

# Le citoyen expert: une introduction interactive avec la salle

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TRACES  
*Théories et reflexions sur l'apprendre,  
la communication et l'éducation scientifiques*



CIEL, UN JOURNALISTE!

# Les média



Les média ne sont pas sensés agir comme *conveyor belts* de l'information scientifique, mais d'élargir l'arène du débat.

Ne pas aimer la façon de fonctionner des média c'est comme ne pas aimer la gravité

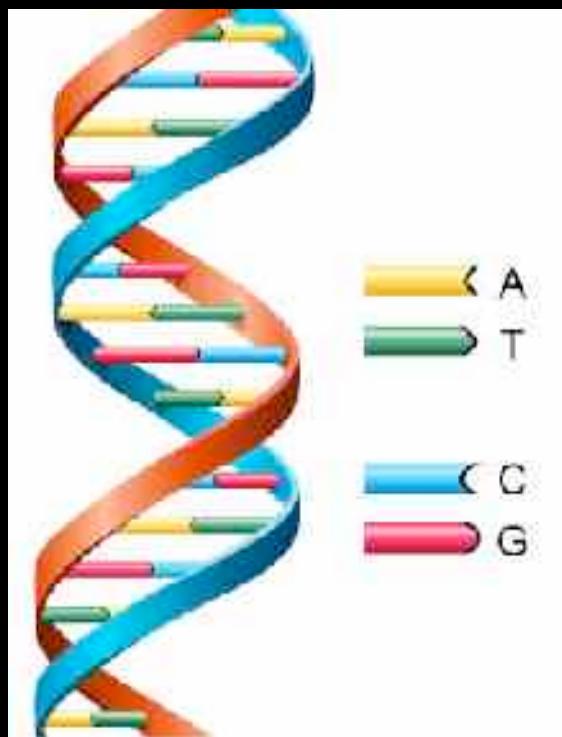
# Les média



Formation des journalistes à la science

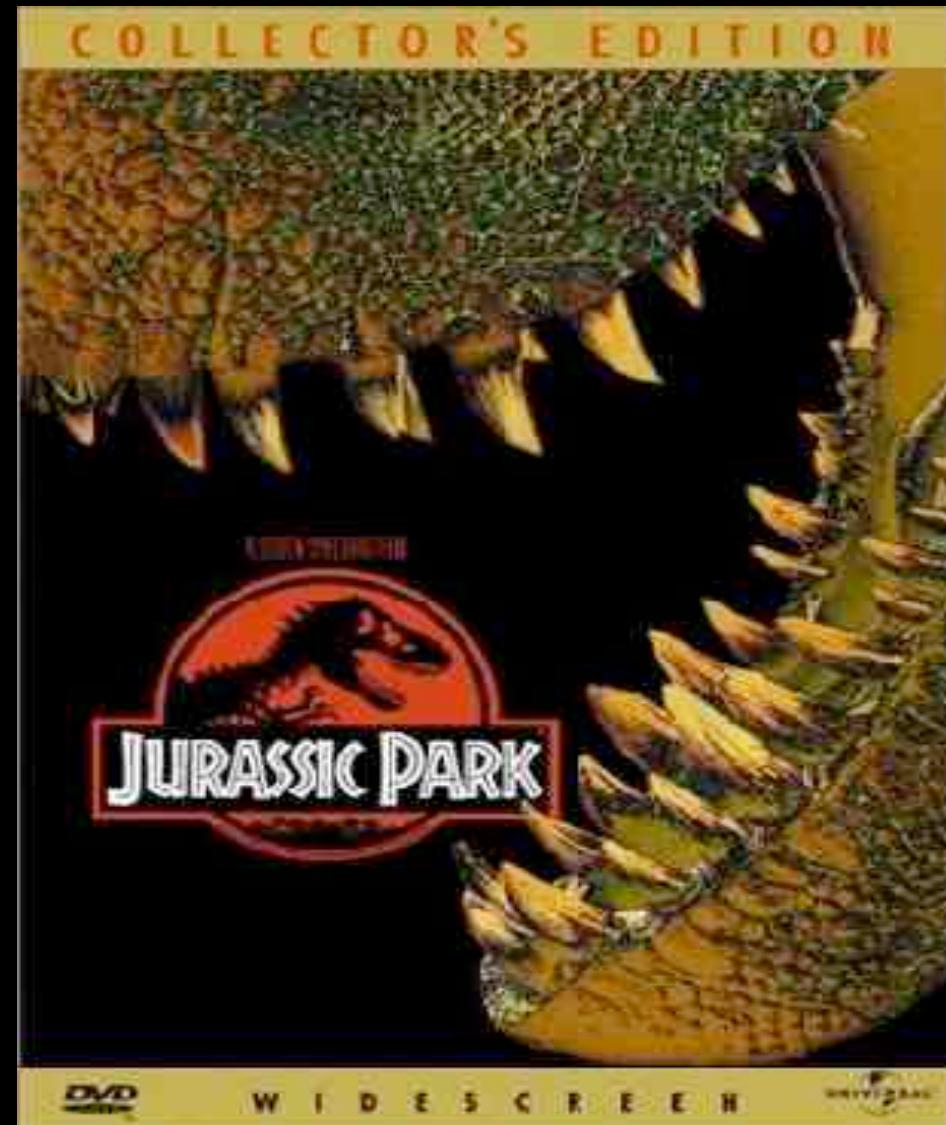
Formation des scientifiques et des experts au journalisme

# Post-academic science



?

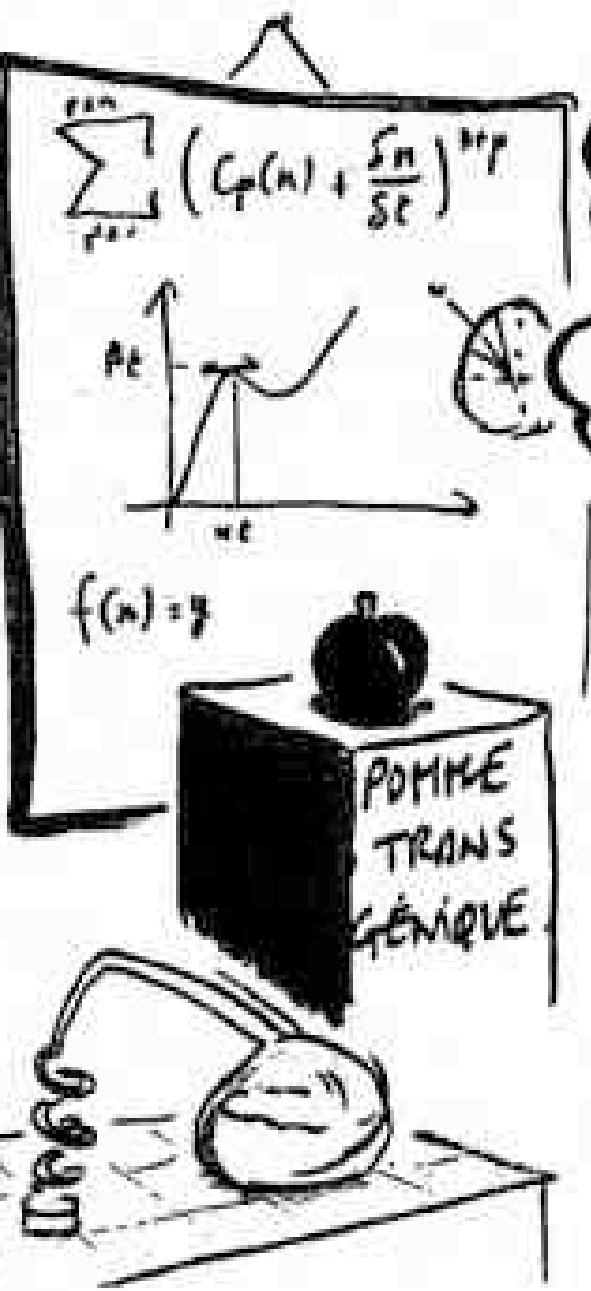
?





# Eurobarometer 224

- Whom do you trust to inform about the impacts of science and technology?
  - Scientists working in public labs 52%
  - Scientists working in an industrial lab 28%
  - Environmentalist associations 21%
  - Consumers organisations 15%
  - Politicians 5%



ÇA ÊTRE NOUVELLE  
POMME. MEILLEUR !  
PLUS RIAM RIAM !  
PAS BRANGER. VOUS  
COMPRENDRE MOI ?

CHARVIN.



- Quel est l'état de la recherche?
- On est en train de chercher à comprendre quelles maladies les gens veulent avoir



# The You era





## WEB 2.0 (inside and outside the web)



Wikis

Blogs

Tagging

Social bookmarking



[https://www.amazon.com/Golem-Should-about-Science-Canto/dp/0521645506/ref=sr\\_1\\_1?ie=UTF8&is=bo0&qid=1230781](https://www.amazon.com/Golem-Should-about-Science-Canto/dp/0521645506/ref=sr_1_1?ie=UTF8&is=bo0&qid=1230781)

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Prev 1-10 11-20 21-30 31-40 Next

**2/10 Terrible** November 16, 2007  
by mid505 (see profile)  
"You want IT purchase in 17 years - Save yourself, sky away" Read more >>  
95 out of 197 users found this opinion helpful

**2/10 Terrible** November 22, 2007  
by mid505 (see profile)  
"good looking but poor quality, big disappointment" Read more >>  
95 out of 35 users found this opinion helpful

**10/10 Perfect** August 21, 2007  
by bluemoon3 (see profile)  
"Ultimate combination of computing power and mobility" Read more >>  
80 out of 75 users found this opinion helpful

**9/10 Spectacular** December 9, 2007  
by chitachit7 (see profile)  
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46 out of 46 users found this opinion helpful

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by JRFenney (see profile)  
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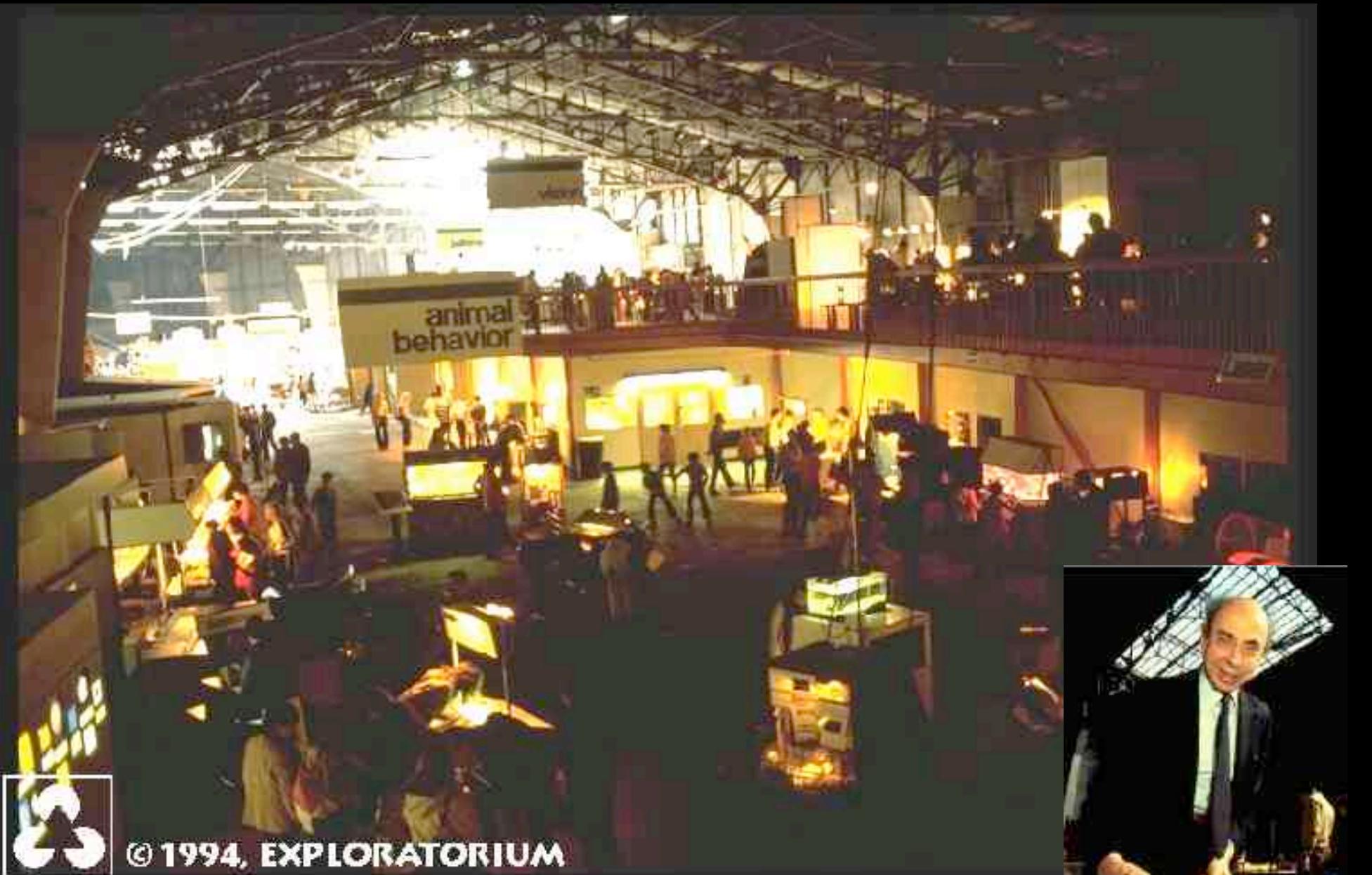
Intel Sony HP Home  
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ASUS Dell BD Samsung

En marche contre la leucémie

DU MARDI 10 MAI 2008

AVEC L'ASSOCIATION LAURENT TUGAN

ÉDITION



© 1994, EXPLORATORIUM



# A de-institutionalised landscape

Connectivity tools such as the Internet, cellular phones and wireless networks – and the new social opportunities for learning that these tools provide – allow people the control to choose when and where and from whom they select their learning opportunities.

This is leading to the deinstitutionalisation of education – a state of affairs in which individual institutions in a particular location lose their unique status as educational providers.



Bob Semper, Executive associate director of the Exploratorium, San Francisco (*Curator*, January 2007)

### Missions to Mars

A four 20-minute tour of past missions, where everything from the  
rocks found on Mars to the first images ever taken by a robot  
on another planet are shown.



### Huygens Probe





**At Bristol Science Centre**



## Welcome to Citizen Science

Citizen Science is designed to be instrumental in engaging young people and teachers in discussion about bio-medical science issues that affect society today.



[About Citizen Science](#)



[Teacher resources](#)



[Events programme](#)



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### What's new?



[ED05: View our "Life in the Frame" entry](#)



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**wellcome** trust

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## about us

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The dana centre is a stylish, purpose-built venue in London (UK). It is a place for adults to take part in exciting, informative and innovative debates about contemporary science, technology and culture.

No two days will be the same at the dana centre. It's the place for experimental dialogue events, blending the best from science, art, performance and multimedia to provoke discussion and real engagement with the key issues of the day. In the dana centre you'll see science delivered in a very different way, everything from Edinburgh-Fringe-style stand-up comics debunking science myths to updates on radical research, handling sessions of rarely seen objects from the Science Museum's collection and challenging debates on modern science.

State-of-the-art digital facilities link the Centre and its events with venues all over the UK, those on the Internet and everyone with a mobile phone. If you can't make it to the dana centre in person, you can join the debate on-line.

The events focus on themes that are important to you and present them in new and attractive ways - all in a lively, informal atmosphere. If you care about how the science behind the headlines affects you and your environment, want to challenge leading experts face to face, argue the case for valuing animals over human embryos, or learn how to make ice cream in 90 seconds, then check out what's on at the dana centre.

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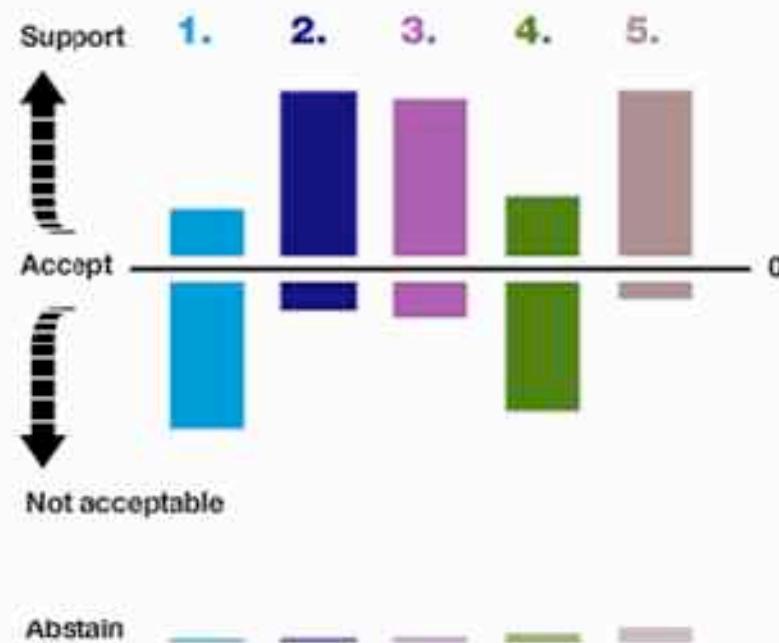
### Worldwide results

### Results per region



### Results Nanotechnology

**Worldwide, 15 may 2008**  
result of 187 games



[> TO EXTENDED RESULTS](#)

### Fifth policies

#### **Canada, 02.07.07**

Comme la position 3 mais le dialogue public devrait prendre la forme d'une consultation entre experts et représentants de la population. De cette consultation, un rapport émanerait avec des recommandations et le pouvoir en place devrait s'engager à considérer ce rapport.

#### **Canada, 08.06.07**

Proceed with nanoscience, but regulate its applications, through a model similar to pharmaceutical regulations; encourage public dialogue; commit 5% of funding to education through approved educational vehicles



# dotik • EUROPEAN TRAINING FOR YOUNG SCIENTISTS AND MUSEUM EXPLAINERS

ICS IS HK ab  
EUREKA

WHAT IS DOTIK? THE PARTNERS ACTIVITIES DOCUMENTS TRAINING SCHOOL

introduction

the project

#### NEWS

[DOTIK executive report](#)

The final report summarize the main achievement of the project

**TIE group is born**  
A special interest group and a learning community on explainers

**ECSITE Annual conference**

A preconference on explainers

#### DOTIK SURVEY

We are running a survey on explainers in science centres and museums; if you have not done so yet please fill in the [DOTIK questionnaire!](#)



Dotik Training School  
August 28 - September 2  
2006 Trieste, Italy



Dotik is a project aimed at developing and testing methodologies for training explainers (animators, demonstrators, guides,...) to effectively promote a science/society dialogue, and to act as strategic, two-way interfaces between science museums and their public.

Dotik is a 24-month project funded by the European Union under the Science and Society section of the Sixth Framework Programme for Research and Technological Development

Dotik is the slovenian word for "frontier".

Ad hoc participatory events are held by science museums and other institutions to stimulate the involvement of citizens in scientific debates and decisions. We believe that it is also crucial to create a more widespread fabric of participation, disseminating the culture of science/society dialogue in all informal learning contexts and activities of popularization of science.

more informations: [dotik@eisca.it](mailto:dotik@eisca.it)



Dotik Training School  
August 28 - September 2  
2006 Trieste, Italy



The exhibit commons is managed and maintained by Liberty Science Center, an interactive science museum whose mission is to be an innovative learning resource for lifelong exploration of nature, humanity and technology, strengthening communities and inspiring global stewardship.

## Welcome to the Exhibit Commons

The Exhibit Commons is a concept that allows people outside normal museum and science center staffs an opportunity to present new information and divergent points of view through mutable exhibitions. Content of existing exhibitions may be amended or altered using physical objects, digital files, videography, photography, spoken word or other material.

Exhibit Commons exhibits will create a wholly new kind of institution where some of exhibits reflect the institution's perspective while others offer differing points of view, created through the communal creativity unleashed by digital technology, including computing and networking. Over time, the Exhibit Commons will grow into a wide ranging body of mutable exhibitions from institutions around the world, allowing anyone anywhere a chance to represent their point of view in museum and science center settings.

The first set of Exhibit Commons experiences is being planned for the expanded Liberty Science Center, located in Jersey City, NJ just across the Hudson River from lower Manhattan, re-opening in July 2007. The first opportunity to add content to exhibits is currently being offered at the Science Center's offsite facility during construction, *Liberty Science Center: Riverside*.

### Exhibit Commons at the American Association of Museums (AAM) Conference May 13-17, 2007

In a session titled "Museums Remixed Part One: Creating Visitor-Authored Experiences" highlighting the Exhibit Commons, panelists from within the museum field and beyond will discuss the implications and opportunities of the role museum-goers play as active participants in the collection, curation, and content of exhibitions.

[Visit the Museums Remixed blog.](#)

### For the latest Exhibit Commons news:

[Visit the weblog.](#)

The philosophy, inspiration and initial concept of the Exhibit Commons is described in a white paper "The Exhibit Commons – Liberty Science Center's Open Source Exhibit Initiative and Community" by [Wayne LaBar](#).



[Click here to download.](#)



http://www.cipast.org/

CIPAST | Small talk new ways of democracy | Demos | search for 'wilson'

# CIPAST

citizen participation in science and technology

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Welcome  
Brennweite  
WILKOMMEN  
Bienvenida  
Beavemuto  
Welkom  
Benvenuto

**CIPAST In Practice**

**CIPAST case study based training package now online**

CIPAST activities have confirmed that training for public participation in science and technology has to be considered as a multiple objective aim as training activity before (and for) the implementation of a public participation initiative but also as an offer to get informed about public participation in general – and not being directly targeted to the translation into training action. CIPAST therefore has decided to put case studies at the core of its training and to focus on a process of active and participative learning.

CIPAST in Practice now provides elementary sets for teaching and learning which are based on 'real life case studies' and which can be used and re-assembled by potential users. The given tools are completed through information resources about designing participatory procedures, expertise literature and additional experiences.

All case studies presented in this training package were developed by involving actors and users. All case studies were tested in training sessions in two international workshops 2006 and 2007.

You can order a free CD of CIPAST in Practice from Norbert Steinhaus: [norbert.steinhaus@hielabonn.de](mailto:norbert.steinhaus@hielabonn.de) or make use of the training offers here at the CIPAST website.

[Go to CIPAST in Practice](#)

**Now**

**Participatory Activities in Nanotechnologies**

A special edition of the CIPAST newsletter prepared by Nicolas Deye Laffite at INRA/TGV provides on 35 pages a summary of 60 participatory processes in nanotechnology governance in

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“Public participation” encompasses a group of procedures designed to consult, involve, and inform the public to allow those affected by a decision to have an *input* into that decision.”

(Pierre-Benoit Joly, INRA/TSV, Alain Kaufmann, University of Lausanne.  
CIPAST seminar)

# Participatory procedures

- A **consensus conference** is a chaired public hearing with an audience from the public and with active participation of 10-15 lay people and a corresponding number of different experts. The experts may be from different disciplines and/or from different schools within a discipline.
- The **Scenario Workshop** follows the three phases for criticism, vision, and fantasy. It is based on a presentation of possible future developments in the area, formulated in advance. The criticism of the Scenarios by the participants together with their own experiences form the basis for visions and action plans.
- The Café Seminar / **World Café** is a creative process for facilitating collaborative dialogue and the sharing of knowledge and ideas to create a living network of conversation and action. The purpose is to achieve a more profound and common understanding of a technological problem.
- The **citizens' jury** is composed of 12-24 persons who go through a process of deliberation.
- The **Future Search** method is an interactive planning process that focuses on breaking down borders and creating understanding about common desires for the future.
- A **focus group** exercise consists in a facilitated discussion on a focal topic among a small group of people (6-12) and lasts for about one and a half to two hours. The aim is to gain insight into the group's norms, meanings and values.
- **Open Space Technology** is a self-organizing practice that enables groups of any size to address complex, important issues and accomplish meaningful work. Open Space establishes a marketplace of inquiry, where people offer topics of interest, reflect, learn and work together.

# Une meta-experience: le “discussion continuum”

*Dans le dialogue entre citoyen et expert, le citoyen est porteur de ...*

*Valeurs*

*Savoirs*

*Problématiques*

*Fait*

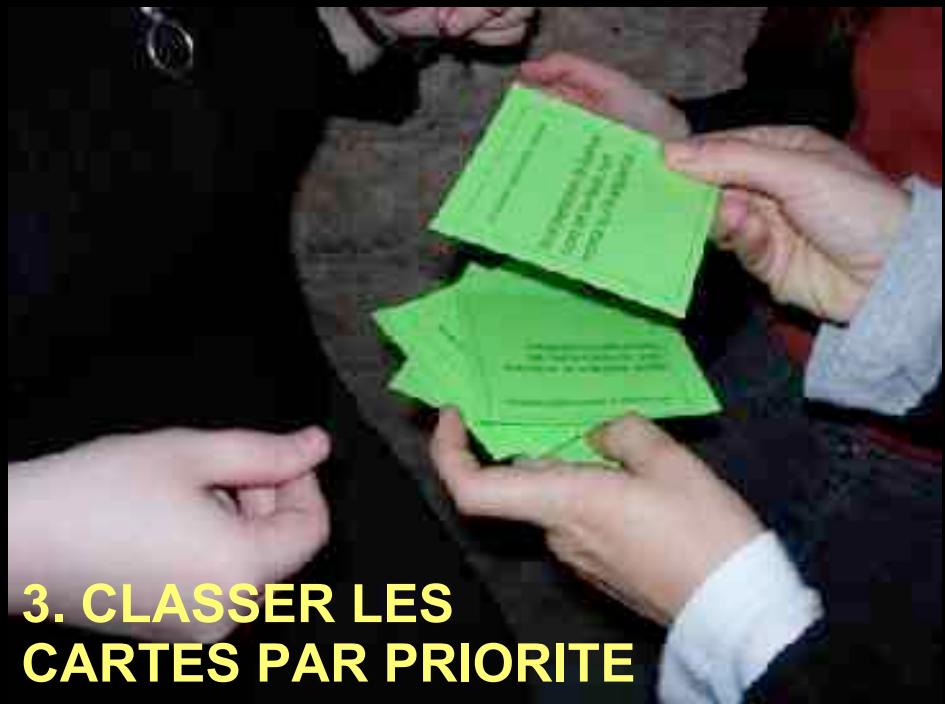
*Ses intérêts*



**1. LIRE**



**2. DISCUTER**



**3. CLASSER LES  
CARTES PAR PRIORITE**

**10 MINUTES!**

# Resultats

valeurs      problématiques      faits      ses intérêts      savoirs

