

We Are Partners in the Fight to Conquer Childhood Cancer

FOUR  DIAMONDS
— Conquering Childhood Cancer —

PENNSTATE HERSHEY
 Children's Hospital



*Aleah, 12, (left) with
mother, Michele (right)*

**CANCER IS
THE #1 CAUSE
OF DEATH BY
DISEASE FOR
CHILDREN IN THE
UNITED STATES.**

What are the
"four diamonds"?

The four diamonds - courage, wisdom, honesty, and strength - come from a story written by 14-year-old Christopher Millard in the early 1970s, shortly before cancer took his life. Hours after his death, his parents, Charles and Irma Millard, established a gift fund in his honor, which was later named Four Diamonds.



“Only research will lead us to a cure.”

A Message from Our Hospital CEO

At Penn State Hershey Children’s Hospital, we believe in a holistic approach to pediatric cancer care and research. Our expert physicians and specialty care providers not only treat the disease, they care for each child’s wellbeing and support their family as well. This type of family-focused care is made possible thanks to generous contributions to Four Diamonds from corporate, community, and individual donors, Mini-THONs, and THON.

During the 2014 fiscal year, Four Diamonds achieved a record-breaking fundraising total of more than \$16 million. This achievement enabled us to provide exceptional care to the hundreds of children fighting cancer at Penn State Hershey, and fueled the Four Diamonds Pediatric Cancer Research Center’s pursuit of discovery for new treatments and cures for childhood cancer. Thanks to your support, the future looks bright.

The youth and young adults who power our mission truly inspire everyone at Penn State Hershey Children’s Hospital. The financial support and awareness they raise through the Penn State Dance Marathon (THON) and the Four Diamonds Mini-THONs prove that the children fighting cancer are not alone. We are united in our goal to conquer childhood cancer.

On behalf of the faculty and staff at Penn State Hershey, I extend my sincere appreciation to all who supported Four Diamonds in the last year. Your generosity provides direct support to our pediatric cancer patients and their families. Your continued partnership is vital to sustain our efforts in the fight to conquer childhood cancer.



A. Craig Hillemeier, M.D.

Dean, Penn State College of Medicine

Chief Executive Officer,
Penn State Hershey Medical Center
and Health System

Senior Vice President for
Health Affairs, Penn State

A. Craig Hillemeier M.D.

MISSION STATEMENT

The Four Diamonds’ mission is to conquer childhood cancer by assisting children treated at Penn State Hershey Children’s Hospital and their families through superior care, comprehensive support, and innovative research.

Once again, Penn State Hershey Children’s Hospital was recognized as one of the top 50 hospitals in the nation for pediatric cancer care. The Children’s Hospital was also recognized for four other specialties in U.S. News & World Report’s 2013-14 rankings.





80%
SURVIVAL RATE



Overall success rates for treating all types of childhood cancers hover around 80 percent. That number sounds great, until you consider the flip side of that statistic: 1 in 5 children will die from their disease within 5 years. We won't stop our fight until the success rate reaches 100 percent.

Ayden, age 4

WHY WE FIGHT

Each year, more than 13,400 families in the United States hear these devastating words: "Your child has cancer." Hundreds of families turn to Penn State Hershey Children's Hospital, a nationally recognized

leader in pediatric cancer care, to provide life-saving medical treatment for their children. Four Diamonds makes it possible for all of these children to receive the exceptional care they need regardless of the cost.



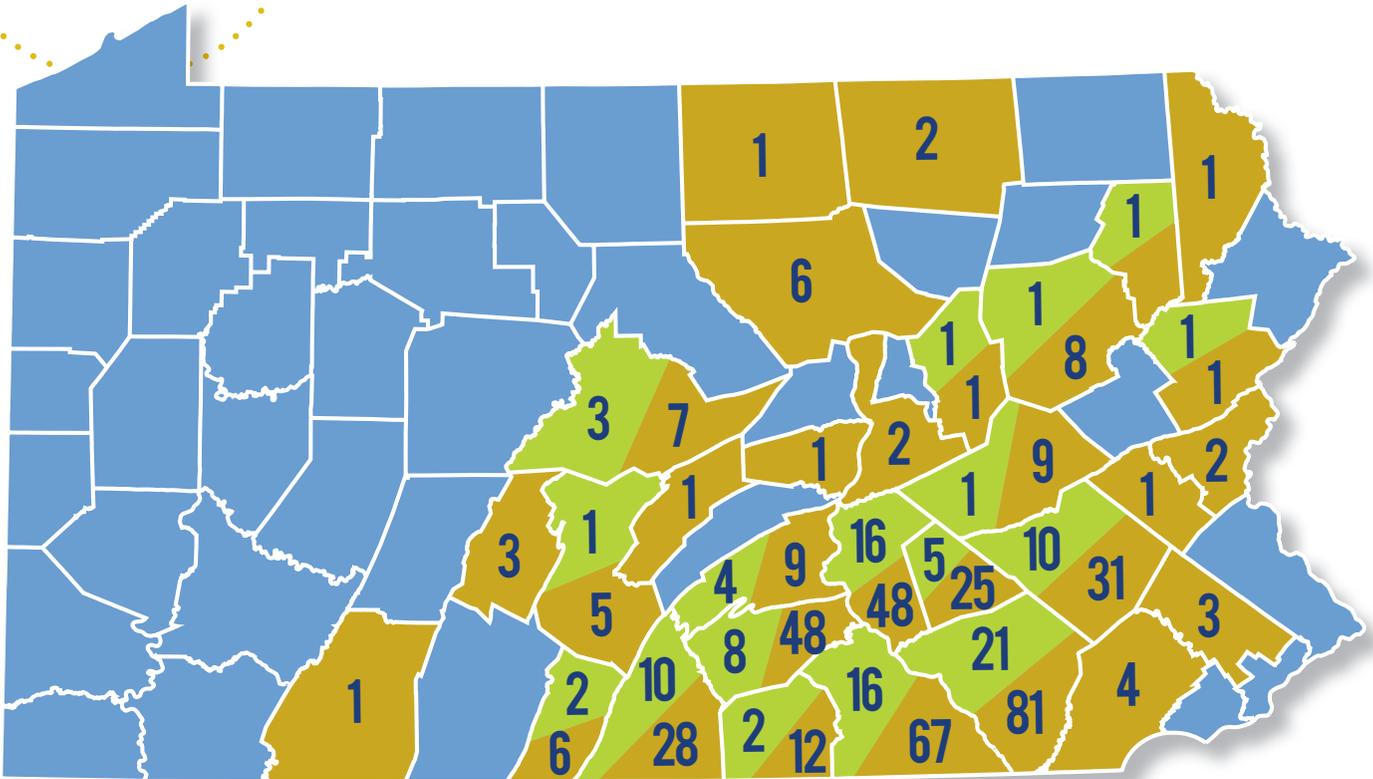


Number of children in the U.S. diagnosed with cancer each year

Who is Eligible for Four Diamonds Assistance?

- 1) Any patient who has been a Pennsylvania resident for more than one year (or who has moved to Pennsylvania for a non-medical related reason); and
- 2) Is under the age of 22 when diagnosed with cancer; and
- 3) Is receiving primary oncology care at Penn State Hershey Children's Hospital.

PATIENTS SERVED AND COUNTY OF RESIDENCE



■ Number of New Patients ■ Number of Total Patients

Adams.....	2	12	Huntingdon.....	1	5	Northumberland...	0	2
Berks.....	10	31	Lackawanna	1	1	Perry.....	4	9
Blair.....	0	3	Lancaster	21	81	Schuylkill.....	1	9
Bradford	0	2	Lebanon	5	25	Snyder.....	0	1
Centre	3	7	Lehigh	0	1	Somerset.....	0	1
Chester	0	4	Luzerne.....	1	8	Tioga.....	0	1
Columbia.....	1	1	Lycoming.....	0	6	Wayne	0	1
Cumberland.....	8	48	Mifflin	0	1	York.....	16	67
Dauphin	16	48	Monroe.....	1	1	Other*	1	13
Franklin	10	28	Montgomery	0	3	Total	104	428
Fulton	2	6	Northampton.....	0	2			

* Other includes patients who met the eligibility guidelines at the time of their diagnosis and treatment and, who have since relocated outside of Pennsylvania. Per guidelines, Four Diamonds provides financial assistance for annual follow-up care at Penn State Hershey for a specified time after a patient successfully completes treatment.

“Research offers the best hope of finding a cure.”

Penn State Hershey’s commitment to childhood cancer research enables us to provide cutting-edge care to all of our pediatric cancer patients. With membership in leading national research consortiums, the Children’s Hospital is able to offer Phase I, Phase II, and Phase III state-of-the-art clinical trials to pediatric cancer patients, including those who relapse in the course of their care, opening up novel treatment avenues.



Barbara A. Miller, M.D.

Chief, Division of Pediatric Hematology/Oncology

Professor of Pediatrics and Biochemistry and Molecular Biology

Vice Chairman for Research, Department of Pediatrics

Christopher Millard Chair for Pediatric Oncology Research

The Four Diamonds Pediatric Cancer Research Center supports the work of four lead scientists, 31 research team members, and 23 clinical researchers who, throughout the course of the past year, contributed to multiple projects in the areas of molecular oncology, translational research, experimental therapeutics, new drug development, and basic science.

These outstanding physician-scientists and investigators are focused on learning more about how cancer forms, how it can be treated, and how treatments can be more effective while minimizing long-term side effects. Their work is reviewed by an external scientific advisory board, providing transparency to our research operations and assurance that our research dollars are being spent wisely.

In addition to seed funding from Four Diamonds, our teams receive support from the National Institutes of Health, Alex’s Lemonade Stand, St. Baldrick’s Foundation, Hyundai Hope on Wheels, the National Childhood Cancer Foundation, and the Children’s Oncology Group.

THE IMPACT OF RESEARCH ENDOWMENTS

Four Diamonds co-founders Charles and Irma Millard dreamed there would one day be an end to childhood cancer. This dream inspired the Four Diamonds Pediatric Cancer Research Center, which became a reality in 1996 thanks to the generosity of Four Diamonds donors.

We know the key to speeding up discoveries in childhood cancer research is a consistent stream of financial support. Because of this, Four Diamonds has endowed a variety of novel research programs, creating a source of sustained funding for pediatric cancer research. Some examples of our unique and specialized work include:

- The Pediatric Molecular Oncology Research Endowment supports cutting-edge lab research that seeks to understand differences in pediatric cancer cells which result in uncontrolled growth on a molecular level.
- The Experimental Therapeutics Program offers state-of-the-art clinical trials to pediatric patients who have relapsed or whose cancer is resistant to standard therapy.
- Four Diamonds supports the ongoing research and development of new drugs.



CAN WE “TEACH” CANCER CELLS TO SELF-DESTRUCT?

As Director of the Pediatric Molecular Oncology Research Program at Penn State Hershey, Dr. Hong-Gang Wang studies the molecular mechanisms underlying the causes of pediatric cancer. The Wang laboratory examines apoptosis (the cell's self-killing process) and autophagy (the cell's self-cleansing process). By better understanding these processes, Dr. Wang and his team hope to create therapies with the power to prevent normal cells from turning into cancer cells.

Four Diamonds research endowments support Dr. Wang's lab, which cover the cost of cutting-edge equipment and provide funding to recruit top research talent.



Hong-Gang Wang, Ph.D.

Director, Pediatric Molecular Oncology Research Program

“Thanks to Four Diamonds donors, the Pediatric Molecular Oncology Research Program became a reality in 2013. This was a longtime dream of the Four Diamonds Pediatric Cancer Research Center – I was honored to be selected to lead this team.”

MILESTONE DISCOVERY

In the last year, Dr. Wang and his team achieved a major milestone in understanding the crosstalk between apoptosis and autophagy as normal cells turn into cancer cells. When Bif-1, a tumor suppressing protein, is properly linked with other proteins, cells can be forced to switch from autophagy to apoptosis - i.e. cancer cells could be made to self-destruct. As the recipient of the prestigious Hyundai Hope on Wheels Scholar award in 2014, Dr. Wang is now investigating how cancer cells can be reprogrammed to switch from “self-cleaning-survival mode” to “self-destruction mode” in pediatric acute myeloid leukemia, a disease that has not seen new treatment options for four decades.

“This discovery was a turning point in our research. It was like discovering a light switch with the power to turn cancer cells on and off.”

WHAT'S NEXT?

Current chemotherapy and radiation strategies kill cancer cells, but they also kill normal cells. As a result, childhood cancer survivors often suffer from long-term side effects. More effective and less harmful treatments are needed for pediatric cancers.

Dr. Wang envisions the future of cancer research to not only focus on cancer cells, but also the microenvironment in which cancer cells reside. He believes that by manipulating autophagy in the tumor microenvironment, cancer treatments would be more effective, and cancer could be prevented altogether.

“Today's cancer research is in its most exciting era ever, as new puzzle pieces are discovered every day for this complex disease,” he says. “We are very close to uncovering the mysteries of cancer.”

*Dr. Hong-Gang Wang
with Brandon, age 13*



FINANCIAL REPORT FOR THE FISCAL YEAR 2014

All of our work is FTK™ - For The Kids. Four Diamonds remains committed to helping to improve the health and lives of children fighting cancer today, and those who will fight in the future.

According to the original Four Diamonds gift agreement by co-founders Charles and Irma Millard, after all of the costs for eligible patient medical expenses have been met, Four Diamonds may direct funds to support pediatric oncology clinical and research needs at Penn State Hershey.

Four Diamonds is fiscally strong, thanks to the extraordinary generosity of our donors. Their loyal philanthropic support over the past 42 years has made it possible for Four Diamonds to cover 100

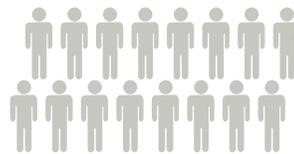
percent of all medical expenses related to cancer care not covered by insurance for qualifying Four Diamonds children. In fiscal year 2014, the amount of that care expense totaled \$985,711.

As awareness of our cause has grown, so too has our philanthropic support. Over the past five years, revenue from philanthropic gifts to Four Diamonds has grown 48 percent. This tremendous increase in philanthropic support has enabled Four Diamonds to direct millions of dollars into pediatric cancer research and build a long-term investment strategy to create an additional revenue stream which is self-sustaining to help fund future pediatric cancer research at Penn State Hershey.

**100% OF
PATIENT BILLS
COVERED**

Four Diamonds provides comprehensive support to children and their families by paying for care and treatment not covered by insurance or other means as well as additional expenses that disrupt the welfare of the children. Thanks to the generous support of donors like you, Four Diamonds has been able to assist 100% of the eligible childhood cancer patients who have been treated at Penn State Hershey.

58 
**pediatric
oncology research
professionals
supported**



16 **SPECIALTY CARE
PROVIDERS**

Four Diamonds makes it possible for 16 specialty care providers to be available exclusively to serve the physical, mental, emotional, and spiritual needs of our patients and their families. These care providers include child life specialists, social workers, music therapists, a clinical nutritionist, a psychologist, and pastoral care.

SUMMARY OF SOURCES AND USES OF FUNDS

(covering 6/30/2013 - 7/1/2014)

Sources of Revenue

Philanthropic Gifts by Source

Penn State Dance Marathon (THON)	\$13,336,675.18	79%
Four Diamonds Mini-THON.....	\$3,054,865.07	18%
Special Events/Other Gifts	\$279,160.26	2%
Honor/Memorial Gifts	\$93,269.95	>1%
Bequests	\$105,550.00	>1%
	\$16,869,520.46	100%

Interest and Endowment Earnings.....\$1,880,591.00

Summary of Revenue

Gifts.....	\$16,869,520.46	90%
Interest and Endowment Earnings	\$1,880,591.00	10%
TOTAL REVENUE	\$18,750,111.46	100%

Uses of Funds

Patient Care & Family Support

Patient Care Providers	\$1,783,253.00
Patient/Family Support.....	\$985,711.00

Research \$1,929,241.00

Investment in Research Endowments

(Note: These moves were approved and initiated in FY13, but not completed until Q1 FY14.)

Pediatric Molecular Oncology Research	\$7,400,000.00
Christopher Millard Chair for Pediatric Cancer Research ..	\$1,500,000.00
Penn State IFC/Panhellenic Dance Marathon Chair for Pediatric Cancer Research	\$4,600,000.00

Fundraising and Administration \$1,034,196.00

Scholarship \$10,000.00

Annual Reserve..... \$8,735,000.00

TOTAL USES OF FUNDS **\$27,977,401.00**

Explanation of the Annual Reserve

In FY2012, leadership from Penn State Hershey Children's Hospital, Penn State College of Medicine, and community volunteers from the Four Diamonds Advisory Board recommended creating an annual reserve fund equal to 18 months of the costs in order to guarantee the continuity of programs and services to our pediatric cancer patients in an ever-changing healthcare and financial environment. Each year, funds held in the annual reserve (and all interest earned from those funds) are added to the current year's fundraising totals and are available to fund the next fiscal year's programs, services, and annual reserve.

94¢ OF EVERY \$1 DONATED

directly impacts children
fighting cancer today and
helps improve the path of
kids who will face cancer
in the future.





Lydia,
age 3

“The further along we got in Lydia’s treatment, the more **I realized how important research is** and the impact it makes for the next child that has to deal with this.”

THE LYDIA HESS STORY

FINDING A CURE

“I’ve learned so much about leukemia since my 3-year-old daughter, Lydia, was diagnosed,” shares Lydia’s mom, Julie Hess. “It’s incredible to think about how my vocabulary has evolved to include words like T-cells, B-cells, high dose methotrexate, echocardiogram, and bone marrow biopsy.”

Learning a new vocabulary is just one of the realities parents of children fighting cancer have to face. “I feel like I have an honorary medical degree with everything I’ve learned,” shares Julie. “And now I realize the importance of pediatric cancer research.”

Gifts to Four Diamonds helped establish the Four Diamonds Pediatric Cancer Research Center in 1996. Through the Center, investigators at Penn State Hershey focus on how cancer forms, how it can be treated, and how to make treatments more successful while minimizing long-term side effects.

“Treatment options have improved tremendously over the years, but people don’t really know about the side effects of treatment,” explains Julie. “In fact, shortly after diagnosis, Lydia was in the hospital for over two months because of a known, but rare, side effect that occurred when one of the chemo drugs attacked her pancreas.” People often recognize hair

loss as a visible side effect, but patients may also have to cope with less obvious, more long-term side effects, like secondary cancers, learning disabilities, physical and developmental delays, and infertility.

“The further along we got in Lydia’s treatment, the more I realized how important research is and the impact it makes for the next child that has to deal with this,” explains Julie. At Penn State Hershey Children’s Hospital, we’re constantly pursuing new discoveries related to pediatric cancer care and treatment, and we are committed to collaborating with the families of our patients in this effort.

The Four Diamonds Pediatric Cancer Research Center is a member of several consortiums - network hospitals that share research and collaborate on projects. “Just the other week a sample of Lydia’s bone marrow from her diagnosis six months ago was sent to a network hospital in the Midwest for testing,” shares Julie. “It makes me happy to know that Lydia’s experience could benefit other kids through research.”

“I’ve never felt this passionate about a cause, but research really is the key,” says Julie. “Sure, it’s my daughter, but if our situation can make a difference in other people’s lives, then we want to help. Four Diamonds does that.”

THON

15,000 students at Penn State participate in THON every year. THON is the largest, student-run philanthropy in the world. All of their proceeds are donated to Four Diamonds every year. (For more information about THON, visit THON.org)

Bryan, age 12, with THON volunteer

POWERING OUR FIGHT

Each year, more than 15,000 Penn State University students join us as partners in the fight to conquer childhood cancer through their participation in the Penn State Dance Marathon (THON). Their dedication, enthusiasm, and honest desire to help children and families who are battling this disease inspire everyone connected to Four Diamonds. In FY2014, THON raised a record-breaking \$13,336,675.18 for Four Diamonds, which was 79 percent of our annual fundraising revenue.

Twenty years ago, students were inspired by THON and asked to create a similar fundraising event in their school. From that one school grew a thriving movement of Four Diamonds Mini-THONs, now engaging more than 30,000 students each year as our partners in the fight. In the past year, students from 135 elementary, middle schools, high schools and colleges participated, raising \$3,054,865.07 for Four Diamonds, which was 18 percent of our annual fundraising revenue in FY2014.

Four Diamonds was also the grateful recipient of an additional \$477,980.21 which came from generous members of our community, who make individual or corporate gifts, organize and participate in community fundraisers, and donate in honor or memory of someone they love.

All of these extraordinary fundraising efforts make it possible for Four Diamonds to cover 100 percent of the costs of cancer care for the children we serve and to direct millions of dollars into research—fueling our tireless work to find a cure for all childhood cancers.

KIDS HELPING KIDS

Inspired and empowered, more than 30,000 students from 135 elementary, middle schools, high schools and colleges joined our fight in FY2014 by coordinating a Four Diamonds Mini-THON in their school. (For a complete list of participating schools, visit FourDiamonds.org. To start a Mini-THON in your school, contact Four Diamonds at minithoninfo@hmc.psu.edu or call 717-531-6086.)

\$13.3 MILLION

In FY2014, Penn State students did what people said was impossible and raised \$13,343,517.33 - nearly a million dollars more than the previous year.



Colton, age 2

#PartnersInTheFight

FOUR  DIAMONDS
— Conquering Childhood Cancer —

PENNSTATE HERSEY
 Children's Hospital

Four Diamonds at Penn State Hershey Children's Hospital

90 Hope Drive, A120 | P.O. Box 852 | Hershey, PA 17033

T: 717-531-6086 | F: 717-531-7939 | fourdiamondsinfo@hmc.psu.edu | www.FourDiamonds.org

