

Accreditation

The 7th Sanquin Spring Seminar is accredited by the following scientific and professional organisations

Dutch Society for Internal Medicine (NIV)

Dutch Society for Pediatrics (NVK)

Dutch College of Medical Immunologists (Dutch Society of Immunology, NVvI)

Netherlands Association for Donor Medicine (NVDG, AbSG)

Dutch Society for Obstetrics and Gynecology (NVOG)

Netherlands Society for Clinical Chemistry and Laboratory Medicine (NVKC)

Dutch Society for BioMedical Laboratory Staff (NVML)

A personalised certificate of attendance will be provided by email after the conference, listing the accrediting organisations

Program 7th Sanquin Spring Seminar 5 April 2019



Sanquin Blood Supply
Plesmanlaan 125
1066 CX Amsterdam
The Netherlands
springseminars@sanquin.nl



**Innovative cellular
approaches for
transfusion medicine**

9:00 *Registration, coffee/tea*

9:25 Welcome
René van Lier (Director Sanquin Research)

Session I - Red blood cells

Chair: Marieke von Lindern (Sanquin Research, Amsterdam, The Netherlands)

9:30 **Matthew Porteus (Stanford University School of Medicine, USA)**
Genome editing in human pluripotent stem cells

10:15 Marea van der Rijst (Sanquin Research, Amsterdam, The Netherlands)
Dominant effects of mutations in SMIM1 resulting in low VEL expression occur late in erythroid differentiation

10:30 Francesca Aglialoro (Sanquin Research, Amsterdam, The Netherlands)
PIEZO1 mediated calcium-induced signal transduction in erythroblasts modulates erythropoiesis

10:45 *Break*

11:15 Thijs Verheul (ErasmusMC, Rotterdam, The Netherlands)
Cell-based high throughput screening for gamma-globin inducers to expand treatment options for sickle cell disease

11:30 **Ash Toye (University of Bristol, United Kingdom)**
Enhancement of red blood cell transfusion compatibility using CRISPR-mediated erythroblast gene editing

12:00 *Lunch*

Session II – Platelets

Chair: Karin Fijnvandraat (Sanquin Research and Amsterdam UMC, Amsterdam, The Netherlands)

13:00 **Kathleen Freson (Catholic University Leuven, Belgium)**
High Throughput Sequencing for diagnosing platelet disorders

13:30 Marten Hansen (Sanquin Research, Amsterdam, The Netherlands)
LSD1 and GFI1B control hematopoietic specification from induced pluripotent stem cells

13:45 Ellie Karampini (Sanquin Research, Amsterdam, The Netherlands)
Sec22b-dependent trafficking is essential for VWF multimerization and WPB formation

14:00 Iris Kreft (Sanquin Research, Amsterdam, The Netherlands)
Proteome profiling of platelet disorders using mass spectrometry

14:15 **Cedric Ghevaert (University of Cambridge, United Kingdom)**
Differentiation of human pluripotent stem cells to megakaryocytes by forward programming

14:45 *Break*

Session III - Stem cells and cellular therapies

Chair: Carlijn Voermans (Sanquin Research, Amsterdam, The Netherlands)

15:15 **Gerald de Haan (University of Groningen, The Netherlands)**
Hematopoietic stem cell aging

15:45 Ilse Timmerman (Sanquin Research, Amsterdam, The Netherlands)
Mesenchymal stromal cells in the metastatic bone marrow niche of neuroblastoma

16:00 Twan de Waard (Sanquin Research, Amsterdam, The Netherlands)
The glycosphingolipid repertoire orchestrates HLA class I-mediated immune responses

16:15 Regina Stark (Sanquin Research, Amsterdam, The Netherlands)
Tissue damage regulates maintenance of tissue resident T cells (T_{RM}) via P2RX7

16:30 **Paul Frenette (Albert Einstein College of Medicine, New York, USA)**
Niches for hematopoietic stem cells and their progeny

17:15 *Drinks and snacks*

19:00 *End*

Wifi: Sanquin Guest, Password: Bloedisleven