Reappointment of Scientific Members to the Grants Working Group

Grants Working Group Members originally appointed in late 2006 and early 2007 have terms that are now expiring or just expired. We are seeking the reappointment of the individuals listed in the table below. Their updated biographies follow. In accordance with the rules set forth by Proposition 71, reappointments should be staggered into thirds, each with a 2, 4, or 6-year term. The first reappointment of GWG members occurred over a year ago and the ICOC approved reappointment of 13 members all for 6-year terms. We propose 2 and 4-year reappointment terms for this cohort (as indicated in table) to realign with the required staggered approach.

Proposed Reappointments to GWG

Last	First	Yrs.	Expertise
Bulte	Jeff	2	Cellular Imaging
Eggan	Kevin	2	Biology of Reprogramming; Neuromuscular System Disorders
Emerson	Stephen	2	Hematopoietic Cells & Transplantation
Fishell	Gordon	2	Developmental Genetics
Gearhart	John	2	Mammalian Developmental Genetics; Stem Cell Biology
Goodell	Margaret	2	Hematopoietic Stem Cells; Gene Therapy
Morrison	Sean	2	Hematopoietic & Neural Stem Cells
Rosmarin	Alan	2	Hematology; Transcriptional Regulation
Stacey	Glyn	2	Stem Cell Standardization & Banking
Stiles	Charles D.	2	Neuro-oncology; Genomics
Baron	Margaret	4	Hematopoiesis; Embryogenesis; Gene Expression
Evans	Todd	4	Developmental & Molecular Biology
ffrench-Constant	Charles	4	Neurogenesis; Neurodegenerative Diseases (MS)
Kerr	Douglas	4	Transverse Myelitis
Kiessling	Ann	4	Reproductive Biology; HIV
Krause	Diane	4	Hematopoietic Stem & Progenitor Cells
Kurtzberg	Joanne	4	Stem Cell Transplantation
Rossant	Janet	4	Developmental & Stem Cell Biology
Rudnicki	Michael	4	Myogenesis; Transcriptional Regulation
Studer	Lorenz	4	Neurogenesis; Differentiation
Wagers	Amy	4	Hematopoietic & Skeletal Muscle Stem Cells; Aging
Wagner	John	4	Lympho-hematopoietic Disorders; HSCT; UCB

Margaret H. Baron, MD, PhD
Dr. Margaret H. Baron is the Irene and Dr. Arthur M. Fishberg Professor of Medicine and Director of Research in Hematology and Blood Disorders at the Mount Sinai School of Medicine in New York. After receiving her MD from Harvard Medical School (HST Program) and her PhD from the Massachusetts Institute of Technology, she was Assistant, then Associate Professor at Harvard University before moving to the Mount Sinai School of Medicine in 1997. Currently, she is also Co-Director of the Graduate Program in Developmental and Stem Cell Biology and the Program Director of an NIH-funded T32 Research Training Program in Molecular and Cellular Hematology. Her numerous awards and honors include election to the American Society for Clinical Investigation (2000) and the Association of American Physicians (2011), Richard E. Rosenfield Faculty Achievement Award (2000), American Cancer Society Research Recognition Award (2004) and Fellow in the Executive Leadership in Academic Medicine Program (ELAM, 2012-2013). Dr. Baron was previously an Assistant Director of the MSTP Program and Interim Co-Director of The Black Family Stem Cell Institute at Mount Sinai. She has served on review panels for the American Cancer Society and the National Institutes of Health (NIH) and has chaired Special Emphasis Panels for the NIH. She has also chaired the Scientific Subcommittee on Hemoglobin and Red Cells for the American Society for Hematology and serves on the editorial board of the journal *StemCells*. Her research focus is developmental hematopoiesis (particularly erythropoiesis) and molecular regulation of mammalian stem cell differentiation.

Jeff W.M. Bulte, Ph.D.
Dr. Bulte is a Professor of Radiology, Oncology, Biomedical Engineering, and Chemical & Biomolecular Engineering at the Johns Hopkins University School of Medicine. He serves as Director of Cellular Imaging in the JHU Institute for Cell Engineering. He received his PhD degree summa cum laude From the University of Groningen, The Netherlands in 1991. Dr. Bulte spent 10 years at the National Institutes of Health, first as a postdoctoral fellow and then a Staff Scientist. He was recruited to Johns Hopkins as an Assistant Professor in 2001, became an Associate Professor in 2002, and a Full Professor in 2006. He is a fellow of the ISMRM, and has published over 180 peer-reviewed publications and 30 book chapters. His research focus is on cellular imaging, and his group has been part of the first-in-man MRI cell tracking studies using stem cells.

Kevin Eggan, Ph.D.
Dr. Eggan is currently Associate Professor in the Department of Stem Cell and Regenerative Biology, Harvard Stem Cell Institute, Harvard University. Dr. Eggan completed his bachelor's degree in microbiology at the University of Illinois in 1996. A two-year Predoctoral internship at Amgen at the National Institutes of Health in Bethesda solidified his desire to pursue a career in academic research. He enrolled at the graduate school of Massachusetts Institute of Technology in 1998 shortly after the cloning of Dolly the Sheep was reported in Scotland. During his Ph.D. training, he actively pursued projects focused on cloning, stem cells and

reprogramming after nuclear transfer under the guidance of genetics pioneer, Dr. Rudolf Jaenisch. He stayed in the Dr. Jaenisch's lab after his graduation for a one-year postdoc training in 2002. During that time, he conducted a collaborative study with Dr. Richard Axel, a Nobel Prize winner at the Howard Hughes Medical Institute. In 2003, he moved to Harvard University as a junior fellow and then became an assistant professor of Molecular & Cellular Biology at the Stem Cell Institute in 2005.

As a young investigator in the burgeoning field of stem cell biology, Dr. Eggan has garnered international recognition for his seminal work and a number of high profile awards for his creativity and productivity, including the MacArthur Foundation "Genius Grant" in 2006. His current research focuses on applying the knowledge gained in stem cell biology to studying the mechanisms underlying amyotrophic lateral sclerosis (ALS) and discovering new therapeutic targets.He made a significant impact in the field by publishing two high profile papers in Cell Stem Cell and Science in 2008. One paper described the discovery that motor neurons derived from human embryonic stem cells are susceptible to the toxic effect of glial cells harboring an ALS mutation while the other shows that induced pluripotent stem (iPS) cells generated from adult skin cells of ALS patients can be differentiated into motor neurons. In 2009, he was selected as one of 50 Howard Hughes Medical Institute Early Career Scientists who will receive six years of dedicated support to conduct transformative research. He will use this support to advance the use of both human embryonic stem cells and iPS cells in the study of ALS study and the development of new treatments.

Stephen G. Emerson, M.D., Ph.D.
Dr. Emerson is the Clyde Wu Professor in Immunology and Medicine and Director of Herbert Irving Comprehensive Cancer Center at Columbia University Medical Center. After receiving his MD and PhD from Yale University, Dr. Emerson interned at Massachusetts General Hospital followed by clinical and research fellowships at Brigham and Women's Hospital, Dana-Farber Cancer Institute and Children's Hospital Medical Center in Boston. In 1990, Dr. Emerson was at the University of Michigan where he was Scientific Director of the Bone Marrow Transplantation Program and Chief of Hematology and Associate Chief, Division of Hematology/Oncology. In 1994, he join the University of Pennsylvania where he was Chief of the Division of Hematology/Oncology, Department of Medicine. He was also the Founding Director of the University of Pennsylvania Institute for Stem Cell Biology and Regenerative Medicine. From 2007 to 2012, Dr. Emerson served as President of Haverford College.

He has contributed to over 110 peer-reviewed publications and received numerous awards for his research. Dr. Emerson served on the editorial boards of Blood, Experimental Hematology and StemCells, as well as on numerous study sections for the National Institutes of Health. He was Deputy Editor and Senior Editor for *The Journal of Clinical Investigation* from 2007 to 2012. The primary aim of Dr. Emerson's research is to understand the regulation of human hematopoietic stem cell self-renewal and differentiation and to apply this knowledge to the development

of novel cellular and molecular therapeutics utilizing bone marrow stem cells. In addition, his laboratory studies the molecular mechanisms underlying the development of graft-versus host disease.

Todd Evans, Ph.D.
Dr. Evans is Professor and Vice Chair for Research in the Department of Surgery at NewYork-Presbyterian/Weill Cornell Medical Center. He is also the co-Director of the Ansary Stem Cell Institute and founded the Weill Cornell Program in Stem Cell and Regenerative Medicine, which over the past several years has recruited top researchers in cancer biology, stem cell biology and chemical biology, forging collaborative working groups to build translational research programs, aiming ultimately to impact how we treat human disease. Dr. Evans earned his doctoral degree in molecular biology at Columbia University in 1987, followed by a postdoctoral fellowship at the National Institutes of Health (NIH). Before coming to Weill Cornell in 2009, Dr. Evans held faculty positions at the University of Pittsburgh and the Albert Einstein College of Medicine, where he also served as Dean for the graduate school. A recipient of the Established Investigator Award from the American Heart Association, and a prestigious NIH MERIT award, his research focus is on organogenesis and regeneration. A primary strategy is to elucidate the molecular regulation of normal organ development during embryogenesis, considering that disease mechanisms often recapitulate or divert embryonic programs. The Evans laboratory studies hematopoietic and cardiovascular programs, in addition to gut-derived organs including the liver, pancreas, and lung. Recently the group has made new discoveries regarding the regulation of stem cell pluripotency and cellular reprogramming, and has used chemical biology screens to identify small molecules that impact these processes. His research program is funded by the NIH and various foundations, and he has trained dozens of students and fellows.

Charles ffrench-Constant, PhD, FRCP
Dr. Charles ffrench-Constant is Chair of Medical Neurology at the University of Edinburgh, Director of the University of Edinburgh/Medical Research Council Centre for Regenerative Medicine, Director of the University of Edinburgh/Multiple Sclerosis Research Centre, and Co-Director of the Anne Rowling Regenerative Neurology Clinic. Professor ffrench-Constant graduated with a MA in Physiology from the University of Cambridge and an MB, BChir in Medicine from Middlesex Hospital, London in 1980. He gained a MRCP in Internal Medicine from Hammersmith/University College Hospital in 1984 and received a PhD in Neuroscience from University College London in 1986. He worked as a Post-Doctoral Fellow at MIT, Boston from 1987 – 1989 and in Zoology, Cambridge from 1989-1991, before being awarded a Junior Group Leader position in the Wellcome/CRC Institute at Cambridge from 1991-1996. He became a University Lecturer/Consultant at Addenbrookes Hospital, Cambridge from 1996 and was promoted to Chair in Neurological Genetics at the University of Cambridge in 1999. During this time he was funded by a Wellcome Trust Clinical Senior Fellowship and then a Research Leave Fellowship.

Gordon Fishell, Ph.D.
Dr. Gordon Fishell is Professor in the Department of Physiology and Neursoscience and the Department of Cell Biology at New York University Medical Center. He is also Associate Director of the NYU Neuroscience Institute and has co-ordinated the Skirball Institute's Developmental Genetics Program since the autumn of 1994 and is currently Professor and Coordinator of the Smilow Neuroscience Program. After receiving his Ph.D. in neurobiology from the University of Toronto in 1989, he was a postdoctoral fellow in Dr. M.E. Hatten's laboratory at Columbia University until 1992. He then joined the Rockefeller University as an Assistant Professor. Dr. Fishell has received numerous awards including the Richardson Award, the McMurrich Award, the Irma T. Hirschl Career Scientist Award, the Anthony Corso Memorial Child Brain Tumor Foundation Award, and was named a NY Spinal Cord Research Foundation Researcher. He serves on the Editorial Boards of Nature Reviews (Neuroscience), Neurosignals, The Journal of Neuroscience, Developmental Neuroscience, and Genes and Development, and is a regular member of NIH study sections. Dr. Fishell and his laboratory study the mechanisms that pattern the mammalian brain with a focus on the interface between regional patterning and the control of neuronal stem cells.

John D. Gearhart, Ph.D.
Dr. Gearhart is the James W. Effron University Professor and the Director of the Institute for Regenerative Medicine at the University of Pennsylvania. Dr. Gearhart is a developmental geneticist and his research over the past several decades has been directed at an understanding of the molecular and cellular basis of human embryonic development. Dr. Gearhart is a leader in the development and use of human reproductive technologies, embryo and germ cell manipulations and in the genetic engineering of cells. In 1998, Dr. Gearhart and his research team at Johns Hopkins published the first report on the derivation of pluripotent stem cells from germ cells of the human embryo. These cells have the capacity to form all cell types and tissues present in the human body and are considered a major starting point for the development of a wide variety of cell-based therapies in the new field of regenerative medicine. His research is focused on the basic science of stem cells, stem cell specialization, and the generation cell-based therapies for a number of diseases and injuries.
Dr. Gearhart was a founding member of the International Society for Stem Cell Research and serves on a number of advisory boards and committees of foundations, institutes and professional societies involved in stem cell research and policy and science outreach and has served as a consultant or expert witness for many governmental agencies, in states, at the national level and to governments of foreign countries.

Margaret A. Goodell, Ph.D.
Dr. Goodell is Professor of Pediatrics, Molecular and Human Genetics, and Immunology, and Director of the Stem Cells and Regenerative Medicine Center at Baylor College of Medicine. She received her PhD from Cambridge University in

England where she worked on ES cell gene targeting with Dr. Andrew Smith. She then joined Dr. Richard Mulligan's laboratory as a postdoctoral fellow working on hematopoietic stem cells at the Whitehead Institute for Biomedical Research at MIT and at Harvard University. In 1997, she joined the faculty of the Center for Cell and Gene Therapy at Baylor where her research focuses on the basic biology of hematopoietic stem cells and the molecular mechanisms controlling their behavior. Among the many awards received by Dr. Goodell are the Leukemia and Lymphoma Society Scholar Award and the W.M. Keck Foundation Award (2001), the Michael E. DeBakey M.D. Excellence in Research Award (2004) and the Stohlman Scholar Award (2006). Her professional activities include service as a Board Member and chair of the Audit Committee of the International Society for Stem Cell Research, and on the editorial boards of StemCells, PLos Biology, Blood, Experimental Hematology and Molecular Therapy. She has also served on review panels for the NIH, the Muscular Dystrophy Association and the Wellcome Society.

Douglas Kerr, M.D., Ph.D.
Dr. Kerr is currently the Medical Director, Neurology at Biogen Idec. Dr. Kerr joined Biogen in January 2010. He is a board certified neurologist and neuroscientist who spent the previous 14 years at The Johns Hopkins University. He was an associate professor of Neurology in The Johns Hopkins School of Medicine and in the Department of Molecular Microbiology and Immunology in the Johns Hopkins Bloomberg School of Public Health and at the Kennedy Krieger Institute. Dr. Kerr received his PhD from Thomas Jefferson University and his MD from Jefferson Medical and founded and directed the Johns Hopkins Project RESTORE, a multidisciplinary effort dedicated to advancement of treatments for autoimmune neurologic disorders. In 2006, Dr. Kerr was awarded the Derek Denny-Brown Young Neurological Scholar Award from the American Neurological Association as one who "has achieved a significant stature in neurological research and whose promise of continuing major contributions to the field of neurology is anticipated." Dr. Kerr has testified before the US Congress and the UK House of Lords on stem cell prospects in neurologic disorders. Dr. Kerr has over 110 peer-reviewed publications in the medical literature, mainly dealing with spinal cord motor neuron disorders and autoimmune neurologic disorders. Dr. Kerr currently directs clinical development programs for ALS and remains active with the spinal muscular atrophy (SMA) and transverse myelitis (TM) communities.

Ann Kiessling, Ph.D.
Dr. Kiessling is Director of the Bedford Stem Cell Research Foundation and retired as Associate Professor of Surgery at Harvard Medical School. She holds bachelor's degrees in Nursing and Chemistry, a master's degree in Organic Chemistry and a doctorate in Biochemistry/Biophysics from Oregon State University. Her postdoctoral research explored relationships between viruses and cancer at Fred Hutchinson Cancer Center, Memorial Sloan-Kettering Cancer Center, and University of California, San Diego. The work in San Diego led to the controversial discovery of *Reverse Transcriptase* in *normal human cells* in 1979. Prior to this discovery, it had been assumed that reverse transcriptase was an enzyme found only in retroviruses.

To understand the normal biologic role of reverse transcriptase, Dr. Kiessling began to study eggs and early cleaving embryos. Harvard Medical School recruited Dr. Kiessling in 1985, where she continues her research today.

Dr. Kiessling's interest shifted toward stem cell research in 2000, when her expertise in human egg biology led her to develop the country's first human egg donor program for stem cell research. Dr. Kiessling's research at the Bedford Stem Cell Research Foundation is now focused on the development of Parthenote Stem Cells (stem cells derived from *un*fertilized human eggs), and Nuerospheres (an early stage of development of neurons).
Dr. Kiessling has published more than 100 scientific papers and given more than 60 lectures to audiences around the world. Her writings can be found in publications such as Nature, Lancet, Proceedings of the National Academy of Science and Connecticut Law Review, and she has been the focus of articles in The Boston Globe and Newsweek. In 2003 (second edition released in 2006), Dr. Kiessling wrote Human Embryonic Stem Cells: An Introduction to the Science and Therapeutic Potential, the first textbook on the controversial topic.
Dr. Kiessling is a current member of the Connecticut Stem Cell Research Advisory Board, and a member of the Embryonic Stem Cell Research Oversight Committees (ESCROS) for Harvard University, Joslin Diabetes Center and Children's Hospital.

Diane Krause, M.D., Ph.D.
Dr. Krause is Professor of Laboratory Medicine, Pathology and Cell Biology at Yale University; Associate Director of the Yale Stem Cell Center; and Director of the Clinical Cell Processing Laboratory. She received a Sc.B. degree in Biology from Brown University, and an MD and PhD degree from the University of Pennsylvania, and performed her post-doctoral studies at Johns Hopkins University.

Dr. Krause is an internationally recognized stem cell researcher. She has a broad background in hematology and hematopoiesis, with extensive expertise in megakaryocyte-erythroid progenitors and megakaryocytopoiesis. As a postdoctoral fellow at Johns Hopkins, she gained expertise in studies of murine and human hematopoiesis while discovering the murine CD34 protein and assessing the function of CD34+ stem and progenitor cells in the bone marrow. As PI of several NIH-funded and state-funded grants, she and members of her laboratory have identified novel mechanisms in hematopoietic differentiation down the erythroid and megakaryocytic lineages. She has been PI of a Center grant from the NIH establishing the Yale Center of Excellence in Molecular Hematology (YCEMH).

Joanne Kurtzberg, M.D.
Dr. Kurtzberg is an internationally renowned expert in umbilical cord blood transplantation. She is Chief of the Division of Pediatric Blood and Marrow Transplantation, Director of the DTRI Cell and Tissue Therapies Core, Professor of Pediatrics and Pathology, and Co-Director of the Stem Cell Laboratory at Duke University School of Medicine.

Dr. Kurtzberg earned her medical degree from New York Medical College. She completed her internship at Dartmouth Medical Center, and her residency at Upstate Medical Center at the State University of New York in 1980. In that same year, she began her career at Duke University Medical Center as a senior research fellow in pediatric hematology-oncology. Within three years she was appointed as an assistant professor of pediatrics. She became a professor of pediatrics in 1993 and a professor of pathology in 2003. Dr. Kurtzberg has concentrated her work on applying basic research to the clinical setting and has published more than 200 manuscripts in peer-reviewed journals such as *The New England Journal of Medicine*, the *Journal of Pediatrics* and the *Journal of Clinical Oncology*.

Dr. Kurtzberg conducts both clinical and laboratory-based translational research efforts, all involving various aspects of normal and malignant hematopoiesis. In the laboratory, her early work focused on studies determining the mechanisms that regulate the choice between the various pathways of differentiation available to the pluripotent hematopoietic stem cell. Over the past 2 decades, Dr. Kurtzberg pioneered and is investigating the use of banked umbilical cord blood as an alternative stem cell source for unrelated marrow transplantation. She was awarded with a banking and transplant center contract from NHLBI for 1996-2005, to establish the Carolinas Cord Blood Bank (CCBB)at Duke and was the PI on the cord blood transplantation study (COBLT) in children with hematological malignancies and inborn errors of metabolism. In 2008-2009, Dr. Kurtzberg's lab pioneered studies to predict cord blood potency through novel assays on segments attached to cryopreserved cord blood units.

Sean J. Morrison, Ph.D.
Dr. Morrison is currently at the University of Texas Southwestern Medical Center where he is Director of the Children's Research Institute, the Mary McDermott Cook Chair in Pediatric Genetics, and Investigator, Howard Hughes Medical Institute. The Morrison laboratory studies the cellular and molecular mechanisms that regulate stem cell function in the nervous and hematopoietic systems and the role these mechanisms play in cancer. Dr. Morrison obtained his B.Sc. in biology and chemistry from Dalhousie University (1991), then completed a Ph.D. in immunology at Stanford University (1996), and a postdoctoral fellowship in neurobiology at Caltech (1999). From 1999 to 2011, Dr. Morrison was at the University of Michigan where he directed their Center for Stem Cell Biology. Dr. Morrison then moved to the University of Texas Southwestern Medical Center where he is the founding Director of Children's Research Institute. Dr. Morrison's laboratory studies the mechanisms that regulate stem cell self-renewal and stem cell aging, as well as the role these mechanisms play in cancer. Dr. Morrison was a Searle Scholar (2000-2003), was named to Technology Review Magazine's list of 100 young innovators (2002), received the Presidential Early Career Award for Scientists and Engineers (2003), the International Society for Hematology and Stem Cell's McCulloch and Till Award (2007) the American Association of Anatomists Harland Mossman Award (2008), and a MERIT Award from the National Institute on Aging. Dr. Morrison has also been active in public policy issues surrounding stem cell research. He has twice

testified before Congress and was a leader in the successful "Proposal 2" campaign to protect and regulate stem cell research in Michigan's state constitution.

Alan Rosmarin, M.D.
Dr. Rosmarin is Professor in the Department of Hematology Oncology at the University of Massachusetts Medical School. Previously he was Associate Professor of Medicine and of Molecular Biology, Cell Biology and Biochemistry at Brown University. He established a successful program in Oncology at Moi Teaching and Referral Hospital in Eldoret, Kenya. After receiving his medical degree from UMDNJ - Rutgers Medical School he served as an intern, resident and clinical fellow at Beth Israel Hospital/Harvard Medical School. His clinical practice is primarily directed towards Hematology and Hematologic malignancies. Widely recognized for his work, he has received many honors including the National Research Service Award and the Physician Scientist Award from the NIH, the Milton Fund Award from Harvard Medical School, and the Henry Christian Award from the American Federation for Clinical Research. He serves on the editorial boards of Stem Cells and the American Cancer Society's Cancer Information Database and on numerous review committees including as chairman of the Peer Review Committee on Leukemia, Immunology, and Blood Cell Development, the Council for Extramural Grants for the American Cancer Society, the Scientific Subcommittee on Myeloid Biology of the American Society of Hematology and review panels of the NIH. His primary research interest is the regulation of transcription in myeloid differentiation.

Janet Rossant, Ph.D.
Dr. Rossant is a Senior Scientist in the Developmental & Stem Cell Biology Program and Chief of Research at The Hospital for Sick Children, Toronto. She is also a University Professor, University of Toronto, and Professor in the Departments of Molecular Genetics, Obstetrics/Gynaecology and Paediatrics, University of Toronto. Dr. Rossant trained at the Universities of Oxford and Cambridge, United Kingdom and has been in Canada since 1977, first at Brock University and then at the Samuel Lunenfeld Research Institute, Mount Sinai Hospital, Toronto, from 1985 to 2005. Her research interests centre on understanding the genetic control of normal and abnormal development in the early mouse embryo using both cellular and genetic manipulation techniques. She is a Fellow of both the Royal Societies of London and Canada and a Foreign Associate to the National Academy of Science. In 2007, Dr. Rossant was awarded the March of Dimes Prize in Developmental Biology and the Conklin Medal from the Society for Developmental Biology.

Michael Rudnicki, Ph.D.
Dr. Michael Rudnicki is a Senior Scientist and the Director of the Regenerative Medicine Program and the Sprott Centre for Stem Cell Research at the Ottawa Hospital Research Institute. He is Professor in the Department of Medicine at the University of Ottawa. Dr. Rudnicki is the Scientific Director of the Canadian Stem Cell Network. Dr. Rudnicki is a Fellow of the Royal Society of Canada, and holds the Canada Research Chair in Molecular Genetics. He is an Associate Editor of Cell Stem

Cell and the Journal of Cell Biology, and is Co-Editor in Chief of Skeletal Muscle. He has organized international research conferences as one of the founding directors of the Society for Muscle Biology.

Dr Rudnicki's laboratory works to understand the molecular mechanisms that regulate the determination, proliferation, and differentiation of stem cells during embryonic development and during tissue regeneration. The lab has conducted leading studies into both embryonic myogenesis and the function of muscle stem cells (satellite cells) in adult regenerative myogenesis. In particular, they have worked extensively to understand the molecular mechanisms that regulate the function of satellite cells in skeletal muscle. Towards this end, the lab employs molecular genetic and genomic approaches to determine the function and roles played by regulatory factors. They identified Pax7 as a transcription factor required for the specification of satellite cells, and identified Wnt7a signaling as playing an important role in muscle stem cell function. His research has been published in scientific journals that include Cell, Nature Cell Biology, Cell Stem Cell, Genes & Development, and PLoS Biology.

Glyn Stacey, Ph.D.
Dr. Glyn Stacey has a background in microbiology and cancer research and has worked on the development of cell substrates for manufacture of biological medicines for over fifteen years. He is currently at the National Institute for Biological Standards and Control, which is soon to become a part of the Medicines and Healthcare Products Regulatory Agency. He is Head of Division of Cell Biology and Imaging and Director for the UK Stem Cell Bank (UKSCB). The UKSCB has been a licensed clinical tissue bank since 2004. The work of his group covers safety and quality issues in cell therapy, cells used for manufacturing purposes, development of novel cell-based assays and the development of reference materials for tissue typing and diagnosis of genetic disorders. This work includes the need for scale up of preservation techniques and long term storage of DNA and cell lines of various types including human stem cell lines and cells used in bioassays and vaccine production.

Glyn has served on numerous steering groups for organisations promoting and funding regenerative medicine. In 2012 he will join a working group of the UK Standing Advisory Board for the Safety of Blood Tissues and Organs (SaBTO) established to investigate and report on risk assessment and detection regimes for adventitious agents in cell therapies. He has also chaired the UK National Clinical hESC Forum and the scientific advisory board for a Public Private Partnership not-for-profit company called Stem Cells for Safer Medicine. His academic roles include member of faculty for postgraduate courses in regenerative medicine at Kings College London and University College London, and he is a visiting Professor at the University of Bedfordshire in the UK.

Charles D. Stiles
Dr. Charles D. Stiles, Professor of Neurobiology at Harvard Medical School is currently the Co-Director of the Program in Neuro Oncology and co-chair of the

Department of Cancer Biology at the Dana-Farber Cancer Institute. He is a lead investigator of the prestigious Nervous System Diseases Program through the Harvard Stem Cell Institute, and serves on the Scientific Advisory Board for the Brain Tumor Society and the Sontag Foundation, a charitable foundation focused on brain cancer and rheumatoid arthritis.

After receiving his PhD from the University of Tennessee at the Oak Ridge National Laboratories, and following postdoctoral research at the University of California, San Diego, Dr. Stiles joined the faculty of Harvard Medical School and the Dana-Farber Cancer Institute where he currently conducts research on brain cancers and brain development. His investigations are supported by the National Multiple Sclerosis Society, the Brain Science Foundation and the National Institutes of Health. In 2002, work by Dr. Stiles and colleagues led to a fundamental shift in our understanding of how myelin-producing cells are related to other cells of the central nervous system. Their observation that oligodendrocytes are more closely related to motor neurons than astrocytes has led to seminal contributions and insights into diseases such as brain cancer, multiple sclerosis, and mental retardation. In his career, Dr. Stiles has authored over 135 articles on growth factor signaling, neural development and brain cancer, and has received awards from the American Cancer Society, the American Association for Cancer Research, and the Roswell Park Memorial Institute. His fundamental work on the genetics of brain development conducted under the auspices of brain cancer research could have positive impacts on health problems outside the cancer field, including childhood mental retardation, Alzheimer's disease, and schizophrenia.

Lorenz Studer, M.D.
A native of Switzerland, Lorenz Studer graduated from medical school in 1991 and received his doctoral degree in neuroscience at the University of Bern in 1994. While there, he initiated studies with Christian Spenger, leading to the first clinical trial of fetal tissue transplantation for Parkinson's disease in Switzerland. Studer next pursued his research interests at the National Institutes of Health (NIH) in Bethesda, Maryland, where he worked in the laboratory of Ron McKay. At the NIH he pioneered the derivation of dopamine cells from dividing precursor cells. In 1998, he was first to demonstrate that the transplantation of dopamine cells generated in culture improve behavioral symptoms in Parkinsonian rats.
In 2000, he moved to New York City where he started his research program at the Memorial Sloan-Kettering Cancer Center (MSKCC). Early contributions of his lab include the in vitro derivation of midbrain dopamine neurons from ES, nuclear transfer ES cells and parthenogenetic stem cells. His laboratory was also first to demonstrate “therapeutic cloning” in a mouse model of a CNS disorder, and he has pioneered studies on the directed differentiation, high-throughput screening and genetic modification of human ES cells. His most recent work increasingly focuses on the translational application of human pluripotent stem cells in disease modeling, drug discovery and cell therapy. He currently leads a large multidisciplinary consortium to pursue the first clinical application of human ES cell derived dopamine neurons for the treatment of Parkinson's disease. He received

numerous awards for his work including the Boyer Young Investigator award and, most recently, the Annemarie Opprecht Award.
Studer is the Director of the Sloan-Kettering Center for Stem Cell Biology. He is a Member of the Developmental Biology Program and the Department of Neurosurgery at MSKCC and a Professor in Neuroscience at Weill-Cornell.

Amy Wagers, Ph.D.
Amy Wagers is a Professor of Stem Cell and Regenerative Biology at Harvard University, a Senior Investigator in the Section on Islet Cell and Regenerative Biology at the Joslin Diabetes Center, and a member of the Paul F. Glenn Laboratories for the Biological Mechanisms of Aging at Harvard Medical School. Dr. Wagers received her Ph.D. in Immunology and Microbial Pathogenesis from Northwestern University, and completed postdoctoral training in stem cell biology at Stanford University. Research in Dr. Wagers' lab currently focuses on defining the factors and mechanisms that control the development, maintenance, migration, and differentiation functions of stem cells in the blood and skeletal muscle lineages. Her research has revealed novel intrinsic and extrinsic regulators of stem cell activity, and highlights the key role of blood-borne mediators in coordinating stem cell behavior throughout life.

Dr. Wagers is a recipient of the Burroughs Wellcome Fund Career Award in Biomedical Sciences, HHMI Early Career Scientist Award, andPresidential Early Career Award for Scientists and Engineers. She is also aPrincipal Faculty member of the Harvard Stem Cell Institute, and has served on its Executive Committee since 2004. She is a past member of the Connecticut Stem Cell Research Advisory Committee (2005-2008) and currently serves on the Board of Directors for the International Society for Stem Cell Research.

John Wagner
Dr. John Wagner is a Professor of Pediatrics; Director of the Division of Blood and Marrow Transplantation; Scientific Director of Clinical Research Stem Cell Institute; and Co-Director of the Center for Translational Medicine at the University of Minnesota. He holds two endowed chairs: the Hageboeck/Children's Cancer Research Fund Chair in Pediatric Cancer Research and the University of Minnesota McKnight Presidential Chair in Hematology and Oncology. After receiving his M.D. degree at Jefferson Medical College in 1981, he completed his internship and residency in Pediatrics at Duke University School of Medicine in 1984 and a postdoctoral fellowship in Hematology-Oncology at the Johns Hopkins School of Medicine in 1987, where he remained until joining the faculty at the University of Minnesota in 1991. Dr. Wagner is internationally recognized as an expert in the field of stem cells and umbilical cord blood transplantation, he is board certified in Pediatrics and Pediatric Hematology/Oncology.

Dr. Wagner's research has focused on the development of new treatment approaches for life-threatening diseases using molecular and cellular therapies. While historically, most of his work is in the setting of leukemia, new possibilities

now exist for skin disease, cardiovascular disease, diabetes, and neurological disease. Specific projects underway in his laboratory include investigation of hematopoietic recovery and engraftment after umbilical cord blood transplantation; prevention of graft-versus-host disease after blood and marrow transplantation; disease-specific studies on Fanconi anemia and severe epidermolysis bullosa; and development of novel cellular therapies involving cardiac stem cells, regulatory T cells, dendritic cell-based vaccines for brain tumors, NK cells for anticancer therapy, and tissue repair.

Dr. Wagner is the PI of a NCI program project grant: Biology and Transplantation of the Human Stem Cell, and the NHLBI Product Assistance for Cellular Therapies (PACT) as well as PI of Industry Grants/Contracts. He is an elected member of the American Society of Clinical Investigators and Association of American Physicians.