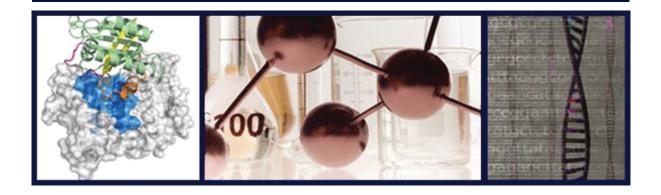
Smith Family Awards Program for Excellence in Biomedical Research

A PROGRAM OF THE RICHARD AND SUSAN SMITH FAMILY FOUNDATION



Alumni Directory

1992 - 2024

Updated, 4/2024

The Richard and Susan Smith Family Foundation is committed to effecting permanent positive change in the lives of the residents of Greater Boston, particularly individuals and families in economically disadvantaged communities. Today, three generations of the Smith family oversee the Foundation, stewarding approximately \$15 million annually in grants aimed at promoting greater health, educational attainment, and economic mobility. In the area of health, the Foundation supports the advancement of biomedical research and the expansion of access to high-quality health care at safety net institutions serving low-income individuals and communities of Greater Boston.

In 1991, the Smith Family Foundation contracted with The Medical Foundation at Health Resources in Action to create a grantmaking program that would identify and support promising junior faculty to find breakthroughs in such areas as AIDS/HIV, cancer, heart disease, diabetes or neuroscience. Since 2008, the Award has broadened to support newly independent faculty engaged in basic biomedical science as well as physics, chemistry and engineering with a focus on biomedicine. The Awards are currently in the amount of \$400,000 over three years.

Over the past 30 years, the Smith Family Awards Program for Excellence in Biomedical Research has helped launch the careers of 197 outstanding scientists with support totaling \$44.1 million.

The following is a listing of all Award Recipients in alphabetical order with current contact information as well as the title of the funded research project. The Smith Family is extraordinarily proud of the accomplishments of its Awardees and is honored to provide the critical support for their newly established research programs.

Cristina Aguayo-Mazzucato, M.D., Ph.D.

(2021 Award Recipient) *Targeting Beta-Cell Senescence in Diabetes* Joslin Diabetes Center <u>cristina.aguayo-</u> <u>mazzucato@joslin.harvard.edu</u>

Judith Agudo, Ph.D.

(2019 Award Recipient) Novel platform to increase dendritic cell function and antigen-specific T cell responses to cancer Dana-Farber Cancer Institute Judith Agudo@dfci.harvard.edu

Mark L. Andermann, Ph.D.

(2012 Award Recipient) Cortical Networks Guiding Hunger-Dependent Attention to Food Cues Beth Israel Deaconess Medical Center manderma@bidmc.harvard.edu

Zolt P. Arany, M.D., Ph.D.

(2008 Award Recipient) Peroxisome Proliferator-Activated Receptor Gamma 1alpha (PGC-1alpha) and Cardiac Angiogenesis University of Pennsylvania <u>zarany@mail.med.upenn.edu</u>

Scott A. Armstrong, M.D., Ph.D.

(2004 Award Recipient) Multi-step Pathogenesis of MLL-rearranged Leukemias Memorial Sloan-Kettering Cancer Center armstros@mskcc.org

Emily Patricia Balskus, Ph.D. (2011 Award Recipient) Understanding and Preventing the Production of Disease-Associated Metabolites by the Human Gut Microbiota Harvard University balskus@chemistry.harvard.edu

Jennifer Benanti, Ph.D. (2011 Award Recipient) Mapping the Proteolytic Regulatory Network that Controls Cell Division University of Massachusetts Medical School Jennifer.Benanti@umassmed.edu

Leslie J. Berg, Ph.D. (1993 Award Recipient) Analysis of the Tsk tyrosine Kinase in Transgenic Mice University of Massachusetts Medical School leslie.berg@umassmed.edu

Sudha Biddinger, M.D., Ph.D.

(2010 Award Recipient) Regulation of the LDLR by Insulin and Diabetes Boston Children's Hospital sudha.biddinger@childrens.harvard.edu

Jonathan S. Bogan, M.D.

(2000 Award Recipient) Role of ARF Proteins in GLUT4 Trafficking Yale School of Medicine jonathan.bogan@yale.edu

Laurie A. Boyer, Ph.D.

(2009 Award Recipient) Non-coding RNA as a Regulator of Cell Fate through Functional Interaction with Polycomb Group Proteins Massachusetts Institute of Technology Iboyer@mit.edu

James E. Bradner, M.D. (2010 Award Recipient) Chemical Inhibition of Bromodomains in Cancer Novartis Institutes of BioMedical Resaerch James.bradner@novartis.com

David K Breslow, Ph.D.

(2018 Award Recipient) Deconstructing the Cellular Antenna: Primary Cilium Disassembly and Control of Cell Growth Yale University david.breslow@yale.edu

Alan Brown, Ph.D. (2018 Award Recipient) Structural Basis of Intraflagellar Transport Harvard Medical School alan brown@hms.harvard.edu

Jessica A Cardin, Ph.D.

(2012 Award Recipient) GABAergic Contributions to Neural and Cognitive Deficits in a Genetic Model of Schizophrenia. Yale University jess.cardin@yale.edu

William A. Carlezon, Ph.D.

(1999 Award Recipient) Neural Substrates of Aversion to Addictive Drugs McLean Hospital carlezon@mclean.harvard.edu

Francis Ka-Ming Chan, Ph.D.

(2003 Award Recipient) TNF-Induced Programmed Cell Death in Immune Responses University of Massachusetts Medical School francis.chan@umassmed.edu

Daniel L. Chase, Ph.D.

(2006 Award Recipient) Electrophysiological Analysis of Novel Dopamine Signaling Mechanisms in C. elegans Central Connecticut State University chase@ccsu.edu

Abhishek Chatterjee, Ph.D.

(2013 Award Recipient) A Chemical Toolset to Investigate and Engineer Viral Infection Boston College <u>abhishek.chatterjee@bc.edu</u>

Iain M. Cheeseman, Ph.D. (2007 Award Recipient) Proteomic and Functional Dissection of the Human Kinetochore Whitehead Institute for Biomedical Research icheese@wi.mit.edu

Jianzhu Chen, Ph.D.

(1995 Award Recipient) Molecular Analysis of Memory B Cell Differentiation Massachusetts Institute of Technology <u>ichen@mit.edu</u>

Jerry Lu Chen, Ph.D.

(2016 Award Recipient) Circuit Mechanisms for Long-Range Communication in the Neocortex Boston University jerry@chen-lab.org

Raghu Chivukula, M.D., Ph.D.

(2024 Award Recipient) Elucidating the Molecular Basis of GGC Repeat Expansion Disorders Massachusetts General Hospital rchivukula@mgh.harvard.edu

James Jeiwen Chou, Ph.D.

(2003 Award Recipient) Structural Study of the Membrane-Associated State of BID for Understanding BID-Induced Damage of Mitochondrial Wall during Apoptosis Harvard Medical School james chou@hms.harvard.edu

Steven Chuck, M.D. (1997 Award Recipient) Regulation of Apolipoprotein B Secretion Gilead Sciences steven.chuck@gilead.com

Damon Alistair Clark, Ph.D. (2013 Award Recipient) Dissecting Motor Pattern Generating Circuits in Walking Drosophila Yale University damon.clark@yale.edu

Andrew Connolly, M.D., Ph.D. (1998 Award Recipient) Endothelial Protease-Activated Receptors Stanford University School of Medicine aconnoll@stanford.edu

Paul B. Cook, Ph.D. (2000 Award Recipient) Modulation of Glycinergic Inhibition in the Vertebrate

Integrated Project Management pcook@ipmcinc.com

David Daniel Cox, Ph.D.

(2013 Award Recipient) Learning How to See: a Biological and Computational Investigation of How Visual Cortex Learns and Develops Harvard University davidcox@fas.harvard.edu

Daniel H. Cox, Ph.D. (2000 Award Recipient) Characterization of the Ca2+ Binding Sites of

the Large-Conductance Ca2+-Activated K+ Channel Tufts University School of Medicine <u>dan.cox@tufts.edu</u>

Michael Crickmore, Ph.D.

(2015 Award Recipient) Molecular and Circuit Analyses of a Motivational State Boston Children's Hospital michael.crickmore@childrens.harvard.edu

Alexei Degterev, Ph.D.

(2007 Award Recipient) Molecular Mechanism and Oncogenic Regulation of Cellular Necrosis Tufts University School of Medicine alexei.degterev@tufts.edu

Josefina del Marmol, Ph.D.

(2023 Award Recipient) Structural Determinants of Odor Transduction in the Disease Vector Mosquito Anopheles gambiae Harvard Medical School Josefina delMarmol@hms.harvard.edu

Walter E. Demkowicz, Ph.D.

(1995 Award Recipient) Immunotherapy for AIDS: Transduction of HIV-1-Specific T-cell Receptor Genes University of Massachusetts Medical School wdemkowicz@yahoo.com

Li Deng, Ph.D.

(1999 Award Recipient) A Chemical Approach Toward Understanding DNA Modification Brandeis University deng@brandeis.edu

Stephanie Dougan, Ph.D.

(2015 Award Recipient) In Situ Delivery of Neoantigens and Targeted Radiation in a Therapeutic Vaccine for Pancreatic Cancer Dana-Farber Cancer Institute stephanie dougan@dfci.harvard.edu Elaine A. Elion, Ph.D. (1992 Award Recipient) Mechanisms of Negative Growth Control in Saccharomyces cerevisiae Harvard Medical School elaine_elion@hms.harvard.edu

Patrick T. Ellinor, M.D., Ph.D. (2003 Award Recipient) The Genetics of Atrial Fibrillation: Exploration of Endophenotypes Massachusetts General Hospital pellinor@partners.org

Sean Elliott, Ph.D. (2004 Award Recipient) Thioredoxins, Thioredoxin Reductase and the Mechanisms of Oxidative Stress Boston University <u>elliott@bu.edu</u>

Patrick Emery, Ph.D. (2002 Award Recipient) *Circadian Rhythms and their Synchronization in Drosophila* University of Massachusetts Medical School patrick.emery@umassmed.edu

Tamar Enoch, Ph.D. (July 1993 Award Recipient) Using Yeast to Identify New Tumor Suppressor Genes

Lucas Farnung, Ph.D. (2022 Award Recipient) Elucidating the Mechanism of Cotranscriptional Histone Mark Deposition Harvard Medical School lucas farnung@hms.harvard.edu Jerry Faust, Ph.D. (1992 Award Recipient) Cloning and Initial Characterization of a Kidney Specific Transporter for Mevalonic Acid Tufts University School of Medicine jerry.faust@tufts.edu

Steven M. Finkbeiner, M.D., Ph.D. (1998 Award Recipient) *Molecular Mechanisms of Huntington's Disease* Gladstone Institute of Neurological Disease <u>sfinkbeiner@gladstone.ucsf.edu</u>

Ana Fiszbein, Ph.D. (2022 Award Recipient) Evolution and Regulation of Hybrid Exons Boston University anafisz@bu.edu

Josué Flores Kim, Ph.D.

(2023 Award Recipient) Bacterial Cell Envelope Remodeling as a Conserved Strategy for Modulating Antibiotic Tolerance and Virulence Factor Assembly University of Massachusetts Medical School Josue.FloresKim3@umassmed.edu

Matthew L. Freedman, M.D. (2006 Award Recipient) A Genome-Wide Admixture Scan to Identify Genetic Determinants of Basal-Like Breast Cancer Dana-Farber Cancer Institute matthew freedman@dfci.harvard.edu

Marc R. Freeman, Ph.D. (2004 Award Recipient) Characterizing Core Components of the Glial Cell Machinery University of Massachusetts Medical School marc.freeman@umassmed.edu

Lillian Fritz-Laylin, Ph.D.

(2019 Award Recipient) Defining Mechanisms of Pathogenesis of the "Brain-eating Amoeba" University of Massachusetts Amherst Ifritzlaylin@umass.edu

Robert C. Fuhlbrigge, M.D., Ph.D. (1999 Award Recipient) Regulation of CTCL Migration to Skin via CLA Brigham and Women's Hospital rfuhlbrigge@partners.org

Jianmin Gao, Ph.D.

(2007 Award Recipient) Understanding Beta Sheet Structure within the Membrane Bilayer Boston College gaojc@bc.edu

Neil Joseph Ganem, Ph.D.

(2014 Award Recipient) Maintenance of Genome Stability by the Hippo Tumor Suppressor Pathway Boston University School of Medicine nganem@bu.edu

Timothy J. Gardner, Ph.D.

(2009 Award Recipient) Exploring the Function of Sleep in Neural Circuit Formation Boston University <u>timothyg@bu.edu</u>

Ethan Clark Garner, Ph.D.

(2012 Award Recipient) Building a Mechanistic Understanding of Bacterial Cell Wall Growth using High-Resolution Dynamic Imaging Harvard University egarner@g.harvard.edu Frank B. Gertler, Ph.D. (1998 Award Recipient) Mena Function in Tumor Cell Biology and Metatasis Massachusetts Institute of Technology fgertler@mit.edu

Grace Gill, Ph.D. (1996 Award Recipient) *Regulation of Cell Growth by Cellular EIA-Like Proteins* Tufts University School of Medicine <u>grace.gill@tufts.edu</u>

Lisa V. Goodrich, Ph.D.

(2003 Award Recipient) Cellular and Molecular Mechanisms of Sensory System Development Harvard Medical School <u>lisa goodrich@hms.harvard.edu</u>

Fotini Gounari, Ph.D., D.Sc.

(2003 Award Recipient) *Thymocyte Transformation in the DN to DP Transition* University of Chicago <u>fgounari@medicine.bsd.uchicago.edu</u>

Yonatan Grad, M.D., Ph.D.

(2015 Award Recipient) Genetic Networks of Antibiotic Resistance in Neisseria gonorrhoeae Harvard School of Public Health ygrad@hsph.harvard.edu

Timothy E. Graham, M.D. (2007 Award Recipient) *Stimulated by Retinoic Acid-6 (Stra6) and Insulin Resistance* University of Utah School of Medicine tgraham@u2m2.utah.edu

Christine Grienberger, M.D., Ph.D.

(2022 Award Recipient) The Biophysical Basis of Neural Circuit Dynamics during Learning Brandeis University cgrienberger@brandeis.edu

Nikolaus Grigorieff, M.Sc., Ph.D. (2000 Award Recipient) Structural Analysis of the Shaker Potassium Channel Janelia Research Campus <u>niko@grigorieff.org</u>

Paul Lieberman Greer, Ph.D.

(2018 Award Recipient) Exploring the Role of a Novel Population of Microglia in Alzheimer's Disease University of Massachusetts Medical School Paul.Greer@umassmed.edu

Steven R. Grossman, Ph.D., M.D.

(2000 Award Recipient) Purification and Analysis of a p53-Targeted Ubiquitin Ligase Virginia Commonwealth University <u>srgrossman@vcu.edu</u>

Marc-Jan Gubbels, Ph.D.

(2006 Award Recipient) Dissection of Toxoplasma gondii Cell Division, an Opportunistic Pathogen Causing Myocarditis and Encephalitis Boston College gubbelsj@bc.edu

Piyush Gupta, Ph.D.

(2011 Award Recipient) Functional Dissection of Invasive Mesenchymal Cancer Cells Whitehead Institute for Biomedical Research pgupta@wi.mit.edu Jeanne A. Hardy, Ph.D. (2005 Award Recipient) Designing Allosteric Switches in Caspases University of Massachusetts Amherst hardy@chem.umass.edu

Aaron N. Hata, M.D., Ph.D. (2017 Award Recipient) Determining the Impact of Therapy-Induced Mutations on Tumor Heterogeneity and Evolution of Acquired Drug Resistance MGH Cancer Center ahata@mgh.harvard.edu

Akiko Hata, Ph.D.

(2001 Award Recipient) Mechanisms of TGF-ß Signal Transduction University of California, San Francisco akiko.hata@ucsf.edu

Daniel N. Hebert, Ph.D.

(1998 Award Recipient) *Tyrosine Maturation and Degradation in Normal Melanocytes and Melanoma Cells* University of Massachusetts Amherst <u>dhebert@biochem.umass.edu</u>

Michael J. Higley, M.D., Ph.D.

(2010 Award Recipient) Neuromodulation of Synaptic Transmission in the Prefrontal Cortex Yale School of Medicine <u>m.higley@yale.edu</u>

Philip W. Hinds, Ph.D.

(1993 Award Recipient) The Retinoblastoma Protein Pathway in Differentiation, Senescence and Cancer Tufts University, Sackler School phinds@tufts.edu

Joel Hirschhorn, M.D., Ph.D.

(2002 Award Recipient) Comprehensive Evaluation of Reported Associations between Common Gene Variants and Obesity" Boston Children's Hospital joelh@broadinstitute.org

Andreas Hochwagen, Ph.D.

(2007 Award Recipient) Investigating the Role of Checkpoint Adaptation in Anti-Cancer Drug Resistance New York University andi@nyu.edu

Ya-Chieh Hsu, Ph.D.

(2014 Award Recipient) Investigation of How Cell Types from Diverse Lineages Coordinate Changes and Behaviors during Regeneration Harvard University yachieh hsu@harvard.edu

Jianming Hu, M.D., Ph.D.

(1999 Award Recipient) Host Factors Required for Hepatitis B Virus Assembly and Replication The Pennsylvania State University College of Medicine juh13@psu.edu

Paul Huang, M.D., Ph.D.

(1994 Award Recipient) Vascular Function in Nitric Oxide Synthase Mutant Mice Massachusetts General Hospital huangp@helix.mgh.harvard.edu

Jun R. Huh, Ph.D.

(2013 Award Recipient) Bacterial Regulators of Immunity and their Modulation of Host Transcription Factors University of Massachusetts Medical School Jun.Huh@umassmed.edu Craig P. Hunter, Ph.D. (1997 Award Recipient) Identifying the Regulatory Targets of pal-1 Harvard University hunter@mcb.harvard.edu

Tyler Jacks, Ph.D. (1992 Award Recipient) Functional Analysis of the p53 Gene David H. Koch Institute for Integrative Cancer Research at MIT tjacks@mit.edu

Ankur Jain, Ph.D.

(2018 Award Recipient) Identifying Cellular Suppressors of RNA Aggregation Whitehead Institute for Biomedical Research ajain@wi.mit.edu

James Jeanne, Ph.D.

(2019 Award Recipient) Cracking the neural code for perception by writing spikes into neural circuits Yale University james.jeanne@yale.edu

David Jeruzalmi, Ph.D.

(2002 Award Recipient) Structure and Function of Biological Assemblies The City College of New York dj@ccny.cuny.edu

Naama Kanarek, Ph.D.

(2022 Award Recipient) The cellular response to folate deprivation; sensing and signaling for survival in a folatepoor environment Boston Children's Hospital <u>naama.kanarek@childrens.harvard.edu</u>

Karla R Kaun, Ph.D.

(2014 Award Recipient) Neuro-molecular Mechanisms Underlying Alcoholism Brown University karla kaun@brown.edu

Nora Kory, Ph.D.

(2024 Award Recipient) Mitochondrial Transporters as Sensors and Responders to Shifting Environments Harvard T.H. Chan School of Public Health nkory@hsph.harvard.edu

Aleksandar David Kostic, Ph.D.

(2016 Award Recipient) Immunological Investigation of Human Type 1 Diabetes-Associated Microbiomes in the Gnotobiotic Autoimmune Diabetic Mouse Joslin Diabetes Center adkostic@gmail.com

Philip J. Kranzusch, Ph.D.

(2016 Award Recipient) Mechanism of Activation of a New Human RNA Second Messenger Signaling Enzyme Dana-Farber Cancer Institute philip kranzusch@dfci.harvard.edu

Jordan A. Kreidberg, M.D., Ph.D.

(1995 Award Recipient) A Transgenic Mouse Model of Wilms' Tumor Boston Children's Hospital jordan.kreidberg@childrens.harvard.edu

Joshua Kritzer, Ph.D., M.Sc. (2009 Award Recipient) *Targeting Hsp90 with Small Cyclic Peptides* Tufts University joshua.kritzer@tufts.edu

Andrew Kruse, Ph.D. (2015 Award Recipient) A New Approach to Targeting GPCRs Harvard Medical School andrew kruse@hms.harvard.edu

Galit Lahav, Ph.D.

(2005 Award Recipient) *p53 Dynamics and Control of Cell Fate* Harvard Medical School Galit Lahav@hms.harvard.edu

David Lambright, Ph.D.

(1996 Award Recipient) Structural Determinants of G Protein Coupled Signal Transduction University of Massachusetts Medical School david.lambright@umassmed.edu

Matthew J. LaVoie, Ph.D.

(2005 Award Recipient) The Role of Protein Modification and Dysfunction in Parkinson's Disease Brigham and Women's Hospital <u>mlavoie@rics.bwh.harvard.edu</u>

Nathan D. Lawson, Ph.D.

(2003 Award Recipient) Genetic Dissection of the Vascular Endothelial Growth Factor Signaling Pathway University of Massachusetts Medical School nathan.lawson@umassmed.edu

Michael Jungho Lee, Ph.D.

(2014 Award Recipient) Micro-Environmental Regulation of Network State and Drug Sensitivity in Triple-Negative Breast Cancer University of Massachusetts Medical School michael.lee@umassmed.edu

Sanghyun Lee, Ph.D.

(2021 Award Recipient) A Focused Approach to Identify Entry Factors for Pathogenic Enteric Viruses Using CRISPR Activation Screening Brown University sanghyun lee@brown.edu

Jacqueline A. Lees, Ph.D. (1995 Award Recipient) The Role of pRB and E2F in Tumorigenesis Massachusetts Institute of Technology jalees@mit.edu

Bernardo Lemos, Ph.D. (2013 Award Recipient) Heterochromatin Variation, Bisphenol A sensitivity, and Environmental Epigenomics Harvard School of Public Health blemos@hsph.harvard.edu

Anthony Letai, M.D., Ph.D. (2004 Award Recipient) Decoding BCL-2 Family Interactions to Promote Cancer Cell Death Dana-Farber Cancer Institute anthony letai@dfci.harvard.edu

Michael Levin, Ph.D. (2001 Award Recipient) The Role of Katp ion Channels in Embryonic Development Tufts University <u>michael.levin@tufts.edu</u>

Laura Lewis, Ph.D. (2019 Award Recipient) Whole-brain dopamine dynamics underlying sleep and wakefulness Boston University Idlewis@bu.edu Gene-Wei Li, Ph.D. (2016 Award Recipient) Breaking the Robustness of Bacterial Translation Massachusetts Institute of Technology gwli@mit.edu

Rong Li, Ph.D. (1995 Award Recipient) The Role of Cdc42 in Actin Cytoskeleton Assembly Stowers Institute for Medical Research rli@stowers.org

Liang Liang, Ph.D. (2021 Award Recipient) Early Visual Centers Coordinate to Shape the Flow of Information Yale University Liang.liang@yale.edu

Maofu Liao, Ph.D. (2016 Award Recipient) Cryo-EM Studies of Multidrug Resistance Conferred by Human ABC Transporters Harvard Medical School liaomaofu@gmail.com

Stuart Licht, Ph.D. (2002 Award Recipient) Interactions of Sulfonyluria Anti-Diabetic Agents with the ATP-Sensitive Potassium Channel Sanofi-Aventis stuart.licht@sanofi-aventis.com

Tami Lieberman, Ph.D. (2018 Award Recipient) Determinants of Bacterial Colonization of Facial Skin Massachusetts Institute of Technology tami@mit.edu

Klaus Lindpaintner, M.D.

(1993 Award Recipient) Molecular Genetics of Hypertension and Stroke Thermo Fisher Scientific klaus.lindpaintner@thermofisher.com

Myra Lipes, M.D. (1994 Award Recipient) A Transgenic Approach to the Study of Tolerance Induction in Type I Diabetes Joslin Diabetes Center myra.lipes@joslin.harvard.edu

Richard Liu, Ph.D.

(2023 Award Recipient) Breaking the Metal Barrier: Safe and Rapid Radiopharmaceutical Synthesis Using Organic Pseudometals Harvard University richardliu@chemistry.harvard.edu

Joseph J. Loparo, Ph.D.

(2011 Award Recipient) Exploring the Molecular Mechanisms of Translesion DNA Synthesis through Single-Molecule Microscopy Harvard Medical School joseph loparo@hms.harvard.edu

Bradford B. Lowell, M.D., Ph.D.

(1994 Award Recipient) *The B3-Adrenergic Receptor: A Gene Knockout Analysis of Function* Beth Israel Deaconess Medical Center blowell@bidmc.harvard.edu

Gavin MacBeath, Ph.D.

(2002 Award Recipient) *Towards the System-Wide Study of Neuronally- Expressed PDZ Domains* Merrimack Pharmaceuticals gmacbeath@merrimackpharma.com Sibongile Mafu, Ph.D. (2018 Award Recipient) Discovery and Mechanism of Plant-Derived Antifungals University of Massachusetts Amherst smafu@umass.edu

Amity Lynn Manning, Ph.D.

(2017 Award Recipient) Epigenetic Regulation of Mitotic Fidelity Worcester Polytechnic Institute almanning@wpi.edu

Katherine M. Martien, M.D.

(2000 Award Recipient) The Efficacy of Valproic Acid in the Treatment of Autism Associated with Regression and/or Severe Sleep Disturbance LADDERS Clinic kmartien@partners.org

Steven A. McCarroll, Ph.D.

(2010 Award Recipient) Finding the Human Genome's Missing Pieces Harvard Medical School mccarroll@genetics.med.harvard.edu

Andrea I. McClatchey, Ph.D.

(1999 Award Recipient) Identification of the Molecular Function of the NF2 Tumor Suppressor, Merlin Massachusetts General Hospital <u>mcclatch@helix.mgh.harvard.edu</u>

Kara Lavidge McKinley, Ph.D.

(2021 Award Recipient) *Molecular Mechanisms Underlying Uterine Regeneration* Harvard University <u>kara.l.mckinley@gmail.com</u>

David E. Moller, M.D.

(1992 Award Recipient) Molecular Genetic Analysis of Candidate P.O. Genes for Insulin Resistance Eli Lilly and Company <u>mollerda@lilly.com</u>

Babak Momeni, Ph.D.

(2017 Award Recipient) Elucidating the Molecular Mechanisms of Microbial Interactions Using Tn-Seq Boston College momeni@bc.edu

Melissa J. Moore, Ph.D.

(1994 Award Recipient) Dynamics of Protein-RNA Interaction in the Mammalian Spliceosome University of Massachusetts Medical School melissa.moore@umassmed.edu

Martin G. Myers, M.D., Ph.D.

(1998 Award Recipient) *Molecular Determinants of Leptin Receptor/Jak2 Signaling* University of Michigan Medical School <u>mgmyers@umich.edu</u>

Ryan Nett, Ph.D.

(2024 Award Recipient) Deciphering the Biosynthetic Chemistry of Plant-derived Medicines Harvard University rnett@fas.harvard.edu

Sarah E. O'Connor, Ph.D.

(2003 Award Recipient) Human Biosynthesis of Alkaloids: Chemical Inducers of Parkinson's Disease The John Innes Center Sarah.O'Connor@jic.ac.uk

Jose Ordovas-Montanes, Ph.D.

(2019 Award Recipient) Inflammatory Memory and Adaptation in Human Intestinal Epithelial Stem Cells Boston Children's Hospital Jose.Ordovas-Montanes@childrens.harvard.edu

Lauren Orefice, Ph.D.

(2019 Award Recipient) Development, Function and Dysfunction of Peripheral Sensory Neurons: Insights for Autism Spectrum Disorders Massachusetts General Hospital orefice@molbio.mgh.harvard.edu

Megan Orzalli, Ph.D.

(2022 Award Recipient) The role of tonic interferon signaling in cutaneous antiviral defense University of Massachusetts Medical School megan.orzalli@umassmed.edu

Noah Wolcott Palm, Ph.D.

(2016 Award Recipient) A Universal Genetic Toolkit to Illuminate Host-Microbiota Interactions Yale University noah.palm@yale.edu

Suzanne Paradis, Ph.D. (2008 Award Recipient) Dissecting the Function of Semaphorin 4B in Excitatory and Inhibitory Synapse Formation Brandeis University paradis@brandeis.edu

Sareh Parangi, M.D. (1999 Award Recipient) Antiangiogenic Therapy, A Novel Therapy for Pancreatic Cancer Massachusetts General Hospital sparangi@partners.org

Christopher L. Passaglia, Ph.D.

(2005 Award Recipient) Retinal Coding of Visual Information in Glaucomatous Eyes University of South Florida passaglia@usf.edu

R. Christopher Pierce, Ph.D. (1999 Award Recipient) Neurotrophins and Cocaine Addiction University of Pennsylvania School of Medicine rcpierce@mail.med.upenn.edu

Emmanuel N. Pothos, Ph.D.

(2002 Award Recipient) *The Effects of Dietary Obesity on CNS Reward Systems* Tufts University School of Medicine <u>Emmanuel.Pothos@tufts.edu</u>

Sara Prescott, Ph.D.

(2024 Award Recipient) *The Rich, Unexplored Diversity of Airway Intrinsic Neurons* Massachusetts Institute of Technology <u>sprescot@mit.edu</u>

Sridhar Ramaswamy, M.D.

(2002 Award Recipient) Molecular Diagnostics for Cancer Metastasis Massachusetts General Hospital Cancer Center sridhar@mgh.harvard.edu

Peter W. Reddien, Ph.D.

(2006 Award Recipient) Regulation of Stem Cells for Regeneration in Planarians Whitehead Institute for Biomedical Research reddien@wi.mit.edu

Nicholas Rhind, Ph.D.

(2001 Award Recipient) The Role of Induced Recombination in the Fission Yeast S-phase DNA Damage Checkpoint University of Massachusetts Medical School nick.rhind@umassmed.edu

John Rinn, Ph.D. (2008 Award Recipient) Large Intergenic Non-Coding RNAs in Cancer Harvard University john rinn@harvard.edu

Tobias Ritter, Ph.D.

(2008 Award Recipient) Approach to Access Positron-Emission-Tomography (PET) Tracers for Molecular Imaging Harvard University <u>ritter@chemistry.harvard.edu</u>

W. Benjamin Rogers, Ph.D.

(2017 Award Recipient) Developing DNA Nanotechnology Tools for Probing RNA Secondary Structure and RNA-Protein Interactions Brandeis University wrogers@brandeis.edu

Silvia Rouskin, Ph.D. (2016 Award Recipient) Identifying the Factors Required for mRNA Localization During Metazoan Development Whitehead Institute for Biomedical Research srouskin@wi.mit.edu

Sandra Ryeom, Ph.D. (2005 Award Recipient) Cancer Protection by the Down Syndrome Candidate Region-1 Gene University of Pennsylvania School of Medicine sryeom@upenn.edu

Bernardo L. Sabatini, M.D., Ph.D.

(2001 Award Recipient) The Role of Regulated Protein Translation in Synapse Formation and Spine Growth Harvard Medical School Bernardo Sabatini@hms.harvard.edu

Adrian Salic, Ph.D.

(2005 Award Recipient) Chromosome Segregation in Vertebrates: A Multidisciplinary Approach to Understanding Kinetochore Function and Centromeric Cohesion Harvard Medical School adrian salic@hms.harvard.edu

Susan L. Santangelo, Sc.D.

(July 1997 Award Recipient) Extremely Discordant Sib-Pairs to Search for Autism Genes Massachusetts General Hospital ssantangelo@pngu.mgh.harvard.edu

Rebecca A Scheck, Ph.D.

(2014 Award Recipient) Mapping the Uncharted: Encodable Chemistry to Discover the Role of Glycation in Disease Tufts University rebecca.scheck@tufts.edu

Gabriela Schlau-Cohen, Ph.D.

(2015 Award Recipient) A Biophysical Toolkit to Explore Bacteria Chemotaxis Massachusetts Institute of Technology gssc@mit.edu

Dietmar Schmucker, Ph.D.

(2001 Award Recipient) Function of the Molecular Diversity of Neuronal Receptors VIB Vesalius Research Center <u>dietmar.schmucker@vib-kuleuven.be</u>

Gavin R. Schnitzler, Ph.D. (2000 Award Recipient) Human Chromatin Remodeling Complexes and Transcriptional Control Tufts University School of Medicine gschnitzler@tuftsmedicalcenter.org

David C. Seldin, M.D., Ph.D. (1996 Award Recipient) Casein Kinase II and Lymphomagenesis in Transgenic Mice Boston University Medical Center

Piali Sengupta, Ph.D.

(1997 Award Recipient) Role of Nuclear Receptors in the Chemosensory System of C. elegans Brandeis University sengupta@brandeis.edu

Matthew D. Shair, Ph.D.

(1997 Award Recipient) Discovery of Small Molecules which Disrupt Protein-Protein Interactions Harvard University shair@chemistry.harvard.edu

Sichen Shao, Ph.D.

(2017 Award Recipient) Mechanistic Dissection of Tail-Anchored Membrane Protein Sorting Harvard Medical School <u>sichen_shao@hms.harvard.edu</u>

Ann M. Sheehy, Ph.D. (2007 Award Recipient) Harnessing the Power of the Anti-HIV Protein APOBEC3G College of the Holy Cross asheehy@holycross.edu

Michael Y. Sherman, Ph.D.

(1996 Award Recipient) Molecular Chaperones and Degradation of Oxidatively Damaged Proteins Boston University School of Medicine <u>sherma1@bu.edu</u>

Ramesh A. Shivdasani, M.D., Ph.D.

(1997 Award Recipient) Identification and Characterization of Genes that Regulate Vertebrate Gut Epithelial Cell Differentiation Dana-Farber Cancer Institute ramesh shivdasani@dfci.harvard.edu

Matthew Donald Shoulders, Ph.D.

(2013 Award Recipient) Hijacking the Host Cell's Protein Homeostasis Network to Potentiate Viral Evolution Massachusetts Institute of Technology <u>mshoulde@mit.edu</u>

Sergei Y. Sokol, Ph.D.

(1994 Award Recipient) The Dishevelled Gene Product and the Establishment of Dorso-Ventral Polarity in Xenopus Embryos Mount Sinai School of Medicine sergei.sokol@mssm.edu

Berna Sozen, Ph.D.

(2022 Award Recipient) Deciphering Principles of Human Embryonic Patterning in Development and Disease Yale School of Medicine berna.sozen@yale.edu

Jessica Spinelli, Ph.D.

(2023 Award Recipient) Elucidating Novel Circuits of Electron Flow in the Mammalian Electron Transport Chain University of Massachusetts Medical School Jessica.Spinelli@umassmed.edu

Bryan Spring, Ph.D.

(2017 Award Recipient) Peering into Cancer Stem Cell Niches to Guide Suppression of Multiple Signaling Loop Pathways Northeastern University b.spring@northeastern.edu

Mansi Srivastava, Ph.D.

(2016 Award Recipient) Cellular Dynamics and Regulation of Pluripotent Stem Cells in vivo Harvard University mansi@oeb.harvard.edu

Kimberly Stegmaier, M.D.

(2007 Award Recipient) Chemical Genomic Approach to Modulating Oncogenic Transcription Factors Dana-Farber Cancer Institute <u>Kimberly Stegmaier@dfci.harvard.edu</u>

Beth Stevens, Ph.D.

(2008 Award Recipient) The Role of the Complement Cascade in Eliminating Synapses during Development and Disease Boston Children's Hospital <u>beth.stevens@childrens.harvard.edu</u>

Radhika Subramanian, Ph.D.

(2015 Award Recipient) Building a Cilium for Intercellular Signaling in Vitro Reconstitution of the Hedgehog Signaling Pathway Massachusetts General Hospital radhika@molbio.mgh.harvard.edu

Masahiko Sugita, M.D.

(2000 Award Recipient) A Novel Pathway for Lipid Antigen Presentation by CD1 Molecules Kyoto University <u>msugita@virus.kyoto-u.ac.jp</u>

Elsie M. Sunderland, Ph.D.

(2012 Award Recipient) Sources, Trends and Effects of Immunotoxic Perfluorinated Compounds Harvard School of Public Health esunder@hsph.harvard.edu

Mario Luca Suva, M.D., Ph.D.

(2014 Award Recipient) Uncovering the Role of Epigenetic Programs in Glioblastoma Massachusetts General Hospital Suva.Mario@mgh.harvard.edu

Sam Thiagalingam, Ph.D.

(2000 Award Recipient) hBUB1, an Alternate Target for p53 Inactivation Boston University School of Medicine samthia@bu.edu

Stefan Thor, Ph.D.

(2000 Award Recipient) Specification of Neuronal Cell Identities during Drosophila Embryogenesis Linköping University stefan.thor@liu.se

Alex Toker, Ph.D.

(1998 Award Recipient) The Role of Protein Kinase C in Integrin-Mediated Tumor Invasion Beth Israel Deaconess Medical Center atoker@bidmc.harvard.edu

Eduardo M. Torres, Ph.D.

(2012 Award Recipient) *Role of Protein Turnover Pathways in Aneuploid Cells* University of Massachusetts Medical School <u>eduardo.torres@umassmed.edu</u>

Shannon J. Turley, Ph.D. (2005 Award Recipient) Targeting IkappaB Kinase in Dendritic Cells to Prevent Pancreatic Cancer Genentech turley.shannon@gene.com

Naoshige Uchida, Ph.D.

(2007 Award Recipient) Elucidating Neural Circuits Underlying Decision-Making in Rodents Harvard University uchida@mcb.harvard.edu

Gowthaman Uthaman, Ph.D.

(2021 Award Recipient) Regulation of Anaphylactic IgE Promoting Tfh13 Cell Subset in Allergic Sensitization University of Massachusetts Medical School ugowthaman@gmail.com

Sander van den Heuvel, Ph.D.

(1998 Award Recipient) Genetic Analysis of Cell-Cycle Regulation and Checkpoint Control Utrecht University s.j.l.vandenHeuvel@uu.nl

David Van Vactor, Ph.D.

(1997 Award Recipient) Molecular Analysis of Fastlane, a Novel Gene Required for Specific Axon Guidance Harvard Medical School <u>davie_vanvactor@hms.harvard.edu</u>

Matthew G. Vander Heiden, M.D., Ph.D.

(2010 Award Recipient) The Impact of Pyruvate Kinase Activity on Cancer Cell Metabolism and Tumor Growth In Vivo Massachusetts Institute of Technology myh@mit.edu

Shobha Vasudevan, Ph.D.

(2010 Award Recipient) Regulation of Quiescence by MicroRNAs Massachusetts General Hospital vasudevan.shobha@mgh.harvard.edu

Douglas E. Vetter, Ph.D. (2001 Award Recipient) A Transgenic and Proteomic Analysis of Olivocochlear System Function and Development The University of Mississippi Medical Center dvetter@umc.edu

Seychelle M. Vos, Ph.D.

(2021 Award Recipient) Elucidating How Genome Organization Influences Gene Expression Massachusetts Institute of Technology seyvos@mit.edu

Amy J. Wagers, Ph.D.

(2004 Award Recipient) Intrinsic and Extrinsic Regulators of Hematopoietic Stem Cell Function Joslin Diabetes Center amy.wagers@joslin.harvard.edu

Yong-Xu Wang, Ph.D.

(2006 Award Recipient) *Transcriptional Control of Hepatic Gluconeogenesis by Twist-1* University of Massachusetts Medical School yongxu.wang@umassmed.edu

Hongwei Wang, Ph.D.

(2009 Award Recipient) Structure and Mechanism of the Human RISC-Loading Complex Yale University hongwei.wang@yale.edu Steven Warach, M.D., Ph.D. (1993 Award Recipient) Distinguishing Reversible from Irreversible Ischemic Neuronal Injury Seton/UT Southwestern Medical Center swarach@seton.org

H. Christian Weber, M.D. (1999 Award Recipient) Human Gastrin-Releasing Peptide Receptor Gene Regulation Boston University School of Medicine christian.weber@bmc.org

Eranthie Weerapana, Ph.D.

(2011 Award Recipient) Activity-Based Proteomic Approaches to Investigate Aging in C. Elegans Boston College <u>eranthie@bc.edu</u>

Kristin White, Ph.D.

(1996 Award Recipient) Genetic Control of Apoptosis in Drosophila Massachusetts General Hospital kwhite4@partners.org

Jessica LaMae Whited, Ph.D.

(2013 Award Recipient) Understanding Information-Encoding During Salamander Limb Regeneration Brigham and Women's Hospital jwhited@partners.org

Rachel I. Wilson, Ph.D. (2004 Award Recipient) Synaptic Mechanisms of Chemical Stimulus Encoding Harvard Medical School Rachel Wilson@hms.harvard.edu

Florian Winau, M.D.

(2009 Award Recipient) Hepatic Stellate Cells Instruct Lymphoid Progenitors to Home to the Thymus Immune Disease Institute florian.winau@childrens.harvard.edu

Yong Xiong, Ph.D.

(2006 Award Recipient) Mechanisms of HIV Suppression by Human Antiviral Protein APOBEC3G and HIV's Countermeasures Yale University yong.xiong@yale.edu

Hannah Yevick, Ph.D.

(2024 Award Recipient) Investigating the Role of Multinucleation in Achieving a Mechanically Robust Maternal Fetal Barrier Brandeis University yevick@brandeis.edu

Meg Younger, Ph.D.

(2023 Award Recipient) Non-Canonical Odor Coding in Mosquitoes Boston University <u>myounger@bu.edu</u>

Lee Zou, Ph.D.

(2004 Award Recipient) Sensing and Signaling DNA Damage in Human Cells Massachusetts General Hospital zou.lee@mgh.harvard.edu