

## Plenary 1

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### ARIFF BONGSO



### Topic: 'Stem Cells in Regenerative Medicine: The Journey from Bench to Bedside'

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Professor Ariff Bongso is a research professor with the Department of Obstetrics and Gynaecology at the National University of Singapore and Scientific Director of the In-Vitro Fertilisation Programme at the National University Hospital. The citation describes him as “highly accomplished in his field”. It adds: “His pioneering spirit, logical thinking and perseverance were clearly demonstrated by his sustained work over the last decade.”

#### ***He made 5 breakthroughs, all world firsts***

**Breakthrough #1 in 1991:** Develops a method known as co-culture.

“This enabled the growth of human embryos in a laboratory dish for up to five days to the blastocyst stage, which can help infertile couples conceive”

**Breakthrough #2 in 1992:** Produces the world’s first blastocyst transfer baby and increases pregnancy rates in childless couples significantly.

**Breakthrough #3 in 1994:** Derives embryonic stem cells from such five-day-old human embryos.

**Breakthrough #4 in 1997:** Improves older women’s chances of giving birth by innovating a test-tube procedure that removes the blastocyst’s outer shell.

**Breakthrough #5 in 2002:** Successfully derives and grow’s human embryonic stem cells completely on human feeders.

**Source:** <http://www.a-star.edu.sg/explosion/iss4/pdf/passion.pdf>

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