

# THE BRAIN TUMOR SOCIETY

*Committed to a cure through research, education and support*

## REPORT TO DONORS

**2000-2002**



## OUR MISSION

*The Brain Tumor Society exists to find a cure for brain tumors. It strives to improve the quality of life of brain tumor patients and their families. It disseminates educational information and provides access to psycho-social support. It raises funds to advance carefully selected scientific research projects, improve clinical care and find a cure.*

THE BRAIN TUMOR SOCIETY

---

*Committed to a cure through research, education and support*

# LOOKING BACK ...

---

Dear Friends,

Welcome to The Brain Tumor Society's 2000-2002 *Report to Donors*. The Brain Tumor Society has continued to prosper in every area of our mission. We are proud to share with you some of the important history of TBTS as well as some of the most significant achievements and progress we have made.



Over the past five years, the Society has received more grant applications from scientific researchers across the country than ever before. This allows for unprecedented opportunities to make large scale medical advances in the management of and, ultimately, the search for a cure for brain tumors. The Brain Tumor Society is honored to support the passionate scientists who are pushing the boundaries of science forward. We hope that their research will result in new therapeutic targets, more effective delivery systems and the identification of preventative factors.

The Brain Tumor Society is fully committed to furthering the education of the medical community that serves our brain tumor patients. The Society has also been a driving force in effective advocacy for our brain tumor constituents. In order to accomplish these goals we have proceeded in a fiscally sound manner by increasing our fundraising, yet maintaining the utmost control over our expenses.

In the area of patient support and education, the Society has organized and executed several symposia to increase the knowledge of our brain tumor patients and their families. Our goal is that through our educational forums and collateral materials, patients will learn about new resources and become empowered to manage their disease. The Society is proud that our message of hope provides comfort to patients and families during their struggle.

We are extremely grateful to our dedicated Board of Directors, the members of our Medical and Scientific Advisory Boards, our staff, our many donors, friends and volunteers. It is because of their extraordinary support and expertise that we are able to progress in our search for a cure and continue to serve the brain tumor community with compassion.

Sincerely,

Mary Catherine Calisto  
Past Chair, Board of Directors

# IN MEMORIAM

---

*In the past two years, the Society lost two of its heroes. Sid Feldman and Richard Ross — friends, colleagues and founders of The Brain Tumor Society — tragically passed away within 14 months of one another.*

*Both men lost their lives much too early. Sid died from metastatic cancer, and Richard was a victim of the 9/11 terrorist attacks. Although this has been a difficult period for The Brain Tumor Society, we are strengthened and enriched by what Sid and Richard have taught us, from their wisdom and their hearts. Their legacy of leadership remains a gift beyond measure.*

Shortly after Sid Feldman's passing, it was Richard who paid tribute to him at the



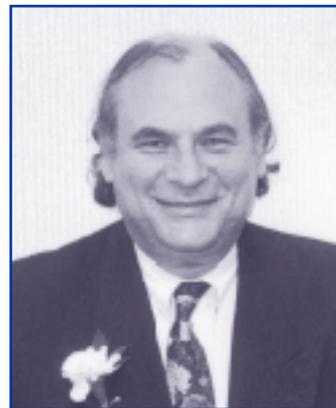
Society's Annual Meeting with the following words: "There are many things I could praise about Sid, like his incredible smile, warmth and enduring kindness and optimism. His interest in learning

and enthusiasm were contagious, but most of all his commitment to sharing ... helped all of us feel empowered. He made a huge difference to the Society, and I know that every time we invest a dollar in research, Sid will be there in spirit helping us make wise decisions on how to advance brain tumor care and find a cure."

We will always remember Sid for his remarkable efforts in helping to found the Society, his passion for the Society's Research Program and his inspiration, which led to so many of the Society's accomplishments. Throughout his life, Sid Feldman touched many people with his casual but learned manner, his engaging personality and deep-rooted integrity. ■

Richard Ross was a man of incredible vision. He played an instrumental role in creating The Brain Tumor Society's mission statement. Richard formulated the plan for the Society's first fundraising campaign, instituted the model for our Annual Meetings, and it was he who turned the Society's desire for an informational resource guide for patients and families into a reality — thus *Color Me Hope* was born.

Richard served the Board of Directors as a Vice-President for many years, and more



recently chaired the Society's Leadership Committee. He brought to the Society the same passion, ingenuity and sensitivity that he gave so willingly to many other aspects of

his life. Richard was compassionate, empathetic and warm, and was always there to help brain tumor patients and families. The most recent edition of the *Color Me Hope* Resource Guide is dedicated in Richard's memory. ■

## PROFILE: SPIRIT & INSPIRATION

---

*We believe that an individual can effect change in the world through his or her efforts. We are grateful to the many individuals — volunteers, donors, physicians, researchers, social workers — who help make a difference in the lives of brain tumor patients and their families.*



*Josh, Evie and Sarah Goldfine*

When you meet Evie Goldfine, you understand immediately the power of the individual to effect positive change.

After her husband, Alan, was diagnosed with a brain tumor in 1994, she dedicated her formidable energies to the work of The Brain Tumor Society.

When Alan died nine weeks after his diagnosis, his grieving family wanted to do something that would commemorate the life of this extraordinary man. The Goldfines' son, Josh, ran numerous marathons to honor his dad (who was also a marathon runner) and to raise money for The Brain Tumor Society.

Evie: "It was Josh's commitment that got me paying attention to The Brain Tumor Society ... When Alan was diagnosed, there was not a lot of information at hand about resources and services or about the latest developments in research."

To help find a cure for the illness that took their husband and father, the Goldfine family established the Alan Goldfine Chair of Research for The Brain Tumor Society's Research Program.

"I would love to think that a cure would be forthcoming through what we have been able to do for the Society," states Evie.

Long active in successful business ventures, Evie retired from VoiceStream in June 2000. Sixteen weeks later, she was facing Stage IV lymphoma. Today, against all odds, the unsinkable Evie Goldfine is holding her own.

How does she maintain her energy, enthusiasm and optimism? Evie says, "You just have to accept the things in life that you cannot change, and try to make the best of it." Evie always tries to find the silver lining in the clouds, and her cup is always full. "If failure is not part of your vocabulary, life's journey is so much easier," counsels Evie. "Don't hold back! Focus on the moment and manage your situation."

And that is exactly what this remarkable woman is doing. She maintains a website for her family and friends so that they are always informed about how she is doing. She always tries to keep in touch with people who have meant so much in her life. And she is very proud of the accomplishments of her daughter Sarah and her son and daughter-in-law, Josh and Amy, and how they have grown and taken on the responsibilities of adulthood. The key to Evie's eternal optimism is that she looks only one way — forward!



*Alan Goldfine*

Evie is truly inspirational and The Brain Tumor Society is proud to honor her. ■

# OUR HISTORY

---

The Brain Tumor Society is committed to finding a cure for the disease that is currently the leading cause of solid tumor cancer deaths in children under age 20 and the third leading cause of cancer deaths in young adults ages 20-39.

Founded in 1989 by Bonnie Feldman, and other concerned individuals, after the loss of her son, Seth, the Society began its operations in 1990 and

has been a pillar of hope for the brain tumor community ever since.

Our mission was strategically designed to have the greatest positive impact for patients, survivors and their families and friends. From the start, we developed parallel short and long term goals.

We focused our short term goals on improving the quality of life for brain tumor patients, survivors and their families by providing psychosocial support and educational resources. To reach our long term goals, the Society began its Research Program, to raise money to fund important basic science research projects with the hope of discovering new treatments — and ultimately, a cure. Our Research Program was also designed to encourage more scientists to enter the field of brain tumor research. Additionally, The Brain Tumor Society also decided to fund scientific and clinical conferences to promote the sharing of information and the education of healthcare professionals. The Society has made very significant

strides in all of these areas.

As a result of our combined initiatives, the Society has been able to convey a message of hope to thousands of patients, survivors and families struggling with brain tumors and their debilitating side effects.

At the outset, the Society built a strong Board of Directors, which has been responsible for many of our accomplishments. Our Board has been innovative in raising funds and creating awareness of the Society's cause, starting with the Campuses Against Cancer program, aided by Seth Feldman's friends at educational institutions throughout the country.

In addition to a very committed Board of Directors, The Brain Tumor Society is guided by a Medical Advisory Board and a Scientific Advisory Council, comprised of distinguished clinicians and renowned researchers in the field of brain tumors.

Throughout the years, many creative fundraising and awareness events have been held to benefit the Society by very dedicated donors and volunteers,



*Dr. Scott Pomeroy, current chair of the Medical Advisory Board, is a clinician and research scientist.*



*The Ride for Research owes its incredible success to the many team riders and volunteers who give so much each year.*

many of whom have lost loved ones to brain tumors. From the incredible **Evening For Patty**, sponsored by the Roche family in celebration of their daughter's life (whom they lost to a brain tumor), to the very successful **Color Me Hope Art Auctions**, a catalyst for our *Color Me Hope* Resource Guide.

These events have been followed by several annual Boston Pops **Orchestrating A Cure** concerts, the **Jack Silverio Memorial Golf Tournament** and for the last five years, **The Brain Tumor Society Run&Walk** in Washington, DC. From Arizona to Wisconsin, from **Shave Raves** to ice skating events, to runners in the Boston Marathon and comedy shows, the Society's caring and committed constituency has helped to support our programs and services.

The unprecedented **Ride for Research**, a 25- or 50-mile cycling event, is now our signature event. The event has grown significantly in the past eight years, both in terms of number of riders and dollars raised. The highly successful **LINKS to a Cure Golf Tournament** is now in its 6th year, and is continually sold out.



The Brain Tumor Society has been very fortunate to have many early and long term donors and extraordinary volunteers whose contributions have been invaluable to the success of the Society.

An important component of our patient education agenda is exemplified by the numerous patient/family symposia that The Brain Tumor Society has organized over the years. Recent activities in this area include a regional conference with New Jersey's largest brain tumor support group in 2001 and a national symposium in 2002 that attracted



*In its 5th year, our Washington D.C. 5K Run&Walk event grew to over 2400 participants.*

participants from as far away as England and Sweden.

Our research endeavors have grown dramatically since 1992 when we made our first research grants in the amount of \$90,000. In 2002 we distributed just over 1 million dollars to some of the most exceptional scientific investigators in brain tumor research for projects which were as diverse as they were promising.

In 1991, our founder, Bonnie Feldman, co-founded the North American Brain Tumor Coalition (NABTC), a collaboration of brain tumor organizations in the United States and Canada dedicated to advocacy for brain tumor patients in the legislative and regulatory branches of the federal government. By creating a greater awareness of the widespread problem of brain tumors, by working to shape public policy to the patients' advantage and by striving to get more governmental monies allocated to brain tumor research, the Coalition has had a significant impact on the quality of life for brain tumor patients and on future research efforts. ■

# PROGRAMS AND SERVICES

---

## RESEARCH

The Brain Tumor Society's Research Program is at the organization's core. Over the years, despite advances in neurosurgery and clinical therapies, there have been no remarkable breakthrough treatments or cures for brain tumors. We believe that the only way to eradicate brain tumors is to fund as much basic science research as possible. During our short history, the Society has funded 61 basic scientific research grants (several of which have resulted in publications in medical journals) for a total exceeding 4.7 million dollars.



*The Brain Tumor Society's 2002 Research Grant Award recipients at the Annual Meeting. (See page 12 for a complete listing of recipients and their research projects.)*

In 2003, the Society hopes to fund 1.1 million dollars in scientific research grants and increase the number of projects funded. One of our early goals — to increase the number of scientific investigators in the field of brain tumor research — has been widely successful. As one of our grant recipients stated, “The Society can, as it has happened to me personally, provide the initial spark to motivate scientists to pursue brain tumor research.”

Our Scientific Advisory Council is instrumental in helping us select the best projects and the best laboratories out of a large and highly qualified applicant pool. Applications are scored based on

standards set forth by the National Institutes of Health (NIH).

## EDUCATION

The Society currently employs two social workers who, in addition to their clinical duties, write patient publications. We distribute invaluable resource materials to those in need, when they need it most. Our *Color Me Hope* Resource Guide has served the brain tumor community for many years with a comprehensive examination of important information. (The 4th and most recent edition is now available.) Our newsletter, *Heads Up*, typically features articles that inform patients and families about an area of cutting edge research, as well as inspirational stories that offer hope to our readers.

The Society has sponsored one regional and five national symposia for patients, survivors and their families, and healthcare providers. These symposia are both educational and interactive; giving participants an opportunity not only to learn the latest medical information, but also to ask questions of the most highly regarded medical experts in the country. Symposia also provide a venue in which the brain tumor community can gather, and in this union find commonality. Our fifth national symposium, “Living Beyond A Brain Tumor” took place in September 2002 and proved to be another exciting and informative event for our patient and family populations.

Periodically, the Society holds free nationwide teleconferences on timely issues of support and education, in which everyone has the opportunity to participate and submit questions to leading experts in the field. Most recently, we collaborated with the Children's Brain Tumor Foundation and Cancer Care, Inc. to produce a teleconference entitled *Brain Tumors and Bereavement: Healing After Loss*.

The Brain Tumor Society has long been active

in providing a forum to facilitate the sharing of research information by scientists and clinicians. The Society has partially funded a variety of medical and scientific conferences, both nationally and internationally, from Moscow to Manhattan. For the past three years, the Society sponsored Education Day at the Society of Neuro-Oncology Meetings.

## SUPPORT

Each year over 185,000 people in the United States are diagnosed with primary or metastatic brain tumors. Our support program provides thousands of patients, survivors, families and friends with the information and educational resources to guide them through their brain tumor journey.

The Society provides psychosocial support to thousands of people each year through our toll-free telephone line, e-mail access and one-on-one professional support. Our social workers respond to patient and family calls about symptoms, treatments, physical disabilities and emotional needs. They discuss fears and concerns, always with a message of hope and comfort, and with the belief that the work we do is an essential part of a patient's recovery process.

The Society also has a Patient/Family Telephone Network which enables people to connect and share mutual experiences. Our support staff matches patients and families based on needs and experiences, with the hope of promoting a healing resource. The Society also acts as a clearinghouse for support groups nationally, encouraging the formation of new groups as needed.

## ADVOCACY

As a member of the North American Brain Tumor Coalition (NABTC), the

Society receives legislative updates on policy matters relevant to brain tumor patients. Each year in May, the Society participates in Brain Tumor Action Week when brain tumor advocates gather to lobby our nation's legislators on specific issues of public policy and legislation. Examples of specific Coalition activities include the spearheading of a collaboration between the National Cancer Institute (NCI) and the National Institute of Neurological Disorders and Stroke (NINDS) to complete a major study on how best to address the research and clinical approach to finding a cure for brain tumors — known as the Brain Tumor Progress Review Group. The NABTC also effectively lobbied and advocated for the passage of the Benign Brain Tumor Cancer Registries Amendment Act, which would provide for the collection of data on benign brain-related tumors, in addition to those that are malignant, through the national program of cancer registries. The Society also has a representative of the NCI Consumer Advocates in Research and Related Activities (CARRA) program who is able to bring the views of the cancer community to select projects of the NCI. ■



*The Society owes much of its progress and success to the many volunteers who give their time on a continuing basis.*

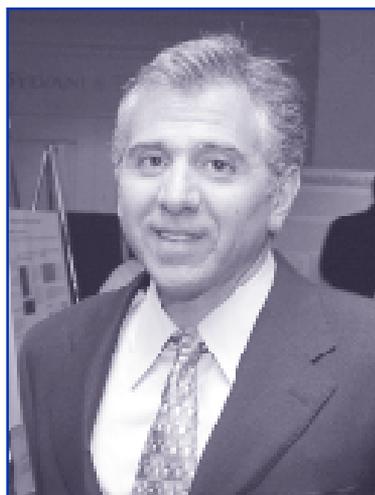


*Dr. Peter Black, shown here at the 2002 Annual Meeting, is one of the founding members of the Society's Medical Advisory Board.*

# THE BRAIN TUMOR SOCIETY

## TBTS Board of Directors

Vincent R. Patrone, Esq., *Chair*  
 G. Bonnie Feldman, *President & Founder*  
 Mary Catherine Calisto,  
*Vice President*  
 Michael R. Corkin, *Treasurer*  
 Robin Boss Dorman, *Secretary*  
 Mark Goldstein  
 Daniel Y. Greiff  
 Kenneth Grey  
 Michael L. Gruber, MD  
 Jane Gumble  
 Steven E. Karol  
 Sheila Killeen  
 Richard S. Mann, Esq.  
 John A. Marshall  
 Dennis Roth  
 Denise Stevens



*Vincent R. Patrone, Esq., was installed in September as the Society's new Chair of the Board.*



*The Ride for Research is the Society's most successful fundraising event.*



*The highly successful LINKS to a Cure Golf Tournament is now in its 6th year.*



*The Brain Tumor Society's newest Board members, left to right: Ken Grey, Jane Gumble, Dennis Roth and Denise Stevens.*



*TBTS Executive Director Neal Levitan (right) with Dr. Howard Fine of the NIH, Medical Advisory Board Member.*

## Medical Advisory Board

Scott L. Pomeroy, MD, PhD,  
*Chair*  
 Lester S. Adelman, MD  
 Keith L. Black, MD  
 Peter McL. Black, MD, PhD  
 Lisa M. DeAngelis, MD  
 Peter K. Dempsey, MD  
 Judith B. Feldman, MD  
 Howard A. Fine, MD  
 Beverly LaVally, RN, MS  
 Jay S. Loeffler, MD  
 Aaron Nelson, PhD  
 Lawrence D. Recht, MD  
 Malcolm P. Rogers, MD  
 R. Michael Scott, MD  
 Leslie N. Sutton, MD  
 Julian K. Wu, MD, FACS

## Scientific Advisory Board

Darell D. Bigner, MD, PhD,  
*Chair*  
 Francis Ali-Osman, DSc  
 Webster Caveene, PhD  
 Dennis Deen, PhD  
 Glenn Dranoff, MD  
 Daniel Fults III, MD  
 G. Yancey Gillespie, PhD  
 Dorothee Herlyn, DVM  
 Mark Israel, MD  
 David Louis, MD  
 Robert L. Martuza, MD  
 Elizabeth W. Newcomb, PhD  
 Peter C. Phillips, MD  
 Evan Y. Snyder, MD, PhD  
 Charles Stiles, PhD

# ROCHE FAMILY AWARD WINNERS

---

*Given in recognition of deep personal commitment and outstanding dedication, the Roche Family Award is one of the Society's highest honors. Established in honor of Patty, Eileen and Bud Roche's beloved daughter, it is a lasting tribute to the generosity and commitment of the Roche family to The Brain Tumor Society.*

Mark Powers, volunteer extraordinaire for The Brain Tumor Society, was awarded the Roche Family Award in 2001.

The award honored the courage and commitment of Mark Powers, a five-year glioblastoma multiforme survivor, who has given countless hours of service by helping with office administration at the Society. Although no longer able to work full-time as a computer professional, he travels to the Society's office twice each week by bus from his home in Arlington.



*Mark Powers has been a volunteer at the Society's offices for four years.*

Mark's kindness and sense of humor brighten any day. He cheerfully performs any task and takes on duties that he feels will enhance the work environment of the staff, whether this means cleaning out closets, replenishing supplies or organizing materials. We salute Mark for his quiet courage, his unflinching dedication to the work of The Brain Tumor Society and for being one of our heroes. ■

Walter Driscoll and SkiMarket, the 2002 winner of the The Brain Tumor Society's distinguished Roche Family Award, have been earnest supporters of our mission for years.

Walter's selfless and enduring commitment to the Society began when he first rode in the Ride for Research as part of the SkiMarket cycling team in the early 1990s. Each year, the



*Walter Driscoll at the 2002 Annual Meeting with his daughter, Annelise.*

Ride raises needed funds which support The Brain Tumor Society and its mission.

With just 60 riders at that very first Ride, Walter and SkiMarket have been an irreplaceable part of the event's astronomical success, which now boasts over 900 riders who pedal through the 25-50 mile course.

Since the Ride's inception, Walter has donated both his time and SkiMarket cycling products in an ongoing effort to promote the Ride. Thanks in large part to their continued commitment and generosity, Walter and SkiMarket have helped make the Ride for Research our signature event, year after year. ■

# LETTER FROM THE PRESIDENT

---

Dear Friends,

In 1989, The Brain Tumor Society envisioned an organization of individuals coming together to share mutual concerns and address a very devastating problem ... a society that would provide help and hope to those struggling with a brain tumor. Today, that vision is a reality.

Each of us has the capacity to leave a mark in this world. Each of us has within us the power to make a difference. Our vision became a reality because of those of you who made the choice to support The Brain Tumor Society.

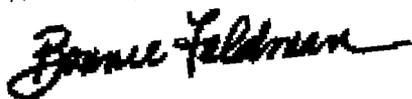
The Directors and the staff of The Brain Tumor Society join me in thanking you for your utmost generosity. It is only with your help that the Society continues to fund vital research, assist patients and families, and educate families and healthcare professionals about brain tumors.

As a result of the many hundreds of individual, corporate and foundation gifts that we receive, space does not allow us to recognize each of you individually. However, every donation, regardless of the amount, is crucial to the fulfillment of our mission. We realize that some of your donations come at a great sacrifice.

Thank you for helping to make these last couple of years exceptional in all aspects of our programs. The Brain Tumor Society looks forward to even greater success in the not too distant future, when we anticipate that some of the research we are funding will have the potential to be tested as new, less toxic therapies for patients.

I personally thank each and every one of you for your past and continuing commitment to our cause.

With deepest gratitude,

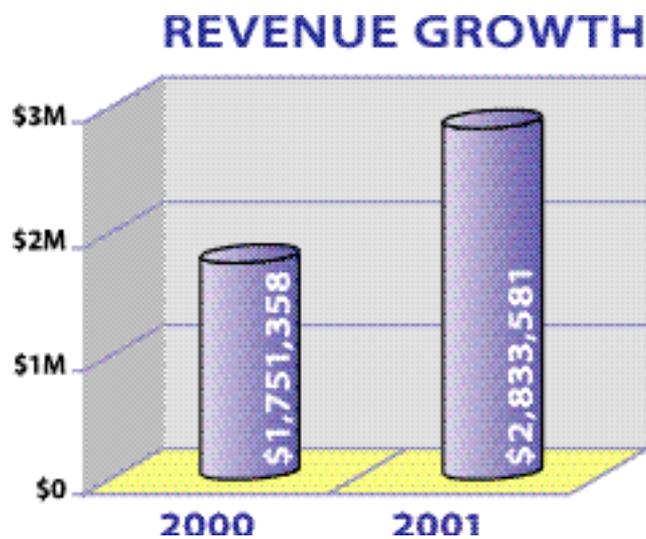
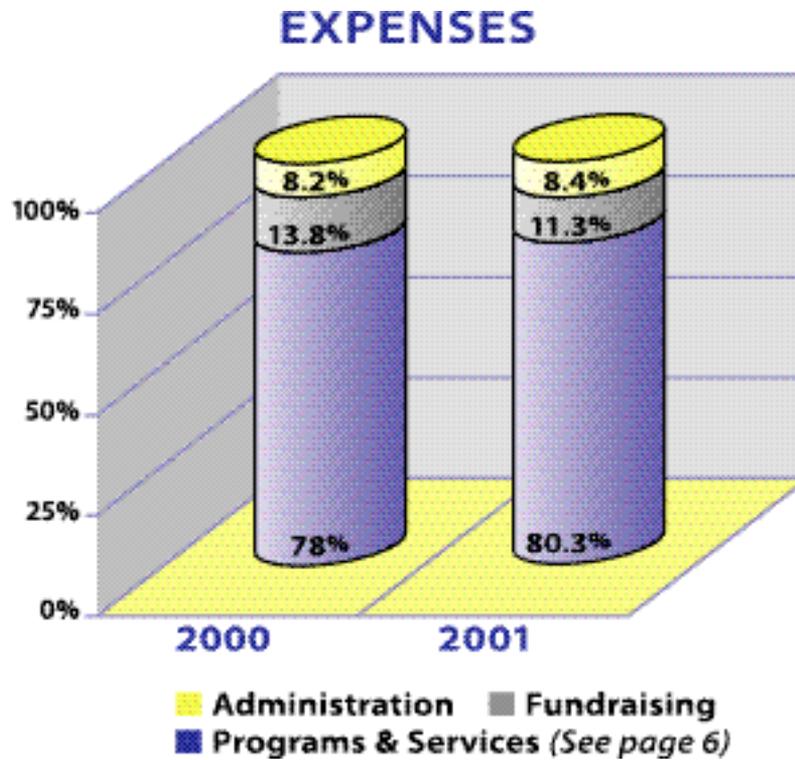


G. Bonnie Feldman  
President and Founder



# FINANCIAL REVIEW 2000-2001

## THE BRAIN TUMOR SOCIETY



# RESEARCH GRANTS 2001-2002

## 2001 Grant Recipients

Arturo Alvarez-Buylla, PhD  
University of California/San Francisco, San Francisco, CA  
*Are neural stem cells a source of brain tumors?*

### The Alexis A. Boss Chair of Research

Bob S. Carter, MD, PhD  
Massachusetts General Hospital, Boston, MA  
*Genetically engineered anti-glioma CTLs in a murine model of EGFRvIII expressing tumors*

### The Rachel Molly Markoff Chair of Research

Charles G. Eberhart, MD, PhD  
Johns Hopkins Hospital, Baltimore, MD  
*Wingless signaling in medulloblastomas: A murine tumor model*

### The Seth Feldman Chair of Research

Ulrike Gaul, PhD  
Rockefeller University, New York, NY  
*Identification of genes regulating glial cell behavior in the developing visual system of drosophila*

Evan M. Hersh, MD  
University of Arizona, Tucson, AZ  
*Dendritic cell and dexosome interaction with glioblastoma multiforme*

### The Neal P. Levitan Chair of Research

Ajay Niranjana, MD  
University of Pittsburgh, Pittsburgh, PA  
*Enhancement of radiosurgical effects on brain tumors using neural stem cell-based gene expression*

### The Alan Goldfine Chair of Research

George Perides, PhD  
Beth Israel Deaconess Medical Center, Boston, MA  
*The role of the fibrinolytic system in development of metastasis to the brain*

### The Alan Goldfine Chair of Research

Benjamin Matthew Segal, MD  
University of Rochester School of Medicine, Rochester, NY  
*Glioma rejection by natural killer cells and IL-10 producing CD4+ T cells*

### Partially funded by The Shaun Catherine Benet Fund

Hui-Kuo Shu, MD, PhD  
University of Pennsylvania, Philadelphia, PA  
*The role of Met tyrosine kinase in the regulation of apoptosis in malignant gliomas*

Erwin G. Van Meir, PhD  
Emory University-Winship Cancer Institute, Atlanta, GA  
*Design of an endostatin delivery vector for the treatment of brain tumors*

### The Patty Roche Chair of Research

Carol J. Wikstrand, PhD  
Duke University Medical Center, Durham, NC  
*Monoclonal antibodies reactive with the angiostatin receptor to replace angiostatin as an anti-tumor agent*

### The Herbert M. Karol Chair of Research

Ming-Jian You, MD, PhD  
Dana-Farber Cancer Institute, Boston, MA  
*Role of the PTEN tumor suppressor in the progression of glioma*

## 2002 Grant Recipients

Arturo Alvarez-Buylla, PhD  
University of California/San Francisco, San Francisco, CA  
*Are neural stem cells a source of brain tumors?*

### The Alexis A. Boss Chair of Research

Bob S. Carter, MD, PhD  
Massachusetts General Hospital, Boston, MA  
*Genetically engineered anti-glioma CTLs in a murine model of EGFRvIII expressing tumors*

Daniel W. Fults, MD  
University of Utah School of Medicine, Salt Lake City, UT  
*Somatic cell gene transfer to model medulloblastoma in mice*

### The Billy Grey Chair of Research

Evan M. Hersh, MD  
University of Arizona, Tucson, AZ  
*Dendritic cell and dexosome interaction with glioblastoma multiforme*

### The Bernard Goldhirsh Research Initiative

Suyun Huang, MD, PhD  
U.T. M.D. Anderson Cancer Center, Houston, TX  
*Critical role of NF- $\kappa$ B activation in necrosis formation in human glioblastoma*

### The Bernard Goldhirsh Research Initiative

Xin Liu, MD, PhD  
UCLA School of Medicine, Los Angeles, CA  
*The role of PTEN tumor suppressor in regulating neural stem cells and tumorigenesis*

### The Bernard Goldhirsh Research Initiative

Maiken Nedergaard, MD, PhD  
New York Medical College, Valhalla, NY  
*Glutamate receptor antagonists and malignant gliomas*

### The Neal P. Levitan Leadership Chair of Research

Jacqueline N. Parker, PhD  
University of Alabama at Birmingham, Birmingham, AL  
*Immunotherapy of malignant gliomas using Cytokine-producing Gamma-1 34.5 deleted HSV*

### The Bernard Goldhirsh Research Initiative

John H. Sampson, MD, PhD  
Duke University, Durham, NC  
*Antiangiogenic immunotherapy of malignant brain tumors*

### The Alan Goldfine Leadership Chair of Research

David T. Scadden, MD  
Massachusetts General Hospital, Boston, MA  
*Recruitment of stem/progenitor cells to brain tumor vasculature*

### The Patty Roche Chair of Research

Erwin G. Van Meir, PhD  
Emory University-Winship Cancer Institute, Atlanta, GA  
*Design of an endostatin delivery vector for the treatment of brain tumors*

### The Bernard Goldhirsh Research Initiative

William A. Weiss, MD, PhD  
University of California/San Francisco, San Francisco, CA  
*Kinase inhibitor therapy using a switchable allele of EGFR*

### The Herbert M. Karol Chair of Research

Ming-Jian You, MD, PhD  
Dana-Farber Cancer Institute, Boston, MA  
*Role of the PTEN tumor suppressor in the progression of glioma*

## LOOKING AHEAD ...

---

*In 1998 and 1999, The Brain Tumor Society awarded grants to Eckard Wimmer, PhD, from the Department of Molecular Genetics and Microbiology at Stony Brook University School of Medicine in New York for his proposal on the “Nonpathogenic Polio Recombinants as Therapy for Brain Tumors.” Dr. Wimmer, together with his co-investigator, Matthias Gromeier, MD, who has since joined the Department of Molecular Genetics and Microbiology at Duke University Medical Center, have recently been awarded a United States Patent for their work creating a genetically engineered poliovirus that may soon be tested on certain forms of malignant brain tumors. Below is a summary of their work.*



Major advances have been recently achieved to utilize the poliovirus for therapeutic applications against malignant gliomas. The strategy relies on the poliovirus' unique ability to efficiently infect and kill malignant glioma cells. Manipulation of the poliovirus genome through insertion of genetic material derived of rhinovirus (the causative agent of the common cold), produces a chimera that specifically grows within and destroys cancer cells without harming normal neurons. We have unraveled the fundamental differences between glioma cells and normal neurons that are responsible for the different response to infection with our agent, called PV-RIPO. That difference explains why PV-RIPO is unable to cause poliomyelitis when injected into the spinal cord of monkeys, but efficiently kills glioma cells explanted from a patient's tumor. An even superior derivative, termed PVS-RIPO, is currently in production at the NCI and is anticipated to enter clinical trials for malignant gliomas within two years.

*The Brain Tumor Society has been acknowledged for supporting this research effort in the Proceedings of the National Academy of Sciences USA, volume 97, June of 2000.*



# THE BRAIN TUMOR SOCIETY

---

*Committed to a cure through research, education and support*

124 Watertown Street, Suite 3H • Watertown, MA 02472

Voice: (617) 924-9997 • Fax: (617) 924-9998

E-mail: [info@tbts.org](mailto:info@tbts.org) • [www.tbts.org](http://www.tbts.org)