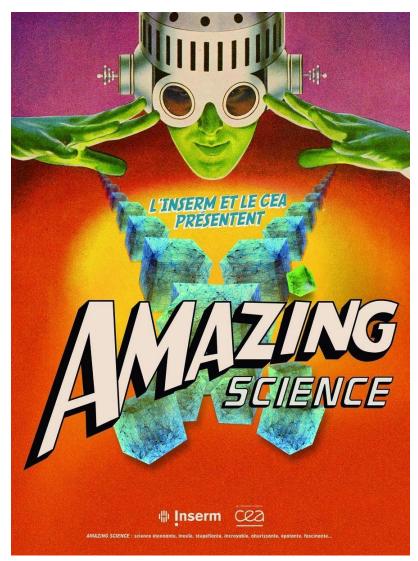




Paris, 15 October 2012

## Press kit

# Amazing Science\*, a "pulp" and science exhibition



<sup>\*</sup>Amazing Science: astonishing, ground breaking, mind-boggling, incredible, jaw-dropping, breath-taking, fascinating science!

#### Press contacts

#### Inserm

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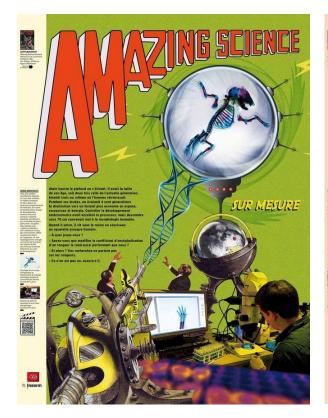
# Amazing Science\*, a "pulp" and science exhibition

In a nod to the Sci-Fi culture of 1930's American magazines, the Amazing Science exhibition brought to you by Inserm and CEA takes you on an exploratory journey into uncharted territory, on the frontiers of pulp culture, science fiction and scientific research.

Presented for the first time at the 2012 Nantes Utopiales, this new exhibition invites you to delve into the mysteries of life, matter and the universe. The Amazing Science exhibition has set itself a dual challenge: to promote discovery and understanding through enjoyment and to encourage explanation and learning through transformation.

## Reinventing Amazing Stories

With the Amazing Science exhibition, Inserm and CEA continue to follow the adventurous trail blazed by *Amazing Stories*, the American sci-fi magazine first published in 1926. Back then, Hugo Gernsback's publication regaled its readers with "scientific romances" complete with shock graphics, bright colours, striking typography and mysterious perspectives.





Opening on 7 November 2012, the Amazing Science exhibition will breathe fresh life

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<sup>\*</sup>Science-Fiction

into those old magazine covers – 20th Century science fiction reinvented by the 21st Century science. Claude Ecken, science fiction writer, comic script writer, literary critic, broadcaster and public reader<sup>†</sup>, will join in this revival of "science romances" with a series of short science fiction stories taking visitors on a 26-picture literary journey.

## Science and pulp culture

As Maison d'Ailleurs Director Marc Atallah reminds us, "the term 'pulp' (or 'pulp magazine') refers to the cheap publications printed on poor quality paper in the United States during the first half of the 20th Century." The exhibition revives the "pulp" look through a blend of scientific research, creative writing and popular culture. From the infinitely small to the infinitely large, the most advanced areas of science are now the realm of unexpected encounters with the real and the imaginary worlds. Each of the exhibition panels features scientific visuals based on a specific research area.

"The Amazing Science exhibition aims to explore scientific research by breaking – through a set of new cultural codes – with science's occasionally inaccessible image, and by reaching out to the popular imagination," says Claire Lissalde, project leader and head of the Inserm audiovisual unit.

#### Practical information

AMAZING SCIENCE

A "pulp" and science exhibition organised by Inserm and CEA From 7 to 12 November 2012 Nantes Utopiales / International Festival of Science Fiction La Cité Nantes Events Center, 5 rue de Valmy, 44000 Nantes Public: for age 7 and over

# Amazing Science, an exhibition designed and produced by the Inserm and CEA communications departments

Project Manager, Claire Lissalde, Head of the Audiovisual Unit at Inserm. Coordination for CEA, Florence Klotz
Based on an original idea by Eric Dehausse, Inserm iconographer
Proofreading by Maryse Cournut of Inserm
Short stories by Claude Ecken,
Art Direction Alexander Cheyrou
Science Editor Charles Muller

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<sup>†</sup> Mission Caladan (Editions Le Pommier 2010) Au réveil il était midi (L'Atalante 2012) Femtopetas (Forthcoming from Bélial)

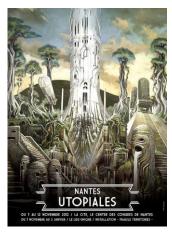
Pulp illustrations from the Agence Martienne and the Maison d'Ailleurs collections.

Science photos from the Inserm Serimedis \*image bank and the CEA Photo Library.

\* Serimedis is an Inserm image bank open to the public and accessible online at: <a href="https://www.serimedis.fr">www.serimedis.fr</a>. The catalogue contains over 14,000 photographs and 1,500 videos.

## **The Nantes Utopiales**

Since its inception in 2000, The Utopiales, the Nantes International Festival of Science Fiction, has set out to attract ever wider audiences and provide a high-quality initiation into the worlds of futurology, new technology and the imagination. This year and for the next five years, the festival will be presided over by Roland Lehoucq, astrophysicist at the CEA, and will take place from 7 to 12 November 2012. Alongside the treatment of topical science fiction issues, this year's theme is "Origins".



Inserm and CEA, sponsors of the event, will be involved at several levels:

The Amazing Science exhibition will be presented by Inserm and CEA for the first time at the Nantes Utopiales.

Visitors can use flashcodes to watch short films on smartphones to complement the scientific information.

-Demonstration Workshops will be offered several times per day by CEA researchers into LIBS Technology, currently being used on board the Curiosity rover bound for Mars. Originally developed by the CEA for measuring in nuclear environments, this ultra-focused laser will enable the long distance study of the composition of Martian rocks using spectometry. Is there life on Mars? This is one of the questions to which the Mars Science Laboratory, which landed on Mars on August 6, is seeking an answer.



- For five days, Inserm and CEA researchers will speak at roundtables on a variety of topics:

### Domestic robots: a revolution in home help? (8 November

#### - 2pm)

Peter Dominey, Inserm - Rodolphe Gélin - Marc Caro - Jack Skillinstead Faced with an aging population, it is likely that the market for domestic robots will explode soon. Will this change social and family relationships?

# The medical exploration of the brain: a tribute to Isaac Asimov's "Fantastic Voyage" (8 November 4pm)

Christian Barillot, Inserm - Lucie Hertz-Pannier, CEA-Neurospin - Laurent Genefort - Nancy Kress

Observing the brain "think", "learn" and "react" in real time is no longer the stuff of dreams. We now know how to measure the activity of areas of the brain in real time. No need for the miniature submarine dreamed up by Asimov! In addition, brain imaging now enables us to diagnose and understand diseases such as autism, epilepsy or Parkinson's and Alzheimer's. Has science fiction taken these techniques on board and is it embracing the latest mysteries of thought?

### In the beginning: stem cells (9 November – 11am)

Patricia Lemarchand, Karim Si-Tayeb, Inserm - Gilles Menegaldo - Marion Mazauric, Recent decades have seen considerable developments in research on embryonic stem cells. They continue therefore to arouse the interest of researchers for their immense therapeutic potential. What are the possible applications? What are the potential social impacts imagined by science fiction?

## Mars: the new scientific and technical challenges (9 November - 3pm)

Gilles Moutiers, Head of Analytical Studies at CEA - Gérard Klein - Stéphane le Mouellic - Eric Picholle

The colonisation or terraforming of Mars is a recurring science fiction dream, but the new scientific challenges are focusing instead on the research for a fossil route. The success of the Curiosity mission has demonstrated this but also seems to have revived the debate: Is Mars humanity's next frontier in search of new spaces or a large open-air life museum?

# The technology of the invisible how nanosciences are revolutionising our daily lives (9 November - 5pm)

Frédéric Lagarce, Inserm - Pascale Chenevier, at the CEA Nanoscience and Cryogenics Institute in Grenoble - Thomas Day - Laurent Genefort - Alain Damasio

Nanotechnology is everywhere!

Capsule cameras, carbon nanotubes, vectorised pharmaceuticals, nanomaterials and nanovehicles, so many invisible actors revolutionising – and indeed improving – our daily lives But is there another side to the coin? Are some uses to be feared?

## Exploration from the marine worlds to the sky's oceans (9 November – 5 pm)

Sophie Nicaud, biological engineer at CEA - Ayerdhal - Serge Lehman - Pierre Bordage - Jean-David Morvan - Olivier Paquet

The imagination of the authors of science fiction has often been fuelled by the maritime epic of Moby Dick's Odyssey. But is the loneliness of the navigator in the storm similar to the isolation of crews bound for the most distant planets? Can we draw an analogy between the ocean and space? Can scientific programmes exploring the seabed prepare man for space?

### Amazing science: the exhibition (10 November – 11am)

Mikael Tanter, Inserm- Gérard Klein - Claude Ecken – Roland Lehoucq, astrophysicist at CEA

Should the legacy of Hugo Gernsback's pioneering magazine Amazing Stories, first published in 1927, the era of "pulps" in the United States, be reassessed? Despite their outdated character, were these stories not a fair reflection of the amazing technological advances of their time? Has science fiction lost its original capacity to marvel at science? Has the time not come to revive the era of the expert adventurers?

### Will genetics rule the world? (10 November - 4pm)

Pierre-Paul Renders - Joëlle Wintrebert – Richard Redon - Mathieu Allart Current prospects for genetic research appear great, and seem to promise, despite ethical resistance, unprecedented changes in the way we look at our own lives, our diseases and our identity. But has science fiction prepared us?

"Encounter" with Etienne Klein, Physicist, Director of Research at CEA (11 November– 11.30am)

# The origins of the universe, between science and science fiction (11 November - 2.30pm)

Etienne Klein, Physicist, Director of Research at CEA – Roland Lehoucq, Astrophysicist at CEA – Laurence Suhner

From the Big Bang to the Big Crunch, the fate of the universe has always fired the imagination of writers and preoccupied cosmologists. But what happened before the Big Bang? Is the scientists' imagination even more boundless than that of the authors? <a href="http://www.utopiales.org/index.php/fr/">http://www.utopiales.org/index.php/fr/</a>

#### Inserm

Inserm, the National Institute of Health and Medical Research, established in 1964, is under the dual supervision of the Ministry of Health and the Ministry of Research. It is the only French public organisation dedicated to biological and medical research and public health. Inserm numbers nearly 15,000 scientists, engineers and technicians and 318 research units, located mainly in university hospitals or other research institutions. The Institute covers all disciplines from the research laboratory to the bedside and conducts thematic research that enables the study of all diseases, from the most common to the rarest.

Inserm is a founding member of Aviesan\*, the National Alliance for Life Sciences and Health, established in 2009.

www.Inserm.fr

Aviesan members:CEA, CNRS, CHRU, CPU, INRA, INRIA, Inserm, INSTITUT PASTEUR, IRD. Associate Members Ariis, EFS, Institut Curie, Unicancer, Institut Mines-Telecom, IRBA, IRSN. www.aviesan.fr

#### **CEA**

The Atomic Energy and Alternative Energies Commission (CEA) is a public research organisation operating in four main areas: low-carbon energy (nuclear and renewable), defence and global security, information technologies and health technologies, combined with an excellence in fundamental research as well as the design and operation of very large research infrastructures. A key player in research and innovation, boasting 16,000 researchers and employees, located in 10 centres throughout France, the CEA benefits from strong regional integration.

As part of its mission to disseminate knowledge and scientific culture, it is heavily involved in public information and educational work with young people. <a href="https://www.cea.fr">www.cea.fr</a>

#### **Partners**

#### Maison d'ailleurs

Located in Yverdon-les-Bains (Switzerland), the Maison d'Ailleurs is the only European museum with exhibitions entirely dedicated to the aesthetics of science fiction, utopias and extraordinary journeys – in other words, the imaginative power of science and technology. It is also a specialised research centre which, through the 120,000 or so documents in its possession, attracts researchers and the curious from around the world. Its collection of science fiction pulps is the most comprehensive – if not the most complete – in the world.

#### Casden

The Casden Cooperative Bank places solidarity and reciprocity at the heart of its approach and its conception of its field. This is why Casden speaks out on issues beyond its core economic business, particularly via its commitment to the research organisations it supports in achieving their scientific and technical goals. www.casden.fr