased Funding:** Significantly increase NCI's budget allocation for pediatric cancer research.
- **Data-Driven Approach:** Establish a robust national database to facilitate data-driven research and improve treatment outcomes.
- **Grant Reform:** Modernize the grant system to encourage collaborative research, leverage AI, and incorporate rigorous post-analysis.
- **Focus on Rare Cancers:** Prioritize research on rare and aggressive childhood cancers.
- **Tailored Clinical Trials:** Develop and implement child-specific clinical trial protocols.

PRIVATE SECTOR

Pharmaceutical companies prioritize shareholder returns, leading to limited pediatric cancer research. This is due to:

- **Low ROI:** High development costs and small patient populations make pediatric drug development financially unappealing.
- **Inadequate Collaboration:**
- **Individualistic culture:** A reward system focused on individual achievement hinders collaborative efforts crucial for pediatric research.
- **Antitrust limitations:** Legal restrictions impede the necessary cooperation between companies.
- **Unique Challenges:** Children's cancers differ significantly from adult cancers, requiring distinct treatment approaches and hindering the translation of adult research findings.
- **Regulatory Hurdles:** Ethical concerns surrounding pediatric drug trials create additional regulatory barriers.

To address these challenges, fostering a collaborative culture and overcoming regulatory obstacles are paramount.

PATH FORWARD
Despite decades of effort and billions invested, childhood cancer research has fallen short of expectations. Continuing current approaches will only perpetuate past failures. The pediatric cancer community urgently needs a new, collaborative approach.

Our mission: Reduce childhood cancer deaths by 50% by 2030.

To achieve this, we will:

Develop a universal model for cancer research:
- Pilot this model on pediatric brain tumors, the leading childhood cancer killer.
- Establish three core imperatives:
- Create a global, open-access brain tumor database.
- Integrate generative AI throughout the research process.
- Develop non-toxic treatments targeting pediatric brain tumor cells.
- Foster a new research culture:
- Prioritize collaboration: Pool resources, data, and funding.
- Maximize impact: Focus resources on high-priority initiatives.
- Moving forward requires:
- Centralized leadership: An influential organization within the pediatric cancer community with substantial resources.
- Strategic expertise: Experienced leaders from all sectors of the pediatric cancer community who can forge successful, collaborative initiatives.

This framework provides a starting point for developing a comprehensive plan to achieve our mission.

PLAN
Success hinges on every sector of the pediatric cancer community actively contributing to the three imperatives and fostering a transformative culture.

This plan is structured in three key areas:

- **Participants & Purpose:** Defines the roles and responsibilities of each sector within the community.
- **Alignment & Priorities:** Establishes a framework for collective action, prioritizing initiatives crucial to achieving the imperatives and cultural transformation.
- **Engagement & Next Steps:** Outlines strategies for securing community buy-in and outlines the path forward.

PART I - PARTICIPANTS/PURPOSE

RESEARCH SECTOR

Participants: All public pediatric cancer research institutions, including:
- Large, well-funded nonprofits
- All other non-profit research institutions
- NCI Research Centers
- Children's Oncology Group (COG) institutions: Note that five institutions account for most of the research within COG.

Purpose
Transforming pediatric cancer research requires:
Enhanced Collaboration & Data Sharing:
- Foster multi-institutional collaborations.
- Develop centralized data and biorepositories.

AI Integration:
- Mandate AI use in all brain tumor research projects.
- Provide AI training and resources to the research community.

Strategic Funding:
- Advocate for increased funding from all sources.
- Prioritize research on rare tumor types.

Translational Research Focus:
- Bridge the gap between discovery and clinical application.
- Accelerate preclinical testing of promising therapies.

Technological Innovation:
- Utilize cutting-edge technologies (genomics, proteomics, AI).
- Explore immunotherapy, precision medicine, and gene editing.
- Investigate novel approaches like targeting angiogenesis and apoptosis.

Improved Clinical Trials:
- Design adaptive and pediatric-specific clinical trials.

Advocacy & Awareness:
- Engage policymakers and the public to increase awareness.
- Partner with advocacy groups to amplify support.

Survivorship Focus:
- Investigate long-term treatment effects and improve quality of life.

By implementing these strategies, the pediatric brain tumor research community can significantly advance treatment options, improve outcomes, and ultimately find cures.

NONPROFITS

Participants

Half of pediatric cancer research funding stems from nonprofits. To maximize impact, these organizations must prioritize:

Research Excellence:
- Fund high-impact projects (basic, translational, and clinical) across the spectrum, including high-risk/high-reward initiatives.
- Leverage AI and data-driven approaches in all research endeavors.

Collaboration & Data:
- Facilitate seamless data sharing and foster multi-institutional collaborations.
- Develop and support open-access data platforms, utilizing AI for analysis.
- Encourage patient and family data contributions.

Addressing Critical Needs:
- Invest in underfunded areas like DIPG and ATRT.
- Focus on long-term survivorship issues.

Innovation & Translation:
Support novel approaches (immunotherapy, gene therapy, precision medicine).
Partner with biotech to accelerate clinical translation.

Advocacy & Impact:
- Advocate for increased government funding and streamlined drug development.
- Cultivate future leaders through training and mentorship programs.
- Engage communities through fundraising and awareness campaigns.

By prioritizing these key areas, the pediatric brain tumor nonprofit community can significantly accelerate research progress and improve outcomes for children.

PUBLIC SECTOR

Participants:
- NCI
- NIH
- FDA
- Legislators

Purpose:
The public sector can significantly accelerate pediatric brain tumor research through:

Robust Funding:
- Increase dedicated funding for high-risk/high-reward research, incentivizing collaboration between academia, industry, and non-profits.
- Leverage AI and data-driven approaches in grant evaluation.

Enhanced Infrastructure:
- Invest in centralized biorepositories and data-sharing platforms.
- Support clinical trial networks and centers of excellence.
- Streamlined Regulation:
- Expedite clinical trial approvals for novel therapies.

Strategic Partnerships:
- Foster strong public-private partnerships with incentives for industry investment.

Increased Awareness:
- Launch public awareness campaigns and advocate for legislative priorities.

Data-Driven Research:
- Mandate standardized data reporting and promote open data sharing.

Investing in the Future:
- Fund training programs to develop a skilled workforce in pediatric neuro-oncology and AI.

By implementing these strategies, the public sector can bridge funding gaps, foster collaboration, and accelerate the development of life-saving treatments for children with brain tumors.

PRIVATE SECTOR

Participants:
- Pharmaceutical Companies
- Tech companies

Purpose:
Pharmaceutical Companies
The pharmaceutical industry holds the key to accelerating progress against pediatric brain tumors. By prioritizing research, funding, and partnerships, they can drive innovation. Key actions include:

Investing in Research:
- Fund early-stage research and preclinical studies.
- Establish dedicated pediatric cancer departments.
- Collaborate with academia to support novel research.
- Leverage AI to accelerate research.

Expanding Clinical Trials:
- Design child-centric trials, not just adapt adult protocols.
- Simplify trial participation for families.
- Work with regulators to expedite approvals.

Developing Targeted Therapies:
- Invest in precision medicine based on tumor genetics.
- Create drug libraries for screening against tumor-specific mutations.
- Promote non-toxic treatments like immunotherapies.

Enhancing Collaboration:
- Join research consortia.
- Contribute to open-access data sharing initiatives.
- Foster public-private partnerships.

Advocating for Policy Changes:
- Lobby for increased government funding for pediatric cancer research.
- Support policies that incentivize pediatric drug development.
- Encourage international regulatory harmonization.

Supporting Survivorship:
- Invest in rehabilitation therapies.
- Monitor long-term health effects.
- Fund psychosocial support programs.

The pharmaceutical industry can significantly impact the fight against this devastating disease by prioritizing pediatric focus, embracing innovation, and fostering collaboration.

Tech Companies
AI companies can revolutionize pediatric brain tumor research. Key contributions include:

Data Analysis & Pattern Recognition:
- Analyze vast datasets to identify patterns and biomarkers.
- Predict tumor subtypes, progression, and treatment responses.

Drug Discovery & Development:
- Accelerate drug discovery through AI-powered simulations.
- Repurpose existing drugs by analyzing their mechanisms.

Precision Medicine:
- Recommend personalized treatment strategies based on patient data.
- Optimize therapy combinations and dosages.

Medical Imaging & Diagnostics:
- Improve tumor detection and delineation through AI-powered imaging.

Clinical Trial Optimization:
- Streamline patient recruitment and monitor trial data in real time.

Collaboration & Open-Source Platforms:
- Develop open-source AI tools and platforms for global collaboration.
- Share AI models and datasets to foster innovation.

Advancing Research:
- Leverage NLP to analyze research literature and generate insights.
- Assist researchers in designing experiments and predicting outcomes.

Patient Support & Education:
- Provide information and support to patients and families through AI-driven tools.

By combining computational power with domain expertise, AI companies can significantly accelerate discoveries and improve outcomes for children with brain tumors.

Part II ALIGNMENT/PRIORITIES
Shared objectives and initiatives are crucial for uniting the community around key priorities to achieve our three imperatives and foster cultural change.

Create a robust, globally accessible brain tumor database.

Objectives:
- Seamlessly integrate all pediatric brain tumor databases.
- Capture complete data from at least 80% of the childhood brain tumor population.
- Ensure easy and accessible technology for all researchers.

INITIATIVES:
Research:

- Secure complete data sets from the five largest pediatric cancer institutions and all NCI Research Centers.
- Collaborate with the five largest pediatric cancer institutions to fund data collection and sharing from smaller, underfunded institutions.
- Involve at least 25% of Children's Oncology Group (COG) institutions.

Nonprofits:

- Partner with the ten largest cancer nonprofits to fund data collection and sharing from underfunded institutions.
- Prioritize grant funding for brain tumor research projects that leverage data and AI.
- Champion the development of centralized, open-access databases for genomic, clinical, and imaging data.

Public Sector:

- Mandate the use of data and AI in grant applications.
- Mandate standardized reporting of clinical outcomes to build comprehensive databases.
- Promote open data-sharing initiatives to accelerate discoveries and prevent research duplication.
- Develop centralized databases and biorepositories to enhance data accessibility and reproducibility.
- Actively fund data collection and sharing from underfunded institutions.

Private Sector:

- Contribute to open-access databases for genetic and clinical data.
- Develop innovative technologies to facilitate data collection and sharing.

EMPLOY GENERATIV AI (artificial intelligence) THROUGHOUT RESEARCH PROCESS.

Objectives:
Revolutionize pediatric brain tumor research through generative AI's strategic and widespread adoption.

Key Goals:

- **Accelerate Discovery:** Leverage AI algorithms to significantly speed up the research process.
- **Foster AI Literacy:** Cultivate a research community that understands and enthusiastically embraces AI tools.
- **Ensure AI Expertise:** Provide readily available AI specialists to support researchers.

INITIATIVES:
Research Focus:

Integrate AI across the entire research spectrum:

- **Data Analysis & Pattern Recognition:** Uncover hidden insights and accelerate data analysis.
- **Drug Discovery & Development:** Accelerate the development of novel therapies.
- **Precision Medicine:** Advance personalized treatment plans based on individual patient data.
- **Imaging & Diagnostics:** Refine medical imaging and improve diagnostic accuracy.
- **Clinical Trial Optimization:** Optimize clinical trials for efficiency and effectiveness.
- **Collaboration & Open Science:** Facilitate data sharing and collaboration through open-source platforms.
- **Prioritize AI-driven research:** Fund only research projects that incorporate AI methodologies.
- **Empower researchers:** Provide comprehensive AI training programs and facilitate collaborations with AI specialists.
- **Support underfunded institutions:** Encourage leading institutions to support AI specialist hiring at smaller, underfunded institutions.
- **Foster multidisciplinary collaboration:** Encourage data sharing, knowledge exchange, and joint research efforts across institutions.

NONPROFIT ROLE

- **Prioritize AI-driven research**: Fund only research initiatives that leverage AI and data.
- **Promote AI adoption:** Advocate for the widespread use of AI and machine learning tools in pediatric cancer research.
- **Invest in AI talent:** Support the development of a skilled AI workforce through funding training programs.

PUBLIC SECTOR ROLE

- **Mandate AI-driven research:** Integrate AI and data utilization as a key criterion for research grant eligibility.
- **Invest in AI training:** Fund robust training programs to develop a highly skilled AI workforce for pediatric brain tumor research.
- **Lead by example:** Implement AI across all research processes at NCI research centers.

PRIVATE SECTOR ROLE

- **Integrate AI across the entire research spectrum:** Utilize AI to accelerate data analysis, drug discovery, precision medicine, imaging, clinical trials, and collaborative efforts.
- **Impact:** By strategically leveraging generative AI, we can accelerate research breakthroughs, improve patient outcomes, and ultimately conquer pediatric brain tumors.

Develop nontoxic treatments that target pediatric brain tumor cancer cells

Objectives:
Develop a research protocol targeting brain tumor cancer cells:

- Employ proteomics to pinpoint the tumor's precise location.

- Leverage the child's immune system to attack cancer.
- Foster comprehensive participation and support from all sectors of the pediatric cancer community across all initiatives.

INITIATIVES:
Research:
Develop research initiatives that harness the body's defense systems to target brain tumor cancer cells, focusing on:

- Immune system activation
- Angiogenesis inhibition
- Apoptosis induction
- Establish multidisciplinary, multi-institutional research teams for each initiative.
- Conduct pilot studies for each initiative.
- Secure 50% funding for all initiatives from the five largest pediatric cancer institutions.

Nonprofits:

- Provide 50% funding for all initiatives.

CULTURE CHANGE
Objectives:

- **Cure pediatric brain tumors:** Achieve seamless, open collaboration across the entire pediatric cancer community to find a cure for this devastating disease.
- **Develop a universal cure model:** Inspired by the success in pediatric brain tumor research, establish a collaborative framework for curing all diseases.

INITIATIVES:
Research:
Foster multi-institutional collaboration:

- Promote data, sample, and knowledge sharing among researchers, clinicians, and institutions.
- Support multi-institutional consortia to accelerate research and enable larger-scale trials. Streamline research and development:
- Fund only collaborative brain tumor research projects.
- Facilitate partnerships between researchers, clinicians, pharmaceutical companies, and regulatory agencies.

Part III - ENGAGEMENT
We propose developing a framework for collective action, prioritizing initiatives crucial to achieving the imperatives and cultural transformation.

- Convene and facilitate collaborative platforms.
- Host summits/workshops to create spaces for leaders from different organizations to connect, share best practices, and identify areas for joint action.
- Facilitate the formation of networks or consortia where organizations can share resources, coordinate efforts, and pool expertise.
- Fund pilot projects that facilitate collaboration among multiple organizations.
- Support data-driven research, programs, and initiatives that leverage data and AI tools. Require researchers to share data generated.
- Lobby for legislation that incentivizes collaboration and resource sharing among non-profit organizations.

We're calling on Stand Up To Cancer to unite with Bridge To A Cure Foundation. Let's forge a bold alliance to tackle a simple challenge: to shatter 40 years of relative stagnation and achieve a more significant impact than any organization alone—or any generation before. Your partnership can make a significant difference in placing childhood cancer in the scrap heap of history.

Together, we can build bridges to a future where we all stand up to cancer and save lives.

ADDENDUM II

TRANSFORMING FOR SUCCESS

Despite a 40 year plus effort, and billions of dollars invested, discovery has fallen well short of expectations. Continuing past practices will only lead to a repeat of past disappointments. A new approach is needed by the broader pediatric cancer community. One where the research, nonprofit, public, and private sector communities are driven by the same mission:

To unite and transform the childhood cancer community's approach to research with the goal of cutting childhood cancer death rate 50% by 2030.

The strategy is to build a model that can be applied to all diseases and disorders. A pilot of the model will be applied to curing pediatric brain tumors, the number one killer of children by disease.

Core to the model are three imperatives:
- **Data:** Fuel a robust, multiomic brain tumor data ecosystem shared freely among all researchers globally.
- **AI:** Employ generative AI (artificial intelligence) throughout the research process.
- **Nontoxic Treatments:** Develop nontoxic treatments that target pediatric brain tumor cancer cells that take advantage of the body's defense systems.

Essential to the achievement of these three strategic imperatives is a cultural change across the community driven by two attributes:
- **Collaboration:** pool /share research initiatives, resources, data and funding.
- **Focus:** harness more resources behind fewer initiatives.

The plan that follows provides a framework for moving forward. It is directional only and meant to serve as a catalyst to the development of a broadly accepted detailed plan to achieve the mission. This will require centralized leadership and strong strategic/planning expertise:

Leadership: An organization within the pediatric cancer community that meets the following criteria:
- Vital financial and human resources
- Respected and influential within the broader pediatric cancer community.

Outside strategy and planning expertise:
- Experience within all sectors of the broader pediatric cancer community.
- Experience forging collaborative multisector initiatives around a common cause.

What we are proposing is transformational; the magnitude and complexity enormous; the end benefit - sensational:
- The promise made to our children over 40 years ago fulfilled
- A proven approach that serves as a model for curing other pediatric diseases and disorders.

BRIDGE
TO A CURE
foundation

BridgeToACure.org

BRIDGE TO A CURE FOUNDATION, INC.
12557 New Brittany Blvd., Ste. 3V-14 • Fort Myers, FL 33907 • 877-460-2873