# How you can help

With billions of dollars invested, tomorrow's advances in the fight against cancer can only come from one source today's research. The greatest advances in cancer research are just over the horizon. New discoveries are being made every day and the American Cancer Society continues to make them possible. But, we need your help and support to continue the progress.

Aside from the U.S. government, we fund the largest percentage of cancer researchers at the start of their careers, when they might not otherwise receive funding to get new ideas off the ground. We have proven results, with 46 of our former grantees having gone on to win the Nobel Prize – a testament to our ability to identify the best and brightest ideas.

In any given year there are between \$450 million and \$500 million in multi-year American Cancer Society research grants in effect. Indiana and Michigan, home to some of the most prestigious medical and research facilities in the world, receive a significant portion of the Society's annual research expenditure.

Unfortunately, our organization can only fund a small percentage of research grants each year. Any one of the approved applications that go unfunded could potentially be the research that results in a cancer breakthrough. The American Cancer Society needs your continued support to help researchers find a cure.

Call us at **1-800-227-2345** to find out how you can contribute to the fight, either as a volunteer or a donor.

## Did you know:

When the American Cancer Society began its research program in 1946, only 25 percent of cancer patients were alive five years after diagnosis. Today, about 67 percent live longer than five years. Against the odds, the Society has turned cancer from a taboo topic into a rallying cry for change. In total, we've helped avert more than 650,000 cancer deaths just since the early 1990s – creating about 350 more birthdays each and every day.

Daniela E. Matei, MD Great Lakes Division Researche Indiana Universit





Derek M. Griffith. PhD Great Lakes Division Researcher Jniversity of Michigan



We **save lives** and create more birthdays by helping you stay well, helping you get well, by finding cures, and by fighting back.

cancer.org | 1.800.227.2345

# The Promise of **Cancer Research**

Helping to Save Lives and Create a World with Less Cancer and More Birthdays



# The search for a cure

The American Cancer Society is internationally recognized as a leader in cancer research. We have a rich history of progress, having launched the nation's first cancer research initiative in 1946. Since then, more than \$3.6 billion has been invested in cancer research, making the American Cancer Society the largest private source of cancer research dollars in the United States today.

In the Great Lakes Division of the American Cancer Society, we are proud to support our Indiana and Michigan research institutions where scientists work tirelessly to understand the many mysteries of cancer. This includes funding projects that expand scientific knowledge to improve treatments and help us find better ways to identify cancer risk, as well as projects that study people, behaviors and populations to help us understand how to prevent the disease and detect it early. Research is an important component of our mission to help people Stay Well, Get Well, Find Cures, and Fight Back.

And our efforts don't stop with our own research program. As the largest voluntary health organization in the nation today, we use our grass roots army of volunteers and trained advocates—both locally and nationally—to push for badly needed growth in private and government cancer research funding.

## What We've Done

Here are some advances made possible by Society-funded research:

- Dramatically improved cure rate for childhood leukemia
- Determination of the link between smoking and lung cancer
- Adoption and widespread use of the Pap test to screen for cervical cancer
- Development of the first therapies to attack cancer at its genetic roots
- Identification of the link between diet and cancer
- Pioneered the technique of bone marrow transplant to treat cancer

- Development of the prostate specific antigen (PSA) for early detection of prostate cancer
- Gardasil, became the first FDA-approved HPV vaccine to prevent cervical cancer
- Development of lifesaving breast cancer drugs, such as Tamoxifen and Herceptin
- Use of hormonal therapy to treat prostate cancer.
- Proof that lumpectomy plus radiation compared with mastectomy is effective against some breast cancers
- Discovery of genes that make some people more susceptible to breast and colon cancer

THE OFFICIAL SPONSOR OF BIRTHDAYS



## Science at Work in the Great Lakes Division, Inc.

To date, your American Cancer Society has spent over \$3.6 billion on cancer research and training. Currently, the American Cancer Society is funding nearly \$470 million in cancer research grants, with nearly \$21 million\* at work at eight research facilities in Indiana and Michigan. As the nation's largest private and not-for-profit investor in cancer research and training, the American Cancer Society pays special attention to young investigators with breakthrough projects to both advance knowledge of the disease and promote a new generation of scientists who can sustain the quest for a cure well into the future.

#### **Current Research Grants in Indiana and Michigan**

<b>Researcher and Location</b>	Subject Matter	Grant Dates	Grant Amount
<b>Rebecca Allan-Gibbs, MSN</b> Wayne State University	Determining Risk Factors Among Hospitalized Cancer Patients	7/1/ 2010-6/30/2013	\$15,000
Gerold Bepler, MD, PhD Karmanos Cancer Institute	Institutional Research Grant	1/1/2011–12/31/2013	\$360,000
Grace Y. Chen, PhD University of Michigan	Role of Commensals and Innate Immunity in Colitis-Associated Colon	1/1/2011–12/31/2014	\$720,000
Mark Chiang, MD, PhD University of Michigan	Targetting NOTCH and TLXI in T-cell Acute Lymphoblastic Leukemia/Lymphoma	7/1/2011–6/30/2015	\$720,000
Arul M. Chinnaiyan, MD, PhD University of Michigan	Oncoseq, A Bioinformatics Platform for Nextgen Sequencing in Oncology	7/1/2009–6/30/2014	\$400,000
Tomasz Cierpicki, PhD University of Michigan	Menin as an Oncogenic Co-Factor in MLL Leukemias	1/1/2011–12/31/2014	\$720,000
Yali Dou, PhD University of Michigan	The Function and Regulation of Histone Acetyltransferase MOF	7/1/2010–6/30/2014	\$720,000
James L. Ferrara, MD University of Michigan	Novel Strategies to Treat Graft Versus Host Disease	7/1/2008–6/30/2013	\$400,000
William Hawse, PhD University of Notre Dame	Molecular Flexibility in T Cell Receptor Specificity and Cross- reactivity	7/1/2011–6/30/2014	\$150,000
Samantha Hendren, MD, MPH University of Michigan	Improving Rectal Cancer Surgery through Regional Collaboration	7/1/2012-6/30/2017	\$728,000
Patrick Hu, MD, PhD University of Michigan	EAK-7, a Novel Regulator of FoxO Tumor Suppressors	7/1/2010-6/30/2014	\$720,000
Mircea Ivan, MD, PhD Indiana University, Indianapolis	Role of miR-210 in the Hypoxia Response and Tumorigenesis	7/1/2009–6/30/2013	\$720,000
Bruce L. Jacobs, MD University of Michigan	The Adoption of Intensity-Modulated Radiation Therapy in Prostate Cancer	1/1/2012–12/31/2012	\$48,000
Reshma Jagsi, MD, DPhil University of Michigan	Experiences and Outcomes in a Randomized Breast Radiation Technology Trial	7/1/2009–6/30/2013	\$580,000
Jae-Wook Jeong, PhD Michigan State University	Understanding the Progression of Endometrial Cancer	1/1/2012–12/31/2015	\$720,000
Mark R. Kelley, PD Indiana University, Indianapolis	Institutional Research Grant	1/1/2009–12/31/2012	\$360,000
Venkateshwar Keshamouni, PhD University of Michigan	Targeting TGF-beta-mediated Tumor-stromal Interactions in Lung Cancer	1/1/2009–12/31/2012	\$720,000
Andrea Manors, BSN Indiana University, Indianapolis	Graduate Scholarship in Cancer Nursing	7/1/2011–6/30/2013	\$20,000
Daniela E. Matei, MD Indiana University, Indianapolis	Targeting the Transglutaminase-Finbronectin Interaction in Ovarian Cancer	1/1/2010–12/31/2013	\$720,000
Susan M. Mendrysa, PhD Purdue University	Role of MDM2 in Cerebellar Development and Medulloblastoma	1/1/2012–12/31/2015	\$720,000
<b>Samy Meroueh, PhD</b> Indiana University, Indianapolis	Docking uPAR for Selective Targeting of Cancer Metastasis	1/1/2012–12/31/2015	\$720,000
Melissa Millerick-May, PhD Michigan State University	Exposure Reconstruction in Three Unique Cohorts	1/1/2011–12/31/2015	\$671,000
Arden M. Morris, MD, MPH University of Michigan	Patient and Provider Influences on disparities in Colorectal Cancer Care	7/1/2011–6/30/2015	\$720,000
Patrick J. O'Brien, PhD Universty of Michigan	Novel Roles of Base Excision Repair in Mutagenesis	7/1/2011–6/30/2015	\$720,000

### Current Research Grants in Indiana and Michigan (continued)

<b>Researcher and Location</b>	Subject Matter	<b>Grant Dates</b>	Grant Amount
Mary O'Riordan, PhD University of Michigan	Regulation of AQP1 and Its Role in the Cellular Innate Immune Response	1/1/2008–12/31/2012	\$697,000
<b>Sela Panapasa</b> University of Michigan	Understanding Cancer Disparities Among U.S. Pacific Islanders	1/1/2012–12/31/2014	\$438,000
Kenneth Pienta, MD University of Michigan	Inhibition of Monocyte Chemoattractant Protein-1 to Treat Prostate Cancer	7/1/2008–6/30/2013	\$400,000
Kevin L. Rand, PhD Indiana University, Indianapolis	Goal-Related Thoughts and End-of-Life Decisions in Advanced Cancer Patients	1/1/2010–12/31/2012	\$330,000
Timothy L. Ratliff, PhD Purdue University	Institutional Research Grant	1/1/2011–12/31/2013	\$180,000
Sameek Roychowdhury, PhD, MD University of Michigan	Individualized Therapies for Genomic Targets: A Personalized Oncology Pilot	7/1/2012-6/30/2017	\$729,000
Florian Schroeck, MD University of Michigan	Impact of Technology on the Quantity and Quality of Prostate Cancer Care	7/1/2012-6/30/2013	\$48,000
Peter H. Schwartz, PhD, MD Indiana University, Indianapolis	Giving Patients Quantitative Information about Colorectal Cancer Screening Tests	7/1/2010–6/30/2013	\$300,000
Vahakn B. Shahinian, MD University of Michigan	Influence of Reimbursement on Androgen Deprivation Use for Prostate Cancer	1/1/2010–12/31/2012	\$534,000
Hayley S. Thompson, PhD Karmanos Cancer Institute	Improving Post-Treatment Resources for Latina Breast Cancer Survivors	7/1/2012-6/30/2017	\$1,271,000
Yanzhuang Wang, PhD University of Michigan	Structure and Function of the Golgi Stacks During the Cell Cycle	7/1/2009–6/30/2013	\$720,000
Daniela Wittmann, MSW Michigan State University	Couples' Sexual Recovery After Prostatectomy and the Role of the Partner	7/1/2012-6/30/2014	\$40,000
Andrew Zelhof, PhD Indiana University, Bloomington	Creating as Extracellular Matrix: The Regulation of Spacemaker and Prominin	1/1/2010–12/31/2013	\$657,000
Yi Zhang, MD, PhD University of Michigan	Regulation of T Cell Stemness by Ezh2	7/1/2010–6/30/2014	\$720,000
Wuqiang Zhu, PhD Indiana University, Indianapolis	Molecular Dissection of Acute vs. Chronic DOX-induced Cardiotoxicity	7/1/2011–6/30/2013	\$102,000

\*Grants in effect as of July 2012

#### Current Grants by the Michigan Cancer Research Fund

Special grants made possible by the generous support of the Michigan Cancer Research Fund, a group of Michigan-based volunteers dedicated to supporting peer-reviewed research of the American Cancer Society (mcrf.org).

<b>Researcher and Location</b>	Subject Matter	<b>Grant Dates</b>	Grant Amount
Kristen Admiraal, MSW Michigan State University (MCRF 2012 Fellow)	Quality of Life Outcomes Among Older Adults with Colorectal Cancer	7/1/2012-6/30/2014	\$40,000
David DeGraff, PhD Vanderbilt University Medical Center (MCRF 2009 Fellow)	Role of Novel Foxa1 Binding Partners in Androgen Regulated Prostate Cancer	10/1/2009–9/30/2012	\$150,000
Kurt Januszyk, PhD Sloan-Kettering Institute for Research (MCRF 2010 Fellow)	Investigations into How the Exosome Recognizes and Degrades RNA	7/1/2010–6/30/2013	\$150,000
Amanda Solem, PhD Wayne State University (MCRF 2012 Fellow)	Single-molecule Study of the Spliceome	7/1/2012-6/30/2014	\$98,000
Aaron R. Van Dyke, PhD University of Michigan (MCRF 2011 Fellow)	Modulating Androgen Receptor with Bifunctional Recruiters	11/1/2010–10/31/2013	\$150,000



Michigan and Indiana Grant Total \$20,258,000

Michigan Cancer Research Fund Grant Total \$588,000