



## Nominations for Appointment to the Grants Working Group (GWG)

### Reappointment of Scientific Members to the Grants Working Group

Grants Working Group Members originally appointed in 2008-09 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.

### **Proposed Reappointments to GWG**

Last	First	Term	Expertise
Clevers	Hans	2	Wnt Signaling & Cancer; Stem Cell Biology
Mummery	Christine	4	Pluripotency; Cardiovascular Lineages: Cellular Therapy for Cardiovascular Disease
Rasmussen	Theodore	6	Chromatin Dynamics in Pluripotent Cells
Schöler	Hans	4	Stem Cell Pluripotency & Germline Development
Whiteside	Theresa	6	Cancer Immunology and Immunotherapy, Cellular Therapy, Immunoregulation, Immunopathology

### **Hans Clevers, MD, PhD**

Hans Clevers is Director of the Hubrecht Institute and Professor of Molecular Genetics in Utrecht, the Netherlands. He obtained his M.D. and Ph.D. degrees from the University of Utrecht and completed his postdoctoral work with Cox Terhorst at the Dana-Farber Cancer Institute of the Harvard University, Boston, USA. Prior to his appointment as Professor of Molecular Genetics at the Hubrecht Institute, Dr. Clevers was from 1991-2002 Professor in Immunology at the University of Utrecht.

Originally focused on T lymphocyte transcription factors, Dr. Clevers' laboratory cloned Tcf1 in 1991. With the discovery that Tcf factors are the final effectors of Wnt signaling, he changed his interests to the biology of Wnt signaling in intestinal self renewal and cancer. Dr. Clevers' laboratory has identified a series of adult tissue stem cells with the novel Lgr5 marker, currently his major focus of research.

Dr. Clevers has been a member of the Royal Netherlands Academy of Arts and Sciences since 2000 and is the recipient of several awards, including the Dutch Spinoza Award in 2001, the Swiss Louis Jeantet Prize in 2004, the Memorial Sloan-Kettering Katharine Berkan Judd Award in 2005, the Israeli Rabbi Shai Shacknai Memorial Prize in 2006, and the Dutch Josephine Nefkens Prize for Cancer Research and the German Meyenburg Cancer Research Award in 2008. He obtained an ERC Advanced Investigator grant in 2008. He is Chevalier de la Legion d'Honneur since 2005.

### **Christine Mummery, PhD**

Christine Mummery is Chair of the Department of Anatomy and Embryology and Professor of Developmental Biology at the Leiden University Medical Center (LUMC). She studied physics at the University of Nottingham, UK and earned a Ph.D. in Biophysics at the University of London. She received a postdoctoral fellowship from the Royal Society in the UK for research at the Hubrecht Institute where she became group leader and, in 2002, Professor of Developmental Biology of the Heart for the Interuniversity Cardiology Institute of the Netherlands. In 2007 she was awarded a Harvard Stem Cell Institute/Radcliffe fellowship for a sabbatical in Harvard at Massachusetts General Hospital and the department of Disease Biophysics.

Dr. Mummery's research concerns mouse development and differentiation of mouse and human embryonic stem cells. She pioneered studies differentiating and characterizing cardiomyocytes from human embryonic stem cells and was among the first to inject them in mouse heart and assess their effect on myocardial infarction. In 2000, she introduced human embryonic stem cells into the Netherlands and subsequently received the first license to derive new lines from surplus IVF embryos. Four lines were later derived in her lab. Much of the work on these cells has concerned their differentiation to cardiomyocytes. Since moving to the LUMC in 2008, Dr. Mummery has continued her research on heart development and the differentiation of patient derived induced pluripotent human cells into the cardiac and vascular lineages. Immediate interest of her lab is on using stem cell derived cardiomyocytes and vascular cells as disease models, for drug discovery and future cardiac repair. In 2015 she became guest professor at the Technical University of Twente to develop organ-on-chip models of disease based on hiPSC.

Dr. Mummery is an elected member of the Royal Netherlands Academy of Science. She is a member of several Scientific Advisory Boards (Galapagos bv, Stem Cell Institute Leuven, the UK Pluripotent Stem Cell Initiative, the Australian Stem Cell Centre) and has written a popular book on stem cells. She is presently Editor in Chief of Stem Cell Reports (the journal of ISSCR), lead reviewer of Stem Cells, and on the Editorial Boards of Cell Stem Cell, the International Journal of Developmental Biology and Differentiation. Dr. Mummery was an elected member of the board of ISSCR for the past 8 years and is past-president of the International Society of Differentiation. She also serves on boards of the Netherlands Heart Foundation and ZonMW (Netherlands Medical Research Council).

### **Theodore Rasmussen, PhD**

Ted Rasmussen is a Professor in the Department of Pharmaceutical Sciences at the University of Connecticut and a charter member of the University of

Connecticut Stem Cell Institute and the Institute for Systems Genomics at the University of Connecticut. In addition, he holds a joint academic appointment in the Department of Molecular and Cell Biology. Dr. Rasmussen earned his B.S. degree in Biology at the University of Washington at Seattle and received his Ph.D. in Genetics at the University of Wisconsin at Madison, where he studied processing of nuclear RNA. He then completed a postdoctoral fellowship at the Whitehead Institute at the Massachusetts Institute of Technology, where he performed research on X chromosome inactivation and embryonic stem cell biology.

The research goals of Rasmussen Lab are designed to bring about advances in cell-based therapeutics through approaches drawn from stem cell biology, epigenetics, proteomics, and molecular genetics. Major research themes in the lab include the following: (1) directing nuclear reprogramming of somatic cells using induced pluripotency (iPS) and ES cell fusion-mediated reprogramming (FMR) strategies; (2) exploring heterochromatin assembly in the context of embryonic stem cell differentiation, so as to understand cell lineage-restricted gene silencing; (3) translational research to use iPS cell reprogramming technologies to develop cell culture models of human genetic disorders through collaboration with clinicians. Long-range goals of the lab include the production of safe, immunocompatible, pluripotent cells for use in human cell-based therapies to alleviate human disease and the development of methods for the guided differentiation of pluripotent cells to produce transplantable cells with therapeutic properties. An allied goal is to achieve a better understanding of molecular and cellular mechanisms that participate in the processes of nuclear reprogramming and differentiation. Dr. Rasmussen also investigates epigenetic function during mammalian gametogenesis, preimplantation development, and X chromosome inactivation.

Dr. Rasmussen helped to establish a stem cell research program in the State of Connecticut. He teaches genetics stem cell science at undergraduate and graduate levels and frequently participates in forums and panels that discuss stem cell research and ethics for the public. Dr. Rasmussen participates in grants review for international funding agencies and is also active in peer review for major scientific journals.

### **Hans Schöler, PhD**

Hans Schöler is Managing Director of the Max Planck Institute for Molecular Biomedicine and Full Professor of the Medical Faculty of the Westphalian Wilhelms-University in Münster, Germany; Adjunct Professor of the “Medizinische Hochschule Hannover” (MHH) in Hannover, Germany; Adjunct Professor of Biochemistry at the University of Pennsylvania, Center for Animal Transgenesis and Germ Cell Research in Philadelphia, USA; Distinguished Professor at the Ulsan National Institute of Science and Technology (UNIST) and at the Konkuk University, in Seoul, South Korea.

Dr. Schöler received his Diploma in Biology and his Ph.D. in Molecular Biology at the Heidelberg University. Prior to his current position, Dr. Schöler has served as Staff Scientist at the Max Planck Institute for Biophysical Chemistry in Göttingen, Germany; Head of Research Group at Boehringer Mannheim (now Roche) in Tutzing, Germany; Head Research Center at the European Molecular Biology Laboratory and as Professor of Reproductive Physiology of the School of Veterinary Medicine at the University of Pennsylvania, USA.

Dr. Schöler long predicted that one day we would be able to change cellular fate and identity at will. This has recently been achieved, as exemplified by our ability to redirect a cell with, say, a neuronal program to one with a germ cell program, and vice versa. But the basic question that already more than a century ago fascinated scientists such as August Weismann still remains unanswered: How do somatic and germline cells differ? Dr. Schöler is interested in understanding the mammalian germline, the lineage that links one generation to the next. His two broad research areas concern pluripotent stem cells and unipotent germ cells, the two principal parts of the germline. He is intrigued by the molecular mechanisms underlying the differences between somatic and germline cells, specifically regarding differential gene regulation. Most importantly, Dr. Schöler seeks to decipher how pluripotency and totipotency are induced in differentiated cells.

Dr. Schöler has received the Robert Koch Prize in 2008, is a member of numerous professional societies, such as the German National Academy of Sciences Leopoldina, the North Rhine-Westphalian Academy of Sciences, the Academy of Sciences and Literature Mainz, the Berlin-Brandenburg Academy of Sciences and Humanities (BBAW) and of the Central Ethics Committee for Stem Cell Research.

He is a member of the editorial boards of several international journals including *Cell*; *Cell Stem Cell*; *Cellular Reprogramming*; *The International Journal of Developmental Biology*; *Molecular Reproduction and Development*; *Stem Cells*; and *Stem Cells Reviews and Reports*.

#### **Theresa L. Whiteside, PhD**

Theresa Whiteside received both her MA and PhD degree in Microbiology from Columbia University, New York, NY. She became a Diplomate of the American Board of Medical Laboratory Immunology in 1979. She spent a year (1984-85) working at the Ludwig Institute for Cancer Research in Lausanne, Switzerland as a Fogarty Senior International Fellow. At the University of Pittsburgh, Dr. Whiteside rose through the faculty ranks to become Associate Professor (1979) and Professor of Pathology (1989-present). In 1986 she became a member of the University of Pittsburgh Cancer Institute and was appointed Director of the Immunologic Monitoring and Diagnostic Laboratory a position she held until stepping down in July 2010. In recognition of her research achievements in the biology of head and neck cancer, Dr. Whiteside was granted secondary appointments as Professor of Otolaryngology and Professor of Immunology at the University of Pittsburgh School of Medicine. She received a *Honoris causa* degree in Medicine from The Poznan Medical University in Poland in 2011 and was awarded a Richard V. Smalley Memorial Award by the Society of Immunotherapy of Cancer in 2012.

Dr. Whiteside's research interests are in Tumor Immunology and Immunotherapy with special focus on mechanisms of tumor-induced immunosuppression, cytokine networks, development of anticancer vaccines, immunology of human head and neck cancer and the role of natural immunity in the control of cancer progression. Her research is in mechanisms of tumor escape from the host immune system and the development of therapies designed to eliminate tumor escape. Currently, she is investigating the role of regulatory T cells in cancer progression as well as contributions of tumor-derived

exosomes (TEX) to dysfunction of CD8<sup>+</sup> effector cells in the peripheral circulation of patients with cancer and in the tumor microenvironment. Dr. Whiteside is also interested in dendritic cells (DC) as vehicles for delivering tumor antigens to T cells. She is investigating components of antigen processing machinery (APM) in human DC with an objective of defining and optimizing conditions for optimal antigen processing and cross-presentation. She is a recognized expert in immune monitoring of patients with cancer. She has authored over 566 peer-reviewed publications in scientific journals and 125 chapters and review articles. She is the author of a book on human tumor-infiltrating lymphocytes and co-editor of several scientific books. Over the years, she has trained over 93 post-doctoral fellows from the United States and abroad.

She has served on numerous NIH and DOD study sections, and is a past member of the Board of Scientific Counselors for NIDCR. She currently serves as a Senior Editor for *Clinical Cancer Research* and is a member of numerous journal editorial boards and a scientific reviewer for many other scientific journals.