

## Janeiro



### **Construções de Órgãos 3D para transplantes**

Fonte: *The Economist*

EVERY year about 120,000 organs, mostly kidneys, are transplanted from one human being to another. Sometimes the donor is a living volunteer. Usually, though, he or she is the victim of an accident, stroke, heart attack or similar sudden event that has terminated the life of an otherwise healthy individual.

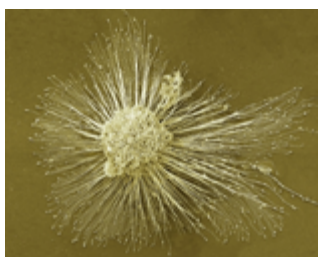
## Fevereiro

### **Linhas de células-tronco disponíveis para desenvolvimento clínico**

Fonte: *Medicines and Healthcare products Regulatory AgencyFirst*

The UK Stem Cell Bank (UKSCB) at the National Institute for Biological Standards and Control (NIBSC) is releasing its first stem cell lines suitable for development into novel cell-based medicines to researchers wishing to bring new and innovative therapies to clinical trial.

## Março



### **Homem japonês é o primeiro a receber células-tronco de outra pessoa**

Fonte: *Nature/ News*

On 28 March, a Japanese man in his 60s became the first person to receive cells derived from induced pluripotent stem (iPS) cells donated by another person.

The surgery is expected to set the path for more applications of iPS-cell technology, which offers the versatility of embryonic stem cells without their ethical taint. Banks of iPS cells from diverse donors could make stem-cell transplants more convenient to perform, while slashing costs.

### **Novo método produz grandes quantidades de células cerebrais e musculares**

Fonte: *MedicalXpress*

Wellcome Trust Sanger Institute scientists and their collaborators at the University of Cambridge have created a new technique that simplifies the production of human brain and muscle cells - allowing millions of functional cells to be generated in just a few days. The results published today (23 March) in *Stem Cell Reports* open the door to producing a diversity of new cell types that could not be made before in order to study disease.

### **Células vegetais podem se tornar uma rede vascular**

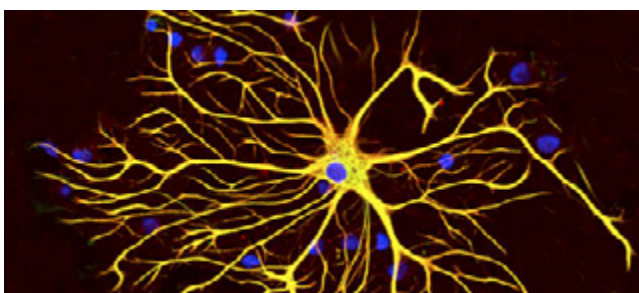
Fonte: *GEN – Genetic Engineering & Biotechnology News*

It's a pretty safe bet that when Popeye was eating his spinach to gain superhuman strength to fight off bullies he wasn't thinking about using the plant to regenerate human heart tissue. Yet, that is exactly what a team of researchers, led by investigators at Worcester Polytechnic Institute (WPI), have just reported on in a new study published in the journal *Biomaterials*.

### **UFMG - Cultivo em laboratório de células-tronco hematopoiéticas**

Fonte: *LabnetWork - UFMG*

Pesquisadores da Universidade Federal de Minas Gerais – UFMG e de instituições dos Estados Unidos e do Japão estudam os sinais químicos relacionados com a reprodução de células-tronco hematopoiéticas. As descobertas devem abrir caminho para seu cultivo em laboratório e aumentar as chances de sucesso dos transplantes de medula óssea.



### **CIRM financia estudo clínico com Células - Tronco para ELA**

Fonte: *UCSanDiegoHealth*

The Independent Citizens Oversight Committee of the California Institute for Regenerative Medicine approved yesterday a \$6.3 million grant to a research team from the University of California, San Diego School of Medicine and University of California, Davis to pursue a novel human embryonic stem cell-based therapy to rescue and restore neurons devastated by amyotrophic lateral sclerosis or ALS.

## “Terapia” não comprovada com células cega três pacientes na clínica da Flórida

Fonte: *Stanford Medicine*

After three patients were blinded following a treatment marketed as a stem cell clinical trial, Stanford ophthalmologist Jeffrey Goldberg calls for increased patient education and regulation.

Three people with macular degeneration were blinded after undergoing an unproven stem cell treatment that was touted as a clinical trial in 2015 at a clinic in Florida. Within a week following the treatment, the patients experienced a variety of complications, including vision loss, detached retinas and hemorrhage. They are now blind.

## Genes de células-tronco conseguem rejuvenescer animal idoso

Fonte: *Centro de Criogenia do Brasil*

As células-tronco, além de poderem se diferenciar em qualquer tipo de células, exibem outra propriedade marcante: a capacidade de permanecerem jovens. Para compreender como isso ocorre é necessário entender que a estrutura dos cromossomos, que contêm os genes, sofre alterações com o decorrer do tempo, ou seja, assim como acontece com a nossa pele ou cabelos, os cromossomos também envelhecem.

## Da pele ao cérebro: células-tronco sem modificação Genética

Fonte: *ScienceDaily*

A discovery, several years in the making, demonstrates that adult skin cells can be converted into neural crest cells (a type of stem cell) without any genetic modification, and that these stem cells can yield other cells that are present in the spinal cord and the brain. The applications could be significant, from studying genetic diseases in a dish to generating possible regenerative cures from the patient's own cells.

## Reservatório de células-tronco resistente a quimioterapia no Intestino

Fonte: *ScienceDaily*

These comprise a small group of passive stem cells -quiescent- that are activated when needed and have the capacity to produce any kind of intestinal cell. Quiescent cells are relevant for tissue regeneration and for participation in tumor development. Researchers have discovered a new group of intestinal stem cells with very different characteristics to those of the abundant and active stem cells already known in this organ. This new group of stem cells is quiescent, that is to say, the cells do not proliferate and are apparently dormant.

## Infográfico sobre a produção de iPS

Fonte: *RegMedNet*

The results of our survey are in - discover what techniques scientists around the world are using to produce iPSCs and the challenges they're facing. You can also register now for on our online panel discussion, for expert analysis of key results and discussion of the field by Lia Kent (Scientific Training and Support, Biological Industries USA), Yvonne Mica (Business Development Consultant - Stem Cells, Thermo Fisher Scientific), Fiona Watt (Director, Center for Stem Cells & Regenerative Medicine at King's College London) and Scott Noggle (Senior Vice President, Research, The New York Stem Cell Foundation Research Institute).

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## Laboratório Associado - Pesquisa

A Profa, Pesquisadora e investigadora principal de um dos nossos Laboratórios Associados **Patricia Pranke**, fala um pouco com a sua equipe do processo de descelularização e recelularização de órgãos que está sendo realizado no IPCT, Instituto de Pesquisa com Células-tronco da UFRGS.

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## Cursos

CURSO: Células madre humanas reprogramadas (hIPS), generación, mantenimiento y caracterización básica

Coordinador: Dr. Fernando Pitossi / Institución: Fundación Instituto Leloir

Fonte: CABBIO - Centro Brasileiro Argentino de Biotecnologia e MCTIC

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## Eventos



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Informamos que as notícias deste boletim foram retiradas da internet, e suas fontes estão disponibilizadas em cada texto, assim como os devidos links.

Caso tenha interesse em divulgar notícias ou informações da área de pesquisa associada a Medicina Regenerativa, por favor faça contato por e-mail que será submetido a coordenação do INCT-Regenera.

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