2015 Division Review
Where Science & Philanthropy Converge

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SCIENTIFIC REVIEW COMMITTEES

The Medical Foundation
A division of Health Resources in Action
For the past 59 years, Health Resources in Action’s Medical Foundation has worked with foundations and bank trusts to guide their philanthropic investments in medical research.

From Myelodysplastic Syndromes Research to promoting Child Health advances in New England, from expanding computational and qualitative research efforts in Virginia to supporting biomedical innovation and discovery by early stage investigators, our clients have been at the forefront of advancing discoveries and cultivating the careers of postdoctoral, junior facility and established scientists in institutions throughout the country and across the globe. Since the first awards in 1957, our clients’ dollars have trained thousands of physician researchers, spurred new discoveries in medicine and clinical care, and helped improve the health outcomes for countless numbers of people.

The rapidly evolving nature of research today requires the wide range of resources of some 150 world class scientists that volunteer their time to make our clients’ programs as successful as they are. The work also requires knowledgeable staff familiar with the science, and skilled in the complexities of medical philanthropy. I am delighted to be able to share the results of our clients’ investments in medical research as well as highlight the efforts of our talented and dedicated staff in ensuring that those investments work.

This, our 2015 Review, introduces you to our current roster of clients, highlights our award recipients, and illustrates the impact, in terms of numbers and results, achieved through thoughtful investments in medical research.

After 27 years, I have retired as President and CEO of Health Resources in Action. I am enormously pleased with the relationships that we have fostered with our clients over those years and I am awed with the results that these philanthropists have achieved in advancing our understanding, treatment and prevention of disease.

I hope that you find this year’s review informative and I invite you to follow us at www.hria.org.

RAY CONSIDINE
2015 President/CEO
ROBERT SEGE, MD, PHD, FAAP, VICE PRESIDENT
617.279.2240, ext. 063, RSege@hria.org
Robert Sege, MD, PhD, FAAP is Vice President of HRiA, where he directs The Medical Foundation. Together with Dr. Kanki, Dr. Sege oversees the clinical and health services research award programs. He has published and spoken on issues affecting the research workforce, as well as an emerging effective health systems approaches to the promotion of child well-being. He is a graduate of Yale College, and received his PhD in Biology from MIT and his MD from Harvard Medical School. Prior to joining HRiA, he was a Professor of Pediatrics at Boston University School of Medicine.

JOHN KANKI, PHD, SCIENTIFIC DIRECTOR
617.279.2240, ext. 329, JKanki@hria.org
Dr. Kanki is the Scientific Director of The Medical Foundation where he oversees life sciences consulting projects and grant program development. To date, he has created eight grant programs and conducted eleven consulting projects/evaluations. Dr. Kanki graduated from Wesleyan University and received his PhD in Biology from UC San Diego. He completed postdoctoral studies at the University of Michigan, Princeton University, and the University of Pennsylvania. Prior to joining TMF, Dr. Kanki was a Senior Research Scientist for twelve years at the Dana-Farber Cancer Institute supervising research in the Department of Pediatric Oncology. Dr. Kanki also serves on the Board of Directors of the Health Research Alliance, a leading group of non-profit organizations supporting biomedical research and training.

GAY LOCKWOOD, MSW, SENIOR PROGRAM OFFICER
617.279.2240, ext. 702, GLockwood@hria.org
Ms. Lockwood’s expertise is informed by 26 years of solid relationships with academic research institutions and senior scientists. She has launched several grant programs, oversees annual scientific meetings and continues to guide award recipients throughout their funding cycles. She brings organizational, resource and client relations skills from prior positions in both diplomatic and healthcare settings.

JEANNE BROWN, PROGRAM OFFICER
617.279.2240, ext. 709, JBrown@hria.org
Ms. Brown enhances the grantmaking activities by delivering efficient services through strategic implementation of best practices and communications efforts. She brings exceptional skills in planning, budget management and problem solving to the team.

ERIN JOHNSTONE, PROGRAM OFFICER
617.279.2240, ext. 710, EJohnstone@hria.org
Since joining the Foundation, Ms. Johnstone has managed the flow of numerous grant and program-related activities through their life cycles, in addition to improving the systems that make this work possible. In 2015, she launched a new international fellowship and collaborated on the website redesign. Ms. Johnstone also enjoys partnering with organizational colleagues on professional development and worksite wellness practices.

LINLEY NYKIEL-BUB, ASSOCIATE PROGRAM OFFICER
617.279.2240, ext. 320, LNykiel-Bub@hria.org
Ms. Nykiel-Bub manages grant programs in a Program Officer capacity and is also responsible for our extensive grants management database and online application system, including the oversight of a major system upgrade which occurred in April 2016. In addition, she provides operational support for grant programs and life science consulting projects.

SAMUEL BOADU JR., ADMINISTRATIVE COORDINATOR
617.279.2240, ext. 393, SBoadu@hria.org
In 2015, Mr. Boadu joined The Medical Foundation to provide support to the team’s workflow. He provides operational assistance to our grant-making programs and life science consulting projects, while also providing technical and logistical support for our review committee meetings. Most recently he has been working with Ms. Nykiel-Bub in the transition to our new grants management platform! Mr. Boadu is currently an MPH candidate at Boston University, School of Public Health.

www.tmfgrants.org/tmfservices
# Programs at a Glance

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For Postdoctoral Fellows or Mentored Clinical Researchers  
(24 awards in 2015 totaling $2,454,592)

For Junior Faculty Members  
(28 awards in 2015 totaling $4,500,000)

For Senior Research Faculty Members  
(33 awards in 2015 totaling $16,165,000)
Programs at a Glance

More information is available in this publication or by contacting each Program Officer at The Medical Foundation at HRiA.

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Director’s Report

THE MEDICAL FOUNDATION
AT HEALTH RESOURCES IN ACTION

This year, The Medical Foundation at HRiA completed its fifty-eighth year of service overseeing the management of health-related grant awards on behalf of the philanthropic community. During the past year, we helped distribute over $20 million in new grants through our 13 Programs. This annual review provides a snapshot of these new investments in extraordinarily promising research.

The Medical Foundation offers unbiased scientific review to fund the best science as well as diligent award oversight on behalf of research-related philanthropies. Our ability to perform this service results from the tremendous support of the biomedical community, in Boston and beyond, to provide our clients with the highest assurance that their investment in biomedical research will result in improvements in health, healthcare, and the advancement of both science and the scientific careers of young investigators.

During 2015, my first full year at The Medical Foundation, I’ve had the opportunity to see why the scientific community deserves to be called a “community.” Communities can only be sustained when individual members contribute their time and expertise to the common good, and to the continuation of the community and its values. The extraordinary thoughtfulness and dedication of the scientific reviewers, who are themselves leaders in their fields, is truly remarkable. They volunteer their time and provide thoughtful evaluations of each proposal. At each of our committee meetings, the discussions go to the heart of the matter: will the funding achieve the objectives of the Program?

Private funding fills a critical need

In the past decade, grants from the National Institutes of Health have become extremely competitive. As a result, junior investigators often find it hard to secure federal funding. More seasoned investigators find that truly innovative ideas require outside support to collect enough data to compete for large federal grants. The Medical Foundation assists our clients in meeting these acute needs in biomedical research, filling an important niche in the research environment.

For junior investigators, our reviews include a careful assessment of the quality of mentoring, the independence of newly hired faculty members, and the likelihood that the proposed project will advance their careers. Many of today’s academic leaders cite earlier private funding as a key pivotal point in their careers.

More senior investigators note the exceptional impact of the innovation awards. These awards are sorely needed to allow them to test new and groundbreaking ideas, catalyzing extraordinary advancements in our understanding of health and health care.

In summary, 2015 saw a continuation of our ability to help private philanthropies make wise investments in medical research — ones that make a real difference.

Our Scientific Review Process

We custom design each program to identify and support the very best projects that further an organization’s mission and vision through the following general approach:

1. Identify the philanthropic goals of each research funding entity in consultation with their trustees and senior administrators.
2. Prepare a request for applications that is consistent with the client’s overall goals and mission.
3. Disseminate the request for applications using our database of institutional contacts throughout the United States and internationally and accept applications via our online portal.
4. Convene a scientific review committee to provide objective reviews of each proposal.
5. Present the results of the scientific review committee to the funder for final funding decisions.
6. Notify applicants of the outcomes. As a service to the scientific community, we do our best to provide reviewers’ comments to benefit each applicant.
7. Continue to follow-up with all Awardees with respect to progress, financial and final reporting.
THE CHARLES A. KING TRUST POSTDOCTORAL FELLOWSHIP AWARDS

The Medical Foundation develops high-impact grant programs customized to meet their client’s health-related missions. However, many factors determine a Program’s continued effectiveness, including: the understanding of a disease’s causes and treatment, the funding landscape and the scientific workforce. These factors change over time. In order to help programs to maintain their impact, we provide in-depth Grant Program Evaluations in our Life Sciences Consulting services.

At the request of its trustees, we conducted an evaluation of the Charles A. King Trust Postdoctoral Fellowship Program in Massachusetts (see page 13), one of the oldest and most prestigious fellowship programs in the nation. Its focus is basic biomedical research with the mission of understanding the causes of human disease to drive therapeutic advance. The evaluation assessed Awardee impact on biomedical research and their career success.

Our analysis spanned the time from the inception of the Charles A. King Trust Awards Program in 1979 through 2014. We investigated the scientific contributions and progress of 605 Awardees, and received feedback from 325. In addition, sixty-six current and former King Trust mentors and reviewers were interviewed for their broad perspective of the funding landscape, the value of the future scientific workforce and the funding niche that the King Trust addresses. These senior investigators represented many biomedical fields and included distinguished leaders of biomedical departments and research institutes, as well as two Nobel Prize laureates.

The $34.6 million investment by the Charles A. King Trust in its awardees has been leveraged an estimated 106-fold to garner $3 billion in NIH grant support by Awardees over the life of the Program. To date, King Trust Awardees have published nearly 33,000 peer-reviewed research articles that have led to over 1.4 million citations by the scientific community. Using a current metric of publication impact the average King Trust Awardee from Award years 1979 to 2006 falls within the top 1% of all biomedical researchers.

Our findings demonstrated that the basic science research of Awardees contributed to the foundation of knowledge essential for subsequent biomedical and therapeutic advances across a broad spectrum of diseases (Table 1). Furthermore, of the 605 Awardees, 94% continued life-long scientific research careers, 73% hold faculty positions, 44% achieved full Professor and 25% continue to conduct research in Massachusetts (Table 2). Clearly, the impact of this Award launching successful careers in basic research over the years is staggering and remarkably successful.

The data in this report supports the conclusion that the Charles A. King Trust research funding strategy continues to meet its core mission and remains as vibrant and relevant now, as it did at its inception thirty-five years ago.

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Introducing a New Program Focus

THE DR. RALPH AND MARIAN FALK MEDICAL RESEARCH TRUST — SUPPORTING HIGH-RISK, HIGH-REWARD TRANSFORMATIVE BIOMEDICAL RESEARCH

In 2015, the Trustees of the Dr. Ralph and Marian Falk Medical Research Trust hired The Medical Foundation at HRiA to advise on its biomedical research awards programs. The Trust’s mission focuses on funding translational research to improve medical treatments and to find new cures.

The Trust wished to focus on funding translational research, a well-acknowledged funding gap often referred to as the “valley of death,” that bridges basic science research and clinical research. While NIH supports academia-based basic research, these elemental discoveries often languish due to their need for further study and refinement before assessing their practical impact. Only after translational studies have been completed successfully, will industry sponsors become interested in supporting costly clinical testing and evaluation.

Bank of America as trustee, strongly desired to support translational research aimed at targeting some of the toughest problems in biomedical research. Addressing these questions is risky. In order to manage this risk while still promoting out-of-the-box ideas, the Program offers a two-stage structured competitive research award program that supports high-risk, high-reward research led by experienced investigators.

Applicants for one-year Catalyst Awards are accepted from invited institutions, each of which may submit up to two applications, most often after competitive processes within each organization. Catalyst Award applicants specify the milestones and benchmarks that they need to achieve to indicate successful progress. These one-year awards are specifically designed to encourage collaborations to expedite progress and testing of the principles involved in solving these complicated scientific problems. Catalyst Awards, in short, are designed as proof-of-concept studies for further exploration.

Catalyst Awardees may apply for additional funding through the Transformational Awards Program. These larger grants fund additional years of research, based on the successful accomplishments of the Catalyst Awards. They allow investigators to bridge the “valley of death” and move ideas from innovation towards clinical application.

This two-stage award process encourages scientists to explore high-risk ideas with substantial funding to test the principles of their innovations, and then provides the opportunity to obtain further funding to bring their research and ideas closer towards realization in the clinic.

Innovative grant programs require innovation in their scientific review process as well. The Medical Foundation at HRiA was fortunate to recruit Bo Saxberg, MD, PhD as the first Chair of our scientific review committee for the Falk Programs. Dr. Saxberg is an internationally renowned advisor for the biotech and pharmaceutical industries. He works to help identify future trends and promising new avenues of scientific exploration. The Medical Foundation, recruited a committee with dramatically varied experiences: traditional academic research leaders were joined by foremost experts in biotechnology and those with technology transfer expertise to identify the best potential scientific innovations that could significantly improve the diagnosis and treatment of the most challenging human health conditions. The inaugural scientific review meeting, held in Chicago, featured a lively discussion and exchange of ideas, and resulted in the identification and funding of truly remarkable research projects. Together with the Trustee, we look forward to seeing this unique funding opportunity contribute to major progress in some of the most difficult problems currently facing biomedical research.
Dr. Ralph and Marian Falk Medical Research Trust Awards Programs

IMPROVING CURRENT TREATMENTS AND FINDING CURES FOR DISEASES FOR WHICH NO CURE IS KNOWN

In 2014, the Falk Medical Research Trust launched a new program to fund transformational research focused on increasing the impact of its funding. In keeping with the intention to fund breakthrough research designed to overcome roadblocks in scientific progress, there are two separate linked awards:

- The Catalyst Research Award provides one-year seed funding to help investigators lay the foundation for the Transformational Award. Select institutions are invited to submit up to two applications per grant cycle.
- The Transformational Research Award provides two years of additional research funding to support successful projects funded by a Catalyst Award and help them achieve their final goals. Applications are accepted only from prior Catalyst Awardees who have successfully achieved the proposed benchmarks and milestones outlined in their Catalyst Award proposals.

2015 Catalyst Award Recipients

The following nine exceptional applicants were selected for the one year Catalyst Award.

**ANDREW APLIN, PH.D.**
Thomas Jefferson University
Targeted Inhibitor Strategies in Uveal Melanoma

**SAMIRA AZARIN, PH.D.**
University of Minnesota
Scaffold-Based Vaccination Strategy to Target Metastatic Disease

**PAUL BOLLYKY, M.D., PH.D.**
Stanford University School of Medicine
Targeting Bacteriophage to Treat Biofilm Infections

**STEVEN DOWDY, PH.D.**
University of California San Diego
Development of Next-Generation Antibody-RNAi Conjugates (ARC) to Treat AML

**NICKOLAI DULIN, PH.D.**
University of Chicago Pritzker School of Medicine
Development of a Novel Small Molecule for Treatment of Fibrotic Diseases

**JOHN IMIG, PH.D.**
Medical College of Wisconsin
Novel Therapy for Kidney Disease

**MARK ROSENBLATT, M.D., PH.D.**
University of Illinois College of Medicine at Chicago
Nanoengineered Silk Biomaterials for Ocular Regenerative Medicine

**STEPHEN STRITTMATTER, M.D., PH.D.**
Yale University
Validation of Targets to Rescue Synapse Loss in Alzheimer’s Disease

**SU-CHUN ZHANG, M.D., PH.D.**
University of Wisconsin-Madison
Refine Cell Therapy Outcomes by Remote Regulation of Neural Circuitry in Non-Human Primates

2015 Transformational Award Recipients

Award recipients were selected from a competitive pool of Catalyst recipients.

**OLUFUNMILAYO OLOPADE, M.D.**
University of Chicago
Genomics, Metabolomics and Epigenetic Regulation in Breast Cancer

**RICHARD PESTELL, M.D., PH.D.**
Thomas Jefferson University
Targeting CCR5 in Cancer Treatment

**MENACHEM SHOHAM, PH.D.**
Case Western Reserve University
Novel Antivirulence Agents against MRSA and other Bacterial Pathogens

**STEPHEN STRITTMATTER, M.D., PH.D.**
Yale School of Medicine
Medical Therapy to Promote Neural Repair and Functional Recovery From Spinal Cord Injury

**MICHAEL WHITFIELD, PH.D.**
Geisel School of Medicine at Dartmouth
Mining Genomic Data to Identify Novel Therapeutics for Systemic Sclerosis
Recently, the HRA has established four major initiatives:

1. Strengthening scientific expertise at the FDA by fostering interaction between FDA scientists and the wider scientific community.

2. Expanding its collective grants database. Information in the database covers 27,000 HRA member-supported research projects totaling $7.4 billion from 2006 to present. The database will allow HRA members to track research funding trends, and highlight funding patterns across organizations and with the NIH.

3. Working towards improving public access to scientific publications resulting from HRA-member funded projects.

4. Enhancing the partnership between grant makers and academic institutions by addressing issues including intellectual property ownership, and funding of institutional overhead.

DR. KANKI JOINS THE HEALTH RESEARCH ALLIANCE BOARD OF DIRECTORS

In 2015, Dr. John Kanki, Scientific Director of The Medical Foundation at HRiA, was appointed to the national Board of Directors for the Health Research Alliance.

The Medical Foundation at Health Resources in Action was a founding member of the Health Research Alliance (HRA). Established in 1998, HRA is now an international consortium of 69 not-for-profit nongovernmental funders that together provide over $1.5 billion annually to support the continuum of health research and training. HRA brings together its members to foster communication and collaboration, provide comprehensive data and analysis about the funding of biomedical research and training, identify gaps in funding, facilitate innovative grant making and address key issues necessary to accelerate research discovery. HRA members share best practices in grants administration, early career development awards, discovery science support, evaluation and impact analyses, and methods to accelerate the development of therapeutics and drug development programs.

TMF is honored that John has joined the Board of Directors, and that our organization remains a thought leader in medical philanthropy.
Charles H. Hood Foundation Child Health Research Awards Program

ADVANCING CHILD HEALTH THROUGH THE SUPPORT OF MEDICAL RESEARCH SINCE 1942

Since 1942, the Hood Foundation has been supporting promising scientists as they begin to launch their research careers. Established in memory of Charles Hood, a pioneer in the dairy industry in the late 1880’s, the Foundation has awarded 585 Child Health Research Awards to New England investigators, all with the goal of improving the health and quality of life for children. Many past award recipients are now leaders in the field of pediatric health research.

The intent of the Child Health Research Awards Program is to support newly independent faculty. Grants are designated for hypothesis-driven clinical, basic science, public health, health services, and epidemiology research projects focused on child health. Over the course of two application cycles in 2015, 56 applications were submitted resulting in 10 awards.

In addition to the Child Health Research program, the Foundation also supports a Major Grants Initiative to Advance Child Health. The 2015 Program funded high-risk, innovative translational or clinical research having an impact on improving clinical outcomes, health care delivery or reducing future health care expenditures. Beginning with the 2016 grant cycle, these awards will focus on either of two significant fields of pediatric research: neonatology, or brain science and child development. One faculty member from each of sixteen invited institutions may submit a letter of intent for this Program.

Three-year-old and mother participating in a research study to improve language development and the interaction between children and caregivers. Photograph by Dave Green. Courtesy of Sudha Arunachalam, Ph.D., (2015 Hood Child Health Award Recipient) Boston University.

2015 Child Health Research Award Recipients

SUDHA ARUNACHALAM, PH.D.
Boston University
Improving Child-Caregiver Interactions for Young Children with Autism

ALEJANDRO BALAZS, PH.D.
Massachusetts General Hospital
Evolutionary Dynamics of Pediatric HIV Infection undergoing Antibody-Mediated Selective Pressure

DANIEL BAUER, M.D., PH.D.
Boston Children’s Hospital
Genome Editing of BCL11A for Beta-Thalassemia

MARCELO DIETRICH, M.D., PH.D.
Yale School of Medicine
Hypothalamic Circuits Underlying Brain Development during Childhood

HIROYUKI INUZUKA, PH.D.
Beth Israel Deaconess Medical Center
Targeting Fbw7 for the Treatment of Pediatric T-cell Acute Lymphoblastic Leukemia (T-ALL)

JASON MCLELLAN, PH.D.
Geisel Medical School at Dartmouth
Molecular Mechanisms of Small Molecule RSV Fusion Inhibitors

KRISTIN MOFFITT, M.D.
Boston Children’s Hospital
Host and Bacterial Factors in Staphylococcus aureus Skin Infections in Autosomal Dominant-Hyper IgE Syndrome

BENJAMIN SHORE, M.D., MPH
Boston Children’s Hospital
Responsiveness of the Pediatric Evaluation of Disability Inventory Computer Adaptive Test in Children with Cerebral Palsy

MARGIE SKEER, SC.D.
Tufts University School of Medicine
Understanding the Protective Mechanisms of Family Dinners: Psychometric Testing and Evaluation of the Family Dinner Index

COURTNEY YUEN, PH.D.
Brigham and Women’s Hospital
Efficacy and Safety of a Simplified Treatment to Prevent Multidrug-resistant Tuberculosis in Children

2015 Major Grant Award Recipients

DAVID GOODMAN, M.D.
Geisel School of Medicine at Dartmouth
The Epidemiology and Efficiency of Neonatal Intensive Care

JOEL RICHTER, PH.D.
University of Massachusetts Medical School
Altering the Translational Landscape to Treat the Fragile X Syndrome
2015 Award Recipients

ANNABELLE RODRIGUEZ, M.D.
University of Connecticut Health Center
Immune Checkpoint Inhibition and Atherosclerosis

WILLIAM WAGNER, PH.D.
Wake Forest University Health Sciences
Biofabrication of a Novel Elastomeric Substitute for Autologous Veins in Coronary Artery Bypass Surgery

Harold S. Geneen Charitable Trust Awards Program for Coronary Heart Disease Research

SUPPORTING TRANSLATIONAL HEART DISEASE RESEARCH

The Harold S. Geneen Charitable Trust Awards Program for Coronary Heart Disease Research supports research in the area of the prevention and control of coronary and circulatory failure. The Program targets smaller medical institutions conducting high-impact and innovative translational cardiovascular research. Together with the Trustees, The Medical Foundation identified two outstanding investigators to receive two-year awards in the amount of $280,000 each.

Confocal image of blood vessel progenitor cells growing on an elastic polymeric biomaterial created to form artificial arteries for use in coronary bypass surgeries. Cell nuclei are green. Courtesy of William D. Wagner, Ph.D., FAHA, (2015 Geneen Award Recipient) Wake Forest University School of Medicine.

Synthesizing the elastic polymeric biomaterial used in the creation of an electrospun substitute artery. Courtesy of William D. Wagner, Ph.D., FAHA, (2015 Geneen Award Recipient) Wake Forest University School of Medicine, and Harleigh Warner, PhD graduate student in School of Biomedical Engineering and Sciences at Wake Forest University.
Jeffress Trust Awards Program in Interdisciplinary Research

Thomas F. and Kate Miller Jeffress Memorial Trust

EXPANDING COMPUTATIONAL AND QUANTITATIVE RESEARCH IN VIRGINIA

The Jeffress Memorial Trust was founded in 1981 by Robert M. Jeffress in memory of his parents and is guided by its mission to benefit the people of Virginia and their research in chemical, medical or other scientific fields. The current Award program established by The Medical Foundation supports high impact, innovative one-year projects that integrate computational, modeling and quantitative scientific methodologies across a broad range of scientific disciplines. The Program is dedicated to supporting mentored students to help build Virginia’s future scientific research workforce. In its continuing dedication to its mission, twelve one-year awards were made for a total amount of $1.2 million.

2015 Award Recipients

SHENGFENG CHENG, PH.D.
Virginia Polytechnic Institute and State University
A Computational Model to Study the Self-assembly of Microtubules

DANIEL CONWAY, PH.D.
Virginia Commonwealth University
Measurement of Mechanical Tension on the Nuclear Membrane

TAKESHI FUKAO, PH.D.
Virginia Polytechnic Institute and State University
Small RNA-mediated Transcriptional Regulatory Networks Governing Adaptation to Submergence and Reoxygenation in Rice

ANGELA HILLIKER, PH.D.
University of Richmond
Using Next Gen Sequencing to Identify Suppressors of Ded1, an RNA ATPase that Promotes Translation

VENKAT MARUTHAMUTHU, PH.D.
Old Dominion University
Developing Quantitative Measures of Mechanical Coherence in Epithelial Tissue

C. DANIEL MELIZA, PH.D.
University of Virginia
Biophysical, Dynamical-Systems Models of Neurons that Recognize Complex Acoustic Patterns

HUA MIN, PH.D.
George Mason University
Applying the Ontology-guided Machine Learning to Analyze the Surveillance, Epidemiology, and End Results Program-Medicare Health Outcomes Survey (SEER-MHOS) Linked Database

HELEN MURPHY, PH.D.
College of William and Mary
Exploring the Evolutionary and Molecular Dynamics of Mixed Biofilms to Disrupt their Stability

JOSEPH REINER, PH.D.
Virginia Commonwealth University
Single Molecule Forensic DNA Analysis with Laser-Induced Nanopore Heating

KENDRA SEWALL, PH.D.
Virginia Polytechnic Institute and State University
Using Social Network Models and Manipulations of Glucocorticoids to Understand how the Social Environment Impacts Neural Function

KARSTEN SILLER, PH.D.
University of Virginia
Intelligent Microscopy: Self-guided Image Acquisition and Quantitative Analysis in Neural Stem Cell and Neuronal Degeneration Research

ISAIAH SUMNER, PH.D.
James Madison University
Computational and Biochemical Determination of the Mechanism of Thioester Aminolysis

This computational chemical reaction profile models ubiquitination, an important cellular enzymatic reaction that may play a role in many diseases including anemia, cancer, viral infection and neurological disease. Courtesy of Isaiah Sumner, Ph.D., (2015 Jeffress Trust Award Recipient) and Christopher E. Berndsen, Ph.D., James Madison University.
Charles A. King Trust
Postdoctoral Fellowship Program

Bank of America, N.A., Edward Dane and Lucy West, Co-Trustees

UNDERSTANDING AND IMPROVING THE TREATMENT OF HUMAN DISEASE THROUGH POSTDOCTORAL RESEARCH AWARDS

The Charles A. King Trust, established in 1936, supports research that focuses on the causes of human disease to discover cures or improve therapeutic treatment. To meet this goal, the Charles A. King Trust Postdoctoral Fellowship Program contributes to high impact discovery research by providing vital support that prepares fellows for launching productive academic careers as independent investigators in biomedical research.

Over the past 57 years, the Program has supported over 800 postdoctoral fellows, many of whom have gone on to make extraordinary contributions in a wide range of scientific disciplines, including cancer, AIDS, heart disease, and diabetes.

In 2015, the Program received 175 applications that were read and critiqued by a Scientific Review Committee comprised of 54 senior researchers. The top 15 applicants received a total of $1,473,000 for two-year postdoctoral fellowships in basic science or clinical/health services. The awards will support their career development, and their discoveries will contribute to accelerating medical innovations at large.

In addition to the outstanding commitment of the Charles A. King Trust, fellowship support has been generously provided by the Bushrod H. Campbell and Adah F. Hall Charity Fund, the Charles H. Hood Foundation, the Sara Elizabeth O’Brien Trust, Bank of America, N.A., Trustee, and the Simeon J. Fortin Charitable Foundation, Bank of America, N.A., Trustee.
2015 Basic Science Award Recipients

LUKE CHAO, PH.D.
Harvard Medical School
Capturing Conformational Change in Flavivirus Membrane Fusion

YOANDRIS DEL TORO DUANY, PH.D.
Boston Children's Hospital
Interplays between ADAR1 and MDA5 in the Pathogenesis of Aicardi-Goutière Syndrome

JAMES DEWAR, PH.D.
Harvard Medical School
The Mechanism of Replication Termination in Vertebrates

XIANCHI DONG, PH.D.
Boston Children’s Hospital
Molecular Basis for Integrin AlphaVbeta6 Mediated TGF-beta Activation and Structure-based Drug Design

THOMAS GUETTLER, PH.D., M.SC.
Harvard Medical School
Capturing Co-Translational Protein Translocation in Action

MONIKA KOWALCZYK, M.D., D.PHIL.
Broad Institute of MIT and Harvard
Deconstructing Different Modes of Heterogeneity in Human Leukemia

HSIANG-YING LEE, PH.D.
Whitehead Institute for Biomedical Research
Dissecting Molecular Mechanisms Underlying Erythroid Progenitor BFU-E Self-renewal

OREN LEVY, PH.D.
Brigham and Women's Hospital
A Metastasis-Targeted Cell-Based Delivery Platform for Prostate Cancer Therapy

FALONG LU, PH.D.
Boston Children’s Hospital
Dissecting Mechanisms Regulating Totipotency in Mouse

YAELE MANDELBLAT-CERF, PH.D.
Beth Israel Deaconess Medical Center
In Vivo Study of Homeostatic and Non-homeostatic Control of Feeding by Hypothalamic Neurons

SHANKAR MUKHERJII, PH.D.
Harvard University
The Role of mRNA Localization in Establishing and Maintaining Organelle Identity

ADAM NORRIS, PH.D.
Harvard University
Combinatorial Control of Alternative Splicing in determining Neuronal Specification and Animal Behavior

KARL SCHMITZ, PH.D.
Massachusetts Institute of Technology
Function and Dysregulation of Mycobacterial Clp Proteases

2015 Clinical and Health Services Research Award Recipients

JENNIFER STEVENS, M.D.
Beth Israel Deaconess Medical Center
Inpatient Specialist Consultation: Understanding Drivers of Variation and Hidden Resource Use

SARINNAPHA VASUNILASHORN, PH.D.
Beth Israel Deaconess Medical Center
The Psychoneuroimmunology of Postoperative Delirium and its Associated Long-Term Cognitive and Functional Outcomes in Older Adults


“Basic science advances contribute indirectly to most disease treatment or prevention and in a few examples contributes directly by providing new modalities for treatment. Perhaps the best example is advances in RNA interference which is now being translated into a new therapeutic modality. I assume a similar case can be made for the CRISPR technology now changing health research.”

DR. PHILLIP SHARP
Professor Koch Institute; 1993 Nobel laureate in Physiology, Presidents Advisory Council on Science and Technology, National Academy of Sciences, Cofounder of Biogen, former Chair of the King Trust Scientific Review Committee.
2015 Award Recipients

VICKI CHEN, M.D.
Tufts Medical Center
A Novel Video Based Therapy for Children with Amblyopia

ALYNA CHIEN, M.D., M.Sc.
Boston Children’s Hospital
Understanding and Improving Care Experiences for Children with Disabilities

NICHOLAS MIAN, Ph.D.
Boston University
Early Identification of Anxiety Disorders in Pediatric Settings

J. KEVIN NUGENT, Ph.D.
The Brazelton Institute
The Effect of a Newborn Behavioral Observation System-Early Intervention (NBO-EI) Model of Care

LAURA SIMONS, Ph.D.
Boston Children’s Hospital
Learn, Move, Cope, Improve: Graded Exposure Treatment for Children and Adolescents with Chronic Pain

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Deborah Munroe Noonan Memorial Research Fund

IMPROVING THE LIVES OF CHILDREN WITH DISABILITIES

The Deborah Munroe Noonan Memorial Research Fund, Bank of America, N.A., Trustee, was established in 1947 by Frank M. Noonan in memory of his mother to improve the lives of children who were left crippled by polio. The Fund now supports innovative clinical research or demonstration projects whose results may improve the quality of life for children with disabilities. Projects range from video based therapy for children with amblyopia to improving outcomes for high risk newborns.

Five awards, from 25 submissions, were funded in the 2015 grant cycle. The Noonan Research Fund has supported 169 projects positively impacting the lives of children in the Greater Boston area.
LE&RN/FDRS Lipedema Postdoctoral Fellowship Awards Program

A joint program of the Lymphatic Education & Research Network and the Fat Disorders Research Society

PROMOTING RESEARCH THAT WILL CONTRIBUTE TO THE CURE AND TREATMENT OF LIPEDEMA AND ASSOCIATED LYMPHATIC DISORDERS

Lipedema is a chronic, painful disorder with a complex pathology of unknown etiology that is predominantly seen in adolescent and adult women. With missions aligned to address this gap in the field, the Lymphatic Education & Research Network (LE&RN) and the Fat Disorders Research Society (FDRS) engaged The Medical Foundation to design a grant program to expand lipedema research, establish its clinical definition, and better understand its pathogenesis.

The LE&RN/FDRS Postdoctoral Fellowship Awards Program launched its inaugural cycle in 2015, soliciting applications worldwide from early-career postdoctoral fellows. In December, four two-year fellowships were awarded with a total of $356,592 generously provided by FDRS and the Lipedema Foundation.

2015 Award Recipients

ECHOE BOUTA, PH.D.
Massachusetts General Hospital, USA
Mechanisms of Impaired Lymphatic Function in Mice with Increased Adiposity

RACHELLE CRESCENZI, PH.D.
Vanderbilt University, USA
Functional Imaging of Sodium and Lymphatics in Patients with Lipedema

JAVIER JALDIN-FINCATI, PH.D.
The Hospital for Sick Children, Canada
Communication between Adipose and Lymphatic Microvascular Endothelial Cells

ANNALISA ZECCHIN, PH.D.
University of Leuven, VIB, Belgium
Novel Metabolite-Based Treatment Approach of Lymphedema: Possible Relevance for Lipedema

Confocal microscopy of microvascular endothelial cells derived from human adipose (fat) tissue. These cells will be used in studies on the metabolic role of adipocyte cell signaling. Courtesy of Javier Jaldin-Fincati, Ph.D., (2015 LE&RN/FDRS Award Recipient) The Hospital for Sick Children.
Robert E. Leet and Clara Guthrie
Patterson Trust Awards Program in Clinical Research

PROMOTING HUMAN DISEASE RESEARCH BY EARLY-CAREER PHYSICIAN SCIENTISTS

In keeping with the original mission, the Patterson Trust Awards Program in Clinical Research, Bank of America, N.A., Trustee, provides support to mentored clinical scientists in Connecticut and New Jersey. In 2015, the Patterson Trust received 14 applications from current recipients of an NIH K23 or K08 Award. These grants, from the National Institutes of Health support the career development of individuals with a clinical doctoral degree who have made a commitment to research.

The Patterson Trust provided support in the amount of $100,000 each to five scientists conducting clinical research, across a range of disciplines, with a focus on patient oriented or translational laboratory research.

Beginning in the 2016 grant cycle, the Patterson Trust Program updated the eligibility requirements for early-career physician scientists in Connecticut and New Jersey.

2015 Award Recipients

CHADI G. ABDALLAH, M.D.
Yale School of Medicine
Neuroimaging and Behavioral Examination of Ketamine-Related Cognitive Improvements in MDD

OSCAR RENE COLEGIO, M.D., PH.D.
Yale School of Medicine
Defining Metabolic Communication in Melanoma

CHARLES DELA CRUZ, M.D., PH.D.
Yale School of Medicine
Phenotypic and Genomic Approach to Human Host Response to Bacterial Lung Infection and Sepsis

MATTHEW STROUT, M.D., PH.D.
Yale Cancer Center
ZBTB32 in B cell Development and Lymphomagenesis

ANIA JASTREBOFF, M.D., PH.D.
Yale School of Medicine
Brain Response to Glucose Ingestion and Food Images in Obese Individuals before and after Weight-Loss Interventions Differing in Glycemic Index

The Tesla Magnet at the Yale Magnetic Resonance Research Center is used for functional MRI studies that use neuroimaging of the brain to better understand mechanisms underlying cognitive dysfunction in depression and its treatment. Courtesy of Chadi G. Abdallah, M.D. (2015 Patterson Award Recipient) Yale School of Medicine.
Smith Family Awards Program for Excellence in Biomedical Research

The Richard and Susan Smith Family Foundation

SUPPORTING BIOMEDICAL INNOVATION AND DISCOVERY BY EARLY-CAREER INVESTIGATORS

For the past 24 years, the Smith Family Foundation has been supporting groundbreaking discovery research through the Smith Family Awards Program for Excellence in Biomedical Research. Its mission is to launch the careers of exceptional junior faculty by funding basic science aimed towards biomedical breakthroughs. Since its founding, the Program has funded 149 investigators for a total of $28.7 million.

In May 2015, the Foundation hosted the 13th scientific poster session for its current and past Awardees. Twenty-six scientists showcased their research followed by a dinner and the presentation of the $65,000 Prize for Outstanding Scientific Contributions to Rachel Wilson, Ph.D., Harvard Medical School. Dr. Wilson received her Smith Family Foundation junior faculty Award in 2004.

In September 2015, the Program received 53 applications for the 2015 funding cycle and awarded six grants in December 2015.

2015 Award Recipients

MICHAEL CRICKMORE, PH.D.
Boston Children’s Hospital
Molecular and Circuit Analyses of a Motivational State

STEPHANIE DOUGAN, PH.D.
Dana-Farber Cancer Institute
In Situ Delivery of Neoantigens and Targeted Radiation in a Therapeutic Vaccine for Pancreatic Cancer

YONATAN GRAD, M.D., PH.D.
Harvard School of Public Health
Genetic Networks of Antibiotic Resistance in Neisseria gonorrhoeae

ANDREW KRUSE, PH.D.
Harvard Medical School
A New Approach to Targeting GPCRs

GABRIELA SCHLAU-COHEN, PH.D.
Massachusetts Institute of Technology
A Biophysical Toolkit to Explore Bacterial Chemotaxis

RADHIKA SUBRAMANIAN, PH.D.
Massachusetts General Hospital
Building a Cilium for Intercellular Signaling: in Vitro Reconstitution of the Hedgehog Signaling Pathway

Transmission electron microscopy image of phospholipid bilayer discs. White circles indicate individual discs. This model membrane system allows the nanoscale motions of single receptor molecules to be studied. Bacteria require these receptors to stage infections resulting in millions of deaths each year from diseases such as tuberculosis and pneumonia. Understanding receptor function on this level may provide new ways to combat infection and the rise in antibiotic resistance. Courtesy of Gabriela Schlau-Cohen, Ph.D., (2015 Smith Award Recipient) Massachusetts Institute of Technology.
2015 Award Recipients

**LUCY GODLEY, M.D., PH.D.**
University Of Chicago
Identification of Germline Predisposition Syndromes in Young MDS Patients

**ROSS LEVINE, M.D.**
Memorial Sloan-Kettering Cancer Center
Role of Cohesin Complex in Myelodysplastic Syndrome

**EIRINI PAPAPETROU, M.D., PH.D.**
Mount Sinai School of Medicine
A Novel Genotype to Phenotype Platform to Study MDS Pathogenesis and Treatment

**JOSEPH SCANDURA, M.D., PH.D.**
Weill Medical College of Cornell University
Curing MDS using Hematopoietic Cells Reprogrammed from Autologous, Normal Endothelial Cells

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Taub Foundation Grants Program for Myelodysplastic Syndromes Research

HIGH-IMPACT, INNOVATIVE TRANSLATIONAL RESEARCH TO ADVANCE THE TREATMENT AND PREVENTION OF MDS

Since 1967, The Henry and Marilyn Taub Foundation has provided grants that improve education, advance medical research, and strengthen local communities and Jewish life. In 2013, the Taub Foundation engaged The Medical Foundation to conduct a scan of the Myelodysplastic Syndromes (MDS) research and funding landscape. The identification of significant funding gaps in the field guided the creation of a high impact grant program to study the underlying causes of MDS, and contribute to the advancement of its treatment and prevention.

2015 marked the second year of the Program, with 61 applicants across the United States applying for three-year awards in the amount of $600,000. Four Award Recipients were approved by the Foundation in October 2015 for a total of 2.4 million.

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This image shows mesenchymal stem cells derived and maintained from patients with a family history for myeloid dysplastic syndrome (MDS) and myeloid malignancies. These patient-derived cells are critical for understanding the genetic basis of this disease and how genes such as DDX41 or RUNX1 contribute to disease progression. *Courtesy of Lucy Godley, M.D., Ph.D. (2015 Taub Award Recipient) University of Chicago.*
Edward N. & Della L. Thome Memorial Foundation Awards Program in Alzheimer’s Disease Drug Discovery Research

ACCELERATING EFFECTIVE TREATMENTS FOR INDIVIDUALS SUFFERING FROM ALZHEIMER’S DISEASE

The Edward N. and Della L. Thome Memorial Foundation is contributing to the advancement of health in older adults through the support of direct service projects and medical research on diseases and disorders affecting this population. In keeping with this mission, The Medical Foundation administers two award programs for the Thome Foundation addressing Age-related Macular Degeneration and Alzheimer’s Disease. These two programs alternate and each are launched every other year.

In 2015, the Awards Program in Alzheimer’s Disease Drug Discovery Research accepted 61 applications from 48 separate academic and medical research institutions across the United States. Researchers with expertise in target compound validation and small molecule therapeutics competed for these prestigious Awards and six were selected to receive awards in the amount of $500,000.

2015 Award Recipients

KAREN ASHE, M.D.
University of Minnesota
Discovery of Caspase-2 Inhibitors to Treat Dementia

YUEMING LI, PH.D.
Memorial Sloan-Kettering Cancer Center
Development of TFEB Target-Based Small Molecules for Alzheimer’s Disease Therapy

SUSAN LINDQUIST, PH.D.
Whitehead Institute for Biomedical Research
Bioactive Cyclic Peptides as Potential Therapeutics for Alzheimer’s Disease

KUN PING LU, M.D., PH.D.
Beth Israel Deaconess Medical Center
Development of Novel Targeted Therapy for Alzheimer’s Disease

PAMELA MAHER, PH.D.
The Salk Institute
Novel Glycation Inhibitors for the Treatment of Alzheimer’s Disease

BENJAMIN WOLOZIN, M.D., PH.D.
Boston University School of Medicine
Targeting RNA Metabolism and the Stress Granule Pathway to Inhibit Tau Aggregation

Scientific Review Committees

**DR. RALPH AND MARIAN FALK MEDICAL RESEARCH TRUST AWARDS PROGRAMS (Catalyst and Transformational)**
Bo Saxberg, M.D., Ph.D. (*Chair*)
William Barson, M.D.
Eric Beyer, M.D., Ph.D.
Bruce Bloom, D.D.S., J.D.
Ernesto R. Bongarzone, Ph.D.
Benjamin Gaston, M.D.
Mehrooosh Ghiam, Ph.D.
Eva Gordon, Ph.D.
Elizabeth Horn, Ph.D.
Anthony Koleske, Ph.D.
Andrey Rzhetsky, Ph.D.
Thomas Shehab, M.D.
Edward Spack, Ph.D.

**CHARLES H. HOOD FOUNDATION CHILD HEALTH RESEARCH AWARDS PROGRAM**
Jonathan M. Davis, M.D. (*Chair*)
Elizabeth D. Barnett, M.D.
Clifford W. Bogue, M.D.
Bobby J. Cherayil, M.D.
Elizabeth Engle, M.D.
Catherine Gordon, M.D., M.Sc.
Jill L. Maron, M.D., MPH
Beth A. McCormick, Ph.D.
Heber Nielsen, M.D.
James Sargent, M.D.
Susanne Tanski, M.D., MPH
Paige Williams, Ph.D.

**THOMAS F. AND KATE MILLER JEFFRESS MEMORIAL TRUST AWARDS PROGRAM**
Donald Brown, Ph.D. (*Chair*)
David Chan, Ph.D.
James Gentle, Ph.D.
Ina Hoeschele, Ph.D.
Debra Hydorn, Ph.D.
Glen Kellogg, Ph.D.
Yiannis Papelis, Ph.D.
Stacie Ringleb, Ph.D.
Thomas Russell, Ph.D.
Jeff Saucerman, Ph.D.
Gregory Smith, Ph.D.
Diego Troya, Ph.D.

**CHARLES A. KING TRUST POSTDOCTORAL FELLOWSHIP PROGRAM (Basic Science)**
Jeannie Lee, M.D., Ph.D. (*Chair*)
Ingolf Bach, Ph.D.
Sudha Biddinger, M.D., Ph.D.
Stephen Blacklow, M.D., Ph.D.
Steve Buratowski, Ph.D.
Job Dekker, Ph.D.
Michael Eck, M.D., Ph.D.
Marc Freeman, Ph.D.
Michael Hemann, Ph.D.
Takao Hensch, Ph.D.
Ann Hochschuld, Ph.D.
Paul Huang, M.D., Ph.D.
Sun Hur, Ph.D.
Robin Ingalls, M.D.
Jonathan Kagan, Ph.D.
Donald Katz, Ph.D.
Gabriel Kreiman, Ph.D.
Andrew Lane, M.D., Ph.D.
Sacha Nelson, M.D., Ph.D.
Carl Novina, M.D., Ph.D.
William Pu, M.D.
Daniel Remick, M.D.
Avital Rodal, Ph.D.
Ralph Scully, Ph.D.
Hazel Sive, Ph.D.
Lois Smith, M.D., Ph.D.
Kevin Struhl, Ph.D.
William Theurkauf, Ph.D.
Vickery Trinka-Randall, Ph.D.
Johannes Walter, Ph.D.
Johnathan Whetstine, Ph.D.
Kristin White, Ph.D.
Matthew Wilson, Ph.D.
CHARLES A. KING TRUST
POSTDOCTORAL FELLOWSHIP PROGRAM
(Clinical and Health Services Research)
Bruce E. Landon, M.D., M.B.A., M.Sc. (Chair)
Robert C. Fuhlbrigge, M.D., Ph.D.
Shelly F. Greenfield, M.D.
Marek Kubicki, M.D.
Nan Laird, Ph.D.
Jennifer Mack, M.D., MPH
Kenneth J. Mukamal, M.D., MPH
Christine Wanke, M.D.

DEBORAH MUNROE NOONAN
MEMORIAL RESEARCH FUND
Susan L. Parish, Ph.D. (Chair)
Reenee Boynton-Jarrett, M.D., Sc.D.
Susan Bruce, Ph.D.
Eugenia Chan, M.D., MPH
Beth Dworetzky, M.S.
JoAnna Leyenaar, M.D., M.P.H.
Jeanne Van Cleave, M.D.
Robert Volpe, Ph.D.

LYMPHATIC EDUCATION & RESEARCH
NETWORK/FAT DISORDERS RESEARCH
SOCIETY (LE&RN/FDRS) LIPEDEMA
POSTDOCTORAL FELLOWSHIP
AWARDS PROGRAM
Michael Jensen, M.D. (Chair)
Susan Fried, Ph.D.
Karen Herbst, M.D., Ph.D.
Philipp Scherer, Ph.D.

ROBERT E. LEET AND CLARA GUTHRIE
PATTERSON TRUST AWARDS PROGRAM
IN CLINICAL RESEARCH
Robert Aseltine Jr., Ph.D.
Lori Bastian, M.D., MPH
Gordon Huggins, M.D.
Mark D. Litt, Ph.D.
Heber Nielsen, M.D.
Cheryl Oncken, M.D.
Elijah Paintsil, M.D.
Junichi Sadoshima, M.D., Ph.D.
David Steffens, M.D.

RICHARD AND SUSAN SMITH FAMILY
AWARDS PROGRAM FOR EXCELLENCE
IN BIOMEDICAL RESEARCH
Gary Ruvkun, Ph.D. (Chair)
Iain Cheeseman, Ph.D.
David Clapham, M.D., Ph.D.
Nathanael Gray, Ph.D.
Leslie C. Griffith, M.D., Ph.D.
Ralph Isberg, Ph.D.
Matthew Meyerson, M.D., Ph.D.
Venkatesh Murthy, Ph.D.
Aviv Regev, Ph.D.
Amy Wagers, Ph.D.
Muhammad Zaman, Ph.D.

HENRY AND MARILYN TAUB
FOUNDATION GRANTS PROGRAM
FOR MDS RESEARCH
Guillermo Garcia-Manero, M.D. (Chair)
Omar Abdel-Wahab, M.D.
Peter Aplan, M.D.
Maria Figueroa, M.D.
Timothy Graubert, M.D.
Eric Padrón, M.D.
Ulrich G. Steidl, M.D., Ph.D.

EDWARD N. & DELLA L. THOME
MEMORIAL FOUNDATION AWARDS
PROGRAM IN ALZHEIMER’S DISEASE
DRUG DISCOVERY RESEARCH
Li-Huei Tsai, Ph.D. (Chair)
Kelly Bales, Ph.D.
Philip De Jager, M.D., Ph.D.
Roberta Diaz Brinton, Ph.D.
Li Gan, Ph.D.
Todd Golde, M.D., Ph.D.
Jeffrey Nye, M.D., Ph.D.
Kenneth Rhodes, Ph.D.
Pierre Tariot, M.D.
Robert Vassar, Ph.D.
D. Martin Watterson, Ph.D.
“Being a Hood Major Grant Awardee has helped me to grow the research portfolio that I think is of highest importance for infants and children.”

DAVID GOODMAN, M.D.
The Dartmouth Institute for Health Policy and Clinical Practice

“With my Jeffress Award, I am able to improve my research infrastructure and, more importantly, train undergraduates in the techniques used in my laboratory, which provides them with an opportunity to engage in a meaningful research experience.”

ISAIAH SUMNER, PH.D.
James Madison University

“I have a longstanding passion for research and I view it as an essential means of improving treatments for children suffering with chronic pain... With the Noonan Fund’s strong track-record of supporting innovative treatment approaches... we are one step closer to moving the pediatric pain field forward.”

LAURA SIMONS, PH.D.
Boston Children’s Hospital

“Being a Falk Catalyst Awardee is a great honor because of the connection of Dr. Ralph Falk to the development of intravenous solutions, blood collection and storage methods, and kidney dialysis. I am extremely grateful that the Trust understands the importance of funding high-risk, high-reward projects that could find cures for diseases.”

JOHN IMIG, PH.D.
Medical College of Wisconsin

“I have been interested in science and research since grade school. I always liked the idea of discovering new things and science gives you that opportunity... Being a Thome awardee means a lot as I can keep my lab functioning and continue my research on some very promising compounds for the treatment of AD.”

PAMELA MAHER, PH.D.
The Salk Institute

Cover Images:


RIGHT: Microscopic image of a cluster of human nerve cells induced to form from pluripotent stem cells. Such cells are used in studies to develop novel stem cell therapies for the treatment of degenerative neural disorders such as Parkinson’s disease. Courtesy of Su-Chun Zhang, M.D., Ph.D., (2015 Falk Catalyst Award Recipient) University of Wisconsin-Madison.