



# SSIEM 2019

## Building Bridges

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## SSIEM 2019 – Building Bridges

By Ans van der Ploeg - Symposium President

After many successful SSIEM Annual Symposia in various European cities, we raised up the question within our team; why not organize the SSIEM in Rotterdam? As an worldwide expertise center in Pompe disease, at Erasmus MC University Medical Center, but also in our role as an (inter)national reference center for other lysosomal and metabolic disorders, we would have the opportunity to show the audience the latest insights and developments in our field.

### Winning the bid

In 2014 during the SSIEM Annual Symposium in Innsbruck, we submitted a bid in collaboration with Gajja Salomons from Amsterdam University Medical Center and Jan Smeitink from Radboud University Medical Center, to host the SSIEM in 2018 or 2019. Whilst Athens was selected as host for the 2018 symposium and Rotterdam won the bid for the 2019 symposium.

### Years of preparation and hard work

Organizing the SSIEM proved to be hard work and should not underestimated. As Local Organizing Committee we spent

many hours in making this conference a success, in which we succeeded in our opinion.

### Professional Congress Organizer

Of course, we did this with the help of a Professional Congress Organizer (PCO). We worked together with the Dutch company Congress by Design who helped us with all the logistical and financial arrangements.

### Theme: Building Bridges

As theme for the congress we chose Building Bridges. Building Bridges is a theme that fits very well in Rotterdam. Our goal was to make connections on various levels and I can only say that we succeeded! During SSIEM 2019 the next-generation scientists connected with those who are well established. We built bridges between laboratory and clinic and connected up the knowledge, which has been generated on a range of diseases.

### September 2019

The first week of September was finally there and all the hard work finally showed off. In this newsletter you can read a short report of a very successful SSIEM conference.



### Local organizing committee

Ans van der Ploeg, Gajja Salomons, Jan Smeitink, Nathalie Soares, Iris Plug, George Ruijter, Marit Verhangen, Hidde Huidekoper, Elles van der Louw, Margreet Wagenmakers, Gerben Schaaf and Pim Pijnappel (not on photo)



### De Doelen

The SSIEM Annual Symposium was held in de Doelen. A state-of-the-art conference and concert venue located in the center of Rotterdam

# FACTS

SSIEM 2019 was a great success! With more than 3000 registrants, the SSIEM 2019 conference has been until now the biggest SSIEM symposium ever organized. Below some facts:

- ➔ 3017 registrations
- ➔ 86 countries

## Top 10 countries

1.	United States of America	269
2.	The Netherlands	222
3.	United Kingdom	196
4.	Germany	139
5.	Turkey	128
6.	Italy	125
7.	Spain	102
8.	France	101
9.	Belgium	73
10.	Japan	57

- ➔ 6 plenary sessions
- ➔ 14 parallel sessions
- ➔ 1 educational session
- ➔ 3 update lectures
- ➔ 78 abstract oral presentations
- ➔ 4 late breaking news abstracts
- ➔ 606 posters
- ➔ 203 e-posters



## Grand opening!

Every year the SSIEM Annual Symposium is opened with a special act. For SSIEM 2019 we chose 2 acts. We started with an acrobatic act from Tête-Bêche. Tête-Bêche is an acrobatic trio who fulfilled their education at Codarts Circus Arts in Rotterdam. Codarts is the link between talents and the professional field. The talents are trained in the building connected to de Doelen, the congress venue which provides them with a podium. During the opening of the SSIEM they showed their own act: Carmen.

The second act was performed by Gert van der Vijver, also known as the sand artist. During the show he made magical drawings of sand in a lightbox. Illustrating the opening speech of the Symposium President Ans van der Ploeg



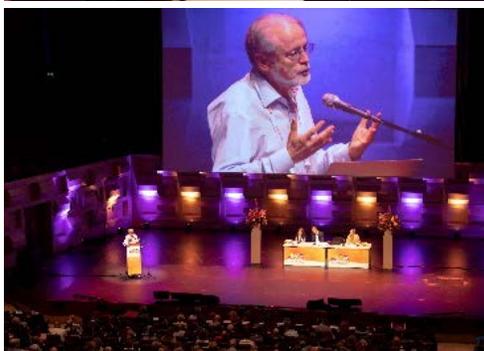
# Exciting Scientific Program



With 6 plenary sessions, 14 parallel sessions, 1 educational session and 606 posters, last year's SSIEM Annual Symposium offered a wide range of very interesting scientific topics within the metabolic field.

All invited speakers were asked to incorporate the theme Building Bridges into their lectures. Especially those speakers who are not active in the metabolic field succeeded in connecting their field of research with the metabolic field. Creating new ideas for the audience.

For instance, Prof. Hans Clevers from the Hubrecht Institute spoke about organoids as models of human disease. With this technology a biopsy is taken from a patient. From stem cells, derived from the biopsy, a miniature organ (organoid) is cultured. With these cultured organoids, scientist can study how cells interact together in an organ, how the cells react on diseases and what effect drugs have on the cells.



Prof. Jan Hoeijmakers (Rotterdam, The Netherlands) spoke about his research on DNA repair and accelerated aging. He discovered that DNA damage and consequent transcription of stress is a main cause for aging. However with dietary restrictions the aging process can be delayed. These findings have wide clinical implications for many aging-related diseases.

In the session RNA based therapy and Gene therapy, the rapid developments in this field were discussed. Prof Auricchio (Naples, Italy) talked about their contribution to the first approved gene therapy for an inherited retinal disease using adeno-associated virus (AAV) as vector. He also discussed the results of an AAV-therapy for MPS VI which led to a clinical trial for MPS VI patients. Prof. Biffi (Cambridge, USA) discussed results from a different gene therapy approach using lentiviral-transduced hematopoietic stem cells for metachromatic leukodystrophy and other inherited neurodegenerative disorders. This approach has the major advantage of having a life-long effect, which will dramatically reduce treatment-burden for patient and caretaker. inherited neurodegenerative disorders. Prof. Aartsma-Rus (Leiden, the Netherlands) discussed the potential of an even different strategy using RNA. She showed that antisense-oligonucleotide molecules can be used to bypass genetic defects as for instance are observed in Duchenne Muscular Dystrophies. She discussed the recent success of this therapy for other disorders such as spinal muscular atrophy as well as opportunities and challenges for future developments.



In the regenerative medicine session, the road to the successful first approved cell-based therapy for treating eye burns was discussed. This work of Prof. Pellegrini and De Luca (Modena, Italy) may pave the road for similar approaches for metabolic diseases. Prof. Mummery (Leiden, The Netherlands) discussed the latest development using human pluripotent stem cells to model cardiovascular disease (heart-on-a-chip) and identify personalized cardiac drugs some of which have already reached the clinic. Prof Strom (Stockholm, Sweden) talked about cell transplantation approaches for liver disease as well as using induced pluripotent stem cell-derived hepatocytes. as models for studying disease and development of new therapeutic strategies.



In the mitochondrial disease session Prof. Shamina Rahman (London, UK) gave an overview of the therapeutical developments in the field of mitochondrial diseases and the progress made. Dr. Marni Falk (Philadelphia, USA) gave a lecture on precision Mitochondrial medicine. Dr Eric Schon (New York, USA) connected, in his very stimulating building bridges talk, the metabolic field to research in Alzheimer disease. He showed that the metabolic disturbances seen in Alzheimer disease likely arise from increased ER mitochondrial communication that is driven by increased levels of MAM (mitochondrial associated endoplasmatic reticulum membranes).

Thursday morning we had 3 excellent presentations in the session on systems biology and metabolomics. Prof Ines Thiele (Galway, Ireland) presented her work on human metabolic modeling, Recon3D, with applications in disease research, including prediction of biomarker metabolites for inborn errors of metabolism, such as PKU. Prof Thomas Hankemeier (Leiden, The Netherlands) gave a lecture on innovative analytical tools, such as organ-on-a-chip, for metabolomics-driven systems biology and presented some examples from both monogenetic and complex disorders. Finally, Dr Carmen Argmann (New York, USA) described network models to uncover genetic modifiers of inborn errors of metabolism in order to explain unexpected discrepancies between genotype and phenotype.



In the lysosomal innovative insights session, Dr. Marjan Huizing (Bethesda, USA) presented an overview of disorders of lysosome-related organelle biogenesis. Paul Saftig (Kiel, Germany) on the challenges and concepts to combat diseases caused by deficiencies of lysosomal hydrolases membrane proteins. In the last lecture Dr. Simon Jones (Manchester, UK) gave us an insight in the future of therapies for lysosomal storage disorders and lessons learned from the past.

# Networking activities

An important part of the SSIEM Annual Symposia are the networking activities. It gives the delegates the chance to get to know each other, exchange ideas and to start new collaborations. Also, it gives the hosting city the chance to show delegates the most interesting places the city has to offer

Last year's SSIEM offered its delegates various networking activities.

## Young investigators event

With so many visitors every year in an unknown city, the SSIEM can be an overwhelming event. Young investigators might find it difficult to connect with other peers and find their way around the conference. For this reason we organized the Young Investigators Event. It was the first time this event took place during a SSIEM Annual Symposium. The Young Investigators participated in a Pub Quiz with three rounds: know it, singing it or dance it.

## Welcome Reception

Each year, at the end of the first conference day, the delegates are invited to the welcome reception. During this SSIEM edition, the welcome reception was held at de Doelen, the conference venue. The reception was catered by Maitre Frederic and with fine wine and delicious bites, the visitors connected with their colleagues and got the chance to exchange ideas or start new collaborations

## Wine and cheese – poster walk

Another SSIEM tradition is the wine and cheese poster walk on Wednesday evening from 18:00 to 20:00. While enjoying a glass of wine and some cheese, poster presenters had the chance to discuss their latest research with other delegates.

## Networking excursions

During the registration process for the symposium delegates had the chance to register for a tour taking place on the Thursday afternoon. 14 tours were offered. The tours were divided in different categories of interest.

- ➔ World Harbor and Maas river
- ➔ Dutch
- ➔ Architecture

- ➔ Into the hoods
- ➔ Peeks
- ➔ Make city
- ➔ Food

The networking excursions were organized by Rotterdam Tours. Rotterdam Tours is a touring agency committed to show the versatility of Rotterdam. Taking the guests to highlights as well as of the beaten track: local entrepreneurs, experts in different fields, little charming places. The tours all had something extra: bite to taste, a water taxi ride, an exclusive visit behind-the-scenes and presentations on site. The tours and the guides resemble Rotterdam: dynamic, real, inspiring and engaging. Professional but unpretentious in hospitality.

## Networking evening

The last networking activity organized on Thursday was the networking evening. The dinner took place at the Onderzeebootloods in the harbor of Rotterdam. The Onderzeebootloods is the hotspot for innovation in the port: this is where the manufacturing industry of the future is taking shape. The guests were taken to the Onderzeebootloods by boat. From 19:00 o'clock two Spido boats were waiting at the Erasmus Bridge to take the guest to the dinner location.

Inside the Onderzeebootloods the guests were welcomed with a drink and small bites. At 20:30 the walking dinner started with amazing dishes and drinks prepared by caterer Maitre Frederic. After dinner, the cover band GOT THE VIBE made sure the right vibe was created during the evening. Within a few minutes after the band started playing, almost all guests were on the dance floor. After the band finished, a DJ took over and played until 02:00 a.m.

## SSIEM NETWORKING ACTIVITIES



## Young investigators event

On Monday evening a special get together for Young Investigators was organized in the Stadsbrasserie Rotterdam. The Young Investigators participated in a pub quiz with three rounds: know it, sing it or dance it!



## Rotterdam Tours

The networking excursions were organized by Rotterdam Tours. SSIEM visitors were offered various intriguing tours around different neighborhoods in Rotterdam.



## Networking dinner

On Thursday evening we closed the networking activities with a dinner and great party at the Onderzeebootloods in Rotterdam. While the guests enjoyed a delicious walking dinner served by Maitre Frederic, cover band GOT THE VIBE blew up the dance floor with great songs from the 70's, 80's and 90's.

# Photo impressions



# Some words of thanks

SSIEM 2019 was a great success and for achieving this great success we would like to express some word of thanks to those who have contributed to the conference.

## Volunteers

You might have seen them walking around, wearing an orange t-shirt, standing at the registration portals and by the doors at the beginning and end of each scientific session. 65 volunteers helped us in welcoming the visitors, processing their registration and helping them to find their way around the conference venue. Each morning during the conference week, the volunteers started their shift at 07:00 a.m. and contributed to a successful conference.

## Congress by Design

After winning the bid, Congress by Design joined our team as the professional congress organizer for SSIEM 2019. They have years of experience in organizing international conferences and supported us from the very beginning and stood by our side to the end and delivered a very organized event.

## Rotterdam Tours

Rotterdam Tours was our partner in organizing the network excursions in Thursday afternoon. For them it was their first big project, but they definitely mad great success out of it. The Tours were very well organized and the SSIEM project even brought them new challenges. Because of the big success at the SSIEM, the city Rotterdam asked Rotterdam Tours to participate in the Cultural Program of next year's Eurovision Song Festival, which will take place in Rotterdam!

