Complex Genetics of Inherited Arrhythmias:

moving from the research lab to the clinic

Amsterdam, March 16th-17th, 2023

Location: **Het Trippenhuis** at the Royal Netherlands Academy of Arts and Sciences (KNAW)
Address: Kloveniersburgwal 29, 1011 JV Amsterdam
Getting there: Closest metro station – Nieuwmarkt, 140m (Lines 51, 53, 54), Rokin, 600m (Line 52)
Closest tram stop – Dam Square, 550m (Lines 4, 14, 24)

Symposium Program

DAY 1 – Thursday, March 16th 2023

0830 – 0900: *Registration*

0900 – 0905: *Welcome and Introduction* - **Connie Bezzina** (Netherlands)

0905 – 1020: Session 1 - ***Current state of the art for clinical genetic testing for inherited arrhythmias***
Session moderators: **Mark Abela** (Malta)**, Annika Rydberg** (Sweden)
0905-0930: Genetics of inherited arrhythmias – setting the stage - **Arthur Wilde** (Netherlands)
0930-0955: How do results from genetic testing inform clinical management? - **Tomas Robyns** (Belgium)
0955-1020: Challenges of genetic testing outside of major research centres - **Ruxandra Jurcut** (Romania)

1020 – 1050: *Coffee Break and Poster Viewing*

1050 – 1230: Session 2 - ***Recent advances in arrhythmia genetics***
Session moderators: **Stefen Kääb** (Germany)**, Joseph Galvin** (Ireland)
1050-1115: Variant interpretation - challenges and innovative approaches - **Roddy Walsh** (Netherlands)
1115-1140: High throughput functional studies to assess variant pathogenicity - **Andrew Glazer** (USA)
1140-1205: GWAS in LQTS and Brugada syndrome - **Connie Bezzina** (Netherlands)
1205-1230: GWAS in ARVC - **Peter van Tintelen** (Netherlands)

1230 – 1300: Session 3 - ***The patient perspective*** **- Ruth Biller** (PAO - ARVC-Selbsthilfe - Germany)

1300 – 1400: *Lunch and Poster Viewing*

1400 – 1515: Session 4 - ***The genetic dark side of under characterised arrhythmia conditions***
Session moderators: **Johan Saenen** (Belgium)**, Jacob Tfelt-Hansen** (Denmark)
1400-1425: Idiopathic ventricular fibrillation and unexplained cardiac arrest - **Elijah Behr** (UK)
1425-1450: Early repolarisation syndrome - **Julien Barc** (France)
1450-1515: Clinical overlap between Brugada syndrome and AVNRT - **Can Hasdemir** (Turkey)

1515 – 1545: *Coffee Break and Poster Viewing*

1545 – 1700: Session 5 - ***Challenges for deriving insights from GWAS***
Session moderators: **Philippe Charron** (France)**, Juan Gimeno** (Spain)
1545-1610: Endophenotype analysis in biobanks - insights into cardiac genetics - **Rafik Tadros** (Canada)
1610-1635: Insights into phenotype penetrance from PRS in biobank studies - **James Ware** (UK)
1635-1700: PRS: ready for prime time? - **Dan Roden** (USA)

DAY 2 – Friday, March 17th 2023

0900 – 0930: *Registration*

0930 – 1045: Session 6 – ***Talks chosen from submitted abstracts***
Session moderators: **Elena Arbelo** (Spain)**, Eric Schulze Bahr** (Germany)
0930-0945: A robust functional genomics assay to establish PS3/BS3 thresholds for *KCNH2* variants - **Chai Ng**
0945-1000: Identifying novel disease modifiers in patients with Congenital LQTS - **Christian Krijger**
1000-1015: Genetic characterization of biopsy-proven myocarditis: a pilot study - **Kalliopi Pilichou**
1015-1030: First Draft of a Novel *PLN* p.Arg14del Heart Failure Risk Model - **Myrthe van der Heide**
1030-1045: Unravelling the genetics of Brugada Syndrome using multi-trait analysis of GWAS - **Paloma Jorda**

1045 – 1115: *Coffee Break and Poster Viewing*

1115 – 1300: Session 7 – ***Discussions and breakout sessions***
Outstanding challenges, future studies and projects, development of new networks, multi-centre registries and databases. Session moderators: **Connie Bezzina** (Netherlands)**, Lia Crotti** (Italy)

1300 – 1315: *Prizes for best poster and selected talk & closing remarks*

1315 – 1400: *Lunch*

Posters:

- Results of genetic stratification in a representative cohort of non-ischemic Cardiac Arrest Survivors (CAS) in Czech Republic, concealed arrhythmogenic cardiomyopathy as the most frequent cause, hypertrophic cardiomyopathy strongly underrepresented - *Alice Krebosva, Prague*
- Update on rare variants in inherited arrhythmogenic syndromes: when to reclassify? - *Estefanía Martínez-Barrios, Barcelona*
- LQTS and transgender transition: a case report - *Georgia Sarquella-Brugada, Barcelona*
- ARVC-specific genetic testing in Hungarian population - *Hategan Lidia, Szeged*
- Comparing Adolescent- and Adult-Onset Idiopathic Ventricular Fibrillation – Results from the Dutch Idiopathic VF registry - *Lisa Verheul, Utrecht*
- The Genetic Basis of Apparently Idiopathic Ventricular Fibrillation – a Retrospective Overview - *Lisa Verheul, Utrecht*
- Cardiac genetics in Malta – where do we stand? - *Mark Abela, Malta*
- Integrated Electromechanical Imaging in Patients with Andersen-Tawil-Syndrome – Mechanistic and Pathophysiological Insights - *Peter Deissler, Maastricht*
- The Clinical Course of Genotype-positive Phenotype-negative Patients with RYR2-mediated CPVT - *Puck Peltenburg, Amsterdam*
- Yield of Guideline Recommended Screening Intervals in Family members for Arrhythmogenic Right Ventricular Cardiomyopathy - *Steven Muller, Utrecht*
- New risk predictor of arrhythmias for patients with congenital Long-QT Syndrome - *Virginnio Proost, Amsterdam*
- The frequency of gene variant reclassification and its impact on clinical management in the inherited arrhythmia clinic - *William Young, London*
- Genetic Factors Predisposing to Sudden Cardiac Arrest - *Dominic Zimmerman, Amsterdam*