DEFEAT DIPG CHADTOUGH
GRANT APPLICATION
2018 INFORMATION AND GUIDELINES

Vivian Weaver, age 3
currently fighting DIPG

TOGETHER WE WILL FIND A CURE FOR DIPG

Grants jointly funded by Michael Mosier Defeat DIPG Foundation and The ChadTough Foundation

Michael Mosier Defeat DIPG Foundation
defeatdipg.org
P.O. Box 34277
Bethesda, MD 20827
@defeatdipg

The ChadTough Foundation
chadtough.org
P.O. Box 907
Saline, MI 48176
@chadtoughfoundation @chadtough
In September 2014, our families learned of the devastating disease called diffuse intrinsic pontine glioma (DIPG) for the first time. Our sons were both diagnosed that month – a week after Michael Mosier’s 6th birthday and just days before Chad Carr’s 4th birthday. Michael and Chad both passed away in 2015, and we have channeled our grief and energy by starting foundations to join the fight against DIPG.

Michael Mosier Defeat DIPG Foundation and The ChadTough Foundation share a common mission: to find a cure for DIPG. In 2017, we decided that we can best achieve this objective by working together to fund the most promising DIPG research. In the initial year of our grant program, we made grants of more than $1 million to six researchers. Our goal is to fund at least $2 million in new DIPG grants during the 2018 grantmaking cycle.

We are committed to building the most comprehensive grant program for funding DIPG research. To achieve this goal, we are now offering three types of grants:
1. Fellowship: designed to encourage outstanding scientists to choose a career involving DIPG research.
2. New Investigator: funding newly independent DIPG researchers in establishing new DIPG research labs - OR - funding established researchers (who have not previously conducted brain tumor research) to encourage them to start DIPG research.
3. Research: supporting the work of existing DIPG researchers by providing three years of funding at $200,000 per year.

The Defeat DIPG ChadTough grants are intended to incentivize novel approaches and spark innovation to find a cure for the deadliest pediatric brain cancer, DIPG. It is no easy task. But we are confident that by working together with the passionate doctors and researchers focused on making progress on this disease, children with DIPG will finally be able to look forward to a bright future.

Mark and Jenny Mosier  
Michael Mosier Defeat DIPG Foundation

Jason and Tammi Carr  
The ChadTough Foundation

“Doing research is not an easy thing, but knowing that there are families and people like you hoping and working to promote research to find a cure makes me feel so motivated and encouraged. I am so very honored to have the chance to work in the field and be supported by the Defeat DIPG ChadTough Fellowship.”

-Dr. Chen Shen

Buddy Miller, age 9  
currently fighting DIPG
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View and download the application online at defeatdipg.org/grants

Applications Due September 17, 2018

“Our family knows that the research that will help our son, the research that will help other families’ sons and daughters, will come from researchers who apply for the Defeat DIPG ChadTough grants. The real raw truth is that our family is at the mercy of clinical trials, and there are so few to choose from. We need more involvement from the research community, we need our best and brightest to help those who one day can become the best and brightest to carry on a legacy you can establish today”. -Rich Engler, Luke’s dad
ABOUT MICHAEL MOSIER DEFEAT DIPG® FOUNDATION

Mark and Jenny Mosier created Michael Mosier Defeat DIPG® Foundation in honor of their 6-year-old son, Michael William Mosier, who bravely battled against DIPG for 8.5 months before passing away on May 17, 2015. When the Mosier family learned of Michael’s diagnosis, it was the first time they heard of “DIPG.” Suddenly, they — like thousands of other families — were forced to face the unimaginable news that their previously healthy little boy would likely have less than a year to live. They are determined to change that outcome for other families by finding treatments and a cure for DIPG through funding of medical research.

Michael was an active and energetic little boy with a thirst for learning. He had a huge smile that would light up a room. He was the special kind of kid who equally enjoyed baseball and art projects, playing in the mud and doing puzzles, wrestling and board games. Michael loved playing with his little sister, Lila. He had an incredible memory, and if you doubted him, you would usually be wrong. He was confident and had no reservations about getting up in front of a crowd to be the center of attention or being the aggressive baseball player to go after the ball even if he was the smallest on the field. But he was also extremely kind, and we were so proud that he would make friends with everyone in his classes. And, from birth, he loved the color yellow.

The vast majority of kids get temporary symptomatic relief from radiation, but Michael’s symptoms unfortunately continued to worsen. Just weeks after his diagnosis, Michael began using a wheelchair, lost the ability to use his left (and dominant) hand, had difficulty speaking, and would often get nauseated and vomit due to pressure from the tumor. In addition, the steroids that Michael took to counteract the inflammation in his brain had their own troublesome side effects, including rapid and significant weight gain and sleeplessness.

Nearly every day one child in the United States is diagnosed with DIPG and another child dies from it. Thankfully, medical advances in the past 40 years have greatly improved the survival rates for children diagnosed with most types of cancer. But these medical advances have done nothing for children with DIPG, which has the unfortunate distinction of being the deadliest form of pediatric brain cancer.

WHY IS IT IMPORTANT TO SHARE MICHAEL’S STORY?

DIPG is a devastating disease that has received far too little attention and funding for far too long. We want people to know Michael’s story because he was a beautiful, sweet, amazing little boy who deserves to be remembered. We miss him every moment of every day, and we will fight to keep his memory alive. But we also want them to know his story so that they realize that DIPG can happen to anyone. We all must band together to ensure that kids who face DIPG in the future have treatment options. We must find a cure.
Michael Mosier Defeat DIPG Foundation operates across the United States by partnering with other families who have also had children battle DIPG through our Defeat DIPG® Network. We are honored to operate chapters in Illinois as Anthony’s Avengers Defeat DIPG Foundation, in Pennsylvania as Addison Grace Defeat DIPG Foundation, in Texas as Connor Man Defeat DIPG Foundation and in Washington as Avery Huffman Defeat DIPG Foundation and Vivian Rose Weaver Defeat DIPG Foundation. Working together with our Defeat DIPG Network partners to achieve our shared goal of finding a cure for DIPG strengthens our overall efforts and helps to rapidly expand the already powerful base of support in our communities.

Each chapter is founded in honor of a child who has bravely battled DIPG. These children all inspire our work to find a cure, and their families are valued partners. In the case of Vivian Rose Weaver Defeat DIPG Foundation, 4-year-old Vivian was diagnosed in February 2018 and is fighting DIPG now. As we stand by her family in the fight for a cure, we are reminded each day of the urgency in finding effective treatments. Children who are currently battling, or will be diagnosed tomorrow, need a breakthrough now.

During Michael’s illness, he created a “to do list” every day. He insisted that the list had to be finished before he would go to sleep at night. Michael Mosier Defeat DIPG Foundation works to complete the final item on Michael’s checklist: Defeat DIPG.

Michael Mosier

Birthday: 8/27/08  
Diagnosed: 9/4/14  
Died: 5/17/15

Kind-Hearted  
Brillant  
Athletic  
Loving  
Funny

MICHAEL’S FAMILY:  
Mother - Jenny  
Father - Mark  
Sister - Lila
ABOUT THE CHADTOUGH FOUNDATION

Chad Carr was a precious, beautiful, fun-loving boy who — on September 23rd, 2014 — was diagnosed with an inoperable brain tumor called Diffuse Intrinsic Pontine Glioma (DIPG). Three days later, he spent his 4th birthday in the Coach Carr Unit of Mott Children’s Hospital in Ann Arbor, Michigan (The Coach Carr Unit is named after Chad’s grandfather, former University of Michigan football coach Lloyd Carr).

Chad would undergo 30 rounds of radiation at Mott, and then participate in a clinical trial at Memorial Sloan Kettering Cancer Center in New York. He bravely fought for 14 months before gaining his angel wings on November 23, 2015.

While fighting the DIPG monster, Chad’s family channeled their anger, sorrow, and grief into starting a foundation in Chad’s name to carry on his legacy. They are committed to funding research until a cure is found!

MISSION:
The mission of The ChadTough Foundation is to fund research and raise awareness for pediatric brain cancer with an emphasis on Diffuse Intrinsic Pontine Glioma (DIPG).

VISION:
DIPG presents a great challenge because it is an extremely difficult and complex disease. We believe a cure will come from talented, passionate people working collaboratively. It will come from “Thinking outside the Box” and taking some risks. It will come from small breakthroughs happening in many different areas of medicine. The ChadTough Foundation is committed to funding this work.

PROGRESS:
There is hope for DIPG. As surgical biopsy techniques become safer and as more parents become aware of the value of donating tissue postmortem, researchers are finally getting access to DIPG tissue. The DIPG Registry, an international registry of DIPG patient data including basic patient information along with MRI scans and tumor tissue, has provided much needed data to study to help open up new ideas and theories.

After decades of nothing, there are discoveries being made about DIPG almost on a monthly basis. Between the DIPG Registry, an international registry of DIPG patient data, advancements in biopsy techniques, and a growing awareness of the value of donating tissue postmortem, researchers now have access to data like never before.

“It’s astounding. In only six years, scientists have gone from knowing virtually nothing about this tumor to understanding its underlying genetics and finding a potential therapy;” said Jane Fountain, Ph.D., program director, at the National Institute of Neurological Disorders and Stroke (NINDS), part of NIH.
MEMORY:
Chad had a passion for animals. His brothers would come to him for help. It would happen with caterpillars, worms, lightning bugs, but mostly with frogs. CJ and Tommy would be playing outside, then come running into the house screaming for Chad. “Chad, there’s a giant frog outside!” Chad knew what this meant … there’s a giant frog outside, my brothers want to keep it, my brothers are scared to touch it, they want me to get it for them. Chad’s face would light up, and he would sprint outside. He was so proud there was something for which his brothers needed him.

WHY IS IT IMPORTANT TO SHARE CHAD’S STORY?
From the beginning, Chad had a reach we couldn’t explain. It wasn’t just our friends and family who wanted to help, it was strangers. Something about him sparked others to action. We felt it was our responsibility to ride that reach to a cure. We have made it our mission to embrace this cause that is bigger than Chad to bring hope to those affected by this disease.

Chad Carr
Birthday: 9/26/10
Diagnosed: 9/23/14
Died: 11/23/15

Smart
Funny
Brave
Animal Lover
Stubborn
Creative

CHAD’S FAMILY:
Mother - Tammi
Father - Jason
Brothers - CJ & Tommy

The ChadTough Foundation is proud to work with the Ruddy family and Team Tommy Army Strong as ChadTough official family partners.
The Scientific Advisory Council is comprised of leading experts on childhood brain cancer. The Council reviews grant applications and makes recommendations to ensure that the Michael Mosier Defeat DIPG Foundation uses its resources to fund the most promising DIPG research projects.

**Darell D. Bigner, MD, PhD, Chairman**  
**Duke University School of Medicine**  
Dr. Darell Bigner is the Director of the Preston Robert Tisch Brain Tumor Center at Duke, the Edwin L. Jones, Jr. and Lucille Finch Jones Cancer Research Professor, the Department of Neurosurgery Division Chief for the Preston Robert Tisch Brain Tumor Center and Chief of Preuss Laboratory for Brain Tumor Research at Duke.

Considered one of the world’s leading authorities on brain tumors, Dr. Bigner has published over 576 peer-reviewed publications on brain tumors and is the founding Editor-in-Chief of Neuro-Oncology.

**Suzanne Baker, PhD**  
**St. Jude Children’s Research Hospital**  
Dr. Suzanne Baker is the Director of the Division of Brain Tumor Research at St. Jude, the co-leader of the St. Jude Comprehensive Cancer Center Neurobiology and Brain Tumor Program, and the Associate Director of Basic Research for the St. Jude Comprehensive Cancer Center.

Dr. Baker's research is directed towards understanding the underlying molecular, cellular and genetic mechanisms driving high-grade gliomas, including DIPG in children.

**Oren J. Becher, MD**  
**Northwestern University’s Feinberg School of Medicine**  
Dr. Oren Becher is an Associate Professor at Northwestern University’s Feinberg School of Medicine and a pediatric neuro-oncologist at the Ann & Robert H. Lurie Children's Hospital of Chicago.

Dr. Becher developed the first genetically engineered mouse model for DIPG, and his laboratory studies the unique biology of DIPG tumors to identify promising novel agents to translate into clinical trials for children with DIPG.

**Cynthia Hawkins, MD, PhD**  
**Hospital for Sick Children**  
Dr. Cynthia Hawkins is a neuropathologist and scientist at the Hospital for Sick Children in Toronto, a principal investigator at the Arthur and Sonia Labatt Brain Tumour Research Centre, and a Professor at the University of Toronto.

Dr. Hawkins maintains a clinical practice devoted specifically to pediatric neuropathology and a laboratory devoted exclusively to pediatric brain tumor research, with a particular focus on DIPG.
Michelle Monje, MD, PhD
Stanford University
Dr. Michelle Monje is an Assistant Professor at Stanford University in the Department of Neurology and, by courtesy, the Departments of Pediatrics, Pathology and Neurosurgery; a member of the Stanford Child Health Research Institute, Stanford Institute of Stem Cell Biology, the Stanford Cancer Institute and the Stanford Neuroscience Institute; and a practicing neurologist and pediatric neuro-oncologist at the Lucile Packard Children’s Hospital at Stanford.

Dr. Monje’s research group studies the molecular and cellular mechanisms of postnatal neurodevelopment and pediatric glioma pathogenesis, with an emphasis on microenvironmental contributions to glioma pathogenesis, with a long-standing focus on DIPG.

Javad Nazarian, PhD
Children’s National Medical Center
Dr. Nazarian is an Associate Professor of Pediatrics at the George Washington University and the Scientific Director of the Brain Tumor Institute at Children’s National Medical Center in Washington DC.

Dr. Nazarian directs the DIPG Program at Children’s National and leads the DIPG-focused initiative—Project Open DIPG—to bring all known DIPG data and resources under one umbrella in order to enhance data accessibility accelerate discovery.

“"There has been more progress in DIPG research in the past 5 years than in the previous 50, and that progress has been the direct result of DIPG research support by grassroots foundations like Defeat DIPG and ChadTough. I am truly hopeful that we will see effective therapy for DIPG become a reality in the next decade.” -Michelle Monje Deisseroth, MD, PhD
In December 2017, Michael Mosier Defeat DIPG Foundation and The ChadTough Foundation awarded grants to fund three DIPG-specific research projects. To qualify for these grants, the proposed research must represent an innovative approach to a major challenge in DIPG research. The funded projects must have the potential to lead to groundbreaking discoveries in the field, and transform our understanding of the tumorigenesis process or our ability to treat or detect DIPG. These research grants provide funding of up to $250,000 over 2 years.

**David Ashley, Duke University**

“Recombinant Attenuated Poliovirus Immunization Vectors Targeting H3.3(K27M) in DIPG.”

In recent years, the Duke University team has developed an immunotherapy treatment that uses a modified form of the poliovirus to treat brain tumors. This treatment has received significant attention, including two segments on 60 Minutes. The Duke team recently began a clinical trial using the poliovirus vaccine in children with high-grade gliomas, but DIPG patients were excluded due to a risk of inflammation. In this study, Dr. Ashley is modifying the poliovirus vaccine so that it can be used to treat DIPG patients.

**Catherine Flores, University of Florida**

“Enhancing efficacy of adoptive immunotherapy against DIPG using hematopoietic cells.”

This immunotherapy project uses adoptive cell therapy, which involves removing cancer cells from the patient, creating a large number of T cells that can identify and attack the cancer cells, and then infusing those cells back into the body. Dr. Flores is developing an adoptive cell therapy treatment for DIPG that uses both the DIPG cells obtained from a biopsy and also cells from the patient’s bone marrow. She will also administer the blood stem cells with the T cells, which can enhance the T cells’ ability to infiltrate the tumor.

**Michelle Monje, Stanford University**

“The Tumor Microtube Network in DIPG: Targeting a Possible ‘Achilles Heel’ Required to Defeat DIPG.”

A recent study of adult brain tumors showed that the cancer cells connect to each other through thin extensions called “tumor microtubes,” and that these connections help the tumor cells survive and resist treatment. Dr. Monje believes she has uncovered similar microtubes within DIPG tumors. She is investigating the microtubes to determine whether targeting them will make DIPG tumor cells more susceptible to treatment.

“The system needs to change. We were “lucky” to have been selected to participate in a trial. Charlie was well aware it would not help him, but hoped that it might help kids diagnosed after him. Let that sink in: a 14-year-old boy just diagnosed with DIPG was told that the trial he enrolled in would most likely not benefit him and that he would die because there was no effective treatment.” -Lynda Poole, Charlie’s mom
2017 DEFEAT DIPG CHADTOUGH FELLOWSHIPS

In December 2017, Michael Mosier Defeat DIPG Foundation and The ChadTough Foundation awarded three fellowships. Fellowships are intended to attract and support promising scientists embarking on careers involving DIPG research. By providing funding to outstanding postdoctoral fellows under the guidance of a mentor, the fellowship grant seeks to assist in the development of the next generation of leaders in the field of DIPG research. These fellowships provided funding of up to $100,000 over 2 years.

Jamie Anastas, Harvard University/Boston Children’s Hospital
“Targeting chromatin regulation to treat DIPG”

Dr. Anastas studies how the histone mutation commonly found in DIPG affects how the tumor cells function. After screening 1,300 chromatin regulators, she has identified multiple proteins that are necessary for DIPG cells to proliferate and survive, but are dispensable for normal cell growth. Her research is determining the roles of these proteins in DIPG development.

Dr. Anastas’s mentor for this project is Yang Shi.

Zach Reitman, Harvard University/Dana-Farber Cancer Institute
“Prioritizing PPM1D mutations as a target for new DIPG therapies”

Dr. Reitman studies the role the PPM1D mutation plays in helping DIPG tumors grow. In this project, he is testing whether targeting the PPM1D gene slows DIPG cell growth to determine whether a PPM1D inhibitor should be developed as a potential treatment for DIPG.

Dr. Reitman’s mentors for this project are Rameen Beroukhim and Pratiti Bandopadhayay.

Chen Shen, Northwestern University
“Dissection of ATRX in Diffuse Intrinsic Pontine Glioma”

Dr. Shen is focusing on the ATRX protein and its role in driving DIPG tumor growth. Her hypothesis is that the loss of ATRX works with the histone mutation to promote DIPG growth. She is investigating whether the loss of ATRX impacts the DIPG tumor’s response to radiation.

Dr. Shen’s mentor for this project is Oren Becher.

“In the past 5 years we’ve learned that genetically, DIPG is a totally different beast compared to other brain tumors. This gives us an opportunity for the first time to develop treatments aimed directly at DIPG, rather than trying treatments that were really developed for with other types of brain tumors in mind.”

-Dr. Zach Reitman
GENERAL GRANT GUIDELINES

These guidelines apply to all grant applications. Please also refer to the specific guidelines for each particular grant.

KEY DATES
- Application Deadline: September 17, 2018
- Award Notifications: November 2018
- Grant Start Date: January 1, 2019
- First Interim Progress Report: December 1, 2019
- Second Interim Progress Report: December 1, 2020 (Required only for 3-year research grants.)
- Final Report (2-year grants): January 31, 2021
- Final Report (3-year grants): January 31, 2022

ELIGIBILITY REQUIREMENTS
- Applicant must hold an M.D. and/or Ph.D. by the application deadline.
- Applicant must be employed by an academic institution, non-profit research institution, or laboratory in North America.
- Applicant need not be an U.S. citizen.

REVIEW AND SELECTION PROCESS
- Each application is reviewed by the Defeat DIPG Scientific Advisory Council. The Scientific Advisory Council makes recommendations to Michael Mosier Defeat DIPG Foundation and The ChadTough Foundation (“Foundations”), which make the final funding decisions.
- The number of grants awarded is based on the funds available and the scientific merit of the applications.
- All application evaluations are considered confidential and are available only to the Defeat DIPG Scientific Advisory Council and the Foundations’ Board of Directors and administrative personnel.
- When a grant is approved for funding, payment of funds is contingent upon all legal documents being signed and approved by the Foundations and the Applicant's Institution.

CONDITIONS OF GRANTS
- We fund research to better understand the causes of DIPG and to advance its treatment and cure. To help achieve this goal, we expect researchers to publish their findings in peer-reviewed journals and, to the extent practicable, make their data available to other researchers.
- All grants are payable to the grant recipient’s institution or laboratory.
- No funds may be used for indirect costs.
- Overlap in funding is not permitted. This includes scientific, budget, and commitment overlap, as defined by the National Institute of Health.
- The second and third year of funding is contingent upon a non-competitive review of the annual progress report. The report must demonstrate satisfactory progress toward completion of proposed research objectives and appropriate budget expenditures.
- No Cost Extensions must be requested by emailing grants@defeatdipg.org. Requests must state the amount of funds remaining and provide a brief report of progress, an explanation of why the extension is necessary, and the length of time requested.
- If a No Cost Extension is not requested or approved, grant recipient must return any unexpended funds at the termination of the grant period.

PRESS RELEASE
- Grant recipients will work with us to coordinate a joint press release to announce the grant.

TRANSFER
- Requests for transfers to another institution while the grant is in effect will be considered on a case-by-case basis.
GENERAL GRANT GUIDELINES (Continued)

SUBMISSION PROCESS
• All pages of the application should be numbered with the Applicant's name in the upper right-hand corner of each page.
• Application should follow NIH format guidelines: Arial, Helvetica, Palatino Linotype, or Georgia fonts with a font size of 11 points or larger with minimum of ½ inch margins.
• Application should be organized according to the sections described below for each type of grant application. Applicant must adhere to the maximum number of pages allowed for each subsection.
• Application should be combined into one PDF and emailed to grants@defeatdipg.org. The Cover Page must include the required signatures. The signed Cover Page should be scanned and included in the application PDF.
• Please contact Mark Mosier at (202) 603-2521 if you have any questions, or you may email questions to grants@defeatdipg.org.

PROGRESS REPORTS
• Grant recipients must submit an interim report of research progress.
• Grant recipients must submit a final report describing the research completed and all publications concerning the project.
• The interim and final progress reports shall include a report of expenditures. All expenditures are expected to follow the approve budget. Any variance of 10% or greater requires written explanation.

“Michael Mosier Defeat DIPG Foundation and The ChadTough Foundation- provide a concrete way for families and friends to contribute to defeating a disease that market forces alone would not address. It helps to know on those days that I feel like I can’t keep going, that there are people out there working to find answers. Of course, we hope for a cure, but we more desperately and immediately hope for whatever can improve the quality of life.” -Lauren Gibson, Dara’s mom

“Great advances have been made in understanding the molecular underpinnings of this illness, concurrently enormous advances have been made in applying immunotherapies to many other cancers. This juxtaposition of new technologies gives us hope that we can make inroads into and improve prognosis for DIPG.” -Dr. David Ashley

Shawn Kennedy, Age 7 currently fighting DIPG

Dara Gibson, Age 3 currently fighting DIPG,
The Defeat DIPG ChadTough Fellowship Grant is intended to attract and support promising scientists embarking on careers involving DIPG research. By providing funding to outstanding postdoctoral fellows under the guidance of a mentor, we seek to assist in the development of the next generation of leaders in the field of DIPG research.

The Defeat DIPG ChadTough Fellowship grant is up to $150,000 over 2 years (maximum of $75,000 per year).

**ELIGIBILITY REQUIREMENTS**
- Applicant must be no more than 5 years post-completion of his/her last degree.
- Applicant must not have received more than one prior fellowship.
- Applicant must commit at least 75% of full-time effort to research.
- Applicant must identify a mentor who will provide supervision, facilities, and research support.

**CONDITIONS OF GRANT**
- Grant is to cover salary and fringe benefits only. No funds may be used for indirect costs.
- Grant is limited to cover the Applicant’s research time, not clinical time.

**IDENTIFICATION**
- The title “Defeat DIPG ChadTough Fellow” shall be used in all publications (printed or electronic) during the period of the fellowship. Identification with Michael Mosier Defeat DIPG Foundation and The ChadTough Foundation shall also be made in any news released about the fellowship or the Fellow’s research.

**PROGRESS REPORTS**
- The interim and final progress reports shall be accompanied by an evaluation report from the mentor.

**CONTENTS OF APPLICATION**
1. Cover page
   Please use our template, which may be downloaded at https://www.defeatdipg.org/grants. Cover Page must be signed.

2. Layman’s Summary
   Provide a 300-word summary of the research project in layman’s terms. By submitting this application, applicant consents to our public use of this summary if the project is funded. Accordingly, the summary cannot include any confidential or proprietary information.

3. Specific Aims (0.5 page)
   Describe the goals of the proposed research and summarize the expected outcome(s).

4. Research Plan (4 pages)
   A. Significance (0.5 page)
      Explain the importance of the problem addressed and how the proposed research project will improve scientific knowledge, technical capability, or clinical practice for DIPG.
   B. Innovation (0.5 page)
      Describe how the application will advance, or challenge, the current DIPG research and clinical practices. Describe any novel theoretical concepts, approaches or methodologies.
   C. Approach (3 pages)
      Describe the overall strategy to accomplish the aims of the project. Describe the methods and analyses to be used to accomplish the specific aims of the project. Address potential difficulties and limitations and how these will be overcome or mitigated. Provide a work plan (including timetable) for completing the project. Provide an account of the applicant’s preliminary studies relevant to the project.
CONTENTS OF APPLICATION (continued)

5. Literature Cited
Provide a list of publications relevant to project. A maximum of 20 references are allowed.

6. Proposed Budget
Provide a budget outlining proposed expenditures. Budget cannot include any indirect costs, and is limited to salary and fringe benefits. Budget cannot exceed $75,000 per year.

7. Statement of Other Support
Provide a list of: (1) active support; (2) applications and proposals pending review or funding; (3) applications and proposals planned or being prepared for submission. Include all Federal, non-Federal, and institutional grant and contract support. For each item give the source of support, identifying number, project title, name of principal investigator, applicant's time or percent of effort on the project, annual direct costs, and entire period of support.

8. Mentor's Letter of Support
A signed Letter of Support must be submitted by the mentor, describing his/her role and commitment to advancing the career independence of the applicant. The letter should address the following:

- The mentor's commitment to mentoring the applicant and plan to support the applicant's career development during the grant term.
- The applicant's potential for success as an independent investigator.
- The resources to be provided to the applicant to support the research project.
- The mentor's experience mentoring postdoctoral level researchers.
- Verification that the applicant is no more than 5 years post-completion of his/her most recent degree.

9. Biographical Sketches
Provide the NIH biographical sketches for the applicant and mentor.

10. IRB Approval
If the project includes human subjects or otherwise requires IRB approval, provide the IRB approval letter. If IRB approval is not required, state that no IRB approval is necessary.

11. Additional Institutional Contact Information
Provide contact information (name, email address, and phone number) for accounts payable, grants management and media or public relations should the project be funded.
New Investigator Grant

The Defeat DIPG ChadTough New Investigator Grant provides two years of funding to a new DIPG investigator for hypothesis-driven research projects. The grant is up to $250,000 over 2 years (maximum of $125,000 per year).

Eligibility Requirements

Except as discussed below, Applicants must have an academic appointment and be in their first independent faculty position or equivalent at an accredited college, university, medical school, or other research facility.

- Applicants should be in their faculty role for not more than six years at the time of application.
- Independence is typically demonstrated by a full-time faculty appointment, a tenure-track position, allocated space, a start-up package, and institutional commitment. We understand that this definition may not align to the practices of all institutions. If you have questions regarding your eligibility to apply, please contact us at grants@defeatdipg.org.
- Applicants who are beyond their first independent faculty position for more than 6 years are eligible if they have no previous research on brain tumors.

Identification

- The title “Defeat DIPG ChadTough New Investigator Grant” shall be used in all publications (printed or electronic) regarding the research project. Identification with Michael Mosier Defeat DIPG Foundation and The ChadTough Foundation shall also be made in any news released pertaining to the research project.

Contents of Application

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2. Layman’s Summary (0.5 page)
   Provide a brief summary of the research project in layman’s terms. By submitting this application, Primary Investigator consents to Foundation’s public use of this summary if the project is funded. Accordingly, the summary cannot include any confidential or proprietary information.

3. Specific Aims (0.5 page)
   Describe the goals of the proposed research and summarize the expected outcome(s).

4. Research Plan (4 pages)
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   B. Innovation (0.5 page)
      Describe how the application will advance DIPG research and clinical practices. Describe any novel theoretical concepts, approaches, or methodologies.
   C. Approach (3 pages)
      Describe the overall strategy to accomplish the aims of the project. Describe the methods and analyses to be used to accomplish the specific aims of the project. Address potential difficulties and limitations and how these will be overcome or mitigated. Provide a work plan (including timetable) for completing the project. Provide an account of the preliminary studies relevant to the project conducted by the Primary Investigator.

5. Literature Cited
   Provide a list of publications relevant to project. A maximum of 20 references are allowed.
CONTENTS OF APPLICATION (continued)

6. Proposed Budget
Using our template, prepare a budget outlining proposed expenditures. Budget cannot include any indirect costs and cannot exceed $125,000 per year. Our template may be downloaded at https://www.defeatdipg.org/grants.

The following items may NOT be included:
- Construction, renovation, or maintenance of buildings/laboratories;
- Office and laboratory furniture;
- Office equipment and supplies;
- Patient services;
- Professional association membership dues;
- Recruiting and relocation expenses;
- Scientific publication subscriptions;
- Secretarial/administrative salaries; and
- Student tuition.

Travel costs should not be included, but Primary Investigator may request additional funding from Foundation for travel to meetings to present research funded by grant. Requests will be considered on a case-by-case basis.

7. Statement of Other Support
Provide a list of: (1) active support; (2) applications and proposals pending review or funding; (3) applications and proposals planned or being prepared for submission. Include all Federal, non-Federal, and institutional grant and contract support. For each item give the source of support, identifying number, project title, name of principal investigator, applicant’s time or percent of effort on the project, annual direct costs, and entire period of support.

8. Biographical Sketches
Provide the NIH biographical sketches for the Primary Investigator and key personnel.

9. IRB Approval
If the project includes human subjects or otherwise requires IRB approval, provide the IRB approval letter. If IRB approval is not required, state that no IRB approval is necessary.

10. Additional Institutional Contact Information
Provide contact information (name, email address, and phone number) for accounts payable, grants management and media or public relations should the project be funded.
The Defeat DIPG ChadTough Research Grant provides three years of funding for hypothesis-driven research projects.

The proposed research must represent an innovative approach to a major challenge in DIPG research. The funded projects must have the potential to lead to groundbreaking discoveries in the field, and transform our understanding of the tumorigenesis process or our ability to treat or detect DIPG.

We welcome both single investigator and collaborative, multi-institutional research proposals. For collaborative proposals, a Primary Investigator must be identified with other participants listed as collaborating researchers. Both single-investigator and collaborative proposals will be evaluated based on their scientific merit.

The Defeat DIPG ChadTough Research Grant is up to $600,000 over 3 years (maximum of $200,000 per year).

CONDITIONS OF GRANT

- All grants are payable to the Primary Investigator’s institution or laboratory. For multi-institutional grants, funding will be made payable to the lead institution to administer on behalf of the collaborating institutions.

IDENTIFICATION

The title “Defeat DIPG ChadTough Research Grant” shall be used in all publications (printed or electronic) regarding the research project. Identification with Michael Mosier Defeat DIPG Foundation and The ChadTough Foundation shall also be made in any news released pertaining to the research project.

CONTENTS OF APPLICATION

1. Cover page
   Please use our template, which may be downloaded at https://www.defeatdipg.org/grants. Cover Page must be signed.

2. Layman’s Summary (0.5 page)
   Provide a brief summary of the research project in layman’s terms. By submitting this application, Primary Investigator consents to Foundation’s public use of this summary if the project is funded. Accordingly, the summary cannot include any confidential or proprietary information.

3. Specific Aims (0.5 page)
   Describe the goals of the proposed research and summarize the expected outcome(s).

4. Research Plan (4 pages)
   A. Significance (0.5 page)
      Explain the importance of the problem addressed and how the proposed research project will improve scientific knowledge, technical capability, or clinical practice for DIPG.
   B. Innovation (0.5 page)
      Describe how the application will advance DIPG research and clinical practices. Describe any novel theoretical concepts, approaches, or methodologies.
   C. Approach (3 pages)
      Describe the overall strategy to accomplish the aims of the project. Describe the methods and analyses to be used to accomplish the specific aims of the project. Address potential difficulties and limitations and how these will be overcome or mitigated. Provide a work plan (including timetable) for completing the project. For multi-institutional applications, describe the roles of each collaborating researcher. Provide an account of the preliminary studies relevant to the project conducted by the Primary Investigator and collaborating researchers, if any.
5. Literature Cited
Provide a list of publications relevant to project. A maximum of 20 references are allowed.

6. Proposed Budget
Using our template, prepare a budget outlining proposed expenditures. For multi-institutional applications, prepare a separate budget for each collaborating institution. Budget cannot include any indirect costs and cannot exceed $200,000 per year. Our template may be downloaded at defeatdipg.org/grants.

The following items may NOT be included:
- Construction, renovation, or maintenance of buildings/laboratories;
- Office and laboratory furniture;
- Office equipment and supplies;
- Patient services;
- Professional association membership dues; Recruiting and relocation expenses;
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7. Statement of Other Support
Provide a list of: (1) active support; (2) applications and proposals pending review or funding; (3) applications and proposals planned or being prepared for submission. Include all Federal, non-Federal, and institutional grant and contract support. For each item give the source of support, identifying number, project title, name of principal investigator, applicant’s time or percent of effort on the project, annual direct costs, and entire period of support.

8. Letter(s) from Collaborating Researcher(s) (If Applicable)
For multi-institutional applications, each collaborating researcher should provide a letter describing his/her role in the project. The letter should provide the collaborating researcher’s contact information, including institution. The letter should also provide a “Statement of Other Support” as required by Section 7 above.

9. Biographical Sketches
Provide the NIH biographical sketches for the Primary Investigator, key personnel, and all collaborating researchers, if any.

10. IRB Approval
If the project includes human subjects or otherwise requires IRB approval, provide the IRB approval letter. If IRB approval is not required, state that no IRB approval is necessary.

11. Additional Institutional Contact Information
Provide contact information (name, email address, and phone number) for accounts payable, grants management and media or public relations should the project be funded.
TOGETHER WE WILL FIND A CURE FOR DIPG

To view and download the application online, visit defeatdipg.org/grants

Please contact Mark Mosier at (202) 603-2521 with questions, or email grants@defeatdipg.org

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