



CELEBRATING
Excellence

**NEW JERSEY
COMMISSION ON
CANCER
RESEARCH**



2009-2013 Report
Featuring grant program
evaluation and
outcomes report



New Jersey Commission on Cancer Research

Results Through Research

*CELEBRATING
Excellence*



Dear Governor Christie:

On behalf of the New Jersey Commission on Cancer Research, we are pleased to present a progress report on the activities the Commission has undertaken to fight New Jersey's war on cancer.

In its 30-year history, the NJCCR has awarded more than \$40 million for over 800 peer-reviewed cancer research grants and student fellowships. On average, grantees have leveraged a return of over \$10.44 in federal research funding to New Jersey laboratories for every NJCCR dollar awarded for a total of over \$400 million.

NJCCR grants are competitive and open to all non-profit research organizations in New Jersey. All awards are based on a stringent NIH system of scientific peer review, ensuring a rigorous and fair approach for all applicants.

In recent years, these grants have been awarded to Princeton University, Rutgers-Cancer Institute of New Jersey, Rutgers School of Dental Medicine, Rider University, New Jersey Medical School, and Rowan University. The funding that has been available has helped New Jersey scientists investigate new developments in Breast, Colon, Lung and Melanoma.

The NJCCR will continue to explore other ways to maximize our revenue so we can continue to support our young scientists in need of funding. We appreciate the support you as our Governor have given us and we look forward to discovering new treatments to reduce the burden of cancer in our State.

Respectfully submitted,

Kenneth R. Adler M.D., F.A.C.P.
Chairperson, NJCCR



Message from the Chair i

Our Mission 3

Did you know 5

Our History and Approach 7

Commission 2009-2013 9

Commission Staff and Contact Information 12

Why State Funding Matters 13

The Year in Review: 2013 15

- ❖ **Funding 16**
- ❖ **2013 Grant Programs 18**
- ❖ **2013 Post-Doctoral Fellowships 18**
- ❖ **2013 Pre-Doctoral Fellowships 20**

Appendix

**Table I: NJCCR Fellowship Awards
2009-2013 21**

The New Jersey Commission on Cancer Research (NJCCR) promotes significant and original research in New Jersey into the causes, prevention and treatment of cancer and serves as a resource to providers and consumers of cancer services.







To ensure that the citizens of New Jersey receive the fullest benefit of our nation's fight against cancer through the promotion and funding of research into the causes, prevention and treatment of cancer.

Our Mission



- ❖ **New Jersey is ranked 6th in the nation in the incidence of cancer.¹**
- ❖ **New Jersey is ranked 38th for cancer deaths in the U.S.²**
- ❖ **According to the American Cancer Society, more than 49,440 people in New Jersey were diagnosed with cancer in 2013, and 16,410 succumbed to the disease.³**
- ❖ **The New Jersey Commission on Cancer Research (NJCCR) promotes significant and original research into the causes, prevention and treatment of cancer and serves as a resource to providers and consumers of cancer services.**
- ❖ **New Jersey has more than 700 cancer researchers and 370,000 cancer survivors.⁴**
- ❖ **Since 1983, the NJCCR has awarded more than \$40 million for over 800 peer-reviewed cancer research grants and student fellowships to support discovery-oriented basic science cancer research. On average, each NJCCR research dollar leverages \$10.44 in federal funding to New Jersey laboratories; a total of over \$400 million for cancer research in New Jersey.**

1 U. S. Cancer Statistics Working Group. Cancer Rates in the U.S. by State. All Cancers Combined; Incidence Rates by State, 2012, Atlanta (GA), Department of Health and Human Services, Center for Disease Control and Prevention, and National Cancer Institute, 2015. Available at: <http://www.cdc.gov/cancer/dcpc/data/state.htm>

2 U. S. Cancer Statistics Working Group. Cancer Rates in the U.S. by State. All Cancers Combined; Incidence Rates by State, 2012, Atlanta (GA), Department of Health and Human Services, Center for Disease Control and Prevention, and National Cancer Institute, 2015. Available at: <http://www.cdc.gov/cancer/dcpc/data/state.htm>

3 Cancer Facts & Figures 2013. American Cancer Society. Available at: <http://www.cancer.org/acs/groups/content/@epidemiologysurveillance/documents/document/acspc-036845.pdf>

4 New Jersey Commission on Cancer Research: 2005 Annual Report. Available at: file:///C:/Users/Jan/Documents/NJ.DOH/NJ%20Cancer%20Research%202009-2013/cancer_research_2005.pdf



It is difficult to find anyone in New Jersey who has not been touched by cancer in some way. Our state consistently ranks among the top ten nationally in the incidence of cancer. In 2012, it was ranked 6th in the incidence of cancer, and 38th in cancer deaths in the U.S. by the Centers for Disease Control and Prevention's (CDC) Cancer Statistics Working Group. The cost of this disease is measured in human suffering, in lives lost, lives potentially wasted, and huge medical care costs.

The New Jersey Commission on Cancer Research (NJCCR) was founded by the Cancer Research Act – P.L.83, Ch.6 in 1983 to promote and fund significant cancer research projects proposed and carried out by New Jersey scientists. The Act dictates that the NJCCR receives no less than \$1 million annually for research into the causes, prevention, and treatment of cancer.

Only by understanding the molecular and genetic properties of cancer cells can we understand what causes them to become malignant and how to reverse or prevent these changes. That is why for over 30 years the NJCCR has provided more than \$40 million in support of discovery-oriented basic science cancer research, and has worked closely with experts statewide to achieve significant advances in understanding the cellular and molecular events that lead to cancer.

While much remains to be discovered about the etiology of cancer, the potential to unravel these unknowns has accelerated remarkably. Scientists are closer to fully understanding the more complex interplay among the myriad of factors involved in cancer progression. This knowledge will, in turn, lead to ever expanding opportunities for prevention and cure.

New findings from laboratory research performed by NJCCR awardees have already aided cancer specialists in the design of procedures for early diagnosis and improved treatment. Important insights have been gained regarding the role of oncogenes, tumor suppressor genes, immunological factors, and carcinogenic agents in the cancer process. As a result of discoveries made in these areas, new frontiers have emerged including molecular epidemiology, gene therapy, genetic risk evaluation, and others that hold significant promise in furthering the battle against cancer.

Our goal is to continue to fund the promising research of New Jersey's most creative young scientists, enabling our State to excel in recognizing and supporting important breakthrough research from its infancy. Our strategy has been to provide the most promising proposals with seed money, and to support research fellowships as they manifest into creative new studies the causes, prevention and treatment of cancer. We are gratified with how far the state's cancer research has advanced and proud that our investment strategy has leveraged on average over \$10.44 in peer-reviewed federal funding for every dollar the NJCCR has invested. We are more committed than ever to funding innovative research and accelerating the pace at which new therapies and drugs are brought to the patients who need them most; and in continuing our efforts to bring together New Jersey laboratory and clinical investigators, patients, legislators, and citizens, to advance our mission.



The overall objectives, strategies, and priorities of the NJCCR are set by the Commissioners, who are volunteer experts in various relevant areas. The Commissioners actively participate in overseeing the program and make final recommendations on the research projects to be funded. In each grant cycle, the NJCCR supports applications based on the evaluation of independent peer reviewers' evaluations, assessment of responsiveness to program priorities, and available funds.

The NJCCR currently consists of 7 members, appointed by the Governor with the consent of the Senate: 4 scientists/clinicians, 1 member from private industry, 1 ex-officio member from the NJ Department of Health, and 1 ex-officio member from the NJ Department of Environmental Protection.

- 1. **Kenneth Adler, M.D., FACP** **2004 – Present**
Chairperson
Scientist/Clinician Member
- 2. **Thomas Atherholt, Ph.D.** **1995 – Present**
Ex-Officio Member
NJ Department of Environmental Protection
- 3. **Robert Hariri, M.D. Ph.D.** **2011 – Present**
Private Industry Member
- 4. **Karen Pawlish, M.P.H., Sc.D.** **2012 – Present**
Ex-Officio Member
NJ Department of Health
- 5. **Anna Marie Skalka, Ph.D.** **1983 – Present**
Scientist/Administrator Member
- 6. **Kathleen Scotto, Ph.D.** **2010 – Present**
Scientist/Administrator Member
- 7. **Jonathan Yavelow, Ph.D.** **2010 – Present**
Scientist/Educator Member

Dr. Kenneth Adler (Chair)

Dr. Adler is currently an attending physician in Hematology-Oncology at Morristown Memorial Hospital and an assistant clinical professor at Rutgers University. He received his undergraduate degree from the University of Pittsburgh and then graduated from Albany Medical College in New York. In addition, his internal medicine residency and Hematology-Oncology fellowship was completed at Albany Medical Center. In 2002, Dr. Adler was awarded the American Cancer Society's St. George National Award for his volunteer work on the local, state, and national levels. He has served as a volunteer for the American Cancer Society since 1981. He is a member of the Practice Committee of the American Society of Hematology, and founding member of Regional Cancer Care Associates. He also was the recipient of this year's Augusta Stone Award from Morristown Medical Center in recognition of his service to the institution.

Dr. Thomas Atherholt

Dr. Atherholt is a member of the Division of Science, Research and Technology at the New Jersey Department of Environmental Protection (DEP) where he is a research microbiologist. Dr. Atherholt received his doctorate in microbiology from Rutgers University. He performed environmental research at the Coriell Institute for Medical Research in Camden, NJ prior to joining the DEP in 1990.

Dr. Robert Hariri

Dr. Hariri is the Chairman and Founder of Celgene Cellular Therapeutics, one of the world's largest human cellular therapeutics companies. Dr. Hariri has pioneered the use of stem cells and biomaterials to treat a range of life threatening diseases. He received his medical degree and Ph.D. from Cornell University. Dr. Hariri received his surgical training at The New York Hospital-Cornell Medical Center where he also directed the Aitken Neurosurgery Laboratory and the Center for Trauma Research.

Dr. Karen Pawlish

Dr. Pawlish holds both a Ph.D. and M.P.H in epidemiology with a focus on cancer epidemiology conducting population-based epidemiologic studies at the New Jersey State Cancer Registry (NJSCR). She is currently a co-investigator/NJSCR site study coordinator for the Women's Circle of Health Study (a population-based case-control study of breast cancer in African American women) and the Epidemiology of Hepatocellular Carcinoma study (a population-based case-control study of liver cancer). She also functions as the New Jersey site study coordinator/co-investigator for the Genome Wide Admixture Scan for Multiple Myeloma in African Americans study (a multi-site case study of multiple myeloma in African Americans).

Dr. Kathleen Scotto (Vice-Chair)

Dr. Scotto is currently Vice-Chancellor of Research and Dean for the Graduate School of Biomedical Sciences for Rutgers School of Biomedical Health Sciences, Rutgers, the State University of New Jersey. She received her Ph.D. from the Cornell Graduate School of Medical Sciences. Prior to joining Rutgers, she served as an Associate Professor of Molecular Pharmacology and Experimental Therapeutics at Memorial-Sloan Kettering Cancer Center and Professor with tenure at the Fox Chase Cancer Center. In addition to her administrative roles, Dr. Scotto maintains an active NIH funded laboratory at Rutgers Cancer Institute of New Jersey.

Dr. Anna Marie Skalka (Chair Emerita)

Dr. Anna Marie (Ann) Skalka is Professor and the W.W. Smith Chair in Cancer Research at the Institute for Cancer Research at the Fox Chase Cancer Center in Philadelphia, where she served as Sr. Vice President for Basic Science from 1987 until 2008. She received a Ph.D. degree in Microbiology from New York University Medical School. Dr. Skalka has also been deeply involved in state, national, and international advisory groups concerned with the broader, societal implications of scientific research, including the NJCCR, which she chaired from 2008-2013. In recognition of her many research accomplishments; she has been honored by election to the American Academy of Arts and Sciences, the American Association for the Advancement of Science, and the Board of Governors of the American Academy of Microbiology.

Dr. Jonathan Yavelow

Dr. Yavelow has been a Professor of Biology at Rider University for over 23 years, and a collaborator and member with the NJCCR since 1984. He received his Ph.D. in Cellular and Molecular Biology from the University of Southern California, Los Angeles. He previously served as a Visiting Member at the Institute for Advanced Study in Princeton. He also helped to convene and lead the Science Advisory Board at Rider University, from 1990-2010.

Commission Staff and Contact Information

“NJCCR has provided seed funds to established scientists to investigate new areas of research that may be high risk, but if successful will have higher impact. For instance, an NJCCR grant allowed me to develop a new computer-aided imaging system to analyze human biopsy specimens. These early studies, supported by the NJCCR, were the basis for two five-year grants, one from the National Cancer Institute and another from the National Science Foundation, to support further work.

In collaboration with an international team of scientists and clinicians we developed new quantitative tests for the diagnosis and prognosis of women with breast cancer. These tests could benefit about 7,000 New Jersey women who are expected to be diagnosed with breast cancer each year, and 226,000 women overall in the United States.”

*Dr. David Axelrod,
Professor
Rutgers the State
University of New Jersey*

We rely heavily on our staff, and are thankful for their ongoing dedication and commitment to team work and excellence.

Acting Executive Director

Candido A. Africa III, M.D., CPM

Administrative Staff

Josette Kamara, BS

Consultant

Jennifer Sullivan, Esq.

The Commission’s office is located in Trenton, New Jersey

Phone: 609-292-2204

E-Mail: NJCCR@DOH.NJ.gov

Fax: 609-984-3346

Website: <http://nj.gov/health/ccr/index.shtml>

Mailing address is:

New Jersey Department of Health
Community Health and Wellness Unit
New Jersey Commission on Cancer Research
50 E. State Street, 6th Floor
PO Box 364
Trenton, NJ 08625-0364

Physical location is:

New Jersey Department of Health
Community Health and Wellness Unit
New Jersey Commission on Cancer Research
50 E. State Street, 6th Floor
Trenton, NJ 08625-0364

Economic Changes

As with many other states across the country, New Jersey faces an economic restructuring based on global competition, technological advancements, and health care reform. These are structural changes that are not temporary, and require new approaches to establish and maintain economic stability in an economy that is forever changing. So, why should its citizens continue to fund cancer research during such difficult times?

For an increasing number of people, a diagnosis of cancer is no longer a death sentence. In recent years, statistics have shown that the death toll from some of the most common cancers has dropped to its lowest levels, survival rates continue to climb, and more specifically, more than three quarters of children with cancer survive. These outcomes have been possible thanks in no small part to the efforts of the thousands of cancer researchers and doctors who have dedicated their lives to beating this disease.

Scientific research into cancer does make a difference, but much more needs to be done – New Jersey is proud to be leading the way in the fight.

Strengthening New Jersey Institutions in World-Class Research

University-based research strengthens the recipient institutions. World-class research institutions attract highly talented students and faculty. Healthy growing academic institutions bolster New Jersey's economy.

New Jersey's cancer research enterprise extends beyond the laboratory and campus. NJCCR research funding augments New Jersey's reputation as "the world's medicine chest." Our state has one of the highest concentrations of pharmaceutical and biotechnology industries in the country -- a \$26 billion "engine of growth." The ability of these industries to tap New Jersey's cancer research talent as well as its research breakthroughs bolsters their strength and in turn New Jersey's economy.

Why State Funding Matters: Helping to Grow our Research Community

“NJCCR grants over the years have funded the work of new scientists in New Jersey, enabling them to begin their research careers in the state.

When I started my career in Princeton as an Assistant Professor in 2004, I received a \$100,000 grant from the NJCCR, which was the first grant I ever received as an independent scientist. This grant allowed us to start our research on breast cancer metastasis that eventually led to more than \$10 million in research funding that I received from the federal and private cancer research foundations over the next 7 years.”

*Dr. Yibin Kang,
Professor and Cancer
Researcher
Princeton University*

NJCCR has provided more than \$40 million in discovery-oriented cancer research grants in its 30-year history. Our research grant recipients have, in turn, brought to New Jersey research laboratories millions of dollars in federal financial support. An independent evaluation of the NJCCR by the Edward J. Bloustein School of Public Policy at Rutgers has shown that the NJCCR represents one of New Jersey’s great success stories in terms of public investment in cancer research:

- ❖ More than **85%** of NJCCR grant recipients go on to obtain major national grants within 4 years of their NJCCR award. This is **4X** better than national averages for scientists with new applications to major funding agencies.
- ❖ **8 out of 10** new scientists without any track record or grant history get major national grants within 4 years of their first NJCCR award.

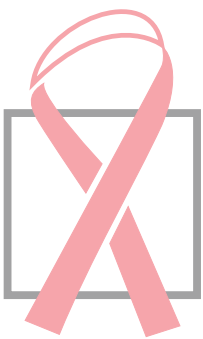


“In 1994 when I was an Assistant Professor starting out at Rutgers University, the NJCCR provided funds for my research in melanoma. My initial grant from the NJCCR has resulted in approximately \$6 million in grants from the National Cancer Institute over the years. NJCCR also has supported graduate students, postdoctoral fellows as well as undergraduates at Rutgers during the summer for many years and these recipients are successful scientists and physicians today.

In 2008, together with two physician scientists at CINJ, we were fortunate to receive another NJCCR grant. Results from the preclinical studies performed funded by the NJCCR translated into four ongoing or completed clinical trials at CINJ. It is essential for the state of New Jersey to have a visible and vital organization that supports the cancer research community.”

*Dr. Suzie Chen
Professor
School of Pharmacy
State University of NJ*

2013: The Year in Review



Breast Cancer



Childhood Cancer



Prostate Cancer



Lung Cancer

Aside from the annual \$1 million state budget appropriation, the NJCCR receives funding from two other sources: sale of the “Conquer Cancer” license plate, and state income-tax check-offs for breast, prostate, lung and childhood cancers.

Conquer Cancer License Plate

The Conquer Cancer specialty license plate is making good on its promise to “take the fight against cancer to the streets of New Jersey”. Since its inception in 1998, over 63,000 license plates have been sold and more than \$5.5 million dollars have been raised for cancer research in the state.

The NJCCR uses ALL the money raised from the license plates to fund talented scientists at New Jersey research institutions. All grants and fellowships are

competitive and subject to stringent scientific review. This merit-based approach ensures that the very best research is funded. The majority of seed grants awarded by the NJCCR have been very successful in attracting national funds for continued research in the state.



In Fiscal Year 2013, a total of 24,563 plates were sold or renewed. When the proceeds from these sales were combined with renewal fees, more than \$312,700

was raised for cancer research. New Jersey motorists can purchase the plate at any time during the registration cycle for \$50, with a \$10 annual renewal fee, at all Motor Vehicle

Commission offices or through its website:

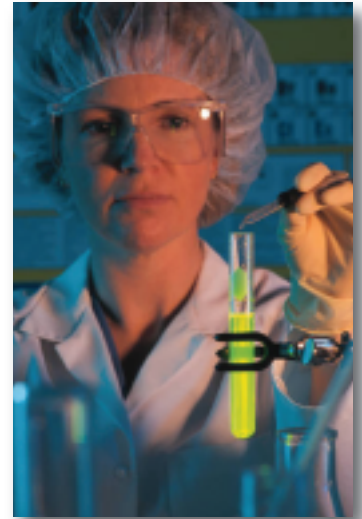
www.state.nj.us/mvc/Vehicle/ConquerCancer.htm

New Jersey Breast, Childhood, Prostate & Lung Cancer Research Funds

The NJCCR administers four targeted funds for cancer research. The New Jersey Breast Cancer Research Fund (BCRF) was created in 1995. In 2000 lawmakers recognized children who have passed away from cancer with a Joint Resolution designating the “Rainbow of Hope” pin as the official symbol for childhood

cancer and September as the *New Jersey Cares About Children with Cancer Month*, which launched the Childhood Cancer Research Fund. The Prostate Cancer Research Fund (PCRF) was initiated online as recently as 2012, creating support for prostate cancer research. All four designated support vehicles are replenished through individual contributions and a check-off box on the New Jersey State Income Tax Return, which allows citizens to voluntarily contribute a portion of their income tax refund or payment.

These designated funds support breast, childhood, prostate, and lung cancer research grants and fellowships, as well as cancer educational programs. Through a competitive scientific peer review process, the NJCCR makes awards for research projects focusing on the causes, prevention, screening, treatment or cure of these cancers. Grants may also be awarded to support basic, behavioral, clinical, demographical, epidemiological and psychosocial research.



The following funds were raised in 2013:

Research Fund	Raised in Tax Year 2013
New Jersey Breast Cancer Research Fund	>\$148,100
New Jersey Childhood Cancer Research Fund	n/a ⁵
New Jersey Prostate Cancer Research Fund	> \$8,678
New Jersey Lung Cancer Research Fund	>\$9,330

⁵ For Fiscal Year 2013, no account number had been assigned.

The NJCCR funds research projects that focus on the genetic, biochemical, viral, microbiological, environmental, behavioral, socioeconomic, demographic and psychosocial aspects of cancer prevention, causes, development, treatment and palliation. Such research may include studies that relate to fundamental aspects of cancer; however, these projects must include biologic systems, tissues, cells, human subjects and/or other materials that have a direct relationship to cancer.

The NJCCR offers Pre- and Post-Doctoral Fellowships to trainees at New Jersey non-profit research institutions with formally established and active graduate research programs. Candidates must apply for a fellowship under the guidance of a Sponsor—a scientist (tenured, tenure-track or equivalent position) capable of providing mentorship to the Fellow. In addition to aiding in the planning, execution and supervision of the proposed research, the Sponsor’s role is to foster the development of the Fellow’s overall knowledge, technical and analytical skills, and capacity for scientific inquiry. The Sponsor is also expected to assist the Fellow in working towards his/her career goals. Awards are made to institutions for the support of the trainee under direct supervision of the Sponsor. A sponsor is only eligible to mentor one NJCCR-funded pre- or post-doctoral research trainee at any one time.

With the restoration of the \$1 million state budget appropriation for the NJCCR in the FY13 budget, the NJCCR was able to award 28 two-year cancer research fellowships in the amount of \$2,160,000, to the following scientists in New Jersey research institutions.

Post-Doctoral Fellowships

1. **Mona Batish, Rutgers the State University of NJ**
Single-molecule Imaging to Detect Cancerous Gene Fusions \$91,000
2. **Chi-Fu Chen, Princeton University**
Effects of Pif1 at G-quadruplex in Mitochondrial DNA \$91,000
3. **Abdul G. Kahn, Rutgers the State University of NJ**
Elucidating the Functions of HCV Glycoprotein E1 \$91,000
4. **Juan Liu, Rutgers the State University of NJ**
Drug-specific Effects of Deregulation of Caspase-8 and p53/p73 in Head and Neck Squamous Cell Carcinoma \$91,000
5. **Joshi M Preeti, Princeton University**
Proteomic Study of DBC1: Deacetylation and Tumorigenesis \$91,000

- 6. Sebastiano Sciarretta MD, Rutgers the State University of NJ**
The Effects of Mst1 Activation Reduces on the Invasion Capacity of Melanoma Cells through Phosphorylation of Beclin-1 on Threonine 108 \$91,000
- 7. Marcus Shin, PhD, Rutgers the State University of NJ**
Elucidate Consequences of IGF-1R and Wnt Oncogene Signaling in Breast Cancer \$91,000
- 8. Goel Shruti, Rutgers the State University of NJ**
Characterization of the SWI/SNF Subunits ARID1A and ARID1B in Cell Cycle Regulation and Tumorigenesis \$91,000
- 9. Jéssica Tomé García, Rutgers the State University of NJ**
E2F3a Role in the Development of Prostate Cancer \$91,000
- 10. Jaebei Wang, Rutgers the State University of NJ**
Regulation of p53 by LIF and Its Role in Colon Cancer \$91,000
- 11. Antoni Celia-Terrassa, Princeton University**
Role of Exosomal miRNAs in Breast Cancer Metastasis \$100,000
- 12. Soumyasri Das Gupta, Rutgers the State University of NJ**
Role of Tocopherols in the Prevention of Estrogen-induced Breast Cancer \$100,000
- 13. Shilpy Joshi, Rutgers the State University of NJ**
Identification and Characterization of Novel Autophagy Regulators for Cancer Therapeutics \$100,000
- 14. Joshi K Kishore, Rutgers the State University of NJ**
Modulation of the Ubiquitin Proteasome System by Extracellular Signaling: A Decisive Step in Cancer Progression \$100,000
- 15. Ansu Perekatt, Rutgers the State University of NJ**
Mechanisms Controlling Stem Cell Fate by the Transcription Factor YY1 \$100,000
- 16. Mo Weng, Princeton University**
Mechanical Force-induced Cell-to-Cell Junction Remodeling \$100,000
- 17. Shiyun Yu, Rutgers the State University of NJ**
Abrogating a Survival Pathway in Early Stage Colon Cancers \$100,000

Pre-Doctoral Fellowships

- 1. Jonathon D Brzezinski, Rutgers the State University of NJ**
MuLV p12 Function in Tethering and Integration \$50,000
- 2. Ashley L Cornett, Rutgers the State University of NJ**
Post-Transcriptional Regulation of COX-2 in Cancer Cells \$50,000
- 3. Stephani A Davis, Rutgers the State University of NJ**
Modeling Cyclin-dependent Kinase Inhibitor Activity for Drug Discovery \$50,000
- 4. Saurav De, Rutgers the State University of NJ**
Characterization of the Role of IRF5 in Lymphoma Genesis \$50,000
- 5. Jennifer L. DeCotiis, Rutgers the State University of NJ**
Elucidating the Role of Notch Signaling Proteins in Transcriptional Specification During Infection by a DNA Tumor Virus \$50,000
- 6. Jason D Domogauer, Rutgers the State University of NJ**
Cancer-Associated Fibroblasts and the Propagation of Radiation-Induced Stress \$50,000
- 7. Joanna E Haye, Princeton University**
Understanding the Mechanism of DNA Mismatch Repair \$50,000
- 8. Andrew C Hoffman, Rutgers the State University of NJ**
Defining Intestinal Stem Cell Identity through Specific Enhancer Activity \$50,000
- 9. Chase E Hulderman, Princeton University**
Ubiquitin-dependent Regulation of EMT and Metastasis \$50,000
- 10. Tiffany Shih, Rutgers the State University of NJ**
Inducing Tumor-targeted Cytotoxic Responses through Activated DC Cross-talk with Innate and Adaptive Cytotoxic Cells \$50,000
- 11. Michelle P Turek, Rutgers the State University of NJ**
Pharmacological Restoration of Mammary Stem/Progenitor Cell Homeostasis and Implications \$50,000

Grants & Fellowships FY 2009 - FY 2012

In addition to the 2013 grants, awards were made to the following promising young scientists in FY 2009-2012.

Grantee	Grant Type	Grant Term	Researcher	Amount	Project Title
Rutgers	2 Year	7/1/09-6/30/11	Bhanot, Giyan	\$66,000	RT-PCR Assay for Breast Cancer Subtypes
Princeton	Seed	6/26/09-7/25/11	Kang, Yibin	\$140,088	Targeting Notch Signaling in Breast Cancer Metastasis
UMDNJ-NJMS ⁶	Seed	6/26/09-12/25/11	Wu, Lizhao	\$132,804	The role of E2f3 locus in Myc-triggered Prostate Cancer
UMDNJ-RWJMS ⁷	Seed	6/26/09/6/25/11	Zarbl, Helmut	\$116,433	Effect of Fetal Zeranol Exposure to Adult Disease
RWJMS	Seed	6/26/09-6/25/11	Schaar, Dale	\$130,044	The Role of PDCD2 in Normal and Malignant Hematopoiesis
CINJ ⁸	RDA ⁹	6/26/09-6/25/11	Levine, Justin	\$553,393	Computational and Systems Biology-Enhanced Molecular Epidemiology Network
CINJ	RDA	6/26/09-6/25/10	White, Eileen	\$557,000	Multidisciplinary Research Network Targeting the Autophagy Pathway for Cancer Therapy
RWJMS ¹⁰	Seed	6/26/09-6/25/10	Keen, Judith	\$118,882	The Role of HUR in Tamoxifen Resistance
NJMS ¹¹	Seed	6/26/09-6/25/10	Harrison, Lawrence	\$133,850	Induced Oxidative Stress with Hyper-thermic Perfusion
RWJMS	Seed	6/26/09-6/25/11	Sabaaway, Hatem	\$132,853	Development of Zebrafish Cancer Research Facility

Appendix

Grantee	Grant Type	Grant Term	Researcher	Amount	Project Title
NJMS	Seed	6/26/09-6/25/11	Barnes, Betsy Jo	\$130,338	New Routes to Apoptosis that are p53-independent
Rutgers	RDA	6/26/09-6/25/11	Chen, Suzie	\$517,100	The Glutamatergic Pathways in Melanoma
CINJ	Seed	6/26/09-6/25/11	Gharibo, Mcidec Meric	\$126,996	Allogenic Cellular Therapy for Hematologic Cancers
NJMS	RDA	6/26/09-6/25/10	Wieder, Robert	\$476,340	UMDNJ-NJMS/UH Cancer Center Clinical Research Program
CINJ	Seed	6/26/09-6/25/11	Feng, Zhaohui	\$135,318	The Role of Leukemia Inhibitory Factor in Breast Cancer
CINJ	RDA	6/26/09-6/25/10	Reiss, Michael	\$557,000	Imaging and Targeting TGF-b in Metastatic Breast Cancer
Rutgers	RDA	6/26/09-6/25/10	Michael, Todd	\$505,810	Next Generation Sequencing Core for Cancer Research in New Jersey
RWJMS	Seed	6/26/09-6/25/10	Kim, Isaac	\$133,680	BMP-6 and Neuroendocrine Differentiation in Prostate Cancer
CMMI/ GSCC ¹²	RDA	6/26/09-12/31/10	Goldenberg, David	\$557,000	Anti-Body Targeted Therapy for Hematologic Cancers
UMDNJ- RWJMS	Mini	8/3/09-6/30/10	O'Malley, Denalee	\$20,000	Cancer Survivorship: Identification and Development of Critical Research Pathways and Interventions
Princeton	Mini	6/1/10-8/31/10	Gammie, Alison	\$20,000	Summer Fellowship
Rutgers	Mini	6/1/10-8/31/10	Levine, Justin	\$20,000	Summer Fellowship
Princeton	Seed	12/1/09-11/30/11	Gammie, Alison	\$300,000	DNA Mismatch Repair and Cancer
Rutgers	Seed	12/1/09-11/30/11	Xie, Ping	\$300,000	TRAF3 Signaling Pathways for B Lymphoma Agenesis

Grantee	Grant Type	Grant Term	Researcher	Amount	Project Title
NJ Dental School	Seed	12/1/09-11/30/11	Kachlany, Scott	\$299,498	A Novel Biological Therapy for Treatment of Leukemia
Princeton	Seed	1/1/10-12/31/11	Garcia, Benjamin	\$300,000	Proteomic Screening for Epigenetic Cancer Codes
UMDNJ-RWJMS	Mini	1/1/10-12/31/11	Chaudhary, Sunita	\$25,000	Evaluating Interventions Promoting Translational Cancer Research Career Choice by Minority Youth
LTLF ¹³	Mini	1/11/10-12/31/11	Gordon, David	\$25,000	Limitless Learning for Student with Cancer
CINJ	Seed	12/1/09-11/30/11	Lee, Jonathan	\$300,000	The Role of IDO-blockade in Melanoma Treatment
Rutgers	Seed	12/1/09-11/30/11	Marotrigiano, Joseph	\$300,000	Defining Essential Regions of E2 of HCV Infection
CINJ	Seed	12/1/09-11/30/11	Vasquez, Alexei	\$150,000	Genetic Variants Implicated in Breast Cancer
CINJ	Seed	12/1/09-11/30/11	Banerjee, Debabrata	\$150,000	MCSs in African American Breast Cancer Patients
Princeton	LOA ¹⁴	12/1/09-11/30/11	Post-doc – He, Tsai, Wong	\$433,000	
			He, Bing		In vivo Analysis of Drosophila Ventral Furrow Formation
			Tsai, Yuan-Chin		Induction of Host DNA Methylation by HIV-1 Infection
			Wong, Ming-Ching		Transcriptional Control of Distal Tip Cell Migration
			Pre-doc - Baker, Boghaert, DeHart, Poole		

Appendix

Grantee	Grant Type	Grant Term	Researcher	Amount	Project Title
			Baker, Kari		Using Zebrafish to Student TGF-beta-induced Cell Motility
			Boghaert, Eline		Modeling Tumor Dynamics in Vitro and in Silico
			DeHart, Caroline		A Biochemical Basis for the Hr6 Oncolytic Phenotype
			Poole, Kimberly		The Role of Rab23 in TGF-beta Signaling
CINJ	LOA	12/1/19-11/30/11	Post-doc – Mehrota, Ma, Zhang	\$258,000	
			Mehrota, Sonam		Understanding How BCCIP Regulates Genome Stability and p53
			Ma, Jianglin		Functional Analysis of the PALB2-Keap 1 Interaction
			Zhang, Cen		GL82, a Novel p53 Target Gene in Liver Tumor
RWJMS	LOA		Post-doc-None Pre-doc – Rota, Fishlock, Dulal	\$150,000	
			Dulal, Kalpan		Identification of Human Cytomegalovirus Pathogenic Genes
			Fishlock, Dulal		Oncogene Induced Telomere Dysfunction
			Rota, Lauren		IGF Signaling in Normal and Malignant Breast Stem Cells
Rutgers	LOA	12/1/09-11/30/11	Post-doc - None	\$106,105	

Grantee	Grant Type	Grant Term	Researcher	Amount	Project Title
			Basavanhally, Ajay		Qualitative Prognosis on Breast Cancer Histopathology
			Irgon, Joseph		Identifying biomarkers for response to treatment in CLL
			Peddada, Lavanya		Novel carrier for antisense cancer therapies
UMDNJ	Mini	6/1/11-8/30/11	Mayo, Anthony	\$30,000	Summer Fellowship Mini-grant
Princeton	Mini	6/1/11-8/30/11	Hunninghake, Rebecca	\$30,000	Summer Fellowship Mini-grant

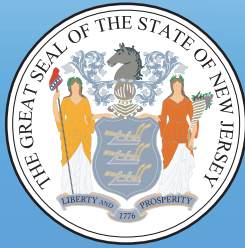
- 6 University of Medicine and Dentistry of New Jersey – New Jersey Medical School
- 7 University of Medicine and Dentistry of New Jersey – Robert Wood Johnson Medical School
- 8 Cancer Institute of New Jersey
- 9 Research and Development Award
- 10 Robert Wood Johnson Medical School
- 11 New Jersey Medical School
- 12 Center for Molecular Medicine and Immunology/Garden State Cancer Center
- 13 Living Through Learning Foundation
- 14 LOA = Letter of Agreement











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