

Christopher P. Austin has served as director of the National Center for Advancing Translational Sciences at the National Institutes of Health since 2012. Prior to this role, he was NCATS' scientific director, focusing on translating basic science discoveries into new treatments and technologies to improve the efficiency of therapeutic/diagnostic development. He founded several initiatives, including the NIH Chemical Genomics Center, the Therapeutics for Rare and Neglected Diseases program, and the Toxicology in the 21st Century program. Before joining NIH in 2002, he led genomic-based target discovery, pharmacogenomic, and neuropsychiatric drug-development programs at Merck. From 2016 to 2018, he served as chair of the International Rare Disease Research Consortium (IRDiRC); Dr. Austin is also a member of National Academy of Medicine. He earned an A.B. from Princeton University, an M.D. from Harvard Medical School, and completed training in internal medicine and neurology at Massachusetts General Hospital.



George Q. Daley, MD, PhD, is the dean of Harvard Medical School and the Caroline Shields Walker Professor of Medicine. A physician-scientist and an authority on stem cell science and cancer biology, his discoveries have twice been cited in *Science* magazine's Top 10 Breakthroughs of the Year. He has co-authored international guidelines for the conduct and clinical translation of stem cell research and regenerative medicine and for ethical oversight of emerging biotechnologies. Daley's priorities as dean of HMS include fostering innovative biomedical, computational and health care policy research, building a pipeline of novel therapeutics founded on basic science, nurturing the next generation of physician-scientists and advancing diversity in

science, technology, engineering and medicine. Daley earned his AB and MD degrees from Harvard and a PhD in biology from MIT, and has worked as a trainee, fellow and staff physician at several HMS-affiliated hospitals.



Peter Marks, MD, PhD, received his graduate degree in cell and molecular biology and his medical degree at New York University and completed Internal Medicine residency and Hematology/Medical Oncology training at Brigham and Women's Hospital in Boston. He has worked in academic settings teaching and caring for patients and in industry on drug development. He joined the FDA in 2012 as Deputy Center Director for CBER and became Center Director in January 2016.



Victor J. Dzau, MD, is the President of the US National Academy of Medicine (NAM). In addition, he serves as Vice Chair of the National Research Council. He is Chancellor Emeritus and James B. Duke Distinguished Professor of Medicine at Duke University and the past President and CEO of the Duke University Health System. Previously, Dr. Dzau was the Hersey Professor of Medicine and Chairman of Medicine at Harvard Medical School's Brigham and Women's Hospital, as well as Bloomfield Professor and Chairman of Medicine at Stanford University. He is an internationally acclaimed leader and scientist has made a significant impact through his seminal research in cardiovascular medicine and genetics. His important work on the renin angiotensin system laid the foundation for development of lifesaving drugs known as ACE inhibitors, used globally to treat hypertension and heart failure. He pioneered gene therapy for vascular disease and was the first to introduce DNA decoy

molecules to block transcription as gene therapy in humans. His pioneering research in cardiovascular regeneration led to the Paracrine Hypothesis of stem cell action and the therapeutic strategy of direct cardiac reprogramming.

Dr Dzau has served on the Advisory Committee to the NIH Director and as chair of the NIH Cardiovascular Disease Advisory Committee. He chaired the Steering Committee of the NHLBI Progenitor Cell Biology Consortium (2010-2017) and now chairs the Progenitor Cell Translational Consortium. Dr Dzau also chairs the International Science Advisory Committee of the Qatar Genome Project, the Scientific Boards of the Peter Munk Cardiac Center of University of Toronto and Institute of Cardiovascular and Medical Sciences of University of Glasgow. He co-chairs the Healthy Brain Global Initiative. He serves on the Advisory Council of Imperial College Health Partners of UK, Health and Biomedical Sciences Council of Singapore and the Global Futures Council on Healthy Longevity of the World Economic Forum.

In his role as a leader in health, Dr. Dzau has led efforts in innovation to improve health.

At the National Academies, Dr Dzau has designed and led important initiatives such as the Commission on a Global Health Risk Framework for the Future; Vital Directions for Health and Health Care, the NAM Grand Challenges in Healthy Longevity and the Human Genome Editing Initiative

Among his many honors and recognitions are the Gustav Nylin Medal from the Swedish Royal College of Medicine, the Research Achievement Award from the American Heart Association, the Ellis Island Medal of Honor, the Poulzer Prize of the European Academy of Sciences and Arts and the Henry Freisen International Prize. He is a member of the National Academy of Medicine, American Academy of Arts and Sciences, Academia Sinica and European Academy of Sciences and Arts. He has received sixteen honorary doctorates.



Kevin Eggan, PhD, joined BioMarin as Group Vice President, Head of Research and Early Development in 2020. He is responsible for the execution of BioMarin's discovery research programs, playing a critical role in shaping the vision of the company's future research pipeline. He heads BioMarin's Research organization, providing scientific leadership throughout the drug discovery process. Dr. Eggan is charged with further building BioMarin's leadership position in genetic medicines in support of people affected by rare genetic diseases and contributing to the long-term growth of BioMarin through the oversight of an exceptional pipeline of first- or best-in-class therapies.

Dr. Eggan has served as a tenured Professor in the Department of Stem Cell and Regenerative Biology at Harvard University, Director of Stem Cell Biology for the Stanley Center for Psychiatric Research at the Broad

Institute, and as an Institute Member of the Broad Institute of MIT and Harvard. In addition, Dr. Eggan has published approximately 130 scientific articles and holds 13 patents. He has served on the Scientific Advisory Boards of Ipierian, Roche, and Angelini Pharma among others. He has cofounded three biotechs, Q-State Bioscience, Quralis, and Enclear Therapies which have raised more than \$85 million of investment. He has also collaborated with Ipierian on establishing human neuronal models that were later used to discover and characterize an anti-Tau antibody that is currently part of Biogen's portfolio for a potential treatment of Alzheimer's disease.

Dr. Eggan resolved early in his academic career to raising support for the stem cell research community at large. While he has been involved in a variety of efforts outside of Harvard, Dr. Eggan worked from 2005 until 2015 with The New York Stem Cell Foundation (NYSCF) and their CEO Susan Solomon to raise more than \$200 million for stem cell research. Amongst the most impactful of these efforts has been the ability to raise more than \$100 million for young investigator programs in stem cell biology and neuroscience that have supported more than 70 five-year awards to junior faculty and fellowships for 75 postdoctoral trainees.

Dr. Eggan received his B.S. in microbiology at the University of Illinois and his Ph.D. in biology from M.I.T. where he focused on cloning, stem cells, and reprogramming after nuclear transfer under the guidance of Rudolph Jaenisch, Ph.D. a scientific pioneer in genetics. Dr. Eggan remained in the lab of Dr. Jaenisch for a one-year post-doctoral position at the Whitehead Institute for Biomedical Research where he conducted a study with Nobel laureate Richard Axel, M.D. Dr. Eggan has received international recognition for his work including receiving the MacArthur Foundation's "Genius Grant." He has also been named one of 50 Howard Hughes Medical Institute Early Career Scientists, one of the 50 Most Influential People in Science by Scientific American two years in a row, Innovator of the Year by Technology Review Magazine, a Top Innovator under 35 by Technology Review Magazine, and a "Brilliant 10" by Popular Science Magazine.



Joseph ("Mike") McCune is Head of the HIV Frontiers Program at the Bill & Melinda Gates Foundation and a Professor Emeritus of Medicine at the University of California, San Francisco. After studies at Harvard College (with Jack Strominger, leading to an AB in biochemistry) and at the Rockefeller University (with Henry Kunkel and Gunter Blobel, leading to a PhD in cell biology and immunology), he started to treat patients with HIV disease as a resident in internal medicine at UCSF from 1982-1984 and has been involved in the HIV/AIDS research field ever since. This work included postdoctoral studies with Irv Weissman at Stanford (1985-1988), exploring the fusogenic properties of the HIV envelope protein and invention of the first humanized mouse model (the SCID-hu mouse) capable of multilineage human hematopoiesis and

receptive to infection with primary isolates of HIV, and was continued in companies that he cofounded (SyStemix in 1988 and Progenesys in 1991) and at which he served first as CEO and then as a Scientific Director. In 1995, Dr. McCune returned to academia as an investigator at the Gladstone Institute of Virology and Immunology and then (starting in 2006) as the Chief of the Division of Experimental Medicine (which he founded) at UCSF. Concomitantly, he was the founding PI (and Senior Associate Dean) of the Clinical and Translational Sciences Institute at UCSF (from 2005-08). In recent years, he has helped to form multidisciplinary, collaborative research teams to find a cure for HIV disease, first in the context of NIH- and amfAR-funded "collaboratories" at UCSF (2010-2016) and then as Head of the HIV Frontiers Program at the Bill & Melinda Gates Foundation (2018-present). Throughout this time, he has taken care of patients with HIV disease at the San Francisco General Hospital AIDS Clinic/Ward 86 and has also actively mentored graduate students and postdoctoral fellows, many of whom have gone on to successful careers in academia or biotech/pharma.

Dr. McCune's studies have led to the publication of over 270 peer-reviewed articles and reviews, and he is the holder of 21 patents and inventions. On the basis of this work, he has been awarded the Elizabeth Glaser Pediatric AIDS Foundation Scientist Award in 1996, the Burroughs Wellcome Fund Clinical Scientist Award in Translational Research in 2000, a MERIT Award from the NIH in 2001, the NIH Director's Pioneer Award in 2004, a Gates Grand Challenges Explorations Phase II Award in 2011, and a number of mentoring awards for his activities with junior faculty, postdoctoral fellows, and graduate students. He is a member of many scientific and professional societies, including the American Society for Clinical Investigation, the American Association of Physicians, and the Henry Kunkel Society. He has also served on the editorial boards of multiple scientific journals. He has served as a board member for a variety of organizations, including The Rockefeller University, the Elizabeth Glaser Pediatric AIDS Foundation, Project Inform, Project Open Hand, the Gay Men's Health Crisis, the Foundation for AIDS and Immune Research, the Foundation for Vaccine Research, the Alliance for Lupus Research, the Immune Tolerance Network, the Bluefield Project to Cure Frontotemporal Dementia, and for the biotechnology companies, SyStemix, Progenesys, and Prosetta.



Christine Mummery has a PhD in Biophysics from the University of London. She was group leader and Professor of Developmental Biology at the Hubrecht Institute until 2007 and after a sabbatical at the Harvard Stem Cell Institute introduced human induced pluripotent stem cells to the Netherlands. In 2008, she became Chair of Developmental Biology at Leiden University Medical Centre in the Netherlands and in 2015, guest professor at the University of Twente. In 2010, she co-founded Nacardia by as an LUMC spin out. Her current research concerns modelling cardiovascular diseases using stem cells from patients and developing organ-on-chip models of multiple organs for safety pharmacology and potential disease and drug targets. She led an NWO Gravity proposal was recently awarded a multimillion grant for this purpose and holds European Research Council Advanced and Proof-of-Concept grants. She co-founded the European

Organ on Chip Society and the Netherlands Human Disease Modelling Technology organization (hDMT.technology).

She is a member of the Royal Netherlands Academy of Science (KNAW), and is currently president of the International Society of Stem Cell research (ISSCR). Her ambitions include promoting women and minorities in stem cell research. She is on several scientific advisory boards including the Hubrecht Institute and Sartorius Gmbh.



Robert Nelsen is a co-founder and a Managing Director of ARCH Venture Partners. He joined ARCH at its founding and played a significant role in the early sourcing, financing and development of more than 100 companies, including twenty-three which have reached valuations exceeding \$1 billion. His seed and early-stage investments include Illumina (ILMN); Alnylam Pharmaceuticals (ALNY); Juno Therapeutics (IUNO); Sana Biotechnology (SANA), Unity Biotechnology (UBX); Sienna Biopharmaceuticals (SNNA); Vir Biotechnology(VIR); Pharmaceuticals (AGIO); Agios Therapeutics (SAGE); GRAIL; Ikaria; Kythera Biopharmaceuticals (KYTH); Receptos (RCPT); Aviron (AVIR); Denali Therapeutics (DNLI); Prime Medicine; Beam Therapeutics (BEAM); NetBot; Bluebird Bio (BLUE); R2 Technology; XenoPort (XNPT); Caliper Life Sciences (CALP); Trubion Pharmaceuticals (TRBN); Adolor (ADLR);

deCODE Genetics; Array BioPharma (ARRY); Editas (EDIT); IDUN Pharmaceuticals; Classmates.com; Hua Medicine; Fate Therapeutics (FATE); Rubius Therapeutics (RUBY); KSQ Therapeutics; WuxiNextCODE; and Everyday Learning Corporation.

Mr. Nelsen is a director of Vir Bio, GRAIL, Sana Biotechnology, Beam Therapeutics, Prime Medicine, Resilience, Lyell, RBNC, Denali Therapeutics, Karuna Therapeutics, insitro, Maze Therapeutics, Inc., and serves as Chairman of Hua Medicine, among others. He previously served as a Trustee of the Fred Hutchinson Cancer Research Institute, the Institute for Systems Biology, and was a director of the National Venture Capital Association. Mr. Nelsen holds an M.B.A. from the University of Chicago and a B.S. from the University of Puget Sound with majors in Economics and Biology.



Dr. Derrick Rossi is a serial biotech entrepreneur and stem cell scientist. His efforts in the development of cutting-edge technologies and novel therapeutic strategies are at the forefront of regenerative medicine and biotechnology. Time magazine named Dr. Rossi as one of the 100 Most Influential People in the world (Time 100) in 2011. Dr. Rossi earned his BSc and MSc from University of Toronto, and his PhD from the University of Helsinki. He was an Associate Professor at Harvard Medical School and Harvard University and an investigator at Boston Children's Hospital where he led an academic team working on stem cell biology and regenerative medicine. Discoveries made in Dr. Rossi's lab led to the formation of several leading biotechnology companies. His development of modified-mRNA reprogramming was named by Time magazine as one of the top ten medical breakthroughs of 2010. That same year, Dr. Rossi leveraged that

technology to found Moderna, a company focused on developing modified-mRNA therapeutics and whose COVID-19 vaccine is being deployed around the world. In 2015, Dr. Rossi co-founded Intellia Therapeutics, a clinical-stage company focused on developing CRISPR/Cas9-based therapeutics. In 2016, he co-founded Magenta Therapeutics, which is focused on transforming transplantation medicine. In 2017, he co-founded Stellexis Therapeutics, an oncology company targeting the stem cell origin of cancer. Also in 2017 he helped launch Convelo Therapeutics, which is developing remyelination therapeutics for patients suffering from demyelination diseases such as multiple sclerosis. He currently serves as the CEO of Convelo.



Dr. Joshua Sanes is Professor of Molecular and Cellular Biology at Harvard. He received a BA from Yale and a PhD from Harvard, then completed a postdoctoral fellowship at UCSF before joining the faculty of Washington University. He returned to Harvard in 2004 as Professor of Molecular and Cellular Biology and founding Director of the Center for Brain Science. He is a member of the National Academy of Sciences and the American Academy of Arts and Sciences. He has served on editorial boards of scientific journals including Cell and Neuron; on planning committees for the NIH BRAIN Initiative and the NEI Audacious Goals Initiative; and on advisory boards for the Max-Planck Institute, Wellcome Trust, Stowers Institute,

Hebrew University and Howard Hughes Medical Institute. His work has been published in over 400 papers, and has been honored with the Schuetze, Gruber, Cowan, Perl/UNC and Scolnick Prizes. He and his colleagues have studied the formation of synapses in the motor and visual systems. In the course of their work, they also pioneered new ways to mark and manipulate neurons and the synapses they form. Most recently, they have extended studies of the visual system to analysis of irreversible vision loss, axonal regeneration after injury, the human visual system and age-related decline in synaptic function.



Ilyas Singec, is the inaugural director of the Stem Cell Translation Laboratory (SCTL) at the National Center for Advancing Translational Sciences (NCATS), a component of the National Institutes of Health (NIH). The SCTL was established in 2015 with support from NIH Common Fund (Office of the NIH Director Dr. Francis Collins) with the specific mission to help advance the iPS cell technology into clinical applications. Prior to this role, Dr. Singec, was the Director of Cell Technologies and Laboratory Head at Pfizer, where he used stem cell models for drug discovery and genetics-based target identification/validation for neurological and psychiatric disorders. Dr. Singec, received his MD/PhD (summa cum laude) from the University of Freiburg (Germany) and completed training in clinical neuropathology.



Sally Temple PhD is the Co-Founder and Scientific Director of the Neural Stem Cell Institute (NSCI) in Rensselaer NY, USA. The mission of the NSCI is to use stem cell research to create therapies for disorders of the central nervous system - the brain, retina and spinal cord. Using patient-derived induced pluripotent stem cells (iPSCs), her research group is building models to study neurodegenerative diseases, with the goal of defining early changes associated with disease that are amenable to early intervention to prevent disease progression. Sally's group models retinal degeneration using iPSC technology and collaborates with Dr. Jeff Stern and a team developing a cell therapy for age-related macular degeneration using an adult stem cell they discovered in the human retina. Sally is past president of the International Society for Stem Cell Research (ISSCR), the largest global organization for scientists working in the stem cell field. Her work has been recognized with several awards, including the Jacob Javits and R35 awards from the

National Institutes of Health, the MacArthur Fellowship, and the Ellison investigator award. Sally is the scientific cofounder of two biotech companies, *StemCultures*, which makes bioengineered growth factors for cell manufacture and *Luxa Biotech*, which is advancing the clinical trial for stem cell therapy patients with age-related macular degeneration.



Dr. Amy Wagers is the Forst Family Professor and Co-Chair of the Department of Stem Cell and Regenerative Biology at Harvard University, a Senior Investigator at the Joslin Diabetes Center and a member of the Paul F. Glenn Center for the Biology of Aging at Harvard Medical School. Dr. Wagers' laboratory investigates how changes in stem cell activity impact tissue homeostasis and repair throughout life, and how stem cells may be harnessed for regenerative medicine using cell transplantation and gene editing approaches.



Fiona Watt obtained her DPhil from the University of Oxford and carried out postdoctoral research at M.I.T., Cambridge, USA. She established her first lab at the Kennedy Institute of Rheumatology in London and then moved to the London Research Institute. From 2006 to 2012 she was Deputy Director of the Cancer Research UK Cambridge Research Institute and Deputy Director of the Wellcome Trust Centre for Stem Cell Research, University of Cambridge. She moved to King's College London in September 2012 to take up her current position as the Director of the Centre for Stem Cells & Regenerative Medicine. Since April 2018 Fiona has been on secondment as the Executive Chair of the Medical Research Council in the UK. The major research interest of Fiona Watt's lab is in the interplay between internal and external factors in the regulation of stem cell fate.