

## Cells: from Robert Hooke to Cell Therapy – a 350 year journey

5-6<sup>th</sup> of October, 2015 - Organised by Professor Sir Ian Wilmut FRS, Professor Johan Hyllner and Professor Chris Mason

DAY 1 – 5 October 2015				DAY 2 – 6 October 2015			
<b>Session 1: From cells to the identification of stem cell populations in adult tissues and embryos</b> Chair: Professor Roger Pedersen		<b>Session 2: Demonstrations of developmental plasticity in mammalian cells</b> Chair: Professor Fiona Watt FRS		<b>Session 3: Established and recent cell therapies</b> Chair: Professor Johan Hyllner		<b>Session 4: Novel cell therapies</b> Chair: Professor Chris Mason	
<b>09.00</b>	Welcome by The Royal Society						
<b>09.05</b>	<b>Dr Felicity Hendersen</b> Robert Hooke, microscopy, and the cell in early science	<b>13.35</b>	<b>Professor Kazutoshi Takahashi</b> Present and future challenges of induced pluripotent stem cells	<b>09.00</b>	<b>Professor Anders Lindahl</b> Discoveries and execution of the first specialized cell therapy (autologous chondrocytes) in global use	<b>13.15</b>	<b>Professor Philippe Menasche</b> Stem cell approaches to treat cardiovascular diseases
<b>09.35</b>	Discussion	<b>14.05</b>	Discussion	<b>09.30</b>	Discussion	<b>13.45</b>	Discussion
<b>09.50</b>	<b>Professor Irving Weissman</b> Evolution of Normal and Neoplastic Tissue Stem Cells	<b>14.20</b>	<b>Dr Marius Wernig</b> Direct reprogramming towards the neural lineage	<b>09.40</b>	<b>Professor James Shapiro</b> Cellular transplantation of human islets or stem cell progenitors in the treatment of diabetes	<b>13.55</b>	<b>Dr Bent Jakobsen</b> Fine-tuned T cell Receptors for Cancer Immunotherapy
<b>10.20</b>	Discussion	<b>14.50</b>	Discussion	<b>10.10</b>	Discussion	<b>14.25</b>	Discussion
<b>10.35</b>	<b>Coffee</b>	<b>15.05</b>	<b>Tea</b>	<b>10.20</b>	<b>Coffee</b>	<b>14.35</b>	<b>Tea</b>
<b>11.05</b>	<b>Dr Sally Temple</b> Neural stem cells: their role in brain development, maintenance and potential nervous system therapies	<b>15.30</b>	<b>Professor Austin Smith</b> Naïve pluripotency	<b>10.50</b>	<b>Professor Olle Lindvall</b> Treatment of Parkinson's disease using cell transplantation	<b>15.05</b>	<b>Professor Carl June</b> Use of genetically modified T-cells in treatment of cancer
<b>11.35</b>	Discussion	<b>16.00</b>	Discussion	<b>11.20</b>	Discussion	<b>15.35</b>	Discussion
<b>11.50</b>	<b>Professor Sir Ian Wilmut FRS</b> Somatic cell nuclear transfer: origins, the present position and future opportunities	<b>16.15</b>	<b>Professor Christine Mummery</b> Human pluripotent stem cells: the new "patient"?	<b>11.30</b>	<b>Professor Silviu Itescu</b> Pioneering industrialisation of cell based therapies	<b>15.45</b>	<b>Dr Patrick Vallance</b> Cell therapies as medicines
						<b>16.15</b>	Discussion
<b>12.20</b>	Discussion	<b>16.45</b>	Discussion	<b>12.00</b>	Discussion	<b>16.25</b>	Conclusion: Session Chairs Panel discussion of Future directions
<b>12.35</b>	LUNCH	<b>17.00</b>	CLOSE	<b>12.10</b>	LUNCH	<b>17.00</b>	CLOSE

*Updated 24/9/2015 – subject to change*