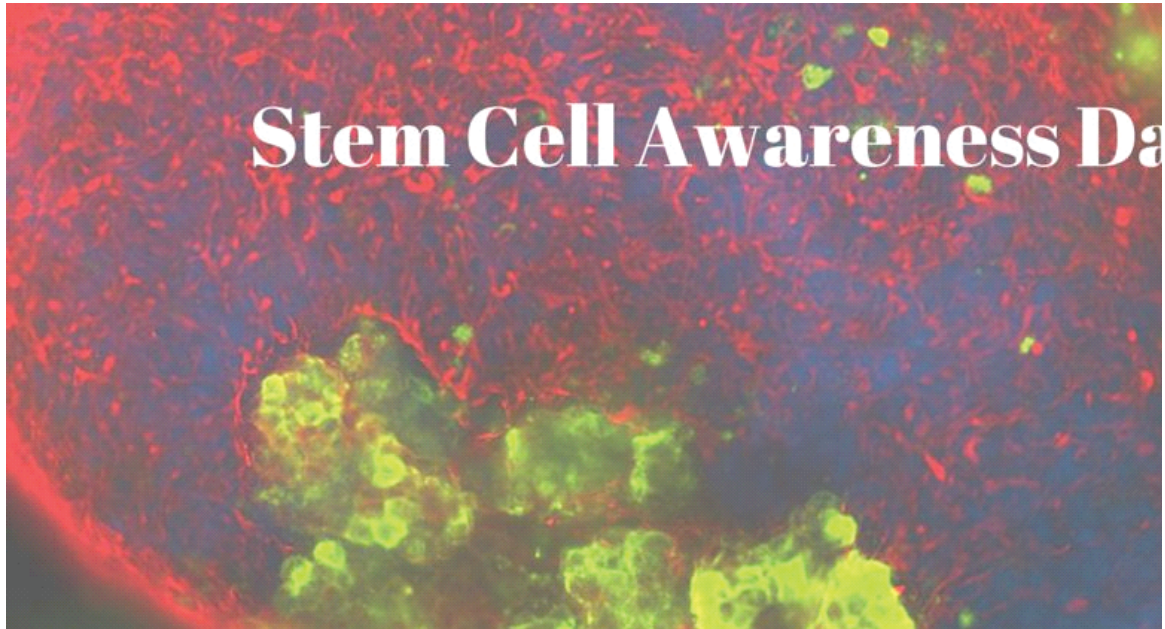


10 Years of Stem Cells



This October 8th marks the seventh anniversary of the international Stem Cell Awareness Day, which was first organised by CIRM, California's Stem Cell Agency in 2008. Back then, it consisted of a handful of events scattered across California, Canada and Australia. Fast-forward to 2014 and you'll see plenty more events taking place throughout October across the USA, Canada, Australia and Europe.

For the large number of people globally suffering from incurable diseases and injury, this day represents a celebration of the scientific advances made to-date and the hope of what is to come in the future.

To celebrate, we've compiled some of the most significant developments in stem cells since 2006, as we celebrate our 10th anniversary at the 2015 World Stem Cells and Regenerative Medicine Congress.

2006:

- Shinya Yamanaka of Kyoto University, Japan uncovers a way of making embryonic-like cells from adult cells. Along with his team, they successfully reprogram ordinary adult cells forming “induced pluripotent stem cells” or “iPSCs”.
- Inaugural **World Stem Cells and Regenerative Medicine Congress** held in London, UK.

2007:

- Mario Capecchi, Martin Evans and Oliver Smithies win the Nobel Prize for Physiology for Medicine “for their discoveries of principles for introducing specific gene modifications in mice by the use of embryonic stem cells”
- Dr. John Dick first identified human colon cancer stem cells, having already identified, in the 1990s, leukemia stem cells.

2008:

- Sam Weiss is awarded the Gairdner Prize for the discovery of neural stem cells in the brains of adult mammals.
- First Stem Cell Awareness Day, organised by CIRM, California’s Stem Cell Agency.

2009:

- President Barack Obama lifts the 2001 restrictions on federal funding for human embryonic stem cell research, put in place by President George Bush Jr. in 2001.

2010:

- First clinical trial of human embryonic-derived stem cells for treatment of spinal cord injury.

2011:

- Pope hails potential of adult stem cell research as the Vatican invests in new stem cell research

2012:

- **Blindness eased by historic stem cell treatment:** For the first time since they were discovered, human embryonic stem cells have shown medical promise.
- **Shinya Yamanaka and John Gurdon win the Nobel Prize in Physiology or Medicine** for creating induced pluripotent stem cells.

2013:

- **Human stem cells made using Dolly cloning technique:** Shoukhrat Mitalipov at the Oregon National Primate Research Center in Beaverton and his colleagues produce human embryonic stem cells from fetal cells using therapeutic cloning
- **Scientists in Japan said they had grown human liver tissue from stem cells** in a first that holds promise for alleviating the critical shortage of donor organs
- **“Say Hello to the Stem-Cell Hamburger”:** The world’s first test-tube burger is made from cow stem cells

2014:

- Charles Vacanti of Harvard Medical School together with Haruko Obokata at the Riken Center for Developmental Biology in Kobe, Japan, and colleagues announced **a revolutionary discovery that any cell can potentially be rewound to a pre-embryonic state – using a simple, 30-minute technique.**
- Masayo Takahashi at the same Riken centre has embarked on what promises to be **the world’s first trial of a therapy based on iPS cells**, to treat a form of age-related blindness.

2015:

- 10th anniversary of the [World Stem Cells and Regenerative Medicine Congress](#), Europe's leading marketplace for investment, commercial opportunities and collaborations in cell therapies, regenerative medicine and tissue engineering.