Autumn Meeting 2019

Heart Failure – New Therapeutic Strategies

Emmanuel College
University of Cambridge
9th-10th September 2019
Autumn Meeting 2019
Heart Failure – New Therapeutic Strategies
Early Careers Symposium

Dates: 9th September 2019
Venue: University of Cambridge, Emmanuel College
Organisers: Ana-Mishel Spiroski & Tian Ziao

Day 1
08.30 – 09.00  Early Career Symposium Registration
9.00 – 12.00  Early Career Symposium
9.00 – 10.15  Session 1
Chair: Tian Ziao
09.00 – 09.25  Aravinda Page, Royal Papworth Hospital
         Heart donation–pushing the boundary
09.25 – 09.50  Murray Clarke, University of Cambridge
         Zen and the art of grantsmanship for early career scientists
09.50 – 10.15  Andrew Sage, University of Cambridge
         Animal models in cardiovascular research: The good, the bad, and the least predictive
10.15 – 10.45  Morning Tea
10.45 – 12.00  Session 2

Chair: Ana-Mihel Spiroski

10.45 – 11.10  Naveed Akbar, University of Oxford

*Extracellular vesicles target immune cells in acute myocardial infarction*

11.10 – 11.35  Duncan Richards, University of Oxford

*A career in translational research: From academia to pharma*

11.35 – 12.00  Praveen Paul, Director & Co-Founder Pint of Science

*How to pour a pint of science*
Autumn Meeting 2019
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Scientific Programme

**Dates:** 9th-10th September 2019

**Venue:** University of Cambridge, Emmanuel College

**Organisers:** Sanjay Sinha, Thomas Krieg, Ana-Mishel Spiroski & Tian Ziao

11.00 – 13.00  **Registration**

12.00 – 13.00  **Lunch**

13.00 – 13.05  Welcome and Introduction – **Sanjay Sinha**

13.00 – 15.15  **Session 1: Pathobiology and management of heart failure**

**Chair:** David Grieve & May Azzawi

13.05 – 13.30  **Sanjay Prasad, Royal Brompton & Harefield**

*Advances in diagnosis and management of heart failure*

13.30 – 13.55  **Jolanda Van Der Velden, Amsterdam University Medical Centre**

*Sarcomeric mutations as a cause for heart failure*

13.55 – 14.20  **Michael Schneider, Imperial College London**

*Intensive Care for Human Hearts in pluripotent Stem Cell Models*

14.20 – 14.35  **Abstract Presentation: Kateryna Sopova** - *Circulating cathespin s levels predict mortality and improve risk stratification over the grace score in patients with non-st elevation acute coronary syndromes*

14.35 – 14.50  **Abstract Presentation: Eleftherios Zormpas** - *Intronic ALU RNA editing couples mRna stability with pre-mRna processing of inflammatory gene expression in human atherosclerotic heart disease*

14.50 – 15.15  **Afternoon Tea/Coffee**
15.15 – 16.35  **Session 2: BSCR Bernard and Joan Marshall Young Investigator Award Talks**

**Chair:** Karen Porter

Co-judges Duncan Richards, Michael Schneider, Helen Arthur

15.15 – 15.35  **Andrew Lewis** - *Noninvasive immunometabolic cardiac inflammation imaging using hyperpolarized magnetic resonance*

15.35 – 15.55  **Kerstin Timm** - *Early detection of doxorubicin-induced heart failure via its in vivo metabolic signature*

15.55 – 16.15  **Michael Preedy** - *Phosphodiesterase 2 inhibition preferentially promotes NO/guanylyl cyclase/cGMP signaling to reverse the development of heart failure*

16.15 – 16.35  **Francesco Mazzarotto** - *Defining the diagnostic effectiveness of genes for inclusion in panels: the experience of two decades of genetic testing for hypertrophic cardiomyopathy at a single center*

16.35 – 17.35  **Bernard and Joan Marshall Distinguished Lecture**

**Chair:** Sanjay Sinha

Joseph Wu, Stanford University

*Stem Cells & Genomics for Precision Medicine*

17.35 – 19.00  **Session 3: Poster Presentations and Wine Reception**

19.30  **BSCR Conference Dinner, Emmanuel College**

*BSCR Marshall and Poster Prize Presentations*

*Prize-giving – Karen Porter*

**Day 2**

9.15 – 10.35  **Session 4: Cell Therapy and Tissue Engineering for Heart Failure**

**Chair:** Joseph Wu & Carolyn Carr

09.15 – 09.30  **Abstract Presentation: Lay Ping Ong** - *Cellular therapy for heart failure*
09.30 – 09.55  Molly Stevens, Imperial College London
Scaffolds and gels for cardiac regeneration

09.55-10.20  Chris Denning, University of Nottingham
hPSC-derived cardiomyocytes to model heart disease

10.20 – 10.35  Abstract Presentation: Oisin King - Non-myocyte influence on excitation-contraction coupling in induced pluripotent stem cell derived myocardium

10.35 – 11.00  Morning Tea/Coffee

11.00 – 13.00  Session 5: Cell Therapy and Tissue Engineering for Heart Failure 2
Chair:    Ajay Shah & Sarah Withers

11.00 – 11.25  Wolfram Zimmermann, University Medical Centre Gottingen
Engineered human myocardium

11.25-11.50  Mairi Brittan, University of Edinburgh
Mechanisms to promote endothelial-mediated neovasculogenesis in heart failure

11.50 – 12.05  Abstract Presentation: Robert Johnson - Human myofibroblasts increase the arrhythmogenic potential of human-induced pluripotent stem cell-derived cardiomyocytes

12.05 – 12.20  Abstract Presentation: Sophie McManus - BNC1 is a key regulator of human epicardial heterogeneity and function

12.30 – 13.00  BSCR AGM

13.00 – 13.45  Lunch

13.45 – 15.25  Session 6: The AstraZeneca session on Academia-Industry Interface in Heart Failure
Chair:    Andrew Bond & Chris Denning

13.45 – 14.10  Angela Russell, University of Oxford
Chemistry for regenerative medicine: discovery of small molecules to manipulate stem cell fate

14.10 – 14.35  Peter Sandner, Bayer
Guanylyl cyclase modulators
14.35 – 15.00  **Shamus Husheer, Heartfelt**  
*Innovation in Heart Failure : A Start-Up Story*

15.00 – 15.25  **Andrew Hall, AstraZeneca**  
*Heart failure as a consequence of oncology treatment - the challenges, models and approaches used to understand the mechanisms behind structural cardiac toxicity*

**15.30 – 16.15  Keynote Lecture introduced by Thomas Krieg**

**Ajay Shah, King’s College London**  
*ROS, NO and heart failure*

16.15  **Concluding remarks and meeting close – Thomas Krieg**