

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

# **Appointment of New Members**

# Diego Correa, MD, MSc, PhD

Diego Correa holds a joint appointment as Scientist/Assistant Professor between the Department of Orthopaedics (Division of Sports Medicine) and the Diabetes Research Institute at the University of Miami, Miller School of Medicine. In 1998, He obtained his M.D. from Universidad Javeriana (Bogotá – Colombia. In 2003, Dr. Correa received a Master of Science degree in Mechanical Engineering from Universidad de Los Andes (Bogotá - Colombia) and obtaining the Engineering School Fellowship for academic and research excellence. In 2009, he received his Ph.D. in Cellular and Molecular Physiology from Yale University/Harvard University where he received a full scholarship and was recipient of the George Robert Pfeiffer Fellowship from the Gustavus and Louise Pfeiffer Research Foundation. Subsequently in 2009, he joined the laboratory of Professor Arnold Caplan at the Skeletal Research Center - Case Western Reserve University (Cleveland, OH), where he led the projects related with the use of adult Mesenchymal Stem Cells (MSCs) in the areas of Articular Cartilage Tissue Engineering and the description of their role as gatekeepers controlling the process of distant Cancer Metastasis.

Dr. Correa is an expert in Cell Biology, with special emphasis on MSC biology and clinical applications in Regenerative Medicine. Throughout his career, Dr. Correa has approached Medicine and Science in a dynamic multidisciplinary manner, using the musculoskeletal system as a primary platform. He has analyzed it from various perspectives, including a clinical view of skeletal diseases, an engineering analysis of tissue mechanical properties, a basic science study of the cellular and molecular underpinnings of skeletal development using genetic models, and the development of novel therapeutic approaches to treat skeletal diseases based on stem cell therapy. This cohesive work has been recognized by distinctions such as the Young Investigator Award from OARSI (Osteoarthritis Research Society International) and chosen as special delegate for the Academy of Achievements 46th International Summit (Washington DC).

Currently, Dr. Correa's laboratory focuses on the Biology of Mesenchymal Stem Cells (MSCs), including their immunomodulatory and trophic activities, intercellular communication through exosomes, and their potential therapeutic application for joint diseases and during islet cell transplantation in type 1 Diabetes, using both *in vitro* and *in vivo* models. In addition, he holds an Adjunct Assistant Professor appointment at the Dept. of Biology, Skeletal Research Center - Case Western Reserve University, where he continues interacting with Professor Arnold Caplan participating in various research areas and funded projects.

Dr. Correa holds various patents submissions; is author and co-author of a significant number of scientific publications in recognized journals; serves on the editorial board and as peer reviewer of several recognized scientific journals; and is an invited speaker and lecturer in national and international scientific and medical meetings. Dr. Correa also participates in diverse entrepreneurial activities, such as the creation and evaluation of private start-up companies in the areas of Regenerative Medicine and adult stem cell-based therapy. He also participates in various Scientific Advisory Boards in companies within the Regenerative Medicine field.

#### John-Michael Sauer, PhD

John-Michael Sauer is Executive Director, Predictive Safety Testing Consortium (PSTC) at the Critical Path Institute and an Adjunct Research Professor in the Department of Pharmacology at the University of Arizona, College of Medicine. John-Michael received his undergraduate (1986) and Master's degrees (1991) in Biomedical Sciences at Western Michigan University, and his Doctorate degree in Pharmacology and Toxicology from The University of Arizona in 1996.

Dr. Sauer is a toxicologist by training with over 15 years of experience in drug discovery and development. He has been responsible for leading multiple functional areas across several pharmaceutical companies. He is dedicated to bringing quantitative translational science approaches to safety assessment, as well as transforming the way we use nonclinical safety data to drive clinical study design and data interpretation.

Prior to joining C-Path in 2013, Dr. Sauer had the opportunity to play an individual contributor role at Eli Lilly where he participated in the development, registration, and commercialization of Strattera for the treatment of ADHD in children and adults, as well as supported many other discovery and development teams. He also played a pivotal leadership role in the transformation of Elan Pharmaceutical's discovery and development strategies, including the incorporation of several quantitative translational science approaches. John-Michael also gained operational and management experience in the Contract Research Organization (CRO) environment as the Site Scientific Head for the Covance Chandler site in Arizona.

Dr. Sauer has over 100 scientific publications in the areas of toxicology, drug metabolism, clinical pharmacology, pharmacokinetics, and pharmacology.

### Alice A. Tomei, PhD

Alice A. Tomei is an Assistant Professor in the Department of Department of Biomedical Engineering at the University of Miami and the director of the Islet Immunoengineering Laboratory (www.tomeilab.com) at the University of Miami Diabetes Research Institute. Dr. Tomei received her Master of Science in Materials Engineering from Politecnico di Milano, Milan, Italy (2004) and her PhD in Biotechnology & Bioengineering from École Polytechnique Fédérale (EPFL), Lausanne, Switzerland in 2008 (Prof. Melody Swartz). In 2012, she completed her Post-Doctoral studies in the Laboratory of Regenerative Medicine and Pharmacobiology at EPFL (Prof. Jeffrey A. Hubbell).

Dr. Tomei's background uniquely combines expertise in bioengineering and immunology and she is applying her skills to the development of novel immunoengineering platforms to prevent rejection after islet transplantation and to promote antigen-specific tolerance for a cure of type-1 diabetes (T1D). Dr. Tomei developed and patented a novel method for conformal encapsulation of cell clusters, including pancreatic islets, that is based on microfluidics (published in PNAS). Several scientific commentaries have regarded this new technology as a breakthrough in the encapsulation field. She has demonstrated that conformal coating is immunoisolating and she is

conducting the necessary preclinical studies to translate the technology to clinical trials. Further, she has started evaluating her innovative encapsulation technology with stem cell-derived insulin-secreting cell products in collaboration with Semma Therapeutics. In a parallel track, Dr. Tomei has demonstrated that local CCL21 secretion mediates antigen-specific immunological tolerance in cancer (published in SCIENCE) and in autoimmune diabetes. She is translating those findings into a clinically applicable biomaterial platform for co-delivery of CCL21 and beta cell antigens for induction of antigen-specific tolerance.

The translation of her research into a therapeutic application has been an additional facet of her postdoctoral work and has resulted in three patent applications. Her research has been published in high impact journals including Science, PNAS, Transplantation, the American Journal of Lung Physiology, and the Journal of Immunology. Dr. Tomei is the recipient of numerous awards and honors including the 2016 JDRF Career Development Award, the 2016 University of Miami Provost's Research Award, and the 2015 Marc S. Goodman Prize to an Outstanding Young Scientist. Dr. Tomei is also a member of the JDRF encapsulation consortium and a reviewer for JDRF international grants.

## Gordon C. Weir, MD

Gordon Weir is the Co-Head of Joslin's Section on Islet and Regenerative Biology, holds the Diabetes Research and Wellness Foundation Chair at the Joslin, and is Professor of Medicine at Harvard Medical School. Dr. Weir received his medical degree from Harvard Medical School in 1967. Before coming to Joslin, Dr. Weir was Professor of Medicine at the Medical College of Virginia. After arriving at Joslin in 1984, Dr. Weir served as the Center's Medical Director for 9 years and throughout has been conducting a broad research program.

Until recently Dr. Weir was Director of the NIH supported Diabetes Research Center (DRC) of Joslin, and was Head of the Diabetes Program of the Harvard Stem Cell Institute. He is currently the Director of Joslin's Center for Cell Transplantation. Dr. Weir is the recipient of numerous honors and serves or has served on the editorial boards of several prestigious journals, including the American Journal of Physiology, Journal of Clinical Endocrinology and Metabolism, Endocrinology and Transplantation. He was Editor-in-Chief of the journal Diabetes and currently acts as chairman of the JDRF Encapsulation on Consortium.

Dr. Weir has combined a career of caring for patients with diabetes, with an intensive research focus on beta-cell function preservation and replenishment. His research interests include islet-cell transplantation and encapsulation, the function of islets in the normal and diabetic state, and on developing alternative sources of insulin-producing cells, e.g. using stem cells, reprogrammed pancreatic exocrine cells, genetically manipulated liver cells, and beta-cell replication. Dr. Weir's main research goal is to find ways to preserve and replenish the insulin-producing pancreatic beta cells that are deficient in diabetes. Dr. Susan Bonner-Weir is a collaborator on many of these projects. Dr. Weir recently led a multi-center Phase 1/2 clinical trial supported by the Immune Tolerance Network (ITN) of NIH to determine the safety and pharmacokinetics of  $\alpha$ 1-antitrypsin (AAT) treatment AAT in individuals with new-onset type 1 diabetes. He also participates in other clinical research projects supported by ITN and TrialNet.

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

Grants Working Group Members originally appointed in 2008-10 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
Hollander	Anthony	4	Chondrogenesis; Osteoarthritis; Tissue Engineering; Trachea Engineering
Rosser	Anne	4	Neurobiology; Development of Cellular Therapies for Neurodegenerative Disease (HD, PD)

## Anthony Hollander, BSc, PhD

Anthony Hollander is a stem cell researcher with more than 20 years of research experience in the fields of cartilage biology, osteoarthritis, stem cells and tissue engineering. He currently heads the University of Liverpool's Institute of Integrative Biology, prior to which he was head of the School of Cellular and Molecular Medicine at the University of Bristol.

In his early career, Professor Hollander spent three years at the internationally renowned cartilage laboratory at McGill University in Montreal, then returned to the UK to take up an Arthritis Research UK fellowship and a lectureship at the University of Sheffield. In 2000 he was appointed to the Chair of Rheumatology & Tissue Engineering at The University of Bristol – the first time that a non-clinical scientist had been appointed to a Chair of Rheumatology in the UK.

He has more than 100 publications, has secured £7 million of peer-reviewed funding over the past 10 years, and has several patents in his name. He is co-founder and scientific director of a University of Bristol spin-out company, Azellon Cell Therapeutics and in 2010 was ranked among the top 40 scientists in Britain by The Times.

#### Anne Rosser, PhD, FRCP

Anne Rosser is Professor of Clinical Neuroscience at Cardiff University and Honorary Consultant Neurologist at the University Hospital of Wales in Cardiff. She trained in Medicine in Cambridge University where she also undertook her PhD in Neuroscience. She has worked in the area of neurodegeneration since 1994 and has a special interest in Huntington's disease (HD), in particular the development of new therapies for this and related neurodegenerative conditions. She leads the South Wales HD clinical service, which provides care for HD patients at all stages of the illness and supports clinical research activities ranging from observational to interventional clinical studies. Professor Rosser is involved in a number of national and international bodies supporting translational medicine in HD, and is currently a member of the UK Huntington's Disease Network and the European HD network executive committee. Along with Professor Stephen Dunnett, she co-directs the Cardiff University Brain Repair Group, and is Chief Investigator for the European consortium, Repair-HD. Within the Brain Repair Group, her focus is on cell replacement therapies and the potential of stem cells as a donor source for neural transplantation in HD and PD.