

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

1. Charles S. Cox Jr., MD

Dr. Charles S. Cox, Jr., is the Children's Fund, Inc. Distinguished Professor of Pediatric Surgery and directs the Pediatric Surgical Translational Laboratories and Pediatric Program in Regenerative Medicine at the University of Texas Medical School at Houston. He directs the Pediatric Trauma Program at the University of Texas-Houston/Children's Memorial Hermann Hospital in the Texas Medical Center. Dr. Cox received his undergraduate degree from the University of Texas at Austin in the Plan II Liberal Arts Honors Program, and his MD at the University of Texas Medical Branch at Galveston. He completed his Surgery residency at the University of Texas Medical School at Houston followed by further post-graduate fellowships in Pediatric Surgery at the University of Michigan, an NIH T32 sponsored clinical and research fellowship in cardiopulmonary support/circulatory support devices/bio-hybrid organs at the Shriners Burns Institute, and a Surgical Critical Care fellowship at the University of Texas Medical School at Houston.

Under Dr. Cox's direction, the Pediatric Translational Laboratories and Pediatric Program in Regenerative Medicine focuses on progenitor cell based therapy for traumatic brain injury, and related neurological injuries (hypoxic-ischemic encephalopathy, stroke, spinal cord injury), recently completing the first acute, autologous cell therapy treatment Phase I study for traumatic brain injury in children. The program also develops novel bio-hybrid organs using cell-based and tissue engineering approaches to trauma and injury related problems. These efforts have recently resulted in two IND based cell therapeutic studies, and three patents in the past two years.

Dr. Cox is certified by the American Board of Surgery in Surgery, with added qualifications in Pediatric Surgery and Surgical Critical Care. He has served on scientific study sections/review groups for the National Institutes of Health, American Heart Association, Veterans Affairs MERIT Awards, Department of Defense, Congressionally Directed Medical Research Programs, as well as National Research Programs in Canada, Singapore, and the Czech Republic. He is the author of over 100 scientific publications, 20 book chapters, and is the editor of a text in press entitled, *Progenitor Cell Therapy for Neurological Injury*.

2. John Rasko, MBBS, PhD, FRCPA, FRACP

Dr. John Rasko heads the Gene and Stem Cell Therapy Program at the University of Sydney's Centenary Institute of Cancer Medicine and Cell Biology, directs the Cell and Molecular Therapy Unit at Royal Prince Alfred Hospital, and is a Senior Staff Hematologist at the Sydney Cancer Centre. After completing his medical and hematology training at Royal Prince Alfred Hospital, he undertook his PhD studies at the University of Melbourne's, Walter and Eliza Hall Institute. He subsequently spent three years at the Fred Hutchinson Cancer Research Center in Seattle as a Damon Runyon Walter Winchell Foundation Fellow.

Professor Rasko leads a research program investigating cutting-edge gene therapy and stem cell biology, cancer, molecular biology and genetics. His research has been successful in uncovering new mechanisms of leukemia, understanding blood hormones and their mechanisms of action, and clinical trials of new biological therapies for cancer and bleeding disorders. In 2004 he led a team that identified the gene for Hartnup Disease reported in Nature Genetics. More recently he developed a milestone in gene therapy for hemophilia with collaborators in the US, published in Nature Medicine in 2006 and 2007. His was the first formal appointment in clinical gene therapy in Australia.

Professor Rasko is the immediate past President of the Australasian Gene Therapy Society, serves on the International Committee of the American Society of Gene Therapy (2004-10) and is the regional Vice President - Australasia of the International Society for Cell Therapy. He chairs the Gene Technology Technical Advisory Committee of the Office of the Gene Technology Regulator for the Australian government. Dr. Rasko has a productive track record with over one hundred papers published in genetics and gene therapy, experimental hematology and cell biology.

3. Peter Zandstra, PhD

Dr. Peter Zandstra, is a Canada Research Chair in Stem Cell Bioengineering at the University of Toronto, and holds a cross-appointment to the Department of Chemical Engineering and Applied Chemistry. He received his undergraduate degree from McGill University in Montreal, and earned his PhD in Chemical Engineering and Biotechnology at the University of British Columbia. Previously, he has held an NSERC Steacie Memorial fellowship and a fellowship from the John Simon Guggenheim Memorial Foundation.

Professor Zandstra's research has focused on the signaling dynamics regulating stem cell fate, blood and cardiac tissue development, and the design of bioreactors and devices to control the stem cell microenvironment with the goal of developing robust stem cell production systems. Using bioengineering strategies such as predictive mathematical modeling, microfabrication and bioreactors, his lab focuses on three project areas: quantitative, spatial and temporal control of embryonic stem cell self-renewal; bioprocesses for the generation of blood and cardiac cells from embryonic stem cells; and control of intracellular signaling networks to grow human blood stem cells. His work has contributed to the development of clinically and industrially relevant and academically recognized technologies based on the design of bioprocesses for the growth and differentiation of adult and embryonic stem cells. Direct applications of this work include tissue and cellular engineering, gene therapy, and organ transplantation.

Dr. Zandstra is a fellow of the American Institute for Medical and Biological Engineering, and the American Association for the Advancement of Science. In 2008 he was the recipient of the McLean Award and was named one of "Canada's Top 40 Under 40". He is currently an associate editor for the journals, *Stem Cells* and *Biotechnology and Bioengineering*, and has previously sat on the Editorial Boards for *the Journal of Biotechnology and Applied Biochemistry* and *Experimental Hematology*.