

**CIRM Scientific and Medical Research Funding Working Group:  
Biographical information of candidates nominated to serve as  
Alternate Scientific Members of the Working Group**

**1. John DiPersio, MD, PhD**

Dr. John DiPersio holds the Lewis T. and Rosalind B. Apple Chair in Oncology at the Washington University School of Medicine. He is also Chief of the Division of Oncology and Deputy Director of the Siteman Cancer Center at the university. Dr. DiPersio earned his medical degree and his Ph.D. in microbiology from the University of Rochester School of Medicine, Rochester, NY. After completing his Residency and Chief Residency in Internal Medicine at the University of Texas Southwestern Medical Center in Dallas, TX, he went on to do a fellowship in Hematology-Oncology at UCLA. He served on the faculty at UCLA and was recruited to the University of Rochester to direct their Bone Marrow Transplant Program in 1990. In 1994, he moved to Washington University where he first served as Director of the Section of Bone Marrow Transplantation.

Dr. DiPersio's areas of clinical interest include hematology, oncology, hematopoietic stem cell transplantation, molecular biology and cellular biology of normal and leukemic stem cells. He leads the bone marrow transplant program (BMT) in research and clinical efforts for the Siteman Cancer Center. This facility has one of the largest transplant programs in the world, performing over 300 transplants each year in adults and 25 in children. His scientific interests include the use of gene therapy to control graft versus host disease (GvHD) using informative murine transplant models, the biology of stem cell homing and mobilization and the genetics of AML relapse and resistance.

**2. Douglas C. Eaton, PhD**

Dr. Douglas Eaton is the Distinguished Professor and Chair of Physiology at Emory University School of Medicine. Dr. Eaton earned an M.S. degree in Marine Biology from Scripps Institute of Oceanography and a Ph.D. in neuroscience from the University of California, San Diego. Dr. Eaton completed postdoctoral training in the Department of Physiology at the University of California at Los Angeles and then was appointed to Visiting Research Associate, Division of Biology at California Institute of Technology, Pasadena. Dr. Eaton served as Professor and Director in the Department of Physiology and Biophysics Graduate Program at the University of Texas Medical Branch at Galveston until 1986 prior to moving to Emory.

The goal of Dr. Eaton's research is to examine the cellular signaling mechanisms which control all aspects of cellular function including cell growth, division, and responses to external stimuli, but with particular emphasis on the role of membrane ion channels in these processes. To examine these signaling mechanisms, Dr. Eaton uses contemporary methods of cellular and molecular biology including patch voltage clamp methods and expression of cloned signaling molecules in *Xenopus* oocytes and other expression systems. Dr. Eaton has been particularly interested in the cellular responses which involve steroid hormones and other lipid molecules. Recently, I have examined defects in cellular signaling which may be responsible for some types of hypertension and electrolyte disorders.

**3. Jay Edelberg, MD, PhD**

Dr. Jay Edelberg is the Group Director of Clinical Biomarkers at Bristol-Myers Squibb. He earned his medical and doctorate degrees at Duke University Medical School in Durham, NC, and went on to complete an internal medicine residency at Massachusetts General Hospital and a cardiology fellowship at the Beth Israel Hospital Boston, MA. Before joining Bristol-Myers Squibb, Dr. Edelberg was Director of Biomarkers, Biochemistry-Translational and Regenerative Medicine, and Stem Cells at GlaxoSmithKline. He was also an Associate Professor of Medicine and Cell and Developmental Biology at the Weill Medical College of Cornell University, where he directed the Cardiac Vascular Biology Laboratory in the Greenberg Division of Cardiology. Dr. Edelberg established the Cardiac Vascular Biology Laboratory at

the Weill Medical College of Cornell University (New York, NY). He served as its Director from 1999 through 2006.

Dr. Edelberg's team is responsible for overseeing biomarker identification and testing for Bristol-Myers Squibb therapeutic programs for cardiovascular, metabolic and neurological diseases. His team is also responsible for human genetics core technology across all therapeutic areas. Dr. Edelberg's research has focused on the age-related impairment in endogenous cardioprotective pathways that contribute to the increased severity of cardiovascular pathophysiology observed in older persons. He has developed molecular and cellular approaches to reverse these changes to improve cardiac and vascular regenerative potential as a foundation for new therapeutic strategies.

#### **4. Jonathan Glass, MD**

Dr. Jonathan D. Glass heads the division of Neuromuscular Diseases in the Department of Neurology and is the Director of the Emory ALS Center. Dr. Glass received his undergraduate degree from Middlebury College (Vermont) and his MD from the University of Vermont. He trained in Neurology and Neuropathology at Johns Hopkins where he was a faculty member until moving to Emory in 1996.

Dr. Glass is widely known for his research on the pathogenesis and prevention of axonal degeneration in neurological diseases, and for his work in human and experimental neuropathology. His laboratory is currently focusing on the role of axonal degeneration in animal models of ALS as well as on proteomic biomarkers of ALS, in animals and in humans.

Dr. Glass is an active clinician who has been cited each year since 2001 as one of "America's Top Doctors" (Castle Connelly) and since 2005 as one of only 5 neurologists in "Atlanta's Top Doctors" (Atlanta Magazine). He is also a teacher and mentor to young physicians and served as the director of Emory's Neurology residency program from 2001-2006.

#### **5. Andrew Kung, MD, PhD**

Dr. Andrew Kung is an Assistant Professor of Pediatrics, at Harvard Medical School. Dr. Kung received his PhD in 1993 and his MD in 1994 from Stanford Medical School, followed by postgraduate training at Children's Hospital Boston and Dana Farber Cancer Institute (DFCI). Dr. Kung was a postdoctoral research fellow in the laboratory of Dr. David Livingston, and joined the DFCI faculty in 2002. Dr. Kung received the Howard Temin Award from the National Cancer Institute in 2001. He received the Howard Temin Award from the National Cancer Institute and was a Fellow in the Howard Hughes Medical Institute.

Dr. Kung is board certified in pediatrics and pediatric hematology/oncology, with a clinical focus on hematopoietic stem cell transplantation. His research interests are centered on understanding basic mechanisms contributing to tumorigenesis, and extending basic research insights to the development of rationally designed anti-cancer therapeutic strategies. His research program extends from very basic tumor and stem cell biology to the development of phase I clinical trials. They utilize diverse molecular and cell biological techniques, viral vectors, gene expression profiling, mouse genetic models, in vivo cellular and molecular imaging, high-throughput screening assays, biochemistry, and proteomic analysis.

#### **6. Ivar M. Mendez, MD, PhD, FRCS**

Dr. Ivar Mendez is the Director of the Neural Transplantation Laboratory at Dalhousie University in Halifax Nova Scotia. Dr. Mendez is also the Head of the Division of Neurosurgery and the Director of Research for the Department of Surgery at the QEII Health Sciences Centre in Halifax. Dr. Mendez received his MD from the University of Western Ontario in 1986, and in 1993 he received his PhD. □ In 1999, Dr. Mendez received the Royal College Medal Award for Surgery from the Royal College of Physicians and Surgeons of Canada for his outstanding contribution to research in neurosurgery.

As a clinician, Dr. Ivar Mendez has pioneered the use of robotics in neurosurgery. As a researcher, Dr. Mendez is breaking new ground in the field of neurotransplantation. At Canada's only Cell Restoration Laboratory, Dr. Mendez is working to answer questions posed by neural transplantation teams around the world - where to transplant the cells, how to improve their survival, how to transplant the cells without damaging the brain and, most recently, which other types and sources of cells may offer even greater possibilities for neural transplantation and with fewer disadvantages.

#### **7. Stephen Navran, PhD**

Stephen Navran is the Chief Scientific Officer at Synthecon, Inc. a company that specializes in the production of 3D Cell Culture Systems. In addition to his duties as CSO at Synthecon, Dr. Navran has also held an adjunct assistant professorship at Baylor College of Medicine, and currently serves on the advisory board for the Texas A&M Program in Biotechnology. Dr. Navran earned his PhD in Pharmacology at Ohio State University and completed his postdoctoral work in Cardiovascular Biology at Baylor College of Medicine

Dr. Navran's research goals include developing in vitro methodology to culture isolated islets of Langerhans prior to transplantation to enhance the function of the graft and the development of large-scale culture methods for culturing stem and progenitor cells for practical applications in cell and tissue therapy. Dr. Navran holds multiple patents in this area.

#### **8. Laura Niklason, MD, PhD**

Dr. Laura Niklason is an Associate Professor of Anesthesia and Biomedical Engineering, as well as a member of the Vascular Biology and Transplantation Group at Yale University. She is a leading international figure in cardiovascular tissue engineering, and is a practicing intensive care unit physician. She has received continuous NIH funding since receiving a K08 award in 1995, and is currently PI on three R01 grants, and holds subcontracts on several other NIH awards. Dr. Niklason has mentored multiple post-doctoral recipients of NRSA awards, as well as pre-doctoral recipients of MSTP awards, AHA and Hughes Fellowships. She has mentored more than 25 individuals, many of whom have gone onto academic or research careers, or onto further academic training.

Dr. Niklason's research interests involve various topics in vascular biology and tissue engineering, which include the role of gene therapy approaches in human cellular lifespan extension, the molecular drivers of vascular cell differentiation from marrow-derived stem cells, and the etiology of delayed cerebral vasospasm following subarachnoid hemorrhage.

#### **9. John Nilson, PhD**

Dr. John H. Nilson is the director of the School of Molecular Biosciences and the Edward R. Meyer Distinguished Professor at Washington State University. Dr. Nilson is a member of numerous scientific organizations including the Endocrine Society, and serves as President-Elect for the Society for the Study of Reproduction. He has served on several NIH study sections, and as a member of the editorial boards of the Journal of Biological Chemistry and Endocrine Reviews, and from 1998 to 2003 he served as Editor-in-Chief for Molecular Endocrinology. Previously, he was named the John H. Hord Distinguished Professor and chair of the pharmacology department at Case Western Reserve University. Dr. Nilson received his BS in Zoology, from the University of Tulsa, and his PhD in Biology from the University of New Mexico in Albuquerque. Following graduation he completed postdoctoral work as an NIH Fellow at Michigan State University.

Dr. Nilson's laboratory has had a long-standing interest in deciphering critical elements and factors responsible for correct temporal, spatial, and hormonal regulation of the genes that encode the two subunits of LH,  $\alpha$ GSU and LH $\beta$ . In addition, Dr. Nilson's lab also uses transgenic technology to develop mouse models that mimic human diseases specific to the reproductive endocrine axis. The long-term goal

of the Nilson laboratory is to establish a comprehensive bank of gene expression profiles to identify the complete molecular pathways necessary and sufficient for tumorigenesis.

**10. Camillo Ricordi, MD**

Dr. Camillo Ricordi, is the Chief of the Division of Cellular Transplantation, Department of Surgery and the Scientific Director and Chief Academic Officer of the Diabetes Research Institute at the University of Miami Miller School of Medicine. He also serves as Distinguished Professor of Medicine and Professor of Surgery, Biomedical Engineering, Microbiology and Immunology. Prior to joining the Diabetes Research Institute, Dr. Ricordi received his MD from the University of Milan, Italy and served as Attending Surgeon at the San Raffaele Institute, University of Milan School of Medicine (1988-1989). He then spent four years as Associate Professor of Surgery and Director of Cellular Transplantation at the University of Pittsburgh Transplantation Institute (1989-1993) before relocating to Miami.

Dr. Ricordi founded and was past president of the Cell Transplant Society, co-founder and steering committee member of the International Association for Pancreas and Islet Transplantation (IPITA), and co-founder of the National Diabetes Research Coalition. He has received numerous honors and awards, including the 1987-88 National Research Service Award (U.S.A.) in Immunogenetics and Immunobiology of Islet Transplantation. Dr. Ricordi also has been serving on the editorial boards of Transplantation, Cell Transplantation (Section Editor), Graft (Co-Editor in Chief), Transplantation Proceedings, and Tissue Engineering.

Dr. Ricordi has developed highly innovative strategies in an attempt to transplant islets without the continuous requirement for immunosuppressive drugs and invented the machine that made it possible to isolate large numbers of islet cells from the human pancreas

**11. Gail Robertson, PhD**

Dr. Gail Robertson is an Associate Professor in the Department of Physiology, University of Wisconsin-Madison, and co-founder of the M.S. in Biotechnology Program. Dr. Robertson earned her Ph.D. in Neuroscience at Washington University, St. Louis. Dr. Robertson serves on a panel for the National Institutes of Health responsible for the evaluation of federally funded Ph.D. graduate programs in the biological sciences across the country. She is a member of the Editorial Board for The Journal of Biological Chemistry. Her honors include a National Science Foundation CAREER Award and the Established Investigator Award of the American Heart Association.

Dr. Robertson's laboratory studies the molecular mechanisms underlying rhythmic activity of the heart. Work in her laboratory uncovered the cause of type 2 Long QT Syndrome (LQTS), a potentially fatal cardiac arrhythmia disease, as a loss of the repolarizing current cardiac IKr. The ion channels underlying IKr, called hERG channels, are also the targets for acquired LQTS, a much more clinically prevalent condition affecting 1-4% of the general population. Acquired LQTS is caused when drugs with other therapeutic targets inappropriately block the hERG or IKr channels, thus mimicking inherited LQTS. Dr. Robertson is actively engaged in the transfer of hERG-related technologies, which are used by drug discovery companies to screen out those drugs that block hERG channels and may therefore trigger acquired LQTS. In addition, she consults for biotechnology and pharmaceuticals companies engaged in research on hERG and other ion channel targets.

**12. Margaret Werner-Washburne, PhD**

Dr. Margaret Werner-Washburne is a Professor of Biology at the University of New Mexico in Albuquerque and an NSF Presidential Young Investigator. From 1997-8 she was Vice Chair of the Department of Biology at the University of New Mexico. Dr. Warner-Washburne has been interim director of the Southwest Genomics and Biotechnology Alliance, and Program Director of Microbial Genetics at the National Science Foundation. She has received numerous awards for both her science and her mentoring, including a Presidential Award for Excellence in Science, Math, and Engineering Mentoring in

2004 and a Proclamation for service to NM from NM House of Representatives in 2003. Dr. Werner-Washburne received her MS in Botany from the University of Hawaii, and her PhD in Botany and a minor in Biochemistry from the University of Wisconsin-Madison.

Dr. Werner-Washburne studies the process of entry into and survival during stationary phase in yeast, which is induced by nutrient limitations. One of the possible outcomes of this work is a better understanding of what regulates entry into and exit from G0 in mammalian cells.

### **13. Robin Wright, PhD**

Dr. Robin Wright is Associate Dean for Faculty and Academic Affairs in the College of Biological Sciences and Professor of Genetics, Cell Biology and Development at the University of Minnesota, St. Paul. Dr. Wright earned a Ph.D. in 1985 under the mentorship of Jonathan Jarvik in the Department of Biological Sciences at the Carnegie-Mellon University in Pittsburgh. Dr. Wright completed postdoctoral training at UC Berkeley prior to an appointment as Assistant Professor of Zoology and Genetics at the University of Washington, Seattle.

Dr. Wright's research focuses on laying the foundations for deep exploration of the genetics, molecular and cellular biology, and physiology of cold adaptation in yeast. It is likely that results of these studies will have relevance to other fungi, and perhaps to other kingdoms of life. In a search for genes required for endoplasmic reticulum (ER) biogenesis in the yeast *Saccharomyces cerevisiae*, the Wright lab discovered that mutations in a subset of genes involved in ER-associated degradation (ERAD) result in cold sensitivity. In collaboration with Dr. Martin Bard, the lab also discovered that these genes are required for proper regulation of sterol metabolism. These observations lead to the foundational hypothesis that they explore: ERAD regulates key aspects of sterol metabolism in yeast and this regulation is required for cold adaptation.

Dr. Wright spends considerable effort on activities that promote innovation and improvement of undergraduate education and has participated in a variety of workshops and seminars and published several papers that deal with teaching issues.