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

## Richard H. Goodman, M.D., Ph.D.

Dr. Richard Goodman, a member of the National Academy of Sciences and the Institute of Medicine, is a Professor of Cell and Developmental Biology at the Oregon Health and Science University (OHSU). He also serves as Director of the Vollum Institute, a privately endowed research unit of OHSU that supports basic research and training programs in diverse areas such as neurobiology, hearing, and gene expression. Under his leadership, Vollum scientists have contributed to numerous issued patents and technology licenses, as well as the formation of several start-up companies. Prior to joining the Vollum in 1990, Dr. Goodman was an Assistant Professor of Medicine at Harvard Medical School, and Professor of Medicine and Chief of the Division of Molecular Medicine at Tufts-New England Medical Center. He received his B.S. degree in Chemistry at the Massachusetts Institute of Technology, and his M.D. and Ph.D. degrees from the University of Pennsylvania.

Dr. Goodman has authored over 100 publications and made seminal contributions to our understanding of regulated gene expression. His laboratory was first to uncover a critical DNA control element in many genes that are expressed in the nervous system and other tissues. The laboratory then developed a novel technique for identifying these control elements in specific cell types and live organisms.

# Shelly Heimfeld, Ph.D.

Dr. Shelly Heimfeld is an Associate Faculty Member at the Fred Hutchinson Cancer Research Center in Seattle, Washington, and is Director of the Cellular Therapy Laboratory and cGMP Cell Processing Facility. He currently serves as President-elect for the International Society of Cellular Therapy (ISCT), and is on the Board of Directors for the Foundation for the Accreditation of Cellular Therapy (FACT). A leading authority in in regulations and lab practices needed for cell therapies, including Good Laboratory Practice (GLP), Good Tissue Practice (GTP) and Good Manufacturing Practice (GMP) , Dr. Heimfeld works with the Food and Drug Administration to facilitate exchange of ideas in the rapidly evolving area of Cell Therapy. He also serves on the Scientific Advisory Board of two cell therapy-based companies, Opexa Therapeutics and BioLife Solutions.

Dr. Heimfeld received his Ph.D. in Cell Differentiation from the University of California, Irvine. He is internationally recognized for research in hematopoietic-derived stem cells and the development of cell processing technologies for improved cancer therapy. His broad range of research interests includes a particular focus on the development of improved therapeutic strategies using various human stem cell populations. Dr. Heimfeld's long-term goals for this area are to identify better markers for the characterization of stem and progenitor cells, to improve isolation technologies for enriching these types of cells, and to develop ex-vivo manipulation strategies that can enhance the therapeutic potential of these cells. Dr. Heimfeld has also been involved in the development of T-cell based immunotherapy for various diseases.

#### Michael D. Schneider, M.D.

In September 2007, Dr. Michael Schneider will assume the role of Head of Cardiovascular Science and Professor of Cardiology at the National Heart and Lung Institute of Imperial College London. Prior to this transition, he was the M.D. Anderson Foundation Chair at the Baylor College of Medicine and served as Director of the Center for Cardiovascular Development. Dr. Schneider sits on the Scientific Advisory Board of the Canadian Stem Cell Network, and is a consultant and Scientific Advisory Board member for multiple companies. He also has been a scientific advisor to the American Heart Association, the Food and Drug Administration, and multiple institutes of the National Institutes of Health (NIH) where he served as co-Chair for the National Heart, Lung and Blood Institute's (NHLBI) 2006 Strategic Plan for Regenerative and Reparative Medicine.

Dr. Schneider received his M.D. degree from the University of Pennsylvania in 1976, and was an intern and resident at Duke University Medical Center from 1976-1978. He was both a Clinical Associate and Medical Staff Fellow at the NHLBI prior to joining the Baylor College of Medicine in 1984 with appointments in the Department of Medicine, the Department of Cell Biology and the Department of Molecular Physiology and Biophysics. Dr. Schneider is an editorial board member of multiple high-profile journals, and has authored over 150 peer-reviewed publications. He has trained nearly fifty graduates students, post-doctoral fellows, clinical fellows and surgery residents in diverse aspects of cardiac function. His laboratory utilizes transgenic mouse models to study cardiac muscle development and survival, centered around analyzing gene expression networks that regulate cardiac hypertrophy. Dr. Schneider is also a founder and board member of Kardia Therapeutics, a research stage biotechnology company focused on the development of cardiac regenerative therapies in the areas of myocardial infarction and heart failure.

#### John R. Sladek, Ph.D.

Dr. John Sladek recently returned to the University of Colorado as a Professor of Pediatrics and Neuroscience. Previously he served as President and Chief Executive Officer of California Lutheran University, and prior to that served as Vice Chancellor of Research and Professor of Psychiatry and Neuroscience at the University of Colorado at Denver Health Sciences Center (UCDHSC). Dr. Sladek's office at UCDHSC managed over 3000 human clinical trial protocols and basic biomedical research for five schools including Medicine, Dentistry, Nursing, Pharmacy, Graduate Studies and 42 Centers and Institutes. He had oversight responsibility for over \$300,000,000 in annual research expenditures and all regulatory compliance related to research. From 1991 to 2001, Dr. Sladek chaired the Departments of Neuroscience at Chicago Medical School; prior to that, he was chair of the Department of Neuroscience at the University of Rochester. At Rochester, Chicago and Denver, he guided successful campus building campaigns including the construction of a 400-acre, \$2 billion campus and the consolidation of two Denver campuses.

At the University of Colorado at Denver, Dr. Sladek will continue his research into the effects of Down's syndrome and Parkinson's disease, including the study of neural stem cell replacement for Central Nervous System (CNS) disorders and neural repair

mechanisms in a primate model of Parkinsonism. He has authored close to 200 scientific publications in the field of neural repair and has presented over 300 invited lectures. Dr. Sladek was founding President of the American Society for Neural Transplantation and Repair.and served as Editor-in-Chief of Experimental Neurology for 15 years; he is an editorial board member for the Journal of Neural Transplantation, the Cell Transplantation journal of regenerative medicine, and the Cell & Tissue Research journal. Dr. Sladek received his B.A. from Carthage College, where he serves as a Trustee, his M.S. from Northwestern University School of Medicine and his Ph.D. from the Chicago Medical School.

# Thomas P. Zwaka, M.D., Ph.D.

Dr. Thomas Zwaka, an Assistant Professor in the Department of Molecular and Cellular Biology and the Center for Cell and Gene Therapy at the Baylor College of Medicine also serves as Director of the Baylor Embryonic Stem Cell Core, and was one of the founders of the Stem Cells and Regenerative Medicine Center. After receiving his M.D. Ph.D. degrees from the University of Ulm, Germany, Dr. Zwaka completed postdoctoral fellowships in molecular cardiology at the University of Ulm, and in human and mouse embryonic stem cell biology at the National Primate Research Center at the University of Wisconsin, Madison with Dr. James Thompson. He has received numerous awards and honors, including the Gillson Longenbaugh Foundation Junior Investigator award and the Lance Armstrong Foundation Junior Investigator Award. He has served on a number review panels for the National Institutes of Health (NIH), including the NIGMS Special Emphasis Panel for human embryonic stem cell research, and he sits on the Scientific Advisory Board of the Genetics Policy Institute and Stem Cells Source, Inc..

Dr. Zwaka's research currently focuses on fundamental questions surrounding human embryonic stem cell biology, including how to reverse the process of differentiation and "re-program" any given cell type into a pluripotent stem cell. Dr. Zwaka has authored fundamental publications on the genetic modification of human embryonic stem cells, and has filed patents on embryonic stem cell differentiation and modification both in the US and internationally.